

The Ornithological Society of the Middle East, the Caucasus and Central Asia (OSME)

The OSME Region List of Bird Taxa

Part A: Non-passerines. Version 8.1: August 2022

(Map

of OSME Region at <https://osme.org/about-osme/osme-region-map/>)

The scale of illegal bird killing annually in the OSME Region is significant in conservation terms: Brochet *et al* 2016 (also cited as 2017) provide estimates for Mediterranean countries (11-36 million birds); see Brochet *et al* 2019 for Arabia, Iran & Iraq (879,000-31,000,000 passerines); Raine *et al* 2021 for Lebanon.

Includes changes indicated in IOC12.2 List

A fuller explanation is given in [Explanation of the ORL](#), but briefly, **Pale grey-green shading of a row** (eg Syrian Ostrich) indicates either taxon extinction worldwide or former presence of a taxon in the OSME Region. **Light gold shading** in column A indicates sequence change from the previous ORL issue. For taxa that have unproven and probably unlikely presence, see the Hypothetical List. **Red font** indicates added information since the previous ORL version or severe Conservation Threat Status (Critically Endangered = **CE**, Endangered = **E**, **Vulnerable** = **V** and Data Deficient = **DD only**). On occasion, **red font** is used for sustained emphasis, in **Bold**. Not all synonyms have been examined. Serial numbers (SN) are merely an administrative convenience and may change. Please do not cite them in any formal correspondence or papers. **NB**: Compass cardinals (eg N = north, SE = southeast) are used.

Rows shaded thus and with yellow text denote summaries of problem taxon groups in which some closely-related taxa may be of indeterminate status or are being studied.

Rows shaded thus and with yellow text indicate recent or data-driven major conservation concerns.

Rows shaded thus and with yellow text contain additional explanatory information on problem taxon groups as and when necessary.

Rows shaded thus with blue text indicate a taxon is extinct worldwide, extinct, or probably extinct, in the OSME Region.

English names shaded thus are taxa on BirdLife Tracking Database, <http://seabirdtracking.org/mapper/index.php>. Numbers tracked are small. NB BirdLife still lump many seabird taxa.

A broad dark orange line, as below, indicates the last taxon in a new or suggested species split, or where sspp are best considered separately.

The Non-passerine Reference List follows as **Part B**, & includes References for Hypothetical non-passerines [List in **Part E**]. It explains Abbreviated References cited in the species accounts. **Notes** ↓ & **Status abbreviations** → BM=Breeding Migrant, SB/SV=Summer Breeder/Visitor, PM=Passage Migrant, WV=Winter Visitor, RB=Resident Breeder

1. **PT=Parent Taxon** (used because many records will antedate splits, especially from recent research) – we use the concept of PT with a degree of latitude, roughly equivalent to the formal term sensu lato, 'in the broad sense'.

2. The term 'report' or 'reported' indicates the occurrence is unconfirmed or not yet formally accepted.

3. **English names**. We use the recommended names in the International Ornithological Congress World List (see www.worldbirdnames.org, updated twice-yearly) with very few exceptions. **The OSME preference is always listed first**. We suggest that national lists for countries in the OSME Region adopt the OSME preference, but there is no compulsion to do so! Please note that unused IOC names appear in curly brackets {...}, alternative or superseded names in round brackets (...).

4. **Scientific names**: we use square brackets [...] to indicate superspecies that comprise two or more allospecies – we use the same convention for semispecies and we use round brackets (...) where the status of a taxon is not entirely clear-cut; eg the evidence may not be wholly convincing and subject to debate, it may not yet be fully available, we may have overlooked it or not found it, or the evidence on one part of a taxon's range may differ from that in another. In its simplest form this is our 'Don't know' category. (Terms such as 'superspecies' are explained in the [Ornithological Basis of the ORL](#), where examples are given).

5. Many distributions will be diminished by continuing habitat loss, but note that many local extensions occur subsequent to construction of canal, dam and other irrigation works, and that the breeding and wintering distributions are likely to change, often radically, with climate change (Huntley *et al* 2007).

6. We do not provide complete lists of taxa occurrences for each OSME Region country or territory save for endemics to the Region. For species distributions, useful starting points are BirdLife Datazone maps (<http://datazone.birdlife.org/home>) or IUCN Red List (<https://www.iucnredlist.org/search>). In either case, enter English or species name. However, BirdLife/IUCN taxonomy is not yet in full commonality with the IOC List.

We seek information backed by references to develop and improve any part of the OSME Region List of bird taxa.

SN	English Name	Family, Species or Taxon	
		Struthionidae	
1	Syrian Ostrich {Common Ostrich} (Ostrich)	<i>Struthio camelus syriacus</i>	Taxon extinct. Treated near-universally as Common Ostrich (now North African Red-necked Ostrich) <i>S.c camelus</i> : <i>S.c syriacus</i> became extinct Syria & Arabia c 1966 (Clements 2000, 2007), HBW1 (Jordan), Perlman & Meyrav 2009 (Israel), but possibly as early as 1939, the latest reliable record Mike Jennings pers comm. Former range included Jordan, Israel, S Syria, SW Iraq and NW Saudi Arabia H&E 1970 (Sinai?) where first reintroductions 1972 were not <i>syriacus</i> (HBW1) although claims made of captive <i>syriacus</i> individuals (crosses?) into 1990s. Known introductions of North African Red-necked Ostrich <i>S.c. camelus</i> have had variable success Jennings 2010. Robinson & Mathee 1999, Jennings 2010 referred to the hypothesis that a former southern population in Saudi Arabia comprised Somali Ostrich <i>S molybdophanes</i> that had crossed by a former S Red Sea landbridge, but Fernandes <i>et al</i> 2006 show that there were no evaporate depositions in the Red Sea after the Miocene c5MYa, and so no land bridge in that period: Tommy Tyrberg Swedish Rarities Committee <i>in litt</i> . In consequence, all historical Ostrich populations in Arabia (indeed to Pakistan & NW India) very probably comprised solely taxon <i>syriacus</i> Tommy Tryberg <i>in litt</i> . See also Extinction Website 2008. Eggshell fragments various locations found up to 1990s eg Warr 1992; Oman (where extinct 1930) 1979 & 1985 OBL7 , but likely preserved in desert for unknown period, Wahiba Sands Oman fragments found in 1986 relate to no known recorded population Jennings 1986. However, from <i>syriacus</i> eggshell samples collected in N & SE Arabia (non-Omani), Boug & Islam 2018 dated 10 sets to c300-50000Ya (20+ sets await funding for dating). No bones have yet been found Boug & Islam 2018. Ticehurst <i>et al</i> 1926 indicated the species remained W of the Euphrates in Syria in the Al Maydin and Abu Kamal regions. Birding in Egypt (BinE).
2	North African Red-necked Ostrich (Ostrich) {Common Ostrich}	<i>Struthio camelus camelus</i>	Closest relation to <i>S.c. syriacus</i> : introduction Saudi Arabia Islam <i>et al</i> 2008; listed in Atlas of Breeding Birds of Arabia draft Mike Jennings pers comm. Current population c330 individuals in 2 areas of Saudi Arabia, mostly in Central Region Boug & Islam 2018. Another area should have obtained releases 2017-2018, Adult collected, eggs found Jebel Elba in Halaib Triangle 1967 Goodman <i>et al</i> 1984, last recorded W of Nile 1959, but occasionally seen S of Aswan at least until 1983, but still exists SE-most Egypt (Birding in Egypt [BinE] website) & probably in Halaib; recorded Sudan N of Dunqunab (120km ² grid 21°N, 36°E), S of Halaib Triangle Nikolaus 1987. Believed extinct in neighbouring Libya Isenmann <i>et al</i> 2016. NB only other taxon is extralimital & Vulnerable Somali Ostrich <i>S. molybdophanes</i> .
		Anatidae	Gonzalez <i>et al</i> 2009 analyse relationships within Anatidae; H&M4 sequence (ORL taxa) is <i>Oxyura</i> , <i>Cygnus</i> , <i>Branta</i> , <i>Anser</i> , <i>Clangula</i> , <i>Somateria</i> , <i>Melanitta</i> , <i>Bucephala</i> , <i>Mergellus</i> , <i>Mergus</i> , <i>Alopochen</i> , <i>Tadorna</i> , <i>Marmaronetta</i> , <i>Netta</i> , <i>Aythya</i> , <i>Spatula</i> , <i>Sibirionetta</i> , <i>Mareca</i> , <i>Anas</i> , <i>Plectropterus</i> , <i>Sarkidiornis</i> , <i>Cairina</i> , <i>Aix</i> , <i>Nettapus</i> . We remain with IOC sequence. H&M4 also re-sequence within genera. NB1 Since 1990s, many spp now overwinter CA at recently-built irrigation reservoirs (EK-M pers comm). NB2 The documented tendency for long-distance migratory birds including waterbirds to spend their non-breeding season in the northern hemisphere has now been proven linked to Climate Change Lehtikoinen <i>et al</i> 2021. NB3 Many anatid spp continue to be introduced, particularly because many cultures have a long history of bird-keeping, but also because of developing prosperity funding the trade in exotics Blackburn <i>et al</i> 2015.

3	White-faced Whistling Duck	<i>Dendrocygna viduata</i>	Monotypic. Individuals shot or observed fairly frequently at Teeb wetlands, north of Amara, Iraq in 2015 and 2017 possibly of natural occurrence but perhaps likely escapes from traded birds, although feral breeding may have occurred Salim <i>et al</i> 2020. However, a group of 8 was photographed Socotra 27 Jan 2020 at Qariya Lagoon; 12 birds in total were present in Feb 2020 Suleiman 2020; by 7 Mar 20 they had moved west to Sirhan Lagoon near the capital Hadiba: they are considered natural arrivals, a first record for the OSME Region: they were still present May 2021 ATR/SG43(2) : 335; one remained until at least Dec 2021 SG44(1) : 256. The species has been included in the latest Socotra Checklist, Porter & Suleiman 2020. Between 24 Oct 2019 & 10 Dec 2019, a cyclone, a super-cyclone and a deep depression hit the Somalia/North Kenya coasts and engulfed that area and Socotra with heavy rainfall. Species subject to irregular rain- or food-driven pressures can erupt into local movements of 800+km. Earlier nearest records Wadi Halfa Sudan (120km ² grid 21°N, 31°30'E) adjacent (within 20km) to Egyptian border, pre-Lake Nasser Nikolaus 1987. Close to Region (nearest breeding grounds 515km from Socotra), reaches W Red Sea coast from N Eritrea to NW Somalia BLDZ Jul 2019. NB Distributed W to C & S America & S to Madagascar
4	Fulvous Whistling Duck	<i>Dendrocygna bicolor</i>	Monotypic. Three main northern hemisphere widely-separated allopatric populations: subtropical Americas, Sahelian Africa curving down to E Africa, and easternmost India to Myanmar Reeber 2015. Dendrocygnae early lineage within Anatidae Gonzalez <i>et al</i> 2009. Occupies much of subtropics, wanders to OSME Region, HBW1 <i>eg</i> Yemen Stanton 2000, introduction recorded Kuwait Gregory 2002, but recorded Saudi Arabia, Lake al-Sad, Jizan AbdulRahman al-Sirhan <i>in litt</i> Jan 2016. Feral population Bahrain King 2018. Long-distance vagrant R&A 2012 from E Indian subcontinent breeding grounds. Rare vagrant Oman OBL7 . NB Distributed W to S USA & C America, S to Madagascar & E to Vietnam.
5	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	Monotypic. Vagrant. Water shortage-induced wandering to Iran & Afghanistan (?) from Pakistan (summer breeder) HBW1, vagrant Israel Perlman & Meyrav 2009, 4th Oman record Aug 2013 OBRC , 9th record perhaps 10 birds Jan/Feb 2016, 10th Salalah Feb 2019 OBRC , recorded Lake al-Sad, Jizan, Saudi Arabia, AbdulRahman al-Sirhan <i>in litt</i> Jan 2016. 1st for Iran shot near Zabol, Sistan & Baluchestan Oct 2019 DB42(1) : 48. Occupies dams, pools once they become vegetation-fringed.
PT	True geese phylogeny PT	<i>Branta</i> spp & <i>Anser</i> spp	Ottenburghs <i>et al</i> 2016 show that ancestral Bar-headed Goose <i>A. indicus</i> split from ancestral <i>Branta</i> , becoming basal to all other true geese, which later formed 2 Clades, the white geese (including <i>A. caerulescens</i>) and the Grey Geese. Their methodology, which explains genetic incongruences highlighted by Ruokonen <i>et al</i> 2008, Gonzalez <i>et al</i> 2009 & Volkovsky <i>et al</i> 2013, points to rapid speciation and the existence of hybridisation events from 4-2MYa when glaciations led to extensive temperate grasslands below a circumpolar tundra. NB IOC 11.1 resequenced Anatidae ahead of Phasianidae .
PT	Brent Goose PT	<i>Branta bernicla</i>	Despite a partially collective consensus (including H&M4) to treat in 3 groups; extralimital Black Brant (or Brent) Goose (<i>nigricans</i> & ' <i>orientalis</i> ' NE Siberia-Canada), Dark-bellied Brent (<i>bernicla</i> NW Europe-N-C Siberia) & Light-bellied Brent (<i>hrota</i> NE Canada & Greenland, some winter Europe), as per Clements 2011, we cautiously address each taxon separately, thus <i>nigricans</i> is Nearctic 'Black Brant' & <i>orientalis</i> is E Palearctic 'Grey-bellied Brant'; therefore is the latter is a rare PM in Kazakhstan from E Siberian population? However, Wassink 2015b omits mention, treating <i>B. bernicla</i> as monotypic Arend Wassink pers comm Jan 2022.
'Clade <i>Branta</i> ': also includes extralimital Hawaiian Goose <i>B. sandvicensis</i> , Canada Goose <i>B. canadensis</i> & Cackling Goose <i>B. hutchinsii</i> . (One <i>B. hutchinsii</i> photographed Mighan, Markhazi, Iran Dec 2018 of uncertain status.)			
6	Dark-bellied Brent Goose {Brant Goose}	<i>Branta (bernicla) bernicla</i>	Breeds NW Russia-Taymyr, winters NW Europe. Straggler, vagrant to OSME Region, HBW1, but very rare PM N&E Kazakhstan Wassink 2015b. Although often kept in collections, no known collections in Kazakhstan: small flocks observed fairly regularly Arend Wassink pers comm Jan 2022 . Support for split of <i>hrota</i> & <i>nigricans</i> Richard Klim pers comm, but needs DNA case. Egypt Avib, BE. NB Stable isotope ratio studies of <i>hrota</i> indicate
7	Pale-bellied Brent Goose (Light-bellied Brent Goose)	<i>Branta (bernicla) hrota</i>	Nearctic breeder; some populations winter NW Europe E to Denmark, straggle further E. Identified in Iran by HJ Speyer in 1960, a bird typically feeding on beach-washed weed, Roselaar & Aliabadian 2010. (Speyer was familiar with both Brent Goose and Red-breasted Goose <i>B. ruficollis</i> from his native Denmark).
8	Black Brant	<i>Branta (bernicla) nigricans</i>	Possibly rare straggler E Kazakhstan from E Siberian population. Red'kin <i>et al</i> 2015, noting that although this taxon had been granted full species status, it was better left as a subspecies.
9	Red-breasted Goose	<i>Branta ruficollis</i> (<i>Rufibrenta ruficollis</i> some Russian references) Vulnerable	Monotypic. Common passage W & N Kazakhstan W&O 2007 from main breeding area Krasnoyarsk Republic, Rogacheva 1992, confirmed by satellite-tracking Simeonov <i>et al</i> 2014. Autumn 2016 N Kazakhstan survey c 31 000 birds DB41(1) : 51. Also Azerbaijan, Aral Sea – HBW1, rare winterer Iran Scott & Adhami 2006, Iraq Salim <i>et al</i> 2012, vagrant CA Ayé <i>et al</i> 2012, vagrant Armenia Mitchell 2017, 1st record Oman Nov 2013 OBRC , 8th record Larnaca Nov 2015 CRC , 1 East Azerbaijan Province Iran Nov 2016 IBRC where considered vagrant. Egypt (in tomb paintings WRP Bourne pers comm) Avib, BE
10	Barnacle Goose	<i>Branta leucopsis</i>	Ottenburghs <i>et al</i> 2016 found Barnacle Goose and Cackling Goose <i>B. hutchinsii</i> share a common ancestor that had earlier split from Canada Goose <i>B. canadensis</i> . Sporadic migrant Kazakhstan Koblik & Arkhipov 2014. Old record (1921) Egypt Goodman & Meininger 1989, vagrant Turkey Kirwan <i>et al</i> 1999. 6th record (33 birds). Regular in small migrant flocks Kazakhstan ; Kostanay Oct 2014 Wassink 2015a, i8 birds, Lake Baybala 24 Mar 2015 Wassink 2016b, 30 Kostanay Zuban & Timoshenko 2020, & others Wassink 2022. Vagrant Iran 2007 Winkel & de Weerd 2007. 1st Israel Nov 2018 -Jan 2019 young bird IRDC .
Basal taxon to Clades 'White' & 'Grey' Geese			
11	Bar-headed Goose	<i>Anser indicus</i> (<i>Eulabia indica</i> in some Russian references)	Ottenburghs <i>et al</i> 2016 found Bar-headed Goose basal to all grey geese. Monotypic. Originally considered rare vagrant Uzbekistan, Kreuzberg-Mukhina & Kreuzberg (K-M&K 2005), E Afghanistan R&A 2005 (Wakhan Oct 1972 Niethammer 1973), Kyrgyzstan: in Tajikistan, breeding noted Lake Karakul Abdusalyamov 1988, but likely substantial population early 20th century diminished by over-hunting & egg-collecting for food, for c 1000 birds diminished to c 25bp by 2006 Nessing 2016; rare breeder Kyrgyzstan Ven 2002. Now assessed as uncommon breeder on high-altitude lakes in Kyrgyzstan, Tajikistan and Wakhan, Afghanistan Ayé <i>et al</i> 2012, confirming Madge 1980 Afghan assessment. Vagrant Kazakhstan & Uzbekistan W&O 2007, Gavrillov & Gavrillov 2005: one at Yazevoe Lake, S Altai (12th record) Wassink 2022 . Estimated 250+ migrant/moulting Wakhan lakes Sep 2006 Ayé 2007, 3 nests found Jun 2021 Wakhan NP SG44(1) : 232. Extraliminally recorded flying at 7290m DB39(5) : 335.
'Clade White Geese': also includes extralimital Emperor Goose <i>A. canagu s</i> & Ross's Goose <i>A. rossii</i>			
12	Snow Goose	<i>Anser caerulescens</i> (IOC6.3: formerly <i>Chen caerulescens</i>)	Ottenburghs <i>et al</i> 2016 show that ancestral Bar-headed Goose <i>A. indicus</i> split from ancestral <i>Branta</i> , becoming basal to all other true geese, which later formed 2 Clades, the white geese (including <i>A. caerulescens</i>) and the grey geese. Snow Goose is therefore nested in <i>Anser</i> , with 2 sssp: <i>atlanticus</i> Nearctic, nominate vagrant Kazakhstan G&G 2005, W&O 2007; no adequate written description, no specimens, no photographs Kazakhstan, so confirmation withheld Wassink 2015b: possible vagrant/escape Russian Caucasus, Azerbaijan, Uzbekistan, Kazakhstan & possible sporadic migrant Kyrgyzstan Koblik & Arkhipov 2014 rare vagrant S of Caspian Zarudny 1911 & suggested H&E 1970, but not Scott & Adhami 2006. NB1 Wrangel Island population has undergone population explosion due to successive warm winters allowing uninterrupted breeding (McKenna 2007); wintering birds in US (& by implication elsewhere) attain migration condition by maize-dominated diet (stable isotope ratio studies, Inger & Bearhop 2008), thus becoming agricultural pests. NB2 Popular in wildfowl collections.
'Clade Grey Geese': also includes extralimital Pink-footed Goose <i>A. brachyrhynchus</i>			
PT	Greylag Goose PT	<i>Anser anser</i>	Parent Taxon : possible potential split, but separation distance 1%, strongly supporting ssp status Ruokonen <i>et al</i> 2000; treated here as separate groups within <i>A. anser</i> . NB Collar 2013 counsels caution on conflicting morphological/reproductive isolation and molecular data as to assigning rank

13	Eastern Greylag Goose {Greylag Goose} (Siberian Greylag Goose)	<i>Anser anser rubrirostris</i>	Breeds, passage Kazakhstan W&O 2007, 1st wintering record W&O 2008, abundant PM Kazakhstan Wassink 2015b. Uncommon, irregular winter UAE (UAE Checklist), Oman OBL7 , Afghanistan Seistan Paludan 1959 H&E 1970. Breeds Iraq southern marshes Salim <i>et al</i> 2012, 10th Qatar record QBRC , 6 at Barr al-Hikman, Oman Nov 2018 SG 41(1)ATR : 143; 5 records Israel Nov 2021, 5 birds Kfar Barukh reservoir Dec 2021 Yoav Perlman <i>in litt</i> .
14	Swan Goose	<i>Anser cygnoides</i> (A. <i>cygnoid</i> H&M4; <i>Cygnopsis cygnoides</i> some Russian refs) Vulnerable	Ottenburghs <i>et al</i> 2016 found Swan Goose to be sister species to the White-fronted Geese (<i>albifrons</i> , <i>erythropus</i>) and to the Bean Goose complex (<i>fabalis</i> , <i>serrirostris</i> & extralimital Pink-footed Goose A. <i>brachyrhynchus</i>). Monotypic. Uzbekistan, vagrant Madge & Burn (M&B) 1988, latest record Sep 2008 Marochkina & Rustamov 2008, Rustamov 2015, former breeder & decreasing vagrant Kazakhstan Wassink & Orel (W&O) 2007, recorded 2006 (Wassink 2009), now endangered Brazil 2009. Damba <i>et al</i> 2020 found that wetland disappearance and degradation have made Korea and Japan devoid of this species in the non-breeding season and have shifted the population in China away from traditional wintering grounds. Total numbers appear down by c 15%. NB Domesticated stock genetic mix via cross-breeding.
PT	Bean Goose PT	<i>Anser fabalis</i>	Egypt as PT Avib, BE. IOC3.5 splits as below (H&M4 does not), but post- PT final grouping still debated. Case made for split Sangster & Orel 1996, Banks <i>et al</i> 2007. However, Ruokonen <i>et al</i> 2008 suggested more evidence needed, except for <i>middendorffii</i> to be elevated to species rank; they noted <i>fabalis</i> , <i>rossicus</i> & <i>serrirostris</i> linked, conceding <i>fabalis</i> possesses closest haplotype grouping. Wink 2011 splits, but without taxa allocation. Ruokonen & Aarvak 2011 revise <i>middendorffii</i> to ssp (Despite this, <i>Dutch Birding</i> WP List 2014 elevates <i>middendorffii</i>) & consider <i>johanseni</i> invalid from mtDNA & haplotype re-examination of specimens, although such data not available for all breeding populations. Reeber 2015 admits 4 valid taxa: <i>rossicus</i> (Tundra BG), <i>serrirostris</i> (Thick-billed BG), <i>middendorffii</i> (Middendorff's BG) & <i>fabalis</i> Taiga BG: he groups <i>rossicus/serrirostris</i> (taiga habitat) & <i>fabalis/middendorffii</i> (tundra habitat). A case has been made, van Impe 2019, for species status for a recently-extinct (by 1934) taxon in this complex, Sushkin's Goose A. <i>neglectus</i> , which purportedly disappeared from its 3 main wintering grounds: Bashkortostan Republic (Ufa is the capital) just north of western Kazakhstan; Tashkent in Uzbekistan, and The Hortobágy puszta in Hungary. Sushkin 1897a, 1897b separated it by its plumage, field characters, its bill size & shape, warm & dry wintering grounds and its characteristic call. On the basis of the low genetic differentiation, considerable morphological variation and incomplete reproductive isolation, Ottenburghs <i>et al</i> 2020 argue that the Taiga and the Tundra Bean Goose should be treated as subspecies. However given their (summarised) caveat, "Detailed investigations, such as behavioral studies to examine whether assortative mating operates according to plumage phenotypes, have not been performed for the Bean Goose complex. The genomic islands of differentiation uncovered in our study might be associated with morphological and behavioral differences between the Taiga and the Tundra Bean Goose, but this remains to be determined by denser sampling across the range of these taxa and experimental work on their social behavior", we <i>pro tem</i> remain with recognising 2 species. NB1 In N Krasnoyarsk Republic (Pyasina River), intergrades of <i>fabalis</i> , <i>middendorffii</i> & <i>serrirostris</i> may comprise above 15% of population; majority of all Krasnoyarsk populations migrate S & E, but a few (mostly in N) migrate W & SW (Rogacheva 1992). NB2 Long bills characteristic of taiga breeders, whatever taxon, & short bills characteristic of tundra Ruokonen <i>et al</i> 2008. NB3 <i>middendorffii</i> correct spelling H&M4
15	Taiga Bean Goose (Bean Goose)	<i>Anser fabalis</i>	Taiga BG form (<i>fabalis</i> , <i>johanseni</i> , <i>middendorffii</i>). likely Turkmenistan, Uzbekistan in winter or on migration, HBW1, likely rare winterer Martin <i>et al</i> 2014, irregular winter Kyrgyzstan Ven 2002, Iran Scott & Adhami 2006 (probably <i>fabalis</i> group), 9th record Mar 2015 Iran IBRC , rare passage, reported in winter Kazakhstan W&O 2007, 1st documented wintering 29 Nov 2016 Wassink 2016b, vagrant Azerbaijan Mitchell 2017, 3rd Israel record Feb 2014 SG38(2) ATR , 5th, Dec 2016-Feb2017 (Taxon unconfirmed) IRDC . NB1 Rogacheva 1992 applied 'Taiga' only to <i>middendorffii</i> , calling <i>serrirostris</i> 'Eastern Siberian Tundra Bean Goose'. NB2 Zarudny obtained <i>middendorffii</i> specimen Iran 1989 Roselaar & Aliabadian 2010. NB3 IOC 3.2 relumps <i>middendorffii</i> within A <i>fabalis</i> .
16	Tundra Bean Goose (Bean Goose)	<i>Anser serrirostris</i>	Tundra BG form (<i>serrirostris</i> , <i>rossicus</i>). Likely only in E of OSME Region, HBW1. Rare (cited as A. <i>serrirostris</i>) passage Kazakhstan W&O 2007, but individuals do wander; very rare PM C-N Kazakhstan Wassink 2015b. AOU support split. 3rd record for Turkey Manyas Gölü Jan 2019 TBRC . NB1 Westernmost populations (<i>rossicus</i>) often cited in error in UK as species name for Tundra Bean Goose, but <i>serrirostris</i> has priority. NB2 Ottenburghs <i>et al</i> 2016 found Tundra Bean Goose to be sister of extralimital Pink-footed Goose A. <i>brachyrhynchus</i> : the placement of Middendorff's Bean Goose taxon <i>middendorffii</i> is being examined in Russia at present Jente Ottenburghs <i>in litt</i> .
17	Greater White-fronted Goose	<i>Anser albifrons</i>	Only <i>albifrons</i> of 5 sspp does not have a Nearctic breeding distribution, and is sole taxon in Region. Migrant W CA from W of Yenisey Rogacheva 1992, abundant PM rare WV Kazakhstan Wassink 2015b, winters OSME Region: Syria Murdoch & Betton 2008, 2 singletons, one twosome Israel Nov 2021 Yoav Perlman <i>in litt</i> ; Iraq Salim <i>et al</i> 2012, Iran Khaleghizadeh <i>et al</i> 2017, 10th Qatar record Nov 2019 QBRC , fairly common Oman OBL7 , locally S CA, HBW1, irregular winter Kyrgyzstan Ven 2002, uncommon WV Uzbekistan Martin <i>et al</i> 2014, rare passage Afghanistan Paludan 1959, vagrant May 1972 Madge 1980, vagrant Bahrain & Yemen Mitchell 2017, & Kuwait KORC . 1st Kazakh Caspian winter record Krakol Lake Jan 2022 Wassink 2022 . Egypt Avib, BE. Deng <i>et al</i> 2020 geotracked birds from 2 breeding areas in easternmost Siberia, all the nominate, finding genetic identification of these 2 flyway populations: an East Asian Continental population & a West Pacific population; this may have the wider implication that populations from the Kanin Peninsula east to 105° east, currently all nominate, are similarly genetically structured. Hence the decline of the non-breeding population in China & the increase in Korea and Japan is not due to transfer. The species is not bound to a limited diet in the non-breeding grounds, & so in China, better site management may halt the decline
18	Lesser White-fronted Goose	<i>Anser erythropus</i> Vulnerable	Monotypic. Migrant in W CA (common PM Kazakhstan W&O 2007, Wassink 2015b, Kyrgyzstan ?? Ven 2002) from Taymyr (Rogacheva 1992), winters around S Caspian area, HBW1, winters Iraq Salim <i>et al</i> 2012, in declining numbers Iran Khaleghizadeh <i>et al</i> 2017, although c32 000 autumn survey N Kazakhstan 2016 DB41(1) : 51. 3rd record Oman QBRC <i>in litt</i> , has occurred Cyprus, Turkey, UAE & Armenia Mitchell 2017, 3 Muscat, Oman Nov 2017 OBRG , 60+ Nov-Dec 2016 Iran IBRC , 7612 Tabriz Iran Dec 2017 DB40(1) : 46; 6th for Israel Nov 2014 reported DB37(1) , 2 more Bet Shean, 7th record Oct-Dec 2016, 9th Nov 2018-Jul 2019 IRDC (13 records by Dec 2020 Yoav Perlman <i>in litt</i>); 1st for Jordan Aqaba Feb 2017 DB40(2) : 111; 8000+ in West Azerbaijan Province Iran DB41(2) : 121: 340 (highest count in Turkey) at Erçek Gölü Nov-Dec 2020 SG43(1) : 182. Ao <i>et al</i> 2020b geotracked birds between their non-breeding areas In China and their breeding areas between the Anabar River & the Kolyma River in eastern Siberia. They also incorporated data from Korea and Japan. Data from the westernmost breeding grounds failed to transmit, but the fan of dispersal from the non-breeding grounds was captured. All eastern populations are in steady and fairly steep decline, but they conclude that this species, being tied to grazing single-species swards of spikerush <i>Eleocharis</i> sp and foxtail <i>Alopecurus</i> sp which has disappeared almost completely from the Yangtze valley where the loss of shallow water & mud habitat has been replaced by permanent pools to grow commercially Lotus <i>Nelumbo nucifera</i> & introduce Chinese Mitten Crab <i>Eriocheir sinensis</i> aquaculture on a large scale, all since 2003. Egypt Avib, BE
19	Mute Swan	<i>Cygnus olor</i>	Monotypic. Local breeder & winterer CA, common resident breeder, PM & WV Kazakhstan Wassink 2015b, fairly common WV Capian Iran Khaleghizadeh <i>et al</i> 2017; once (?) bred Afghanistan Paludan 1959, winters mostly further S, HBW1, rare winter Iraq marshes Salim <i>et al</i> 2012. Has reached Pakistan in numbers R&A 2012, rare vagrant Oman OBL7 , Cyprus, Egypt Mitchell 2017, Israel IRDC , 2 imm Jebel Dhanna UAE Dec 2017, 6th record (of wild bird) Bhalghelam Island Jan 2019 EBRC . Egypt Avib, BE

20	Bewick's Swan {Tundra Swan} (Whistling Swan)	<i>Cygnus (columbianus) bewickii</i>	Split supported by R&A 2005, 2012, DB 2009, but not by IOC4.4, Parkin & Knox 2010; nominate Nearctic distribution, <i>bewickii</i> Palearctic. Migrant (very rare Kyrgyzstan Ven 2002), rare PM Kazakhstan W&O 2007 5th winter record Dec 2014 Wassink 2015a, but now regular & increasing eg Sorbulak Lakes, but increase around Caspian Sea coasts perhaps offsets decline in Iran Wassink 2022 . rare winter Iraq marshes Salim <i>et al</i> 2012, uncommon WV S Caspian Iran Khaleghizadeh <i>et al</i> 2017, local winterer CA, mostly S Caspian or in Caspian region, HBW1, regular but scarce N Turkey Kirwan <i>et al</i> 2014. Vagrant Saudi Arabia, Meadows & Musalami 2004, Jordan JBRC , seen UAE Jun 2013 (1 accepted record) wild status NK EBRC ; vagrant Pakistan R&A 2012.
21	Whooper Swan	<i>Cygnus cygnus</i>	Monotypic. Common resident & BM, rare WV Kazakhstan Wassink 2015b, recorded Kyrgyzstan, Ven 2002, winters locally CA, Iran HBW1, Afghanistan R&A 2005. One juv shot Iraq Moore & Boswell 1941-46; rare winter Iraq marshes Salim <i>et al</i> 2012, vagrant Cyprus, Egypt, Israel, Jordan Saudi Arabia & UAE Mitchell 2017, vagrant Oman OBL7 . Has reached Pakistan R&A 2012. Ao <i>et al</i> 2020a geotracked Whooper Swans in the Eastern Palearctic between breeding grounds in Mongolia and much further N & E in Chukotka to their non-breeding grounds in China, Korea & Japan, their results amending the BLDZ map data: one implication is that breeding birds from the NW of this area, probably use wetlands in easternmost Kazakhstan as stopovers. The eastern populations are probably declining due to degradation of stopover and non-breeding areas.
22	Spur-winged Goose	<i>Plectropterus gambensis</i>	Self-sustaining (?) feral population Nile delta. Genus <i>incerta sedis</i> ; nominate occurs Sudan and beyond; 2nd ssp <i>niger</i> southern Africa. EORC 2018 list as fewer than 10 records. Goodman & Meininger 1989 noted history as feral/domestic in Egypt; even Meinertzhagen ascribed all records to this origin. Feral status confirmed for flocks in Nile Delta BinE 2009. Bones found in archaeological digs Egypt . No documentation of any wild flocks or of introductions. NB Overshoot by this intra-tropical migrant possible, <i>eg</i> from abundant Ethiopian breeding population; see Ash & Atkins 2009.
23	Knob-billed Duck [Comb Duck]	<i>Sarkidiornis melanotos</i>	Genus <i>incerta sedis</i> : previously lumped with S American <i>S. sylvicola</i> , split finally accepted in the New World Chesser <i>et al</i> 2020. Drought once drove sporadic occurrences from Pakistan into OSME Region HBW1; recorded rarely Pakistan (mostly extirpated except in extreme SW R&A 2012) since 1930s; female at Mandhra Kalaan, Dera Ismail Khan, Khyber Pakhtunkhwa, June 2021 <i>BirdingASIA</i> 36 : 124-5. Disjunct Afrotropical migrant populations winter in several countries of the Horn of Africa (Redman <i>et al</i> 2009), and so 'overshoot' vagrancy to Yemen & Saudi Arabia also possible. Vagrant Oman 1990s Richard Porter <i>in litt</i> . 1st record Oman OBL7 Aug 1990-Nov1998, 2nd reported Salalah Oct 2019 DB42(1) : 48. Several records in Arabia perhaps escapes possibly traded S. American congener Jennings 2010. NB1 The name Comb Duck is now applies only to the separated South American <i>S. sylvicola</i> . NB2 H&M4 do not split.
24	Egyptian Goose	<i>Alopochen aegyptiaca</i>	Monotypic. African & former SE European (Hagemeijer & Blair 1997) mainly tree-breeding species; sedentary, but droughts drive movements, HBW1 . Formerly (1906-1928) a scarce WV Peter Flint pers comm: 4th record since 1948 Jun 2014 SG36(2) ATR . Population around Lake Nasser, Egypt Goodman <i>et al</i> 1986, present in S&E Egypt BLDZ Jun 2016, bred Aswan Dec 2017 Bull ABC 25(2) : 235. Vagrant SW Saudi, but not uncommon introduction E Arabia Jennings 2010. Introduced UAE, Lever 2005 spreading Aspinall 1996, Oman 3 records OBL7 , 4th & 5th at Ras al Khabbah & 2 at Khawr Sallan Feb & Apr 2020 SG42(2)) : 327; Israel Perlman & Meyrav 2009 (introduced: [also?]), Jordan 2011 JBRC. Egypt Avib, BE
25	Common Shelduck	<i>Tadorna tadorna</i>	Monotypic. Breeds, local resident Turkey, Caucasus, CA, HBW1, 1st breeding Israel Jun 2016 DB38(5) : 322. Small but increasing numbers in much of Middle East Mitchell 2017, resident Iran, winters Afghanistan R&A 2005, Iraq Salim <i>et al</i> 2012, uncommon & irregular Oman OBL7 . Egypt Avib, BE
26	Ruddy Shelduck	<i>Tadorna ferruginea</i>	Monotypic. Breeds Turkey, Caucasus, CA, Iraq (Salim <i>et al</i> 2012), Iran, Afghanistan, MB Afghanistan Madge 1980 (resident where favourable; 130+ estimated Wakhan Pamir lakes Sep 2006 Ayé 2007), migrant and winterer further S, HBW1. Common breeding PM & rare RB Kazakhstan W&O 2007. 3rd-6th records for Lebanon shot in 2016/17 Ramadan-Jaradi <i>et al</i> 2017. Erratic WV Arabia; breeding occurrences possibly all escapes from collections Jennings 2010, 7th Qatar record Dec 2016 KORC . Extralimital record of flight at 6800m asl DB39(5) : 335. Egypt Avib, BE
27	Cotton Pygmy Goose (Cotton Teal)	<i>Nettapus coromandelianus</i>	Genus <i>incerta sedis</i> : 2 ssp nominate occurs in Region, <i>albipennis</i> confined to Australia. Vagrant Iran, Iraq (Kainady 1976), E Arabia, possibly Israel SG33(1) ; rare vagrant Kyrgyzstan Koblik & Arkhipov 2014; vagrant/PM Afghanistan Madge 1980, 5 records, summer breeder E Afghanistan R&A 2005 R&A 2012, winters further S HBW1. Vagrant Bahrain late 1970s Bundy & Warr 1979, Iran Scott & Adhami 2006 (one imaged Mahshahr, SW Iran Dec 2021 by Kourosh Kopei, Birding Iran in litt , SG44(1) : 238; 2nd Khuzestan record). Jordan Bashford 1997, fairly common WV SW/SE Oman OBL7 , UAE 10th record, 1st since 2003 Dec 2012 EBRC .
PT	Deconstruction of <i>Anas</i> PT	This change makes <i>Anas</i> monophyletic	IOC7.3 accepts the H&M4 deconstruction of <i>Anas</i> by the erection of 3 new genera. Baikal Teal now forms the monotypic genus <i>Sibirionetta</i> ; Garganey, Blue-winged Teal and Northern Shoveler are transferred to <i>Spatula</i> as the OSME Region representatives; Gadwall, Falcated Duck and Eurasian Wigeon likewise become the OSME Region representatives of <i>Mareca</i> .
28	Baikal Teal	<i>Sibirionetta formosa</i> (IOC7.3, H&M4) (formerly <i>Anas formosa</i>)	Monotypic. Vagrant Afghanistan M&B 1988, Kazakhstan W&O 2007 - 3 records Wassink 2015b, Uzbekistan, Kyrgyzstan K-M&K 2005, Koblik & Arkhipov 2014, but Bahrain (9 in 1972 Bundy & Warr 1979) possibly escaped traded birds: male of unknown origin Dec 2021 Kfar Barukh, Israel; no accepted records so far Yoav Perlman in litt , 1st for Israel IBRC (SG44(1)) : 239). 95% decrease in western populations 1970-90 (breeds W to Yenisey), possibly due to development of relatively small wintering area in China (Rogacheva 1992).
29	Garganey	<i>Spatula querquedula</i> (IOC7.3, H&M4) (formerly <i>Anas querquedula</i>) (<i>Querquedula querquedula</i>)	Monotypic. Breeds Caucasus, N CA (Afghanistan R&A 2005), but most winter beyond OSME Region to S; abundant PM, uncommon SB Iran Khaleghizadeh <i>et al</i> 2017, abundant PM & common WV Oman OBL7 , HBW1; mortality due to trapping in Sahel droughts significant, but overall population decline due to loss of breeding habitat there (worst in W) Zwarts <i>et al</i> 2009. Egypt Avib, BE.
30	Blue-winged Teal	<i>Spatula discors</i> (IOC7.3, H&M4) (formerly <i>Anas discors</i>)	Monotypic. One shot May 1990 Lake Burullus, Egypt; found in market by G Nilolaus & R van Westrienen DB13 : 93-94. EORC accepted record 2011. (IH in SG Summary of Rarities Committees SG35(1)). One record western Libya Isenmann <i>et al</i> 2016. Previously in ORL Hypothetical list.
31	Northern Shoveler	<i>Spatula clypeata</i> (IOC7.3, H&M4) (formerly <i>Anas clypeata</i>)	Monotypic. Breeds Caucasus, N CA (Afghanistan R&A 2005), winters further S, HBW1. Introduced Riyadh, Saudi Arabia, may now be extinct, Lever 2005, but probably breeds secretly in small numbers Jennings 2010; some migrants may stay to breed. Abundant WV & PM Oman OBL7 , uncommon RB, very common PM, WV Iran Khaleghidazeh <i>et al</i> 2017. Egypt Avib, BE
32	Gadwall	<i>Mareca strepera</i> (IOC7.3, H&M4) (formerly <i>Anas strepera</i>)	Now monotypic: ssp <i>couesi</i> extinct. Breeds CA, N Iran, N Afghanistan (R&A 2005) winters further S, HBW1. Egypt Avib, BE
33	Falcated Duck (Falcated Teal)	<i>Mareca falcata</i> (IOC7.3, H&M4) (formerly <i>Anas falcata</i>)	Monotypic. Vagrant Kazakhstan W&O 2007 - 3 records Wassink 2015b, Uzbekistan, Turkmenistan KM&K 2005, Koblik & Arkhipov 2014, Turkey Kirwan <i>et al</i> 1999. Vagrant Dec 1884 Afghanistan Madge 1980; some winter Afghanistan R&A 2005; very rare Iraq (2 in Mar 1916), Jordan (10 shot Jan 69) Mitchell 2017, rare Iran Zarudny 1911, last recorded Iran before 1950s Scott & Adhami 2006. Reported Oman Dec 06 status uncertain IH pers comm.
34	Eurasian Wigeon	<i>Mareca penelope</i> (IOC7.3, H&M4) (<i>Anas penelope</i>)	Monotypic. Breeds NE Kazakhstan, winters locally in N OSME Region, HBW1, also S to Afghanistan R&A 2005; fairly common WV Oman OBL7 . Egypt Avib, BE
PT	Spot-billed Duck PT	<i>Anas poecilorhyncha</i>	Split to Eastern <i>A.[p.] zonorhyncha</i> (below) and Indian Spot-billed Duck <i>A.[p.] poecilorhyncha</i> (see ORL Hypothetical List). IOC2.0 accepts split; also R&A 2005, AOU. NB Koblik & Arkhipov 2014 revised all old former USSR records to update to modern taxonomy.
35	Eastern Spot-billed Duck (Chinese Spot-billed Duck)	<i>Anas zonorhyncha</i>	Monotypic. Koblik & Arkhipov 2014 assess Uzbekistan (pre-split) vagrant records as this taxon & not Indian Spot-billed Duck <i>A.[p.] poecilorhyncha</i> & doubt validity of Kazakhstan occurrence of latter. Likely wanderer from western limit of eastern summer breeding range in W China and Mongolia Bräunlich 2012 & extrapolated from Brazil 2009: Gombobaatar & Leahy 2019 map in Mongolia to within 350km of Kazakhstan.; extralimital <i>A. zonorhyncha</i> normally resident, but may be traded. Often commensal. Possibly overlooked NE CA – resembles ♀ Mallard <i>A. platyrhynchos</i> . See Shimba 2007. NB Westernmost northern breeding populations in westward range expansion up to 1990 at least Rogacheva 1992.

36	Mallard	<i>Anas platyrhynchos</i>	Only nominate of 3 ssp in Region. Almost ubiquitous breeder N hemisphere, winters in ice-free areas to S, 1st breeding record Kuwait Apr 2013 SG35(2) ATR , possibly 1st breeding record Iraq Feb 2017 al-Obeidi 2018; abundant, HBW1. WV Arabia, any breeding from escapes & feral birds Jennings 2010. Egypt Avib, BE
37	Feral Duck	<i>Anas platyrhynchos</i> forma domestica	Ubiquitous, abundant, commensal, & little studied or reported; probably has significant effect on genetic identity of <i>A. platyrhynchos</i> & congeners and potentially serious effect on gene pool of many duck species capable (though unlikely otherwise in the wild) of hybridisation. This form increasing in Arabia, especially near cities Jennings 2010. 1st breeding Kuwait Apr 2013 KORC . Egypt Avib, BE
38	Cape Teal	<i>Anas capensis</i>	Monotypic. Egypt Avib. Vagrant Israel, 3 records Perlman & Meyrav 2009. Occurs Sudan IOC4.1. 3 records 1961-68 easternmost Libya Isenmann <i>et al</i> 2016.
39	Red-billed Teal (Red-billed Duck)	<i>Anas erythrorhynchos</i>	Monotypic. Until 2015, sole record 1958 straggler Israel Shirihi 1996 (as of Nov 09 Yoav Perman <i>in litt</i> , species long a favourite of waterfowl fanciers). On current Israel Checklist www.birds.org.il after late Jan 2015 record at Arava, and report of same bird, presumably after migration/movement in mid-Nov 2015 at Hazeva, present until mid-May 2016, accepted as 2nd record by IRDC , but later amended as captive origin could not be ruled out. Very rare vagrant from Horn of Africa populations (rare on coasts Redman <i>et al</i> 2009) to Yemen.
40	Northern Pintail	<i>Anas acuta</i>	Monotypic. Breeds Caucasus, N CA (Afghanistan R&A 2005), but further N than <i>A. clypeata</i> , HBW1, winters to S, abundant WV & PM Oman OBL7 . Egypt Avib, BE. NB Long-term decline of Eurasian and Nearctic populations thought to be driven by breeding habitat loss Zwarts <i>et al</i> 2009.
PT	Teal/Green-winged Teal	<i>Anas crecca</i>	NB BOU recognise Green-winged Teal <i>A. [crecca] carolinensis</i> as full species; accepted in IOC v2.0. Not especially close to <i>A. [c.] crecca</i> Parkin & Knox 2010.
41	Eurasian Teal (Common Teal)	<i>Anas crecca</i>	Monotypic. Abundant breeder sometimes resident N CA (Afghanistan R&A 2005), N OSME Region winters extensively further S HBW1, abundant WV & PM Oman OBL7 , common passage migrant E OSME Region SW Siberia-India (Veen <i>et al</i> 2005) (Route?). Egypt Avib, BE
42	Marbled Duck (Marbled Teal)	<i>Marmaronetta angustirostris</i> Vulnerable. 5000-15000 killed or taken annually in Iraq Brochet et al 2019.	Monotypic. C Turkey Kirwan <i>et al</i> 2008; rare CA save Kyrgyzstan- K-M&K 2005. Also Syria Murdoch & Betton 2008, Iraq, Afghanistan, HBW1: breeds (bred?) Seistan & S Caspian Zarusny 1911, common to uncommon RB across Iran & locally abundant WV Khaleghizadeh <i>et al</i> 2017 Afghanistan Paludan 1959: WV Madge 1980), Iran Scott & Adhami 2006, Iraq (where likely world's largest wintering population) Salim <i>et al</i> 2012: although few recorded during extensive survey winter 2013/4 during extensive survey Fazaa <i>et al</i> 2017, possibly bulk wintered elsewhere, rare breeder Israel Perlman & Meyrav 2009. Vagrant/introduced (?) Oman, Lever 2005 App B, 2nd Oman record Mar 2009 OBRC , 8th UAE Ras al Khor Nov 2018 EBRC . Egypt Avib, BE. Rare migrant Kyrgyzstan, Ven 2002, vagrant (former breeder up to 1950s) Kazakhstan W&O 2007 - 2 modern records Wassink 2015b; Ayé <i>et al</i> 2012 BM in very S & NE Uzbekistan & N Afghanistan.
43	Red-crested Pochard	<i>Netta rufina</i>	Monotypic. CA, N Iran, N Iraq (Ararat <i>et al</i> 2011), Caucasus, moult migration unpredictable, winters Black/Caspian Seas, southern CA (Ayé <i>et al</i> 2012), mostly India (R&A 2005); 2nd Kuwait record 13 Sep 16 Jahra Pools DB38(6) : 393, KORC ; 3rd Qatar record Dec 2017, 4th (12 birds) Irkkaya Farm Lagoons Jan-Feb 2021 QBRC ; 8th Jordan record Azraq Nov 2018, JBRC ; uncommon WV & PM Oman OBL7 . Egypt Avib, BE. NB Although species generally regarded as monotypic, W European and CA populations are genetically distinct Gay <i>et al</i> 2004.
44	Southern Pochard	<i>Netta erythrophthalma</i>	2 ssp: African ssp (<i>brunnea</i>), wanders to SW Arabia, M&B 1988. Israel, Shirihi 2000 (Apr-May 1998, sole Israel record as of Nov 09 Yoav Perlman <i>in litt</i>): increasingly recorded as far north as Khartoum Jenner & Taha 2016, making vagrancy to S Egypt more likely. NB Yet another duck species that also occurs in South America ssp <i>erythrophthalma</i>).
45	Common Pochard	<i>Aythya ferina</i> Vulnerable	Monotypic. Abundant breeder on latitude of N CA, winters extensively to S, rarer Arabia, M&B 1988, fairly common WV Oman OBL7 . Breeds E Iran, winters SE Afghanistan, India R&A 2005. Egypt Avib, BE
46	Ferruginous Duck	<i>Aythya nyroca</i> Near-Threatened. 1000-5000 killed or taken annually in Iraq Brochet et al 2019.	Monotypic. Turkey also Syria Murdoch & Betton 2008; CA HBW1, Afghanistan, Iran: bred Anzali wetland, Ashoori 2018a Caspian Iran Jun 2015; has been declining in W, some recovery C Europe MB pers obs, rare breeder Israel Perlman & Meyrav 2009, winters S Caspian region, head of Gulf, India, M&B 1988, Iraq Moore & Boswell 1956, Ararat <i>et al</i> 2011. Breeds Kyrgyzstan (Bishkek), likely quite widely from eBird observations van Els & Hiddes 2022. Mostly WV to Arabia, but perhaps 200bp resident Jennings 2010, fairly common WV Oman OBL7 . 1st breeding Kuwait Apr 2013 KORC , 2nd Jahra Pools Apr 2014 KORC 2014 Rarity Report; 1st breeding record Azraq, Jordan Jun 2020 DB42(4) : 272. 1st breeding Egypt 2010 Hoek <i>et al</i> 2010, flocks of 30 & 80 observed N of Abu Simbel Jun 2022 Jens Hering pers comm Jul 2022. Some WV Kyrgyzstan, Ven 2002. RB, PM Kazakhstan, N limit uncertain Kazakhstan W&O 2007.
47	Tufted Duck	<i>Aythya fuligula</i>	Monotypic. Breeds in N OSME Region, winters extensively to S, M&B 1988, fairly common WV Oman OBL7 . Egypt Avib, BE
48	Greater Scaup	<i>Aythya marila</i>	2 ssp: <i>marila</i> PM in region & <i>nearctica</i> ; latter possible vagrant; breeds Palearctic & Nearctic High Arctic, winters mainly oceans, also Black, Caspian Seas, M&B 1988, W Kazakhstan Ayé <i>et al</i> 2012, rare PM, WV very rare SV Kazakhstan Wassink 2015b, uncommon WV Turkey Kirwan <i>et al</i> 2014 & S caspian, Iran Khaleghizadeh <i>et al</i> 2017, vagrant Israel Perlman & Meyrav 2009, E Afghanistan vagrant Dec 1973 Madge 1980, Reeb 1977, R&A 2005: 2nd UAE record Long Expo lake, al-Marmoon reserve, Dubai Feb 2022 DB44(2): 145.. Egypt Avib, BE. Vagrant Kyrgyzstan, Ven 2002. Occurred Iraq 1942 Moore & Boswell 1956, & 1979 (Derek Scott <i>in litt</i> to TJ Roberts), rare Iraq winter Salim <i>et al</i> 2012.
49	King Eider	<i>Somateria spectabilis</i>	Monotypic Arctic breeder, winters high latitudes. Vagrant Kazakhstan K-M&K 2005, but this probably 1851 report - no skin or description (Arend Wassink <i>in litt</i> , supporting rejection in G&G 2005); occurrence this latitude likely misorientation (Berthold 1999). However, there are numerous overland records in North America, fewer in Eurasia, some (Tennessee) and Europe (Slovakia) to much further south than central Kazakhstan (eBird maps); southernmost California and Florida are typical ocean-borne vagrancy records. <i>Pro tem</i> , we retain this entry as probable. NB Hybridisation with Common Eider <i>S. mollissima</i> does occur Harrison <i>et al</i> 2021, which may explain some of the sightings of individual King Eider (as a parent bird) in a Common Eider flock
PT	Common Eider PT	<i>Somateria mollissima (sensu lato)</i>	IOC2.9 draft splits extralimital Pacific Eider <i>S. v-nigrum</i> , but IOC7.2 remains unsplit, while noting that there appears to be a valid case.
50	Common Eider	<i>Somateria [mollissima] mollissima</i>	Likely only nominate of 6 ssp occurs in Region; remainder extralimital. Winter vagrant to Black Sea, W Caucasus, M&B 1988, vagrant Russia N of Caucasus, Georgia Koblik & Arkhipov 2014, locally scarce Turkey Kirwan <i>et al</i> 2014. One on İğneada Black Sea coast, European Turkey Feb 2022 Çağan Abbasoğlu in litt Birding Turkey.
51	Harlequin Duck	<i>Histrionicus histrionicus</i>	Monotypic. A 1st-winter bird photographed by Askar Isabekov on the River Irtysh at Öskemen easternmost Kazakhstan is 1st valid record (13-20 Dec 2016) for the country & the OSME Region Wassink 2018, remained 01 Apr 2017. Recorded Russia N of Caucasus Koblik & Arkhipov 2014. The report on Avibase website's Kazakh list of Aug 08 we consider to be a resurrection of Zarusny's 1888 record of a shot specimen described as being near Orenburg; in Imperial Russia such records sometimes just refer to the nearest large city, even if distant from it. Orenburg lies over 50km north of modern westernmost Kazakhstan. G&G 2005 also rejected it as a Kazakh record, although the species occurs irregularly in not-too-distant Mongolia Bräunlich 2012. Population increasing BLDZ Aug 2016.

52	Velvet Scoter	<i>Melanitta fusca</i> Vulnerable	Monotypic. Collinson <i>et al</i> 2006, H&M4 acknowledges while remaining conservative. Breeds Kazakhstan (rare Kazakhstan W&O 2007, first wintering record 2008 Bevza 2009, Wassink 2010), seen Issyk Kul, Kyrgyzstan Ven 2002, breeds 4 high-altitude lakes & local WV Turkey Kirwan <i>et al</i> 2014; Winters N of Caucasus, Armenia, Azerbaijan Turkmenistan, Uzbekistan Koblik & Arkhipov 2014; winters S Caspian but only 2 Iran records Khaleghizadeh <i>et al</i> 2017. One on Ural River Atyrau, Kazakhstan Nov 2021 SG44(1): 241. Vagrant Afghanistan Jan 1973 Madge 1980, Reeb 1977, Kuwait, Pilcher & Shehab 1994 (not accepted on Kuwait List 2016 KORC), Israel Perlman & Meyrav 2009. Egypt Avib, BE. H&E 1970 suggested sporadic breeding Transcaucasia, but breeding population S Caucasus region now known (Porter & Aspinall 2010, Svensson <i>et al</i> 2009), also in adjacent easternmost Turkey, Black Sea coast Mitchell 2017: formerly bred Lake Van, Hersek lagoon, Yalova Jan 2022, Çağan Abbasoğlu Birding Turkey website. Small colony (25-35bp) bred Tabatskuri lake, Samtskhe-Tabatskuri Georgia 2018-20 Nika Paposhvili <i>in litt</i> .
53	Stejneger's Scoter	<i>Melanitta stejnegeri</i> (formerly <i>Melanitta (deglandi) stejnegeri</i> & <i>M. (fusca) deglandi</i>)	Monotypic. <i>M. deglandi</i> now comprises Nearctic-only <i>sensu stricto</i> White-winged Scoter IOC9.2, who now accept NACC decision (hence also <i>M. stejnegeri</i>), supplanting Collinson <i>et al</i> 2006 & H&M4 which did not split. HBW 1 <i>M.d. stejnegeri</i> suggested breeds E of Yenisey easternmost Kazakhstan (Collinson <i>et al</i> 2006). Confirmed breeds s Altai, Kazakhstan G&G 2005, W&O 2007, Ayé <i>et al</i> 2012 – may reach Caspian, Aral Seas, other CA lakes: 1st wintering record Sorbulak lakes Jan 2020 Wassink <i>et al</i> 2021. NB1 The ORL had previously named this taxon Asian White-winged Scoter, that formerly had been lumped in White-winged Scoter <i>sensu lato</i> (aka Siberian Scoter) which formerly was known as Hump-billed Velvet Scoter, which had previously been lumped in Velvet Scoter. NB2 Disjunct populations possible Krasnoyarsk Republic (Rogacheva 1992 – Khatanga in N, Sayan Mts in S) may have different migration routes & timings. NB3 long treated in Russian-language literature as <i>M. deglandi</i> Anderson <i>et al</i> 2009 Red'kin <i>et al</i> 2015.
PT	Black Scoter PT	<i>Melanitta nigra</i>	IOC v2.4 splits to Common (<i>nigra</i>) & American (<i>americana</i>) following Collinson <i>et al</i> 2006, supported by voice differentiation Sangster 2009, H&M4 agrees. NB All male scoters are black.
54	Common Scoter {Black Scoter}	<i>Melanitta [nigra] nigra</i>	Monotypic. Very rare winterer W OSME Region, but H&E 1970 suggest occasionally in Black & Caspian Seas (former winterer (?) Schüz 1959), 1st documented winterer near Bautino, Kazakh Caspian 10 Jan 2015 Wassink 2016b, 2nd there Nov 2019 DB41(6): 423. NB <i>M. americana</i> is American Scoter, HBW1, IOC.
55	Long-tailed Duck (in USA, former name Oldsquaw derogatory)	<i>Clangula hyemalis</i> Vulnerable	Monotypic Arctic breeder; regular overland migration (Armenia Ananian & de Rouw 2003) to lakes and seas CA and slightly further S, scarce S Caspian Schüz 1959, regular vagrant Turkey Kirwan <i>et al</i> 2014; mostly winters oceans, M&B 1988, 1st for Tajikistan 2010 Rafael Ayé pers comm. Some regularly winter Kyrgyzstan, Ven 2002. Rare passage & visitor Kazakhstan W&O 2007, but flock of 390 May 2006 (Wassink 2009), probable 1st Tajikistan Raffael Ayé <i>in litt</i> , has occurred Iran Mitchell 2017, 1st Kuwait record Nov 2012 KORC 1st Qatar record Nov 2016 QBRC ; one at Hour-al-Azeem, Khuzestan Iran Apr 2020 SG42(2): 322. NB Ancestral gene flow occurred between this species & true Eiders <i>Somateria</i> spp, which occurrence may have produced, by hybrid speciation, Steller's Eider <i>Polysticta stelleri</i> Lavretsky <i>et al</i> 2021.
56	Common Goldeneye	<i>Bucephala clangula</i>	2 spp: nominate in Region, <i>americana</i> Nearctic. Taiga hole-nester, widespread breeder in N OSME Region, winters to S (1st records E Kazakhstan W&O 2008), sometimes wanders far, <i>eg</i> Afghanistan, 6 records Madge 1980, M&B 1988.
57	Smew	<i>Mergellus albellus</i>	Monotypic. Breeds occasionally NW Kazakhstan Wassink 2015b (1st breeding record 2021 since 2011 Aksuat Lakes, Naurzum NR Wassink 2022), winters widely across CA, M&B 1988, 5 records Madge 1980 Afghanistan R&A 2005, Iraq Moore & Boswell 1956. Fairly common to uncommon WV N Iran Khaleghizadeh <i>et al</i> 2017. Egypt Avib, BE
58	Goosander {Common Merganser}	<i>Mergus merganser</i>	3 spp: <i>americanus</i> Nearctic; nominate Europe-N Japan, wintering to S; <i>orientalis</i> further S C Asia- Ladakh wintering NE India. Scarce breeder & PM NE Kazakhstan Wassink 2015b, Kyrgyzstan, Tajikistan, winters widely in CA waters & further S M&B 1988, NE Afghanistan R&A 2005 (<i>comatus</i> ? H&E 1970; Paludan 1959 says <i>orientalis</i>); 450+ estimated Wakhan lakes Sep 2006 Ayé 2007. G&G cite <i>comatus</i> present in E Kazakhstan, W&O 2007 cite only <i>merganser</i> . Vagrant Cyprus CBR11 , 6th record Mar 2014 CRC . NB1 whether <i>orientalis</i> & <i>comatus</i> are synonyms depends on possible labelling error on <i>orientalis</i> type specimen Dickinson 2003: IOC4.1, H&M4 subsume <i>comatus</i> in <i>orientalis</i> . NB2 The Polish population no longer winters largely in southern Europe, but to the now ice-free northern Baltic, and the breeding population has extended S & W from N Poland, Marchowski <i>et al</i> 2022; conversely, Polish breeding populations of Red-Breasted Merganser <i>M. serrator</i> and Black-throated Diver <i>Gavia arctica</i> have largely disappeared from the whole of Poland. The conclusion is that although many species are breeding and wintering further north due to climate change, a few others are expanding into abandoned niches despite climate change, a pattern that likely will also occur within the OSME Region.
59	Red-breasted Merganser	<i>Mergus serrator</i>	Monotypic. Very rare breeder N Kazakhstan Wassink 2015b, Kyrgyzstan, winters CA waters, M&B 1988, 1st Jordan record Dec 2016 Jordan Valley JBRC vagrant Oman OB17 6th UAE record Al Barsha Mar 2019 (last record was 2006) EBRC , SE Iran coast R&A 2005 & S Caspian Khaleghizadeh <i>et al</i> 2017, Afghanistan Paludan 1959, 3 records Madge 1980; 2nd record Kuwait Feb 2015, 3rd Jahra Pools Jan 2021 KORC . 2nd record of 5 (3 shot) Qleiaat Lebanon Ramadan-Jaradi <i>et al</i> 2019, 3rd record Tripoli Dec 2021 SG44(1): 241. 5th record Oman, at Al Mouj, Muscat Jan 2021 OBRC , 4 at Acre, one at Sdot Yam Israel Nov 2021 Yoav Perlman <i>in litt</i> . Egypt Avib, BE
60	Ruddy Duck	<i>Oxyura jamaicensis</i>	Escapes and captives in Eurasia of uncertain origin and ancestry. 3 spp in New World. Oxyurinae closer to Anserinae (<i>Anser</i> , <i>Branta</i> , <i>Cygnus</i>) than to any other tribe Gonzalez <i>et al</i> 2009, hence H&M4 place before Anserinae. Two records from Cyprus (Colin Richardson <i>pers comm</i>), that for Dec 2011 accepted by Cyprus Rarities Subcommittee as 1st for Cyprus; vagrant from a feral population in mainland Europe, as is Israel (undated) record Mitchell 2017. NB The large UK feral population has been reduced from an estimated 4000 birds to a rump of c 60; it is highly likely that earlier occurrences from Ukraine to Portugal, given the timings of these records, were largely from UK-origin birds that had reverted to migratory behaviour, <i>eg</i> overwintering groups in Italy. The likelihood of birds from established feral populations reaching the OSME Region is thus now much diminished.
61	White-headed Duck	<i>Oxyura leucocephala</i> Endangered. 50-100 killed or taken annually in Iran Brochet et al 2019.	Monotypic. Breeds Turkey (Gürsoy-Ergen 2019 reveals a reversal of population decline in Turkey, but concentrated at Manyas lake in western Anatolia) also Syria Murdoch & Betton 2008, CA (also N Iraq, N Iran – rare resident Scott & Adhami 2006), winters to S, even to Afghanistan, HBW1. Egypt Avib, BE. Vagrant Kyrgyzstan, Ven 2002. Mostly declining, with local increases Kazakhstan W&O 2007, W&O 2008, formerly widespread Wassink 2015b, but over 20 000 counted 13-16 Sep 2016 on lakes in Tengiz-Korgalzhyn Region DB338(7): 447, SG39(1)ATR , more than known world population; high counts were also obtained in 2017 Koshkina <i>et al</i> 2019, who noted that these were on relatively few sites in N-C Kazakhstan, and thus indicated a vulnerability to development or mining. Record count in Turkmenistan N of Sevdar of 17,000 birds Jan 2019 SG42(1): 180. The 1st Revision to the Species Action plan Sheldon <i>et al</i> 2018 includes this threat. Rare non-annual PM & WV Cyprus CBR11 . Jan 1973 count at Lake Burdur, Turkey of 8988 birds Köning 2018: the 1970s waterbird counts in Turkey at locations that became IBAs was 1 million birds Köning 2018. Apparent eastward shift of breeding (E Kreuzberg-Mukhina pers comm), and to lesser extent, wintering Israel (Hadad & Moyal 2007) locally common Perlman & Meyrav 2009, grounds supported by modelling climatic effects: Huntley <i>et al</i> 2007, likely reason for reassessment of threat status BLDZ Jul 2018. 1st Israel breeding record July 2017 DB39(5): 335 , 1st for Lebanon shot Nov 2017 Ramadan & Itani 2018; breeding again in Armenia since 1972, at least 12 males at Armash carp ponds Jun 2018 Aghababayan 2019. 4th for Saudi Arabia Khafra Marsh, Jubail, Eastern Province Dec 2020 SG43(1): 180. Discounting doubtful Meinertzhagen claims, 1st for Egypt Qaroun Lake, Fayoum Feb-Mar 2021 DB43(2): 150.
		Numididae	

62	Helmeted Guineafowl	<i>Numida meleagris</i>	Traded birds any mix of 9 ssp. Sub-Saharan sp SW Arabia, resident border of N & S Yemen Warr 1992. Meinertzhagen suggested introduced to Region, cited in Lever 2005. Semi-feral collections UAE Aspinall 2010, Aspinall & Porter 2011, 2 escapes Oman OBL7 . Any natural population likely ssp <i>somaliensis</i> , but introduced birds possibly multiply-sourced.
		Phasianidae	Changes to previous taxonomies from revised relationships in eg Crowe <i>et al</i> 2006. H&M4 resequences genera. NB1 Many phasianid spp continue to be introduced, particularly because many cultures have a long history of bird-keeping, but also because of developing prosperity funding the trade in exotics Blackburn <i>et al</i> 2015. NB2 IOC11.1 resequenced Phasianidae to follow Anatidae & IOC11.2 internally resequenced the Phasianidae genus.
63	Snow Partridge	<i>Lerwa lerwa</i>	2 ssp: nominate in Region; <i>major</i> China. E Afghanistan-HBW2, possibly NE Afghanistan R&A 2005, R&A 2012 map close to Wakhan & in Pakistan Safed Koh, mapped Grimmer <i>et al</i> 1998, 2009. Possibly easternmost Wakhan, S side (from maps in Roberts 1991, R&A 2012). However, Ayé <i>et al</i> 2012 consider reports doubtful, yet BLDZ Mar 2018 maps at E end of Wakhan, S side, & an isolate in massif W of Mt Sikaram straddling Afghan/Pakistani border above the Kabul road.. Ample habitat Afghanistan above 3000m.
64	Himalayan Monal	<i>Lophophorus impejanus</i>	Monotypic. Afghanistan, M&M 2002. NE Afghanistan R&A 2005, 2012, BLDZ map Mar 2018: westernmost continuous distribution reaches NE Afghanistan, perhaps also S Wakhan, in area to N of Koklass Pheasant distribution, explained by summer foraging up to 5000m Roberts 1991
65	Koklass Pheasant	<i>Pucrasia macrolopha</i>	Genus <i>incerta sedis</i> , 9 ssp, only <i>castanea</i> for certain in Region, perhaps <i>biddulphi</i> extends from N Pakistan. Afghanistan, M&M 2002. NE Afghanistan R&A 2005, 2012 (<i>castanea</i> Paludan 1959), matches Roberts 1991 map & current BLDZ map Mar 2018: westernmost continuous distribution crosses Afghan border N of Peshawar; 2 isolates to S athwart Afghanistan/Pakistan border. Birds of Gilgit-Baltistan 2021 map as rare resident 60km S of Wakhan. NB up to 2700m in remote mountains
66	Hazel Grouse (Hazel Hen) (Northern Hazel Grouse H&M4)	<i>Tetrastes bonasia</i> (formerly <i>Bonasa bonasia</i>)	11 ssp; only <i>sibiricus</i> known in Region. Europe E to Kazakhstan Kreuzberg-Mukhina & Kreuzberg (K-M&K) 2005, rare resident W&O 2007. Easternmost Kazakhstan ssp <i>sibiricus</i> Ayé <i>et al</i> 2012, scarce resident Wassink 2015b.
67	Rock Ptarmigan (Ptarmigan)	<i>Lagopus muta</i>	23 ssp: only <i>nadezdae</i> for certain in Region, <i>pleskei</i> extralimital to N may occur. Kazakhstan. <i>L.m. macrorhynchus</i> (now included in <i>nadezdae</i>) Clements 2000, M&M 2002, but not Kyrgyzstan or Tajikistan <i>contra</i> Knystatus 1983 (Raffael Ayé <i>in litt</i> Jun 2014): BLDZ Sep 2020 map isolate population spanning S-C Kyrgyzstan, eastern Kazakhstan & Afghan Wakhan Pass, just into northernmost Pakistan, but whether this represents an unknown ssp or <i>nadezdae</i> is unknown, notwithstanding Raffael Ayé <i>in litt</i> Jun 2014. Taxon <i>nadezdae</i> (rare) Kazakhstan W&O 2007, easternmost Kazakhstan Ayé <i>et al</i> 2012. Fuglei <i>et al</i> 2019 analysed data from 90 long-series of monitoring circumpolar populations, concluding that 30% of Ptarmigan spp populations show true declines (despite short- and long-term cyclical fluctuations), due to climate change, thus reinforcing the conclusions of Henden <i>et al</i> 2017, Scridel <i>et al</i> 2018; peripheral alpine populations at lower latitudes likely to be vulnerable earliest to total collapse.
68	Willow Ptarmigan (Willow Grouse)	<i>Lagopus lagopus</i>	16 ssp: 2 known for certain in Region, <i>koreni</i> also possible; <i>maior</i> & <i>brevirostris</i> Kazakhstan W&O 2007, Ayé <i>et al</i> 2012. Fuglei <i>et al</i> 2019 analysed data from 90 long-series of monitoring circumpolar populations, concluding that 30% of Ptarmigan spp populations show true declines (despite short- and long-term cyclical fluctuations), due to climate change, thus reinforcing the conclusions of Henden <i>et al</i> 2017, Scridel <i>et al</i> 2018; peripheral alpine populations at lower latitudes likely to be vulnerable earliest to total collapse. NB Extralimital taxon scoticus reverts to full species status as Red Grouse L. scoticus: Note that (Irish + Hebrides) populations possibly are sufficiently distinct to merit ssp status, but subject to all populations being better sampled Sangster <i>et al</i> 2022.
69	Western Capercaillie (Capercaillie, formerly Capercaillie)	<i>Tetrao urogallus</i>	9 ssp, 7 extralimital. N Kazakhstan- Madge & McGowan (M&M) 2002, <i>uralensis</i> & <i>taczanowskii</i> W&O 2007 (Ayé <i>et al</i> 2012); ssp <i>taczanowskii</i> distribution as far as N Korea. (Black-billed Capercaillie <i>T. urogalloides</i> is extralimital, although has reached 86.5°E, 67.5N, but is in serious decline Rogacheva 1992: <i>uragalloides</i> has priority over <i>parvirostris</i> H&M4: population in Nogoonnur, W Mongolia at 49.8°N, 89.6°E lies c220km from easternmost Kazakhstan: map in Gombobaater & Leahy 2019.) NB1 Long irruptive movements of up to 1000km are known from Siberia de Juana & Kirwan 2019. NB2 Abrahams & Denny 2018 devised successful method of deploying unmanned acoustic recorders as a tool for populations estimates derived from lekking activity: once suitable survey protocols have been established, a reliable means of estimating populations throughout the species range could become a vital conservation tool.
70	Black Grouse	<i>Lyrurus tetrix</i> (formerly <i>Tetrao tetrix</i>)	6 ssp: 2 in Region; N Kazakhstan- M&M, <i>viridanus</i> (N) & <i>mongolicus</i> (E), W&O 2007, Ayé <i>et al</i> 2012, Kyrgyzstan, Ven 2002. Formerly bred Turkey Mitchell 2017. NB BOU revert to <i>Tetrao</i> Sangster <i>et al</i> 2012 despite molecular studies' congruency, favouring parsimony of genus instead.
71	Caucasian Grouse (Caucasian Black Grouse)	<i>Lyrurus mlokosiewiczii</i> (formerly <i>Tetrao mlokosiewiczii</i>)	Monotypic Region endemic. Caucasus (S Russia, Georgia, Armenia, Azerbaijan) Mitchell 2017, BLDZ May 2017, NE Turkey NW Iran, HBW2, scarce breeder Iran Scott & Adhami 2006. NB BOU revert to <i>Tetrao</i> Sangster <i>et al</i> 2012 despite molecular studies' congruency, favouring parsimony of genus instead.
72	Grey Partridge	<i>Perdix perdix</i>	7 extant ssp, 3 in Region: <i>lucida</i> rare westernmost Kazakhstan Wassink 2015b; <i>canescens</i> Turkey through Caucasus-NW Iran; <i>robusta</i> common resident most Kazakhstan Wassink 2015b. C&E Turkey Kirwan <i>et al</i> 2008; N & SE Kazakhstan M&M 2002, some hybridisation from introduced (?) <i>perdix</i> with <i>P. dauurica</i> W&O 2007, Kyrgyzstan, Ven 2002, scarce resident Iran Scott & Adhami 2006, probably also Afghanistan, but certainly on passage – from Roberts 1991
73	Daurian Partridge	<i>Perdix dauurica</i>	2 ssp, only nominate in Region, rare resident SE & E Kazakhstan Wassink 2015b, Kyrgyzstan, Madge & McGowan 2002, N Tajikistan Ayé <i>et al</i> 2012. then E to Tuva, China; <i>suschkini</i> extralimital China E Russia.
PT	Common Pheasant PT	<i>Phasianus colchicus</i>	PT , IOC1.7 recognises Dickinson 2003 split of extralimital Green Pheasant <i>P. [c.] versicolor</i> . Liu <i>et al</i> 2020 propose a further split into 3 spp: Common Pheasant <i>P.[c.] colchicus</i> (13 ssp, 11 occurring in OSME Region) & extralimital 'Elegant Pheasant' <i>P.[c.] elegans</i> (2 ssp) & 'Chinese' (or 'Collared') Pheasant <i>P.[c.] torquatus</i> (English names & sssp allocation informal@OSME). IOC 11.1 rejected the split Dec 2020: Donald & Collar 2021 noted the intentions of the split. NB Global extent of uncontrolled commercial intensively bred stock of uncertain ancestry has blurred identity of many wild ssp. Annual releases in UK alone average 30-35 million birds GWCT Sep 2016 (Homepage). Consequent predator culling (illicit or legally approved) is often undertaken without the intention of understanding of the dynamics of ecosystems dominated by artificially reared, superabundant non-native game species Lees <i>et al</i> 2013.
74	Common Pheasant (formerly Ring-necked Pheasant)	<i>Phasianus colchicus</i>	At least 30 ssp, & 11 in Region: <i>septentionalis</i> N Caucasus, W Caspian to Volga-Ural interfluvium; nominate Transcaucasia E to W&N Azerbaijan; <i>talischensis</i> E&SE Azerbaijan-NC Iran; <i>persicus</i> SW Turkmenistan, NW Iran; <i>principalis</i> SE Turkmenistan, NW Afghanistan; <i>chrysomelas</i> W Uzbekistan, N Turkmenistan; <i>zarudnyi</i> E Turkmenistan Amudar'ya valley; <i>bianchii</i> SE Uzbekistan, SW Tajikistan, NE Afghanistan; <i>zerafschanicus</i> Uzbekistan Bukhara & Samarkand; <i>turcestanicus</i> S Kazakhstan Syrdar'ya valley to Fergana Basin; <i>mongolicus</i> SE Kazakhstan, N Kyrgyzstan. In all Caucasus & Central Asia Republics in OSME Region M&M 2002, NW, NC Afghanistan R&A 2005, Iran Scott & Adhami 2006. NB Large-scale introductions or reared stock Kazakhstan W&O 2007.
75	Cheer Pheasant	<i>Catreus wallichii</i> Endangered	Monotypic. Although Afghan distribution given in Clements (2000) & HBW2 (<i>contra</i> M&M 2002: McGowan also editor HBW2 pheasant texts) & R&A 2012, HBW Alive (McGowan <i>et al</i> 2018 conforms taxon is not present in Afghanistan, BLDZ map Jan 2021 indicating nearest population to Region is E of Mingora, Pakistan, 85km from Afghan border, which gloomy picture is reinforced by Birds of Gilgit-Baltistan 2021 treating as historical SB & possible vagrant. <i>Pro tem</i> we treat as formerly present.
76	Indian Peafowl (Common Peafowl, Peacock)	<i>Pavo cristatus</i>	Monotypic. Introduced in several locations Arabia Jennings 2008d, but sustaining a feral (& tolerated) population only in UAE Jennings 2010. Feral suburban populations UAE Aspinall 2010.

77	Grey Francolin	<i>Ortygornis pondicerianus</i> (formerly <i>Francolinus pondicerianus</i>)	Genus change follows Mandiwana-Neudani <i>et al</i> 2019 & Kimball <i>et al</i> 2021. 3 ssp, only <i>mecranensis</i> in Region, others Indian subcontinent. One old vagrancy record SE Afghanistan M&M 2002; R&A 2012 map very close to Afghanistan at Khyber), SE Iran R&A 2005, Scott & Adhami 2006. Some introduced UAE (Aspinall 1996); certainly present since 5th century AD (Pedersen & Aspinall 2010) but may even then have been introductions Lever 2005. Bred Dahrhan 2006; Jennings 2008a; possibly introduced Oman, but before 1886 Jennings 2010, expanding SW from E Oman OBL7 . NB Very well adapted to aridity Roberts 1991
PT	Black Francolin PT	<i>Francolinus francolinus</i>	Boesman 2019 reveals existence of 2 vocal groups, eastern & western, split in southern Iran. For the two subspecies groups to gain species status, molecular evidence is necessary, but the first is given in Forcina <i>et al</i> 2019. <i>Pro tem</i> , we place the two groups into our provisional category to align with Forcina <i>et al</i> 2019 and because of the track record of vocal separation in other examples. English names informal@OSME. Forcina <i>et al</i> 2013 discovered that birds for sale as pets in Cyprus descended from Iraqi <i>arabistanicus</i> and Nepali <i>melanotus</i> , thus posing a potential risk through escape or illegal release to the genetically homogenous Cyprus wild stock that are well-adapted to local conditions.
78	'Middle Eastern Black Francolin'	<i>Francolinus (francolinus) francolinus</i>	The western group comprises nominate: SW Turkey, Cyprus through NE Syria & W Iraq, isolates in Azerbaijan & Levant, <i>arabistanicus</i> from C Iraq, N Kuwait into SW Iran roughly to Bandar Siraf, isolates in E-C Saudi Arabia & Bahrain. Forcina <i>et al</i> 2012 noted that genetically the western group genetically uniform in mtDNA, but differs from most of the eastern group significantly. Boye 1990 reported a historic low estimate of Cyprus population, but lack of post-1974 records from Northern Cyprus likely skewed the decline into that claimed catastrophic minimum. Hellicar 2015a records moderate increase in 2006-2015. Forcina <i>et al</i> 2019 employ microsatellite DNA; the findings reinforce Forcina <i>et al</i> 2012 and Boesman 2019. SE Turkey Kirwan <i>et al</i> 2008, Syria Murdoch & Betton 2008, Iraq, SW Turkmenistan Flint <i>et al</i> 1984. Uncommon NE Israel Perlman & Meyrav 2009, declining slowly Cyprus Pomeroy 2014, but probably short-term fluctuation Peter Flint pers comm: very common 19th century, overhunted, then stricter regulation restored it to widespread Flint & Stewart 1992, Peter Flint pers comm; now stable CBR 2016 spring 2020 Lebanon at Anjar of pair believed shot subsequently Ramadan-Jaradi <i>et al</i> 2021. NB1 Historical range (as 'Black Partridge') stretched E to Iberia, although possibly introduced Cyprus in antiquity WRP Bourne pers comm. NB2 Introduced Saudi Arabia Jennings 2010: Boesman 2019 map suggests <i>arabistanicus</i> .
79	'Asian Black Francolin'	<i>Francolinus (francolinus) asiae</i>	The eastern group comprises <i>bogdanovi</i> W through SE Iran into S Afghanistan then extralimally to Pakistan as <i>henrici</i> , which then occurs in E Afghanistan down to north-westernmost India; <i>asiae</i> then occurs south to N Gujarat & E across India to N Bangladesh where <i>melanotus</i> is present. Forcina <i>et al</i> 2012 noted that genetically the western group genetically uniform in mtDNA, but differs from most of the eastern group significantly. Forcina <i>et al</i> 2019, using microsatellite DNA, reveal that eastern populations comprise 2 separate clades, west to east as <i>bogdanovi</i> + <i>henrici</i> & <i>asiae</i> + <i>melanotus</i> . Because of hybrid zones from Pakistan eastwards are of unmapped size and unknown stability, they make no decision on the taxonomic status within eastern populations. However, if later these become full species, the populations in S Iran would become <i>F.(f.) henrici</i> . Afghanistan (<i>bogdanovi</i> Paludan 1959), HBW2, E Iran R&A 2005, Scott & Adhami 2006. NB1 UAE, introduced Gregory 2002: Boesman 2019 map suggests <i>bogdanovi</i> . NB2 Bonaparte 1856 seemingly described <i>asiae</i> & <i>henrici</i> in the same paper. Until a First Reviser is needed to establish nomenclatural priority, we'll adopt the pragmatic alphabetical solution.
80	Tibetan Snowcock	<i>Tetraogallus tibetanus</i>	6 ssp, only nominate in Region; remainder E in China. E Tajikistan, M&M 2002, HBW2. Afghanistan, HBW2. Easternmost Afghanistan (E end of 'China strip' – Wakhan) map in R&A 2005, 2012: ssp <i>tibetanus</i> . Extralimally, occurs in NE Pakistan just SE of Wakhan: images at Khunjarab, Gojal by Imran Shah (www.birdsofgilgit.com). NB Ding <i>et al</i> 2020 suggested that genetic analysis of <i>T. tibetanus</i> & Himalayan Snowcock <i>T. himalayensis</i> included hybrid populations, in that <i>himalayensis</i> carried a <i>tibetanus</i> haplotype from a most recent common ancestor (mrca) much deeper in time than suggested by other studies. Päckert 2021, using data from Ding <i>et al</i> 2020 and having downloaded the same & additional GenBank data, discovered that the conclusions of Ding <i>et al</i> 2021 on hybridisation were not supported by the larger database, and that both spp were monophyletic. Furthermore, the outgroup spp selected by Ding <i>et al</i> 2021 unfortunately had incorrect, near-identical GenBank composition, thus rendering their mrca dating invalid.
81	Altai Snowcock	<i>Tetraogallus altaicus</i>	Monotypic. Easternmost Kazakhstan, M&M 2002, very rare resident Arend Wassink <i>in litt</i> Dec 2014, Ayé <i>et al</i> 2012, recorded Kazakh Altai May 2013 SG(36)1 ATR .
82	Caucasian Snowcock	<i>Tetraogallus caucasicus</i>	Monotypic Region endemic. Caucasus: S Russia, Georgia, N, Azerbaijan BLDZ May 2017, M&M 2002. N slopes of Caucasus- HBW2.
83	Caspian Snowcock	<i>Tetraogallus caspius</i>	Region endemic, 3 ssp: <i>tauricus</i> S&E Turkey, -W Armenia; nominate C Armenia, SW&SE Azerbaijan, N Iran, SW Turkmenistan; <i>semenowtianschanskii</i> Zagros Iran; N Iraq population requires confirmation Mitchell 2017: one heard by locals Sep 2021 Sakran Mountain, Iraqi Kurdistan SG44(1): 128 . S&E Turkey, Armenia, Azerbaijan, Iran Zagros Mts & S Turkmenistan, M&M 2002. Also Iraq, HBW2.
84	Himalayan Snowcock (Ram Chukar)	<i>Tetraogallus himalayensis</i>	6 ssp, 4 in Region: <i>sauricus</i> scarce Trabagatay & Saur Kazakhstan; <i>sewerzowi</i> common W Tien Shan-Dzhungarian Akatau Kazakhstan to China; <i>incognitus</i> S Tajikistan- N Afghanistan; <i>himalayensis</i> E Afghanistan E to Himalayas; 2 ssp extralimital China. Kyrgyzstan AAC, Ven 2002, <i>saurensis</i> (<i>sauricus</i> ?) & <i>sewerzowi</i> E Kazakhstan W&O 2007; HBW2 Tajikistan & Afghanistan (widespread in N&NE Niethammer 1973), R&A 2005, UZ resident Tien-Shan & Hissar-Alai, 2500-4000m asl, where commoner Kreuzberg-Mukhina pers comm, Afghanistan (<i>himalayensis</i> , <i>bendi</i> (now included in <i>incognitus</i>) Paludan 1959), Madge 1980, Clements 2000, M&M 2002, map Grimmett <i>et al</i> 1998, 2009; Salang Pass 1970 Afghanistan Madge 1978, probably breeds Bamiyan Busuttil & Ayé 2009: BLDZ Mar 2018 maps NE Afghanistan extending SW in 2 salients, larger via C Afghanistan & other through Nurestan beyond Torkham Pass. Ding <i>et al</i> 2020 suggested that genetic analysis of Tibetan Snowcock <i>T. tibetanus</i> & <i>T. himalayensis</i> included hybrid populations, in that <i>himalayensis</i> carried a <i>tibetanus</i> haplotype from a most recent common ancestor (mrca) much deeper in time than suggested by other studies. Päckert 2021, using data from Ding <i>et al</i> 2020 and having downloaded the same & additional GenBank data, discovered that the conclusions of Ding <i>et al</i> 2021 on hybridisation were not supported by the larger database, and that both spp were monophyletic. Furthermore, the outgroup spp selected by Ding <i>et al</i> 2021 unfortunately had incorrect, near-identical GenBank composition, thus rendering their mrca dating invalid. NB Introduced US Alderfer 2006
85	See-see Partridge	<i>Ammoperdix griseogularis</i>	Monotypic. SE Turkey Kirwan <i>et al</i> 2008, Syria Murdoch & Betton 2008; Iraq, Afghanistan, HBW2, Iran Scott & Adhami 2006, one prey of Omani Owl <i>Strix butleri</i> Shadab, Dezful, Khuzestan Dec 2018 SGATR41(2) 251 : extralimital Pakistan. Uncommon resident Afghanistan, Turkmenistan, Uzbekistan and SW Tajikistan Ayé <i>et al</i> 2012. Ven 2002 mentions the species for Kyrgyzstan, but not Ayé <i>et al</i> 2012, nor Rustamov & Kovshar 2007. <i>peraticus</i> NW Afghanistan <i>griseogularis</i> in S Paludan 1959 (now treated as monotypic). Vagrant Armenia Ananian 2004, but rediscovered as a breeder in the far SE (perhaps overlooked) in 2020, Aghababayn <i>et al</i> 2021; introduced Kuwait Gregory 2002. Widespread introduction Arabia; some evidence of hybridisation in Jordan with <i>A. heyi</i> (qv below) Jennings 2010. Claim of wild bird in Al-Jawi province May 2017 DB39(4): 257 (450km from nearest population to N) should be treated with caution: local feral status not known.
86	Sand Partridge	<i>Ammoperdix heyi</i>	Region near-endemic, 4 ssp: nominate Sinai, Israel, Jordan-NW&C Saudi Arabia; <i>nicolli</i> NE Egypt; <i>cholmleyi</i> SE Egypt S to N Sudan; <i>intermedius</i> SW Saudi Arabia, Yemen, Oman: extralimital NE Sudan. Widespread in low hilly or sandy hinterland NE, NW Red Sea, SW Red Sea, W to Oman hinterland & SW to Yemen below Empty Quarter OBL 7 , HBW2; in C Saudi Arabia where some cover exists but not in open irrigated agriculture Jennings 2010. All 4 ssp contained within Region; <i>heyi</i> , <i>nicolli</i> , <i>cholmleyi</i> & <i>intermedius</i> . Egypt Avib, BE NB 1st evidence of brood amalgamation N of Eilat Israel May 2013 Gallardo & Moraru 2018

87	Common Quail	<i>Coturnix coturnix</i>	5 ssp., 4 extralimital, nominate in region. Widespread unpredictable summer breeder in N of OSME Region, range extension in S Kazakhstan Martin <i>et al</i> 2018; winters to S as far E as India, breeds & migrant Afghanistan R&A 2005, recorded Wakhan Sep 2006 Ayé 2007, Iran Scott & Adhami 2006; small resident population UAE Aspinall 1996. Probably now resident breeder (small numbers) in C Saudi Arabian irrigated agricultural areas since 1970s Jennings 2010: PM & WV Oman, may have bred OBL7. 1st breeding record Lake Nasser, Abu Simbel Egypt Jun 2022 Jens Hering pers comm 2022. Egypt Avib, BE. NB Japanese Quail <i>C. japonica</i> common import Middle East <i>eq</i> Kuwait Gregory 2002.
88	Harlequin Quail	<i>Coturnix delegorguei</i>	2 remote extralimital ssp in Africa, <i>arabica</i> wholly in SW Arabia on Red Sea littoral, ssp <i>arabica</i> , HBW2, present winter S Yemen Warr 1992. Probably at least 1000 bp Jennings 2010, vagrant Oman OBL7 . Reported Socotra Feb 07. Calling birds heard & responses to playback obtained in Jun & Jul 2015 & 2016 from same fields near Sabaya, Jizan, SW Saudi Arabia; males & females seen Babbington 2018a; circumstantial evidence suggests resident population SW Saudi Arabia/westernmost Yemen (not migratory as previously suggested), but darker than given in the sparse literature on Yemen birds; either <i>arabica</i> is not a valid ssp or those in Saudi Arabia are a different ssp Babbington 2018.
PT	Barbary Partridge PT	<i>Alectoris barbara</i>	Spanò <i>et al</i> 2013 present the case for elevating this taxon to species status.
89	Cyrenaic Partridge {Cyrenaican Partridge}, (Barbary Partridge)	<i>Alectoris (barbara) barbata</i>	Monotypic if split; NW Egypt (IOC, H&M4) treat as ssp <i>barbata</i> . Earlier status as probable former breeder BinE 2009, now confirmed as breeding NW Egypt & considered eligible for full species status as <i>A. barbata</i> Cyrenaic Partridge Spanò <i>et al</i> 2013. Unpublished genetic work by George Sangster supports the separation of barbata from barbara , though more conservatively than by Spanò et al 2013 (Ebels & Essaker 2022). However, in adjacent NE Libya, may have declined drastically, as inferred from Isenmann <i>et al</i> 2016 & emphasised by Ebels & Essaker 2022. Not yet reviewed by IOC World List.
90	Arabian Partridge	<i>Alectoris melanocephala</i>	Monotypic. Region endemic: W Saudi-W Yemen-E Hadramawt, Oman. Kirwan 2021 deems <i>guichardi</i> an invalid ssp . Resident upland littoral SW Red Sea, W to Salalah (Oman), also in E Oman, HBW2: ssp <i>guichardi</i> in E Yemen, <i>melanocephala</i> elsewhere.
91	Chukar Partridge (Chukar)	<i>Alectoris chukar</i> (subsumed in <i>A. graeca</i> Rock Partridge by earlier authors, distribution of which split sp does not occur naturally in OSME Region)	10 of 15 ssp in Region: <i>kleini</i> NW&N Turkey, Caucasus; <i>cypristes</i> Cyprus, SW&SC Turkey; <i>kurdestanica</i> SE Turkey, N Syria, N Iraq, Transcaucasia, N Iran; <i>sinaica</i> Sinai-Syria; <i>werae</i> E Iraq, SW Iran; <i>koroviakovi</i> SW Kazakhstan, SW&S Turkmenistan, N&E Iran, W&S Afghanistan, then Pakistan; <i>subpallida</i> C Turkmenistan-C Uzbekistan, N Afghanistan; <i>falki</i> C Tien Shan Kazakhstan; <i>dzungarica</i> E Tien Shan-Altai, then Mongolia; nominate E Afghanistan, E to Nepal. Syria(IOC) Murdoch & Betton 2008, Israel Perlman & Meyrav 2009, S Yemen Warr 1992, Caucasus, S CA (W&O 2007), mountains most CA also some deserts – increasing Kreuzberg-Mukhina pers comm: Kazakhstan, UZ <i>shestoperovi</i> (now included in <i>koroviakovi</i>) – Mangyshlak & Ustyurt (where rare resident); Kazakhstan, UZ <i>subpallida</i> – Kyzylkum desert, S Kazakhstan, C UZ – sand dunes with Haloxylon near Aydar lake; Kazakhstan, UZ, KS <i>falki</i> – Tien-Shan, Karatau range, Chu-Ili mts.; Kazakhstan <i>dzungarica</i> – Dzhungarsky Alatau, Saur, Tarbagatai, S Altai, S UZ,TJ, TM <i>koroviakovi</i> . Iran, HBW2, Afghanistan R&A 2005 (Paludan 1959 suggests <i>pallascens</i> & confirm <i>chukar</i>). Resident Musandam Peninsula Oman OBL7 . Probably introduced UAE (ssp <i>werae</i> , link to St Helena C Richardson pers comm?), Lever 2005, definitely so Kuwait Gregory 2002, UAE (1700s) Aspinall 1996. Egypt Avib, BE. NB1 Large-scale introductions CA possibly blur ssp ID, notably Kazakhstan Wassink 2015b. NB2 Are Oman birds the origin of introduced St Helena population, or Portuguese colony? WRP Bourne pers comm. NB3 Possibly introduced Cyprus in antiquity (WRP Bourne pers comm), note ssp <i>cypristes</i> not confined to Cyprus. NB4 Extralimital <i>whitakeri</i> raised to species Sicilian Rock Partridge Corso 2010
92	Rock Partridge	<i>Alectoris graeca</i>	Extralimital, 3 ssp. Introduced, ancestry unknown, Masse el Shouf Lebanon 1995-6, now declining, further releases banned Ramadan Jaradi <i>et al</i> 2008, ssp unknown. Avibase Aug 08 website claims introduced into Kyrgyzstan - would not be surprising.
93	Philby's Partridge	<i>Alectoris philbyi</i>	Monotypic Region endemic. Highlands of SW Arabia, HBW2, Jennings 2010; some detail for N Yemen Porter & Warr 1985..
		Caprimulgidae	
94	Grey Nightjar	<i>Caprimulgus jotaka</i>	BLDZ map (Jun 2016) shows summer distribution reaching just into Afghanistan N of Peshawar, but possibly just spring migration overshoot to Afghanistan, ssp <i>hazarae</i> , from NW Pakistan (H&M4) in conditions of strong E/NE winds; old records accepted Ayé <i>et al</i> 2012. Recently split from <i>C. indicus</i> Jungle Nightjar IOC4.1: see Hypothetical List but note this split long recognised in Russian-language literature Red'kin <i>et al</i> 2015.
95	European Nightjar (Eurasian Nightjar)	<i>Caprimulgus europaeus</i>	Passage across C of Region. <i>C.e. unwini</i> Turkmenistan Bukreev 1997, Afghanistan Paludan 1959, Mongolian breeders <i>dementievi</i> probably scarce PM to & from S&E Africa Cleere 2010. Breeds Caucasus CA (common PM ssp <i>europaeus</i> , common BM <i>sarudnyi</i> & rare PM <i>plumipes</i> Kazakhstan Wassink 2015b) Iran, Afghanistan (passage <i>plumipes</i> Paludan 1959), passage, but rare breeder in N Iraq Salim <i>et al</i> 2012, <i>unwini</i> , <i>meridionalis</i> , <i>sewerzovi</i> breed Iran Khaleghizadeh <i>et al</i> 2017, <i>unwini</i> fairly common PM Oman OBL7 , vagrant Israel Weiss & Yosef 2010, winters E Africa HBW5; some are trans-oceanic migrants boreal autumn India-E Africa preying on dragonflies exploiting ITCZ movement Anderson 2009. Norevik <i>et al</i> 2019 find relationships between optimal migration routes and barrier-crossing by wind-assisted detours employed by flapping migrants. Egypt Avib, BE. NB1 Although assessed as Least Concern as recently as 2016, most populations are declining. Secomandi <i>et al</i> 2022 (in peer review) have published the reference genome for this species, which will help aid planning conservation actions. NB2 Summer breeder across much of the Afghanistan-Pakistan border BLDZ Oct 2021. NB3 Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.
96	Egyptian Nightjar	<i>Caprimulgus aegyptius</i>	<i>C.a. arenicolor</i> Turkmenistan, Bukreev 1997 (now subsumed in <i>aegyptius</i>), breeds mid-C CA (very rare BM S-C Kazakhstan Wassink 2015b), 1st breeding record Uzbekistan Apr 2011 (SG34(1)Atr), BLDZ Mar 2018 maps <i>inter alia</i> as SB Kazakhstan, Uzbekistan, Turkmenistan, NW Afghanistan, E Iran: Wassink 2018 notes decline S Kazakhstan, only recent record being of 4 in S Kazakhstan: decline may be consequence of aridification of Aral Sea Wassink 2022. 1st recent breeding record Jun 2016 N Dead Sea Israel DB38(5) : 322-3, 9th Jordan record of 2 at Azraq Reserve Jul 2021 JRBC ; 1st breeding record UAE Abu Dhabi Ajban Mar 2016 amid saxaul <i>Haloxylon salicornicum</i> Campbell & Smiles 2017, has bred in small numbers Bahrain, included in ringing programme Abdullah al-Kaabi <i>in litt</i> ; present almost year-round Dubai, 30-39 ind July 2017 DB39(5) : 337, MB pers obs Sep 2017. 1st for Turkey Milleyha Wetland Apr 2021 TRBC , 2nd record Apr 2022 at Milleyha Emin Yoğurtcuoğlu, Soner Bekir in litt . BLDZ Oct 2021 maps as resident Abu Dhabi & Dubai; S&C arid Iraq Salim <i>et al</i> 2012, 1st record Georgia Aug 2017 Schärer & Cavailès 2019, 2nd Batumi Sep 2018 DB40(5) : 330; likely on migration any OSME country-Cleere & Nurme (C&N) 1998, uncommon PM & WV Oman OBL7 , breeds SW Afghanistan, S Iraq E Iran R&A 2005 SE Iran only Khaleghizadeh <i>et al</i> 2017, probably breeds Kuwait G Gregory 2006 in <i>Phoenix 22</i> ; ssp <i>saharae</i> breeds W Egypt. Egypt Avib, BE. Not confirmed Kyrgyzstan, Ven 2002.
97	Sykes's Nightjar (in error, Syke's Nightjar)	<i>Caprimulgus mahrattensis</i>	Monotypic. SE Iran, SE Afghanistan-C&N 1998, HBW5, R&A 2005, BLDZ Mar 2018 maps resident E to S Afghanistan, SE Iran (probably SB E Hormozgan & Baluchestan Khaleghizadeh <i>et al</i> 2017), extraliminally contiguous into much of Pakistan & easternmost India BLDZ Oct 2021, winters SW India R&A 2012. Vagrant Oman, 1st fully-documented record Muntasar 12 Dec 2016 Burgas & Ollé 2017 OBRC , 5th UAE record Dec 2021 Wadi Wurayah NP DB44(2): 145..
98	Nubian Nightjar	<i>Caprimulgus nubicus</i>	Largely African species with populations ssp <i>tamaricus</i> along E Red Sea & S Arabian coast, HBW5, Cleere 2010, breeds Fife Jordan JBRC, c5000bp Jennings 2010; ssp <i>torridus</i> has occurred Socotra Kirwan 1998, likely bred late 2013 ABC Bull 21(20) . 7-record vagrant Oman OBL7 . Occurred (<i>tamaricus</i>) Israel Perlman 2008, bred Kalya Israel Jun 2016 DB38(5) : 323; 125 calling males ssp <i>tamaricis</i> ('Tamarisk Nightjar') Sdom saltmarsh near Dead Sea Spring 2020 DB42(4) : 272. 33 at 3 sites southern Jordan Valley & Wadi Araba SG40(2) : 195-208, 1st record since 1985 Egypt at Hamata, Red Sea governate Jul 2013 EORC 2019. Zardny 1911 speculates uncommon occurrence Zagros region Iran.

99	Montane Nightjar (Mountain or [Cleere 2010] Abyssinian Nightjar)	<i>Caprimulgus poliocephalus</i>	Monotypic, largely African species. Present every month SW Arabia (perhaps into N Yemen) Symens <i>et al</i> 1992, Porter <i>et al</i> 1996, Cleere 2010, possibly in excess of 1000bp Jennings 2010, 3 heard Tanomah, Saudi Arabia Jul 2016 SG39(1)ATR : 1st breeding suspected Nov 1982 Asir Province long afterwards from later-identified sound recording Stagg 1992. NB Ruwenzori Nightjar <i>C. ruwenzorii</i> formerly was called Montane Nightjar-C&N 1998, Cleere 2010 reverting to that name.
100	Indian Nightjar	<i>Caprimulgus asiaticus</i>	Monotypic. Resident Indian/SE Asian species HBW5, vagrant SE Iran, Porter <i>et al</i> 1996, may breed Scott & Adhami 2006. Reported NW Afghanistan R&A 2005 suggested NE Iran/NW Afghanistan H&E 1970, 2 1885 Afghan records Madge 1980. However, BLDZ map Oct 2021 indicates current distribution in Pakistan no closer than 380km to Iran & 350km to Afghanistan.
101	Plain Nightjar	<i>Caprimulgus inornatus</i>	Monotypic. African sub-Saharan species with montane breeding population SW Saudi Arabia, Yemen Porter & Aspinall 2010, perhaps 2000bp, mostly in Yemen Jennings 2010, winters Africa, HBW5. One on board Nov 87 40km off Kuria Muria Islands Bourne 1988a. Previously thought to be a 2-record vagrant, it is seasonally common near Djibouti City and at the DECAN (Decouvrier et Aider la Nature) Reserve 10km further S Dove <i>et al</i> 2017.
		Apodidae	H&M4 resequences ORL Apodidae genera species; we remain with IOC. Tietze <i>et al</i> 2015 show ancestral <i>Hirundapus</i> as originating before all other swift genera that occur in the OSME Region: ancestral <i>Aerodramus</i> preceded ancestral <i>Cypsiurus</i> , which in turn preceded <i>Tachymarptis</i> and <i>Apus</i> .
102	Himalayan Swiftlet	<i>Aerodramus brevirostris</i> (formerly <i>Collocalia brevirostris</i>)	Swiftlets reported Socotra Nov 2007, following a cyclone, assessed as this extralimital species (Hugh Buck pers comm), likely ssp <i>brevirostris</i> Himalayan foothills Himachal Pradesh & points E & SE. Occurrence accepted in Redman <i>et al</i> 2009, Porter & Aspinall 2010. NB1 Long split from largely sedentary (Pune south to Sri Lanka) Indian Swiftlet <i>A. unicorn</i> Anderson & Shimal 2020. NB2 Known spring wanderer well to E of normal range (Japan) Brazil 2009
103	White-throated Needletail	<i>Hirundapus caudacutus</i>	ssp <i>caudacutus</i> . Likely wanderers to Uzbekistan, Kazakhstan (K-M&K 2005). Perhaps optimistically mapped breeding NE Kazakhstan, HBW5, perhaps Kyrgyzstan (see map Shimba 2007), but SV to easternmost Mongolia & Novosibirsk (Russia) and so occurrence in Region probable. Recorded Kabul Afghanistan May 2013 DB35(4) WPR . Possible Kazakh Altai breeder G&G 2005, Flint <i>et al</i> 1984 map supportive, but remains 6-record vagrant Wassink 2015b. Vagrant CA Ayé <i>et al</i> 2012. Vagrant to UK Parkin & Knox 2010: BLDZ Mar 2018 map nearest breeding range as NE Pakistan, although has reached the Maldives in vagrancy Anderson & Shimal 2020. NB Likely breeds in scattered, high-montane locations in E OSME Region
104	African Palm Swift	<i>Cypsiurus parvus</i>	African species with population ssp <i>parvus</i> in SW Arabia, HBW5, essentially Tihama (beyond old BWP WP boundary), some 15 000bp Jennings 2010; distribution linked to that of doum palm <i>Hypaene thebaica</i> for nesting & roosting. No acceptable records Egypt Haas <i>et al</i> 2010b, EORC 2011. NB Mills <i>et al</i> 2019 split off Malagasy Palm Swift <i>C. gracilis</i> . & Comoros Palm Swift <i>C. griveaudi</i>
105	Alpine Swift	<i>Tachymarptis melba</i> (formerly <i>Apus melba</i>)	Limited molecular studies suggest possible reversion to <i>Apus</i> , but more detailed analysis of true swifts required Parkin & Knox 2010; IOC3.5, H&M4 retain <i>Tachymarptis</i> , Wink 2011 reverts. ssp <i>melba</i> Turkey NW Iran, <i>tuneti</i> NE Mediterranean, Iran <i>archeri</i> S Israel S to Arabia. Widespread Middle East (semi-resident SW Arabia, elsewhere passage migrant or summer breeder [perhaps >10 000bp] Jennings 2010), uncommon irregular PM & WV Oman OBL7 , near absent E Syria except on passage (likely breeds NE Iraq Moore & Boswell 1956, confirmed Salim <i>et al</i> 2012, widespread breeder N Iraq Ararat <i>et al</i> 2011); C-S CA, occupies montane or hilly country K&MK 2005, Ayé <i>et al</i> 2012; <i>tuneti</i> Turkmenistan, Bukreev 1997, Afghanistan Paludan 1959, Chantler & Driessens (1995), Iran, Afghanistan, HBW5. SE Uzbekistan, S Tajikistan R&A 2005. Rare BM scattered locations S Kazakhstan G&G 2005, W&O 2007, Wassink 2015b. 10 000+ Israel Mar 87 Meininger & Bijlsma 1988. Egypt Avib, BE. Breeds N Kyrgyzstan & W Tien Shan, Ven 2002. NB Light-sensitive geolocators showed birds continuously airborne for >200 days Liechti <i>et al</i> 2013.
106	Common Swift	<i>Apus apus</i>	Widespread; <i>A. a. pекinensis</i> Turkmenistan Bukreev 1997, Afghanistan Paludan 1959, this (S Kazakhstan) & <i>apus</i> N Kazakhstan W&O 2007. Nominate in Caucasus, CA, Iraq, Iran, Afghanistan, HBW5. Helicar 2015b recorded moderate decline Cyprus 2006-2015. Zhan <i>et al</i> 2022 track ssp pекinensis from Beijing to southern Africa, crossing the OSME Region via Wakhan Pass Afghanistan & also Tajikistan, Kyrgyzstan, Uzbekistan, Iran, Kuwait & Arabian Peninsula on outward and return migrations. Egypt Avib BE. Thibault <i>et al</i> 2020 remind us that Common Swift is also a regular tree-hole nester in small but regular numbers. NB1 Colony at Amangeldy W-C Kazakhstan where breeding distributions of both <i>apus</i> and <i>pekinensis</i> adjoin & hold birds resembling both ssp: interbreeding (suggested in Wassink 2015b), or perhaps sympatric breeding? NB2 This species has the highest lift/drag ratio (13.3:1) of any bird so far measured: Henningsson <i>et al</i> 2008. NB3 Separation from <i>A. pallidus</i> made on morphology, nestling diet, foraging behaviour in mixed colonies and voice; Päckert <i>et al</i> 2012 suggested genetic distances were fairly low from mtDNA cytb, but Pellegrino <i>et al</i> 2017 found considerable differences in mt DNA markers COI, ND2 & control region, all aligning with an estimated separation some 2MYa.
107	Pallid Swift	<i>Apus pallidus</i>	ssp <i>brehmorum</i> breeds Cyprus, NW&SC Turkey, NW Egypt H&M4; elsewhere ssp <i>pallidus</i> eg Syria Murdoch & Betton 2008, Egypt to Iran H&M4: <i>ilyricus</i> from W Croatia coast migrates through W OSME Region probably to winter Ethiopia latitudes. In Middle East (Jennings 2010 suggests in N & C Arabia only, all other records in S Arabia attributable to <i>A. berliozi</i> ; estimated population of 25 000bp takes this division into account: probable localised SB to coastal cliffs & offshore islands Oman (certain PM) but confusion with <i>A. berliozi</i> requires clarification OBL7 . Colonised towns UAE Aspinall 1996), S Iran (where seemingly resident Porter & Aspinall 2010), winters sub-Saharan Africa; Gibraltar populations of <i>brehmorum</i> geotracked to W sub-Saharan Africa, but later move S and move much further E, remaining airborne while moving to follow greatest insect densities Finlayson <i>et al</i> 2021. Some (resident Scott & Adhami 2006) in SE Iran, HBW5, Pakistan Mekran coast R&A 2012, possibly also Iraq Moore & Boswell 1956, confirmed but uncommon Salim <i>et al</i> 2012. 2 observed Lake Nasser, Egypt Jun 2022 Jens Hering in litt Jul 2022. Egypt Avib, BE NB See above species for genetic separation between <i>A. pallidus</i> & <i>A. apus</i> .
108	Forbes-Watson's Swift (Dhofar Swift)	<i>Apus berliozi</i>	ssp <i>berliozi</i> resident Socotra, encountered occasionally in S of Region, HBW5, reported 2006 islands near Aden Jennings 2007b. Jennings 2010 revise breeding distribution to include S Arabian coast, noting history of confusion with <i>A. pallidus</i> , and suggests 2500bp as conservative estimate: fairly common summer breeder cliffs S Oman (& inland) OBL7 ; resident Socotra BLDZ map Feb 2018. Probably breeds locally Somalia, some thought to winter E Africa Redman <i>et al</i> 2009: BLDZ Feb 2018 maps resident along much of SE Somali coast.
PT	Pacific Swift (Fork-tailed Swift) PT	<i>Apus pacificus</i> (<i>sensu lato</i>)	IOC2.10 reverts to English name Pacific Swift for only 2 taxa, <i>pacificus</i> (breeding in Kazakhstan in Altai) & extralimital (?) <i>kurodae</i> (which now amended to <i>kanoi</i> , because the type collected for <i>pacificus sensu lato</i> may have been within <i>kurodae</i> H&M4); split off are Salim Ali's Swift <i>A. salimalii</i> , Blyth's Swift <i>A. leuconyx</i> , & Cook's Swift <i>A. cooki</i> (see ' NB2 ' below): Leader 2011 (on morphological grounds). Taxon <i>leuconyx</i> (breeds Pakistan) probably wanders to OSME Region & possibly occurs (via ITCZ cycles) in Iran, UAE & Oman (see Hypothetical List): how many taxa have definitely occurred is unclear; taxa would have to be examined in the hand. NB1 ID character aid: <i>pacificus</i> broad white (15-25mm) rump Luiten 2017; <i>salimalii</i> narrow white throat patch (Wikipedia); <i>leuconyx</i> narrow (10mm) white rump (Wikipedia), broad pale (not white) throat patch; <i>cooki</i> iridescent green sheen & shallow tail fork (Wikipedia); more detail by Leader <i>et al</i> 2021, who assesses that only Pacific and Blyth's Swifts are known to have occurred in India. NB2 H&M4 suggests taxon <i>cooki</i> relates more to Dark-rumped Swift <i>A. acuticauda</i> (both extralimital: <i>A. acuticauda</i> breeds at the easternmost end of the Indian subcontinent BLDZ map Jul 2021): indeed Päckert <i>et al</i> 2012 emphasise that <i>cooki</i> and <i>acuticauda</i> are closer than to the other <i>pacificus</i> taxa, but also note that more distinctive molecular markers for separation may be needed.

109	Pacific Swift (Fork-tailed Swift)	<i>Apus pacificus (sensu stricto)</i>	Very rare BM NE-most Kazakhstan (SW Altai G&G 2005) Wassink 2015b: may be locally common Ayé <i>et al</i> 2012, breeds extensively across Mongolia Gombobaatar & Leahy 2019; migrant easternmost OSME Region, vagrant elsewhere, eg 2-record vagrant Oman (<i>pacificus? blythii?</i>) OBL7 , 3rd record Nov 2021 Shamkaiah Park, Ash Sharqiyah DB 44(1): 51 . 4 records UAE (probably <i>pacificus EBRC</i>), possible 1st for Israel Mar 2017 DB40(2): 113 . Vagrant to UK Parkin & Knox 2010. NB Records in E Arabia prior to breeding season may involve Blyth's Swift <i>A.[p.] leuconyx</i> , especially if weather systems in N Pakistan, NW India push early migrants W. Blyth's Swift has reached the Maldives, only 300-350km E of OSME Region deep-ocean area Anderson & Shimal 2020.
110	Little Swift [House Swift]	<i>Apus affinis</i>	<i>A.af. galilejensis</i> SE Turkey Kirwan <i>et al</i> 2008, probably that ssp N Iraq Ararat <i>et al</i> 2011 (2 known colonies Salim <i>et al</i> 2012), Syria Murdoch & Betton 2008, Turkmenistan, Bukreev 1997, Afghanistan Paludan 1959. African species, but resident also SW Arabia, where, breeds mostly Tihama foothills, but with recently-discovered outlier populations (<i>aerobates?</i>); c 30 000bp Jennings 2010. Breeds Levant, Iran, very locally CA HBW5, also common Iraq above 1100m Moore & Boswell 1956, E Afghanistan, SE Tajikistan R&A 2005; SE Uzbekistan, W Tajikistan Ayé <i>et al</i> 2012. Egypt Avib, BE. Rare autumn PM Oman OBL7 , also UAE PH pers comm, very rare spring PM Cyprus CBR11 , 17th record Sep 2015 CRC , up to 5 present Akrotiri Marsh Sep-Oct 2021 SG44(1): 233 . 2nd Qatar record Nov 2016 QBRC , 3rd Umm Salal Mohammed May 2018 QBRC . NB Name House Swift now confined to extralimital <i>A. nipalensis</i> , whose separation is made on morphology and allopatry, not genetic distances Päckert <i>et al</i> 2012.
111	White-rumped Swift	<i>Apus caffer</i>	Monotypic sub-Saharan African resident species, recorded Arabia, HBW5, N Yemen 1982 Cornwallis & Porter 1982. Likely wanders to Yemen littoral.
		Otididae	
Collar <i>et al</i> 2018 (31 authors) analysed the threats to Asian bustards, detailing what is required to halt pending extinctions; they covered bustard populations in OSME Region countries & in the Indian subcontinent, China to Mongolia & SE Asian countries, & in Russian Asia. Consequent to that overview, <i>Sandgrouse</i> 44(1) 2022, a special Great Bustard Issue, published 'Proceedings of the International Conference "Advancing the Conservation of the Great Bustard in Asia"': these comprise 17 papers on the status of <i>Otis tarda tarda</i> in the OSME Region, from Turkey to easternmost Kazakhstan, and also in Xinjiang Province, China. NB Every 2022 reference listed in the text below forms part of those Proceedings: full citations are given in ORL 8.1 Part B			
PT	Great Bustard PT	<i>Otis tarda</i>	Kessler <i>et al</i> 2018 establish a sizeable genetic difference between the 2 ssp, <i>tarda</i> & <i>dybowskii</i> , based on DNA sequence data from the mt cytb gene & the mtDNA control region to estimate the degree of mtDNA differentiation and rates of female gene flow between the ssp. They conclude that the evidence is strong enough for the 2 taxa to at least be recognized and managed as Separate Evolutionary Units; they also suggest that <i>O.t. dybowskii</i> and <i>O.t. tarda</i> may be distinct species, but other DNA techniques are needed to validate that., Despite an ambiguously-worded sentence in the Kessler <i>et al</i> 2018 Abstract, <i>dybowskii</i> has never been recorded in the OSME Region (AE Kessler pers comm). Kessler & Collar 2022 present the Editors' Preface of the <i>Proceedings of the International Conference "Advancing the Conservation of the Great Bustard in Asia"</i> . Kessler 2022 addresses the species' status and global population sizes.
112	Great Bustard	<i>Otis (tarda) tarda</i> Vulnerable (Endangered in Asia). Nationally or Regionally Critically Endangered in Iran (Abdulkarimi 2022), Turkmenistan (Rustamov 2022), Uzbekistan (Kashkarov, Mitropolskaya & Ten 2022), Kazakhstan (Kessler & Bidashko 2022, Koshkin, Timoshenko & Salamgareev 2022, Shakula <i>et al</i> 2022a, Shakula <i>et al</i> 2022b, Prokopov 2022, Nefedov 2022), Tajikistan (Muratov & Talbonov 2022), Kyrgyzstan (Kulagin 2022), Azerbaijan (Farajli 2022), Russian Caucasus (Fedosov & Dzhahirzoyev 2022), Turkey (Özgencil <i>et al</i> 2022) & (extralimitally) NW China (Wang & Yang 2022).	Rare summer breeder ssp <i>tarda</i> scattered areas Kazakhstan Ayé <i>et al</i> 2012, very rare BM, PM, resident, WV Wassink 2015b (declining Kazakhstan W&O 2007, Tajikistan Abdusalyamov 1988), rare PM Uzbekistan Martin <i>et al</i> 2014, Kyrgyzstan, W Iran (scarce Scott & Adhami 2006, now virtually confined to W Azarbaijan Province Iran Khaleghizadeh <i>et al</i> 2017), winters Iraq Salim <i>et al</i> 2012 (former breeder), formerly (?) Syria Murdoch & Betton 2008: sole other ssp <i>dybowskii</i> from Russian Altai eastwards genetically (mtDNA) and in structure and plumage differs sufficiently for the two taxa to be considered Separate Evolutionary Units Kessler <i>et al</i> 2018. 1st sighting in decades Milleyha, Hatay Province, Turkey Nov 2021 SG44(1): 251 . Collar <i>et al</i> 2018 note extinction status in several Russian provinces, with perhaps fewer than 200 birds in the whole of Asian Russia, although some small increases are thought due to an inflow from the few Kazakhs hotspots. However, the Kazakhstan breeding population status is uncertain, from 80 to 1000 adults. Recently a small population, 30 birds, was discovered near Shayan, S Kazakhstan, at the Sheik Khalifa Houbara Breeding Center Martin <i>et al</i> 2018. Winters to S of Region, HBW3, possibly incl Afghanistan R&A 2005, 2012, Ayé <i>et al</i> 2012; vagrant Israel Perlman & Meyrav 2009, sharp population decline Iran, perhaps 40 individuals left Barati <i>et al</i> 2015. Rare breeder, migrant Kyrgyzstan Ven 2002, Egypt Atta 1992, accepted EORC 2011 , 8th record Jizreel Valley Israel Dec 2015 IRDC . NB1 PM to N&C Mongolia, breeding in at least 7 disparate locations Gombobaatar & Leahy 2019, probably all taxon <i>dybowskii</i> , the nearest to easternmost Kazakhstan being near Myangad, at 360km. NB2 Decline of c30% Turkey since 2016 Anatolia, range decreased by 65% since early 20th century DB43(5): 389 . NB3 The extralimital populations in Iberia and parts of Central Europe are stable or relatively stable, although historical declines in Central Europe have greatly reduced many populations to existing levels.
113	Arabian Bustard	<i>Ardeotis arabs</i>	ssp <i>arabs</i> SW Yemen N just into SW Saudi Arabia Porter <i>et al</i> 1996. Now declining fast in range & numbers (50 breeding females optimistic estimate); only in S Tihama Jennings 2010. NB1 ssp <i>arabs</i> main range Ethiopia through to NE Sudan; 2 ssp African extralimitals (one may be extinct), but <i>stieberi</i> likely SE Egypt. NB2 Not included in Collar <i>et al</i> 2018.
PT	Houbara Bustard PT	<i>Chlamydotis undulata</i>	Re Parent Taxon , sizable (eg IOC v2.2) but incomplete (eg BB 2004a, b qv) consensus with BOU decision to split, based (mt cyt-b molecular clock more robust than mtDNA clock) on Broders <i>et al</i> 2003, Sangster <i>et al</i> 2004a, Lesobre <i>et al</i> 2009, Korrida <i>et al</i> 2012, Korrida & Schweizer 2013. H&M4 splits. Cowan 2017, 2018 disagrees. While the two species are narrowly genetically distinct, Korrida & Schweizer 2013 found little intraspecific genetic differentiation NB1 The divergence time of the two species falls within a period of extreme aridity at around 0.9MYa, likely resulting in an E-W vicariance along the Arabo-Saharan deserts; it is likely that the extremely arid eastern Sahara, including the Qattara Depression remained so even during 'greening' periods (summarised from Schweizer 2020). Differentiation within Houbara and Macqueen's Bustard populations occurred later, during the Middle to Upper Pleistocene. Korrida & Schweizer 2013 surmise that population expansion of Macqueen's Bustard (excluding Sinai-Negev birds) happened between 18 and 98KYa and thus appears synchronous with the most recent glacial period, which spanned the period 110 to 10KYa. NB2 The Sinai population differentiated more than the other <i>macqueenii</i> populations, but crucially more than any <i>undulata</i> population to the west, and bears no trace of hybridisation events with <i>undulata</i> Korrida & Schweizer 2013. NB3 Haghani <i>et al</i> 2018 note that the 3 Iran <i>macqueenii</i> breeding populations had free gene flow within Iran, hence comprise a single clade separable from the Saudi populations, with which there was little or no genetic exchange. Protection of genetic diversity in future might require management to make the genetic makeup of dwindling populations more robust.
114	Houbara Bustard	<i>Chlamydotis undulata</i> Vulnerable.	Not found east of Egypt, HBW3; N Africa to Nile valley H&M4. Had become scarce Wadi Natrun & S of Mersa Matruh Egypt by mid-1980s Goodman <i>et al</i> 1986. Not included in Collar <i>et al</i> 2010. Egypt Avib, BE

115	Macqueen's Bustard ('Eastern Houbara', 'Asian Houbara')	<i>Chlamydotis macqueenii</i> Vulnerable. 800-2000 killed or taken annually in Iraq Brochet et al 2019.	<p>Boland & Burwell 2020 in an important paper propose a ranking methodology for taxa at risk in Saudi Arabia; <i>C. macqueenii</i> is near the top of the list. The basis of their methodology appears sound, but likely will need development to account for finer-scale subtleties. Former breeder Turkey Kirwan <i>et al</i> 2008, S Caspian Schüz 1959, Syria (?) Murdoch & Betton 2008, rare local resident S Israel Perlman & Meyrav 2009. Breeds Caucasus, S half Kazakhstan Ayé <i>et al</i> 2012 (not NE Kazakhstan W&O 2008, but wintering records 2013 & 2014 Wassink 2015a Manghystau), rare BM & PM, accidental resident Wassink 2015b: data from 2008 estimate c 18 000 max in Kazakhstan Gubin 2016, declining Tajikistan Abdusalyamov 1988, resident (?) S Uzbekistan Ayé <i>et al</i> 2012, declining Turkmenistan Rustamov 2015 (erroneously as 'Houbara'). Common breeder in surveyed prime habitat Uzbekistan Martin <i>et al</i> 2014, Middle East to Afghanistan (Paludan 1959) (declining Iran Mansoori 2006, but still widespread Khaleghizadeh <i>et al</i> 2017), HBW3: extralimital to W Pakistan. Status in Arabia: formerly numerous breeder in NE Saudi Arabia, much declined, c200 breeding females (half in Oman), some N Saudi Arabia, (scarce S Yemen Warr 1992), W Yemen & SC Oman; many winter Jennings 2010: rare resident breeder Oman central desert, also rare PM & WV OBL7. 4th record Azerbaijan, Lenkoran, exhausted bird from Kazakhstan Breeding Project, Oct 2019 SG42(1): 162. Officially protected, but locally persecuted, as also in Iraq Salim <i>et al</i> 2012. Collar <i>et al</i> 2018 note that all Macqueen's Bustard resident populations in the OSME Region are small, the population trend being one of decline across its entire distribution. The Kazakhstan decline is 26-36%, but some recent recovery, possibly due to a surge in local employment at US military resupply bases for Afghanistan until 2016. Declines are apparent in Uzbekistan & likely in Afghanistan, but evidence for any breeding in Turkmenistan is lacking. 3rd & 4th records for Lebanon shot Nov 2016 Ramadan-Jaradi <i>et al</i> 2017. After 800 released Jordan 2014-4, 1st nest found Spring 2016 DB38(6): 398. Successful reintroduction UAE to boost declining population Pedersen & Aspinall 2010; c 5000 released by 2014 EBRC; successful captive-bred release scheme southern Bahrain King 2018. Rare breeder & migrant Kyrgyzstan, Ven 2002. BOU separation from <i>C. undulata</i>. Ibis 144: 707-710. Egypt Avib, BE. 3rd Azerbaijan record Oct 2018 Besh Barmag DB40(6): 408.</p> <p>NB1 Radiotagged birds migrated Abu Dhabi to China and back 1997 <i>et seq</i> Jennings 1997, UAE Checklist 2008, & birds wintering in N Saudi Arabia close to Jordan, joined the breeding population in W Kazakhstan ul Islam <i>et al</i> 2014. Wild and captive-bred birds from Bukhara, Uzbekistan wintered in different areas: wild in Pakistan & S Iran, captive in Turmenistan, Afghanistan & N Iran DB39(5). NB2 The eponymous 'Macqueen' has never been convincingly identified Jobling 2010. NB3 RNBWS data in <i>Sea Swallow</i> over 50 years contain many references to 'Houbara' circling ships in areas where only taxon <i>macqueenii</i> is expected; surprisingly, several accounts relate to sightings well out in the Arabian Sea.</p>
116	Little Bustard	<i>Tetrax tetrax</i> IUCN 2020 assess as Near-Threatened globally	<p>Monotypic. Scarce but widespread summer breeder across much of Kazakhstan Ayé <i>et al</i> 2012 1st winter record E Caspian Dec 2014 Wassink 2015a, scarce BM Wassink 2015b: localised resident & SV, uncommon WV Turkey Kirwan <i>et al</i> 2014, Iran (may breed Scott & Adhami 2006, formerly so although fairly common WV Khaleghizadeh <i>et al</i> 2017); 8413 counted Besh Barmag, Azerbaijan Nov 2018 DB41(1): 53 Highest winter survival rate in security-patrolled borders of northern Iran Yousefi <i>et al</i> 2017; Caucasus, HBW3, Afghanistan R&A 2005, extinct Syria Murdoch & Betton 2008, very rare winterer Israel Perlman & Meyrav 2009 (one N of Katzrin, Golan Heights Jan 2021 Yoav Perlman <i>in litt</i>), Iraq Salim <i>et al</i> 2012. Collar <i>et al</i> 2018 note evidence in Kazakhstan of a recovery from a huge decline, but fear this will be nullified as economic recovery leads to intensive agriculture on the breeding grounds. Over 100,000 pass through the Besh Barmag, Azerbaijan, bottleneck in autumn Heiss <i>et al</i> 2020; eastern populations have declined with intensification of agriculture, but continuing poaching in Azerbaijan during migration through flyway bottlenecks continues, although a promise has been obtained from the Minister of Ecology & Natural Resources for dialogue Collar & Kessler 2021. 2-record vagrant Oman OBL7, 3rd & 4th records Paphos & Mandria Cyprus CRIC; one reported Fujairah UAE 1-2 Dec 2016 DB39(1): 44, 4th for Cyprus Jan 2017 Patriki/Tuzluca SG39(2): 201, 9 shot Lebanon Dec 2016 Ramadan-Jaradi <i>et al</i> 2017; 1st fully wild bird UAE Dec 2016 EBRC. Some recovery apparent Kyrgyzstan, Ven 2002. EBRC still admit to Egyptian Checklist (2013), presumably as scarce winter visitor, but no recent records in adjacent Libya Isenmann <i>et al</i> 2016.</p>
		Cuculidae	
117	Senegal Coucal	<i>Centropus senegalensis</i>	ssp <i>aegyptius</i> in Egypt, resident Nile Delta & S discontinuously along Nile Mitchell 2017 BoA III. BLDZ map Jun 2020 gives southernmost Region isolate just NE of Aswan. Likely others scattered S through Sudan along Nile.
118	White-browed Coucal	<i>Centropus superciliosus</i>	ssp <i>superciliosus</i> SW Arabia; HBW4 includes <i>sokotrae</i> . Afrotropical species (ssp <i>sokotrae</i>) breeding SW Saudi Arabia from al Quz southward, W Yemen & Socotra; 14 000bp (mainland), perhaps Jennings 2010. The Socotra population is 930km from the next nearest in Berbera Province, Woqoqiya Galbeed District, Somalia, according to BLDZ map Jun 2020. However, halfway between these points 25km inland is a steep ridge whose north-facing slope is well-vegetated, & it stretches for 240km between the coastal towns of Kiis & Bosaso. The Socotra population may not be so isolated as it first appears.
119	Chestnut-winged Cuckoo	<i>Clamator coromandus</i>	1st record photographed extensively Ayn Hanran, Dhofar Oman Dec 2019 by Avescapes tour leaders and group: Lehtikoinen & Forsman 2020, OBRC . Normally north-south migrant mostly in India no nearer than 1500km from this record.
120	Great Spotted Cuckoo	<i>Clamator glandarius</i>	Monotypic. Breeds Turkey, N Iraq, Levant, Cyprus occasional Arabia, HBW4, scarce breeder Iran Scott & Adhami 2006. Vagrant Armenia & Turkmenistan . 4th Qatar record Dec 2017 QBRC , 5th shot Messaied Mar 2020 SG42(2) : 327; 3-record vagrant Masirah Oman OBL7.6 , 3rd record UAE Apr 2012, 5th Feb 2017 EBRC , one Absineh, Hamedan Province Iran May 2016 IRDC rare SV W Zagros Khaleghizadeh <i>et al</i> 2017, 1 parasitising Eurasian Magpie <i>Pica pica</i> nest Ilam Province Iran SG42(2) : 322, potential 3rd breeding record Hammana Lebanon May 2021 Ramadan-Jaradi <i>et al</i> 2021, 2nd for Georgia reported Apr 2017 Batumi DB40(3) : 182, 6th Qatar record Jul 2020 QBRC , 7th record Irkayya Farm Dec 2021 QBRC . Vagrant Armenia, Bahrain, Georgia, Qatar, Yemen Mitchell 2017. Egypt Avib, BE
121	Pied Cuckoo {Jacobin Cuckoo}	<i>Oxylophus jacobinus</i> { <i>Clamator jacobinus</i> }	<p><i>Oxylophus</i> because of plumage and wing-shape differences, HBW4, although this may not be sustained: Erritzøe <i>et al</i> 2012, H&M4 remain with <i>Clamator</i>, but acknowledge <i>Oxylophus</i>: ssp <i>pica</i> occurs Sub-Saharan Africa & Pakistan, Indian subcontinent; Oman, S Arabia migration (scarce migrant S Yemen Warr 1992) records overshoots from Pakistan or sub-Saharan breeding areas, HBW4; some (<i>pica</i>) are trans-oceanic migrants boreal autumn India-E Africa preying on dragonflies exploiting ITCZ movement Anderson 2009. However, small summer-breeding population in W Yemen (possibly also SW Saudi Arabia) of uncertain identity (300+ birds), 2 records from N of breeding distribution Jun & July 2016 Tanoumah SG39(1)ATRC: Uncommon irruptive PM Oman (eg 2011) OBL7.6; 4th UAE record Jul 2015, 5th found recently dead Wadi Wurrayah Nov 2020 EBRC. 2nd for Qatar m&f Nov 2019 QBRC. Breeds SE Iran R&A 2005, but Khaleghizadeh <i>et al</i> 2017 assess as vagrant, 2 records since 2004 Khaleghizadeh <i>et al</i> 2011. Afghanistan E Dickinson pers comm.</p> <p>NB1 We retain English name 'Pied Cuckoo' because it is most apt. NB2 Possible ID confusion if any Yemen reports with wandering Levaillant's Cuckoo <i>O. levaillantii</i> (see Redman <i>et al</i> 2009 p211) wintering on N Somali coast? NB3 2 specimens of African taxon <i>serratus</i> from Yemen locations (1922 & 1948) are Meinertzhagen's, and are thus suspect, although the breeding location holds many other Afrotropical breeders or visitors Jennings 2010.</p>
PT	Common Koel PT	<i>Eudynamys scolopaceus</i> (sensu lato)	Extralimital split to Eastern Koel <i>E.[s.] orientalis</i> Christidis & Boles 2008, H&M4. IOC v2.7 names as Pacific Koel: both <i>orientalis</i> & Black-billed Koel <i>E. melanorhynchus</i> breed in SE Asia. H&M4 adopt name Common instead of Asian Koel for <i>E. scolopaceus</i> . NB Erritzøe <i>et al</i> 2012 caution that many ssp (& populations) of uncertain alignment within this split.

122	Asian Koel	<i>Eudynamys scolopaceus (sensu stricto)</i>	ssp <i>scolopaceus</i> vagrant Socotra (RP pers comm), HBW4, Bahrain Jennings 2007b (record under review), fairly common irregular visitor Oman, mostly C or Masirah OBL7 , Qatar Apr 2012 (SG34(2) ATR), Iran Dec 2013 SG36(1) ATR . Possibility of breeding NE Afghanistan R&A 2005, suggested by map in Erritzøe et al 2012, old records accepted Ayé et al 2012 & likely uncommon, local but regular S Afghanistan where small dams & ponds have proliferated: BLDZ maps in Pakistan very close to Afghan border from Mingora SE to Zhob May 2017, vagrant Turkmenistan Koblik & Arkhipov 2014, notable record of female SE-most Turkmenistan May 2013 Rustamov et al 2016. Accidental SE Iran 1970s Derek Scott pers comm, but Khaleghizadeh et al 2017 treat as possibly resident (recorded Jan 2009 Winkel et al 2010, one Mar 2016 at Tiss, Chahab, Sistan & Baluchestan Province Iran IBRC one Shahdad, Kerman Province Feb 2020 SG42(2) : 322), recorded Kuwait Feb 2009 AERC TAC 2015 WP List, 2 records Bahrain King 2018. NB Irrigation developments aid distribution increase – resident SE Pakistan Roberts 1991
123	Diederik Cuckoo (Dideric, Diedrik or Didric Cuckoo)	<i>Chrysococcyx caprius</i>	Monotypic SW Oman, HBW4, vagrant Israel Perlman & Meyrav 2009, Cyprus Colin Richardson <i>in litt</i> . Uncommon N Yemen Porter & Warr 1985, 2 males Tanoumah Saudi Arabia May-Jul 2016 SG39(1) ATR , 1st for Lebanon shot at Al Ghassaniya Ramadan-Jaradi et al 2017. Juveniles being fed by Rüppell's Weavers <i>Ploceus galbula</i> Oman, Jennings <i>in litt</i> . Perhaps 600 breeding pairs Dhofar, Oman & W Yemen Jennings 2010; fairly common summer breeder SW Oman OBL7 . (Finalised name best represents call IOC2.9). NB H&M4 places <i>Chrysococcyx klaas</i> ahead of <i>C. caprius</i> .
124	Klaas's Cuckoo	<i>Chrysococcyx klaas</i>	Monotypic. Overshoot from Africa, HBW4, uncommon BM Porter & Warr 1985, breeding SW Arabia, Jennings 2008d, possibly 200+ breeding females Jennings 2010. BLDZ map Jun 2020 depicts as SB from the latitude of al-Qahma on Saudia Arabia's Red Sea S to Aden in Yemen.
125	Grey-bellied Cuckoo	<i>Cacomantis passerinus</i>	Monotypic. Vagrant Oman, Porter et al 1996, 4 records OBL7 ; 1st for UAE (5th for WP), a hepatic bird, at Dibba-Karsha farms Mar 2021 QBRC . Migration overshoot ex NE Pakistan? – HBW4. NB Name Plaintive Cuckoo now confined to <i>C. merulinus</i> , extralimital post-split.
126	Common Hawk-Cuckoo (Indian Hawk-Cuckoo)	<i>Hierococcyx varius</i> (= <i>Cuculus varius</i>)	ssp <i>varius</i> vagrant Oman, Porter et al 1996 2 records OBL7 3rd Jan 2016 SG38(2) : 233, but 4th Wadi Ash Shwaymiyyah Dec 2017 OBRC . Overshoots from India or NE Pakistan; westernmost Pakistan range near Khyber & Kunar river, Chitral; see map Grimmer et al 2009, hence possibly in Afghan Daryā-ye & Konar valleys. Possibly breeds E Afghanistan: map in Erritzøe et al 2012. BLDZ map Jun 2020 depicts as SB almost to Peshawar Pakistan. 60km from Afghanistan border.
127	Lesser Cuckoo (Asian Lesser Cuckoo)	<i>Cuculus poliocephalus</i>	Monotypic, long-distance migrant. H&M4, Erritzøe et al 2012 list as summer breeder N Afghanistan, vagrant Uzbekistan & Turkmenistan : breeds NE Pakistan Roberts 1991, BLDZ Jun 2020 IUCN Feb 2022 map as SB only to Mingora district Pakistan, 90km from Afghan border. Entire breeding population spends non-breeding season in E Africa from a breeding distribution that stretches E to Hokkaido Island Japan and southern Ussuriland, Russia, NE of Vladivostok; some are trans-oceanic migrants boreal autumn India-E Africa preying on dragonflies exploiting ITCZ movement Anderson 2009; return migration likely via Arabian Peninsula. Vagrant Uzbekistan, Turkmenistan (K-M&K 2005), 1910 record Zarudnyi 1914, Rustamov 2015. One at al Beed Farm Oman Nov 2014, one at Shisr farms Oct 2019 Martin et al 2021. NB Former English name Indian Cuckoo now applies only to extralimital <i>C. micropterus</i> H&M4.
PT	Oriental Cuckoo PT (Himalayan Cuckoo)	<i>Cuculus saturatus (sensu lato)</i>	Early treatment encompassed many taxa (composition of which & specific name not universally agreed); now assessed as superspecies. IOC1.6 notes split of <i>C. saturatus</i> into Oriental (<i>C.[s.] optatus</i>) & Himalayan (<i>C.[s.] saturatus</i>) & the extralimital Sunda (<i>C.[s.] lepidus</i>) Cuckoos Payne 2005, Collar & Pilgrim 2007. The corollary is that taxon <i>saturatus</i> in the Russian Federation (Koblik et al 2006) is listed as such because Blyth 1843 antedates Gould 1845, under whose arrangement it would be described as <i>C.(s.) optatus</i> ! Whatever species name applies in Russia, it has long had the English name Oriental Cuckoo (Anufriev et al 1997). Song analysis (Lindholm & Lindén 2007) suggests deeper complexity but although Erritzøe et al 2012 assess differences as minor, while conceding their taxonomic conclusions are tentative, Xia et al 2015 clearly demonstrate well-differentiated songs across a wide geographical range. Lehtikoinen & Väisänen 2020 provide detailed, if complex, analyses of primary feather patterns of Common, Oriental and Himalayan Cuckoos as reliable ID markers. BLDZ Jun 2020 does not split <i>saturatus</i> & <i>optatus</i> . NB1 H&M4 note <i>optatus</i> antedates <i>horsfieldi</i> . NB2 IOC10.2 is unchanged from 1.6, but absence of defined breeding distributions for taxa listed here may yet see Horsfield's Cuckoo <i>C.[s.] horsfieldi</i> revived for some populations. NB3 From his monograph on Old World Cuckoos, examination of such as type specimens suggests some early misidentification, thus perpetuating distributional errors Clive Mann pers comm.
128	Himalayan Cuckoo	<i>Cuculus saturatus (sensu stricto)</i>	Breeds foothills Himalayas E to E China H&M4. In Region, vagrant or migration overshoot, <i>eg</i> from NE Pakistan Roberts 1991 map? From map in Erritzøe et al 2012, probably this taxon vagrant Iran although Porter & Aspinall 2010 suggest <i>C.[s.] optatus</i> . BLDZ Aug 2020 map gives westernmost breeding area close to New Mirpur City Pakistan, 270km from Afghan border at Torkham: note that BLI does not split <i>C. optatus</i> from <i>C. saturatus</i> , but calls lumped <i>C. saturatus</i> Oriental Cuckoo.
129	Oriental Cuckoo	<i>Cuculus optatus</i>	See PT row for summary of earlier inconsistent treatments. H&M4 treat as monotypic allospecies covering N Eurasia, E from east European Russia. rare BM Kazakhstan SW Altai region Wassink 2015b who treats as <i>C. optatus</i> , Ayé et al 2012 as <i>C. saturatus</i> , as does Rustamov 2015 for Turkmenistan, irregular scarce PM: the context of Xia et al 2015 would seem to require some re-evaluation of these conclusions towards congruency with ORL treatment. In N of range N of Kazakhstan, parasitizes Olive-backed Pipit <i>Anthus hodgsoni</i> & White Wagtail <i>Motacilla alba</i> Rogacheva 1992. Possible migrant overshoot from Kashmir, HBW4. Roselaar & Aliabadian 2009 assessed as vagrant to Iran 'Oriental Cuckoo <i>C. saturatus</i> ', but did not specify which taxon, two 1898 records assigned to <i>optatus</i> Khaleghizadeh et al 2017 <i>pro tem</i> ; Kyrgyzstan, Ven 2002, vagrant Israel - Israel Checklist 2015. Likely just into NE Kazakhstan Flint et al 1984. NB <i>optatus</i> & <i>horsfieldi</i> perhaps best treated as conspecific <i>pro tem</i> Clive Mann pers comm.
130	Common Cuckoo	<i>Cuculus canorus</i>	<i>C.c. subtelephonus</i> Turkestan. Widespread breeder N OSME Region HBW4, N Iraq Moore & Boswell 1956, Thought to breed occasionally Musandam Peninsula on UAE/Oman border Jennings 2010, female collected (male present but not captured) Tab Island 1920 Ticehurst et al 1925; fairly common PM Oman OBL7 . Afghanistan <i>subtelephonus</i> & <i>canorus</i> Paludan 1959, also Iran Khaleghizadeh et al 2017 where common SV N Iran & highlands elsewhere & common PM; in boreal autumn some are trans-oceanic migrants India-E Africa (loop migrants) preying on dragonflies exploiting ITCZ movement Anderson 2009: in Jun 2019, one tagged in Khurkh Mongolia flew directly across the Indian Ocean from Gujarat, passing Socotra, Somalia & continued overland SW for 1000km before stopping DB42(1) : 52. Egypt Avib, BE. NB Once treated by some as conspecific with <i>C. saturatus</i> .
		Pteroclididae	Cohen 2011 comprehensively analyses Pteroclididae . However, the taxonomic placement of <i>P. alchata</i> & extralimital Burchell's Sandgrouse <i>P. burchelli</i> prevents phylogenetic certainty. Placing all sandgrouse in <i>Syrrhaptes</i> on name priority grounds is narrowly valid, but says nothing about relative relationships within Clades , 3 of which are evident (2 in Region) from Cohen 2011, but omit the 2 unplaced taxa. Should deeper investigation of the unplaced taxa fit them into the 3 Clades , well & good, but if not, then all OSME Region taxa except <i>lichtensteinii</i> would be placed in <i>Syrrhaptes</i> . <i>Pro tem</i> , we follow the Clade option, assuming <i>alchata</i> will eventually fit. For ORL convenience, we retitle the Clades as A (<i>Syrrhaptes</i>), B (<i>Pterocles</i>) & C (<i>Nyctiperdix</i>).
Cohen 2011, Clade A			
131	Tibetan Sandgrouse	<i>Syrrhaptes tibetanus</i>	Monotypic. E Tajikistan K-M&K (2005), Afghan Wakhan Ayé et al 2012, but BDLZ Jun 2020 maps into Tajikistan as resident Badakhshan and Pamirsky National Parks. Likely also in Afghan Wakhan as lowest-altitude migration route in that vast mountainous area. Prey items of Eurasian Eagle Owl <i>Bubo [b.] bubo</i> in Pamirs Tajikistan-Afghanistan border cited in Niehammer 1973. H&M3 corrigenda for Afghanistan E Dickinson pers comm. Extralimital to China.

132	Pallas's Sandgrouse	<i>Syrrhaptes paradoxus</i>	Monotypic. Kazakhstan (scarce PM in fluctuating numbers, rare resident Wassink 2015b), northern Turkmenistan, Uzbekistan & Kyrgyzstan BLDZ Jun 2020, HBW4 vagrant winter Iran Scott & Adhami 2006, some recent (2007, 2015) records Khaleghizadeh <i>et al</i> 2017: one male in flock of Black-bellied Sandgrouse <i>S. orientalis</i> at Hossein-Abad plain, Khaf, Khorasan-e Razavi Iran Jan 2021 DB43(2) : 151, another at Ghaleh-Bin, Talesh Dec 2021 DB 44(1): 51 .. Extralimital W to Europe at Volga-Ural interfluve & E to E China; common resident throughout Mongolia save N-C Gombobaatar & Leahy 2019. Several irruptions reached UK in the 19th & early 20th century ea Stevenson 1864.
133	Black-bellied Sandgrouse (Formerly Imperial Sandgrouse)	<i>Syrrhaptes orientalis</i> (<i>Pterocles orientalis</i>)	<i>P.o. arenarius</i> Turkmenistan, Bukreev 1997. Resident <i>orientalis</i> C&EC Turkey Kirwan <i>et al</i> 2008 to Caucasus; <i>arenarius</i> from lower Volga (probably rare regular breeder Arkhipov 2006) to S Iran <i>orientalis</i> to W Iran Khaleghizadeh <i>et al</i> 2017: <i>orientalis</i> uncommon Negev Israel Perlman & Meyrav 2009, 3rd record (350+) in weather-driven irruption Lebanon Dec 2013 Gol <i>et al</i> 2014, but at least 25 shot Lebanon 2018, raising its status to WV in small numbers Ramadan-Jaradi <i>et al</i> 2019; former breeder extinct by 1980s Flint 2019, now less than annual migrant Cyprus, latest May 2015 CRC ; 2 Akrotiri Gravel Pits Jan 2019 CRBC . Winterer, passage only Iraq Salim <i>et al</i> 2012, breeds widely CA (common BM, very rare resident Kazakhstan Wassink 2015b), HBW4, Afghanistan, E Iran R&A 2005: extralimital disjunctly W in NW Africa & Iberia & E wintering Pakistan & NW India. Egypt Avib. BE
134	Chestnut-bellied Sandgrouse	<i>Syrrhaptes exustus</i> (<i>Pterocles exustus</i>)	Resident southern edges Arabian Peninsula, ssp <i>erlangeri</i> perhaps 80 000bp Jennings 2010, SE Iran, HBW4 coastal lowlands Bandar Abbas to E Khaleghizadeh <i>et al</i> 2017, UAE Aspinall 1996, abundant resident breeder Oman OBL7 , largest assemblages since 1970s, 600+ at Saham Nov 2016 & 500 at Ayn Hamran Dec 2016 over 800km away SG39(1)ATR , SE Iran R&A 2005 ssp <i>hindustan</i> . Rediscovered (<i>floweri</i> , thought extinct) Egypt between Giza & Luxor 2012, max count 120, 61 in one group Feb 2013 EORC , c50 Gebel Elba (Halaib Triangle) 2013-17 DB40(3) : 182; EORC , 19 photographed there Jul 2-18 DB40(4) : 256, records 2013-2018 Dora 2019; 30 SW of Bahnasa, Minya governorate Sep 2018 (near southernmost Qattara Depression), where rediscovered 2012 Khil <i>et al</i> 2012 EORC 2019. Extralimital Africa & India Introduced Kuwait, bred in captivity Qatar Mitchell 2017.
Cohen 2011, Clade A1 (Sister to Clade A)			
135	Spotted Sandgrouse	<i>Syrrhaptes senegallus</i> (<i>Pterocles senegallus</i>)	Monotypic. Largely African sp. Resident SE Iran coastal lowlands & deserts N Khuzestan to N Baluchestan & Seistan Khaleghizadeh <i>et al</i> 2017, S&W Iraq (where very local in deserts) Salim <i>et al</i> 2012, Arabian peninsula, heavily biased to C & S Oman (fairly common resident breeder OBL7), elsewhere erratic, perhaps 10 000bp Jennings 2010, Levant to Egypt, HBW4, former (?) breeder Syria Murdoch & Betton 2008 uncommon Israel Perlman & Meyrav 2009, 6th UAE record Saih al Salam Jan 2008 EBRC : 3rd for Turkey Milleyha shores, Samandag, Hatay Mar 2021 by Emin Yoğurtcuoğlu TBRC ; single old record Tajikistan Ivanov 1940, SW Afghanistan R&A 2005. Extralimital Saharan Africa. Egypt Avib, BE. NB imported Kuwait Gregory 2002.
Cohen 2011, Clade B			
136	Crowned Sandgrouse (Formerly Coronetted Sandgrouse)	<i>Pterocles coronatus</i>	Resident <i>atratus</i> locally common Iran C&S deserts Khaleghizadeh <i>et al</i> 2017 & in Arabia, virtually confined to S Oman as breeder (c6000bp) Jennings 2010, some Yemen SW Saudi, fairly common stony deserts Oman OBL7 ; <i>saturatus</i> N Oman hills. Also Egypt, HBW4, SW Afghanistan (<i>atratus</i> Paludan 1959) R&A 2005, <i>vastitas</i> NE Egypt to Jordan rare Israel Perlman & Meyrav 2009, 25 NW Qatar Jun 2016 SG39(1)ATR ; <i>coronatus</i> W Egypt Goodman <i>et al</i> 1986, likely this taxon Gebel Elba, Halaib Triangle Dora 2019: extralimital to E in W Pakistan & disjunctly W to Saharan Africa. Egypt Avib, BE
Unplaced in Cohen 2011 - pro tem leave in Pterocles			
137	Pin-tailed Sandgrouse	<i>Pterocles alchata</i>	<i>P.a. caudacutus</i> Turkmenistan, Bukreev 1997. Breeds Turkmenistan, Uzbekistan, S-C Kazakhstan (Scarce BM, accidental resident Wassink 2015b), WV N Iran, HBW4. Breeds Syria-Iran, resident Tajikistan, Afghanistan, E Iran R&A 2005, Scott & Adhami 2006, tens of thousands winter Golestan Winkel <i>et al</i> 2010, locally common resident SW Iran Khaleghizadeh <i>et al</i> 2017; formerly common resident Iraq Moore & Boswell 1956; now locally widespread Salim <i>et al</i> 2012, uncommon local RB S Israel Perlman & Meyrav 2009, declining Turkey Kirwan <i>et al</i> 2014, 2nd record (17+) in weather-driven irruption Lebanon Dec 2013 Gol <i>et al</i> 2014. Rare PM Kyrgyzstan, Ven 2002. Egypt Waschkie <i>et al</i> 2005, 1st record since 1917 EORC 2011, 3-record vagrant Oman OBL7 , possibly from introduced UAE birds (Established population from large-scale introductions, also on undisclosed site 2018 Campbell & Smiles 2019a), 1st record Qatar small breeding flock Jun 2015 QBRC . In N Saudi & Kuwait, variable WV & occasional SB Jennings 2010. 10K counted PanSeaCo shrimp site, Caspian Golestan near Turkmenistan border & 18K counted Gonbad road to Turkmenistan border (Route 83?) Dec 2018 SGATR41(1) . Extralimital W via N Africa to Iberia & E just into NW Tibet: some winter Pakistan, NW India. NB1 imported Kuwait Gregory 2002, released UAE since 1998 Aspinall 2010. NB2 DB 2009 call ssp <i>caudacutus</i> Asian Pin-tailed Sandgrouse
Cohen 2011, Clade C			
138	Lichtenstein's Sandgrouse	<i>Nyctiperdix lichtensteinii</i> (<i>Pterocles lichtensteinii</i>)	Uncommon resident (<i>arabicus</i>) SE Iran Scott & Adhami 2006 Khaleghizadeh <i>et al</i> 2017 S Afghanistan & extralimital to SW Pakistan. Not recorded Iraq since 1920s Salim <i>et al</i> 2012; resident Saudi western hills, W Yemen, <i>ingramsi</i> Hadramawt E Yemen, <i>lichtensteinii</i> rest of Arabia, Socotra (Jennings 2007b); Kirwan 2021 asserts validity of <i>ingramsi</i> , formerly generally considered endemic to Yemen, but Velasco & Menzie 2022 cite imagery evidence for it in Dhofar Governorate, southern Oman . SE Egypt, Israel, Jordan 5th record Aqaba Nov 2018 JBRC ; perhaps above 60 000bp Arabia Jennings 2010, fairly common Oman (not Empty Quarter) OBL7 , Egypt, S Jordan, S Israel, SE Iran, S Afghanistan, HBW4, E UAE Aspinall 1996, Socotra. 1st for Lebanon of 6 killed & 3 injured Feb 2020 reported Sawan 2020 (submitted Jun 2020) Bquiaa, Aakar, N Lebanon; Ramadan-Jaradi <i>et al</i> 2020 (submitted May 2020) had requested detailed confirmation. Extralimital to W in disjunct fashion across arid Africa. Egypt Avib, BE
		Columbidae	H&M4 mildly resequence ORL Columbidae genera, placing Turtur & Oena last.
139	Rock Dove (Common Pigeon)	<i>Columba livia</i>	Populations free of or with little introgressive DNA from domesticated or feral pigeons (see next row) occur almost solely in mountainous or uninhabited areas (<i>eg</i> in Arabia Jennings 2010: abundant montane resident Oman OBL7) or on sea cliffs. <i>C.l. livia</i> & <i>neglecta</i> Turkmenistan Bukreev 1997, common resident Kazakhstan Wassink 2015b <i>livia</i> in N, <i>neglecta</i> in S, but see next taxon; <i>neglecta</i> Afghan Nurestan <i>gaddi</i> rest of Afghanistan Paludan 1959. Widespread Middle East, CA & Caucasus Gibbs <i>et al</i> 2001 Iran, Afghanistan R&A 2005. Egypt Avib, BE. Our English name differentiates from Feral Pigeon, whose status differs.
140	Feral Pigeon {Common Pigeon}	<i>Columba livia</i> forma domestica	Widespread amongst human habitation, but poorly & rarely documented, thus biasing Rock Dove studies Parkin & Knox 2010, who emphasise need for better reporting: all birds in Tengiz-Korgalzhyn region central Kazakhstan are this form Wassink 2015b. Feral Pigeon spreading where interest in 'show' varieties has increased, as have escapes, <i>eg</i> Kuwait Gregory 2002, but 'dark' phenotype males out-compete paler birds for mates, thus ensuring high frequency of dark birds in urban sites Parkin & Knox 2010. Some evidence of out-competing Lesser Kestrels <i>Falco naumanni</i> for nest-holes in old buildings.
141	Hill Pigeon	<i>Columba rupestris</i>	<i>C.r. turkestanica</i> Turkmenistan, Bukreev 1997, Afghanistan Paludan 1959. Resident E CA, Gibbs <i>et al</i> 2001, HBW4, Afghanistan R&A 2005, Wakhan Sep 2006 Ayé 2007. NB Kazakhstan status rare resident in E, but future uncertain – hybridisation with <i>C. livia</i> has caused recent local extinctions Wassink 2015b.
142	Snow Pigeon	<i>Columba leuconota</i>	Kazakhstan records unsupported by extant documentation or skins Wassink 2015b (no vagrancy reports since 1956), Tajikistan, Kyrgyzstan (Rare resident S Ferghana, Ven 2002, not (K-M&K 2005) Turkmenistan, EC & NE Afghanistan R&A 2005 (NE Paludan 1959), Wakhan 2006 Ayé 2007, mapped Grimmer <i>et al</i> 1998, 2009: BLDZ Feb 2018 maps NE Afghanistan, E Tajikistan S-most Kazakhstan & touching E-most Uzbekistan. NB1 rarely enters trees Bates & Lowther 1952. NB2 Oddly, H&M4 make no mention of occurrence in Region.
143	Speckled Pigeon	<i>Columba guinea</i>	Vagrant Yemen, Stanton 1998, likely ssp <i>guinea</i> from Ethiopia; escapes in UAE Aspinall & Porter 2011; breeds Eritrean Dahlak Archipelago de Monti <i>et al</i> 2009. Feral population around Kandahar, Afghanistan 2011/2 Richard Seargent <i>in litt</i> . One shot Rumaitha, Sawana Iraq Jan 2019 may be from feral or wild population, but Traded species IUCN Species Account Aug 2019. Extending range N in Sudan to N of Khartoum Jenner 2019.

144	'Western Stock Dove' (Stock Pigeon)	<i>Columba oenas oenas</i>	Monotypic. Widespread SW (winter) & NE (Kyrgyzstan, breeding) CA & Caucasus, Turkey to NW Iran Gibbs <i>et al</i> 2001: rare BM, common PM, rare resident, WV Wassink 2015b; found N Iraq Moore & Boswell 1956 uncommon winterer Salim <i>et al</i> 2012, 9th Kuwait record Nov 2015 KORC , uncommon Israel Perlman & Meyrav 2009, 1st Qatar record Irikaya Dec 2019 QBRC . 2-record vagrant Oman OBL7 , 3rd Raysut Oct 2019 OBRC . Egypt Avib, BE
145	'Eastern Stock Dove'	<i>Columba oenas yarkandensis</i>	Monotypic. Long-isolated population, morphologically larger than <i>C.o. oenas</i> , BLDZ Jun 2020 mapping in Turkmenistan, Tajikistan, Uzbekistan, Kyrgyzstan & northernmost Afghanistan; also Gibbs <i>et al</i> 2001; very rare BM SE-most Kazakhstan Wassink 2015b. Likely this taxon wintering E Afghanistan R&A 2005.
146	Yellow-eyed Pigeon (Pale-backed Pigeon) (Eastern Stock Dove)	<i>Columba eversmanni</i> Vulnerable	Monotypic. CA, N Iran, Afghanistan, HBW4, SE Turkmenistan, SE Uzbekistan (rare breeder Martin <i>et al</i> 2014), S Tajikistan, S, rare BM SE Kazakhstan Wassink 2015b, 3 at Turanga Forest, Almaty Province Jun 2019 SG42(1) : 169, Afghanistan R&A 2005 (N&W Paludan 1959), Wakhan 2006 Ayé 2007. Migrant, rare, confined to steep wooded valleys Kyrgyzstan, Ven 2002: one in Tashkent Region Aug 2022 3rd record since 1970s SG44(1): 255 . Resident NE Iran, WV SE Iran Mitchell 2017, but Khaleghizadeh <i>et al</i> 2017 downgrade these categories to 'probably rare': 2 at Shahdad, Kerman Oct 2019 DB42(1) : 52, 5 near Mashhad, Sep 2020 Birding Iran FB image, another there May, 4 photographed Mashhad, Khorasan-e Revi Jun 2021 DB43(4) : 302, 10 at Kashaf-Rud, Mashhad, Khorasan-e Razavi August 2021 DB 43(5) : 386.
147	Common Woodpigeon {Common Wood Pigeon}	<i>Columba palumbus</i>	<i>C.p. iranica</i> & <i>casiotis</i> Turkmenistan, Bukreev 1997, <i>casiotis</i> Afghanistan Paludan 1959. Much of CA, Caucasus, Afghanistan, Gibbs <i>et al</i> (2001) <i>palumbus</i> (Common BM, PM) in N & <i>casiotis</i> (common BM) in SE Kazakhstan Wassink 2015b, extension (uncommon) into Uzbekistan Martin <i>et al</i> 2014, Resident S Caspian Iran, SV further S & W, & WV to S Iran Khaleghizadeh <i>et al</i> 2017. Iraq Moore & Boswell 1956, NE Iran R&A 2005, uncommon winter Israel Perlman & Meyrav 2009. Egypt Khounganian & Meininger 1992, accepted EORC 2011. 2nd record Jordan Valley, Jordan (1st was in 1966) Azraq SG43(1) : 173, 5th Azraq Sep 2020 JRBC . In Arabia, WV, but resident population Oman (Uncommon, localised N Oman mountains, rare WV OBL7), has bred Kuwait Jennings 2010. IOC division of English name cumbersome. NB <i>casiotis</i> suggested by some as separable
148	African Olive Pigeon	<i>Columba arquatrix</i>	Monotypic. African species. Rare and local SW Saudi Arabia & W Yemen, Porter <i>et al</i> 1996; 2 records Jun & Oct 2019 Abha, Raydah escarpment SG42(1) : 175. Very shy, perhaps 100bp Jennings 2010. Considered very rare resident in not-too-distant Djibouti Buechley <i>et al</i> 2019.
149	European Turtle Dove	<i>Streptopelia turtur</i> Vulnerable	<i>S.t arenicola</i> Turkestan, Afghanistan Paludan 1959; passage Iraq Moore & Boswell 1956, breeds in N, numbers down Salim <i>et al</i> 2012, <i>turtur</i> perhaps Turkey; <i>arenicolor</i> rare BM scarce PM Wassink 2015b, abundant SV, PM all Iran Khaleghizadeh <i>et al</i> 2017. Widespread BM Middle East eg UAE Aspinall 1996: possibly 10 000bp Arabia Jennings 2010, uncommon summer breeder, fairly common PM, rare winter Oman OBL7 : CA: Kazakhstan, Caucasus, Afghanistan, Gibbs <i>et al</i> (2001), E Iran R&A 2005; it may have disappeared from E Kazakh range W&O 2008; part of decline in Kazakhstan possibly linked to severe decline in European Russia, from 1 million bp in 1990s to an estimated 7000bp in 2022 Wassink 2022: rufescens Nile Delta Isenmann & Thevenot 2018: Hering <i>et al</i> 2020a found 3 spp breeding around Lake Nasser in 2019; <i>rufescens</i> (abundant), <i>turtur</i> & <i>arenicola</i> . Extremely high breeding density ssp rufescens in tamarisks Toshka Island N of Abu Simbel, Lake Nasser Jun 2022 Jens Hering pers comm Jul 2022 . W Europe decline 70-90% since 1970s due to habitat loss (hedgcs etc) reducing breeding period by 12 days (Browne & Aebischer 2003a,b,c 2004) & to indiscriminate shooting (France & S Europe, including Malta: now reduced in many places) (Africa, much by Europeans targeting roosts because they can afford to) & to severe habitat loss in Sahel Zwarts <i>et al</i> 2009. Prakas <i>et al</i> 2021 found that breeding populations in Morocco and Ukraine have a different genetic make-up from those in Europe west of the longitude of Poland and Romania. No taxonomic conclusions can be reached until the species' entire breeding range West Saharan Africa east to N China) is sampled using a suite of DNA techniques.
150	Dusky Turtle Dove [Pink-breasted Dove]	<i>Streptopelia lugens</i>	Monotypic. SW Arabia, but mostly African species, HBW4, resident W Yemen Porter & Warr 1985. Breeds montane SW Arabia in optimum habitat at 50bp/km²: possibly declining through woodland loss to below 80 000bp Jennings 2010.
PT	Rufous Turtle Dove PT	<i>Streptopelia orientalis</i>	Parent Taxon reverts to early ornithologists' treatment, eg Lars Svensson in Wilson & Korovin 2003, yet Svensson <i>et al</i> 2009 remains unsplit, as does IOC12.1 still, & H&M4. Both following are taxa vagrant to Europe Svensson <i>et al</i> 2009 & to UK Parkin & Knox 2010. NB Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.
151	Oriental Turtle Dove (Rufous or Eastern Turtle Dove)	<i>Streptopelia (orientalis) orientalis</i>	May wander from westernmost distribution C Siberia, Gibbs <i>et al</i> 2001, vagrant CA Ayé <i>et al</i> 2012. Passage migrants likely through N Pakistan via easternmost Afghanistan (especially Wakhan) & CA states to N - Roberts 1991 text. One S of Zhanaturmys, E Kazakhstan (3rd record after 2 males Chokpak Pass 1990 Andrei Gavrilov <i>in litt</i>) (Wassink 2009), but there are no skins, images or documented descriptions that would rule out intergrades with meena Arend Wassink in litt Feb 2022 . One at Yotvata, Israel Sep 2018 SGATR41(1) , 4 Israel Nov 2021 unassigned to taxon SG44(1): 239, one Gad Hills Feb 2022 Yoav Perlman <i>in litt</i> . Common SV in eastern two-thirds of Mongolia Gombobaatar & Leahy 2019
152	Rufous Turtle Dove {Oriental Turtle Dove} (Mountain Turtle Dove)	<i>Streptopelia (orientalis) meena</i>	Grouped with extralimital <i>agricola</i> of NE India & points E. E&SE CA, Afghanistan, Gibbs <i>et al</i> (2001), Iran (vagrant Scott & Adhami 2006) & NE Kazakhstan Flint <i>et al</i> 1984, common BM, PM Wassink 2015b, likely this taxon scarce migrant Volga Delta Arkhipov 2006. Vagrant Israel Perlman & Meyrav 2009, Kuwait Oct 2010 SG33(1) , Jahra Pools Late Sep 2015 DB 37(6) : 406, 14th record Nov 2015 KORC ; Netherlands Jan 2010 Ebels <i>et al</i> 2010, 1st & 2nd records Turkey Feb 2011 Kirwan <i>et al</i> 2014, juvenile seen Milleyha, Hatay Sep 2018, one perhaps this taxon reported at Kocalçay Delta, Karacabey Nov 2021 DB43(6) : 463. 2nd Azerbaijan record Oct 2017 SG40(1) : 113: the 11 recorded at Batumi Sep-Oct assumed to be this taxon SG44(1): 237 . Breeds as far W as S Urals Wilson & Korovin 2003. Egypt Avib, BE. Rare passage SE Oman, uncommon Masirah OBL7 , 1st documented record Dec 2021 Irkayya Farm QBRC , vagrant Iran (or rare PM Khaleghizadeh <i>et al</i> 2017) one found dead Jajarm, N Khorasan Province May 2020 SG42(2) : 322, Iraq, Israel, Saudi Arabia Porter & Aspinall 2010. One shot 15 Dec 2016 at Larnaca was 1st for Cyprus CRC ; 2nd & 3rd for Cyprus at Mandria March 2017 CRC Richardson 2019, 4th (?) Akrotiri Marsh SGATR41(1) , one Beit Sahour, 1st for Palestine Oct 2019 (as <i>S.o. meena</i>) Jarayseh 2021, one Yotvata Israel Apr 2017 SG40(2) : 202, another at Ga'ash Oct 2018 SGATR41(1) . Resident (minority) & summer breeder in Pakistani W Himalayas Roberts 1991. NB1 Following Svensson's view, the name Oriental Turtle Dove applies only to <i>S.(o.) orientalis</i> , which has wandered to easternmost Kazakhstan (see previous taxon). NB2 <i>orientalis</i> specimens in Almaty Museum, origin not known at present Andrew Grieve <i>in litt</i> .
153	Eurasian Collared Dove (Indian Ring Dove)	<i>Streptopelia decaocto</i>	Monotypic after extralimital taxon <i>xanthocycla</i> (Myanmar) split as Burmese Collared Dove in IOC11.2 Inskipp & Collar 2015. Turkey-Afghanistan H&E 1970; now widespread Middle East eg UAE Aspinall 1996; scarcely recorded before 1963, now widespread above 20°N [possibly 2 million bp!] Jennings 2010, common resident breeder, abundant PM Oman OBL7 , widespread breeder Saudi Arabia Alshamli <i>et al</i> 2021, Turkmenistan, Tajikistan, Afghanistan, Gibbs <i>et al</i> (2001), common resident rare BM Kazakhstan Wassink 2015b, Iran R&A 2005 (urban & settlements Khaleghizadeh <i>et al</i> 2017), noted Helmand Afghanistan 2006.Lever 2005 suggested introduced Bahrain, Jennings 2010 disagreed. Observed many locations between Abu Simbel & Aswan, Lake Nasser Jun 2022 & 2 nests (1st breeding record there) found with chicks Jens Hering pers comm Jul 2022 . Egypt Avib, BE.

154	African Collared Dove [Pink-headed Dove]	<i>Streptopelia risoria</i> { <i>Streptopelia roseogrisea</i> }	Although species name <i>risoria</i> , not <i>roseogrisea</i> as in Opinion 2215 ICZN 2008 (Richard Klim <i>in litt</i>) , IOC3.5 reverted to <i>roseogrisea</i> on grounds that Opinion 2215 was reached through flawed data. However, van Grouw 2018 details the lengthy and confused history of the naming of this species to demonstrate that the correct genus and species names by precedence are <i>Streptopelia risoria</i> Linnaeus 1758. We therefore diverge from IOC here, but have suggested that they look again at this issue. SW Arabia, African species HBW4; ssp in Region <i>arabica</i> : rare RB or MB SW Oman, increasing OBL7 . Vagrant Israel Perlman & Meyrav 2009 (but much debate on origin, history & current status Yoav Perlman <i>in litt</i> Nov 09), Egypt, S of Shalatein, Halaib Triangle Bonser 2006, where resident Dora 2019.. RNBWS report Aden Feb 91 12:0:0.0N+45:0:0.0E. In Arabia, SB W Saudi in broad swathe extending to whole Yemen into SW Oman Jennings 2010, numbers reaching perhaps 1 million bp some years; 2-record vagrant Bahrain King 2018. NB Opinion 2215 previously interpreted as allowing captive and feral populations of 'Barbary Dove' as <i>S. risoria forma domestica</i> , as in Kuwait Gregory 2002. Generations of captive breeding have produced distinctive variety, confusingly referred to as <i>roseogrisea</i> ! Perhaps traded birds also the origin of the descriptions of S Caspian specimens by Pallas in 1772-3, cited in Gmelin 1784 (Schüz 1959).
155	Mourning Collared Dove	<i>Streptopelia decipiens</i>	First record for WP: found Abu Simbel village, Egypt Dec 2010 de Rouck & Colin 2012: photos (Steve Moldovan <i>in litt</i>) ; present until at least 01 Aug 2013 Haas 2017; ssp <i>decipiens</i> recorded as common just S of Egyptian border in N Sudan in 120km² grid 21°N, 30°E Nikolaus 1987 and S upstream along Nile. EORC accepted. Previously in ORL Hypotheticals
156	Red-eyed Dove	<i>Streptopelia semitorquata</i>	Monotypic. SW Arabia; African species HBW4. Resident SW-most Saudi Arabia, W Yemen (c 100 000bp) Jennings 2010. RNBWS report Oct 73 at Ras Binnah at 11:4:0.0N+53:0:0.0E
157	Red Collared Dove (Red Turtle Dove)	<i>Streptopelia tranquebarica</i>	IOC10.2 change of English name. Likely ssp <i>tranquebarica</i> in Region: vagrant Oman (4 records OBL7), UAE Aspinall & Porter 2011, Iran, Gibbs <i>et al</i> (2001) single accepted record Iran Khaleghizadeh <i>et al</i> 2017 (where traded species), 3rd & 4th Shahdad, Kerman May & Jun 2021 IBRC ; Lebanon; possibly Afghanistan R&A 2005, but Meinertzhagen report suspect unless verifiable – see Garfield 2007. BLDZ map along much of Afghanistan/Pakistan northern border Feb 2-18. 2003 Web list for Ladakh.
PT	PT Spotted Dove	<i>Spilopelia chinensis</i>	Rasmussen & Anderton 2012, del Hoyo & Collar 2014b, del Hoyo <i>et al</i> 2018 split into Western <i>S. suratensis</i> & extralimital polytypic Eastern <i>S. chinensis (sensu stricto)</i> : supported in IOC11.2 proposed split
158	Western Spotted Dove (formerly, Spotted Dove, Spotted-neck Dove) (Split makes <i>S. suratensis</i> as Western Collared Dove)	<i>Spilopelia suratensis</i> (Formerly part of <i>Spilopelia chinensis sensu lato</i> , <i>Stigmatopelia chinensis sl</i> & <i>Streptopelia chinensis sl</i>)	Monotypic. Huang <i>et al</i> 2016 provide genetic support for the taxonomic revision of 2009 IOC v2.3, Schodde & Mason 1997, superseding Cheke 2005. H&M4 retain in <i>Streptopelia</i> . E Afghanistan, Gibbs <i>et al</i> (2001); one record NE Afghanistan R&A 2005. Popular cagebird, has been introduced in many countries, Lever 2005. E&SE Afghanistan H&E 1970 & <i>suratensis</i> summer breeder Pakistan-Afghan border midway between Chitral and Khyber Roberts 1991. NB BirdLife & del Hoyo & Collar 2014b split taxon <i>suratensis</i> on Tobias <i>et al</i> 2010 criteria (see also Inskipp & Collar 2015) as Western Spotted Dove, which BLDZ Jun 2020 maps in Pakistan to within 9km of Afghan border NNE of Islamabad, between Barawal Bandi & Arandu.
159	Laughing Dove (Palm Dove, Little Brown Dove)	<i>Spilopelia senegalensis</i> (formerly <i>Stigmatopelia senegalensis</i> & <i>Streptopelia senegalensis</i>)	Huang <i>et al</i> 2016 provide genetic support for the taxonomic revision of 2009 IOC v2.3, Schodde & Mason 1997, superseding Cheke 2005. H&M4 retain in <i>Streptopelia</i> . All 5 ssp occur in Region: <i>phoenocophila</i> reaches W Egypt at Siwa, likely from al Jaghbub Oasis (60km) in nearby Libya Isenmann <i>et al</i> 2016; <i>aegyptiacus</i> in Nile Valley; <i>senegalensis</i> in Egypt, Socotra, W Arabia; <i>cambayensis</i> E Arabia, E Iran where range extension towns, villages S & C Iran <i>ermanni</i> in N&N-C Iran Khaleghizadeh <i>et al</i> 2017, & <i>ermanni</i> Transcaspia E to Kazakhstan (common resident Wassink 2015b) as far as Rodino, Altai Krai, Russia (IUCN map Jan 2022) & N Afghanistan. Widespread Middle East: Arabian population c2 million bp Jennings 2010, species widespread breeder Saudi Arabia Alshamliah <i>et al</i> 2021; prolific urban breeder Bahrain King 2018, abundant widespread breeding resident Oman OBL7 . Turkey <i>phoenicophilii</i> Kirwan <i>et al</i> 2008, 1st breeding Cyprus Jun 2013 SG35(2) ATR , where both vagrant & introduced CBR11 , small group thriving Mandria 2018 MB pers obs, whereas 1st breeding record Greece on Lesvos Sep 2021 (less than 10km from nearest Turkish island) DB43(6) : 463. Levant & W Iraq <i>senegalensis</i> once disjunct, but has colonised much of Iraq rapidly Ararat <i>et al</i> 2011, first breeding 1988 Salim <i>et al</i> 2012: Iran-Afghanistan <i>cambayensis</i> & <i>ermanni</i> main Paludan 1959 H&E 1970, <i>ermanni</i> Turkestan, Iran, Afghanistan <i>cambayensis</i> (Gibbs <i>et al</i> 2001 updated by Ayé <i>et al</i> 2012), <i>cambayensis</i> UAE Aspinall 1996, 5th Cyprus record Oct 2013 CRC . Also some introductions, eg Almaty, Kazakhstan G&G 2005; ssp <i>ermanni</i> W&O 2007. Egypt Avib, BE.
160	Black-billed Wood Dove	<i>Turtur abyssinicus</i>	Monotypic. African species. Occurred Yemen Jul 2004, Stanton 2005. BLDZ map this trans-African species as resident on Eritrea's western Red Sea coast from 17°N to 16°N, thence slightly inland & then E towards Mersa Fatma; offshore here are the Dahlak Islands, where it has been reported.
161	Namaqua Dove	<i>Oena capensis</i>	Largely African species, ssp <i>capensis</i> resident Arabian peninsula, mostly to W, Porter <i>et al</i> 1996, but breeding UAE in small numbers Aspinall 2010. Late 1970s records East Saudi & one Kuwait Bundy & Warr 1979. Eastward range expansion Arabia since 1970s & population increase to c60 000bp Jennings 2010, widespread breeder Saudi Arabia Alshamliah <i>et al</i> 2021: recorded western Gujarat, India Praveen <i>et al</i> 2019. Origin Kuwait (?) Lever 2005 App B, uncommon to fairly common resident, mostly western Abu Dhabi Lawicki 2020. Expanding range northwards Cyprus 1998 Lamsdell & Lamsdell 2000, 2nd record 2011 CBR11 , 3rd record Apr/May 2011, 4th Mar 2016 CRC 5th, male, Paphos Apr 2016 CRC , 2 locations 2018 CRBC , 7th record Petounta Point Apr 2018 CBRC , 9th Akrotiri Marsh Apr 2019 CBRC , 10th Cape Pyla Apr 2020 CBRC . Turkey Veyrunes & Veyrunes 2006, 4th record Jun 2009 Kirwan <i>et al</i> 2014, another near Hilvan 26 Oct 2016 DB38(7) : 452, 2 Çukorova Delta Adana Sep 2018 DB40(5) : 330, spreading N on a broad front from southern Turkey SG44(1) : 251; 4th record Lebanon Haraldsson 2008, 3 shot Oct 2015 Ramadan-Jaradi & Itani 2016, Iraq Salim 2008, male reported Mosul Dam Jun 2018 DB40(5) : 330; Iran Osaedi & Jamadi 2008, one Jun 2016 Mehran Iran (Iraq border) Ilam Province IBRC , 2 pairs bred separate locations Iran 2017 DB(40)1 : 46 where range expansion beginning Khaleghizadeh <i>et al</i> 2017, common scrub breeder S Bahrain King 2018; Israel Perlman & Meyrav 2009, S Oman (increasing elsewhere) OBL7 Egypt Apr 2010 SG33 : 201, Hering <i>et al</i> 2020a at Lake Nasser in 2019 assessed it as probably breeding there, observed in many locations between Aswan and Abu Simbel Jun 2022 (including juveniles) Jens Hering <i>in litt</i> Jul 2022.; 1st for Armenia Lake Sevan May 2017 Arce & Rukhaia 2022 ; 1st record Azerbaijan May near Cayli DB41(4) : 261 (Earlier cited in error as breeding). Recorded Dagestan, Russia (W Caspian coast in OSME Region May 2016 Lawicki & van den Berg 2016. Increasing Khuzestan province Iran, 3rd record May 2015 beyond it IBRC .
162	Zebra Dove	<i>Geopelia striata</i>	Popular cagebird from SE Asia. Reported as introduced self-sustaining resident Doha Corniche (Sheraton) Qatar 11Mar 07
163	Bruce's Green Pigeon (Yellow-bellied Pigeon)	<i>Treron waalia</i>	Monotypic. African species. Migrant/resident breeder N Yemen Porter & Warr 1985, S Yemen Warr 1992, SW Arabia, Yemen to S Oman, Porter <i>et al</i> 1996, Socotra Porter & Aspinall 2010, 1st for Egypt 3 Jan 11 van der Veen 2011 (reported DB33(1)): EORC accepted. Perhaps 100 000bp Arabia; Saudi & W Yemen birds summer visitors, but oddly, resident E Yemen, SW Oman (increasing OBL7 , 54 in winter 2012-13 Ball <i>et al</i> 2015, not mapped as resident BLDZ Jun 2020) & Socotra Jennings 2010. Introduced Jordan WBDB 2008 checklist claim
		Rallidae	H&M4 resequences families, genera & within genera; IOC 10.2 revises taxonomy of Rallidae and resequences consequently.
PT	Water Rail PT	<i>Rallus aquaticus (sensu lato)</i>	Re Parent Taxon , IOC2.0 accepts split of extralimital Eastern Water Rail {Brown-cheeked Rail}) <i>Rallus indicus</i> (in ORL Hypothetical section), proposed Livezey 1998, R&A 2005: Sangster <i>et al</i> 2011, H&M4 agree. Species delimitation is supported by genetics, morphology and vocalizations Tavares <i>et al</i> 2010, Brazil 2009; BirdLife 2020. Brazil 2009 use Eastern Water Rail for <i>R. indicus</i> .
164	Western Water Rail {Water Rail}	<i>Rallus aquaticus (sensu stricto)</i>	<i>R.a. korejewi</i> Turkmenistan, Bukreev 1997, <i>aquaticus</i> N Kazakhstan Ayé <i>et al</i> 2012, common BM, PM rare resident Wassink 2015b; <i>korejewi</i> common resident, BM SE Kazakhstan Wassink 2015b. Resident Caucasus, breeds Afghanistan, Iran, HBW3: status in Arabia; winterer; breeder since 1970s, 100+bp, mostly W Gulf artificial wetlands near coast Jennings 2010; 7th Qatar record Nov 2016 QBRC , rare PM & WV Oman OBL7 . Migrant NE Africa (direct), Gulf, Pakistan. Origin Kuwait (?) Lever 2005 App B. Egypt Avib, BE

165	African Crane	<i>Crecopsis egregia</i> : (Formerly <i>Crex egregia</i> : not close to <i>Crex</i>)	Monotypic genus: change follows IOC10.2: validated Kirchman <i>et al</i> 2021. One found exhausted Eilat 02 Jan 20, treated & released 18 Jan 20 Ottens & Perlman 2021. Nearest known population 2000km away in Kuma-Khorayt region of SE Sudan; waterholes, small dams and ponds and seasonal-flow wadis.
166	Corncrake {Corn Crane}	<i>Crex crex</i>	Breeds Caucasus, Iran possibly, certainly passage Scott & Adhami 2006, Khaleghizadeh <i>et al</i> 2017, W Afghanistan, Kazakhstan, Kyrgyzstan, possibly elsewhere in CA, HBW3, scarce BM, PM N & SE Kazakhstan; migrates Africa, uncommon passage Iraq Salim <i>et al</i> 2012, Israel Perlman & Meyrav 2009, 7th Qatar record QBRC , rare PM & WV Oman OBL7 . Egypt Avib, BE. IOC amendment to English name unnecessary.
167	Spotted Crane	<i>Porzana porzana</i>	Monotypic. Breeds N Kazakhstan, HBW3 scarce BM, PM Wassink 2015b, E Turkmenistan (probably across borders), uncertain (local) in rest of CA, scarce breeder Iran Scott & Adhami 2006 & fairly common PM Khaleghizadeh <i>et al</i> 2017, Migrant, winterer Iraq Salim <i>et al</i> 2012, migrant S Afghanistan R&A 2005, vagrant Socotra T&vP 1998. Winters to S, mainly India, rare UAE PH pers comm, fairly common PM & WV Oman OBL7 . Bred Kuwait 2001, al-Ghanem 2007. Origin Kuwait (?) of possible introductions, Lever 2005 App B, but Jennings 2010 places in context of passage migration through Kuwait; has bred elsewhere in Gulf. Egypt Avib, BE
168	Lesser Moorhen	<i>Paragallinula angulata</i> (<i>Gallinula angulata</i>)	Monotypic. Genus change follows Sangster <i>et al</i> 2015. African species. 2-record vagrant Oman OBL7 . Egypt, Haavisto & Strand 2002, report not upheld EORC 2011.
PT	Common Moorhen PT	<i>Gallinula chloropus</i> (<i>sensu lato</i>)	IOC2.8 splits extralimital New World Common Gallinule <i>C. [c.] galatea</i> , following SACC; also DB 32(3) : 205
169	Common Moorhen	<i>Gallinula chloropus</i> (<i>sensu stricto</i>)	Resident (ssp <i>chloropus</i>) Caucasus, N Iran, Tigris-Euphrates, Afghanistan, summer breeder in rest of CA Ayé <i>et al</i> 2012, common BM Kazakhstan Wassink 2015b, scattered through S OSME Region <i>eg</i> UAE Aspinall 1996 (some wintering S Kazakhstan W&O 2008); Arabia holds c3500bp Jennings 2010; locally abundant resident breeder Oman OBL7 . CA breeding populations winter in S of Region, HBW3, T&vP 1998. NB Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.
170	Eurasian Coot (Common Coot)	<i>Fulica atra</i>	Resident (ssp <i>atra</i>) Turkey, Caucasus, Iran, S Iraq (small numbers) Salim <i>et al</i> 2012, Afghanistan, resident (Turkmenistan, Uzbekistan, Afghanistan) and breeder throughout CA, very common BM Kazakhstan Wassink 2015b, wintering Iran & round Gulf. In Arabia, first bred mid-1970s, now widespread & resident Jennings 2010, common to abundant WV rare local breeder Oman OBL7 , 2nd breeding Kuwait May 2013 SG35(2) ATR . Common passage migrant across E OSME Region SW Siberia to India (Veen <i>et al</i> 2005) (Route?). Egypt Avib, BE
171	Red-knobbed Coot (Crested Coot)	<i>Fulica cristata</i>	Monotypic. Save S Spain, mostly African species. Formerly vagrant Oman, Gustad & Schjolberg 2002, now small resident population SW Oman OBL7 where 1st breeding record Oct 2012 Tibbett 2013. One individual in UAE hybridised successfully with Common Coot Jennings 2010. 2nd for UAE at Saadiyat Apr 2018 EBRC , 3rd Jun 2018 Hatta Dam EBRC ; one at Sirhan Lagoon, Socotra Feb-Mar 20 Ahmed Saeed Suleiman in <i>litt</i> , but more arrived, breeding successfully, a first record for Socotra Suleiman 2020; a total of 77 birds including juveniles was counted Jun 2020 at Qariya & Sirhan Lagoons & were still present May 2021 ATR/SG43(2) : 335. 1st for Saudi Arabia Al Shaaf, Asir Province Dec 2020 SG43(1) : 180. NB Abundant Ethiopia on freshwaters Ash & Atkins 2009
172	Allen's Gallinule	<i>Porphyrio alleni</i> (= <i>Porphyryla alleni</i>)	Monotypic. Sangster <i>et al</i> 2007, Parkin & Knox 2010 retain in <i>Porphyrio</i> . African species T&vP 1998, vagrant Cyprus, Oman 9 records OBL7 , 1st record Qatar Jan 2017 QBRC , Porter <i>et al</i> 1996, 1st record Turkey near Ankara Apr 2013 SG35(2) ATR . Egypt Avib, BE. NB Locally common BM Ethiopia Ash & Atkins 2009
PT	Purple Swamphen PT [Purple Gallinule]	<i>Porphyrio porphyrio</i> (<i>sensu lato</i>)	Since Trewick 1997 & Sangster 1998 were published (& now Garcia & Trewick 2015), little disagreement to Sangster's recommended split into 6 species: Garcia & Trewick 2015 outline the phylogenetic history of Australasian <i>Porphyrio</i> : IOC5.3 splits Western and Grey-headed as below; extralimital spp are Black-backed <i>P. indicus</i> , Philippine <i>P. pulverulentus</i> , Australasian <i>P. melanotus</i> . Both <i>poliocephalus</i> & <i>madagascariensis</i> groups occur in the OSME Region, although Sangster 1998 argues convincingly for synonymising <i>caspius</i> & <i>seistanicus</i> with <i>poliocephalus</i> , which H&M4 does not support. We accept these 3 sspp, all of which have been recorded (<i>poliocephalus sensu stricto</i> has spread to E Arabia) in the Region. Garcia & Trewick 2015 synonymise <i>seistanicus</i> & <i>caspius</i> , but extend taxon limits of <i>poliocephalus</i> west to include the Tigris-Euphrates interfluvium. Furthermore, they note that rapid differentiation in plumage colour due to local selection pressures is prevalent in <i>poliocephalus</i> (including <i>seistanicus</i>). Moreover, their conclusions strongly support a separate clade for <i>poliocephalus</i> (including <i>caspius</i> , <i>seistanicus</i>): IOC5.3 agrees. NB1 Specimen feathers from E Saudi Arabia sent by Jem Babbington to Steve Trewick for analysis confirmed as <i>poliocephalus sensu lato</i> (Steve Trewick in <i>litt</i> June 2015). NB2 Name Purple Gallinule now allotted to New World <i>P. martinica</i> .
173	Western Swamphen	<i>Porphyrio porphyrio</i> (<i>sensu stricto</i>)	One record near Istanbul 1893, Kirwan <i>et al</i> 2008. NB <i>P. porphyrio sensu stricto</i> occurs to the west of OSME Region
174	African Swamphen	<i>Porphyrio madagascariensis</i>	Egypt, Israel T&vP 1998, African species; 2 Arava Israel Jun 2015 DB37(4) , 2 Neve Zohar, S Dead Sea Apr 2018 DB41(3) : 188. UAE 2006 Jennings 2007b, (escapes?) bred 2006 & 2009 Pedersen & Aspinall 2010, 4th record Aqaba Jordan July 2015 JBRC , 2nd record Oman Dec 2012 OBL7 . More abundant Qatar than Grey-headed <i>P.[p.] poliocephalus</i> QBRC . H&M4 retain as ssp of <i>P. porphyrio</i> .
175	Grey-headed Swamphen (Purple Swamphen) [Purple Gallinule].	<i>Porphyrio poliocephalus</i>	Garcia & Trewick 2015 include <i>caspius</i> & <i>seistanicus</i> in <i>P. poliocephalus</i> , but Khaleghizadeh <i>et al</i> 2017 subsume <i>caspius</i> in <i>seistanicus</i> (Kees Roselaar unpub): <i>seistanicus</i> occurs Turkey-Caspian, likely this taxon in Turkmenistan Caspian Rustamov 2015 (called just 'Swamphen'), Bukreev 1997 suggested <i>poliocephalus</i> from Iraq E to N, SW Iran, Kuwait, Turkmenistan, then extraliminally to Myanmar. <i>P.p. seistanicus</i> was also Afghanistan Paludan 1959, but present taxon there uncertain: <i>seistanicus</i> resident Azerbaijan, very rare BM & accidental resident Wassink 2015b W Kazakhstan, also N Caspian Khaleghizadeh <i>et al</i> 2017 citing Kees Roselaar (unpub) examinations of multiple specimens: <i>poliocephalus</i> S Iran Scott & Adhami 2006, Khaleghizadeh <i>et al</i> 2017; occasional winter UAE PH pers comm. More widespread than in HBW3 , locally abundant breeder (<i>seistanicus</i> ?) Syria Murdoch & Betton 2008, bred (<i>poliocephalus</i> ?) Saudi Arabia 08 Aug 03 Meadows 2004, 1st report for Bahrain 23 Jan 2010 SG 32(2, bred 2017 King 2018), 1st Qatar record Sep 2012 QBRC , 5th record Irkayya Lagoon Apr 2016, 6th there Apr 2021, 7th (2 birds) Abu Nakhla May 2021 QBRC ; 8th Karannah Lagoons Oct 2021, 9th Barwa Lagoons Nov 2021 QBRC . OBRC assess one at Seeb Sep 2021 as 7th record: older records revised? May occur SW Afghanistan (<i>seistanicus</i> ?), T&vP 1998; status in Arabia; irregular visitor; has bred Kuwait, E Saudi Arabia, Qatar & UAE, perhaps <i>poliocephalus</i> expanding breeding range; breeding numbers increasing Saudi, distribution increasing J Babbington in <i>litt</i> . A 'grey-headed' bird recorded UAE/Checklist 2008; now a regular breeder at al Wathba, Abu Dhabi Campbell <i>et al</i> 2018. NB1 Garcia & Trewick 2015 observe that eastern <i>poliocephalus</i> are less greyish than those breeding in the Region (The <i>poliocephalus</i> group is an exemplar of a mismatch between plumage patterns and the distribution of neutral population genetic markers, which circumstance suggests that differentiation in colour and other traits has arisen rapidly in <i>Porphyrio</i> because of selection pressures in local environments or by means of stochastic genetic drift). NB2 R&A 2012 map increasingly 'paler' heads towards Afghanistan!
176	Ruddy-breasted Crane	<i>Zapornia fusca</i> (<i>Porzana fusca</i>)	Polytypic. Bates & Lowther 1959 record as occurring "from the Afghan Frontier" in Pakistan, old records Afghanistan Madge 1980 (single record) Ayé <i>et al</i> 2012. Small breeding population in reed-choked waterbodies on Pakistani side, at Thal, likely occurs similar habitats Afghan side, Taleban permitting. R&A 2012 map wintering birds fairly close to Khyber, but annotate 'movements unclear'; BLDZ map Aug 2019 shows large wintering area N-C & NE Pakistan, and a much smaller adjoining summer breeding area centred NE of Bannu, but extending to less than 20km of Afghan border on River Kaitu. On WBDB 2008 Afghanistan country checklist as vagrant. In Nov 2012 (present 23 Nov-4 Dec) 1st modern record for the OSME Region from Oman OBL7 , Olsson 2015, 2nd Wadi Darbat May 2017 OBRC : likely ssp <i>bakeri</i> (H&M4), occurs W Pakistan, <i>zeilonica</i> W India.

PT	Baillon's Crane PT	<i>Zapornia pusilla</i> (<i>sensu lato</i>) { <i>Porzana pusilla</i> }	PT Split into Western & Eastern species, both occurring in the Region, by del Hoyo & Collar 2014b, Taylor <i>et al</i> 2018. Western is <i>Z. intermedia</i> (subsuming <i>obscura</i>); Eastern is <i>Z. pusilla</i> , with remaining taxa sspp. NB H&M4 resurrect <i>Zapornia</i> because several spp are closer to other genera than to <i>Porzana</i> : Sangster <i>et al</i> 2016 agree. IOC10.1 remains unsplit. Western & Eastern populations separate apart from Palearctic taiga zone, the division probably along a southerly extension S of Urals through N-S ridges of forested high ground to just before Kazakh border N of Aktobe (BLDZ map Jun 2019 & Google Satellite Map).
177	Western Baillon's Crane	<i>Zapornia intermedia</i>	Monotypic. BLDZ map Mar 2018 has 2 isolated summer breeding areas in N Turkey, S coast of Sea of Marmara & around Bafra, S Black Sea; resident populations shown in Nile Delta & also in N Israel (rare migrant Israel Perlman & Meyrav 2009) & NE Jordan (Breeds (bred?) Azraq Jordan in numbers sufficient to mask migrant passage Wallace 1982), scarce PM Cyprus CBR11 but bred Akrotiri Jul 2017 (1st since 1985), 2nd recent record Aug 2018 SGATR41(1) . Suspected family party found Apr 2020 Sirhan Lagoon Socotra, a probable first record & breeding record for Socotra and Yemen Suleiman 2020. This taxon breeds C Fars Province Iran Khaleghizadeh <i>et al</i> 2017.
178	Eastern Baillon's Crane	<i>Zapornia pusilla</i> (<i>sensu stricto</i>) { <i>Porzana pusilla</i> }	Polypitic: 5 sspp, 4 being extralimital in Far East: taxon <i>pusilla</i> occurs across N of Region to E Asia. Breeds scattered locations CA less Turkmenistan, W Caucasus, Afghanistan, resident SW Iran, HBW3 T&VP 1998; common BM, PM N-C, S-C & E Kazakhstan Wassink 2015b, assumed PM Iran Khaleghizadeh <i>et al</i> 2017 where recorded in E & SW Iran, Iraq Salim <i>et al</i> 2012. 1st record Qatar Nov 2012, 4th Mar 2019 QBRC , fairly common PM & WV Oman OBL7 . Winters Pakistan, India. Egypt Avib, BE
179	Little Crane	<i>Zapornia parva</i> { <i>Porzana parva</i> }	Monotypic. Breeds Caucasus, CA (mostly in N) HBW3, Afghanistan, T&VP 1998: scarce BM, PM N-C & SE Kazakhstan Wassink 2015b. Winters in S OSME Region: Iran (certainly passage, Scott & Adhami 2006) Gulf hinterland, S Iraq (now known to breed in small numbers near Baghdad Iraq Ararat <i>et al</i> 2011), Kuwait, E Syria: although Madge 1980 assessed as rare vagrant Afghanistan, BLDZ map Mar 2018 indicates Turkmenistan breeding area extends into N Afghanistan near Bala Morqab; in any case, wintering Pakistan population probably crosses Afghanistan to reach breeding areas of other 'stans to N. Status in Arabia: widespread, scarce migrant and winterer; sporadic breeder in N, likely more frequently than recorded Jennings 2010, fairly common PM & WV Oman OBL7 , 6th Qatar record Mar-Apr 2019 QBRC . Origin Kuwait (?) Lever 2005 App B. Egypt Avib, BE
180	Striped Crane	<i>Aenigmatolimnas marginalis</i>	1st record for Kuwait & OSME Region 1 Jan 2015 (originally identified as Spotted Crane <i>Porzana porzana</i>) correctly identified Apr 2016 KORC . This occurrence begs the question as to how many Spotted Crane records between Kuwait and (mostly) sub-Equatorial Africa were actually Striped Crane. Until recently, placed in <i>Amauornis</i> . Nearest previous record is one NW Libya Feb 1970 Isenmann <i>et al</i> 2016. 2nd record of one found dead Bodrum Turkey Dec 2020: finder could not ID it & finally sought assistance Feb 2021; Kuzey Cem Kulaçoğlu <i>in litt</i> , DB43(2) : 151.
181	Watercock	<i>Gallicrex cinerea</i> (<i>Gallicrex</i> may include taxa from another genus: see account)	Monotypic. Range Pakistan Indus delta E to Japan, Philippines, Dickinson 2003. Vagrant to Oman Porter <i>et al</i> 1996, 6-record vagrant Oman OBRC , 7th record Al Ansab Nov 2017 OBRC , 8th Raysut Oct 2019, 9th (juvenile) Muscat Hills OBRC ; Socotra Porter & Suleiman 2011: 2nd for Kuwait Nov 2020 Jahra East Outfall DB42(6) : 343. Egypt Avib, BE NB Garcia-Ramirez <i>et al</i> 2020 place <i>Gallicrex</i> close to <i>Amauornis</i> , while confirming the latter as ployphyletic; genetic rearrangement needed, but other taxa within group need consideration, hence IOC10.2 leaves this taxon unchanged.
182	White-breasted Waterhen (White-breasted Bush-hen)	<i>Amauornis phoenicurus</i>	Breeds (ssp <i>phoenicurus</i>) Pakistan to SE Asia. Winters Oman, UAE Taylor & van Perlo (T&VP) 1998. Vagrant Yemen, Kirwan 1994, Iran, Saudi Arabia Mitchell 2017, uncommon PM & WV Oman OBL7 , 1st for Iran Sistan-o Baluchestan Dec 2010 Raffael Ayé pers comm, dead bird Dec 2012 SGATR36(1) , 3rd for Iran Nov 2015, 4th Bandar-e Lengeh coast Hormozgan Aug 2016 IBRC , Khaleghizadeh <i>et al</i> 2017, one at Minab Hormozgan Epr 2019 DB41(4) : 264; 1st for Kuwait at Jahra Dec 2019 Pope 2021 , 2nd same location Nov-Dec 2020 KORC . Egypt Avib, BE NB1 Has reached 50°N in Siberia at 115.7°E Arkhipov & Goroshko 2019 & 46°N, 109°E in Mongolia Gombobaatar & Leahy 2019. NB2 <i>Amauornis</i> is polyphyletic Garcia-Ramirez <i>et al</i> 2020 & close to <i>Gallicrex</i> ; IOC10.2 deconstructs the genus, but this species remains in <i>Amauornis</i> .
		Gruidae	The findings of Krajewski <i>et al</i> 2010 are acknowledged by IOC7.2, reversing the conclusions of two papers co-authored earlier by Krajewski, thus restoring <i>Leucogeranus</i> , <i>Antigone</i> & <i>Anthropoides</i> . Some gruid spp continue to be introduced, particularly because many cultures have a long history of bird-keeping, but also because of developing prosperity funding the trade in exotics Blackburn <i>et al</i> 2015. NB Crane conservation and taxonomy is based on Meine & Archibald 1996, as refined or informed by subsequent fieldwork and genetic research, but many populations remain little-studied and poorly sampled.
183	Grey Crowned Crane	<i>Balearica regulorum</i> Endangered	Introduced. Bred 1994 freely in sheltered location Sir Bani Yas Island UAE Jennings 1994, 2008d, Kuwait record presumably from this or similar source Gregory 2002. Not thought to have bred ferally in Saudi Arabia Jennings 2010, but has done in UAE Aspinall & Porter 2011
184	Siberian Crane (Siberian White Crane)	<i>Leucogeranus leucogeranus</i> (H&M4) (<i>Grus leucogeranus</i>) (Also formerly <i>Bugeranus leucogeranus</i>) Critically Endangered	Monotypic. <i>Bugeranus</i> is embedded in <i>Grus</i> , IOC 2.6 Krajewski <i>et al</i> 2010. Originally, sole OSME wintering grounds thought to be Iran (HBW3), & last survivor (Omid) recorded Oct 2011 (SG34(1)AtR) until Jan 2020 so far DB41(6) : 426 & departed 27 Feb 2020 Ghasempouri <i>in litt</i> , then paused at Shirvan NP, Hesenli, Azerbaijan Mar 2020 DB42(2) : 125. Omid returned to Iran autumn 2020, departed Feb 2021 DB43(2) : 151, returned Oct 2021 online images Ghasempouri <i>in litt</i> . Note satellite-tracked birds entered Kazakhstan from Ural delta 1996, 2000, 2011, some heading E to a N-S traditional narrow migration corridor at c 59-62°E, others heading SSE parallelling Caspian shore to Turkmenistan (2013) Wassink 2015b, First recorded 18th century (Mlikovsky 2008, Habiłzi 1783, Gmelin 1784); migrates via Turkmenistan & Uzbekistan Ven 2002, rare PM E Kazakhstan W&O 2007; one recorded Sep 2014 Qostanay Kazakhstan Wassink 2015a; may not be same bird recorded since in Iran, which bird returned for 9th time 9 Nov 2016 Mazandaran Province DB39(1) : 44. The few that appear in Astrakhan Volga delta, may drift into Kazakhstan; scarce WV Iran Schüz 1959, Scott & Adhami 2006. Afghan Lake Abi-i-Estada formerly (72 counted 1970 Köning 2018) important staging area Roberts 1991; Khyber Pass migration route, 1 record Paludan 1959. However, satellite tracking indicates entry into Pakistan is SW from Lake Ab-i-Estada, Zabol province Afghanistan, 350km ESE of Khyber (Sadegi Zadehan <i>et al</i> 2009). Vagrant Jordan Hamidan 2003, Turkey Kirwan <i>et al</i> 1999 & elsewhere. Afghanistan: H&M3 corrigenda E Dickinson pers comm. East Siberian population may be stable - 3800-4000ind BLI 2016 - more birds migrating through Russian Amur Suanjak & Heim 2016. NB Only 11 records Turkmenistan since 1865 Rustamov 2015.
185	White-naped Crane	<i>Antigone vipio</i> (H&M4) (<i>Grus vipio</i>) Vulnerable	Monotypic. Considered vagrant Kazakhstan (eg K-M&K 2005). No recent records G&G 2005, at one time confirmed 1913 from specimen W&O 2007, but skin now lost & modern standard of proof lacking W&O 2008. However old records accepted Ayé <i>et al</i> 2012. Historically vagrant in Region; nearest breeding grounds & SV movemnts in W Mongolia E Lake Uvs & Buyant respectively Gombobaatar & Leahy 2019, wintering Korea, S Japan & E-C China. NB Krajewski <i>et al</i> 2010 reverse earlier taxonomic findings by lead author.
186	Demoiselle Crane	<i>Grus virgo</i> (<i>Anthropoides virgo</i>)	Monotypic. <i>Anthropoides</i> is embedded in <i>Grus</i> , IOC 2.6 Krajewski <i>et al</i> 2010; Anderson <i>et al</i> 2009. CA. Breeds W&N Kazakhstan W&O 2007, common BM, PM Kazakhstan Wassink 2015b, 2nd winter record Kazakhstan, 2 birds, Dec 2016 Wassink 2018. Migrant throughout OSME Region, including Afghanistan R&A 2005, largest Cyprus passage count (1260+) 23 Aug-15 Sep 16 DB38(6) : 398, also 383 Aug 2018 DB40(5) : 330, c900 landed Akrotiri Salt Lake Mar 2019 DB41(3) : 188; winterer Iraq Salim <i>et al</i> 2012, 11th record (7 birds) Kuwait Sep 2015 KORC , vagrant Iran Scott & Adhami 2006, one Meighan wetland Markazi Province Iran Aug 2016 IBRC , very rare Israel Perlman & Meyrav 2009 (2 found Feb 2016 DB38(2) : 186), rare PM & WV Oman OBL7 . 3rd UAE record al Maha Sep 2021 EBRC . However, pair bred for second successive year at Yedikir Baraji, 50km SW of Samsun, Turkey in 2022, first breeding since 2004 Emin Yoğurtcuoğlu <i>in litt</i> , & 2 also at Bolu, 300km further W, Aug 2021 SG44(1) : 251. Egypt Avib, BE. NB Krajewski <i>et al</i> 2010 reverse earlier findings by lead author.

Although IOC4.4 lumped all Common Crane sspp in monotypicity aligning with Meine & Archibald 1996, by v7.2 there appears to be no cited IOC reference since 2010. Mudrik *et al* 2015 make a reasonable case for monotypicity on genetic grounds, while calling for populations to be treated as evolutionary significant units. We remain tentatively with sspp names thus '*archibaldi*' for these populations *pro tem*.

187	Common Crane	<i>Grus grus</i>	Monotypic. Resident & migrant Turkey Kirwan <i>et al</i> 1999. Isolated population new ssp ' <i>archibaldi</i> ' Trans-Caucasus Ilyashenko 2008, Parkin & Knox 2010, but IOC4.4 lumps all sspp in monotypicity; insufficient data to confirm identity of similarly-isolated extralimital crane population in Tibet Valentin Ilyashenko <i>in litt</i> Dec 09; <i>Dutch Birding</i> name ' <i>archibaldi</i> ' as Armenian Crane, perhaps inappropriately. Nowald 2018 on ' <i>archibaldi</i> ' movements notes Georgia breeders winter in Turkey S of Lake Van on Iraq border. Cranes geotagged on eastern Finnish breeding grounds migrate through the Region via Cyprus and the Levant to winter in Turkey, Israel or Ethiopia Ojaste <i>et al</i> 2019. Breeds W Kazakhstan (scarce, <i>grus</i> Ayé <i>et al</i> 2012) N Kazakhstan (rare, ' <i>lifordi</i> ' W&O 2007) although Wassink 2015b assumes monotypicity; rare BM, common PM, non-breeding SV; 1st winter record Jan 2014 (19 birds) Wassink 2015a, migrant through Region (K-M&K 2005), including wintering S Caspian Encyclopedia Iranica & Afghanistan R&A 2005 (' <i>lifordi</i> ' Paludan 1959); Wakhan Niethammer 1973; 9th record Kuwait Oct 2016 KORC 10th Sulabiya pivot fields Jan 2020 SG42(2) : 326, rare to uncommon PM & WV Oman OBL7 , one ' <i>lifordi</i> ' reported Azerbaijan Apr 2018, another Jan 2019 Max Baumgarten <i>in litt</i> . Breeds SE Kazakhstan, autumn migrant Kyrgyzstan, increased wintering in Uzbekistan, Ven 2002, winters Iran Scott & Adhami 2006, commonly Israel Perlman & Meyrav 2009. Egypt Avib, BE
188	Hooded Crane	<i>Grus monacha</i> Vulnerable	Monotypic. Considered vagrant Kazakhstan (eg K-M&K 2005). No recent records G&G 2005; at one time confirmed from 1855 specimen W&O 2007, but skin now lost and modern standard of proof lacking W&O 2008. However old records accepted Ayé <i>et al</i> 2012, and historically occurred in Region. Vagrant breeder W to c88°E, 69°N (1970s) Rogacheva 1992. Regular, uncommon PM & SV to scattered wetlands Mongolia, the nearest to Region being 490km from easternmost Kazakhstan Gombobaatar & Leahy 2019. NB IUCN 2020 record as Increasing.
		Podicipedidae	
PT	Little Grebe PT	<i>Tachybaptus ruficollis</i> (<i>sensu lato</i>)	IOC2.7 split extralimital taxa <i>tricolor</i> , <i>vulcanarum</i> & <i>collaris</i> as Tricolored Grebe <i>T.[r.] tricolor</i> in South-East Asia; IOC4.4 lists 7 sspp under <i>T. ruficollis</i> ; H&M4 also consider debate on differentiation of sspp of <i>T. ruficollis sensu lato</i> (10 sspp) not settled.
189	Little Grebe (Dabchick)	<i>Tachybaptus ruficollis</i> (<i>sensu stricto</i>)	3 sspp in Region: nominate N Caucasus; <i>iraquensis</i> Iraq, SW Iran; <i>albescens</i> Caucasus E to Iran, C Asia to Tien Shan then extralimital to Burma. Breeds most of N OSME Region, resident in much of Asia Minor to Iran, HBW1, Afghanistan, R&A 2005, 2012. Since 1970s thinly widespread breeder Arabia, associated with irrigation Jennings 2010, also Oman OBL7 . Several pairs with young at Abu Simbel & along Lake Nasser at Aswan Jun 2022, perhaps 1st breeding records lake nasser Jen Hering pers comm Jul 2022. Egypt Avib, BE
190	Red-necked Grebe	<i>Podiceps grisegena</i>	2 sspp, nominate wholly Palearctic, <i>holboellii</i> E of Lena/Amur basins to New World. Breeds much of N OSME Region, incl Iran (irregularly Khaleghizadeh <i>et al</i> 2017) & Afghanistan Niethammer & Niethammer 1967 (WV Afghanistan Madge 1980), R&A 2012, Syria Murdoch & Betton 2008, 9th Cyprus record Chrysochou Bay Aug 2015 CRC , dispersive winter to ice-free inland waters, especially larger bodies, HBW1 vagrant Israel Perlman & Meyrav 2009, 5th record Ayalon Dec 2020 Yoav Perlman <i>in litt</i> SG43(1) : 172, 6th record Magan Michel Jul 2021 SG44(1) : 239. Egypt Avib, BE
191	Great Crested Grebe	<i>Podiceps cristatus</i>	Only nominate of 3 sspp in Region, others extralimital in Africa & Australasia. Breeds N OSME Region, & scattered locations further S, incl Afghanistan R&A 2012; WV much of mid-Region, Afghanistan Paludan 1959, southern Africa, HBW1, also India R&A 2005. Common Gulf WV, but with some isolated breeding/probable records Dhahran & Qatar Jennings 2010, similarly Iraq Salim <i>et al</i> 2012, vagrant Oman OBL7 ; 3 pairs bred Cyprus 2019, (last record 1982) DB41(4) : 261, bred Aklhna Dam & Kanli reservoir Jun-Jul 2020 SG43(1) : 165, trend increasing 2021 SG44(1) : 233.: 1st breeding record Lebanon, Aamiq Apr 2019 Ramadan-Jaradi <i>et al</i> 2019. Egypt Avib, BE
192	Horned Grebe (Slavonian Grebe)	<i>Podiceps auritus</i> Vulnerable	2 sspp, only nominate in Palearctic; <i>cornutus</i> confined to Nearctic. Breeds N Kazakhstan (rare W&O 2007), winters further S (Caspian), but many breed scattered locations further S, E of Black Sea & beyond, HBW1, including W Afghanistan R&A 2005, 2012, although Ayé <i>et al</i> 2012 doubt this; vagrant Israel Perlman & Meyrav 2009, 3rd record Ein Hamifratz 11 Nov 2016 DB37(7) : 452, 4th, Ma'agan Michael SG39(1)ATR , 5th Kfar Ruppin Jan 2017 IRDC . Widespread SB Kyrgyzstan, winters partly Issyk Kul (NE), Ven 2002. Regular WV to Arabia with opportunistic occasional breeding Jennings 2010, vagrant Kuwait KORC . 3rd Cyprus record off Kouklia Nov 2017-Feb 2018 CRC .
193	Black-necked Grebe	<i>Podiceps nigricollis</i>	Of 3 sspp, only nominate in Region: others confined to Africa & New World. Breeds N OSME Region, winters mid-Region, Jan 1973 count Lake Burdur, Turkey of 11,400 birds Köning 2018, Gulf, HBW1, & Kyrgyzstan, Ven 2002, Afghanistan Roberts 1991: breeds W Afghanistan R&A 2012, fairly common WV Oman OBL7 . Egypt Avib, BE
		Phoenicopteridae	
194	Greater Flamingo	<i>Phoenicopterus roseus</i> (formerly <i>P. ruber roseus</i>)	Monotypic. Makes long-distance inter-colony movements & prone to vagrancy Lees & Gilroy 2021. Breeds Turkey, locally N CA (Lake Tenghiz Kazakhstan Johnson & Cezilly 2008) S to Iran Scott & Adhami 2006, fairly common SB two locations Iran, abundant WV Khaleghizadeh <i>et al</i> 2017. 1st unequivocal breeding record Uzbekistan was 2500+ nests Sudochie Lake May 2015 Roman Kashkarov <i>in litt</i> , occurs Afghanistan R&A 2005; migrant Kyrgyzstan (Ven 2002) winters warm coasts OSME Region, migrates across Region, HBW1, up to 10 000 Cyprus in the past Flint & Stewart 1992, matched by recent totals CBR 2015, 2016 . Numerous Aden most years, present year-round 1960s Warr 1992, MB per obs 1964-5. Perhaps 200bp Arabia most years, but no permanent colony known Jennings 2010, but annual breeding al Wathba, Abu Dhabi since 2011 Campbell <i>et al</i> 2018, 1st breeding Saudi Arabia in 2016 Roberts & Babbington 2020, locally abundant WV E Oman OBL7 . c 1000 N of Abu Simbel Jun 2022, 1st June records at Lake Nasser Jens Hering pers comm 2022. Egypt Avib, BE
195	Lesser Flamingo	<i>Phoeniconaias minor</i> (formerly <i>Phoenicopterus minor</i>) (May be junior synonym of <i>Phoenicoparrus</i> Torres <i>et al</i> 2014)	Monotypic, but if placed in <i>Phaenicoptarrus</i> , Old World representative of 3 sspp. Local breeder Rift Valley, (isolated population NW India/Pakistan) winters dispersed widely, S Red Sea, Oman, UAE, vagrant Israel Perlman & Meyrav 2009, wanderer, rare straggler Afghanistan Paludan 1959; old record Ayé <i>et al</i> 2012 (1904 Madge 1980), single record Iran also 1904 in June Khaleghizadeh <i>et al</i> 2017, possibly same individual at Sistan/Seistan; only Kazakhstan record imaged by Steve Klasan Sep 2015 Lake Korgalzhyn (80km from Astana) of 2 birds Wassink 2015b; 4th record Turkey Apr 2011 Kirwan <i>et al</i> 2014, returning bird Kulu Lake, Konya Apr 2017 DB39(3) , another returner at Gediz Deltasizmir Jan 2020 DB42(1) : 52; 3rd for Israel Mar-Apr 2018 Eilat IRDC ; Iran 1903-5 Roselaar & Aliabadian 2010 (perhaps from former breeding population in the Gulf area?), 2nd record Khours of Shadegan, Khuzestan Feb 2020 DB42(2) : 123, 4th record at Morreh, Qom Jul 2020 IBRC . 1st Qatar record Dec 2013 Al Shamal QBRC . 1st record Kuwait Feb 2012, 2nd 22 Dec 2015, 3rd Jan 2017, 4th seen again Oct 2019 KORC . 5th Sulaibikhat Bay Jan 2020 SG42(2) : 326, 6th there Sep 2021 KORC : 1600 S of Jizan Aug 2020 SG43(1) : 180. Sometimes large irregular movements, HBW1, eg 9 Aden marsh 1961 Bundy & Warr 1979, 120 1962 Warr 1992, 50+ 1964 (MB pers obs), 1700 Nov 07 Jennings 2008b, 9000+ March 1996 Jennings 2010; normally vagrant, occasionally large numbers Oman OBL7 : 420 S of Jizan Saudi Arabia Dec 2018 (7th record) SG41(1)ATR : 146, first attempted breeding Saudi Arabia Dec 2018 Roberts & Babbington 2020. 1st for Egypt 27 Nov 92 EORC 2011: 1st record for Iran since 1904 Jalali <i>et al</i> 2020. NB Nuclear DNA studies indicate lack of population genetic structure & asymmetric gene flow suggest regular interchange between Kenyan and Gujarati populations, thus supporting natural origin of OSME Region records Parasharya <i>et al</i> 2015.
		Turnicidae	
			NB Considerable resequencing of genera within a revised Lari (which would include this family) proposed by Sangster <i>et al</i> 2012. We shall await IOC consideration.

196	Common Buttonquail (Small Buttonquail, Kurrichane Buttonquail)	<i>Turnix sylvaticus</i>	Possibly E Iran, HBW3, may breed Scott & Adhami 2006 perhaps ssp <i>dussumier</i> (Pakistan). Recorded 19th century S Yemen Warr 1992, probably resident in small numbers W Yemen, three 2013 records suggest likely residency in SW Saudi Arabia Babbington & Roberts 2014 (<i>Iepurana</i> of Ethiopia or <i>sylvaticus</i> of Egypt?), also at Sabya Saudi Arabia Apr 2014 in same fields as in 2013 (<i>Iepurana/sylvaticus</i> ?) SG36(2) ATR ; 2-record vagrant Oman (1974, 1999) OBL7 (<i>dussumier</i> ?); mapped Pakistan close to Khyber R&A 2012. NB1 Breeds Ethiopia Ash & Atkins 2009. NB2 Former English names also include Andalusian Hemipode, Little Buttonquail (now name for <i>T. velox</i> of Australia) & Little Bustard Quail. Present English name as agreed by IOC 2.6 & HBW.
		Burhinidae	Černý & Natale 2021 preprint proposes reevaluation of relationships within many wader genera. The genus <i>Burhinus</i> would then apply only to extralimital Bush Stone-curlew <i>B. grallarius</i> . NB Livezey 2010 separated as sub-families the <i>Burhinus</i> taxa below into Lesser Thick-knees and includes <i>Esacus</i> in Greater Thick-knees
PT	Eurasian Stone-curlew PT (Eurasian Thick-knee)	<i>Burhinus oedicnemus</i> (<i>sensu lato</i>)	Re Parent Taxon , IOC v2.0 accepts split of Indian Stone-curlew <i>Burhinus [oedicnemus] indicus</i> R&A 2005, as do BLI; however the two taxa are separated in Pakistan by a corridor 20-70km wide that lacks correlation with any dividing topography or habitat. H&M4 remains unsplit, noting lack of genetic data Martens & Bahr 2007, but Inskipp & Collar 2015 note del Hoyo & Collar 2014b agree split on Tobias <i>et al</i> 2010 criteria. See ORL Hypothetical List
197	Eurasian Stone-curlew (Eurasian Thick-knee)	<i>Burhinus oedicnemus</i> (<i>sensu stricto</i>) May move to genus <i>Oedicnemus</i> Černý & Natale 2021.	Caucasus ssp <i>oedicnemus</i> , <i>harterti</i> Turkmenistan, Bukreev 1997. Widespread breeder, including Kazakhstan W&O 2007, thinly widespread Wassink 2015b, Iraq Salim <i>et al</i> 2012, some resident in N of Gulf, HBW3 (<i>saharae</i> SW Iran, <i>harterti</i> NW), common Israel Perlman & Meyrav 2009, breeding proven Lebanon Ramadan-Jaradi <i>et al</i> 2017, scarce breeder N Kyrgyzstan, Ven 2002, NW & S Afghanistan, SE Iran R&A 2005, Possibly a few hundred bp in C Saudi Arabia, although confirmed records few Jennings 2010: fairly common PM & WV Oman OBL7 . Breeding records of birds wintering to S of region (Save those in S Yemen Warr 1992 accepted as winterers) now considered applicable to Spotted Thick-knee <i>B. capensis</i> Jennings 2010. Egypt Avib, BE
198	Senegal Thick-knee	<i>Burhinus senegalensis</i> May move to genus <i>Oedicnemus</i> Černý & Natale 2021.	Monotypic. African species, breeds Egyptian Nile, taxon <i>inornatus</i> Wadi Natrun Western Desert Goodman <i>et al</i> 1986: vagrant Saudi Arabia, Porter <i>et al</i> 1996, one at Ma'gan Michael Israel Jul 2015 DB37(4) , 2nd at Kfar Rupin Jul 2020 Yoav Perlman <i>in litt</i> , where joined by 3rd record Aug 2020 SG43(1) : 172.
199	Spotted Thick-knee (Spotted Dikkop)	<i>Burhinus capensis</i> May move to genus <i>Oedicnemus</i> Černý & Natale 2021.	African species, resident (<i>dodsoni</i>) N Yemen Porter & Warr 1985, SW Yemen, S Oman, Porter <i>et al</i> 1996: fairly common resident breeder C & SW Oman OBL7 . Main breeding <i>Burhinus</i> in S Arabia (SW Saudi, W Yemen, S Oman) might exceed 1000bp Jennings 2010.
200	Great Stone-curlew (Great Stone Plover)	<i>Esacus recurvirostris</i>	Monotypic. SE Iran coastal region, HBW3, scarce resident Scott & Adhami 2006, most Oman records from Shinas (Ian Harrison <i>in litt</i>), but also to tip of Musandam peninsula (Oman) Delany <i>et al</i> 2009, UAE Sep 2011, Feb-Mar 2012 EORC . RNBWS report Nov 87 at sea off Masirah.
		Haematopodidae	
PT	Eurasian Oystercatcher PT	<i>Haematopus ostralegus</i>	Livezey 2010 strongly supports (see Inskipp <i>et al</i> 2011) separation of Korean Oystercatcher <i>H. (o.) osculans</i> , whose Far Eastern breeding distribution does not disqualify use of 'Eurasian Oystercatcher' for remaining taxa. Shannon <i>et al</i> (in prep, Univ Aberdeen) provide genetic justification of split; Swedish Taxonomic Committee prefer 'Kamchatka Oystercatcher' as English name..
201	Eurasian Oystercatcher	<i>Haematopus (ostralegus) ostralegus</i>	<i>H.o. buturlini</i> Turkmenistan, Bukreev 1997, often subsumed in <i>longipes</i> (not by H&M4), both taxa occurring in much of the Region H&M4, Delany <i>et al</i> 2009, note <i>ostralegus</i> winters W Mediterranean. Breeds Caucasus, CA (<i>longipes</i> Kazakhstan W&O 2007, rare BM, PM Wassink 2015b), scarcer to E Kyrgyzstan, Ven 2002, scarce breeder Iran Scott & Adhami 2006, 1st beeding for 130 years Azerbaijan Jun 2018 SGATR41(1) . winters Afghanistan (R&A 2005), Iraq Salim <i>et al</i> 2012, on coasts to S (eg S Yemen Warr 1992), HBW3, uncommon Israel Perlman & Meyrav 2009, abundant PM & WV Oman (mostly Masirah) OBL7 and declining Jordan JBRC. Eavot Avib. BE
		Ibidorhynchidae	
202	Ibisbill	<i>Ibidorhyncha struthersii</i>	Monotypic. Kazakhstan, Kyrgyzstan, Tajikistan, HBW3. Breeds high mountain streams C&E Kyrgyzstan, Ven 2002, rare resident (150bp) ESE Kazakhstan Wassink 2015b. Turkmenistan, Bukreev 1997, not Tajikistan (K-M&K 2005) where habitat disturbed David Ewbank pers comm, possibly NE Afghanistan R&A 2005; found Wakhan Raffael Ayé 2007, Ayé <i>et al</i> 2012, R&A 2012, which occurrence predicted from Pakistan records on border Roberts 1991. Bates & Lowther 1959 had noted its decline with disturbance at medium to high elevations Kashmir, & Grimmett <i>et al</i> 2009 record only tiny relict breeding population. Sharma <i>et al</i> 2018 report is from Kashmir's Marusadar cathchment; BLDZ map Jan 2020 indicates residency across N Afghanistan above Kabul.
		Recurvirostridae	
PT	Black-winged Stilt PT	<i>Himantopus himantopus</i>	Livezey 2010 strongly supports separation (see Inskipp <i>et al</i> 2011) of SE Asian Black-naped Stilt <i>H. leucocephalus</i> , whose insular SE Asian breeding distribution does not disqualify use of 'Black-winged Stilt' for remaining taxa: that said, the only ssp/taxon in the OSME Region is <i>himantopus</i> .
203	Black-winged Stilt	<i>Himantopus [himantopus] himantopus</i>	Breeds Caucasus, much of CA, common BM, PM Kazakhstan Wassink 2015b, Afghanistan (R&A 2005), Iran Scott & Adhami 2006 (some resident), Iraq (+ passage, wintering) Salim <i>et al</i> 2012, now known Socotra Suleiman 2009: formerly scarce breeder Arabia, now widespread near artificial lagoons, irrigated agriculture, c2500bp Jennings 2010, common local breeder, abundant PM & WV Oman OBL7 ; winters mostly amongst resident populations beyond Region to S, HBW3, mostly in Africa Delany <i>et al</i> 2009. Formerly Egypt Avib, BE
204	Pied Avocet (Avocet)	<i>Recurvirostra avosetta</i>	Monotypic. Breeds Caucasus, across N CA, scarce PM, BM Kazakhstan Wassink 2015b: also Afghanistan (R&A 2005), Iraq Salim <i>et al</i> 2012, Iran Scott & Adhami 2006: breeding in Arabia since 1970s, now probably under 200bp, but irregularly Jennings 2010; winters mostly Gulf or E Africa, HBW3, uncommon winter Israel, scarce breeder Perlman & Meyrav 2009; fairly common PM & WV Oman OBL7 . Egypt Avib, BE
		Charadriidae	Černý & Natale 2021 preprint proposes reevaluation of relationships within many wader genera. The genus <i>Vanellus</i> would then apply only to extralimital Northern Lapwing. NB Sangster <i>et al</i> 2012 recommend <i>Pluvialis</i> precede <i>Vanellus</i> .
205	Northern Lapwing	<i>Vanellus vanellus</i>	Monotypic. Breeds in N CA, common BM, PM Kazakhstan Wassink 2015b, wintering Iran (some breed Scott & Adhami 2006), Iraq, HBW3, Afghanistan R&A 2005, Israel Perlman & Meyrav 2009. Uncommon irregular PM & WV Oman OBL7
206	Spur-winged Lapwing (Spur-winged Plover)	<i>Vanellus spinosus</i> (formerly <i>Hoplopterus spinosus</i> to which it may return Černý & Natale 2021	Monotypic mostly African species, scattered populations from N Turkey SW to SW Yemen, Porter <i>et al</i> 1996: first bred Arabia 1980s, now c 1000bp, mostly Red Sea or Riyadh Jennings 2010, 2nd record Qatar Nov 2014, 3rd Nov 2016, 2 birds Mar 2017, 5th & 6th records Oct & Dec 2017 7th Mar 2019, 8th record Abu Nakla QBRC , 9th Shamal coast Apr 2020 SG42(2) : 328, rare PM & WV Oman OBL7 ; winter vagrant Iraq Feb 42 Moore & Boswell 1956, but actually resident in S Iraq Salim <i>et al</i> 2012, WV Iran Scott & Adhami 2006, but recolonised Khuzestan Iran 2000, now resident Khaleghizadeh <i>et al</i> 2017. Accidental Armenia Koblik & Arkhipov 2014, one at Armas, Armenia Feb 2018 DB40(2) : 118, 1st for Azerbaijan Jul 2020 Nakhchivan Mammadov <i>et al</i> 2021; 1st breeding record Jahra Pools, Kuwait (1 bp, two succesfull nests) Apr-Jun 2020 Ashour <i>et al</i> 2020. Breeds in Egyptian desert near Libyan border Jens Hering (unpub) in Isenmann <i>et al</i> 2016.
207	Black-headed Lapwing (Black-headed Plover)	<i>Vanellus tectus</i> (formerly <i>Hoplopterus tectus</i> to which it may return Černý & Natale 2021	African species, once Jordan, vagrant Israel, Porter <i>et al</i> 1996; ssp <i>tectus</i> easternmost distribution Ethiopia, <i>latifrons</i> northrmmost distribution S Somalia. Egypt Avib, BE
208	Grey-headed Lapwing	<i>Vanellus cinereus</i> (may move to <i>Hoplopterus</i> Černý & Natale 2021)	Monotypic. Vagrant from Far East, 1st record 03 Jan 12 Sahnawt Farm Salalah Hanne & Jens Eriksen OBL7 - 1st record for Oman, Middle East, OSME Region & extended WP. 2nd record at Kızıllırmak Delta, Batra, Samsun, Turkey Mar 2018: found & image by Emin Yoğurtcoğlu. 1st for Iran at Kish Island Hormozgan Jan 2020 DB42(1) : 54; 1st for Kazakhstan Sep 2020, lower Turgun River, Almaty Wassink <i>et al</i> 2021, 1st for Pakistan Gujrat, Punjab Oct 2021 (330km from Region's Afghan border) DB43(6) : 466.
PT	Red-wattled Lapwing PT	<i>Vanellus indicus</i> (<i>sensu lato</i>)	We follow Inskipp <i>et al</i> 2011 in separation of W SE Asian White-eared Lapwing <i>V. atronuchalis</i> ; SE Asian breeding distribution does not disqualify use of 'Red-wattled Lapwing' for remaining taxa. (See also Livesey 2010). IOC7.2 remains unsplit.

209	Red-wattled Lapwing (Red-wattled Plover)	<i>Vanellus indicus (sensu stricto)</i> (may move to <i>Hoplopterus</i> Černý & Natale 2021)	<i>V.i. aigner</i> SE Turkey Kirwan <i>et al</i> 2008, Turkmenistan, Bukreev 1997, Afghanistan Paludan 1959. Resident Iran, Iraq HBW3 summer visitor NW Iran HBW3. E Iran, Afghanistan R&A 2005, UAE Aspinall 1996, Oman Delany <i>et al</i> 2009: first bred E Arabia 1970s, now c 1700bp mostly UAE & Oman, 1st breeding record Jul 2020 Sabkhat al Fasl, Jubail, Saudi Arabia Roberts 2021; some Kuwait Jennings 2010; common resident breeder Oman OBL7 , vagrant Israel Perlman & Meyrav 2009, 3rd for Israel Hula valley Nov 2017, 4th Afkim, Jordan Valley IRDC , Jan 2018 DB40(1) : 48, 5th Tirza Reservoir Jordan Valley Feb 2022 Yoav Perlman in litt ; 1st record Kazakhstan Arend Wassink <i>in litt</i> Mar 2015, vagrant Armenia Koblik & Arkhipov 2014; old records for SW Russia in OSME Region, Aug 1982 N Stavropol, Dagestan one River Akusha mouth May 1956 & one Agrakhan Peninsula Apr 1984 DB41(4) : 266. 1st for Kazakhstan sound-recorded Zhanakorgan, Qyzylorda May 2014 Wassink <i>et al</i> 2021. Range greater than in HBW3. Some winter UAE.
210	Sociable Lapwing (Sociable Plover)	<i>Vanellus gregarius</i> (formerly <i>Chettusia gregaria</i> : may move to <i>Hoplopterus</i> Černý & Natale 2021) Critically Endangered. 10-70 killed or taken annually in Iraq Brochet et al 2019.	Monotypic. Migrant Afghanistan R&A 2005. BM mostly N Kazakhstan W&O 2007, rare (3500bp) Sheldon <i>et al</i> 2006, Wassink 2015b; decining in N Eichhorn & Khrokov 2002; (flocks of 250+ 2006, rare migrant in E), migrant Kyrgyzstan, Ven 2002, winters scattered through southern OSME Region HBW3; Iraq, 4 1942, one 1945 Moore & Boswell 1941-46, scattered records Iran 1886 -2002 (numbers declining) Roselaar & Aliabadian 2010 now rare PM WV Khaleghizadeh <i>et al</i> 2017, 22 Beit-Kosar, Khuzestan Feb 2020 DB42(2) : 125; uncommon PM Uzbekistan Martin <i>et al</i> 2014, 8th Qatar record Nov 2016 QBRC , 10th record Oct 2017 QBRC , fairly common PM & WV Oman OBL7 , 2600+ Turkey, Syria Jan 2007 (BLI), where apparently regular winter population Syria Murdoch & Betton 2008, large numbers plains SE Turkey just N of Syrian border Oct 07 Biricik 2009, rare Iraq (formerly common) Salim <i>et al</i> 2012, NW Negev Israel Perlman & Meyrav 2009. W&C Kazakh populations migrate through Volga-Ural region to Turkey & Syria W&O 2008, Sheldon <i>et al</i> 2006, Rob Sheldon pers comm 2008, E Kazakh population may be those wintering SE Pakistan, NW India Delany <i>et al</i> 2009; 2210 counted Talimarjan Lake Uzbekistan Sep 2015 DB37(6) : 406, 3675 in 2015 & also 4225 in Uzbekistan DB38(4) 245, c500 at Zhanteke Kazakhstan Jun 2017 DB39(4) : 264, two flocks (45 & 15) recorded Azerbaijan Oct/Nov 2013 Vidal & Sheldon 2016, new stopover site on Uzbekistan-Tajikistan border Donald <i>et al</i> 2016; 3rd for Lebanon shot Oct 2016 Ramadan-Jaradi <i>et al</i> 2017. Egypt Avib, BE. Suggestion of wintering Sudan (satellite-tracking) Delany <i>et al</i> 2009, 3rd for Cyprus Kuklia Dec 2020-Jan 2021 CBRC , 4th Phasouri Oct 2021 Jane Stylianou <i>in litt</i> , perhaps same bird or another Mia Milia (Haspolat) sewage treatment plant late Oct 2021 SG44(1) : 233. 11 at Sulabiya Kuwait 9 Jan 2017 DB39(1) : 50, wintering flock in NW Saudi Arabia & new wintering area in Eastern province, all in newly-ploughed fields Babbington & Roberts 2017. In Oct 2016, survey teams in Turkmenistan & Uzbekistan counted 303 flocks totalling at least 3470 individuals at feeding & roosting sites amid a steady decline in habitat quality Azimov <i>et al</i> 2018; even worse declines possibly attributable to that same reason found in C Kazakhstan study area Urazaliyev <i>et al</i> 2021, although relocation to areas outwith the survey area may also be a contributory factor. Donald <i>et al</i> 2020 mapped outward & return migration routes via satellite tagging: non-breeding areas were in Sudan (some finding Middle East irrigated fields suitable) via a circum/trans-Caspian route, and in Pakistan & NW India via a trans-Afghanistan route from Kazakhstan breeding grounds. Vagrant once in 1975 to the Maldives Anderson & Shimal 2020.
211	White-tailed Lapwing (White-tailed Plover)	<i>Vanellus leucurus</i> (formerly <i>Chettusia leucura</i> : may move to <i>Hoplopterus</i> Černý & Natale 2021)	Monotypic. Breeds S CA, likely scarce BM mostly S half Kazakhstan Wassink 2015b. (Once thought to be 1st formal record lower Turgan River, Almaty Sep 2020 SG43(1) : 175 now known as a misidentification of Grey-Headed lapwing V. cinereus Arend Wassink pers comm Jan 2022); likely irregular breeder Volga Delta Arkhipov 2006, erratically further W Kirwan <i>et al</i> 2008, rare S Israel Perlman & Meyrav 2009: uncommon migrant visitor, scarce breeder from Kuwait to Dubai Jennings 2010, 1st bred Dubai 1996 Aspinall 2010, now regularly so in small numbers Al Wathba Wetland Reserve Dubai Campbell <i>et al</i> 2018, limited range extension to undisclosed site UAE Campbell & Smiles 2019a; winters Iran, Gulf, HBW3, fairly common to common PM & WV Oman OBL7 , Iraq Moore & Boswell 1956, local breeder Salim <i>et al</i> 2012, one Akrotiri Marsh Cyprus May 2022 Anders Gray in litt , one Oroklini Marsh May 2022 Pete Bromley, Jane Stylianou in litt , 3 at Akhna Dam May 2022 Evangelis Tsakiris, Jan Stylianou in litt ; Sudan, Pakistan/NW India Delany <i>et al</i> 2009; migrant Armenia Adamian & Melikyan 1991, Ananian <i>et al</i> 2002, Kyrgyzstan, Ven 2002. Breeds NW Afghanistan, E Iran winters SE Afghanistan R&A 2005. Egypt Avib, BE
212	Eurasian Golden Plover {European Golden Plover}	<i>Pluvialis apricaria</i>	Likely only ssp <i>apricaria</i> in Region. Winters S Caspian, HBW3 & further to S; Israel Perlman & Meyrav 2009, rare PM Kazakhstan W&O 2007, rare PM & WV Oman OBL7 , but largest ever flock of c2400 found Tyuntugur Lake N Kazakhstan Apr 2021 Wassink 2022 : vagrant Iraq Salim <i>et al</i> 2012, Jordan 2003 JBRC , 2 birds 4th record Qatar QBRC , Bahrain, Kuwait, Saudi Arabia Mitchell 2017. Egypt Avib, BE
213	Pacific Golden Plover (Lesser Golden Plover)	<i>Pluvialis fulva</i>	Monotypic. Tundra breeder from area to NE of E Kazakhstan Rogacheva 1992 as far E as Alaska, locally common migrant through region to Somali or Indian wintering grounds & S OSME Region, Porter <i>et al</i> 1996, scarce PM Kazakhstan Wassink 2015b, scarce on or near Arabian Gulf coasts mid-Aug-mid-May Bundy & Warr 1979, uncommon N Yemen Porter & Warr 1985, S Yemen Warr 1992, 6th record Turkey Oct 2011 Kirwan <i>et al</i> 2014 2nd for Azerbaijan Aug 2017 (1st in 19th century) DB39(5) : 344, one at Horkaniya, Judean Desert Israel Nov 2021 Yoav Perlman <i>in litt</i> ; common PM & WV Oman OBL7 ; 2nd for Azerbaijan at Ağgöl Milli Park Jan 2020 DB42(1) : 54. Egypt Avib, BE. Autumn migrant NE Kyrgyzstan, Ven 2002, spring & autumn Kazakhstan W&O 2007. One shot Iran c1956 Roselaar & Aliabadian 2010, v (rare pm?), 2 recorded Hormozgan Jan 2009 Winkel <i>et al</i> 2010 now regular winterer Iran Khaleghizadeh <i>et al</i> 2017, probably rare winterer Iraq Salim <i>et al</i> 2012; straggler Afghanistan Paludan 1959 occasional H&E 1970, Afghanistan E Dickinson pers comm. NB1 Long treated in Russian-language literature as separate from American Golden Plover <i>P. dominica</i> . NB2 Scarce (former?) winterer Indus estuary Pakistan Roberts 1991.
214	American Golden Plover	<i>Pluvialis dominica</i>	Monotypic. Vagrant Turkey, Porter <i>et al</i> 1996, 2nd record Kızılırmak Delta Mar 2021 TBRC . Vagrant Israel Perlman & Meyrav 2009, 3rd for Israel Eilat, south of IBRC Dec 2021 still present Jan 2022 Yoav Perlman in litt , DB43(1) : 64. Vagrant Oman, Grieve <i>et al</i> 2005 (sole record 2003 Oman OBL7), Israel Mitchell 2017, perhaps through accompanying <i>P. fulva</i> from common breeding grounds in W Alaska?
215	Grey Plover	<i>Pluvialis squatarola</i>	Migrates (ssp <i>squatarola</i>) over Region to and from warm sea-coast wintering grounds, HBW3; scarce PM Kazakhstan Wassink 2015b, abundant PM & WV Oman OBL7 . Egypt Avib, BE. NB wintering grounds of Wrangel Island ssp <i>tomkovichi</i> not known, but likely Far East.
216	Common Ringed Plover	<i>Charadrius hiaticula</i>	Usually Arctic or northern temperate breeder from Chukotsky W through Kola, Iceland to Greenland Delany <i>et al</i> 2009; <i>psammadroma</i> (-us?) possibly vagrant to Egypt, <i>hiaticula</i> possibly so, but <i>tundrae</i> (Tomkovich <i>et al</i> 2018) occurs throughout Region. Winters S Caspian, Iran, Iraq S to S Africa Delany <i>et al</i> 2009, scarce PM <i>tundrae</i> Kazakhstan W&O 2007, Wassink 2015b. Widespread passage migrant through Middle East, some oversummer, Porter <i>et al</i> 1996; abundant PM & WV Oman OBL7 . Migrant through Afghanistan R&A 2005. Egypt Avib, BE. Tomkovich <i>et al</i> 2018 show geolocator data for <i>tundrae</i> migration round trip from the Chukotsky Region (via Arabia) to Horn of Africa up to 25,000 km travelled. Léandri-Breton <i>et al</i> 2019 do likewise for High Nearctic populations migrating mainly in long-distance legs to West Africa.
217	Little Ringed Plover	<i>Charadrius dubius</i>	Widespread summer breeder (mostly <i>curonicus</i>) in CA region, HBW3, common BM, PM Kazakhstan Wassink 2015b, including Afghanistan R&A 2005, Iran Scott & Adhami 2006, <i>curonicus</i> widespread, buy likely <i>jerdoni</i> in SE corner if Iran Khaleghizadeh <i>et al</i> 2017; in Iraq, breeds mostly in N, passage, winterers Salim <i>et al</i> 2012, in Arabia, artificial wetlands support perhaps 500bp Jennings 2010; 1st bred Kuwait Apr 2012 Khaled Alghanem <i>in litt</i> ; casual breeder, abundant PM & WV Oman OBL7 . Geolocators on S Sweden breeders show a wide spread of migration to winter quarters, from Nigeria across to Egypt, the Levant and Saudi Arabia, with those wintering in Pakistan and India passing through the Caucasus, Iraq and Iran Hedenström <i>et al</i> 2013. Egypt Avib, BE NB taxon <i>jerdoni</i> may wander from Pakistan near Khyber R&A 2012.

218	Three-banded Plover (formerly Collared Plover)	<i>Charadrius tricollaris</i>	Ethiopian vagrant to Egypt and Western Palearctic, Hoath 2000, but common breeder also Eritrea & Ethiopia Redman <i>et al</i> 2009. 1st record Egypt Mar 1993 Haas 2017, breeding confirmed Sahari, Aswan, Egypt 2009 Haas <i>et al</i> 2010a; present Dec 2011, also 2012-18; also Abu Simbel 2011 Crochet 2018, 2012 Hering <i>et al</i> 2013, still rare & localised breeder Lake Nasser 2015-19 Hering <i>et al</i> 2020, 4 (incl 1 pair) fish ponds Aswan Jun 2022 Jens Hering <i>in litt</i> , DB44(4): 305 : now regular local breeder Mitchell 2017, one near Alexandria Jun 2020 SG43(1): 170 ; ssp <i>tricollaris</i> ; <i>bifrontatus</i> extralimital Madagascar endemic. 1st record for Israel at Ma'ayan Tzvi May 2020 still present late Oct 2020 & Baram fishponds Hula Valley Feb 2021 Ottens & Perlman 2021, 2nd record Nov 2021 Golan Heights still present Feb 2022 Israel Yoav Perlman <i>in litt</i> . NB The former English name Collared Plover now allocated (IOC) to <i>C. collaris</i> of Latin America.
219	Eurasian Dotterel	<i>Charadrius morinellus</i> (<i>Eudromias morinellus</i> H&M4 & elsewhere)	Monotypic. Very rare BM, scarce PM easternmost Kazakhstan Wassink 2015b, migrant Turkey Kirwan <i>et al</i> 2008, rare Israel Perlman & Meyrav 2009, Kyrgyzstan, Ven 2002, winters in N Gulf, HBW3, Uncommon PM N Iran, fairly common WV dry Khuzestan plains Khaleghizadeh <i>et al</i> 2017. 9 records Oman OBRC, OBL7.6 10th Al Hail, Muscat Nov 2020 OBRC . Egypt Avib, BE. RNBWS record Apr 60 E Masirah. NB Livezey 2010 revises back to <i>Eudromias</i> .
PT	Kentish Plover PT	<i>Anarhynchus alexandrinus</i> (formerly <i>Charadrius alexandrinus</i>) <i>sensu lato</i>	Two-stage PT split: first, Nearctic extralimital Snowy Plover <i>C. nivosus</i> separated (IOC2.3; justification in Küpper <i>et al</i> 2009, reinforced by Livezey 2010, who perversely adopted 'Kentish Sandplover' as English name) & accepted Sangster <i>et al</i> 2011; second, 'restored' rediscovered extralimital & Data-Deficient Oriental taxon White-faced Plover <i>C. dealbatus</i> , proposed IOC2.8, then regarded as inconclusive, but resurrected via Sadanandan <i>et al</i> 2019, Wang <i>et al</i> 2019: IOC10.2. NB1 Sangster <i>et al</i> 2016 summarise recent work indicating <i>Charadrius</i> is not monophyletic, hence the following change of genus based on dos Remedios <i>et al</i> 2015. NB2 Collar 2013 counsels caution on conflicting morphological/reproductive isolation and molecular data as to assigning rank
220	Kentish Plover	<i>Anarhynchus alexandrinus</i> (<i>sensu stricto</i>) { <i>Charadrius alexandrinus</i> (<i>sensu stricto</i>)}	Widespread & scattered ME, Porter <i>et al</i> 1996, ssp <i>alexandrinus</i> , ssp <i>seebohmi</i> possible vagrant/PM easternmost OSME Region. Resident in S; breeds Turkey, Ira, CA, Caucasus HBW3, common BM Kazakhstan Wassink 2015b, 1st winter record Aqtua Kazakh Caspian 4 Jan 16 Wassink 2016b. E Iran Afghanistan R&A 2005. Status in Iraq & Arabia: common widespread PM, WV, (S&C Iraq RB Salim <i>et al</i> 2012), Arabia colonial expansion in irrigated areas, possibly 30 000bp Jennings 2010; common RB, abundant PM & WV Oman OBL7. 1st breeding records Lake Nasser, N of Abu Simbel Jun 2022 Jens Hering pers comm Jul 2022 . Egypt Avib, BE. NB Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.
PT	Lesser Sand Plover PT	<i>Anarhynchus mongolus</i> { <i>Charadrius mongolus</i> }	Split follows Hirschfeld <i>et al</i> 2000, Livezey 2010, Wei <i>et al</i> 2022: <i>atrifrons</i> group <i>atrifrons</i> , <i>pamirensis</i> , <i>schaeferi</i> ; <i>mongolus</i> group <i>mongolus</i> , <i>stegmanni</i> . Ayé <i>et al</i> 2012 & Eaton <i>et al</i> 2016 split, R&A 2012 H&M4 do not. Shannon <i>et al</i> (in press Univ Aberdeen) establish genetic basis for, in addition to differences in biometrics, plumage characters and allopatric breeding ranges, the Sand Plover complex being comprised of 3 species: <i>C. leschenaultii</i> , <i>C. mongolus</i> and <i>C. atrifrons</i> . Their phylogeny is based on 11 genes & confidently places the ' <i>atrifrons</i> ' group as sister to Greater, with ' <i>mongolus</i> ' group having diverged earlier. This conclusion emphatically agreed by Wei <i>et al</i> 2022; the <i>atrifrons</i> group is not the closest relative to the <i>mongolus</i> group, the latter being sister to Greater Sand Plover <i>A. leschenaultii</i> NB1 All claimed records Cyprus up to 1996 and Turkey up to 1989 have been reviewed and rejected as smallest ssp, <i>columbinus</i> , of Greater Sandplover <i>C. leschenaultii</i> Flint <i>et al</i> 1997. NB2 We resist Livezey 2010 proposal to rename <i>mongolus</i> as 'Black-fronted Sandplover' and <i>atrifrons</i> as 'Spot-fronted Sandplover'. (See Inskipp <i>et al</i> 2011). NB3 Previous mention of Wei <i>et al</i> 2021 referred to submitted version, publication of which occurred in 2022, hence Wei <i>et al</i> 2022 herein.
221	Lesser Sand Plover (Mongolian Sand Plover: Tibetan Sand Plover, Wei <i>et al</i> 2022, IOC12.2 draft)	<i>Anarhynchus [mongolus] atrifrons</i> { <i>Charadrius [mongolus] atrifrons</i> } (<i>atrifrons</i> group originally named 'Tibetan Sand Plover' by Dutch <i>Birding</i> , but now accept Lesser SP: 'Tibetan Plover' assigned Eaton <i>et al</i> 2016).	Polytypic. Wei <i>et al</i> 2022 confirm the <i>atrifrons</i> group is not the closest relative to the <i>mongolus</i> group, the latter being sister to Greater Sand Plover <i>A. leschenaultii</i> . Vagrant Kazakhstan G&G 2005, W&O 2007 as <i>C.m pamirensis</i> (reassessed as rare passage migrant Kazakhstan Wassink 2013) – 1 record Afghanistan Paludan 1959, 3 collected at 4000m Wakhan Niethammer 1973: probably breeds up to 5500m SE Kazakhstan, very rare PM, non-breeding SV Wassink 2015b, Tajikistan HBW3; breeds montane plateaus Kyrgyzstan, Ven 2002; Ayé <i>et al</i> 2012 map breeding area along Chinese border from Afghan Wakhan through Tajikistan to Kyrgyzstan; both Turkmenistan records Rustamov 2015 not identified beyond 'Mongolian' <i>sensu lato</i> . 3rd (post 1989) record for Turkey Millehya Beach Mar 2021 TBRC, 4th May 2022 at Millehya claimed (likely pamirensis in almost full breeding plumage) Emin Yögürtcuoğlu <i>in litt</i> , DB44(3): 224 . Common PM, WV Iran as <i>pamirensis</i> Khaleghizadeh <i>et al</i> 2017. Unlikely <i>schaeferi</i> has occurred in Region, nearest known record Bengal Hirschfeld <i>et al</i> 2000. Winters sea-coasts to S, the Gulf, Red Sea (<i>pamirensis</i> Ash & Atkins 2009, some <i>atrifrons</i> Hirschfeld <i>et al</i> 2000), abundant PM & WV Oman OBL7 (lumped under 'Mongolian'). Iraq passage, winterer Salim <i>et al</i> 2012, Arabia, passage birds to eastern coastlines of Africa. Breeds NE Iran H&E 1970, NE Afghanistan R&A 2005 (breeds Bamiyan Busuttii & Ayé 2009). Egypt Avib, BE. NB1 High risk of confusion between this species and small <i>columbinus</i> ssp of <i>C. leschenaultii</i> : although Mitchell 2017 suggests Syrian LSP records, we would conclude these may be <i>columbinus</i> unless proven otherwise. NB2 Long-recognised as meriting species rank in Russian-language literature Red'kin <i>et al</i> 2015. NB3 Wei <i>et al</i> 2022 formally propose English name of Tibetan Sand Plover.
222	Mongolian Sand Plover Siberian Sand Plover Wei <i>et al</i> 2022, IOC12.2 draft)	<i>Anarhynchus [mongolus] mongolus</i> { <i>Charadrius (mongolus) mongolus</i> }	Polytypic. Wei <i>et al</i> 2022 confirm the <i>mongolus</i> group is sister to Greater Sandplover <i>A. leschenaultii</i> and is more distant from the <i>atrifrons</i> group. Identified Israel 2013 from a photo taken in Israel by Itai Shanni in 2000 ssp <i>mongolus</i> ; accepted record Yoav Perlman pers comm 21 Nov 2015. No OSME record of <i>stegmanni</i> for which no certain Pakistan records – black line separating white throat & chestnut breast never recorded there Roberts 1991. Wanderers possible on E OSME Region coasts. <i>C. mongolus sensu stricto</i> has reached UK Parkin & Knox 2010 and Ireland Jul 2013. Isenmann <i>et al</i> 2016 admit <i>A. mongolus sensu lato</i> to Libya Checklist, but omit mention of ssp or of awareness of confusability with <i>A. leschenaultii columbinus</i> (<i>qv</i>). NB <i>A. mongolus stegmanni</i> is very unlikely to occur from its remote breeding distribution.
223	Greater Sand Plover (Formerly Large or Geoffroy's Sand Plover) ('Desert Sand Plover' Wei <i>et al</i> 2022)	<i>Anarhynchus leschenaultii</i> { <i>Charadrius leschenaultii</i> }	Polytypic. <i>C.I. crassirostris</i> (now <i>scythus</i>) Turkmenistan, Bukreev 1997, common BM S Kazakhstan W&O 2007, Wassink 2015b; <i>columbinus</i> in W of Region. Breeds CA, Caucasus, Afghanistan (up to 3100m H&E 1970), HBW3, Kazakhstan G&G 2005, range extension Lake Balkash Martin <i>et al</i> 2018, widespread SB Iran Zarudny 1911, but now scarce Scott & Adhami 2006: <i>columbinus</i> & <i>scythus</i> migrate through Arabia, <i>leschenaulti</i> vagrant Hirschfeld <i>et al</i> 2000, abundant PM & WV Oman (<i>scythus</i> & likely <i>leschenaultii</i>) OBL7: scythus (<i>crassirostris</i>) PM & WV Arabia, <i>columbinus</i> scarce SB NW Gulf Jennings 2010: bred Kuwait Gregory 2005; 1st breeding Egypt, near Port Said Jun 2019 SG42(1): 167 , Habib 2020b. Winters across S of Region eg S Yemen Warr 1992, S&W Iraq Salim <i>et al</i> 2012. Egypt Avib, BE NB1 Taxon <i>crassirostris</i> now renamed <i>scythus</i> Carlos <i>et al</i> 2012. NB2 small ssp <i>columbinus</i> (DB 2009 call it Anatolian Sand Plover) so easily confusable with <i>C. [m.] atrifrons</i> that many old Region records of <i>atrifrons</i> now deleted as inadequately documented. NB3 Greater Sandplover is sister to the <i>mongolus</i> group (<i>qv</i>) & more distant from the <i>atrifrons</i> (<i>qv</i>) group. NB4 We resist Livezey 2010 proposal to rename this taxon as 'White-fronted Sandplover', but note that Wei <i>et al</i> 2021 formally propose the English name 'Desert Sand Plover'.
224	Caspian Plover	<i>Anarhynchus asiaticus</i> { <i>Charadrius asiaticus</i> }	Monotypic. Scarce or rare on passage but widespread ME, Porter <i>et al</i> 1996; rare spring PM Cyprus CBR11 2-3 Cyprus Mar 2018 Colin Richardson <i>in litt</i> ; 43 Gyzylagach Azerbaijan Jul 2017 DB39(5): 344 uncommon autumn PM, rare spring PM & WV Oman OBL7 . Breeds Caspian, similar latitudes to E in CA, HBW3, 1st breeding record Golestan Iran May 2017 DB40(1): 48 , common BM Kazakhstan Wassink 2015b, rare Kazakh Volga-Ural area Wassink 2018; migrant Kyrgyzstan, Ven 2002. Egypt Avib, BE.
225	Oriental Plover	<i>Anarhynchus veredus</i> { <i>Charadrius veredus</i> }	Monotypic. Vagrant Kazakhstan, Uzbekistan (K-M&K 2005): W&O 2007 removed from Kazakh list – 1910 skin lost, but now 1st record May 2009 Wassink <i>et al</i> 2011), Wassink 2015b Ayé <i>et al</i> 2012 accept old CA records. Note westernmost breeding grounds in China & Mongolia close to easternmost Kazakhstan HBW3.

226	Kittlitz's Plover	<i>Anarhynchus pecuarius</i> { <i>Charadrius pecuarius</i> }	Monotypic. African species. Isolated population Nile Delta S to Fayum Egypt Delany <i>et al</i> 2009 c 50 N Lake Nasser Dec 2017 DB40(1) : 48, 1st breeding records Lake Nasser Jun 2022, especially N of Abu Simbel Jens Hering pers comm Jul 2022 . Regular but scarce winter Israel, vagrant Cyprus, Bahrain, UAE, Porter <i>et al</i> 1996, Saudi Arabia Mitchell 2017. Egypt Avib, BE
		Pluvianidae	IOC v2.0 elevates to own family Pluvianidae & places well ahead of Scolopacidae , but Livezey 2010 subsumes in Glareolidae NB Sangster <i>et al</i> 2012 recommend Pluvianidae precedes Recurvirostridae .
227	Egyptian Plover (Crocodile-bird)	<i>Pluvianus aegyptius</i>	Monotypic. Now rare accidental. Sub-Saharan African species. Extinct Egypt 20th century Delany <i>et al</i> 2009. Avib, BE. Winters Ethiopia and Eritrea Redman <i>et al</i> 2009, so may occur en route in E Red Sea hinterland. IUCN map Feb 2022 indicates presence along E side of Nile in Sudan N of Ad Damir (where River Atbara joins) and on Eritrean coast N of Massawa for c 100km, opposite Dahlak Archipelago .
		Rostratulidae	
PT	Greater Painted-snipe PT	<i>Rostratula benghalensis (sensu lato)</i>	IOC1.6 splits extralimital Australian Painted Snipe <i>Rostratula [benghalensis] australis</i> ; Lane & Rogers 2000, Christidis & Boles 2008. IOC2.11 amends English name to hyphenated compound-noun
228	Greater Painted-snipe	<i>Rostratula benghalensis (sensu stricto)</i>	Separate Egyptian population extending (formerly?) to Siwa Western Desert Egypt Goodman <i>et al</i> 1986; 3 widely-separate main populations from S Africa to SW & SE Asia, bred Israel: Single-record vagrant Iran Dasht-e Lut, Kerman Province May 1972 Misonne 1976, Khaleghizadeh <i>et al</i> 2017 . 6-record vagrant Oman (OBL7), 2nd breeding record Sabya Saudi Arabia Jul 2017 DB39(5) : 344, Jordan, Afghanistan, HBW3; vagrant Yemen & Oman (Dhofar & Masirah) Kirwan 1998, 9th Oman record Khawr Kalba Oct 2017 OBRC , 1st for Qatar May 2019 at Al Rayyan, Jariyan al Batnah QBRC . 1st for Iraq near Mdeina Sep 2021 DB44(4) : 312. Sporadically rare visitor Israel - Israel Checklist 2015: one (ringed bird) Gan Shmuel fishponds all Jan 2021 Yoav Perlman <i>in litt</i> , returned to HaMa'apil Sep 2021. Resident NE Afghanistan R&A 2005 (Wakhan suggested by H&E 1970) but Ayé <i>et al</i> 2012 suggest vagrant only, although BLDZ map Mar 2018 gives as resident in E Afghanistan. Iran once Misonne 1976, single-record vagrant Scott & Adhami 2006. 1st records Lake Nasser; Khor Kalabsha, N of Abu Simbel (remote from other Egypt records) 5 displaying of 7/-8 (indicating probable breeding) seen June 2022 Jens Hering pers comm Jul 2022 . Egypt Avib, BE. Nomadic, so after rainy periods, may occur SW Arabia from W Red Sea hinterland Delany <i>et al</i> 2009: 1st breeding Saudi Arabia May 2013 Tovey 2014.
		Jacanidae	Livezey 2010 places taxon below in Greater Jaçanas as single-species genus.
229	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	Monotypic. Indian & SE Asian species; non-breeders wander, Oman, S Yemen, HBW3, one imm male collected E of Riyan S Yemen Warr 1992, one at Wadi Dibneh, Hadramawt Jun 2022 DB44(4) : 305. Bred Oman (Dhofar) 1993 <i>et seq</i> , Jennings <i>in litt</i> , locally fairly common WV Oman OBL7 , spread to Qatar Jennings 2007b, possibly not annually; mostly scarce WV Jennings 2010, 1st & 2nd for UAE Oct & Nov 2013 Smiles 2014, 3rd Oct 2015, 4th Ajman Nov 2018, 5th at Green Mubazarra, Al Ain Nov 202, 6th Tower Links Golf Course Ras Al Khaimah Nov 2020 EBRC ; 2nd Saudi record Jan 2014 SG36(2) ATR . H&E 1970 mainly in Seistan (Iran/Afghanistan) wetlands, although first formal Iran record juvenile Nov 2018 Lamerd, Fars, Abolghasem Khaleghizadeh <i>in litt</i> , Abbasi <i>et al</i> 2019; breeds Afghanistan R&A 2005, but Ayé <i>et al</i> 2012 unsure if this remains the case, although BLDZ map Mar 2018 indicates a healthy slice of E Afghanistan as summer breeders..
		Scolopacidae	BOU (Sangster <i>et al</i> 2012) & CSNA both resequenced Tringids (including <i>Actitis</i> , <i>Xenus</i>): Gibson & Baker 2012 (in a wide-ranging molecular study) & Banks 2012 proposed subsuming several monotypic calidrids in <i>Calidris</i> ; for some time IOC has been deliberating the merits, now adopted in IOC7.2. Sangster <i>et al</i> 2012 had also declined to rearrange the calidrine sandpipers, unlike several other authorities. H&M4 resequenced families, genera & within genera; IOC7.2 has limited changes to the sequence within <i>Calidris</i> , presumably because the proposed sequence devised by Banks 2012, based on Gibson & Baker 2012 findings, is rendered moot by the Clades constructed by Huang & Tu 2016. Gibson & Baker 2012 overall had proposed subsuming <i>Tryngites</i> , <i>Limicola</i> & <i>Philomachus</i> in <i>Calidris</i> & <i>Heteroscelus</i> & <i>Actitis</i> in <i>Tringa</i> , then Huang & Tu 2016 convincingly establish both <i>Tringa</i> (+ <i>Heterosculus</i>) & <i>Calidris</i> in monophyly; although Huang & Tu also establish clades within both. Now we align with these clades and subsume <i>Tryngites</i> , <i>Limicola</i> , <i>Philomachus</i> & <i>Actitis</i> accordingly. Huang & Tu 2016 also demolish the case for <i>Ereunetes</i> as a full genus for those taxa within <i>Calidris</i> (Laurent Raty <i>in litt</i>). However, Černý & Natale 2021 (in a pre-print) establish support for deconstructing <i>Calidris</i> ; <i>pro tem</i> , we list their proposed genera for each species affected. They also find a deep division in <i>Gallinago</i> , which in the Region would leave only Common Snipe in that genus, transferring the remainder to <i>Telmatias</i> : <i>pro tem</i> , we comment where appropriate, but will await IOC decisions.
PT	Whimbrel PT	<i>Numenius phaeopus</i>	Sangster <i>et al</i> 2011 justify split to polytypic Eurasian Whimbrel (<i>phaeopus</i> , <i>alboaxillaris</i> , <i>variegatus</i>) and monotypic Hudsonian Whimbrel, citing phylogenetic analyses of several recent studies, while recognising that further rearrangements may well be needed, such as voice analysis; IOC10.1 accepts split. <i>Dutch Birding</i> 2014 elevated <i>hudsonicus</i> ; we list ssp <i>alboaxillaris</i> separately as a taxon of interest: Allport 2017 notes call differences from taxon <i>phaeopus</i> . Li <i>et al</i> 2020 radiotracked Whimbrel wintering in Singapore crossing the Himalayas & easternmost Kazakhstan to reach breeding grounds at c 67°N near the River Yenesei; likely short stopovers in Kazakhstan occur on outward & return legs. Tomkovich 2008 erected new ssp <i>rogochevae</i> which breeds C Siberian tundra. NB1 taxon <i>alboaxillaris</i> genetically close to <i>phaeopus</i> Tan <i>et al</i> 2021. NB2 Livezey 2010 erected 'Siberian Whimbrel <i>N. variegatus</i> ' but relationship to <i>alboaxillaris</i> unclear.
230	Eurasian Whimbrel	<i>Numenius phaeopus phaeopus</i>	Most passage in Region (<i>phaeopus</i>) breed W Russia Arctic, scattered areas to S&E, common PM Kazakhstan Wassink 2015b, Afghanistan Viellard 1969; winters warm shores E Africa & Arabia van de Kam <i>et al</i> 2004, common PM N Iran, uncommon WV S Iran coast Khaleghizadeh <i>et al</i> 2017, abundant PM & WV Oman OBL7 , migrant CA, HBW3. Kuang <i>et al</i> 2022 indicate the westernmost breeding <i>rogochevae</i> may transit easternmost Kazakhstan on migration to & from SE Asia & N Australia. Egypt Avib, BE NB1 taxon <i>phaeopus</i> also has discontinuous breeding range Fennoscandia, which population winters W Africa with <i>islandicus</i> . NB2 Livezey 2010 notes arguable case for Hudsonian Whimbrel <i>N.(p.) hudsonicus</i> & intermediately-distributed Siberian Whimbrel <i>N.(p.) variegatus</i> to be elevated, leaving <i>phaeopus</i> as 'European Whimbrel'. NB3 Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.
231	'Steppe Whimbrel'	<i>Numenius phaeopus alboaxillaris</i>	This pale-breasted, pale-underwing (perhaps invalid) taxon likely low in numbers & declining, possibly through interbreeding with <i>phaeopus</i> . It was thought doubtful if <i>alboaxillaris</i> ever bred Volga-Zhaysyq (Ural) interfluvium, Kazakhstan Arend Wassink <i>in litt</i> 2009, <i>contra</i> W&O 2007, but Köhler <i>et al</i> 2013 recorded several <i>alboaxillaris</i> beside the Kazakh Ural River in Jul-Aug while searching for Slender-billed Curlew <i>N. tenuirostris</i> ; Wassink 2015b accepts Thorup 2006 <i>contra</i> A Wassink <i>in litt</i> 2009 as confirming occasional breeding likely in 21st century in that area. Furthermore, 6bp recorded 1997 some 400km N of Kazakhstan at Bashkiryia (Orenburg longitude) Morozov 2000. 5 Kazakhstan records since 1985 Wassink 2015b, but very likely under-recorded. Vagrant Iran Khaleghizadeh <i>et al</i> 2017 (2 records); one possible 30km off Khor Kalba (image) SG41(1)ATR : 149. One reported Yemen (undated) Callan Cohen <i>in litt</i> , 2016 DB39(1) : 35. Two seen Maputo, Mozambique Allport 2017, one captured there Mar 2016, fitted with tracker ABC Bull 23(2) : 135: calls mostly differed from taxon <i>phaeopus</i> ; tag fell off in Aden, Yemen DB42(2) : 127. Juvenile (first ever World sighting) at Abu Dhabi late Aug-mid Sep 2020 Oscar Campbell, Simon Lloyd <i>in litt</i> , EBRC : account at https://osme.org/2020/12/finding-steppe-whimbrel-in-abu-dhabi/. English name informal@OSME
232	Hudsonian Whimbrel	<i>Numenius hudsonicus</i>	One recorded at Naksholim, Israel Dec 2013-March 2014 DB36(2) :123-124, SG36(2) ATR .
233	Little Curlew (Little Whimbrel)	<i>Numenius minutus</i>	Monotypic. Vagrant Kazakhstan K-M&K 2005 W&O 2007, 8 reports listed in Wassink 2015, none of which appear to have any formal records submitted . Recorded Kuwait 12-15 Dec 07 vagrant Porter & Aspinall 2010. Breeds E Palearctic, one migratory route to & from Australia, but prone to wander widely, HBW3. Westernmost breeding (rare) c 100°E at c 64°N Rogocheva 1992.
234	Eastern Curlew (Far Eastern Curlew)	<i>Numenius madagascariensis</i> Endangered	Monotypic. Vagrant from E Sino-Siberian breeding grounds, winters Sundas, Australia HBW3; vagrant Iran (collected 1898 by Zarudny Roselaar & Alibandian 2010); not since 1950s Scott & Adhami 2006, single-record vagrant Afghanistan Ayé <i>et al</i> 2012, single-record vagrant Oman 1997 Porter & Aspinall 2010 OBL7 . Westernmost breeding c 100°E (c 63°N) Rogocheva 1992.

235	Slender-billed Curlew	<i>Numenius tenuirostris</i> Critically Endangered (Likely Extinct)	Likely Extinct. Monotypic. Most closely related to Eurasian Whimbrel <i>N. phaeopus</i> Shariko <i>et al</i> 2019. Historical. Last Turkish record 1986 Kirwan <i>et al</i> 2008 (The 28 Turkish records are under rigorous review, although 2 valid additional early records are known Corso <i>et al</i> 2015), CA breeding area unknown. Very rare migrant Kyrgyzstan, Ven 2002, 9 Kazakhstan specimens (1921-55) in various collections, formerly very rare PM Wassink 2015b, all 14 subsequent reports inadequately documented Wassink 2015b. Wassink 2016a reviewed Central Asian records to modern standards; concludes last reliable record worldwide is 1995, suggesting categorisation as extinct is valid. Zarudny (1911) recorded passage Iran, possible nesting Seistan; collected 1898 & 1939 Roselaar & Aliabadian 2010; on Afghanistan WBDB 2008 as uncertain. Old records: "Throughout the year on the Red Sea and in the Gulf of Aden - from October to December rather numerous in the Gulf of Aden" von Heuglin 1859, "commonest curlew wintering North Africa early 20th century" Isenmann <i>et al</i> 2016, a few old records Israel Perlman & Meyrav 2009, one purported record (undated) mentioned in Benson 1970 for Jordan; 5 claimed Kuwait Jan 67 Bundy & Warr 1979, one Seeb Oman 25 & 28 Apr 76, one Awamir Oman 19 May 76 Walker 1981 (in total of 5 Oman records, last in 1999 OBL7 , all under review Mitchell 2017), 6 SW shore Haur Al Hammar Iraq 27 Jan 79 Scott & Carp 1982 Salim <i>et al</i> 2012, one Zaranik, Sinai, Egypt Sep 82 Baha el Din & Salama 1984, one N Yemen (Richard Porter photo; Porter & Warr 1985). Other records, Azerbaijan, Georgia, Iran Mitchell 2017. Recorded Iran S Caspian, Seistan & Kerman Zarudny 1911, last certain record Aug 1963 Khaleghizadeh <i>et al</i> 2017. Widely dispersive migration strategy, differing for males, females. Museum specimens focus of stable-isotope ratio research to establish former breeding and wintering areas, Fox & Bearhop 2008; Buchanan <i>et al</i> 2017 analyse 35 juvenile samples from museums by this means, identifying the Kazakh Steppe as the most probable breeding region; this lengthy grassland biome was hugely diminished by the Khrushchev era conversion of steppes to wheat-growing, which as a consequence, introduced predators attuned to agriculture, but scarce in steppe, thus establishing two additional pressures on the species. However, the remaining steppe and the re-established steppe on abandoned fields, may yet hold a remnant breeding population. Winters warm shores, HBW3 Egypt Avib, BE. NB1 One reported Bar al-Hikman (N20° 44' 40", E 58° 43' 12") 13 Apr 2014, but OBRC remain with 5 historical records. NB2 Sharko <i>et al</i> 2019 establish taxon as close genetically to Eurasian Curlew & confirm <i>Numenius</i> as a separate lineage.
236	Eurasian Curlew	<i>Numenius arquata</i>	Scarce BM, PM Kazakhstan (<i>orientalis</i> : <i>suschkini</i> not identifiable in the field & often not in the hand; many intermediates) Wassink 2015b (Transvolga breeding population in rapid decline Belik 1998, Delaney <i>et al</i> 2009); common WV to N Iran & Gulf shores Khaleghizadeh <i>et al</i> 2017; most winter on warm shores, abundant PM & WV Oman OBL7 ; occurs (mostly ? <i>orientalis</i>) on migration widely, HBW3 (eg Afghanistan Paludan 1959), although passage <i>arquata</i> have been documented extensively in Israel & Turkey (Peter Flint <i>in litt</i>). Egypt Avib, BE
PT	Bar-tailed Godwit PT	<i>Limosa lapponica</i>	Livezey 2010 strongly supports separation of Siberian Bar-tailed Godwit <i>L. baueri</i> ; Livezey's use of 'Lapland Bar-tailed Godwit' for <i>lapponica</i> group seems useful, but its adoption has little been discussed; see Inskipp <i>et al</i> 2011. Separation criteria need wider discussion/acceptance, some support from Bom <i>et al</i> 2021, who propose a new ssp, <i>yamalensis</i> , for the southern, allopatric population of <i>taimyrensis</i> ; the latter winters primarily in W Africa, via a flyway W along NW Russia via S Fennoscandia then by coastal Atlantic corridor: <i>yamalensis</i> considered to migrate across Kazakhstan Wassink 2022. NB The extralimital Anadyr breeding population <i>L.l. anadyrensis</i> around the Bering Sea is not fully described Tomkovich 2010.
237	Sápmi Bar-tailed Godwit (Lapland Bar-tailed Godwit)	<i>Limosa (lapponica) lapponica</i>	Polytypic if split. Palearctic Arctic breeder, scarce PM, non-breeding SV Kazakhstan Wassink 2015b; winters along warm OSME Region shores, formerly mostly assigned to <i>taimyrensis</i> as in Iran, southern coast Khaleghizadeh <i>et al</i> 2017, now proposed as <i>yamalensis</i> (Bom <i>et al</i> 2021), occurs mostly as migrant in Region, HBW3; accidental vagrant Cyprus CBR11 , abundant PM & WV (originally attributed as <i>lapponica</i> , but now proposed as <i>yamalensis</i> ssp Bom <i>et al</i> 2021) Oman OBL7 , rare Israel Perlman & Meyrav 2009. Egypt Avib, BE. Flyway is directly S fom northern West Siberian plain across eastern European Russia from the Shuryshkarsky District, Yamalo-Nenets Autonomous Okrug, via the Aral Sea or eastern Caspian shore to the Middle East, Iran & Pakistan shores. NB English name informal@OSME: the name 'Sápmi' describes the land recognised by the Sami reindeer-herding peoples of northernmost Norway, Sweden, Finland and of the Kola Peninsula, Russia and largely coincides with the breeding area of <i>L.l. lapponica</i> .
238	Siberian Bar-tailed Godwit	<i>Limosa (lapponica) baueri</i>	Monotypic if split: <i>L. l. yamalensis</i> Bom <i>et al</i> 2021 common WV Oman OBL7.3 , where <i>baueri</i> also occurs in small numbers. NB Alaskan <i>baueri</i> radiotracked migrating non-stop (13 days) to New Zealand (11 700km), returning via nonstop leg to Yellow Sea (10 800km). English name informal@OSME.
PT	Black-tailed Godwit PT	<i>Limosa limosa</i>	Some evidence for this taxon to be PT, split into 'European' <i>Limosa (limosa) limosa</i> , 'Siberian' <i>L. (l.) melanuroides</i> & extralimital 'Icelandic' <i>L.(l.) islandica</i> (Höglund <i>et al</i> 2009, Richard Porter pers comm); separation based not on relative genetic distances (small), but on their unique haplotypes lacking gene flow between them (indication of long separation Parkin & Knox 2010). Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009. Relative mtDNA & nuclear DNA distances confirmed as small, but according to the patterns observed & their geographic separation, the 3 traditional subspecies should be managed as 3 separate units Trimbos <i>et al</i> 2014. <i>Pro tem</i> , we agree. Zhu <i>et al</i> 2020A found that in all populations, females are larger than males. Zhu <i>et al</i> 2020B proposed a new ssp, <i>L.l. bohaili</i> , 'Bohai Godwit', extralimital breeder likely in Sakha Republic of Russia, that winters on S China coast: accepted IOC11.1. English names informal@OSME.
239	European Black-tailed Godwit	<i>Limosa (limosa) limosa</i>	Common BM, PM very rare resident, WV S half Kazakhstan (ssp <i>limosa</i> C&N) Wassink 2015b, winters from S Caspian latitudes southwards, HBW3; common PM & WV Iran Khaleghizadeh <i>et al</i> 2017 & Oman OBL7 . Winters also SW Afghanistan R&A 2005. Egypt Avib, BE. Decline of western breeding populations (4% per annum) continues due to breeding habitat loss and clutch losses (grass-mowing now over a month earlier than 1960s; in Sahel drought years, shooting of en-route migrants probably significant) Zwarts <i>et al</i> 2009. 4th Record Socotra , Yemen Khor Sirhan Dec 2021 SG44(1): 256 . NB1 English ame informal@OSME. NB2 Occupants (<i>islandica</i>) of best breeding areas also occupy best wintering areas - stable isotope ratio study, Inger & Bearhop 2008
240	Siberian Black-tailed Godwit (Eastern Black-tailed Godwit)	<i>Limosa (limosa) melanuroides</i>	Taxon <i>melanuroides</i> 5-record vagrant Kazakhstan Wassink 2015b; smallest of the 3 taxa, but females noticeably larger than males Groen <i>et al</i> 2006. Winters SE Asia to Australasia, but vagrancy likely in E OSME Region. NB1 Brazil 2009 elevated <i>melanuroides</i> as Eastern Black-tailed Godwit, but English name used here informal@OSME
241	Ruddy Turnstone	<i>Arenaria interpres</i>	Arctic Breeder, ssp <i>interpres</i> migrant though Region (scarce PM Kazakhstan Wassink 2015b) to winter on most shores below 40°N in OSME Region, HBW3; common to abundant PM & WV Oman OBL7 .
Calidris Clade 1 (Huang & Tu 2016: qv Scolopacidae above). Includes Nearctic extralimital Least Sandpiper C. minutilla.			
242	Sanderling	<i>Calidris alba</i> (<i>Ereunetes albus</i>) (formerly <i>Crocethia alba</i> by some) (Černý & Natale 2021 propose <i>Pelidna</i>)	Winters warm coasts OSME Region (ssp <i>alba</i>); widespread passage migrant mostly in small numbers, HBW3, though common to abundant PM & WV Oman OBL7 . Egypt Avib, BE
243	Little Stint	<i>Calidris minuta</i> (<i>Ereunetes minuta</i>) (Černý & Natale 2021)	Monotypic. Winters warm coasts and at S inland waters of OSME Region, also quite common widespread migrant, HBW3, abundant PM & WV Oman OBL7 . Autumn migrant Kyrgyzstan, Ven 2002, abundant PM Kazakhstan Wassink 2015b. Egypt Avib, BE
244	White-rumped Sandpiper	<i>Calidris fuscicollis</i> (<i>Ereunetes fuscicollis</i> : Černý & Natale 2021)	Monotypic. Nearctic vagrant to Turkey, Browne 1997, Israel 2004 Perlman & Meyrav 2009, 1st record UAE May 2012 Campbell & O'Mahoney 2013, Sep 2012 EBRC , 1st for Azerbaijan Machmud Chala Aug 2017 Himmel 2019. Livezey 2010 suggests 'White-rumped Stint'.
Calidris Clade 2 (Huang & Tu 2016: qv Scolopacidae above). Includes Nearctic extralimital Rock Sandpiper C. ptilocnemis.			
245	Dunlin	<i>Calidris alpina</i> (<i>Ereunetes alpina</i>) (Černý & Natale 2021 propose <i>Pelidna</i>)	Widespread Holarctic Arctic breeder, and warm coasts and ice-free inland waters in winter (1st winter records Karakol Kazakhstan 2008 Karpov & Kovshar 2009 Wassink 2010); sssp <i>alpina</i> & <i>centralis</i> common migrants in OSME Region, HBW3, <i>centralis</i> common PM Kazakhstan Wassink 2015b, abundant PM & WV Oman OBL7 . Egypt Avib, BE

246	Purple Sandpiper	<i>Calidris maritima</i> (<i>Ereunetes maritimus</i>) (Černý & Natale 2021 propose <i>Pelidna</i>)	Monotypic. No credible Palearctic Arctic breeding area, but winters to W in N hemisphere, HBW3. Singleton vagrancies Kuwait Jan 93, Feb 67, Apr 69 Bundy & Warr 1979.
<i>Calidris</i> Clade 3 (Huang & Tu 2016: <i>qv</i> Scolopacidae above). Includes Nearctic extralimital Western Sandpiper <i>C. mauri</i>.			
247	Semipalmated Sandpiper	<i>Calidris pusilla</i> (<i>Ereunetes pusillus</i> Černý & Natale 2021)	Monotypic. Accidental 1989 Israel Shirihai 1996. Vagrant Israel Perlman & Meyrav 2009. Livezey 2010 suggests 'Semi-palmated Stint'.
<i>Calidris</i> Clade 4 (Huang & Tu 2016: <i>qv</i> Scolopacidae above); technically a subclade. Includes Nearctic extralimital Stilt Sandpiper <i>C. himantopus</i>.			
248	Pectoral Sandpiper	<i>Calidris melanotos</i> (<i>Ereunetes melanotos</i> Černý & Natale 2021)	Monotypic. E Palearctic Arctic breeder, migrates ESE, but widespread occurrence of individuals W & SW, high vagrancy likely in OSME Region, HBW3; <i>eg</i> one record Azerbaijan Koblik & Arkhipov 2014, Israel Perlman & Meyrav 2009, Kuwait Oct 2011 (SG34(1)ATR), 2nd Jahra Pool Mar-Apr 2021 KORC , 1st for Kazakhstan Sep 2006 Wassink 2013. 2nd Egypt record May 2012 EORC , 3rd near Hurgghada Mar 2018 Jönsson 2019 EORC . UAE 3 records UAE Checklist 2008, 7th record Dubai Safari Park Oct 2018 EBRC ; rare PM & WV Oman OBL7 . One reported Cyprus 28 Sep 06. 6th record Turkey May 2008 Kirwan <i>et al</i> 2014.
<i>Calidris</i> Clade 5 (Huang & Tu 2016: <i>qv</i> Scolopacidae above).			
249	Curlew Sandpiper	<i>Calidris ferruginea</i> (<i>Ereunetes ferruginea</i>) (<i>Erolia ferruginea</i> Černý & Natale 2021 as a monotypic genus)	Monotypic. C & E Palearctic Arctic breeder, widespread southern wintering areas, expected in OSME Region anywhere on migration, HBW3, abundant PM & WV Oman OBL7 ; common PM Kazakhstan Wassink 2015b, autumn migrant Kyrgyzstan, Ven 2002; the recently-created Al Wathba Wetland Reserve, Abu Dhabi, has become a significant stopover site in the return migration, some 1000 birds assembling in Apr & May Campbell <i>et al</i> 2018. Egypt Avib, BE
250	Sharp-tailed Sandpiper	<i>Calidris acuminata</i> (<i>Limicola acuminata</i> Černý & Natale 2021)	Monotypic. Mainly E Palearctic breeding area & Australasian wintering grounds. 7-record vagrant Kazakhstan Wassink 2015b <i>contra</i> 'fairly regular on migration E Kazakhstan' of HBW3: probably from isolated population on Ob river 500km N of E Kazakhstan, Flint <i>et al</i> 1984, but common PM Mongolia Gombobaatar & Leahy 2019. Vagrant Azerbaijan Koblik & Arkhipov 2014, N Yemen Porter & Warr 1985, single-record vagrant Oman 2000 OBL7 .
251	Baird's Sandpiper	<i>Calidris bairdii</i> (<i>Ereunetes bairdii</i> Černý & Natale 2021)	Monotypic. Nearctic vagrant (small Palearctic breeding area Chukotska Peninsula), single-record vagrant Oman 1987 Porter <i>et al</i> 1996, OBL7 , Israel 1998 Perlman & Meyrav 2009, 1st Cyprus Dec 2009 Porter & Aspinall 2010, Richardson 2011, Roberts 2011, 1st record Turkey May 2011 Kirwan <i>et al</i> 2014. NB Livezey 2010 suggests 'Baird's Stint'.
<i>Calidris</i> Clade 6 (Huang & Tu 2016: <i>qv</i> Scolopacidae above).			
252	Red-necked Stint (Formerly Rufous-necked Stint)	<i>Calidris ruficollis</i> (<i>Ereunetes ruficollis</i>) (Černý & Natale 2021 propose <i>Eurynorhynchus</i>)	Monotypic. Vagrant OSME Region, HBW3; but Ayé <i>et al</i> 2012 assess as passage migrant for CA; rare passage migrant Kazakhstan G&G 2005, 9 records, 12 birds by Jan 2013 Wassink 2013, Wassink 2015b. However, the application of modern ID criteria standards should remove all but one record as unproven, the exception being the photographed bird at lake Sorbulak, Almaty Province sep 2012, Wassink 2019. Vagrant UAE Mitchell 2017. Tong <i>et al</i> 2020 radiotracked birds from a breeding area in Chukotka to widely-separated non-breeding areas in the southern hemisphere, suggesting that conservation of this species is more difficult than previously thought; some migration nonstop legs were 4500-5200km. NB1 westward breeding range expansion to c 80°E Rogacheva 1992. NB2 Two 1941 'lost' specimens from Iran were 4500 - 5000km from breeding grounds as rediscovered Kirwan 2007, followed by belated recognition of 2010 inland record Gholami <i>et al</i> 2017.
253	Temminck's Stint	<i>Calidris temminckii</i> (<i>Ereunetes temmincki</i>) (Černý & Natale 2021 propose <i>Eurynorhynchus</i>)	Monotypic. Winters on parts of warm coasts & S inland waters in OSME Region; fairly common widespread migrant, HBW3, common PM Kazakhstan Wassink 2015b; abundant PM & WV Oman OBL7 . Egypt Avib, BE
254	Long-toed Stint	<i>Calidris subminuta</i> (<i>Ereunetes subminutus</i>) (Černý & Natale 2021 propose <i>Eurynorhynchus</i>)	Monotypic. Kazakhstan once thought to hold one of several disjunct breeding populations, but no evidence at all; W&O 2007 assigned vagrant status, but Ayé <i>et al</i> 2012 suggested passage migrant for CA, to which Wassink 2015b agrees for Kazakhstan. Likely main migration E & not through OSME Region, HBW3, Rogacheva 1992. Autumn migrant E Kyrgyzstan, Ven 2002. Vagrant Socotra Redman <i>et al</i> 2009, Israel Perlman & Meyrav 2009, likely 3rd for Israel Eilat Feb 2018 DB40(2) : 118, Saudi Arabia Mitchell 2017, uncommon PM & WV Oman OBL7 ; one reported Doha Kuwait Mar 2017 would be 1st record if accepted DB39(3) : 206. Egypt Avib, BE
255	Great Knot (Formerly Eastern Knot)	<i>Calidris tenuirostris</i> Endangered	Monotypic. Vagrant most of Middle East & CA; some winter SE Oman coast, HBW3 (Barr al-Hikman Eriksen 1996 held 1260 birds, uncommon but regular, vagrant elsewhere Oman OBL7), Bird tagged Kamchatka Jul 2016 found at Khor al Beida Jan 2017 DB39(2) : 124, a Great Circle distance of 8550km; likely SE Iran coast R&A 2005; 140+ found Jan 2009 Winkel <i>et al</i> 2010, regular small numbers Derek Scott pers comm, 71 Golshahr, Bandar Abbas, Hormozgan Iran Jan 2016 IBRC , locally common Hormozgan coast (250 counted Tiab Feb 2019 DB41(2) : 127), fewer elsewhere Khaleghizadeh <i>et al</i> 2017; 1st Qatar Chalmers 2009, 2nd Jan 2014 QBRC , 13 on Balghalam Island Oman (wintering area?) Jun 2014 SG36(2) ATR , 7th Kuwait record Jahra, Kuwait Jun 2018, 8th Sep 2019 KORC . NB Uncommon maritime winterer Pakistan Makram Roberts 1991.
256	Red Knot	<i>Calidris canutus</i>	Mostly transient migrant or vagrant (ssp <i>canutus</i>) in OSME Region, 7-record vagrant Kazakhstan Wassink 2015b, 5-record vagrant Oman OBL7 . 6th Kuwait record May 2016 KORC , 7th record May 2018 Jahra Pools, 8th record (2 birds) there May 2021 KORC , 9th record Sulaibikhat Bay Oct 2021 KORC . Vagrant Iran Khaleghizadeh <i>et al</i> 2017: wanders widely, HBW3, <i>eg</i> Azraq Jordan 25 Apr 67 Wallace 1982. Egypt Avib, BE
257	Ruff	<i>Calidris pugnax</i> IOC7.2, H&M4) (Formerly <i>Philomachus pugnax</i> to which Černý & Natale 2021 revert)	Monotypic. Widespread Arctic, subarctic & accidental BM NW Kazakhstan, where abundant PM Wassink 2015b; common migrant OSME Region, winters warm coastal/ice-free inland waters, HBW3, abundant PM & WV Oman OBL7 . 1st June record Lake Nasser N of Abu Simbel 2021 Jens Hering <i>in litt</i> . Egypt Avib, BE. European breeding populations only 10% of 1900 levels; decline continues (2002-8); in Sahel, vulnerable to trapping (up to 60% of winterers) on margins of today's artificially reduced annual floods Zwarts <i>et al</i> 2009. NB BOU place in <i>Calidris</i> : Sangster <i>et al</i> 2012.
258	Broad-billed Sandpiper	<i>Calidris falcinellus</i> IOC7.2, H&M4) (Formerly <i>Limicola falcinellus</i> to which Černý & Natale 2021 revert)	Disjunct breeding areas Palearctic Arctic, quite small population, disjunct warm coastal wintering areas: ssp <i>falcinellus</i> in Region <i>eg</i> S Red Sea SW Gulf Delany <i>et al</i> 2009; 3600+ estimated Hormozgan Jan 2009 Winkel <i>et al</i> 2010, regular migrant in small numbers, HBW3. Rare autumn migrant Kyrgyzstan, Ven 2002, rare PM W-most Kazakhstan Wassink 2015b, uncommon Israel Perlman & Meyrav 2009, Iraq Salim <i>et al</i> 2012, fairly common PM & WV Oman OBL7 , formerly (late 1970s) hundreds passage N Yemen Porter & Warr 1985, Aden area only S Yemen Warr 1992: 7th record Socotra of 2 at Khor Mori, Socotra, Yemen Dec 2021 SG44(1) : 256.. NB BOU place in <i>Calidris</i> : Sangster <i>et al</i> 2012.
259	Buff-breasted Sandpiper	<i>Calidris subruficollis</i> IOC7.2, H&M4 (Formerly <i>Tryngites subruficollis</i> to which Černý & Natale 2021 revert as monotypic genus)	Monotypic. Claimed Nearctic vagrant to Turkey, cited in Porter <i>et al</i> 1996, but here agree with doubts expressed by Kirwan <i>et al</i> 1999, 2008 of 1930 Wahby claim. Note also claims of one Abqaiq sewage lagoons East Saudi Oct 75 & one Dhahran airport May 78 Bundy & Warr 1979. However, 1st certain record Oman SG29 (2) 2005 OBL7 , 1st for Israel N of Tel Aviv Oct 2018 IRDC ; reported UAE Dubai 7-10 Nov 2010 DB 32(6) p414. 1928 Egypt Meinertzhagen record rejected by EORC , see Garfield 2007. NB1 has reached Indian subcontinent R&A 2012. NB2 BOU place in <i>Calidris</i> : Sangster <i>et al</i> 2012.
260	Asian Dowitcher (Asiatic Dowitcher)	<i>Limnodromus semipalmatus</i>	Monotypic. Has bred NE Kazakhstan, HBW3, in 2 areas straddling border with Russia Flint <i>et al</i> 1984. Two Kazakhstan breeding records, 1974, 2014 Kokpekty-Kindykty interfluvie Wassink 2015b, but Wassink 2022 reviewed as <i>unsafe</i> , very rare PM. Ayé <i>et al</i> 2012 map isolated areas as 'summer non-breeding'. Rare migrant throughout; has occurred Sudochie wetland Uzbekistan Kreuzberg-Mukhina & Lanovenko 2007. Occurrences in S OSME Region apparently vagrants misoriented (see Berthold 1999) from Sundas wintering area. 1st for Oman al-Ansab, Muscat Nov 2015-Jan 2016 OBRC . Discounted 1958 Yemen record may be re-evaluated Mitchell 2017. Unknown wintering area round Arabian Sea?
261	Long-billed Dowitcher	<i>Limnodromus scolopaceus</i>	Monotypic. Vagrant to Region, perhaps misorientation (Berthold 1999) mainly juveniles, but adult 2005 Tengiz Kazakhstan Wassink 2009, 2nd record Sep 2014 Wassink 2015a, 2015b, 3rd Sorbulak Lake Oct 2018 Isabekov 2018, Wassink 2019; from NE Palearctic breeding grounds Anabar River to Chukotka Rogacheva 1992. Vagrant Israel 1984, 2nd record Eilat Apr 2017 IRDC ; 3rd for Israel Nakhsholim Nov 2017 Yoav Perlman <i>in litt</i> . Rare PM & WV Oman OBL7 , Eriksen <i>et al</i> 2017, 1st UAE record Jan 2013 EORC , 1st record for Azerbaijan, of 2 birds at Narimanabad, Kizil Agach 31 Jan 2017 van Oostveen & Wassink 2018.

262	Eurasian Woodcock	<i>Scolopax rusticola</i>	Monotypic. Breeds NE Turkey (H&E 1970), probably occasionally Kirwan <i>et al</i> 2008, Caucasus, scarce BM, common PM E&SE Kazakhstan W&O 2007, Wassink 2015b; winters Iran, Iraq, HBW3, rare WV Kuwait KORC ; 3-record vagrant Oman OBL7 . Jordan, Bahrain, Saudi Arabia Mitchell 2017, Afghanistan Paludan 1959. Breeds, occasional resident Kyrgyzstan. Ven 2002. Egypt Avib, BE
263	Jack Snipe	<i>Lymnocyrtus minimus</i>	Monotypic; single-species genus. Scarce PM Kazakhstan Wassink 2015b, winters from S Caspian southwards, HBW3 (last breeding 1913 Kazakhstan W&O 2007; all breeding records reviewed Wassink 2022 & considered unsafe), fairly common PM & WV Oman OBL7 , winters Afghanistan R&A 2005, migrant Kyrgyzstan, Ven 2002. 7th Record Socotra, Yemen at Khor Mori SG44(1): 256. Egypt Avib, BE
264	Solitary Snipe	<i>Gallinago solitaria</i> (formerly <i>Capella solitaria</i> by some authors) (Černý & Natale 2021 propose <i>Telmatias</i>)	ssp <i>solitaria</i> in Region, ssp <i>japonica</i> much less likely. Ayé <i>et al</i> 2012 map as resident easternmost Kazakhstan, wintering further S in CA; very rare resident, scarce WV Kazakhstan Wassink 2015b. May breed easternmost Kyrgyzstan, Tajikistan, & winter E Afghanistan, but main area just E of this border, HBW3 . Widespread non-breeding resident Kyrgyzstan BLDZ map Jul 2016, up to 5000m Ven 2002, parts of Kyrgyzstan, E Uzbekistan & E Afghanistan BLDZ map Jul 2016. Winters E&SE Afghanistan R&A 2005, but wintering records from as high as 55°N Rogacheva 1992; widespread passage & winter Iran Zarudny 1911, but now likely rare WV, PM Khaleghizadeh <i>et al</i> 2017: 1st modern record Kiasar, Mazandaran Dec 2011 (ID from photos) DB43(4): 306 . Breeds w Altai, Tien Shan Kazakhstan G&G 2005. Vagrant Saudi Arabia Jennings 1979. No Iraq records since 1956 Mitchell 2017.
265	Pin-tailed Snipe (Pintail Snipe)	<i>Gallinago stenura</i> (Černý & Natale 2021 propose <i>Telmatias</i>)	Monotypic. Rare BM, PM NE-most Kazakhstan Wassink 2015b, some migrating through CA, HBW3. Vagrant Kyrgyzstan, Ven 2002, Afghanistan E Dickinson pers comm. Vagrant much of OSME Region, rare passage & winter Iran Zarudny 1911, several recent passage records S coast, Derek Scott pers comm, Scott & Adhami 2006, likely uncommon PM, WV SE Iran Khaleghizadeh <i>et al</i> 2017, 1st for Qatar Irkayya Mar 2017 & 1st for Kuwait Sulaibiya Jan 2018 KORC ; fairly common PM & WV Oman OBL7 , less so UAE Bahrain, Yemen Mitchell 2017, 1st Qatar record Mar 2017 QBRC , one at Green Mubazzarah Aug 2020 SG43(1): 186 , 2nd accepted record Sealine Beach Resort Oct 2020 QBRC ; vagrant Israel Perlman & Meyrav 2009, several 5-17 Oct 2015 at 3 sites DB37(6): 409 , one videod Tel Afek NP Oct 2021 DB43(6): 467 . 1st record for Turkey at Milleyha, Hatay, Hamandağ TBRC.
266	Swinhoe's Snipe	<i>Gallinago megala</i> (Černý & Natale 2021 propose <i>Telmatias</i>)	Monotypic. Scarce BM NE-most Kazakhstan Wassink 2015b, may migrate through E OSME Region, HBW3, Israel claim 28 Feb-4 Mar 98 Shirihai 1999 not accepted on Israel List. Casual passage migrant Uzbekistan E Kreuzberg-Mukhina pers comm.
267	Great Snipe	<i>Gallinago media</i> (Černý & Natale 2021 propose <i>Telmatias</i>)	Monotypic. Formerly bred E-most Kazakhstan, but not in N & NW Wassink 2015b, Ayé <i>et al</i> 2012, status very rare PM Wassink 2015b; most migrate through W OSME Region, HBW3; rare autumn PM Oman OBL7 , vary rare migrant Israel Perlman & Meyrav 2009, Jordan Mitchell 2017, Iraq Salim <i>et al</i> 2012, one Behesht-e Masoumeh wetland Qom Province Iran Apr 2016 IBRC , uncommon WV, PM N&W Iran Khaleghizadeh <i>et al</i> 2017. Species known for high site fidelity on migration, its occurrence at many marshes in spring on Cyprus may reflect more than one breeding population in transit (Found at two specific sites over several years on a first visit to check its presence MB pers obs). Possibly former breeder Kazakhstan W&O 2007; no recent records Arend Wassink <i>in litt</i> . No proof breeds Kyrgyzstan, Ven 2002. Once regular in small numbers Aden Bundy & Warr 1979, N Yemen Porter & Warr 1985. Egypt Avib, BE
PT	Common Snipe PT	<i>Gallinago gallinago</i> (<i>sensu lato</i>)	PT Split from extralimital Nearctic Wilson's Snipe <i>G. [g.] delicata</i> Knox <i>et al</i> 2008 Livezey 2010 IOC2.10 H&M4 (see Inskipp <i>et al</i> 2011) NB Černý & Natale 2021 propose genus change for this sp to <i>Telmatias</i>
268	Common Snipe	<i>Gallinago gallinago</i> (<i>sensu stricto</i>) (formerly <i>Capella gallinago</i> by some authors)	Sole ssp in Region <i>gallinago</i> . Common BM, PM rare resident, WV N&E Kazakhstan Wassink 2015b, Afghanistan (R&A 2005), probably Kyrgyzstan, Tajikistan, migrates post-breeding to moult sites en route, thence to sub-tropics, HBW3; common WV N half of Iran Khaleghizadeh <i>et al</i> 2017, abundant PM & WV Oman OBL7 . Some winter Iran & points S in region Scott & Adhami 2006. Breeds N Kyrgyzstan, Ven 2002. Egypt Avib, BE.
269	Terek Sandpiper	<i>Xenus cinereus</i>	Monotypic. Similar to <i>T. stagnatilis</i> , (further N) but main passage through Caspian region, HBW3, mostly W Kazakhstan W&O 2007, scarce PM elsewhere Wassink 2015b, abundant PM & WV Oman OBL7 scarce passage Iraq Moore & Boswell 1956 fairly common Salim <i>et al</i> 2012, occurs spring & autumn Afghanistan Niethammer 1967, Niethammer & Niethammer 1967, regular but scarce Turkey Kirwan <i>et al</i> 2008, rare Israel Perlman & Meyrav 2009. Winters SE Iran coast R&A 2005. Egypt Avib, BE. NB Loop migration suggested (observations before & after breeding) Rogacheva 1992.
270	Wilson's Phalarope	<i>Steganopus tricolor</i> (formerly <i>Phalaropus tricolor</i>)	Monotypic. HBW & Livezey 2010 cite <i>Steganopus</i> , also H&M4, Menkhurst <i>et al</i> 2017. Nearctic vagrant Turkey, 2-record vagrant Oman OBL7 . 1st accepted record UAE Jan 2010 Campbell 2010. 1st for Israel Sde Eliyahu reservoir, Bet She'an Valley Dec 2020, then Kfar Ruppin ponds al Jan 2021 DB41(1): 64 , Bet Alfa until late Feb 2021 Yoav Perlman <i>in litt</i> .
271	Red-necked Phalarope	<i>Phalaropus lobatus</i>	Monotypic. Holarctic Arctic breeder, winters in Arabian Sea (Bourne 1988b), off Iran Winkel <i>et al</i> 2010, migrant across OSME Region, HBW3: Scandinavian breeders stage Caspian Sea (up to 36 days outward migration, 8-10 return migration) en route to Arabian Sea van Bemmelen <i>et al</i> 2016; one radiotagged from Fennoscandia to Arabian Sea DB41(2): 127 . Very common PM Iran wetlands, common WV southern Gulf, Gulf of Oman Khaleghizadeh <i>et al</i> 2017. Migrant autumn (?) Kyrgyzstan, Ven 2002, sometimes abundant both seasons Kazakhstan W&O 2007; c 40 000 counted Zhumay Lake Kazakhstan May 2014 SG36(2) ATR , uncommon migrant Iraq Salim <i>et al</i> 2012, Israel Perlman & Meyrav 2009. Egypt Avib, BE. Scarce but regular migrant through Cyprus Peter Flint pers comm, common PM & WV OBL7 . Passage Afghanistan Paludan 1959; given regularity as offshore winterer Pakistan (Baluchistan Roberts 1991), likely regular also offshore SE Iran.
272	Grey Phalarope {Red Phalarope}	<i>Phalaropus fulicarius</i>	Monotypic. Case-ending <i>fulicarius</i> David & Gosselin 2002. E Palearctic/Nearctic Arctic breeder, very rare PM Kazakhstan Wassink 2015b, rare PM & WV Oman, second to fourth records Cyprus 2011/2012 CRC , 5th Turkey record Apr 2014 SG36(2) ATR , 2nd for Azerbaijan Gyzylagach Jul 2017 DB39(5): 344 , one imaged at Yöksekova, Hakkari (c28km from Iranian border) by Emrah Kayhan Apr 2022 Emin Yoğurtcuoğlu in litt ; vagrant most of OSME Region (eg 1943 record Basra Iraq Moore & Boswell 1956, occasionally up to 100 birds Iran coast Roselaar & Aliabadian 2010, very rare Israel Perlman & Meyrav 2009), winters SW Africa HBW3, & some off Arabia Bourne 1988a,b, 1991. Meinertzhagen claimed Arabian Sea records in Ibis 67 (2): 325-344 (1925), but this was comprehensively demolished by Ticehurst 1925. Egypt Avib, BE. English name used here more descriptive of post- & pre-breeding plumage of all birds seen in OSME Region, IOC name being highly confusable with Red-Necked <i>P. lobatus</i> .
273	Common Sandpiper	<i>Actitis hypoleucos</i>	Monotypic. IOC, BOU revert to <i>Actitis</i> . Breeds Caucasus, CA, Iran, Afghanistan, HBW3, common PM, BM Kazakhstan Wassink 2015b, likely N Iraq, also widespread migrant Salim <i>et al</i> 2012, abundant PM & WV Oman OBL7 , Migrates to S, rare migrant Kyrgyzstan, Ven 2002. Egypt Avib, BE
274	Spotted Sandpiper	<i>Actitis macularius</i>	Monotypic. IOC BOU revert to <i>Actitis</i> . Vagrant OSME Region HBW3, 1 accepted record Turkey Kirwan <i>et al</i> 2008. One extralimital record Mramor, Bulgaria 1973, c280km from OSME Region Inanove <i>et al</i> 2021.
Tringa Clade 1 (Huang & Tu 2016: qv Scolopacidae above). Includes Nearctic extralimital Solitary Sandpiper T. solitaria .			
275	Green Sandpiper	<i>Tringa ochropus</i> (Černý & Natale 2021 propose this sp as sole member of <i>Tringa</i> genus in Region)	Monotypic. Breeds similar distribution (but further N) to <i>T. stagnatilis</i> , but isolated E Kyrgyzstan breeders, HBW3, Ven 2002, common PM Kazakhstan Wassink 2015b, abundant PM & WV Oman OBL7 ; WV NE Iran Khani <i>et al</i> 2015, passage & wintering Afghanistan Paludan 1959. 1st June record Lake Nasser Egypt at Abu Simbel 2022 Jens Hering in litt . Egypt Avib, BE. Livezey 2010 suggests 'Green Grayshank'.
Tringa Clade 2 (Huang & Tu 2016: qv Scolopacidae above).			
276	Common Redshank	<i>Tringa totanus</i> (Černý & Natale 2021 propose <i>Totanus</i>)	Breeds CA, widespread migrant, winters just S and beyond, HBW3 <i>totanus</i> & <i>ussuriensis</i> breed & on passage Kazakhstan W&O 2007; abundant PM & WV Oman OBL7 . Breeds NE Afghanistan (<i>totanus</i> & <i>eurhina</i>) Niethammer 1973; <i>eurhina</i> likely migrant from Pamirs H&M4; isolated breeders SE R&A 2005; probably breeds Bamiyan Busuttil & Ayé 2009. Egypt Avib, BE. NB Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.

277	Marsh Sandpiper	<i>Tringa stagnatilis</i> (Černý & Natale 2021 propose <i>Totanus</i>)	Monotypic. Common BM, PM Kazakhstan Wassink 2015b, most migrate directly across Region, few stopover hence relatively few records & most in spring eg Afghanistan Paludan 1959, Turkey Kirwan <i>et al</i> 2008. However, 4020 counted Gyzylagach Aug 2017 DB39(5) : 344; Common PM Iran wetlands Khaleghizadeh <i>et al</i> 2017; winters widely along warm shores S (common PM & WV Oman OBL7) to S Africa and Australia, HBW3. Egypt Avib, BE
278	Wood Sandpiper	<i>Tringa glareola</i> (Černý & Natale 2021 propose <i>Totanus</i>)	Monotypic. Similar to <i>T. stagnatilis</i> , HBW3, common passage Kazakhstan W&O 2007, but no breeding records Arend Wassink <i>in litt</i> ; common widespread Iran PM, fairly common WV Khaleghizadeh <i>et al</i> 2017, abundant PM & WV Oman OBL7 , passage & wintering Afghanistan Paludan 1959. Egypt Avib, BE. Dependent on continuing existence of stopover sites during migrations Zwarts <i>et al</i> 2009. Livezey 2010 suggests 'Wood Grayshank'.
Tringa Clade 3 (Huang & Tu 2016; <i>qv</i> Scolopacidae above). Includes extralimital Greater Yellowlegs <i>T. melanoleuca</i>, Willet <i>T. semipalmata</i>, & Wandering Tattler <i>T. incana</i>			
279	Common Greenshank	<i>Tringa nebularia</i> (Černý & Natale 2021 propose <i>Totanus</i>)	Monotypic. Although many map as breeding Kazakhstan, no breeding records Arend Wassink <i>in litt</i> , scarce PM Wassink 2015b, 1st Kazakh Caspian wintering record Lake Karakol 12 Jan 16 Wassink 2016b; most migrate directly across Region, but more numerous than <i>T. stagnatilis</i> , more stopping over, abundant PM & WV Oman OBL7 ; larger breeding area to E & N, HBW3, passage & wintering Afghanistan Paludan 1959. 1st June records Lake Nasser, Egypt, in 6 locations 2022 N of Abu Simbel Jens Hering <i>in litt</i> . Egypt Avib, BE
280	Grey-tailed Tattler	<i>Tringa brevipes</i> (formerly <i>Heteroscelus brevipes</i> to which Černý & Natale 2021 revert)	Monotypic. (Change of taxonomy Sangster <i>et al</i> 2007, H&M4, although Livezey 2010 reverted to <i>Heteroscelus</i>). 1st record for Oman, Middle East & OSME Region imaged at Filim, Wustá Feb-Mar 2022 DB44(2) : 151. Notorious wanderer. Permanent breeding grounds known near 86°30'E, 67°30'N in Krasnoyarsk Republic Rogacheva 1992 (1750km due N of E Kazakhstan) & Alaska BLDZ Sep 2021, rare PM W Mongolia Gombobaatar & Leahy 2019. A Tattler sp, probably Grey-tailed has reached the Chagos Archipelago Carr 2015. Migration through western Mongolia HBW 3. Vagrant to Mauritius & UK, IUCN.
281	Lesser Yellowlegs	<i>Tringa flavipes</i> (Černý & Natale 2021 propose <i>Totanus</i>)	Monotypic. Vagrant Israel 1977 Shirihai 1994, 3rd for Israel Dec 2020 Ein Hamifratz fishponds, N Med Coast, thence Nev Ur Jordan Valley Feb 2021 Yoav Perlman <i>in litt</i> ; sole record Oman 2003 OBL7 , Turkey 2006 (Erciyas <i>et al</i> 2008), 2nd record Silifke, Mersin Mar 2021 TBRC ; UAE Aspinall 2010. Livezey 2010 suggests 'Yellowshank'.
282	Spotted Redshank (Formerly Dusky Redshank)	<i>Tringa erythropus</i> (Černý & Natale 2021 propose <i>Totanus</i>)	Monotypic. Widespread on migration to & from Arctic breeding areas, 2nd Kazakhstan winter record Lake Sorbulak, Almaty, Wassink 2016b, fairly common PM & WV Oman OBL7 ; many winter Iran, Iraq, HBW3, some Afghanistan R&A 2005. Egypt Avib, BE
		Dromadidae	Considerable resequencing of genera within a revised Lari (which would include this family) proposed by Sangster <i>et al</i> 2012: likewise H&M4. IOC10.1 resequences Dromadidae to precede Glareolidae Pereira and Baker 2010.
283	Crab-plover (Crab Plover)	<i>Dromas ardeola</i>	Monotypic. Closely related to Glareolidae Pereira & Baker 2010. Rarely more than 1km from sea, HBW3 (but one inland record S of UAE border Pambour & al-Karairy 1991, one geotracked from just W of Ruwais island directly SE across the Empty Quarter to Barr al-Hikman Kwarteng <i>et al</i> 2015), warm OSME shorelines, E Iran coast R&A 2005 (resident and summer breeder Iran Scott & Adhami 2006), Iraq Gulf coast Salim <i>et al</i> 2012, UAE Aspinall 1996: BM, c 4000bp Arabian coasts & islands, mostly in 20 colonies Jennings 2010, local breeder & common PM & WV SE Oman OBL7 , winters partly to S (eg S Yemen Warr 1992), has been satellite-tracked to Aldabra, Indian Ocean Javed <i>et al</i> 2011: data-logged birds wintering Barr al-Hikman, Oman, were tracked to Iran to breed, & also to Iraq, Kuwait, Saudi Arabia, Qatar & UAE; a Barr al-Hikman colour-ringed bird was registered Gulf of Mannar between India & Sri Lanka Bom & van Gils 2013, vagrant Turkey Kirwan <i>et al</i> 1999, Israel Perlman & Meyrav 2009 5th record Eilat May 2016, 6th Eilat May 2018 IRDC (&1st for Jordan) 3 birds. Old (1885) record Syria on River Nahr el-Kebir accepted by Kumerloeve 1968 citing specimen in Vienna Museum. Breeds islets off Elba Protected Area, Egypt BinE Jan 2011, 1st breeding record SG33(1) . NB Species requires firm sandy/soft earth substrate into which it excavates obliquely downwards for 35cm, burrow length being up to 3m Ticehurst <i>et al</i> 1926.
		Glareolidae	Černý & Natale 2021 propose placing Small Pratincole in <i>Galachrysis</i> : resequencing may follow; we await IOC decision. NB1 Livezey 2010 placed it in <i>Subglareola</i> . NB2 Considerable resequencing of genera within a revised Lari (which would include this family) proposed by Sangster <i>et al</i> 2012.
PT	Cream-coloured Courser PT	<i>Cursorius cursor</i> (<i>sensu lato</i>)	NB Sangster <i>et al</i> 2012 acknowledge split of Somali Courser <i>C.[c.] somalensis</i> , also IOC3.2 & H&M4
284	Cream-coloured Courser {Cream-colored Courser}	<i>Cursorius cursor</i> (<i>sensu stricto</i>)	Breeds (ssp <i>bogolubovi</i>) SE Anatolia Turkey Kirwan <i>et al</i> 2008, Syria, uncommon & local S Israel Perlman & Meyrav 2009, UAE (<i>cursor</i>) Aspinall 1996, some RB Iraq (<i>cursor</i> ?) Salim <i>et al</i> 2012, probably S Yemen Warr 1992, Kuwait: status in Arabia (<i>cursor</i>) widespread and fairly common RB, less so Yemen, up to 40 000bp, plus WV Jennings 2010: note that Socotran population of c 1000 birds breeds September-July Porter & Suleiman 2014; uncommon widespread RB, fairly common PM & WV Oman OBL7 ; <i>C.c. bogolubovi</i> Turkmenistan, Bukreev 1997, & Iran, Afghanistan HBW3, NW Afghanistan (resident in SE) R&A 2005; 1956 single-record vagrant WSW Kazakhstan Wassink 2015b. Egypt Avib, BE
285	Collared Pratincole	<i>Glareola pratincola</i> (formerly <i>Glareola glareola</i> by some)	ssp <i>pratincola</i> breeds wetlands CA common BM S&W Kazakhstan Wassink 2015b, also NW & S Afghanistan Ayé <i>et al</i> 2012, widespread sites Iran Khaleghizadeh <i>et al</i> 2017, Iraq.HBW3, often common migrant eg Israel Perlman & Meyrav 2009: small Arabian breeding population (c 20bp) at irregular locations, but mainly migrant Jennings 2010; fairly common PM, SV & occasional breeder Oman OBL7 , 14 Qatab Farm, Sohar Sep 2018 SG41(1)ATR : 144; small, increasing breeding population UAE, including on undisclosed site Campbell & Smiles 2019a; highest count of 766 birds at Dubai/Abu Dhabi breeding area Jul 2021 Campbell <i>et al</i> 2021 . Winters mostly sub-Saharan Africa but also Pakistan & India Delany <i>et al</i> 2009. Egypt Avib, BE
286	Oriental Pratincole (formerly Large Indian Pratincole)	<i>Glareola maldivarum</i>	Monotypic. Irruptive occasionally breeding vagrant to most of Region, HBW3, accidental Uzbekistan Koblik & Arkhipov 2014; Iraq 1920s Salim <i>et al</i> 2012, vagrant Israel - Israel Checklist 2015. Recorded recently Khuzestan, Iran by WIWO team, Diek <i>et al</i> 2004 Khaleghizadeh <i>et al</i> 2017. Vagrant Kuwait, Cyprus, UAE Mitchell 2017.
287	Black-winged Pratincole	<i>Glareola nordmanni</i>	Monotypic. HBW3 suggestion of breeding S Kazakhstan countered by W&O 2007 who say C & N; N half of Kazakhstan Wassink 2015b: range extension Betpak-Dala Martin <i>et al</i> 2018' into S Kazakhstan Wassink 2022 . Migrant Kyrgyzstan, Ven 2002. Occasional breeder elsewhere, scarce migrant Israel Perlman & Meyrav 2009, vagrant Iran Scott & Adhami 2006, although many may transit Iran at altitude Roselaar & Aliabadian 2010, rare PM N&W Iran Khaleghizadeh <i>et al</i> 2017; scarce but regular PM Cyprus Stylianou 2017, rare autumn PM Oman OBL7 , 2 at East Khawr Dec 2019 SG42(1) : 172: wanders; 3rd record Qatar Apr 2013 SG35(2) ATR , 4th record Nov 2017 QBRC . Entire population migrates across Middle East wintering in Africa S of Sahara, some to S Africa Delany <i>et al</i> 2009.Egypt Avib, BE
288	Small Pratincole (formerly Little or Small Indian Pratincole)	<i>Glareola lactea</i> (may move to <i>Galachrysis</i> Černý & Natale 2021)	Monotypic. E Afghanistan HBW3 (Jalalabad H&E 1970), R&A 2005, single-record vagrant Iran Scott & Adhami 2006, Khaleghizadeh <i>et al</i> 2017, Bahrain one Apr 71 & one Dec 78, one Abu Dhabi Island UAE Nov 78 Bundy & Warr 1979, vagrant S Yemen Warr 1992, uncommon WV Oman OBL7 , but 4 at 2 locations Dec 2018, Seeb & East Khawr SG41(1) : 145; 1st record Qatar Jan 2013 SG35(2) ATR .
Sweetman <i>et al</i> 2017 assess ocean warming trends as likely to impact southern oceans, particularly the Indian Ocean, by steadily reducing both organic food density & oxygen content per decade through to 2100. Such trends would reduce resident and at-sea roosting seabird populations. Human fishing communities would also be badly affected.			

		Laridae Considerable resequencing of genera within a revised Lari follows Sangster <i>et al</i> 2012.	<p>The use of Sternidae below aligns with BOU TSC8, Černý & Natale 2021. Since Pons <i>et al</i> 2005, there have been no similar-scale papers that challenge the bulk of their conclusions. The IOC have adopted all except the genus proposed for the extralimital & Vulnerable Saunders's Gull <i>Saundersilarus saundersi</i>; we now align with that view, noting that the main exceptions are the BOU & <i>Dutch Birding</i>. H&M4 resequences families, genera & within genera, but we remain with IOC sequencing. Some explanation of the non-alignment of biometric and morphological data (<i>eg</i> as consistently documented by Pierre Yésou) appears in Sonsthagen <i>et al</i> 2016, where hybridisation events as an evolutionary force do not lead to lack of reproductive fitness in white-headed gulls, resulting in much haplotype sharing, yet breeding populations remain strongly associated with geographical locations in distinct clades despite small genetic differences.</p> <p>NB1 It appears somewhat unusual that just a few genes are driving the speciation process within this complex (although 9.2% of all species are known to hybridise, the incidence of hybridization reaching 41.6% of species within some orders Grant & Grant 1992). NB2 Harrison <i>et al</i> 2021 offer new insights on Laridae. NB3 For useful overview of lack of taxonomic clarity of gull taxa, see Newton 2003 & also Kerr <i>et al</i> 2007 for results of genetic 'barcode' large-scale Nearctic species trial.</p>
		Sub-family Anoinae (2 species in Region)	Noddies <i>Anous</i> (probably including <i>Procelsterna</i> Cibois <i>et al</i> 2016) are a basal offshoot and sister to the rest of the Laridae , forming their own subfamily Anoinae (Bridge <i>et al</i> 2005, Pons <i>et al</i> 2005, Baker <i>et al</i> 2007, Pratt 2020)
289	Common Brown Noddy (Brown Noddy, Common Noddy)	<i>Anous [stolidus] stolidus</i>	Howell & Zufelt 2019 split off Galapagos Brown Noddy <i>A.[s.] galapagoensis</i> . Polytypic. 2 extralimital sssp, ssp <i>pileatus</i> breeds S Red Sea, Gulf of Aden, Masirah, some remaining in general area year-round, HBW3; also Gulf of Oman, Socotran archipelago holding 17% of regional total Porter & Suleiman 2014, total Arabian breeders c 17 000bp Jennings 2010; fairly common summer breeder offshore islets Oman OBL7 , 1st for Iran May 1877, 2nd Jun 2011 Khaleghizadeh <i>et al</i> 2017. NB1 IOC v2.0 resequences noddies and skimmers, placing them ahead of gulls in Laridae ; oddly <i>Dutch Birding</i> retain amongst terns. NB2 Howell & Zufelt 2019 suggest that the local Galapagos population should be elevated to species status as <i>A.[s.] galapagensis</i> , Galapagos Brown Noddy.
290	Indian Black Noddy {Lesser Noddy} (Sooty Noddy)	<i>Anous [minutus] tenuirostris</i>	Howell & Zufelt 2019 prefer to return this species to being part of the Black Noddy <i>A. minutus</i> superspecies complex as Indian Black Noddy <i>A.[m.] tenuirostris</i> : 3 other species in this complex are extralimital to our Region. Polytypic. Wintering population, taxon <i>tenuirostris</i> , around E Oman, HBW3 & Harrison <i>et al</i> 2021, contra OBL7 - rare summer visitor Masirah, rarely at other times. 9th UAE record Sep 2017 EBRC . NB Black Noddy has been <i>A. minutus</i> since IOC1.6 which reverted to name Lesser Noddy.
		Sub-family Gyginae (1 species in Region)	A consensus topology now positions <i>Gygis</i> as an independent basal offshoot of Laridae forming its own subfamily Gyginae Thibault & Cibois 2017: 246, Pratt 2020. However, the precise position of <i>Gygis</i> at the base of the larid tree remains unsettled Jackson <i>et al</i> 2012. <i>Pro tem</i> , we follow Howell & Zufelt 2019 for the English name; Pratt 2020 proposes 'Fairyn tern'.
291	Indo-Pacific Noddy (White Noddy, {White Tern}, Angel Tern, Fairy Tern)	<i>Gygis [alba] candida</i>	Howell & Zufelt 2019 provisionally split into 3 species within a superspecies: Atlantic White <i>G.[a.] alba</i> , Indo-Pacific <i>G.[a.] candida</i> & Little White <i>G.[a.] microrhyncha</i> (of SE Pacific islands, presumably with ssp <i>leucopes</i>) Noddies. Harrison <i>et al</i> 2021 retain as sssp, while noting taxonomy is vexed, Pratt 2020 agreeing split of <i>candida</i> , but proposing entirely new English names. Feb 1964: 4 records of 18+ birds total between 6.5°N & equator at c55°E Gill 1967. Map (Fig 9b) in Bailey 1968 indicates at least 5 records in extended deep-ocean OSME area. RNBWS record Mar 64 at Menai Island Seychelles at 9:24:0.0S+46:15:0.0E, W of OSME Region deep-ocean extension; ssp <i>candida</i> breeds Seychelles, Mauritius, Réunion E to S Pacific implying interchange of individuals over long distances, & hence BLDZ Jul 2015 map presence in SE & S of deep-ocean extension of OSME Region. IOC 2.6 noted DNA evidence that this taxon is a noddy and not a tern (subsequent to Bridge <i>et al</i> 2006).
292	African Skimmer	<i>Rynchops flavirostris</i>	Monotypic. African species, Egypt (<i>eg</i> Dec 2011 DB34(1) : 58) breeds Upper Nile Harrison <i>et al</i> 2021; vagrant Yemen, Israel, Porter <i>et al</i> 1996, 2 at Taqah & Khawr Rawri Jan-May 2015 (Magnus Ullmann) Oman Harrison 2015, OBRC , rare in Eritrean Dahlak Islands di Monti <i>et al</i> 2009.
293	Indian Skimmer	<i>Rynchops albicollis</i> Endangered	Monotypic. Population is <2000 adults Harrison <i>et al</i> 2021. Indian species, single-record vagrant 1979 Oman, Porter <i>et al</i> 1996, OBL7 , one collected Rud-i-Sarbas Mar 1901 S Baluchestan Iran Zarudny 1911; vagrant Iran Mar 1901 Scott & Adhami 2006, Khaleghizadeh <i>et al</i> 2017; vagrant N Yemen Nov 1979 (Philips 1982), one at Kalba in Gulf Bourne 1988a.
294	Black-legged Kittiwake (Kittiwake)	<i>Rissa tridactyla</i> Vulnerable	Extralimital ssp <i>pollicaris</i> genetically distinct Sauve <i>et al</i> 2019, but visual separation likely unsafe Howell & Zufelt 2019 because of phenotypic overlap. Note ssp <i>tridactyla</i> rare E Mediterranean, Gulf of Aqaba (Jordan 23-26 Jan 2010 SG 32(2) , 2nd record Aqaba Dec 2014 JBRC), regular, scarce PM Turkey Kirwan <i>et al</i> 2008 & winterer Kirwan <i>et al</i> 2014, vagrant Iran Syria Oman (3rd record Jan 2013 SG35(2) ATR, OBL7), 4th record Barr al-Hikman Nov 2018 OBRC . Porter <i>et al</i> 1996, 6th UAE record Apr 2014 ERC , 7th record Cyprus Dec 2014, 8th Paphos Nov 2017 CRC . 2-record vagrant Kazakh Caspian & single record vagrant C-E Kazakhstan Wassink 2015b, Mischenko 2009a, several 21st-century records Wassink 2022; 3rd-6th Azerbaijan records Oct 2017 SG40(1) : 113, now 10 records + inland at Aras River Dam, Nakhchivan Dec 2020 SG43(1) : 164. 5-record vagrant Iran Khaleghizadeh <i>et al</i> 2017, 7th record Shahrud, Semnan Apr 2021 IBRC ; 4yJ for Oman at Shahhah Nov 2018 DB41(1) : 55; accidental Issyk Kul (1932) Kyrgyzstan Ven 2002. Egypt Avib, BE. RNBWS records: low numbers Aspheron, Caspian 97/98 at 40:5:47.0N+50:15:15.0E & 40:0:0.0N+51:4:0.0E, Jan, Feb, Apr, Nov & Dec; 2nd Kuwait record Apr 2017 Peter Colston in litt, DB39(3) : 206, 4th Apr 2017 SG39(2) : 207. NB Niethammer 1967 cited (H&E 1970) recording 2 juveniles near Kabul Afghanistan on 3 dates in Sep 1965, but Oreel 1972 convincingly revised to Little Gull <i>Hydrocoloeus minutus</i> . However, R&A 2012 seemingly overlooked Oreel's refutation.
295	Sabine's Gull	<i>Xema sabini</i> (formerly <i>Larus sabini</i>)	Monotypic. Vagrant Israel, E Mediterranean, UAE, Jordan, Egypt (first records from Zaranik, N Sinai; Salama & Grieve 1996) MO&L 2004: 1st record Oman Nov 2013 OBRC , 2 records UAE EBRC . 1st Egypt record Sep 1980 EORC . 1st record Kuwait Aug 2015 KORC , 2nd Jahra Pools June 2019 KORC . 1st record Turkey at Hatay Dec 2021 imaged by Murat Bozdoğan: Emin Yoğurtcoğlu & Phil Andrews in litt, <i>Birding Turkey website</i> , TBRC . Vagrant once to c2°N Somali coast Redman <i>et al</i> 2009.
296	Slender-billed Gull	<i>Chroicocephalus genei</i> (formerly <i>Larus genei</i>) (Černý & Natale 2021 propose <i>Gelastes</i>)	Monotypic. Widespread scattered SB CA, scarce BM, PM Kazakhstan Wassink 2015b, rare migrant Volga Delta Arkhipov 2006; also Afghanistan Paludan 1959, Turkey Kirwan <i>et al</i> 2008; winters on warm coasts, abundant PM & WV Oman OBL7 . Resident S Iraq Salim <i>et al</i> 2012, common SV N Iran, WV N&S Iran Khaleghizadeh <i>et al</i> 2017. In Arabia, primarily WV to all coasts, but common RB Kuwait KORC . SW Pakistan coasts R&A 2005. Likely construction of duplicate Suez canal has concentrated scattered breeding colonies into one location at salt pans 10km E of original Suez canal, some 15 km SSW of Port Said (from lat/long in Habib 2018a). this colony represents at 15,125bp 12% of known breeders in the Mediterranean & Black Sea Habib 2020a. 7 recorded 2022 N of Abu Simbel, 1st Lake Nasser June records Jens Hering pers comm Jul 2022. 4th & 5th Socotra, Yemen, records at Khor Sirhan (2 birds) & at Ditwah Lagoon (6 birds) Dec 2022 SG44(1) : 256. Egypt Avib. BE
297	Brown-headed Gull (Formerly Tibetan Gull)	<i>Chroicocephalus brunnicephalus</i> (formerly <i>Larus brunnicephalus</i>)	Monotypic. Breeds Tajikistan, occurs Uzbekistan, MO&L 2004, recorded Afghan Wakhan Sep 2006 Ayé 2007. Possibly elsewhere in N OSME Region, not certainly recorded Kyrgyzstan, Ven 2002; vagrant to Gulf, Israel Perlman & Meyrav 2009. 4-record vagrant SE Iran coast Khaleghizadeh <i>et al</i> 2017; 2nd Saudi record Jan 2014 SG36(2) ATR . Hoogendorn 1991 throws doubt on the following: RNBWS reports in the Gulf (also Bourne & Bundy 1990) at <i>eg</i> 25:0:0.0N+53:0:0.0E, single-record vagrant offshore Oman 1988 (now accepted OBL7) 2nd at Raysut Nov 2018 OBRC : 1st for Kuwait Jahra Pools Dec 2020 SG43(1) : 177. Afghanistan E Dickinson pers comm; R&A 2012 map suggests some winter Nuristan.
298	Common Black-headed Gull {Black-headed Gull}	<i>Chroicocephalus ridibundus</i> (formerly <i>Larus ridibundus</i>)	Monotypic. Breeds in N OSME Region, scarce breeder NE Iraq Ararat <i>et al</i> 2011, Iran Scott & Adhami 2006, previously breeding confined to Iran's West Azarbaijan and Kurdistan provinces, but now proven at Anzali wetlands at the Caspian coast in Gilan Province Ashoori & Watanabe 2017: winters in W & S of Region; common on migration MO&L 2004 winters S CA, common WV Oman OBL7 , Afghanistan & Indian subcontinent R&A 2005, 2012. Egypt Avib, BE. IOC1.7 removes 'Common' from English name because IOC now calls Great Black-headed Gull Pallas's Gull and changes its genus to <i>Ichthyæetus</i> . We prefer to retain 'Common' & 'Great Black-headed' names.

299	Grey-headed Gull (Grey-headed Gull)	<i>Chroicocephalus cirrocephalus</i> (formerly <i>Larus cirrocephalus</i>)	African species, ssp <i>poicephalus</i> has occurred Saudi Arabia, Yemen, Israel, Jordan MO&L 2004, Egypt Elmborg & Müller 2003, accepted EORC 2011. IOC2.10 re-adopted English name Grey-headed Gull: NB Given <i>et al</i> 2005, in a study of masked gulls, proposed splitting the South American and African populations of this species. However, their sample size for all the studied species was tiny, and their proposal in the same paper to elevate to species status the New Zealand Red-billed Gull <i>C. scopulinus</i> from Australian Silver Gull <i>C. novaehollandiae</i> was reversed by Gill <i>et al</i> 2010 because of inadequate sample size. On the other hand Harrison <i>et al</i> 2021, while agreeing that the sample sizes considered for the suggested <i>C. cirrocephalus</i> split were too small for a conclusive split, accepted the single specimen of <i>scopulinus</i> adequate enough to split Red-billed Gull!
300	Little Gull	<i>Hydrocoleus minutus</i> (formerly <i>Larus minutus</i>)	Monotypic. Breeds N Kazakhstan Ayé <i>et al</i> 2012, scarce BM, PM rare resident, WV Kazakhstan Wassink 2015b; widespread in CA, Middle East on migration & in winter, especially Caspian MO&L 2004, although vagrant Iraq Salim <i>et al</i> 2012, Turkey Kirwan <i>et al</i> 2008, 8 records Jordan JBRC , 7th record Kuwait Oct 2015 KORC , 2 records Bahrain King 2018, Wakhan Afghanistan Sep 2006 Ayé 2007, Egypt Avib, BE. NB Ross's Gull also proposed (Pons <i>et al</i> 2005) for <i>Hydrocoleus</i> , but BOU retain as <i>Rhodostethia rosea</i> , pro tem.
301	Laughing Gull	<i>Leucophaeus atricilla</i> (Černý & Natale 2021 propose <i>Atricilla</i>)	1st for Georgia & OSME Region at Lake Paliastomi Aug 2022 imaged by Sander Bruylants <i>in litt</i> (Phil Andrews pers comm). As an increasing Nearctic vagrant in Europe, even to Greece (Hoogendorn & Steinhaus 1990) & Bulgaria Ivanov <i>et al</i> 2021, its appearance on Turkish & eastern Mediterranean coasts in the OSME Region has long been anticipated.
302	Franklin's Gull	<i>Leucophaeus pipixcan</i> (formerly <i>Larus pipixcan</i>) (Černý & Natale 2021 propose <i>Atricilla</i>)	Monotypic. Nearctic vagrant, Israel, E Mediterranean Smith 2004 MO&L 2004 (3 records Perlman <i>in litt</i>), one reported S Egypt 400km S of Crocodile Island 12 Mar 2011 (Steve Moldován pers comm; EORC accepted), UAE May 2011 SG33(2) , Kuwait Jun 2012 KORC : the Middle East records 2003-2012 may refer to the same returning bird Dennis <i>et al</i> 2021; 2nd record for Cyprus at <i>Lady's Mile</i> , Limassol Dec 2021 SG44(1) : 234. 1st for Kazakhstan Jul 2010 Wassink <i>et al</i> 2011 (in N), vagrant Kazakhstan Koblik & Arkhipov 2014, Cyprus, UAE Mitchell 2017. Has reached Goa, India Praveen <i>et al</i> 2019.
303	Relict Gull	<i>Ichthyaeus relictus</i> Vulnerable	Monotypic. Disjunct breeding areas Kazakhstan N&E of Lake Balkash K-M&K (2005) & MO&L 2004, amid much larger populations of very similar Common Black-headed Gull <i>Chroicocephalus ridibundus</i> Ayé <i>et al</i> 2012 maps. 2nd W Kazakhstan record NE Caspian Apr 2020 Wassink <i>et al</i> 2020. E Kazakhstan breeders likely part of Chinese population distribution G&G 2005 - 3 Kazakh ringing recoveries China & 1 Vietnam, 1 Bulgaria, 1 Turkey W&O 2007, but last two records best regarded as probable because specimens were not retained Kirwan <i>et al</i> 2008. Colony discovered W Mongolia 2012 Buchheim <i>et al</i> 2015.
304	Audouin's Gull	<i>Ichthyaeus audouinii</i> Vulnerable	Monotypic. Mostly confined to Mediterranean, declining generally Harrison <i>et al</i> 2021 & Cyprus Hellicar 2016b, recorded Israel Mitchell 2017, one off Jaffa Dec2020 Yoav Perlman <i>in litt</i> ; occasionally inland in Turkey (not confirmed Kirwan <i>et al</i> 2008), 4th for Georgia Aug 2015 DB37(6) : 409, 1st for Russia Sochi Mzymta River mouth DB40(5) : 333 (7.5km from Georgia). Egypt, (MO&L 2004), vagrant Jordan, has occurred Lebanon Mitchell 2017.. Egypt Avib, BE.
305	Mediterranean Gull	<i>Ichthyaeus melanocephalus</i>	Monotypic. Breeding epicentre Black Sea, distribution extending N, largely not site-faithful Harrison <i>et al</i> 2021. Winters in W Mediterranean, breeds Turkey, MO&L 1994. Vagrant to Kazakhstan W&O 2007, 9th record 24 May15 Wassink 2016b, G&G 2005 & Iran Scott & Adhami 2006 Caspian shores, one just S of Caspian Salihieh wetland Alborz Iran Apr 2016 IBRC WV numbers increasing Iran & first bred 2014 Khaleghizadeh <i>et al</i> 2017; 7th Kuwait record Sulaibikhat Bay Jan 2021 KORC . UAE, Jordan, Saudi Arabia Mitchell 2017.
306	Great Black-headed Gull {Pallas's Gull}	<i>Ichthyaeus ichthyaeus</i>	Monotypic. N China main breeding location suffered population crash of 87% from 1974 onwards Harrison <i>et al</i> 2021. Breeder mostly C & E CA, but with significant Caspian population at risk from restoration of sea-levels, MO&L 2004. Rare Kyrgyzstan RB, some winter movements, Ven 2002, scarce local BM Kazakhstan W&O 2007, scarce PM, very rare RB, WV Wassink 2015b. Widespread PM, WV (uncommon Turkey Kirwan <i>et al</i> 2008) to S Caspian coast Khaleghizadeh <i>et al</i> 2017, Middle East coasts eg, Oman OBL7 , Bahrain King 2018, Israel Perlman & Meyrav 2009, more frequent Cyprus since Frost & Flint 2001 now scarce WV & spring PM CBR11 , Armenia, Azerbaijan, Egypt, Red Sea & Arabian coasts Mitchell 2017, commonly encountered wintering Arabian Sea 1950s (records of voyages, collected notes of the late Arthur Stagg); also now inland Iraq; & Saudi Arabia (Dhahran) Babbington 2018b, one at Lake Nasser, Egypt Bull ABC 25(2) : 253: winters coasts Myanmar W to Somalia, also inland India. Egypt Avib, BE. Ringing recoveries suggest exchange of breeders between Caspian & SW Siberia, crossing Kazakhstan, Veen <i>et al</i> 2005. Passage migrant Afghanistan Paludan 1959, in Wakhan Sep 2006 Ayé 2007.
307	White-eyed Gull	<i>Ichthyaeus leucophthalmus</i>	Monotypic. Red Sea endemic: estimated 8000bp Arabian population, higher than some estimates for world population (which includes E Red Sea breeders) Jennings 2010, c 8000 birds on Egyptian Red Sea coastal islands Habib 2017a. Harrison <i>et al</i> 2021 give <18000bp as world total. Common non-breeder Aqaba Israel Perlman & Meyrav 2009, Mediterranean vagrant Jaffa Jan 2016 DB38(2) : 188, 3 off Haifa May 2018 SG40(2) : 202. 1st for Lebanon Dec 2020-Jan 2021 Ramadan-Jaradi & Sawan 2021. 1st for Kuwait Jahra pools May 2018 DB40(3) : 183. MO&L 2004, vagrant Iran, single record Turkish Aegean Kirwan <i>et al</i> 2008, rare WV UAE Mitchell 2017, 2-record vagrant Baluchestan Iran Khaleghizadeh <i>et al</i> 2017, rare autumn visitor Masirah Oman OBL7 , 1st for Cyprus Larnaca 23 Jun 2017 CRBC , images Jane Stylianou, 1st Kuwait record May 2018 KORC . Perhaps 30% of World population breeds on Egyptian Red Sea islands, but numbers likely decreasing locally due to increased tourism, possibly increasing the threat status: eggs are considered an aphrodisiac by local fishermen Habib 2021. Egypt Avib, BE.
308	Sooty Gull (formerly Hemprich's Gull, Aden Gull)	<i>Ichthyaeus hemprichii</i>	Monotypic. Mostly Red Sea, S Arabia (Darsa in Socotran archipelago: around 2000bp, regionally & globally significant Porter & Suleiman 2014), but also into Gulf (in Arabia 28 000bp Jennings 2010) and E African coast (MO&L 2004), common non-breeding visitor Iran S Gulf Khaleghizadeh <i>et al</i> 2017; abundant breeder offshore islands Oman OBL7 . Resident SE Iran, SW Pakistan coasts, R&A 2005, yet 7-record vagrant Bahrain King 2018. Vagrant Israel Perlman & Meyrav 2009, NE Egypt, Bahrain, Jordan, Lebanon Mitchell 2017. Small Egyptian population on Red Sea islands perhaps breeds on more islands than before, but local decrease in numbers likely due to recreational & fishing disturbance Habib 2021; Habib 2022 is a more detailed report solely concerned with Sooty Gull, 31bp 2012-2018 in Egypt . Egypt Avib, BE. NB A known prey-dropper of hard-bodied/shelled prey on to rocks, this species has extended its repertoire & foraging success to dropping thin-shelled bivalves on to wet sand Alam <i>et al</i> 2017
PT	Common Gull (BLI Jun 2020 retain Mew Gull taxa as a single species: AOU 62nd Supplement recognises name Common Gull & split of Short-billed Gull)	<i>Larus canus</i>	MO&L 2004 did split Common & Mew, but others since re-lumped under Mew Gull. However, Chu 1998 & Zink <i>et al</i> 1995 suggest separating Nearctic taxa as Mew <i>L. brachyrhynchus</i> & Kamchatka <i>L. kamtschatschensis</i> from Common <i>L. canus</i> , Mew & Kamchatka being closer to each other than to Common. 'Mew' name variously used for all <i>canus</i> or just for <i>brachyrhynchus</i> , for which 'Short-billed Gull' is preferred by CSNA 2019. However, Sternkopf 2011 in her Dissertation made the case for splitting. Johnsen <i>et al</i> 2010 noted that Scandinavian <i>canus</i> is an old lineage, distinct from the large white-headed gulls, whereas Nearctic <i>canus</i> is more recent, but also more closely related to Herring Gull <i>L. argentatus</i> & a host of Nearctic & Western Palearctic large white-headed gull taxa. Adriaens & Gibbon 2016, using Non-metric Multi-Dimensional Scaling (NMDS) to assess the similarity of the wing-tip patterns of the four taxa (nominate, <i>canus</i> , <i>heinei</i> , <i>brachyrhynchus</i> , <i>kamtschatschensis</i>), dealing simultaneously with all the individual features supported the conclusions of Sternkopf 2011. NMDS was applied separately to adult and second-cycle birds. Harrison <i>et al</i> 2021 maps <i>canus</i> & <i>heinei</i> , <i>brachyrhynchus</i> & <i>kamtschatschensis</i> separately. NB IOC10.2 cautions that some earlier molecular evidence indicates split may be only of <i>kamtschatschensis</i> ; other DNA techniques are required.

309	Common Gull (formerly Mew Gull)	<i>Larus [canus] canus</i>	Polytypic: <i>canus</i> & <i>heinei</i> : tentatively we assign <i>kamtschatschensis</i> to <i>L. brachyrhynchus</i> . Breeds N Kazakhstan, N Aral Sea Ayé <i>et al</i> 2012, BM, PM, resident & WV Kazakhstan Wassink 2015b; mostly migrant <i>L. c. heinei</i> in OSME Region, although ssp <i>canus</i> may appear, wintering S Caspian, E Med (rare), Georgia MO&L 2004, uncommon Iraq Salim <i>et al</i> 2012, rare PM Oman OBL7 , common WV S Caspian Iran, uncommon Gulf Khaleghizadeh <i>et al</i> 2017, E Afghanistan Reeb 1977, R&A 2005. We prefer Mew Gull (or Short-billed Gull Adriaens & Gibbins 2016) only for Nearctic <i>L. brachyrhynchus</i> (including <i>kamtschatschensis</i> : NW N America Howell & Dunn 2007 & E Palearctic), but note <i>canus</i> also breeds eastern N America. NB IOC 11.2 adopts English name Common Gull
310	Ring-billed Gull	<i>Larus delawarensis</i>	Monotypic. 1st record (photos by Anna Yasko) for Kazakhstan and OSME Region at Aktau, Mangystau (NW Caspian) 07 Jan 2015, seen at same location 5 Nov 2015 & 29 Dec 2016 DB39(1) : 51, 10 Nov 2017 Wassink 2018, at Aqtau 24 Nov 2018 Wassink 2019, Nov 2020 Wassink <i>et al</i> 2021, Jan 2022 Wassink 2022 .
Sternkop <i>et al</i> 2010 show complex ancestral genetic differentiation between intra-specific populations of species of large Holarctic gulls and much shared inter-species ancestry (including next 2 spp) between certain populations, citing past & present geographic distributions. Ancestral relationships of other large gull taxa in Sonsthagen <i>et al</i> 2016.			
311	Great Black-backed Gull	<i>Larus marinus</i>	Monotypic. Although it has hybridised with American Herring Gull <i>L. smithsonianus</i> , European Herring Gull <i>L. argentatus</i> and Glaucous Gull <i>L. hyperboreus</i> , it shows more reproductive isolation than the other large white-headed gulls Harrison <i>et al</i> 2021. E Mediterranean vagrant, MO&L 2004, eg Syria Murdoch & Betton 2008, Israel Perlman & Meyrav 2009, increasing vagrancy Turkey SG34(1)AtR , vagrant NE Black Sea Koblik & Arkhipov 2014. Reported Oman Feb 06. Iran as vagrant Scott & Adhami 2006: two 1938 records (of 'several' & 'one') at Bushehr Iran by Løppenthin 1951 (who knew Palearctic gulls well) Roselaar & Aliabadian 2010, only 5 records accepted Khaleghizadeh <i>et al</i> 2017. Improving ID awareness of southern-hemisphere black-backs vagrancy to Arabian Sea invaluable. Vagrant Cyprus, Israel, Jordan, Lebanon Mitchell 2017. Accidental Iran Khaleghizadeh <i>et al</i> 2011, RNBWS report off Aspheron Peninsula, Caspian Sea Dec 98 at 40:5:47.0N +50:15:15.0E discounted, but 1st winter vagrant photographed at Aktau Mar 2021 by Qanatbek Kenzhegulov, 1st for Kazakhstan Wassink 2022 . NB Long misidentification history OSME Region WRP Bourne pers comm, including widely cited Meinertzhagen record (eg Roberts 1991 includes in Pakistan records (also Ali & Ripley 1969); Bourne 1997 persuasive on genuine misidentifications of Heuglin's Gull <i>L. (fuscus/heuglini) heuglini</i> . Such errors likely given present knowledge of taxonomy, but wanderings of southern hemisphere black-backs (large size variation) make Kelp Gull <i>L. dominicanus</i> (see ORL Hypothetical List), which has reached as far N as Portugal & France Mitchell 2017, also a candidate. Similarly, suggest S Yemen records (left unvalidated by Warr 1992) of Barnes (1893a, 1893b 'small parties') and Ennion (1962) 'one with <i>L. fuscus</i> ' more likely refer to to alternatives suggested above.
312	Glaucous Gull	<i>Larus hyperboreus</i>	Monotypic. Vagrant to Black & Caspian Seas, occasional E Mediterranean, N Red Sea, MO&L 2004, 6-record vagrant Kazakhstan Wassink 2015b, accidental Turkmenistan Koblik & Arkhipov 2014, Israel Perlman & Meyrav 2009 (also Jordan Mitchell 2017), 1st record Iran Jan 2015 Bandar Abbas IBRC Khaleghizadeh <i>et al</i> 2017, 2nd record Azerbaijan Jan 2016 SG(38(2)) 224. Egypt Avib, BE NB1 mtDNA indicates that separation from <i>L. argentatus</i> far from clear-cut Sangster <i>et al</i> 2007, but other indicators more positive. NB2 Harrison <i>et al</i> 2021 note tendency of Nearctic <i>hyperboreus</i> to hybridise with American Herring Gull <i>L. smithsonianus</i> (forming 'Nelson's Gull') and Western Palearctic <i>hyperboreus</i> with European Herring Gull <i>L. argentatus</i> (forming 'Viking Gull'): they also emphasise a deep genetic divergence between these two Glaucous Gull populations..
The relationships between the large white-headed gull taxa are complex. Some taxa may be undefinable in terms of species or subspecies, but nevertheless include diagnosable populations, making a broader view necessary, as outlined in Sonsthagen <i>et al</i> 2016. Our PT approach allows complexities to be highlighted & so aligns with published analyses only where these are not in disagreement for taxa that occur in the OSME region. Although our approach may be seen as an ecelectic mix of the radical and the traditonal, we note that complex relationships occur in other groups (eg the large grey shrikes and the <i>flava/citreola</i> wagtails), which also merit taking the broader view.			
PT	Herring/Yellow-legged/ Armenian/Caspian/American Herring Gull PT	<i>Larus argentatus</i>	Parent Taxon issue ongoing and long-term, with nested PT groups. We note, re the large white-headed gulls, Yésou 2002 (Malling Olsen & Larsson (MO&L) 2004 largely in alignment), the modifications proposed by Collinson <i>et al</i> 2008 & subsequent thought-provoking ideas of Pierre Yésou (pers comm). Apparent lack (since excellent summary by Bourne 1996) of large-scale systematic observations of large-white-headed gulls wintering in Region makes for uncertain conclusions on trends, but Kralj <i>et al</i> 2013 studying Adriatic Yellow-legged Gulls <i>L. michahellis</i> provide increased understanding of factors (eg food source stability, population pressure, nest-site availability) influencing post-breeding movements & dispersal that may also apply to many other taxa. Liebers <i>et al</i> 2004 & Liebers-Helbig <i>et al</i> 2010 provide convincing evidence & overview of origins to supersede ring-species theory; indeed, de Knijff <i>et al</i> 2005, Sternkopf <i>et al</i> 2010 note that <i>L. smithsonianus</i> formed in North America from an eastern Siberian ancestor (which had formed 65,000Ya Liebers <i>et al</i> 2004) post-glacial radiation some 25,000 years ago and so is but distantly related to European Herring Gull.
313	European Herring Gull	<i>Larus argentatus</i>	Now generally accepted (MO&L 2004, Collinson <i>et al</i> 2008, Liebers-Helbig <i>et al</i> 2010, Pierre Yésou pers comm) as distinct from <i>michahellis</i> & <i>cachinnans</i> . Likelier ssp is <i>argentatus</i> . Recently found E Mediterranean R Porter pers comm (Israel Perlman & Meyrav 2009). Separated from <i>L. smithsonianus</i> , American Herring Gull MO&L 2004, Collinson <i>et al</i> 2008, <i>argentatus</i> is a much older taxon than <i>smithsonianus</i> Harrison <i>et al</i> 2021. 4 records Cyprus Richardson 2006. Overall , 3-record vagrant Kazakh E Caspian coast (1 & 2 Wassink 2015), 3rd record comprising a single bird returning 2014-2017 Aqtau, Mangghystau Province Yasko 2017 , Wassink 2018, 15 birds Georgia Jan 2014 Wassink 2015, 1st & 2nd Turkey records Feb 2014 SG36(2) ATR , 1st record Azerbaijan Jan 2016 SG(38)2 224. Iranian PT records now revised (Scott 2007); none now referable to <i>L. argentatus</i> .
PT	American Herring Gull PT (Smithsonian Gull) (Arctic Gull: BLI, but they subsume <i>vegae</i> & <i>mongolicus</i> June 2020)	<i>Larus smithsonianus</i>	PT follows BOU here; see Sangster <i>et al</i> 2007, Collinson <i>et al</i> 2008 (who note that the case for <i>vegae</i> as a species awaits further research). Pierre Yésou (pers comm) is certain that the strong diagnostic phenotypical differences between these Asian and N American taxa recorded in Alaska demand a different conclusion, namely <i>L. vegae vegae</i> and <i>L. v. mongolicus</i> . We note that this view still aligns with subsequent descent of these taxa from a common ancestor of <i>L. smithsonianus</i> , but independently of the radiation of <i>L. smithsonianus</i> : de Knijff <i>et al</i> 2005 conclude that <i>vegae</i> (High-Arctic easternmost Siberia), <i>mongolicus</i> (mid-latitude central-eastern Asia) and Slaty-backed Gull <i>L. schistisagus</i> (N Pacific: Bering Straits coastal to S Japan & Ussuriland) derived from the same ancestral stock as <i>L. smithsonianus</i> . Full diagnosability criteria many of these gull taxa in relation to each other yet to be proved Parkin & Knox 2010. See also Liebers-Helbig <i>et al</i> 2010. We expect much remains to be discovered. H&M4 include <i>vegae</i> & <i>mongolicus</i> in <i>smithsonianus</i> .
PT	East Siberian Gull PT	<i>Larus (smithsonianus) vegae/mongolicus</i>	Here we agree with Yésou 2002 (pers comm) who advises taxonomic uncertainties in white-headed gulls will be long-standing; taxa are prime candidates for combined genetics/field/museum studies (including breeding biology & statistical analysis of phenotypical variations): we consider that de Knijff <i>et al</i> 2005 have proven the relationship to the extent we show here. Harrison <i>et al</i> 2021 treats as ssp of Vega Gull <i>L. vegae</i> . NB Although Rogacheva 1992 suggested PT breeds as far W as Anabar River mouth in Arctic, 'clear hybrids not being uncommon', ID knowledge at this time was less clearcut - Pierre Yésou pers comm. NB1 separation from <i>L. argentatus</i> on mtDNA grounds alone is far from clear-cut (Sangster <i>et al</i> 2007), but other DNA criteria and morphology (de Knijff <i>et al</i> 2005, Collinson <i>et al</i> 2008, Liebers-Helbig <i>et al</i> 2010) make strong case. NB2 Sangster <i>et al</i> 2007 (BOU) and Collinson <i>et al</i> 2008, Liebers-Helbig <i>et al</i> 2010 also make the case for the PT for Vega Gull <i>L. (smithsonianus/vegae) vegae</i> (see Hypothetical List) and <i>L.(s.m.) mongolicus</i> to be American Herring Gull <i>L. smithsonianus</i> . NB3 <i>L. (smithsonianus) vegae</i> is prone to wandering: one recorded Wexford, Ireland 10 Jan 2016 by Killian Mullarney

314	Mongolian Gull {Vega Gull}	<i>Larus (smithsonianus/vegae) mongolicus</i>	Variable leg colour; regarded variously as southern ssp of East Siberian Gull or as full sp: <i>eg</i> Yésou 2002, Clements 2007 & Shimba 2007, but now fits better as taxon of American Herring Gull, Collinson <i>et al</i> 2008. Rare Kyrgyzstan (Ven 2002). Breeding range does not reach easternmost Kazakhstan (Liebers-Helbig <i>et al</i> 2010, Arend Wassink pers comm) as implied in MO&L 2004, in map in Yésou & Hirschfeld 1997 & in H&M4; expected E Kazakhstan G&G 2005; Only accepted modern record is at Ust Kamengorsk Oct 2013: all others deemed insufficiently documented Wassink 2022 (qui citatis Klaus Maling Olson in litt) . Common PM, SV across Mongolia Gombobaatar & Leahy 2019. 1st for Iran at Qeshm Island, Hormozgan Jan 2019 DB41(2) : 127. Two collected as 'Herring Gull' ssp <i>vegae</i> 1921-3(?) Baghdad, Iraq Ticehurst <i>et al</i> 1926 are referable to taxon <i>mongolicus</i> . NB1 Once considered ssp of <i>cachinnans</i> (MO&L). NB2 Birds ringed in breeding areas go east (Yésou & Hirschfeld 1997, WRP Bourne pers comm). NB3 Roberts 1991 notes Dement'ev & Gladkov 1951 referred to specimens from Karachi to Baghdad, but subsequent fog of taxonomic history, reasonably contradicted in Yésou & Hirschfeld 1997; surviving specimens require re-examination. NB4 Harrison <i>et al</i> 2021 treat as ssp of <i>L. vegae</i> (qv entry in Hypothetical List), but note that a future split is likely.
315	Caspian Gull	<i>Larus cachinnans</i>	Monotypic. Molecular data suggest <i>cachinnans</i> is of ancient lineage which expanded N from Caspian giving rise to dark-mantled group, including <i>fuscus</i> , <i>heuglini</i> & <i>barabensis</i> (Parkin & Knox 2010), thus supporting view of being distinct from <i>argentatus</i> & <i>micahellis</i> , MO&L 2004, Collinson <i>et al</i> 2008, Liebers-Helbig 2010, Pierre Yésou pers comm; subsequent interbreeding with <i>argentatus</i> may account for <i>cachinnans</i> ' morphological variability Parkin & Knox 2010. Breeds widely throughout N CA, Caspian, common BM, PM, resident, WV SW & S-C Kazakhstan Wassink 2015b; Turkish Black Sea coast Kirwan <i>et al</i> 2008. Most winter Red Sea/Gulf/S Arabia seas, including Oman (abundant) OBL7 Iran (abundant) Khaleghizadeh <i>et al</i> 2017, Israel Perlman & Meyrav 2009. Immatures move W. NB1 'ponticus' invalid, Yésou 2002. Egypt Avib, BE. NB2 Those 'cachinnans' ringed Lake Chany, SW Siberia & recovered E Caspian & Uzbekistan & those recovered near Chany but ringed in SE Kazakhstan & attributed to 'cachinnans', may be <i>barabensis</i> taxon: Veen <i>et al</i> 2005; however, Wassink 2015b, citing MO&L 2003 (2004?) & Clements 2014 adopt <i>barabensis</i> as ssp of <i>cachinnans</i> . This intriguing approach is <i>contra</i> the monotypic conclusion of Collinson <i>et al</i> 2008. NB3 Methodical application of established ID criteria to this & next taxon surprisingly absent from many records submitted to national records committees; care certainly required for large gulls off Iran Dubois 2003.
316	Yellow-legged Gull (Western Yellow-legged Gull)	<i>Larus micahellis</i>	Now widely acknowledged as distinct from <i>argentatus</i> & <i>cachinnans</i> , MO&L 2004, Collinson <i>et al</i> 2008, Pierre Yésou pers comm. In Region, ssp <i>micahellis</i> breeds Black Sea, Eastern Mediterranean (sedentary), declining Cyprus Hellicar 2016, may also wander to Red Sea, MO&L 2004. Most colonies Turkey this taxon Kirwan <i>et al</i> 2008. Kralj <i>et al</i> 2013 show that Adriatic ringed birds disperse widely to N, E & W, adults to N & E, creating potential for range expansion. 1st colony for Egypt at the outer sandbar of Lake El Mallahah, just E of Port Fouad, Port Said Habib 2017b. NB1 Methodical application of established ID criteria to this & previous taxon surprisingly absent from many records submitted to national records committees. NB2 Serra <i>et al</i> 2016 document conservation measures adopted in some parts of distribution, while noting the species attaining pest status in others & having deleterious effects on some breeding passerines and non-passerines.
317	Armenian Gull	<i>Larus armenicus</i> Near-Threatened. 1000-2000 killed or taken annually in Iran Brochet et al 2019.	Monotypic. BOU; nearer <i>micahellis</i> , not <i>cachinnans</i> . Breeds inland Turkey, N&W Iran (Khaleghizadeh <i>et al</i> 2017), Armenia, 1st breeding record (several colonies) Azerbaijan May 2018 SGATR41(1) ; winters river deltas Iraq, E Med; also to Gulf (confusion with <i>barabensis</i> taxon?) MO&L 2004, scarce WV Kuwait KORC , uncommon WV Iran Gulf coasts Khaleghizadeh <i>et al</i> 2017, lower reaches Nile via Israel Perlman & Meyrav 2009, Tigris (WRP Bourne). Meinertzhagen Tring specimens likely reliable WRP Bourne pers comm. DNA research indicates <i>armenicus</i> is old taxon, originating from early invasion of pre- <i>atlantis</i> form into Mediterranean; <i>micahellis</i> (qv) originates from subsequent invasion - Collinson <i>et al</i> 2008. Regular winter Egypt. NB Collar 2013 counsels caution on conflicting morphological/reproductive isolation and molecular data as to assigning rank
318	Lake Beysehir Gull	<i>Larus armenicus</i> × <i>micahellis</i>	Small, probably stabilised, fertile hybrid population (known since 1964, with some <i>armenicus</i> & some <i>micahellis</i> pairs) on islands in Lake Beysehir, Turkey (MB pers obs 1996), likely to have arisen from secondary contact between <i>armenicus</i> and colonising <i>micahellis</i> , Liebers & Helbig 1999, Collinson <i>et al</i> 2008; no other known hybridisation site despite quite extensive (Kirwan <i>et al</i> 2008) range overlap in SW inland Turkey. English name informal @OSME.
PT	Lesser Black-backed/Baltic/Heuglin's Gull PT NB BLI Jun 2020 still subsume the following 6 taxa within Lesser Black-backed Gull	<i>Larus fuscus</i>	Taxonomy complex; subtleties slowly becoming uncovered via molecular and morphological studies. Liebers <i>et al</i> 2004, Sangster <i>et al</i> 2007 & Collinson <i>et al</i> 2008 indicate that all morphological & genetic evidence correlates with geographic clinal differences from taxon <i>graelisii</i> to <i>vegae</i> , although mtDNA analysis shows slight step from <i>fuscus</i> to <i>heuglini</i> Parkin & Knox 2010; indeed, Liebers & Helbig 2002 found little mtDNA variation between <i>graelisii</i> , <i>intermedius</i> , <i>fuscus</i> , <i>heuglini</i> & <i>taiyrensis</i> '. However, Liebers-Helbig <i>et al</i> 2010, investigating the entire cytochrome b gene & a hypervariable part (HVR-1) of the mitochondrial control region, improved the resolution of the phylogeny of these taxa. Taxon identity is normally, but not solely, based on genetic separation: studies of zones of contact may quantify extent of hybridisation & introgression Parkin & Knox 2010. Also low levels of gene flow with <i>heuglini</i> still apparent despite ecological separation; BOU suggest <i>heuglini</i> -related taxa best subsumed in <i>fuscus</i> as ssp. We note that much remains to be learned; Collinson <i>et al</i> 2008, Parkin & Knox 2010 conclude that laboratory research, morphology (and work such as Yésou's fieldwork-driven conclusions) need to be reconciled through careful interpretation - many gull populations remain poorly-known. Most early records will not be separable under these criteria due to lack of descriptions: <i>eg</i> Egypt Avib, BE
319	Western Lesser Black-backed Gull	<i>Larus fuscus graellsii</i>	1st record for Israel and the OSME Region at Ma'agan Michael Nov 2014 & Ashdod Dec 2015 returned Ma'agan Michael Dec 2016 SG39(1)ATR ; Norwegian ringed SGATR 2015 . English name informal@OSME
320	Continental Black-backed Gull (Continental Lesser Black-backed, Lesser Black-backed, Intermediate Black-backed Gull)	<i>Larus fuscus intermedius</i>	Following Collinson <i>et al</i> 2008 & MO&L 2004. Wanders to E Mediterranean in small numbers Kirwan <i>et al</i> 2008. We retain <i>intermedius</i> as ssp (under the 75% rule [not the 90% rule] of diagnosable individuals in population), Yésou 2002. English name informal@OSME. Harrison <i>et al</i> 2021 note that breeding distribution of <i>intermedius</i> expanding NE into core <i>fuscus</i> breeding distribution.
321	Baltic Gull {Lesser Black-backed Gull}	<i>Larus fuscus fuscus</i>	Following Collinson <i>et al</i> 2008 & MO&L 2004. Turkey, E Med, migrates to Gulf (not scarce, WRP Bourne pers comm), Israel Perlman & Meyrav 2009, S Arabia - rare to uncommon PM & WV Oman OBL7 , Red Sea, scarce PM S Caspian & Gulf Iran a few WV Khaleghizadeh <i>et al</i> 2017, winters E Africa; passage, winterer Iraq Salim <i>et al</i> 2012. Rare vagrant Kazakh Caspian G&G 2005, which record W&O 2007 remove; no skins or descriptions (one claim from former Kazakh territory), but Finnish-ringed bird found dead 1982 accepted Wassink 2010, 5th record Kyzylkum desert Mar 2017 Wassink 2017. Reported Dec 06 Oman IH pers comm, UAE Jan 07 PH pers comm. Scattered RNBWS reports Red & Arabian Seas 1953-95 perhaps inconclusive, but up to 105 Bay of Suez 1988 not inconceivable. English name informal@OSME; previously popular informal name. NB Taxon <i>fuscus</i> declining sharply, possibly due to <i>intermedius</i> expanding NW into <i>fuscus</i> core breeding distribution Harrison <i>et al</i> 2021.
PT	Heuglin's Gull PT	<i>Larus (fuscus) heuglini</i>	Probably recorded under <i>L. cachinnans</i> , <i>L. armenicus</i> or 'taiyrensis' in past, Yésou 2002. Sangster <i>et al</i> 2007, Collinson <i>et al</i> 2008 note that low levels of gene flow with <i>fuscus</i> still apparent despite ecological separation. Egypt Avib, BE. Pierre Yésou (pers comm) argues a dissenting line, noting there are clearcut phenotypical differences between parapatric Heuglin's Gull and Lesser Black-backed Gull as well as a quite marked ecological segregation, leading to the lack of proven hybridisation, reinforcing the case for speciation. We note both views, but essentially we remain undecided. Liebers <i>et al</i> 2001 found <i>heuglini barabensis</i> & 'taiyrensis' to be very closely related, while Liebers-Helbig <i>et al</i> 2010 documented enough distinctiveness of populations. IOC4.1 omits mention <i>taiyrensis</i> . Van Dijk <i>et al</i> 2011 provide a reasoned framework for recognition of <i>taiyrensis</i> , Liebers-Helbig <i>et al</i> 2010 noting its distinct (if close to <i>heuglini</i>) haplotype.

322	Heuglin's Gull {Lesser Black-backed Gull} (Siberian Gull)	<i>Larus (fuscus/heuglini) heuglini</i>	Harrison <i>et al</i> 2021, noting <i>heuglini</i> has long evolutionary history & thus is more genetically diverse than <i>fuscus</i> , to which it is closely related, suggest that there is intrinsic gene-flow restriction between them: if that restriction be dominant, then the case for <i>L. heuglini</i> as a separate species would be reinforced. MO&L 2004: occurs Kazakhstan, Turkmenistan (K-M&K 2005); PM, WV in Region: N Kyrgyzstan, rare, Ven 2002, Kazakh Caspian & Aral Seas, rare PM Kazakhstan Wassink 2015b, 1st winter record Aqtau, Caspian, 1 Dec 15-09 Jan 16 Wassink 2016b, 2nd record same area Dec 2017 Wassink 2018, Israel coasts uncommon Perlman & Meyrav 2009, Jordan JBRC; <i>heuglini</i> common winterer S Arabia, Gulf (abundant PM & WV Oman OBL7) fairly common PM S Caspian Iran, Fairly common WV Iran Gulf Bushehr & to E Khaleghizadeh <i>et al</i> 2017, Red Sea W India coasts, hence must cross Iraq Salim <i>et al</i> 2012; darker <i>heuglini</i> in Gulf: ' <i>taimyrensis</i> ' (<i>qv</i>) suggested mostly E India coasts (Bourne 1996), but now thought to winter in Pacific van Dijk <i>et al</i> 2011; ' <i>taimyrensis</i> ' × Vega Gull <i>L. vegae</i> hybrids declining phenomenon; Parkin & Knox 2010 note argument of ' <i>taimyrensis</i> ' (<i>qv</i>) as invalid taxon (Yésou 2002), but see van Dijk <i>et al</i> 2011. Migrant Afghanistan R&A 2005. Link <i>L. (c.) barabensis</i> records? Pierre Yésou's view (pers comm): <i>heuglini</i> phenotypically different from neighbouring <i>fuscus</i> ; also various arguments re ' <i>taimyrensis</i> ' (<i>qv</i>) status employ different population sets, but see van Dijk <i>et al</i> 2011. Above DNA conclusions re <i>armenicus</i> dismiss rationale of <i>barabensis/armenicus</i> intergrades (as was suggested WRP Bourne, pers comm). Collinson <i>et al</i> 2008 summary analysis of ssp argument for <i>L. fuscus</i> to include <i>heuglini</i> and <i>barabensis</i> in the present state of knowledge, but see also Dubois 2003.
			NB1 taxon <i>heuglini</i> wanders widely Harrison <i>et al</i> 2021. NB2 Sri Lankan wintering bird geotracked by Field Ornithology Group Sri Lanka Univ of Colombo across Iran, Afghanistan, Turkmenistan & Kazakhstan on N & S headings to and from Arctic Ocean shores of Zapolyarny District (European Russia) & Priuralsky District (Asian Russia), a breeding area 330km in length, just W of the Yamal Peninsula Taej Mundkur <i>in litt</i> FB.
323	Steppe Gull (Baraba Gull) {Lesser Black-backed Gull}	<i>Larus (fuscus/heuglini) barabensis</i> (<i>L. (cachinnans) barabensis</i> has been proposed)	Likely superspecies with <i>L. f. heuglini</i> ? (MO&L 2004). Harrison <i>et al</i> 2021 treat as recently diverged ssp of <i>heuglini</i> , but note its propensity to hybridise with Caspian Gull <i>L. cachinnans</i> , possibly accounting for eastern form of that species. Common PM Kazakhstan Wassink 2015b, who adopts this taxon as ssp of <i>L. cachinnans</i> citing MO&L 2003 (2004?) & Clements 2014. Wintering birds reach S Arabian seas, status there unclear; possibly winters S Iraq Salim <i>et al</i> 2012, those reaching Oman included in OBL7 under Caspian Gull <i>L. cachinnans</i> ; recorded Bandar Abbas area Iran Khaleghizadeh <i>et al</i> 2017. Taxonomy uncertain: while acknowledging DNA case to treat as <i>fuscus</i> ssp (Collinson <i>et al</i> 2008) & recognising the biometric & morphological differences from <i>heuglini</i> (see Kirwan <i>et al</i> 2008) (suggesting either it is a ssp of <i>L. heuglini</i> or is a species in being itself), we're unable to be certain; degree of reproductive isolation unproven, Yésou 2002. Pierre Yésou (pers comm) notes <i>barabensis</i> diagnosable in the field from <i>heuglini</i> , but since they are not parapatric, he guesses they are different species. R&A 2012 map suggests specimens collected just within E&SE Afghanistan.
			NB1 WRP Bourne (pers comm) suspects intergrades with ' <i>taimyrensis</i> ' (<i>qv</i>) & <i>heuglini</i> winter in Gulf, <i>barabensis</i> being dominant winterer lower Gulf between <i>heuglini</i> & <i>cachinnans</i> areas; however, see Dubois 2003. NB2 Those ' <i>cachinnans</i> ' ringed Lake Chany, SW Siberia & recovered E Caspian & Uzbekistan, & those recovered near Chany but ringed in SE Kazakhstan & also attributed to ' <i>cachinnans</i> ', may be <i>barabensis</i> taxon: Veen <i>et al</i> 2005.
324	Taimyr Gull {Lesser Black-backed Gull}	<i>Larus (fuscus/heuglini) taimyrensis</i>	Despite the preponderance of doubt amongst authors writing on large white-headed gulls citing ' <i>taimyrensis</i> ' as an unstable & doubtfully diagnosable hybrid, we consider that van Dijk <i>et al</i> 2011 have provided a sufficiently coherent appraisal of the <i>taimyrensis</i> population & within the same geographical boundaries as that considered by Collinson <i>et al</i> 2008 to render its inclusion here (the data in Liebers-Helbig <i>et al</i> 2010 narrowly support this view). Of particular interest is the support of van Dijk <i>et al</i> 2011 for a Pacific location as the main wintering site (Yellow Sea, Sea of Okhotsk). We therefore suggest (as stated in Scott 2008 & proposed in van Dijk <i>et al</i> 2011) that this taxon is generally an uncommon to rare winterer in the Region. English name informal@OSME
			NB1 Harrison <i>et al</i> 2021 treat ' <i>taimyrensis</i> ' as synonymous with the ' <i>birulai</i> ' claimed clinal form of <i>L. vegae</i> and add its breeding distribution to that of <i>L. vegae</i> , while mapping ' <i>taimyrensis</i> ' separately. NB2 ' <i>taimyrensis</i> ' is genetically close to the <i>fuscus/heuglini</i> group, but is phenotypically representative of the <i>vegae</i> group Collinson <i>et al</i> 2008. NB3 Putative <i>taimyrensis</i> reported & photographed Goa 15 Dec 2015 Mark Newsome <i>in litt</i> , only 200km from the OSME Region Indian Ocean boundary at 15°N 70°E.
		' Sternidae '	Use of Sternidae follows BOU TSC8, Černý & Natale 2021. IOC v2.0 & AOU accepted all changes suggested in Gochfeld & Burger 1996 & Bridge <i>et al</i> 2005. Dutch CSNA Sangster <i>et al</i> 2009 follow suit. However, doing so renders Laridae paraphyletic (Note in IOC9.1) and so we place in single quotation marks. We follow Parkin & Knox 2010 re 'crested terns' being better placed in <i>Thalasseus</i> . IOC v2.2 accepts split of New World Cabot's Tern <i>T. acutiflavus</i> from Sandwich Tern <i>T. sandvicensis</i> Efe <i>et al</i> 2009, as does Sangster <i>et al</i> 2011. Collinson <i>et al</i> 2017 emphasise that the molecular phylogeny of 'orange-billed terns' does not reflect morphology, West African Royal Tern <i>T. maximus abidorsalis</i> being much more closely related to Lesser Crested Tern <i>T. bengalensis</i> & Great Crested Tern <i>T. bergii</i> than to American Royal Terns <i>T.m. maximus</i> , noting that this accuracy not being achievable by the Tobias <i>et al</i> 2010 method that specifically excludes genetic criteria. NB Many tern spp disperse widely in N hemisphere winter WRP Bourne pers comm.
PT	Gull-billed Tern PT	<i>Gelochelidon nilotica (sensu lato)</i> (formerly <i>Sterna nilotica</i>)	Rogers <i>et al</i> 2005 set out a comprehensive ID methodology of differentiating between migrant ssp to Australia <i>affinis</i> & resident <i>macrotarsa</i> , noting that the differences were distinct. Inskipp & Collar 2015 split taxon <i>macrotarsa</i> as Australian Gull-billed Tern iaw del Hoyo & Collar 2014b on Tobias <i>et al</i> 2010 criteria (as does BLDZ), adding modifier 'Common' to remainder. Harrison <i>et al</i> 2021 concur with split, but not with the modifier 'Common'. IOC9.2 opts for 'Australian Tern'. NB ID criteria are well set out in Rogers <i>et al</i> 2015: clear comparisons can be made between wintering <i>nilotica</i> & breeding <i>macrotarsus</i> in NW Australia, particularly at Broome Observatory MB pers obs 2018.
325	Gull-billed Tern (Common Gull-billed Tern)	<i>Gelochelidon nilotica (sensu stricto)</i>	Polytypic. Bridge <i>et al</i> 2005 <i>Mol. Phylogenet. Evol</i> 35 :459-469. Probably only ssp <i>nilotica</i> occurs in Region, <i>affinis</i> , being extralimital SE Asia, <i>aranea</i> , <i>vanrooei</i> , <i>gronvoldi</i> in New World. SB throughout (mostly C) CA & in Afghanistan (R&A 2005), N Gulf coast Salim <i>et al</i> 2012: up to 1000bp Arabia, mostly Kuwait Jennings 2010, year-round presence within Iran Khaleghizadeh <i>et al</i> 2017, common PM & WV Oman OBL7 , bred Lake Qarun Egypt 2013, 2014 Habib 2015, 500 roosting Dec 2017 DB49(1) : 51; increasing numbers breeding in at least 7 colonies Lake Nasser Hering <i>et al</i> 2021, singletons & small flocks between Abu Simbel & Aswan Jun 2022, but only one chick Jens Hering pers comm Jul 2022 : most southerly colonies known, beyond the resident colonies of UAE & Indus coast Pakistan. RB & WV in S, HBW3 Egypt Avib, BE. Tiny population breeds Germany, Denmark Conradt & Ebels 2014: some increase in S Europe populations; no significant changes known from Sahel
326	Caspian Tern	<i>Hydroprogne caspia</i> (formerly <i>Sterna caspia</i> , <i>Hydroprogne tschegra</i>)	Monotypic. Bridge <i>et al</i> 2005. Breeds locally in much of CA, also E Iran, W Afghanistan R&A 2005, Iraq Salim <i>et al</i> 2012, some 500bp In Arabia in Gulf and Red Sea Jennings 2010, common to abundant PM & WV Oman OBL7 , but mostly migrant and winterer; disperses widely to S, HBW3. Some 60 pairs breed on Egyptian Red Sea islands Habib 2021. Adult observed near Abu Simbel in 2022, first June record for Lake Nasser Jens Hering in litt . Fluctuations in breeding populations related to Sahel flood levels; vulnerable to human predation in droughts Zwarts <i>et al</i> 2009, but flexibility in breeding site choice may ameliorate long-term effects. Rueda-Uribe <i>et al</i> 2021 geotrack Baltic-breeding birds on outward and return migration through Turkey, Cyprus and Egypt to & from wintering grounds in Chad and Sudan's lower White Nile; that breeding population also has 4 other migration routes, all much further west. Few of the stopover points enroute are in protected areas.
327	Greater Crested Tern (Swift Tern, Great Crested Tern)	<i>Thalasseus bergii</i> (formerly <i>Sterna bergii</i>)	Polytypic. Bridge <i>et al</i> 2005. Gulf, Red Sea part-resident, most warm shores winter, HBW3, likely mostly ssp <i>velox</i> : perhaps 13 000bp in Arabia, mostly in Gulf, also Oman where abundant resident breeder PM & WV OBL7 , & Red Sea, but present year-round Jennings 2010; one Eilat Jul 2018, another North Beach Eilat Aug 2021, 2 there Nov 2021 Yoav Perlman <i>in litt</i> . 1st breeding record Egypt 20 Jul 97 Castell 1998. Up to 50bp counted amongst large colonies of <i>T. bengalensis</i> Egyptian Red Sea islands 2014-18 Habib 2021. Egypt Avib, BE. (Name reversion IOC2.9)

328	Lesser Crested Tern	<i>Thalasseus bengalensis</i> (formerly <i>Sterna bengalensis</i>)	Polytypic. Bridge <i>et al</i> 2005. Vagrant Turkey (4th record Dec 2004 Kirwan <i>et al</i> 2014), rare but regular Israel spring & summer Kirwan <i>et al</i> 2008; birds possibly from Libyan colony in C Mediterranean, these being ssp <i>emigratus</i> ; 2nd record Lebanon (after 120+ years) Mar 2019 at Chekka Ramadan-Jaradi <i>et al</i> 2019; abundant resident Iran S coast Khuzestan to E Khaleghizadeh <i>et al</i> 2017, 2nd record Jordan Aqaba Aug 2015 JBRC . Iraq, HBW3, but pre-1940s Salim <i>et al</i> 2012. In Arabia, mostly summer breeders (c80 000bp, ssp <i>bengalensis</i>), leaving Red Sea & Gulf for Indian Ocean Jennings 2010, Bahrain-ringed birds recovered as far E as Maldives India, Sri Lanka, Sumatra and Borneo Abdulla Alkaabi in litt Apr 2020 & Socotra Yemen Jan 2021 SG43(1) : 165, <i>contra</i> HBW Alive 2014, who had suggested non-breeding birds moved to the E African coast Kavanagh <i>et al</i> 2017, common to abundant PM & WV Oman OBL7 ; at least 4500bp, a regionally important total, counted on Egyptian Red Sea islands Jul 2018 Habib 2021. Egypt Avib, BE. NB taxon <i>albididorsis</i> split off as West African Crested Tern Chesser <i>et al</i> 2020.
PT	Sandwich Tern PT	<i>Thalasseus sandvicensis</i> (<i>sensu lato</i>)	New World extralimital polytypic Cabot's Tern <i>S. acutiflvida</i> now split Sangster <i>et al</i> 2011
329	Sandwich Tern	<i>Thalasseus sandvicensis</i> (<i>sensu stricto</i>) (formerly <i>Sterna sandvicensis</i>)	Now monotypic. (Bridge <i>et al</i> 2005). Passage migrant Turkey, tiny breeding population Aegean Kirwan <i>et al</i> 2008, rare N Caspian breeder, & migrant Kazakhstan W&O 2007; winters to S also Caspian, Gulf, S Arabia, HBW3; however, has bred 1991 on E Saudi island, & possibly overlooked in other tern spp colonies Jennings 2010; very common PM Gulf Khaleghizadeh <i>et al</i> 2017, abundant PM & WV Oman OBL7 . 1st confirmed breeding (950 nests) Port Fouad Jun 2017 Habib 2018b. Recorded Lake Nasser Egypt on migration Hering <i>et al</i> 2021. Egypt Avib, BE NB1 in split of Cabot's Tern <i>S. acutiflvida</i> , Efe <i>et al</i> 2009, subspecies identity of <i>eurygnathus</i> taxon weak due to slight degree of DNA separation & lack of reproductive isolation of populations. NB2 Johnsen <i>et al</i> 2010 note that Nearctic <i>acutiflvida</i> closer to Nearctic Elegant Tern <i>T. elegans</i> than to Palearctic <i>sandvicensis</i> . NB3 Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.
PT	Little Tern PT	<i>Sternula albifrons</i> (<i>sensu lato</i>)	Split via Bridge <i>et al</i> 2005, Harrison <i>et al</i> 2021. Detailed ID comparison study Mullarney & Campbell 2022.
330	Little Tern	<i>Sternula albifrons</i> (<i>sensu stricto</i>) (formerly <i>Sterna (albifrons) albifrons</i>)	Polytypic. Widespread breeder & PM (ssp <i>albifrons</i>) through N OSME Region (including Afghanistan R&A 2005), <i>sinensis</i> less so further S, in Arabia, a few in Red Sea, but mostly in Gulf (200bp) Jennings 2010, fairly common SV wetlands N Iran Khaleghizadeh <i>et al</i> 2017, uncommon PM & WV Oman OBL7 (also Iraq Salim <i>et al</i> 2012, winters along warm coasts, HBW3. Egypt's Port Said <i>albifrons</i> colonies declining through construction and disturbance Habib 2016c; new colony at Lake Nasser Bull ABC : 93; Norman Dean van Swelms in litt Jan 2019 suggested plumage characteristics of this population (and seemingly as far as Kuwait) it may be a new taxon, for which DNA results await formal publication; Hering <i>et al</i> 2021 do not seem to share this opinion, but they recorded multiple small colonies on tiny, bare islets exposed by seasonal post-rainwater fluctuations; singletons & small flocks between Abu Simbel and Aswan Jun 2022 & one colony with young Jens Hering pers comm Jul 2022 . Egypt Avib, BE. NB Mullarney & Campbell 2022 provide an excellent ID comparison with Saunders' Tern S. saundersi.
331	Saunders' Tern	<i>Linaria cannabina</i> (Carduelis <i>cannabina</i>) Zuccon <i>et al</i> 2012	Monotypic. Breeds Red Sea, Socotran archipelago (c500bp regionally significant: worldwide data deficient Porter & Suleiman 2014), Gulf (c4000bp Jennings 2010), fairly common SV S Iran coast Bushehr to E mostly on small islands Khaleghizadeh <i>et al</i> 2017, common local resident breeder Oman E & SE coasts OBL7 , certainly bred Iraq 19th century Salim <i>et al</i> 2012, winters mostly further S, HBW3, vagrant Israel Perlman & Meyrav 2009, breeding off Egyptian Sinai at Ras Sudr (sandbar) 40km S of Suez Jul 2013 Habib 2014, c50 fledged young 2014 & 2015 Habib 2016b; the population of 80 adults, 50 fledgelings seems an increase Habib 2021. Breeds SE Iran Zarudny 1911 SW Pakistan coasts R&A 2005. Egypt Avib, BE. NB Mullarney & Campbell 2022 provide an excellent ID comparison with Little Tern S. albifrons.
332	Eastern Bridled Tern {Bridled Tern}	<i>Onychoprion [anaethetus] anaethetus</i> (formerly <i>Sterna anaethetus</i>)	Howell & Zufelt provisional split into 2 polytypic spp within a superspecies, Western <i>O.[a.] melanopterus</i> + ssp <i>nelsoni</i> (Caribbean & W Africa) & Eastern nominate + <i>antarcticus</i> (W Pacific & Indian Ocean) Bridge <i>et al</i> 2005. Harrison <i>et al</i> 2021, are slightly more conservative. Taxon <i>antarcticus</i> part-resident Gulf, Red Sea, S Oman, Socotra (c300 000bp) Jennings 2010, probably disperses widely HBW3, but Gulf-ringed birds recovered on NW India coasts Kavanagh <i>et al</i> 2017; fairly common breeding SV offshore islands Oman OBL7 , locally abundant on S Iranian coasts Khaleghizadeh <i>et al</i> 2017, rare visitor both Israeli coasts Perlman & Meyrav 2009. At least 330 nests counted Jul 2018 on all sandy & vegetated fossilised coral Egyptian Red Sea islands Habib 2021. Egypt Avib, BE. Regular large-scale passage Sep off Sri Lanka (van den Berg <i>et al</i> 1982) perhaps part of dispersal: one ringed Nakhiloo Islet Iran Jul 2013 found dead Nago Okinawa Oct 2014 1st confirmed record of such movement DB37(6) : 409..
333	Sooty Tern	<i>Onychoprion fuscatus</i> (formerly <i>O. fuscata</i> , <i>Sterna fuscata</i>)	Bridge <i>et al</i> 2005, Harrison <i>et al</i> 2021. Taxon in Region <i>nubilosus</i> . Probably vagrant Bahrain Skakuj & Stawarczyk 1997, Israel Perlman & Meyrav 2009. Rare breeding SV Oman amongst <i>O. anaethetus</i> colonies OBL7 . Wanders late autumn Iran Scott & Adhami 2006, vagrant Khaleghizadeh <i>et al</i> 2017. Fewer than 30bp, mostly Musandam island Oman although has been recorded occasionally from S Red Sea to Gulf; many past records now thought better attributed to <i>O. anaethetus</i> Jennings 2010.
334	River Tern	<i>Sterna aurantia</i> Vulnerable	Monotypic. Two immatures near Kabul August 1966 Niethammer & Niethammer 1967, sight records NE Afghanistan R&A 2005. Recorded recently SE Caspian (Iran 18 Jan 2005) by WIWO team Foekens & Schlevs 2006, vagrant Iran Khaleghizadeh <i>et al</i> 2017. One record from former USSR, N Caspian 1990? Koblik <i>et al</i> 2006. BLDZ Jul 2020 maps regular residency as far west as Buzi Makola Wildlife Sanctuary, Pakistan, between Pasni & Ormara on the coast, and inland only 80km from Iran at Gishk, but only during and after the rainy season. NB Scattered breeding along Pakistan rivers, but wanders widely winter Roberts 1991.
335	Roseate Tern	<i>Sterna dougallii</i>	Mostly around E & S Oman waters in winter, HBW3, but fairly common summer breeder ssp <i>arideensis</i> (also in Seychelles & Madagascar) offshore islands Oman OBL7 , thought declining Jennings 2010, vagrant Israel Perlman & Meyrav 2009, vagrant UAE Mitchell 2017. Egypt Avib, BE
336	Black-naped Tern	<i>Sterna sumatrana</i>	Polytypic: ssp <i>mathewsi</i> breeds on W Indian Ocean islands H&M4, also on the Lakdashweep archipelago off SW India (08°16'-13°58'N, 71°44'-74°24'E) BLDZ (which also maps the main pelagic area of occurrence as including the OSME Region deep-sea extension). Breeding population in Maldives only 300-350 km from OSME Region deep-ocean easternmost boundary Anderson & Shimal 2020. Likely rare vagrant off Socotra & Arabian Sea coast, including Masirah; numbers may be also subject to displacement at sea by violent tropical storms. 1960 RNBWS report in OSME Region, Daimaniyat Islands at 23:55:0.0N 57:59:0.0E, but old description inadequate; perhaps misidentified, WRP Bourne pers comm. Plausible report Masirah 1970 of small numbers in summer & party of 25 on 28 Aug close inshore Strickland 1978; 1962 Gulf of Aden RNBWS report and 1970 Gulf of Oman report, but none acceptable by current standards. We seek first acceptably-documented observations. Several RNBWS reports S&E of 10:00:00N 61:24:00E (well within deep-ocean extension of OSME Region). May have occurred off Somali E coast Redman <i>et al</i> 2009. Likely vagrant from SW India R&A 2005. NB Mapped HBW3, BLDZ Jul 2015 as occurring in much of S of deep-ocean extension of Region : similarly mapped in Harrison <i>et al</i> 2021 & IUCN Red List 2021.
337	Common Tern	<i>Sterna hirundo</i>	Breeds extensively also PM Turkey Kirwan <i>et al</i> 2008 (ssp <i>hirundo</i>) N Iran Khaleghizadeh <i>et al</i> 2017, in N OSME Region, also Afghanistan R&A 2005 (<i>tibetana</i>), some Iran Scott & Adhami 2006, Iraq Salim <i>et al</i> 2102 (ssp uncertain), winters to S HBW3, 1st Kazakhstan winter record 03 Dec 14 Tentek Delta Almaty Province Wassink 2016b; common PM Uncommon WV, SV Oman OBL7 . Recorded Lake Nasser Egypt on migration Hering <i>et al</i> 2021. Egypt Avib, BE. NB ssp <i>tibetana</i> (all-black bill), recorded Iran Seistan Zarudny 1911 likely migrant from breeding grounds to N & E eq Tibetan plateau.

338	White-cheeked Tern	<i>Sterna repressa</i>	Monotypic. Breeds Kenya & Somali coasts, islands Gulf, Red Sea, Arabian breeders may exceed 75 000bp Jennings 2010, Iran breeders locally abundant on Gulf islands Khaleghizadeh <i>et al</i> 2017, common PM & summer breeder Oman OBL7 , resident N Somalia coast, some near Oman winter, HBW3, rare-very rare visitor Israel coasts Perlman & Meyrav 2009, 2nd breeding record Eilat June 2016 (same location as 2015) DB35(5) : 330, 70+ (2 groups, 3rd-4th records) off Aqaba, Jordan including juveniles) early Sep 2020 JRBC , 7th record 20+ there Aug 2021 JRBC ; common N Yemen coast spring, uncommon autumn Porter & Warr 1985. Irregular breeder Egypt; 270 nests Port Said 2013 DB 36(1) : In Jul 2018 390 nests, a regionally important number, counted on Egyptian Red Sea islands Habib 2021.
339	Arctic Tern	<i>Sterna paradisaea</i>	Monotypic. Non-breeders, 'lost' return migrants, in OSME waters in small numbers, usually well offshore, HBW3, vagrant Turkey Kirwan <i>et al</i> 2008, Kuwait al-Sirhan 2008, 7th for Kuwait at Jahra Pools 30 July 16 KORC , 9th Jahra Jun 2018 KORC , 11th Jul 2019 (4 birds) KORC ; 5th UAE record Jun 2016 EBRC . NB claim in Flint <i>et al</i> 1984 of breeding on Ob N of Kazakhstan rejected (Arend Wassink <i>in litt</i>). Some overland migration along rivers to Caspian?
340	Whiskered Tern	<i>Chlidonias hybrida</i>	Polytypic; ssp <i>hybrida</i> breeds locally in much of N OSME Region, scarce BM W half of Kazakhstan Wassink 2015b, (<i>indica</i> Afghanistan Paludan 1959: now included in <i>hybrida</i>), irregular migrant Kyrgyzstan, Ven 2002, common to abundant SV Iran (Khaleghizadeh <i>et al</i> 2017), Iraq, disperse widely, some remain in Gulf, HBW3; abundant PM & WV Oman OBL7 . Recorded Lake Nasser Egypt on migration Hering <i>et al</i> 2021; large flocks between Aswan & Abu Simbel, not recorded in such numbers in that months Jens Hering in litt Jul 2022 . Egypt Avib, BE
341	White-winged Tern (White-winged Black Tern)	<i>Chlidonias leucopterus</i>	Monotypic. Has similar contiguous breeding area to <i>C.niger</i> common PM Iran Khaleghizadeh <i>et al</i> 2017, breeds high elevation Turkey Hering & Buckley 2013, but scarcer over slightly smaller area; abundant BM, PM Kazakhstan Wassink 2015b, 1st recorded wintering Karakil Lake Mangistau Region Oct 2018-Jan 2019 Wassink <i>et al</i> 2021, 2nd Aktau Dec2021 Wassink 2022 . Summer breeder/resident S Iraq Salim <i>et al</i> 2012, almost regular migrant N Kyrgyzstan, Ven 2002, Afghanistan Reeb 1977. Winters Gulf or disperses further, eg inland Africa HBW3 although has bred Gulf Jennings 2010 eg Kuwait; common PM & WV Oman OBL7 . Recorded Lake Nasser Egypt on migration Hering <i>et al</i> 2021; large flocks June 2022 between Abu Simbel & Aswan, unprecedented for June Jens Hering in litt Jul 2022 . Egypt Avib, BE
342	Black Tern	<i>Chlidonias niger</i>	Polytypic for now. Extralimital 'American Black Tern' <i>C.(n.) surinamensis</i> candidate for future split Harrison <i>et al</i> 2021, which would render Region taxon <i>niger</i> monotypic sp. Largely similar contiguous breeding area to <i>C. leucopterus</i> , in Kazakhstan extending further S, common BM, PM Wassink 2015b; post-breeding often wanders N then W, HBW3, uncommon PM N Iran Khaleghizadeh <i>et al</i> 2017, rare Kuwait al-Sirhan 2008, 8-record vagrant Oman OBL7 , vagrant Afghanistan Sayer & van der Zon 1981, Iraq Salim <i>et al</i> 2012: Recorded Lake Nasser Egypt on migration Hering <i>et al</i> 2021; 2 immatures June 2021 N Lake Nasser, 1st June records Jens Hering in litt Jul 2022 . Egypt Avib, BE. Most winter at sea off W Africa WRP Bourne pers comm.
		Stercorariidae	<p>Single genus Cohen <i>et al</i> 1997 derived from multiple evidence strands: mt & nuclear DNA, enzyme variations, feather lice, behavioural studies & calls (Parkin & Knox 2010). However, BLI remain with 2 genera comprising 4 large & 3 small (jaegers), Harrison <i>et al</i> also remain with 2 genera, but describe 7 spp or incipient species in <i>Catharacta</i>, Howell & Zufelt 2019 also remain with 2 genera, but describe 10 spp or incipient species. Skua ID has always been difficult, even from good images in some cases, but new information and the teasing out of subtler distinctions inform the contents of Howell & Zufelt 2019 and Harrison <i>et al</i> 2021. Černý & Natale 2021 propose resequencing Stercorariidae: we shall await IOC decision.</p> <p>NB1 Sangster <i>et al</i> 2011 support recognition of the following 3 large skuas (plus Chilean <i>S. chilensis</i>), acknowledging that further research is warranted. NB2 South Polar (<i>macconnicki</i>) and particularly Brown (<i>antarcticus</i>), Chilean (<i>chilensis</i>), Tristan (<i>hamiltoni</i>) and Subantarctic (<i>lonnbergi</i>) Skuas have a relative lack of genetic differentiation, due to their relatively recent divergence as a group from Great (<i>skua</i>) and Pomarine (<i>pomarinus</i>) Skuas. Any treatment as separate species must recognise that their mobility and the extent of hybridisation means many individuals are not identifiable by morphology, plumage characters, or at all. NB3 We adopt as a null hypothesis that all large skuas in the Indian Ocean are southern hemisphere species in the absence of strong evidence to the contrary, following the example of Mörzner Bruyns & Voous 1965, where the former's 20 records on voyages in the Indian Ocean 1953-1964 were assumed all to be southern skua species. NB4 Records of Pomarine and Long-tailed Skua moving S past the western Sri Lanka coast during the northern spring Allport <i>et al</i> 2021 suggest that some birds spending the non-breeding season in the OSME deep-ocean area are members of eastern Siberian breeding populations aligning neatly with eBird records & dates much further E. NB5 Harrison <i>et al</i> 2021 tracked from Nearctic & WP breeding grounds Pomarine Skua <i>Stercorarius pomarinus</i> across the Arctic Ocean to the western Pacific Ocean; Arctic (Parasitic) Skua <i>S. parasiticus</i> to the western Atlantic Ocean, and Long-Tailed Skua <i>S. longicaudus</i> to the eastern Atlantic Ocean and western Indian Ocean. NB6 A Long-tailed Skua has been tracked from Nome, Alaska to the western end of the Great Australian Bight, (where the southern Indian Ocean begins: unpublished data); more extensive tracking showing them deeper into the Indian Ocean would not be a surprise Autumn-Lynn Harrison pers comm 5 Jan 2022.</p>
343	South Polar Skua	<i>Stercorarius macconnicki</i> (formerly <i>Catharacta macconnicki</i>)	Monotypic. The only southern skua known to cross regularly into the Northern Hemisphere, mostly reported in S Greenland waters BLDZ map Jul 2021, Harrison <i>et al</i> 2021, but also in the Arabian Sea from S of Ladhkshweep (Laccadive) Islands N past Mumbai Harrison <i>et al</i> 2021 map. This latter non-breeding area likely to cause 'stray' birds in the OSME Region Indian Ocean deep-sea area near Arabian coasts, possibly up to Strait of Hormuz. We follow BOU re <i>Stercorarius</i> Sangster <i>et al</i> 2011, IOC1.6. Antarctic breeder, may winter N Hemisphere, wanders widely Indian Ocean; uncommon OSME Region, HBW3. 2 records Israel, that of 1983 also in Jordanian waters Andrews <i>et al</i> 1999; one reported Jaffa Feb 2012 (SG34(2) ATR). 5th record Jun 2015 Oman OBRC . 3 recorded in deep-ocean OSME area van der Berg <i>et al</i> 1991. Vagrant Israel Perlman & Meyrav 2009 - two records as of Nov 09 Yoav Perlman <i>in litt</i> . Early 'southern skua' records on Indian Ocean cruises: Two March 1956 & 1958 (5 birds), 5 in May 1955-1964 (8 birds), 2 in June 1963 (2 birds), one in July 1959, (1 bird), two in Aug (1954 & 1957, each one bird), one in Oct 1957 (1 bird) & one November 1957 (one bird) Mörzner-Bruyns & Voous 1965, taxon unidentified. One (or next taxon) reported UAE off Mirbah Jan 2018 DB40(2) : 118.
344	Subantarctic Skua {Brown Skua}	<i>Stercorarius [antarcticus] lonnbergi</i> (formerly <i>Catharacta (antarcticus) lonnbergi</i>)	Polytypic as per IOC10.2, nominate (Argentina & Falklands), <i>hamiltoni</i> (Tristan da Cunha & Gough Island of S Atlantic) and <i>lonnbergi</i> of S Antarctic island & Antarctica). However, Howell & Zufelt 2019 extend the breeding distribution of <i>hamiltoni</i> (Tristan Skua/Subtropical Skua Harrison <i>et al</i> 2021) to include Amsterdam and St Paul in S Indian Ocean; they also recognise an undescribed taxon from Chatham Island (NZ), but assign all four as a superspecies. Furthermore, they name the 4 provisional spp as Falkland Skua (nominate), Subtropical Skua (<i>hamiltoni</i>), Subantarctic Skua (<i>lonnbergi</i>) and Chatham Skua. The name Brown Skua would disappear. We follow BOU re <i>Stercorarius</i> . Sangster <i>et al</i> 2011. IOC1.6 agreed English name Brown Skua in Cohen <i>et al</i> 1997 & Andersson 1999; we follow their taxonomy as amended by Howell & Zufelt 2019. Superspecies breeds, winters subantarctic; but which taxa wander to OSME Region? Subtropical <i>hamiltoni</i> may be more inclined from its possible preference for warmer waters, but is hugely outnumbered by Subantarctic <i>lonnbergi</i> , whose juveniles & immatures probably wander for 2 to 3 years. 3-record vagrant Oman OBL7 best left as 'Brown Skua' . <i>S.[a.] lonnbergi</i> has been collected in Somalia Ash 1983 & all Sri Lankan specimens De Silva (1989, 1991) are assessed as Subantarctic Skua <i>S. [a.] lonnbergi</i> and so we <i>pro tem</i> consider this taxon most probably is vagrant to the Region; ssp <i>hamiltoni</i> is discountable until proven otherwise, but it appears in the Hypothetical Section. In Australasia previously treated as <i>S. [C.] (a.) lonnbergi</i> , as in Scott & Adhami 2006, Iran).

			<p>NB1 English name Subantarctic Skua confusingly once was used for all 3 taxa that IOC describe as Brown Skua!</p> <p>NB2 Has reached the Maldives, only 300-350km from easternmost OSME Region deep-ocean area Anderson & Shimal 2020. NB3 3 RNBWS reports, Aug 64 (11:0:0.0N+53:30:0.0E off C Guardafui), Nov 88 Jebel Ali (25:6:0.0N+ 55:12:0.0E) & Sep 90 in the Gulf (25:0:0.0N+54:0:0.0E) are treated just as southern Skua taxa.</p>
345	Great Skua	<i>Stercorarius skua</i> (formerly <i>Catharacta skua</i>)	<p>Monotypic. Predominantly predator of seabirds Harrison <i>et al</i> 2021, but known as opportunistic predator of landbirds, including passage migrants. Vagrant to E Mediterranean, at least one record from the Black Sea off Ukraine Redinov <i>et al</i> 2014. One immature ringing recovery W of Astrakhan (Wernham <i>et al</i> 2001), 6 records Turkey, 4 Israel Kirwan <i>et al</i> 2008; largely confined to Atlantic HBW3. Egypt Avib, BE. Non-Mediterranean OSME records require review to comply with Sangster <i>et al</i> 2004b, Dudley <i>et al</i> 2006 & Sangster <i>et al</i> 2011. See also Arkhipov & Blair 2007. Mörzer Bruyns (3) & Voous (1) 1965 had 4 records of a large skua in the E Mediterranean off Port Said (1959-1964) & concluded these were possibly southern skua species in the absence of confirmed records of Great Skua NB sister taxon to <i>S. pomarinus</i> Cohen <i>et al</i> 1997, Parkin & Knox 2010.</p>
346	Pomarine Skua (Pomarine Jaeger)	<i>Stercorarius pomarinus</i>	<p>Monotypic. Separated from <i>S. skua</i> after <i>S. skua</i> ancestor separated from other large skuas Cohen <i>et al</i> 1997. Regular passage migrant, some perhaps wintering in Gulf, where 3 recorded Jan 2009 Winkel <i>et al</i> 2010, fairly common PM Oman OBL7, off S Arabian coasts, mostly Arabian Sea or wandering further. Extensive overland migration across OSME Region from High-Arctic breeding grounds (HBW3, Arkhipov & Blair 2007 [who document S Caspian records]), probably regular but scarce Turkey Kirwan <i>et al</i> 2008. However, current status 9-record vagrant (since 1907) Kazakhstan Wassink 2015b. Routes uncertain, but loop migration (Berthold 1999) likely. Uncommon migrant both Israeli coasts Perlman & Meyrav 2009. Egypt Avib, BE. Recorded Aral Sea Rogacheva 1992. NB1 Not rare off Pakistan coast, so likely off SE Iran coast Roberts 1991. NB2 sister taxon to <i>S. skua</i> Cohen <i>et al</i> 1997, Parkin & Knox 2010.</p>
347	Arctic Skua {Parasitic Jaeger}	<i>Stercorarius parasiticus</i>	<p>Monotypic. IOC1.6 notes English name parity. Site-faithful species Sharp decline at largest colony at Slettnes naturreservat, Gamvik, N Norway due to decreasing trend of food availability and increased predation due to warming climate change van Bemmeln <i>et al</i> 2021: impact likely mirrored further E, affecting overland migration through W of OSME Region. As for <i>S. pomarinus</i>, but spring migrants partly from Atlantic (BWP3); immature ringing recoveries C Sudan, C Congo (Wernham <i>et al</i> 2002) implying regular overland movements - overland reports Turkey commoner than for previous species Kirwan <i>et al</i> 2008. Once Issyk Kul, Kyrgyzstan Ven 2002, very rare PM Kazakhstan Wassink 2015b, status CA passage migrant Ayé <i>et al</i> 2012. Noted c60°N Yenisey Rogacheva 1992 (see also Arkhipov & Blair 2007 [who document S Caspian records])). Transequatorial migrant (HBW3), but occurs any month Arabian Sea (non-breeders) (Francis Ward <i>in litt</i>). Common migrant both Israeli coasts Perlman & Meyrav 2009, scarce (mostly spring) PM Cyprus CBR11 largest group (11) Mar 2013 CRC, 7th Qatar record Apr 2014 QBRC, fairly common autumn PM Oman OBL7, vagrant Iraq Salim <i>et al</i> 2012, one at Khor Khafka Jun 2016 SG38(2): 231. Egypt Avib, BE. NB Not rare off Pakistan coast, so likely off SE Iran coast Roberts 1991.</p>
348	Long-tailed Skua {Long-tailed Jaeger}	<i>Stercorarius longicaudus</i>	<p>IOC1.6 notes English name parity. Most pelagic of skuas (HBW3): likely <i>longicaudus</i> & not <i>pallascens</i> in Region; vagrant Turkey Kirwan <i>et al</i> 2008, Iran Scott & Adhami 2006, some overland migration through OSME Region occurs (Francis Ward <i>in litt</i>: single 1956 record S Caspian Schüz 1959); no records yet Kazakhstan Arend Wassink <i>in litt</i>. Rare Iran Roselaar & Aliabadian 2010, vagrant Iraq Salim <i>et al</i> 2012, 6-record vagrant Oman OBL7, S Israel coast, very rare N Israel coast Perlman & Meyrav 2009, 4th record Kuwait Jul 2015 KORC, 2nd record Qatar Apr 2013 SG35(2) ATR; 2 Mersin, Turkey Dec 09 DB 32: 138. Egypt Avib, BE</p>
		Alcidae	
349	Razorbill	<i>Alca torda</i>	<p>Harrison <i>et al</i> 2021 map as occurring regularly, if in small numbers in W Mediterranean. Egypt Avib, BE, vagrant Egypt (dead birds 1908-09 winter BinE). WBDB 2008 checklist.</p>
350	Atlantic Puffin	<i>Fratercula arctica</i> Vulnerable	<p>Monotypic. BLDZ Jul 2021, Harrison <i>et al</i> 2021 map as occurring regularly, if in small numbers in W Mediterranean. One found moribund Bustan Haglil beach, Israel N Mediterranean coast Sep 2018 Yoav Perlman <i>in litt</i>. IRDC. BLDZ Jul 2020 map winter occurrence in W Mediterranean almost to Sicily. Kersten <i>et al</i> 2021 identify genetically 4 distinct breeding clusters that do not coincide with the 3 subspecies or their current distribution, philopatry alone being insufficient to explain this result. Although taxonomic reassessment is clearly called for, a number of mostly smaller populations have yet not been sampled & may also show further taxonomic diversity.</p>
		Phaethontidae	<p>Kennedy & Spencer 2004 place <i>P. aethurus</i> as basal to the other 2 spp. Some evidence <i>P. a. indicus</i> may be full species, but very little subsequent molecular data available, but nevertheless Howell & Zufelt 2019 revise this taxon as monotypic full species, part of a superspecies. NB IOC2.0 places Phaethontidae after Phoenicopteridae</p>
Sweetman <i>et al</i> 2017 assess ocean warming trends as likely to impact southern oceans, particularly the Indian Ocean, by steadily reducing both organic food density & oxygen content per decade through to 2100. Such trends would reduce resident and at-sea roosting seabird populations. Human fishing communities would also be badly affected.			
351	Arabian Tropicbird (formerly Red-billed Tropicbird)	<i>Phaethon [aethereus] indicus</i>	<p>Howell & Zufelt 2019 elevate <i>indicus</i> to monotypic full species as part of superspecies. Of the 2 sspp of the split of <i>P. aethurus sensu stricto</i>, extralimital <i>mesonauta</i> most widespread, Pacific E Caribbean, E Atlantic & nominate S Atlantic. Breeds Gulf (including Iraq) Red Sea, S Arabia, HBW1, UAE Aspinall 1996, much scarcer than expected during multiple pelagic surveys UAE Gulf of Oman coast Campbell <i>et al</i> 2017, but transits at height (perhaps overland but no Indian Ocean birds yet fitted with trackers); wanders to Egyptian Red Sea SG33(1); 20 Eilat Israel May 2016 DB38(5): 322, one there Jun 2022 DB44(4): 300: Socotra (Hugh Buck pers comm); 25 at Qarnein Island UAE Nov 2019 SG42(1): 180. Status in Arabia; 1500bp may be underestimate Jennings 2010; fairly common localised breeder Oman OBL7. Off E Iran coast R&A 2005, but thought not to have bred since 1977 Khaleghizadeh <i>et al</i> 2018. Inland record Israel Apr 1981 Murphy & Redman 1983. Taxon <i>indicus</i> informally called Arabian Red-billed Tropicbird by many, but English name adopted iaw Howell & Zufelt 2019. Adults probably move long distances after breeding Jennings 2010. Egypt Avib, BE</p>
352	Red-tailed Tropicbird	<i>Phaethon rubricauda</i>	<p>4 sspp, 2 likely in Region: nominate of Madagascar, Mauritius, Seychelles; <i>westralis</i> of Christmas Island, Cocos Islands W Australian Islands (non-breeders wander Indian Ocean; extralimital <i>roseinctus</i> E Australian waters & <i>melanorhyncus</i> E Pacific. Ranges deep into the Arabian Sea, Nelson 2005, Schreiber & Schreiber 1993. Though vagrant at 13:53:0.0N+42:52:0.0E Dec 60 (PPO Harrison in Bourne & Radford 1962) is only recorded observation, geotracked birds from Madagascar have reached S Arabian coast & Red Sea, & frequent northern Indian Ocean BLISTD Dec 2017.</p>
353	Yellow-billed Tropicbird (Howell & Zufelt 2019) (Formerly White-tailed Tropicbird)	<i>Phaethon lepturus</i>	<p>Howell & Zufelt 2019 provisionally elevate Caribbean <i>catesbyi</i> to species rank. <i>C. lepturus</i> thus has 5 sspp, 3 likely in Region: nominate breeds Madagascar-Cocos Islands & further E, but non-breeders from all populations may wander to Indian Ocean; <i>europae</i> breeds Ile Europa Mozambique Channel; <i>fulvus</i> breeds Indian Ocean Christmas Island; remaining 3 taxa Atlantic or E Pacific residents. Recorded observations: 1st confirmed record OSME deep-ocean area 23 May 1964 6.75°N, 55° Gill 1967: 3 birds at 10:0:0.0N, 60:42:0.0E Jan 88 (MG Finn in Bourne 1989) & one in E of deep-ocean area at 20:30:0.0N+64:0:0.0E Nov 89 (B Grandin in <i>HMS Cheshire</i> 1991). One record 9°51'N, 66°44'E van den Berg <i>et al</i> 1991. BLISTD Dec 2017: geotracked birds from Seychelles colonies cover entire OSME Region deep-sea area, some close to S Arabian coast & to SE-most Iranian coast. Redman <i>et al</i> 2009 map provisionally offshore to c 7°N off Somalia. Humeau <i>et al</i> 2020 have determined the genetic structure of all taxa under White-tailed Tropicbird; their conclusions largely reinforce the assumptions of Howell & Zufelt 2019, although there was no significant degree of genetic evidence to support the 3 sspp <i>lepturus</i>, <i>fulvus</i> & <i>dorothea</i> from the small sample sizes available. NB Any very small individual seen in OSME Region waters could be vagrant <i>dorothea</i>.</p>
		Gaviidae	

354	Red-throated Diver {Red-throated Loon}	<i>Gavia stellata</i>	Monotypic. A few might breed as far S as northernmost Kazakhstan (Rare passage W&O 2007) but no breeding records : one on E Caspian coast Mangystau Bay Oct 2020 SG43(1) : 175, one Ural River Atyrau Nov 2021 SG44(1) : 241.; wintering populations S Caspian, Black Seas, HBW1, WV Uzbekistan Koblik & Arkhipov 2014, likely uncommon WV Turkey Kirwan <i>et al</i> 2014, one on İğneada Black Sea coast Feb 2022, European Turkey Çağan Abbasoğlu in litt Birding Turkey . Vagrant Israel Perlman & Meyrav 2009, Iran Mitchell 2017. Possible 1st for Cyprus Apr 2018 Paphos DB40(3) : 182. Vagrants to NW Pakistan & NW Indian plains probaby crossed Afghanistan R&A 2012. Ecvot Avib. BE
355	Black-throated Diver (Arctic Loon) {Black-throated Loon}	<i>Gavia arctica</i>	2 ssp, nominate wholly Palearctic breeder, <i>viridigularis</i> extralimital Siberia R Lena E to W Alaska. Breeds N Kazakhstan (rare N&E Kazakhstan Wassink 2015b), winters Caspian, Black Seas, HBW1, c30 İğneada Black Sea Coast European Turkey Feb 2022 Çağan Abbasoğlu in litt Birding Turkey . Rare Bujagh (Bojag) NP, Gilan, Iran Ashoori 2018b, WV Uzbekistan Koblik & Arkhipov 2014; once bred Issyk Kul, NE Kyrgyzstan, Ven 2002. Rare winter E Med Perlman & Meyrav 2009, 1 rescued Haifa Nov 2017 Yoav Perlman <i>in litt</i> ; one found Jan 2009 Gulf Winkel <i>et al</i> 2010. 1st for Kuwait at Jahra Jan 2019 KORC . 2nd for Cyprus imaged Spiros Beach Mar 2022 by Antonis Konis: Jane Stylianou in litt . Vagrants to NW Pakistan & NW Indian plains probaby crossed Afghanistan R&A 2012. NB Separated from Pacific Loon <i>G. pacifica</i> Knox <i>et al</i> 2008.
356	Great Northern Diver (Great Northern Loon) {Common Loon}	<i>Gavia immer</i>	Monotypic. WV in W OSME Region, HBW1, sporadic WV Georgia Koblik & Arkhipov 2014, vagrant Turkey Mitchell 2017.
357	White-billed Diver {Yellow-billed Loon}	<i>Gavia adamsii</i>	Monotypic. Sole record: vagrant North Ossetia at 43°15'N, 44°16'E (Kazakov 2004, Komarov 2002a, 2002b). Two nearby Bulgarian records 1992, 2016, latter at 42° 36'N, 23° 46'E, at 235 & 170km respectively from OSME Region, Ivanov <i>et al</i> 2021, one at Navodari, Constanmta, Romania Jan-Feb 2022 DB44(2) : 150.

Sweetman *et al* 2017 assess ocean warming trends as likely to impact southern oceans, particularly the Indian Ocean, by steadily reducing both organic food density & oygen content per decade through to 2100. Such trends would reduce resident and at-sea roosting seabird populations. Human fishing communities would also be badly affected.

		Diomedeidae	Parent Taxon aspects abound within this family, but extent disputed. In any case, record below has insufficient data to distinguish lowest-level taxon – here guided by caution of Tickell 2000. Previously resequenced to follow Oceanitidae IOC5.1, Hackett <i>et al</i> 2008, but Prum <i>et al</i> 2015 placed ahead of Storm Petrels and Shearwaters. NB1 Dec 2021 preprint of Cuevas-Caballé <i>et al</i> 2022 supports recent genomic-based hypotheses in which albatrosses (Diomedeidae) are sister to the rest of Procellariiformes , storm petrels are paraphyletic and diving petrels are included within Procellariidae . NB2 BL 2008, Onley & Scofield 2007, IOC v2.3 separate <i>cauta</i> from <i>eremita</i> (Chatham Albatross) and <i>salvini</i> (Salvin's). Some (eg BLDZ) regard each taxon as valid species.
358	'Tasmanian Shy Albatross' {Shy Albatross}	<i>Thalassarche cauta sensu stricto</i> (≡ <i>T. c. cauta</i>)	H&M4 note that taxa <i>eremita</i> & <i>salvini</i> together may merit separation from <i>T. cauta</i> , but retain all in <i>sensu lato</i> under 'White-capped Albatross'. IOC4.4 split to 3 species: Shy Albatross <i>T. cauta sensu stricto</i> , with 2 ssp, nominate & <i>steadi</i> ; monotypic Chatham Albatross <i>T. eremita</i> breeding E off New Zealand; monotypic Salvins' Albatross <i>T. salvini</i> , also S of New Zealand. Unfortunately H&M4 taxa distributions differ considerably. IOC cite <i>T. cauta s.n.</i> non-breeding range as widespread in Indian Ocean, & <i>T. salvini</i> similarly in Southern Ocean. We surmise that the former is more likely in OSME Region. Identified as sub-adult <i>T. c. cauta</i> (Meeth & Meeth 1988) Sep 86 at 11:50:0.0N+51:35:0.0E (off Cape Guardafui). – WRP Bourne pers comm. In : Meeth & Meeth 1988: one <i>Diomedea c. cauta</i> noted Nov 86 off Mombasa, citing GR Cunningham-van Someren <i>Bull. Brit. Orn Cl.</i> 108 : 18-19, another 20 Feb 81 seen Gulf of Aqaba found dead 15 days later, citing MC Jennings <i>Saudi Arabia Nat. Hist. Soc J.</i> 2(4) :14-17. Single vagrant 1986 33km off Ras Casey Somalia Redman <i>et al</i> 2009. <i>Thalassarche sp (Diomedea sp in 2000)</i> Oman Oct 2000 OBL7 . Claimed Egypt Avib, BE. NB1 The previous lack of consensus on visual separation of ssp <i>cauta</i> (Tasmanian Albatross) from <i>steadi</i> (White-capped) is partially resolved in Menkhurst <i>et al</i> 2017, wherein adult <i>cauta</i> usually has a pale to strong yellow wash to the upper mandible. NB2 'Status of albatross taxa' far from settled, HBW1. English name from cautionary checklist in Tickell 2000 App1, Onley & Scofield 2007 declining to provide one.
PT	Storm Petrel PT	Oceanitidae & Hydrobatidae genera PT 1. <i>Oceanites</i> PT 2. <i>Hydrobates</i> PT	Hackett <i>et al</i> 2008 showed that Oceanitidae (the 'Southern Storm Petrels') are not sister to Hydrobatidae (the 'Northern Storm Petrels'). The latter now includes the extralimital Markham's Storm Petrel <i>H. furcatus sensu lato</i> . However, since as <i>O. furcata</i> it was the type species of <i>Oceanodroma</i> , one solution would be to place all <i>Hydrobates</i> species bar 2 (in the ORL preferred taxonomy: <i>furcatus</i> , <i>pelagicus</i> , <i>melitensis</i>) into 3 other genera: <i>Halobata</i> , <i>Halocyptena</i> & <i>Cymochorea</i> . A further complication is that <i>H. furcatus sl</i> is now itself split into Fork-tailed Storm Petrel <i>H. furcatus sensu stricto</i> and Markham's Storm Petrel <i>H. markhami</i> (Howell & Zufelt 2019) (<i>Cymochorea markhami</i> by John Boyd). Now Penhallurick & Wink 2004, but using only a single gene, did conclude that a total of 4 genera was indicated, supporting earlier work by Nunn & Stanley 1998. Sausner <i>et al</i> 2016 researching eastern Pacific storm petrels combined cyt b genetic analysis with statistical analyses of physical characters and behaviour of 'small' and 'large' storm petrel spp found strong correlation between the 2 methods. <i>Pro tem</i> , we retain Hydrobatidae as unsplit pending more widely-applicable genetic research using a suite of techniques. We note that John Boyd (Taxonomy in Flux http://jboyd.net/Taxo/) & Howell & Zufelt 2019 support the revision of Hydrobatidae & we have annotated each applicable entry accordingly.
		Oceanitidae	IOC5.1 places these species in new family Oceanitidae , not sister taxa to Hydrobatidae (congruent with Dec 2021 preprint of Cuevas-Caballé <i>et al</i> 2022) Hackett <i>et al</i> 2008, & resequences 3 other seabird families (see below).
359	Wilson's Storm Petrel	<i>Oceanites oceanicus</i>	Howell & Zufelt 2019 provisionally recognise several species within the <i>Oceanites</i> complex (<i>galapagoensis/lowei</i> Lowe's, <i>gracilis</i> Elliot's, <i>chilensis</i> Fuegian, <i>pincoyae</i> Pincoya), but apart from <i>O.o. oceanicus</i> , none are at all likely in the Indian Ocean of OSME Region. 2spp, both in all main oceans, nominate & <i>exasperatus</i> , latter breeding much further S Antarctic Region. Ubiquitous ocean wanderer, HBW1, in Region mostly Arabian Sea Porter & Aspinall 2010, vagrant Israel Perlman & Meyrav 2009, 3rd record at Eilat 12 Sep 16 IRDC , 4th & 5th off Eilat Jul & Sep 2020 SG43(1) : 173; common 20km off UAE Gulf of Oman coast Campbell <i>et al</i> 2017, fairly common SV Oman OBL7 , eg 900 off Masirah Sep 2016 SG39(1)ATR . Off E Iran coast (wintering Zarudny 1911) R&A 2005 & vagrant Iran, last recorded 2007 Khaleghizadeh <i>et al</i> 2017; Bab-el-Mandab Ash & Atkins 2009, Saudi Arabia, Jordan Mitchell 2017. Egypt Avib, BE. Heavy passage Cormorins Phillips 1950, Sri Lanka Sep van den Berg <i>et al</i> 1982b possibly typical.
360	Australian Storm Petrel (White-faced Storm Petrel, Frigate Petrel)	<i>Pelagodroma [marina] dulciae</i>	Howell & Zufelt 2019 provisionally recognise 8 taxa & 6spp in this complex; only <i>dulciae</i> likely to occur in Region from SW Australia island population. Regular off S Arabia, HBW1; Bourne 1960, one examined in hand May 1960 at 8.7°N, 73° Bailey & Bourne 1963, Prasad 2003. Vagrant Oman 2 records OBL7.7 , 3rd Jun 2017 Al-Hanniyah island OBRC . English name from Howell & Zufelt 2019.
PT	<i>Fregetta</i> PT	Fregetta species group	The opaque and confusing <i>Fregetta</i> phylogeny has been clarified considerably by Bretagnolle <i>et al</i> 2022 in the extralimital establishment of the species status of New Caledonian Storm Petrel <i>F. lineata</i> . Through Multivariate (Principal Component and Discriminant) Analyses of specimens, and through revisiting the specimens used in previous genetic analyses, they confirmed that there is consensus that the four <i>Fregetta</i> Storm Petrel taxa (White-bellied <i>F. grallaria</i> , Black-bellied <i>F. tropica</i> , New Caledonian <i>F. lineata</i> and New Zealand <i>F. maoriana</i>) form a monophyletic clade, based on mtDNA and nuclear DNA, albeit a single gene in both cases.
361	Inaccessible Storm Petrel (White-bellied Storm Petrel)	<i>Fregetta [grallaria] 'melanoleuca'</i> (May prove to be a variant of <i>F.[tropica] leucogaster</i> Gough Island Storm Petrel, but taxonomy is vexed Howell & Zufelt 2019)	Howell & Zufelt 2019 provisionally recognise 6 taxa as spp in this complex, including <i>F. tropica</i> below split into 2 spp, all in a superspecies.. Likeliest taxon in Region is ' <i>melanoleuca</i> ' from Ile St Paul & Ile Amsterdam populations (Not from Gough Island in the South Atlantic: the population from Inaccessible Island in the South Atlantic is thought unlikely to occur in OSME Region waters). Rare vagrant to S OSME Region coasts, HBW1. Earliest in-hand examination Indian Ocean at c08°N, 72°E, SE of Region 9 Sep 1960 Bailey & Bourne 1963; Redman <i>et al</i> 2009 refer to two 1969 records off Socotra: 4th Oman record June 2017 Al-Hallaniyah Island OBRC . Austral WV to sub-equator Indian Ocean islands Sinclair & Lagrand 2013.

			<p>NB1 The account of the superspecies of 6 taxa provisionally proposed by Howell & Zúfelt 2019 should be read with great care. NB2 Visual separation this taxon essential from white-bellied individuals of next taxon below Bourne 2000 (may hybridise WRP Bourne pers comm), which concern apparent in Prasad 2003: this sp has a dark-bellied morph Menkhurst <i>et al</i> 2017; Howell & Zúfelt 2019 clarify these points to a degree. NB3 The findings of Bretagnolle <i>et al</i> 2022 do not address the ID and status of '<i>melanoleuca</i>', but the images therein provide very useful ID characteristics.</p>
362	Black-bellied Storm Petrel	<i>Fregetta tropica</i>	<p>Howell & Zúfelt recognise this taxon as a polytypic species in the <i>grallaria/tropica</i> complex. <i>F. tropica</i> vastly outnumbers '<i>melanoleuca</i>' (See above) of Ile St Paul & Ile Amsterdam & breeds on many circumpolar Antarctic islands. Regular off S Arabia, HBW1; vagrant (3 records of 6 birds) Oman OBL7 OBRRC: One examined in hand Sep 1960 at 8.05°N, 72.5°E Bailey & Bourne 1963. Many earlier records attributed to other spp likely this taxon (may hybridise with previous taxon Bourne 2000) WRP Bourne pers comm; Prasad 2003 appropriately cautious. However, 1964 record (Redman <i>et al</i> 2009) off Socotra is supported Kirwan 1998: 2007 record (Redman <i>et al</i> 2009) probably valid (Details not known to OSME). Austral WV to sub-equator Indian Ocean islands Sinclair & Lagrand 2013.</p> <p>NB1 This sp is thought to have a pale-bellied form, whether a morph or not was uncertain, but it may be part of a <i>F. grallaria</i> population, given Howell & Zúfelt 2019 provisional taxonomy; geographic distribution also unknown, but no confirmed records of this form yet in Region.</p> <p>NB2 Ausem <i>et al</i> 2021 in modelling data from stable-isotope ratio analyses of feather growth predicted a high probability of origin of that growth along the south coast of Arabia up to the outer Gulf of Oman.</p> <p>NB3 Ausem <i>et al</i> 2021 in modelling data from stable-isotope ratio analyses of feather constituency predicted the highest chlorophyll-<i>a</i> concentration area in the seas around Socotra.</p>
		Hydrobatidae	<p>H&M4 resequences families, genera & within genera; we apply IOC5.1 resequencing, a reduced Hydrobatidae (new genus <i>Oceanitidae</i> not sister taxa, congruent with Dec 2021 preprint of Cuevas-Caballé <i>et al</i> 2022) Hackett <i>et al</i> 2008: both follow <i>Diomedeidae</i> Prum <i>et al</i> 2015. NB Of Wallace <i>et al</i> 2017's 4 Clades, Clade 2 is wholly extralimital (Black Storm Petrel <i>H. melania</i> [E Pacific], Markham's Storm Petrel <i>H. markhami</i> [E Pacific], Least Storm Petrel <i>H. microsoma</i> [NE Pacific] & Wedge-rumped Storm Petrel <i>H. tethys</i> [E Pacific])</p>
Clade 4 of Wallace <i>et al</i> 2017 (Includes extralimital Fork-tailed Storm Petrel <i>H. furcatus</i> [N Pacific])			
PT	European Storm Petrel PT	<i>Hydrobates pelagicus</i>	<p>Re PT, Robb & Mullaney 2008 suggest split of Mediterranean Storm Petrel <i>H. melitensis</i> on basis of voice differentiation, heavier bill, breeding timing differences and preponderance of blackish rather than brownish feathering. Howell & Zúfelt 2019 support this split to the extent of treating as superspecies. IOC4.4, H&M4 unchanged, lack of voice analysis; further evidence needed. NB <i>melitensis</i> probably has reached Region</p>
363	European Storm Petrel (British Storm Petrel)	<i>Hydrobates [pelagicus] pelagicus</i>	<p>Monotypic if split. Regular in E Mediterranean, HBW1, accidental Cyprus Flint & Stewart 1992, vagrant Israel Perlman & Meyrav 2009 6th record Oct 2016 Haifa IRDC, likely occurs Turkish waters. Up to 2012, all records credited as 'European Storm Petrel' taxon <i>pelagicus</i>; likely majority of this taxon until proven otherwise. Vagrant Georgia & Krasnodar Krai, Russia Black Sea coasts Koblik & Arkhipov 2014, Egypt Avib, BE. NB Early records of this species in the Red Sea or Arabian Sea likely attributable to Wilson's Storm Petrel <i>Oceanites oceanicus</i>, as stated forcibly in Gibson-Hill 1948.</p>
364	Mediterranean Storm Petrel	<i>Hydrobates [pelagicus] melitensis</i>	<p>Monotypic if split. Robb & Mullaney 2008 concede that ID difficulties considerable unless bird in hand or found on beach, essentially making this a cryptic species/taxon. However, it does display sexual dichromatism Albores-Barajas <i>et al</i> 2010. Matović <i>et al</i> 2017 suggested that cyclic weather oscillations in Mediterranean likely to favour breeders from W Med spending non-breeding period in E Med. Lago <i>et al</i> 2019 datalogged Malta breeders, but all records from 9 birds in non-breeding period were from W Med or N Atlantic. Taxon known to breed as far E as 24°E, Evvoia in Aegean, making occurrence in OSME Region highly probable; we assume that some Turkish vagrancy records (Kirwan 2008, Kirwan <i>et al</i> 2014) & Israeli records (eg Shirihi 1999) are this taxon. Kirwan 2008 remained unconvinced by proposed split; accepted by DB 2009 & under review by IOC. However, when Hémery & Elbéé 1985, Massa & Catalisano 1986a, 1986b, Bretagnolle 1998, Cagnon <i>et al</i> 2004, Robb <i>et al</i> 2008 & Parkin & Knox 2010 are taken together, the case for separate treatment is reasonable; curiously, <i>melitensis</i> not mentioned Svensson <i>et al</i> 2009. NB1 proven to wander to Atlantic Robb & Mullaney 2008, Lago <i>et al</i> 2019. NB2 Principal diet in breeding season in Mediterranean is small fish caught 10m down, unlike krill for Atlantic taxa: breeds (6000p) in caves (many viewable on Google Street-view photos) on Marettimo Island (W of Sicily) Albores-Barajas <i>et al</i> 2011.</p>
Clade 1 of Wallace <i>et al</i> 2017 (Includes Monteiro's Storm Petrel <i>H. monteiroi</i> [Azores] & Cape Verde Storm Petrel <i>H. jabejabe</i> [Cape Verde Islands]). NB IOC11.2 finally proposes subsuming <i>Oceanodroma</i> in <i>Hydrobates</i> , NB The ORL aligns with Wallace <i>et al</i> 2017 for sequencing <i>pro tem</i> , not IOC 11.2.			
PT	Band-rumped Storm Petrel PT (Madeiran or Harcourt's Petrel)	<i>Hydrobates castro (sensu lato)</i> (Wallace <i>et al</i> 2017; originally <i>Oceanodroma castro</i>)	<p>Original Parent Taxon split from Madeiran Storm Petrel <i>O. castro sensu lato</i> covered smaller (northern hemisphere hot-season breeder) Monteiro's Storm Petrel <i>O.[c.] monteiroi</i> Bolton <i>et al</i> 2008, IOC v2.3 (probably extralimital). Second Parent Taxon split (IOC2.8) of Atlantic/Band-Rumped Storm Petrel <i>O. castro sensu stricto</i> covered two extralimital taxa, Cape Verde Storm Petrel <i>O. jabejabe</i> (IOC v2.3) & Grant's Petrel <i>O. sp novo</i> (IOC proposal: as yet nondescript); Robb & Mullaney 2008 separated by distinct voices and by different (hot/cool season) breeding periods, supported by Sangster <i>et al</i> 2012. Wallace <i>et al</i> 2017 provide data to support H&M4 subsuming <i>Oceanodroma</i> in <i>Hydrobates</i> NB The allochronic breeding cycles of these taxa mean that adult seasonal plumage wrt time of year of sightings vital for assigning species identity. Curious that Svensson <i>et al</i> 2009 omitted mention of any putative split, yet book is dedicated to the eponymous Grant's memory.</p>
365	Band-rumped Storm Petrel (Madeiran or Harcourt's Petrel)	<i>Hydrobates castro (sensu stricto)</i> (Formerly <i>Oceanodroma [castro] castro</i>) May move to <i>Thalobata</i> (Penhallurick & Wink 2004, Howell & Zúfelt 2019). May be part of a superspecies with two as yet unaccepted S Atlantic taxa.	<p>Monotypic as per IOC10.2. However, Howell & Zúfelt recognise taxon <i>helena</i> (St Helena) and an undescribed taxon from São Tomé and Príncipe as part of a superspecies; either may be vagrant in the OSME Region seas. Wanderer to Gulf of Aqaba Porter & Aspinall 2010 (E Mediterranean?) vagrant Israel Perlman & Meyrav 2009, possibly also to S Arabian coasts, HBW1. Actual taxon identity of old Region records now limited to PT, but <i>pro tem</i> the presence of any of the other three in the Region considered highly unlikely. Taylor <i>et al</i> 2019 suggests deconstruction of taxon into several species on basis of song differences and allochronic breeding in some locations. Any birds in E Mediterranean likely taxon <i>castro</i> (North Atlantic) from Portuguese Berlengas, Desertas & Selvagem Islands, or Spanish Canaries. Those encountered Aqaba, Red Sea or S Arabian coasts likely from cryptic allochronic Ascension/St Helena (<i>castro</i> South Atlantic) populations: the limited acoustic data so far does not conflict with close genetic status of allochronic populations, suggesting allochronicity is relatively recent; as found elsewhere, seasonal current flow and water temperature differences probably indicate that the feeding ground locations differ between the hot and cool season breeders. There is evidence of subtle morphological differences between allochronic populations.</p>
Clade 3 of Wallace <i>et al</i> 2017 (Includes Tristram's Storm Petrel <i>H. tristrami</i> [NW Pacific], Ashy Storm Petrel <i>H. homochroa</i> [NE Pacific] & Hornby's Storm Petrel <i>H. hornbyi</i> [SE Pacific]). NB IOC11.2 finally proposes subsuming <i>Oceanodroma</i> in <i>Hydrobates</i> .			
366	Swinhoe's Storm Petrel	<i>Hydrobates monorhis</i> (Formerly <i>Oceanodroma monorhis</i>) May move to <i>Cymnochoera</i> (Penhallurick & Wink 2004, Howell & Zúfelt 2019)	<p>Monotypic. Oman small numbers Gulf & S coast (14 Oman 1997-2006) mainly Aug-Nov (IH in litt) two records, off Somalia & Djibouti Redman <i>et al</i> 2009, rare, semi-regular deep water off Eilat (Up to 5 Sep 2021 Yoav Perlman in litt), 10 records accepted Mar 2020 IRDC 7th record UAE Jun 2016 SG38(2): 237, 10th Sep 2016 EBRC, status likely present most years: very uncommon off UAE Gulf of Oman coast, mostly 30+ kmm offshore (multiple pelagic surveys) Campbell <i>et al</i> 2017. One specimen 15.47N, 52.25E Bailey 1966. Atlantic wanderers also possible E Mediterranean, HBW1. Rare but increasing Oman OBL7. NB Subsequent to 1st Oman record of Matsudaira's Storm Petrel <i>H. matsudairae</i> & recent UAE pelagic surveys finding 'dark-rumped petrel sp', EBRC has reviewed all records of Swinhoe's Storm Petrel <i>H. monorhis</i> & deleted those that could not safely distinguish between the two spp Campbell <i>et al</i> 2017.</p>

367	Leach's Storm Petrel	<i>Hydrobates leucorhous</i> (Formerly <i>H. leucorhoa</i>) May move to <i>Cymnochorea</i> , which would require a return to species name <i>leucorroha</i> (Penhallurick & Wink 2004, Howell & Zufelt 2019) Vulnerable	2 spp, nominate & <i>chapmani</i> (extralimital San Benito Island Pacific W Mexico), most likely nominate wanderer to E Mediterranean, HBW1, Gulf of Aqaba where rare Israel Perlman & Meyrav 2009 Porter & Aspinall 2010, but 40 reported Haifa Feb 2012, one off Ashkelon Feb 2021 Yoav Perlman <i>in litt</i> ; few records Egypt's Mediterranean coast Goodman & Meininger 1989. UAE (Gulf) & Indian Ocean Laphorne <i>et al</i> 1970, 2nd record 60km off Kalba May 2018 SG40(2) : 207. One moribund Sharjah airfield (UAE) Jun 1969 (Bundy & Warr 1979); one photographed off Fujairah May 2018 Campbell & Smiles 2019b. These records may suggest that map in Harrison <i>et al</i> 2021 should include the northern Indian Ocean. Nearest known breeding populations New Brunswick & Newfoundland in NW Atlantic, & N Japan in NW Pacific BLDZ Jul 2019, but Atlantic birds mapped as passing Cape Agulhas just into S Indian Ocean. AOU Classification Committee 2016 erected 2 former ssp to full sp status, <i>socorroensis</i> Townsend's Storm Petrel & <i>cheimomnestes</i> , Ainsley's Storm Petrel & confirmed genetically by Taylor <i>et al</i> 2017, supported by Howell & Zufelt 2019; these two species appear to be allochronic on Guadeloupe Island, Pacific W Mexico,. Egypt Avib, BE. NB Scientific name follows HBW Alive/BLI
368	Matsudaira's Storm Petrel	<i>Hydrobates matsudairae</i> (Formerly <i>Oceanodroma matsudairae</i>) May move to <i>Halocyptena</i> (Penhallurick & Wink 2004, Howell & Zufelt 2019) Vulnerable	Monotypic. One record Oman OBL7.6 . Species range in BL Maritime IBA e-atlas shows deep-ocean occurrence in Region below 12°N. Harrison <i>et al</i> 2021 map as occurring to Oman coast & in much of OSME Region deep-ocean area. Considered quite common equatorial western Indian Ocean 1963-5 Bailey <i>et al</i> 1968, whose lat/long list has 4 records in Region, 12 of 40 close, but their map shows 18 within the Region! Several recorded between 7.2°N & equator 1964 Gill 1967. Three RNBWS reports, all N of 10:00:00N; one (Mar 64) in E half of deep-ocean OSME Region, the others (10 birds, Sep 87) on successive days in E at 68-70E. Onley & Scofield 2007 map to 10°N off Somalia. 14 recorded together northernmost Seychelles 2014 <i>Bull ABC 22(1)</i> p109. Image off Eilat, Gulf of Aqaba Aug 2021 may be 1st for Israel DB43(5) : 389. Considered regular off Chagos Carr 2015, Praveen <i>et al</i> 2019. May share wintering grounds with Jouanin's Petrel <i>Bulweria fallax</i> – full scrutiny of reports and records essential, WRP Bourne pers comm. IOC3.1 locates non-breeding western distribution as 'C Indian Ocean'.
		Procellariidae	Change to <i>Ardenna</i> for some <i>Puffinus</i> originally argued in Christidis & Boles 2008 now generally accepted. H&M4 adopts some changes to <i>Ardenna</i> , & resequences families, genera & within genera, which IOC5.4 largely follows, Procellariidae to follow a reduced Hydrobatidae Hackett <i>et al</i> 2008, congruent with Dec 2021 preprint of Cuevas-Caballé et al 2022 . NB Indian Ocean seabird occurrence often correlates with phytoplankton concentrations (intensities vary seasonally), whose locations also affected by variation in annual pattern of ocean currents, hence birds sometimes absent, but may also occur unexpectedly. Howell & Zufelt 2019 boldly & plausibly interpret the latest, if still fragmentary, data for many spp.
369	Cape Petrel (Formerly Cape Pigeon, Pintado Petrel)	<i>Daption capense</i>	2 sspp, warmer-water <i>australe</i> the likelier to occur. One record Israel AERCTAC 2011 WP List. Ship-follower, often for long distances. Occurrence in Region likely partly dependent on food availability (often seasonal in N Indian Ocean), or on unusual weather events (eg errant Inter-Tropical Convergence Zone) driving southern ocean species N. Individuals do wander widely above the 25°S normal northern limit in Indian Ocean, HBW1. One RNBWS report 18°N, 57.7°E S of Ras Madraka Oman Bourne1988a. One recorded at c 2°N off S Somalia Redman <i>et al</i> 2009. NB1 In the Atlantic, it has wandered as far north as Norway Harrison <i>et al</i> 2021 & Gibraltar (36°N) Jun 1979 Holloway 1990, but no records known since, Robert Perez pers comm; it has also reached Italy Harrison <i>et al</i> 2021. NB2 WRP Bourne suggested all past reports in Region are inadequate; also old records of birds in Indian Ocean northern hemisphere not documented well enough to rule out subsequent release of birds found stranded aboard ships.
370	Atlantic Petrel (Formerly Schlegel's Petrel)	<i>Pterodroma incerta</i> Endangered	Monotypic. Indian Ocean current/wind patterns likelier to produce other species than this S Atlantic specialist, HBW1. Rare in Indian Ocean (perhaps less so in S Indian Ocean) Jun-Dec Howell & Zufelt 2019, vagrant Eilat Haas 2012. (same bird Jordan Mitchell 2017), van der Schot 1989, Perlman & Meyrav 2009, Onley & Scofield 2007, also via WRP Bourne pers comm. One off Djibouti 1985 Redman <i>et al</i> 2009.
371	Soft-plumaged Petrel	<i>Pterodroma mollis</i>	Monotypic, although Onley & Scofield 2007 list 2 ssp, that in Indian Ocean attributed as <i>P.m. dubia</i> , but suggested as simply a colour-phase WRP Bourne pers comm. Immatures thought to wander widely in Indian Ocean, HBW1. Eilat record Shirihi 1999, Haas 2012; vagrant Israel Perlman & Meyrav 2009. Howell & Zufelt map regular occurrence as reaching southernmost part of OSME Region deep-ocean area.
PT	Fea's Petrel PT	<i>Pterodroma feae</i>	Split of Desertas Petrel <i>P. [feae] deserta</i> from Parent Taxon , as an essentially cryptic species differing in voice (Robb & Magnus 2008) but little in morphology from Fea's (Cape Verde) Petrel <i>P.[f.] feae</i> Jésus <i>et al</i> 2009, IOC4.4, but H&M4 retails while noting split option; behavioural differences in breeding areas. IOC2.10 supports split, H&M4 does not. We treat as part of a superspecies.
372	Fea's Petrel (Cape Verde Petrel)	<i>Pterodroma [feae] feae</i>	Monotypic. Breeds Cape Verde Islands, but <i>P.[f.] deserta</i> of Desertas Islands, off Portugal, thought rarer, may also enter Mediterranean. Rare EC Atlantic species, but individuals seem to wander widely except to S; vagrant E Mediterranean, HBW1. Actual taxon identity of Region records to 2009 only to PT Jésus <i>et al</i> 2009, but calling unlikely away from colonies. Israel 1963 record (& <u>corpse</u> of specimen found Dead Sea; Shirihi 1999) recorded as <i>P. (mollis) feae</i> Bourne 1983 (Only Israel record Yoav Perlman <i>in litt</i> Nov 09).
373	Kermadec Petrel	<i>Pterodroma neglecta</i>	Polytypic: 2 sspp Mostly southern Pacific breeding grounds except Round Island, Mauritius, nominate & <i>juana</i> , the latter possibly taxon that once bred Cousin, Seychelles, otherwise vagrant there Sinclair & Lagrand 2013. BLDZ Mar 2019 maps Indian Ocean breeding centred on Round Island, N of Mauritius, 10° below the OSME Region southernmost latitude. Harrison <i>et al</i> 2021 map likely occurrence in OSME Region deep-sea area including 'IBA Indian Ocean Western 31'. Known to breed & to hybridise in small numbers with Trindade Petrel <i>P. arminjoniana</i> (qv) & possibly Herald Petrel <i>P. heraldica</i> on Round Island, Seychelles Howell & Zufelt 2019; occurs in light- and dark-morph forms. rare in Indian Ocean, but in Pacific spends non-breeding seasons mostly well N of Equator, hence probably wanders at least to the Trindade Petrel <i>P. arminjonia</i> Indian Ocean non-breeding location in OSME Region deep-sea area (BirdLife IBA Indian Ocean Western 31). NB Tahiti Petrel <i>Pseudobulweria rostrata</i> (qv) has occurred, but was much less likely a vagrant
374	Herald Petrel	<i>Pterodroma heraldica</i>	Monotypic. Predominantly southern Pacific Ocean breeding distribution, but known to breed and to hybridise in small numbers with Trindade Petrel <i>P. arminjoniana</i> and possibly Kermadec Petrel <i>P. neglecta</i> on Round Island, Seychelles Howell & Zufelt 2019; likely to wander on rare occasions into the OSME Region deep-sea area 'IBA Indian Ocean Western 31' where Trindade Petrels spend the non-breeding season feeding, although Harrison <i>et al</i> 2021 map likely occurrence in OSME Region deep-sea area SE of that. The main population spends the non-breeding period below the Equator in the Pacific, except for a sizeable area N of the Equator to above the Tropic of Cancer either side of the International Date Line BLDZ Mar 2021, & so Round Island breeders may spend non-breeding season with Trindade Petrels <i>P. arminjoniana</i> in N Indian Ocean (BirdLife IBA Indian Ocean Western 31).
375	Trindade Petrel (Round Island Petrel)	<i>Pterodroma arminjoniana</i> Vulnerable	Monotypic. Round Island Seychelles breeder, but colonisation by petrels thought due to human deforestation Brown <i>et al</i> 2011. Probable Indian Ocean record (as then ssp of Herald Petrel <i>P. heraldica</i>) of 30 at 10°S, 69°E 11 Jul 1958, in SE-most OSME Region – <i>Sea Swallow 12</i> : 9 (1959): WRP Bourne pers comm. As of Nov 2017: BLMarIBA maps year-round loafing in Indian Ocean, 'IBA Western 31' of 350+, in deep-ocean OSME Sea Area: Nicoll & Booth Jones (2017 unpub): BLISTD maps geolocator presence across entire Indian Ocean Nicoll & Booth Jones (2017 unpub), including Oman W & S coast, Yemen S coast, Red Sea as far N as Farasan Islands, Socotra & Gulf of Aden. Map in Harrison <i>et al</i> 2021 in agreement. The coverage extent of the dataset suggests that other Indian Ocean breeding colonies may exist. Birds breeding on Round Island Seychelles (c 200km from extended OSME deep-ocean area) are genetically identical to S Atlantic Trindade Petrels Brown & Jordan 2009. Indeed, at least one datalogged Round Island bird has reached the Caribbean Nicoll & Booth Jones (2017 unpub). Datalogs indicating presence along Australian E coast probably indicate a 180° longitudinal error, instead of placing the points correctly near Trindade Island in S Atlantic, whose tracked birds may forage over 10 000km in only a few days Leal <i>et al</i> 2017.

			<p>NB1 Although separated from Herald Petrel <i>P. heraldica</i>, Brown <i>et al</i> 2011 revealed it hybridises in small numbers both with <i>P. heraldica</i> & with Kermadec Petrel <i>P. neglecta</i> on Round Island Howell & Zufelt 2019. NB2 S Atlantic breeding birds hunt fish & squid, averaging 3000km round trips Leal <i>et al</i> 2017. Separated from Herald Petrel <i>P. heraldica</i>. NB3 Krüger 2018 formulated a powerful mathematical model for estimation of Trindade Petrel population estimates.</p>
376	Barau's Petrel	<i>Pterodroma baraui</i> Endangered	<p>Monotypic. Réunion & Rodrigues (Mauritius) breeding endemic, Réunion colonies surveyed 1990 Bretagnole & Attié 1991. 2 RNBWS reports Jul 64, at 3°S near Seychelles, so wanderers following Arabian Sea seasonal food-rich upwellings possible in austral winter from May-August. Recorded in the 'Oman Sea' Barré, Barau & Jouanin 1996. Two recorded 11°07'N, 63°44'E (One image published Harrison 1987) within OSME deep-ocean extension van den Berg <i>et al</i> 1991 & E to 100°E, see also Stahl & Bartle 1991, who mention 'Arabian Sea N of equator' records; summary in Pinet <i>et al</i> 2009. BLDZ Aug 2018 population justification reveal as-yet unpublished estimates of around 25,000bp; Veit <i>et al</i> 2007 in S Indian Ocean encountered flocks in 100s. Pinet <i>et al</i> 2011 notes that adults of the age to attend colonies remain below 10°S (current limit of OSME deep-sea area), from 23 downloaded dataloggers; birds in N Indian Ocean likely wandering juveniles. Danckwerts <i>et al</i> 2016 show diet mostly cephalopods, rarely fish & so non-breeding adults seek out low-competition areas remote from coasts Pinet <i>et al</i> 2011. R&A 2005 note 'ranges to N Indian Ocean'. Flock reported Feb 2003 40km W of Ladakhshweep islands. Lambert 2000 recorded this species in Mozambique waters. Although no confirmed RNBWS records were known by WRP Bourne (pers comm) in OSME Region, the geolocators fitted to fledglings on the breeding grounds show occurrence throughout the Indian Ocean within the OSME Region: (seabirdtracking.org/mapper/<i>Pterodroma baraui</i> Sep 2019); map in Harrison <i>et al</i> 2021 reflects this. Likely all breeding & wintering adults Pinet <i>et al</i> 2011 remain in southern hemisphere latitudes: Howell & Zufelt 2019 map occurrence well into N Indian Ocean.</p> <p>NB1 In the austral winter, the maximum micronekton biomass in the Indian Ocean occurs in tropical waters N of 12°S Stahl & Bartle 1991, & so this taxon is most likely to occur in the OSME Region then. NB2 On Réunion, the main 2 colonies on very steep and high mountain slopes (2300-3000m asl) lie within 5km of each other, but the respective populations are genetically distinct, though phenotypically & morphologically indistinguishable Danckwerts <i>et al</i> 2021: no assessment of relative taxonomic differentiation has yet been made. The 2015 population estimate was 10k nesting pairs LIFE+ Pétrels project https://www.petrels.re/les-especes/petrel-de-baraui/?lang=en. NB3 Brammer <i>et al</i> 2018 establish the species description precedence as that in Jouanin ("1963" = 1964) [<i>Bulletin du Muséum National d'Histoire Naturelle</i> 19 Jun 1964.]</p>
377	Mascarene Petrel (Réunion Petrel)	<i>Pseudobulweria aterrima</i> Critically Endangered	<p>Monotypic. Réunion breeding endemic, exceptionally rare. RNBWS reports (different observers) Sep (12:50:0.0N+45:0:0.0E) & Dec 57 (15:0:0.0N+65:0:0.0E) attributed to this species, originally identified in previous taxonomy as Réunion Petrel <i>Pterodroma aterrima</i>, but <i>Sea Swallow</i> sighting reports became sceptical as ID character and status of Jouanin's Petrel <i>Bulweria fallax</i> became known; Jouanin 1957 revisited old records from Region & reattributed them to Jouanin's Petrel <i>B. fallax</i> & Persian Shearwater <i>Puffinus persicus</i>. R&A 2005, 2012 treated as hypothetical in Indian Ocean, but <i>aterrima</i> breeding locations and habitat since known in one part (burrows Shirihi <i>et al</i> 2014) at 1200-1800m asl amid very dense vegetation LIFE+ Pétrels project https://www.petrels.re/les-especes/petrel-noir-de-bourbon/?lang=en, possibly also on sea-cliffs (not extensive on Réunion) or inland cliffs as well as on more of the many steep canyons on Réunion. Extent of at-sea roaming, especially during non-breeding season or by immatures, was uncertain; Howell & Zufelt 2019 vaguely suggest 'subtropical or tropical Indian Ocean'.</p> <p>NB1 Gangloff <i>et al</i> 2012 show that the <i>Puffinus/Bulweria</i> group split from the <i>Pseudobulweria</i> group c 13Mya, and within <i>Pseudobulweria</i>, Macaronesian/Fiji (<i>aterrima/macgillivrayi</i>) split from Tahiti/Beck's (<i>rostrata/becki</i>) c 6-7Mya. NB2 <u>Intensive fieldwork on Réunion that tagged 23 birds from 2 newly-discovered colonies (perhaps increasing the world population estimate above 10-50 nesting pairs) with global light sensors, 14 of which functioned for more than a year, showed their extensive use of the OSME Region deep-ocean area, spending some 35% of their time resting on the open sea Saunier <i>et al</i> 2021, Harrison <i>et al</i> 2021.</u> NB3 BLDZ Jul 2021 still maps occurrence only around Réunion, 10-12° below the OSME Region southernmost latitude. NB4 in 1950s, Réunion Petrel known only from four 19th-century specimens – WRP Bourne pers comm.</p>
378	Tahiti Petrel	<i>Pseudobulweria rostrata</i> (formerly <i>Pterodroma rostrata</i>)	<p>1st for Region photographed by Bill Simpson just S of Mirbat, Dhofar, Oman February 2019 OBRC, bird considered ssp <i>trouessarti</i>, which breeds in New Caledonia Howell & Zufelt 2019. Flood & Simpson 2021 rule out this bird being Beck's Petrel <i>P. becki</i>. Abundant species, ssp <i>rostrata</i> occurring off northern coasts of Western Australia, occurs just extralimittally Chagos Archipelago Carr 2015, probably breeds in the Bismarck Sea & thus likely to occur in northern Indian Ocean (JA Bartle pers comm cited in van den Berg <i>et al</i> 1991); other sspp <i>trouessarti</i> wholly extralimittal, breeds Vanuatu. Occurred SE Indian Ocean off Durban in 2018. One imaged Chagos Carr 2015. Praveen <i>et al</i> 2019.</p>
379	Streaked Shearwater (Formerly White-faced Shearwater)	<i>Calonectris leucomelas</i> (formerly <i>Procellaria leucomelaena</i>)	<p>NW Pacific species, but a wintering area is E Indian Ocean H&M4; vagrant to OSME Region, HBW1, Eilat & Aqaba Onley & Scofield 2007 (Israel & Jordan Michell 2017), one off Safaga Egypt Apr 2015 Haas 2017, EORC 2019, Socotran record 2008 Redman <i>et al</i> 2009, single-record vagrant Oman OBL7.6, Mitchell 2017, 2nd record Mirbat Nov 2017 OBRC. Recorded between India & Sri Lanka 1978 (van den Berg <i>et al</i> 1982a, also 1985 at 8°01'N, 77°17'E van den Berg <i>et al</i> 1991).</p>
PT	Cory's Shearwater PT	<i>Calonectris diomedea</i> (<i>sensu lato</i>)	<p>As Parent Taxon vagrant Iranian waters Scott & Adhami 2006; RNBWS Gulf of Suez. IOC3.2, H&M4 accept split: Robb & Mullaney 2008 (including CD) document voice differences and restrict name Cory's Shearwater to <i>C.[d.] borealis</i> only (elevated thus in Gómez-Díaz <i>et al</i> 2006 & DB 2009): see also Parkin & Knox 2010, Wink 2011 (3-way split) & Sangster <i>et al</i> 2012. Flood & Gutiérrez 2019 note precision of voice differences in shared <i>diomedea/borealis</i> colonies & refine ID characteristics, noting that both species transit Strait of Gibraltar; they identify the principal geographic division between the 2 species as the line between the cities of Almeria in Spain and Oran in Algeria. Flood & Gutiérrez 2021 refine ID separation characters for Cory's & Scopoli's Shearwaters.</p> <p>NB1 Killian Mullaney in Svensson <i>et al</i> 2009 could not persuade adoption of conclusions of Robb & Mullaney 2008! NB2 <i>C. [d.] edwardsii</i>, Cape Verde Shearwater unlikely to occur in OSME Region BLI 2005. NB3 Gabirot <i>et al</i> 2015 indicate olfactory component to sympatry in mixed <i>diomedea/borealis</i> colonies, not just voice. We interpret the foregoing as generally supportive of separate identities. NB4 Obiol <i>et al</i> 2021, using advanced mathematical techniques analysing genetic data summarised in a time-calibrated species tree, suggest that the species status of the 3 Atlantic <i>Calonectris</i> species should be re-examined.</p>
380	Scopoli's Shearwater {Cory's Shearwater}	<i>Calonectris diomedea</i> (<i>sensu stricto</i>)	<p>Monotypic. Breeds one colony French Biscay coast, but many in Mediterranean, E to at least 28°E (Rhodes; Robb & Mullaney 2008), perhaps others undiscovered; rare but regular Egypt's Mediterranean coast, wanders to Israel, Lebanon HBW1, Perlman & Meyrav 2009: passage N coast Cyprus (Flint 1999 Stagg 2000; MB own notes) 500+ Esentepe Sep 2018 SGATR41(1), Syria Murdoch & Betton 2008 (listed as Cory's Shearwater); 9 records Oman May 2017 OBL7.6. Probably breeds small numbers Turkish S Aegean coast. Irregular Red Sea coast (perhaps <i>borealis</i>?), Goodman & Meininger 1989. RNBWS report Little Bitter Lakes Sep 86 at 30:13:0.0N+32:33:0.0E, Red Sea records 1984/5 van den Berg <i>et al</i> 1991. Iran 1970s records (Scott 2008) highly likely <i>diomedea</i>, accepted as such Khaleghizadeh <i>et al</i> 2017.</p>

381	Cory's Shearwater	<i>Calonectris borealis</i>	Monotypic. Essentially Atlantic colony breeder, but at least one breeding colony W Mediterranean (Robb & Mullarney 2008) & regular in numbers past Gibraltar, likely wanders to E Mediterranean, HBW1. Early records of 'Cory's Shearwater' in Red Sea, Arabian Sea & Gulf perhaps <i>C.[d.] diomedea sensu stricto</i> : <i>diomedea</i> has often been tracked in Indian Ocean as far N as Kenya BLISTD Dec 2017 & <i>borealis</i> might 'miss' re-entry to Atlantic (tracked in S Atlantic below latitude of S Africa BLISTD Dec 2017) & attempt migration via Indian Ocean. 10+ <i>borealis</i> reported Eilat Jul 2011 DB33(5) , 4th UAE record May 2014 SG36(2) ATR , Campbell <i>et al</i> 2013; vagrant 2 records Oman OBL7.6 ; one in southern Red Sea between Eritrea and Yemen April 2015 Flood 2016. One imaged at Milleyha, Turkey Jan 2021, by Emin Yoğurtcuoğlu, Murat Bozdoğan & Ahu İlibeyi (image assessed by numerous experts as likely Cory's Shearwater) Kuzey Cem pers comm, Birding Turkey website. NB Specimen Kerala, SW India Praveen <i>et al</i> 2019.
PT	<i>Puffinus sensu lato</i> not monophyletic	PT Transferred to <i>Ardenna</i> from <i>Puffinus</i>	First formal suggestion to split <i>Puffinus</i> in Christidis & Bowles 2008 after extensive studies mainly of Australian shearwaters. Adopted in IOC5.4
382	Wedge-tailed Shearwater	<i>Ardenna pacifica</i> (formerly <i>Puffinus pacificus</i>)	IOC5.3 treats as monotypic, subsuming <i>chlororhyncus in</i> nominate, which previously considered extralimital in Pacific: <i>chlororhyncus</i> name applied mostly to Indian Ocean breeders. Harrison <i>et al</i> 2021 retains both ssp. 1st confirmed record in OSME Region deep-sea area May 1964 Gill 1967. Regular wanderer N from sub-equatorial breeders in W Indian Ocean, HBW1, regular in winter Bourne 1991; likely occasional off Socotra Kirwan 1998. Off E Iran coast R&A 2005, 2012 in 1969 & 1976 Khaleghizadeh <i>et al</i> 2017; 1st report Aug 2010 UAE, multiple pelagic surveys supported Very Rare status, while noting that BLISTD tracked individuals from 5 datasets reached into & past Gulf of Oman Campbell <i>et al</i> 2017 from colonies in Seychelles & Réunion; rare SV Oman OBL7 . 1988 Egypt record off Port Said now deleted; account did not include the main modern ID characters Ławicki <i>et al</i> 2021. EORC .
383	Sooty Shearwater	<i>Ardenna grisea</i> (formerly <i>Puffinus griseus</i>)	Monotypic. Regular in numbers in all oceans bar Indian Ocean, but present there in small numbers year-round (misplaced migrants? WRP Bourne pers comm) HBW1: multiple UAE pelagic surveys Gulf of Oman confirm annual in small numbers, but origins of birds obscure, possibly 'lost' Campbell <i>et al</i> 2017, one Raysut Jul 2016 8th record Oman May 2010 OBL7 , 9th Mirbat, Dhofar Dec 2018: has occurred both Israeli coasts Perlman & Meyrav 2009. One found dead Iran Khaleghizadeh <i>et al</i> 2011, 3rd record found dead Nakhilu, Bushehr June 2021 DB43(4) : 305: 3rd record Kuwait May 2015 KORC , 4th Jun 2017 Jahra pools DB39(4) : 260, 5th May 2018 Kubbar Island, 6th & 7th Jahra Pools Apr 2019 & May 2019 KORC , 9th near Kuwait Towers Jun 2021 KORC , perhaps same bird 2nd for Iran at Hendijan, Khuzestan Jun 2022 DB44(4) : 305: 1st for Turkey off Milleyha, Hatay, Turkey Jan 2022 via <i>Tarsiger.com</i> & Emin Yoğurtcuoğlu in litt, <i>Birding Turkey website</i> . Egypt Avib, BE.
384	Short-tailed Shearwater	<i>Ardenna tenuirostris</i> IOC5.4 (formerly <i>Puffinus tenuirostris</i>)	Monotypic. 1 record just beyond limit of OSME deep-ocean boundary close to Iran-Pakistan border, beached bird record: near Ormara 64°30'E Pakistan w of Karachi (1889: Roberts 1991, Ali & Ripley 1968/1983 (originally assigned as <i>chlororhyncus</i> ssp of Wedge-tailed Shearwater <i>P. pacificus</i> [<i>Procellaria pacifica</i>], actually Short-tailed Shearwater) Jouanin 1957: also Sri Lanka (Ali & Ripley 1968/1983) Michael Gallagher pers comm, Bourne 1960, R&A 2005; vagrant Pakistan waters, but mapped well into OSME Indian Ocean area R&A 2012. 1st & 2nd records Kuwait Garoh Island & Zour Port May 2021 KORC are also 1st & 2nd confirmed records for the OSME Region. Harrison <i>et al</i> 2021 & BLDZ Jul 2021 do not map into N Indian Ocean. NB The longer ice-free season allows passage either via Canadian waters (NW Passage) or via waters N of Siberia (NE Passage), the latter actually being the shorter and most direct route Flood <i>et al</i> 2021.
385	Flesh-footed Shearwater (Pale-footed Shearwater)	<i>Ardenna carneipes</i> IOC5.4 (Formerly <i>Puffinus carneipes</i>)	Monotypic. Vagrant Israel Perlman & Meyrav 2009. Regular off S Arabia, HBW1, hundreds daily Sep Hirschfeld 1992, recorded Socotran waters 1951 Kirwan 1998. Off E Iran coast R&A 2005. Fairly common SV Oman OBL7 , occasional large assemblages eg 84 off Masirah Sep 2016 SG39(1)ATR , UAE 2nd record 11 Jun 2010 Pedersen & Aspinall 2010. NB Obiol <i>et al</i> 2021, using advanced mathematical techniques analysing genetic data summarised in a time-calibrated species tree, suggest that the species status of Flesh-footed Shearwater <i>A. carneipes</i> & extralimital (E Pacific) Pink-footed Shearwater <i>A. creatopus</i> should be re-examined.
386	Great Shearwater	<i>Ardenna gravis</i> IOC5.4 (formerly <i>Puffinus gravis</i>)	Monotypic. Although Atlantic species, regular vagrant into Indian Ocean, HBW1, vagrant Israel Perlman & Meyrav 2009, one Eilat, Gulf of Aqaba Red Sea Jun 2018, one off Ashkelon, Mediterranean coast, Dec 2021 8th record IBRC . Lebanon Porter & Aspinall 2010; confirmed records elsewhere somewhat lacking. NB Christidis & Boles 2008 placed in <i>Ardenna</i> .
PT	<i>Puffinus sensu stricto</i> now monophyletic	PT <i>Puffinus puffinus</i> (<i>sensu lato</i>)	First formal suggestion to split <i>Puffinus</i> in Christidis & Bowles 2008 after extensive studies mainly of Australian shearwaters. Adopted in IOC5.4
387	Manx Shearwater	<i>Puffinus puffinus</i> (<i>sensu stricto</i>)	Was monotypic, but IOC11.1 accepts extralimital ssp <i>canariensis</i> ; Rodriguez <i>et al</i> 2020. One 27 May-20 Jun 2015 North Beach Eilat, Israel, 1st for Israel & OSME Region found by Barak Granit accepted by IRDC: 2nd reported Eilat May 2022 DB44(3): 221 . Its Red Sea occurrence fits with its preference for the western Mediterranean and the Atlantic - presumably this bird's sojourn in the Southern Ocean had ended in it heading north again, but in the Indian Ocean
PT	Yelkouan Shearwater PT	<i>Puffinus yelkouan</i>	PT reported Egypt Avib also BinE without any reason for dismissing <i>yelkouan</i> . However, <i>P. puffinus</i> now known to be more closely related to other Atlantic shearwaters than to the following two taxa (Robb & Mullarney 2008), hence earlier PT more literary than genetic . H&M4 notes subsequent split, but treats next 2 taxa as ssp. However, Militão <i>et al</i> 2014 applying stable isotope analysis within integrative taxonomy achieved species ID successfully. We treat these taxa as part of a superspecies. NB1 Tiny Menorcan population ('Menorcan Shearwater') (smaller & darker) may be stabilised (?) hybrid of <i>mauretanicus</i> × <i>yelkouan</i> , 2 mtDNA lineages being present: DNA sequencing of all Mediterranean forms may help (Robb & Mullarney 2008), but this aspect unmentioned in Svensson <i>et al</i> 2009. NB2 Obiol <i>et al</i> 2021, using advanced mathematical techniques analysing genetic data summarised in a time-calibrated species tree, suggest that the species status of Yelkouan Shearwater <i>P. yelkouan</i> & Balearic Shearwater <i>P. mauretanicus</i> should be re-examined. NB3 3 extinct closely-related taxa, Ibiza <i>P. nestori</i> , Hole's <i>P. holei</i> (Iberia) & Lava <i>P. olsoni</i> (Canary Islands) Shearwaters Robb & Mullarney 2008.
388	Yelkouan Shearwater (Levantine or Mediterranean Shearwater)	<i>Puffinus [yelkouan] yelkouan</i> Vulnerable	Resident E Mediterranean, Richard Porter pers comm (eg Syria Murdoch & Betton 2008), Israel uncommon Med, rare Aqaba Perlman & Meyrav 2009, May 2012 record Hurghada Egypt (SG34(2) ATR). Recorded off Black Sea coasts of Krasnodar Krai, Russia and adjacent Georgia Koblik & Arkhipov 2014. Breeds close to OSME Region near Turkish Aegean, 29 on passage Esentepe Cyprus Sep 2018 SGATR41(1) . Egypt Avib, BE. RNBWS report large numbers S Black Sea Jun 59 at 41:0:0.0N, 29:0:0.0E, where H&E 1970 note seen regularly; summer breeder. Regular Black Sea WRP Bourne pers comm, Iankov 2007. PT listed as vagrant Caspian Sea (doubtful) Schalow 1880 (tx of Bogdanov 1879) would have been this taxon. Apparent extensive overland activity N, S & E of Black Sea BLSTD Nov 2014 is due to datalogging anomalies at times of equal daylight & darkness.
389	Balearic Shearwater	<i>Puffinus [yelkouan] mauretanicus</i> Critically Endangered	Small & declining population, probably only on a few W Mediterranean islands, HBW1. Spends non-breeding season in Atlantic. Dec 2021 preprint of Cuevas-Caballé <i>et al</i> 2022 establish population estimate in pre-human occupation of Balearics as >30,000bp. Current estimates (2011-2014) range from 2400-7000bp (from a total population of c 17000-c 23500 individuals, declining at c 7.14-14% per annum - IUCN Feb 2022). One record Israel 1982, Shirihi 1996. 1st for Egypt, 3 birds, Aug 1981 EORC .
PT	Audubon's Shearwater/ Little Shearwater PT IOC9.2: Little Shearwater PT now widely separated from deconstructed Audubon's Shearwater, Tropical Shearwater comprising at least 6 spp, 3 in Indian Ocean; Howell	<i>Puffinus bailloni</i> (<i>sensu lato</i>)(formerly <i>Puffinus iherminieri</i> / <i>P. assimilis</i>)	Complicated incomplete taxonomic history. In 1990s, ID conclusions from few pelagic observations often misled. Many subtle ID characteristics now teased out, as is genetic makeup. Since 2009, we have treated these taxa separately: Audubon's as Atlantic form <i>iherminieri</i> (extralimital) now separated from extralimital (Atlantic) Macaronesian <i>P. [l.] b. baroli</i> & Boyd's <i>P. [l.] b. baroli boydi</i> (closely related but separable by voice: Robb & Mullarney 2008). Now, IOC9.2 sequencing separates <i>iherminieri</i> into 6 spp to the extent that the old concept of a superspecies is probably not viable for all 6. Austin <i>et al</i> 2004 offered plausible taxonomy, but kept Indian Ocean ssp (<i>bailloni</i> , <i>nicolai</i> , <i>temptator</i> , <i>colstoni</i>) in <i>iherminieri</i> , not in <i>P. assimilis</i> . We now follow the lead of Onley & Scofield 2007, but align with the subsequent arrangement suggested in Howell & Zufelt 2019.

	& Zufelt 2019 propose <i>nicolai</i> as full sp		NB1 BLDZ Sep 2019 treat Persian and Tropical Shearwaters as full spp, but include all Pacific taxa in Tropical Shearwater iaw Carbonaras <i>et al</i> 2018; Howell & Zufelt 2019 erect all 4 as full spp (extralimital) & treat Little Shearwater <i>Puffinus assimilis</i> (as per IOC9.2) as comprising 4 spp of W Pacific/S Australian waters, all extralimital to Region. NB2 Extralimital <i>bannermani</i> of the Ogasawara islands south of Japan now restored as full sp in Clements 2020 as Bannerman's Shearwater, following Kawakami <i>et al</i> 2018. NB3 Obiol <i>et al</i> 2021, using advanced mathematical techniques analysing genetic data summarised in a time-calibrated species tree, suggest that the species status of Barolo Shearwater <i>P. baroli</i> & extralimital Boyd's Shearwater <i>P. boydi</i> should be re-examined.
390	Baillon's (Mascarene) Shearwater (formerly Tropical Shearwater) [lumped variously Audubon's or Persian Shearwater under previous taxonomies]. Howell & Zufelt 2019 named it as Baillon's (Mascarene) Shearwater	<i>Puffinus [bailloni] bailloni</i> (<i>sensu stricto</i>) (formerly considered <i>P. Iherminieri bailloni</i>) Post-split, likely Vulnerable	Monotypic as per Howell & Zufelt 2019. (IOC9.2 lists 5 spp, nominate, <i>nicolai</i> , <i>colstoni</i> Indian Ocean, 2 extralimital in Pacific, <i>dichrous</i> , <i>gunax</i> . Nominate Mauritius archipelago; <i>colstoni</i> Aldabra; <i>nicolae</i> NW Indian Ocean islands); Howell & Zufelt 2019 erect an additional Pacific taxon, <i>polynesiae</i> . Howell & Zufelt 2019 propose the 'vexed' taxonomy best considered as 5 spp; Seychelles Shearwater <i>P. nicolae</i> with ssp <i>colstoni</i> [qv next entry], Baillon's (Mascarene) Shearwater <i>P. bailloni sensu stricto</i> , Melanesian Shearwater <i>P. gunax</i> , Micronesian Shearwater <i>P. dichrous</i> & Polynesian Shearwater <i>P. [dichrous] polynesiae</i> . Treating as superspecies is close to Howard & Zufelt 2019 as is comfortable. Indian Ocean taxa seemingly regular as far N as c4°N off S Somalia Redman <i>et al</i> 2009. Mapped BLDZ Sep 2019 S Indian Ocean from 10°N to below 10°S. Taxon breeding in the Maldives as yet unconfirmed, but Anderson & Shimal 2020 remain with 'Tropical Shearwater'. NB1 Earlier extralimital split of Galapagos Shearwater <i>P. subalaris</i> Howell & Zufelt 2019. NB2 Although Perlman & Meyrav 2009 list Audubon's Shearwater <i>P. Iherminieri</i> separately from taxa <i>persicus</i> & <i>baroli</i> , they have confirmed they refer to taxon <i>bailloni</i> , Yoav Perlman <i>in litt</i> Nov 09. The Shirihai <i>et al</i> 1995 'atrodorsalis' perhaps actually this taxon, breeding Europa Islands, Mozambique Channel.
391	Seychelles Shearwater	<i>Puffinus [bailloni] nicolae</i> Post-split, likely Vulnerable	Polytypic as per Howell & Zufelt 2019. Nominate more widespread in Indian Ocean than ssp <i>colstoni</i> , which is considered rare and mostly confined to waters around Mohéli, Comoros, but not impossible in OSME Region waters. Previously listed in the OSME Region as part of Tropical Shearwater <i>P. [Iherminieri] bailloni</i>.
392	Persian Shearwater (Arabian Shearwater) (Audubon's Shearwater in previous treatments)	<i>Puffinus [bailloni] persicus</i> (formerly <i>P. Iherminieri persicus</i>)	Polytypic, Onley & Scofield 2007, Howell & Zufelt 2019. H&M4 notes likely splits but retains as sspp of Tropical Shearwater <i>P. bailloni</i> . IOC4.4 cited 2 spp, nominate in Region Oman Socotra, <i>temptator</i> of Comoros. BLI 2005; breeds Kuria Muria Islands. E Iran coast Zarudny 1911 R&A 2005. Vagrant Israel Perlman & Meyrav 2009; 3rd record North Beach Eilat late Oct-late Nov 2020 Yoav Perlman <i>in litt</i> SG43(1) : 173. Austin <i>et al</i> 2004 revision, but Onley & Scofield 2007 suggest ssp <i>persicus</i> in Arabian Sea and <i>temptator</i> around Comoros: Howell & Zufelt 2019 agree, citing Mohéli as breeding location, they suspect possibility of related new taxon in W Australian waters. Common widespread Oman waters; breeds Hallaniyat Is off S coast OBL7 . Breeds Socotra (50%+ of world population - globally significant Porter & Suleiman 2014) & probably on many inaccessible cliffs around S Arabian coast & in Gulf Jennings 2010: abundant off UAE Gulf of Oman coast Mar-Aug on multiple pelagic surveys Campbell <i>et al</i> 2017, who suspect unknown breeding location closer than Hallaniyat Islands, a sentiment echoed for Iran, where locally common Oct-Mar Khlehghizadeh <i>et al</i> 2017. NB taxa <i>bailloni</i> & <i>persicus</i> first linked in 1950s Phillips & Sims 1957; although H&M4 maintains this link, it footnotes likely species status for <i>persicus</i> .
PT	Barolo Shearwater (formerly within Macaronesian Shearwater PT)	<i>Puffinus baroli</i> (<i>sensu lato</i>) (formerly considered <i>Puffinus [Iherminieri] baroli/boydi</i>)	PT Originally lumped with many other taxa under Audubon's Shearwater <i>P. Iherminieri</i> . Firstly Macaronesian Shearwater was split into the <i>Iherminieri/boydi/barolo</i> complex, then Boyd's Shearwater <i>P.[I.] boydi</i> was split w1th ssp <i>barolo</i> , thus leaving <i>Iherminieri</i> as the monotypic Audubon's Shearwater (English name restored). Howell & Zufelt 2019 suggest this complex best treated as 3 full spp. H&M4 noted case for splits, listing 3 groups under <i>P. Iherminieri</i> . BLDZ Sep 2019 remain with 3-taxa lumped <i>P. Iherminieri</i> . NB1 See ORL Hypothetical List for place of Boyd's Shearwater <i>P. boydi</i> in this complex. NB2 Obiol <i>et al</i> 2021 suggest re-evaluation of species status for <i>P. baroli</i> & <i>P. boydi</i> .
393	Barolo Shearwater (formerly Macaronesian Shearwater) (previous taxonomy as Little Shearwater)	<i>Puffinus baroli</i> (<i>sensu stricto</i>) (<i>P. [Iherminieri] baroli</i> ; under <i>P. assimilis</i> in Brooke 2004; formerly in ORL as <i>P. assimilis baroli</i>)	Monotypic Atlantic breeder. [H&M4 places within <i>Iherminieri</i> , while noting Austin <i>et al</i> 2004. Although Little Shearwater <i>sensu stricto</i> sspp <i>tunneyi</i> & <i>elegans</i> known to reach easternmost Indian Ocean (Shirihai 1996 had then included <i>baroli</i> within Little Shearwater complex for Israel Mediterranean record)]. Possible 3rd record reported off Haifa Jan 2021 Yoav Perlman <i>in litt</i> . DB 43(2) : 152. NB1 Little Shearwater on WBDB & other Israel checklists confirmed as referring to Shirihai record (<i>baroli</i>), which now (Austin <i>et al</i> 2004) treated as here (Yoav Perlman <i>in litt</i> Nov 09), likely vagrant heading north in wrong ocean; Perlman & Meyrav 2009 agree (as Barolo's Shearwater) as do Svensson <i>et al</i> 2009: DB 2010 revise to Barolo Shearwater. NB2 Past OSME Region records of <i>baroli</i> not separated from equally vagrant <i>boydi</i> ; hypothetical report Turkey Western Anatolia Kirwan <i>et al</i> 2014 possibly this taxon or Boyd's Shearwater <i>P. boydi</i> (see Hypothetical List). NB3 Flood & van der Vliet 2019 provide an excellent ID paper on separation of <i>baroli</i> & <i>boydi</i> , & detail the separation difficulties.
394	Bulwer's Petrel	<i>Bulweria bulwerii</i>	Monotypic. RNBWS reports Sep 10:55:0.0N+56:20:0.0E Nov 83 13:56:0.0N+51:0:0.0E Feb 01 11:54:0.0N 51:42:0.0E & entries in <i>Sea Swallow</i> possible misidentifications of Jouanin's Petrel <i>B. fallax</i> (ID characters & status then unknown); wintering grounds shared? – full scrutiny of reports & records essential – WRP Bourne pers comm. Flood 2019 notes occurrences of pale- or white-bellied individuals, ascribing this as probably due to heavy feather wear, thus alerting awareness of misidentification. Indian Ocean records all E of 100°E, S of Sumatra, van den Berg <i>et al</i> 1985, but IUCN Redlist maps its occurrence up to 10°N below Socotra, as does BLDZ , probably from Bailey 1968 (also cited by Flood 2016), but were these records Jouanin's Petrel <i>B. fallax</i> ? In any case, now within OSME Region deep-ocean extension (Most likely from Sep-Apr Howell & Zufelt 2019, who think cryptic species exist in some populations: indeed, a <i>Bulweria</i> -type petrel intermediate between <i>bulwerii</i> & <i>fallax</i> has been seen Shirihai & Bretagnolle 2015, Harrison <i>et al</i> 2021.
395	Jouanin's Petrel	<i>Bulweria fallax</i> Near-Threatened. 100-200 killed or taken annually in Yemen Brochet et al 2019.	Monotypic. First described Jouanin 1955 & ID difficulties discussed Jouanin 1957. Breeds Socotra, Taleb, 2002, only known population possibly 4000+bp Porter & Suleiman 2014 (globally significant), which H&E 1970 had suggested, but likely breeds undiscovered S Oman (OBL7) & elsewhere in Socotra archipelago Jennings 2010. 1st record UAE 18 Oct 2004 Pedersen & Aspinall 2010. but 7th record comprised over 600 birds Oct-Dec 2012 EBRC : 1st record for Kuwait May 2018 KORC . Multiple pelagic surveys UAE Gulf of Oman coast assessed status as irregularly common, sometimes absent, but occasional juveniles suggest unknown breeding locations closer than Socotra Campbell <i>et al</i> 2017. BL Marine IBA Atlas Aug 2016 identifies small sea area off Ra's Fartak Headland SE Yemen as a confirmed IBA for this species, the first in mainland Arabia, but without revealing if breeding, feeding, or loafing area. Socotra IBA 1 'Jouanin's Petrel Cliffs' (location withheld) is the only known breeding colony, >4000ind Porter & Suleiman 2016, c3000bp BLDZ Aug 2016. A 'Jouanin-like' petrel has been found off Mozambique Channel (Peter Ryan) & in the Comoros Archipelago (Hadoram Shirihai), seemingly smaller in form Bull. ABC 25(2) : 155, & a <i>Bulweria</i> -type petrel intermediate between <i>bulwerii</i> & <i>fallax</i> has been seen Shirihai & Bretagnolle 2015, Harrison <i>et al</i> 2021. NB Many examples of attribution to other spp before ID standards improved and status established – WRP Bourne pers comm citing reviews of many reports eg in <i>Sea Swallow</i> .
		Ciconiidae	
396	Yellow-billed Stork	<i>Mycteria ibis</i>	Monotypic. Widespread resident African species (HBW1), occasional Egypt Goodman & Meininger 1989, but 50+ Abu Simbel May 2011 SG33(2) , 76 in 2012 (SG34(2) ATR & 500+ May 2016 DB38(4) p245, 36 Aswan Jun 2021 DB43(4) : 305; encountered commonly Lake Nasser 2015-19 (total shoreline 7500km), but no proof of breeding Hering <i>et al</i> 2020c, 91 same location Jun 2022, again no breeding proof, but 1 immature present Jens Hering in litt . Juvenile at Ras Gharib, Gulf of Suez Red Sea Apr 2017 DB39(3) : 205. Has reached Arabia. Rare Israel, but almost annual, no longer reportable to IRDC ; one photographed by Watter Albahry <i>in litt</i> , Ras Shukeir Red Sea, Egypt May 2020 migrating with White Storks <i>C. ciconia</i> , subsequently reported Lebanon May 2020 online; Jordan Mitchell 2017: 186), vagrant S Turkey. Qatar Hellyer 2000 & UAE sightings are escapes Aspinall & Porter 2011; two of them recorded in Oman are from UAE. However the Khor Mugsayl 2005 record may have been genuine Jennings 2010 Ian Harrison <i>in litt</i> . OBL7 . Egypt Avib, BE. RNBWS report one shipboard SE of Aden Sep 74 at 11:30:0.0N+46:0:0.0E

397	African Openbill	<i>Anastomus lamelligerus</i>	2 sspp, <i>madagascariensis</i> of W Madagascar & nominate whose nearest known breeding population Ethiopia. One photographed 26 May 2009 Crocodile Island, Luxor, Egypt, Steffen 2010, 1st for WP; accepted EORC 2011, 2nd record May 2013 Haas 2017 EORC . 7 near Wadi Zikt July-Aug 2021 1st record for UAE: 4 (from same flock?) at Dhalkut, Dhofar, Oman, Aug 2021 also 1st record DB43(5) : 389, another at Khawr Raysut, Dhofar until Jan 2022 OBRC , a different bird (also one dead bird) Wadi Al Fulajj Dam, Sur Jan 2022 Taej Mundkur in litt: individual reaching Goa 1st for India Oct 2021 likely from this flock; also 2 juveniles in 4-strong flock photographed at al Sadd Lake, Jizan, SW Saudi Arabia Oct 2021 DB43(6) : 465-6, up to 16 there Mar 2022 DB44(2) : 150. 1st UAE record 7/8 birds Wadi Zikt Jul-Aug 2021 EBRC .
398	Black Stork	<i>Ciconia nigra</i>	Monotypic. Breeds Caucasus Armenia Dahl 1954, Adamian & Klein 1999, CA: rare summer resident Iran Scott & Adhami 2006; Qashqaei <i>et al</i> 2017 review all Black Stork records for Iran & include extensive recent survey results, finding 3 new cliff-nesting locations, & concluding that it is a thinly-widespread rare breeder but a fairly common wintering species across Iran; very rare sometimes accidental breeder, also rare PM E Kazakhstan Wassink 2015b, probably N Afghanistan Paludan 1959 H&E 1970 (mapped R&A 2012, BLDZ Feb 2018), formerly bred Syria Murdoch & Betton 2008, E to N China; scarce winter Arabia, mostly sub-Saharan Africa, India, also SE Iran, migrates across OSME Region, HBW1, rare WV Oman OBL7 , 1st breeding record Chami Razan, Iraq SGATR41(2) 251, 5th & 6th Iranian breeding records Yusefi <i>et al</i> 2020, 7th UAE record Ras al Khor Nov 2018 EBRC . Egypt Avib, BE. NB ground-nester in treeless parts of Region Paludan 1959.
399	Abdim's Stork	<i>Ciconia abdimii</i>	Monotypic African species, population SW Arabia (which neither IOC7.2 nor H&M4 mention, although BLDZ May 2016 does map it), winters E Africa below equator, HBW1 (scattered colonies Tihama, Taizz N Yemen Porter & Warr 1985), perhaps 300bp Jennings 2010, uncommon irregular visitor Oman OBL7 , eg 500 Raysut 2013, 610 Dec 2014, 16 Salalah 11 Jan 2010 SG 32(2) , 500 Raysut Dec 2016 SG39(1)ATR ., c900 Nov 2017 DB40(1) : 48, Nov 2018 SG41(1)ATR : 143..
PT	Woolly-necked Stork PT	<i>Ciconia episcopus</i>	As well as forming an established superspecies with extralimital & Endangered Storm's Stork <i>C. stormi</i> , Woolly-necked Stork has been split by HBW Alive into monotypic African Woollyneck <i>C. microcelis</i> and debately polytypic Asian Woollyneck <i>C. episcopus</i> ; extralimital ssp <i>neglecta</i> (Far East, Sundas) may not be diagnosable. The HBW new English names are fine for birding insiders, but will be confusing to people whose first language is not English. We prefer to treat the split as potential, given that full justification has not been published, although Inskipp & Collar 2015 note split published in del Hoyo & Collar 2014b on Tobias <i>et al</i> 2010 criteria: IOC 11.2 have now proposed this split. We know of no record of taxon <i>microcelis</i> in the Region, but it could wander into lower Egypt from Ethiopia & Eritrea, where fairly common migrant Ash & Atkins 2009.
400	Asian Woolly-necked Stork (Asian Woollyneck)	<i>Ciconia (episcopus) episcopus</i> Vulnerable only in SE Asia; elsewhere NT	2 sspp, extralimital <i>neglecta</i> doubtfully diagnosable; vagrancy to Region possible for nominate resident India to Iran, where first recorded 1901 Zarudny 1911, Roselaar & Aliabadian 2010, but not since 1950s Scott & Adhami 2006; however, mapped breeding SE Iran R&A 2005, 2012 (? error?), but confirmed breeding Thar Desert, Western Rajasthan May 2014 Singh 2015. BLDZ map May 2021 gives presence in Pakistan NW at Malam Jabba, 95km from Afghanistan: continuing increase in number of artificial ponds and reservoirs in this region & in neighbouring Afghanistan may enable a distribution extension.
PT	White Stork PT	<i>Ciconia ciconia</i>	Recorded extensively in E of region as just 'White Stork' where <i>asiatica</i> distributed, but consideration of species limits of <i>ciconia</i> & <i>asiatica</i> requires all populations to be documented. Prudent to make scrupulous observations to discover extent of any cline, hence separate entries here. Re PT , split of extralimital & Endangered Asian White Stork <i>C. boyciana</i> long accepted
401	Western White Stork {White Stork}	<i>Ciconia ciconia ciconia</i>	C & E Europe, Caucasus, Turkey, N&W Iraq Salim <i>et al</i> 2012, Iran Khaleghizadeh <i>et al</i> 2018. Winters sub-Saharan Africa, funnel migration (see Berthold 1999) Levant, HBW1, common PM & WV Oman OBL7 , some winter Pakistan regularly. Eastern European population migrating via Egypt & W Arabia less vulnerable to Sahel droughts than western European population, because E Sahel used only as stopover in droughts, the wintering grounds extending beyond Ethiopia to E & S Africa Zwarts <i>et al</i> 2009; over 120 000 spring migration Zait Bay 260km S of Suez, Egypt Hilgerloh <i>et al</i> 2009.. Egypt Avib, BE
402	Eastern White Stork {White Stork}	<i>Ciconia ciconia asiatica</i>	Turkmenistan. Tajikistan, SE Kazakhstan (S Kazakhstan W&O 2007, very rare BM Wassink 2015b) 2nd winter record flock of 12 Zhambyl Province Wassink 2018, winters S Iran (Schüz 1959 cites 1913 record), Zarudny 1903 records breeding at Sistan (long since dry) which Khaleghizadeh <i>et al</i> 2017 consider probable. Winters Pakistan, India, HBW1; R&A 2012 presume taxon wintering India is <i>asiatica</i> , but unconfirmed. Scarce breeder E of Ferghana, Kyrgyzstan, Bukreev 2005 as forecast Ven 2002 - also mapped passage Afghanistan R&A 2005 (rare migrant Paludan 1959 H&E 1970), R&A 2012 map suggests summer breeder S Turkmenistan, S Uzbekistan. Predicted to occur UAE & Oman.
403	Marabou Stork	<i>Leptoptilos crumenifer</i> (<i>Leptoptilos crumeniferus</i>)	Monotypic. H&M4 places at head of Ciconiidae . African species, partly commensal scavenger, vagrant Israel, HBW1, nearest known breeding population Eitrea. Yemen, al-Safadi 1990, Oman Sep 2008 (photo by non-birder!); one reported Hurghada, Egypt Jul 2017 DB40(2) : 117-8.. Escapes UAE (al Ain) Aspinall & Porter 2011. Scientific name change iaw David & Gosselin 2011; IOC2.10..
		Fregatidae	6 records Frigatebird sp Oman 1972-2009 OBL7
Sweetman <i>et al</i> 2017 assess ocean warming trends as likely to impact southern oceans, particularly the Indian Ocean, by steadily reducing both organic food density & oxygen content per decade through to 2100. Such trends would reduce resident and at-sea roosting seabird populations. Human fishing communities would also be badly affected.			
404	Great Frigatebird	<i>Fregata minor</i>	Polytypic. 5 sspp, 2 in Region: <i>aldabrensis</i> breeds Aldabra W Indian Ocean, nominate Seychelles, Maldives, Lakshadweep archipelagos C&E Indian Ocean (& to Pacific); extralimital <i>nicolli</i> SW Atlantic, <i>ridgewayi</i> , <i>palmerstoni</i> Pacific. Immatures, non-breeders wander widely, HBW1, geolocators on SW Indian Ocean breeders show many occurrences in S of OSME Region deep-ocean extension Jul 2015: see seabirdtracker.org/mapper/ <i>Fregata minor</i> . Single-record vagrant Jun 1982 Oman OBL7 . One record Socotra 2007 Redman <i>et al</i> 2009, one narrowly extralimital at Djibouti Sep 2011 ABCBull19(1) . BLISTD Mar 2018 shows several geolocator transits of southern deep-sea OSME Region in Western Indian Ocean.
405	Lesser Frigatebird	<i>Fregata ariel</i>	Polytypic. Smallest and basal member of genus Kennedy & Spencer 2004, Harrison <i>et al</i> 2021. 3 sspp, 2 in Region: <i>iredalei</i> W Indian Ocean; nominate E Indian Ocean E to Polynesia; extralimital <i>trinitas</i> SW Atlantic, may be elevated to full species status as Trindade Frigatebird, provisionally agreed Howell & Zufelt 2019. Breeds W & S Indian Ocean, immatures, non-breeders wander widely, HBW1, vagrant Dec 1997 Eilat Israel Perlman & Meyrav 2009, Ławicki & de Vries 2018, same bird Jordan. RNBWS record Jan 55 one on board, Trucial coast at 24:30:0.0N+53:0:0.0E (Bourne 1988a), another Mar 55 <i>Sea Swallow</i> 18 (Landbirds at Sea) landed aboard RN vessel. 6 records 1986-2014 Oman OBL7 , 7th record Mar 2016 SG38(2) : 232, 8th at Khawr Dahariz Jul 2021 OBRC ; 1st record Kuwait Zour Point Apr 2008 KORC ; 1st Frigatebird sp, male, Jumeirah Mar 2019 probably this taxon EBRC . Several SW Red Sea records just outside Region Redman <i>et al</i> 2009; one seen from Yemen at Bab-el Mandab 2008 Aspinall & Stanton 2010, 2nd Saudi record May 2016 Thuwal E Red Sea coast (opposite Halaib) DB38(5) : 328. Summary of frigatebird spp in extended WP (van den Berg 2018) records includes Many transit S part of deep-ocean extension to Region (seabirdtracking.org/mapper/ <i>Fregata ariel</i> Jul 2015 - geolocator data). ID of immatures and females fraught with difficulty.
		Sulidae	

406	Northern Gannet	<i>Morus bassanus</i>	Monotypic. Occasional E Mediterranean coasts, HBW1, Syria to Egypt H&E 1970, eg Cyprus Apr 2011 CBR11 , also Jordan Mitchell 2017, off Gaza Jan 2003 Riddiford 2017. Likely regular in small numbers E Mediterranean Shirihi 1995, Peter Flint pers comm. Has wintered Black Sea, all (?) immatures Kirwan <i>et al</i> 2014. Grémillet <i>et al</i> 2020 document population crash of the southernmost breeding location on Rouzic Island in Brittany, France, attributed mostly to poor feeding conditions in non-breeding areas, due to a shifting prey base driven by global warming. Colonies further north show no similar declines, but many Rouzic birds winter in the Mediterranean, one tracked in successive years to the Lebanon coast; this group suffers high accidental bycatch mortality. NB Northern Gannet has been observed in the N Pacific off Alaska, the longer ice-free season allowing passage either via Canadian waters (NW Passage) or via waters N of Siberia (NE Passage), the latter actually being the shorter and most direct route Flood <i>et al</i> 2021.
407	Cape Gannet	<i>Morus capensis</i> Vulnerable	Monotypic. Vagrant to S OSME Region coasts, HBW1. Single-record vagrant Oman Eriksen 2004, OBL7 .
408	Masked Booby	<i>Sula dactylatra</i>	3 spp, <i>melanops</i> breeds S Red Sea, S Arabian & Iranian Makran (H&E 1970) coasts; also Socotra Jennings 2010, Red Sea, present year-round in S OSME Region waters, HBW1. Status in Arabia, c 13 000bp Jennings 2010; common breeding resident islands 200km ENE of Salalah Oman OBL7 , annually rare in north of Gulf of Oman Campbell <i>et al</i> 2017, 1st record Kuwait Apr 2015 Haas 2017, KORC , 2nd Araifjan Reef May 2021 KORC ; 2nd Israel record Aug 2015 Haas 2017. Nominate is Atlantic spp, <i>tasmani</i> off SE Australia, but <i>personata</i> of distant E Indian Ocean & NW Australia may reach Region.
409	Red-footed Booby	<i>Sula sula</i>	Of 3 spp, only <i>rubripes</i> of Indian Ocean in Region: nominate in Atlantic & <i>websteri</i> in Pacific. Juveniles or long-range foragers likely off S Arabian coast, HBW1. Possible RNBWS record Jan 90 at 15:30:0.0N, 41:42:0.0E. 2 other RNBWS reports (Sep 98 & Jan 99) just E of 61:24:00 and 1 to S (Mar 64). Vagrant Djibouti 1985 Redman <i>et al</i> 2009. One photographed at inland desert airstrip, 3rd record Oman, 18 Jun 07 OBL7 . Vagrant UAE Oman Aspinall & Porter 2011, very rare Campbell <i>et al</i> 2011, 3rd Ras Madrakh Dec 2018 OBRC , 4th live bird record Khalifa Port Sep 2020 EBRC , adult off Brakh, juvenile off Abu Dhabi May 2021 DB43(4) : 305; 5th Abu Dhabi & 6th near Dalma Island records May 2021 EBRC . 1st for Iran Aug 79 Khaleghizadeh 2017, 2nd at Khoor-e Tiab, Hormozgan Jan 2020 DB44(3) : 221. Mapped OSME Region Indian Ocean between 10°N & 10°S BLDZ Feb 2-18. Extralimital records of dead (May & Oct 1979) and live (Nov 1981) birds near Mogadishu, Somalia, Ash 1983. about 1200km S of Socotra.
410	Indo-Pacific Brown Booby (earlier Forster's Brown Booby) {Brown Booby}	<i>Sula [leucogaster] plotus</i>	Howell & Zufelt 2019 treat as 3-species superspecies, Brewster's Brown <i>S.[l.] brewsteri</i> with ssp <i>etesiaica</i> , Atlantic Brown <i>S.[l.] leucogaster</i> , & the widespread Indo-Pacific Brown <i>S.[l.] plotus</i> . (Only <i>plotus</i> in Region: <i>brewsteri</i> + <i>etesiaica</i> along Pacific coasts California-Panama). Red Sea, including small scattered breeding populations on islets off Egypt's coast Habib, SW Arabian coast, Socotra c 13 000bp Jennings 2010, revised by Porter & Suleiman 2014 to 200 000+ (globally significant); not unexpected along Region's warm coasts HBW1, fairly commonly Oman OBL7 ; 1st Kuwait record Apr 2013 (2 birds) DB35(3) WPR , 1st Turkey record Alanya May 2013 DB35(2) WPR . Since 2007, that small Egyptona population breeds on fewer Red Sea islands & in lower numbers due to recreational disturbance Habib 2021. Egypt Avib, BE.
Anhingidae			
PT	Darter PT	<i>Anhinga melanogaster</i> (<i>sensu lato</i>)	PT , which we aligned with Schodde <i>et al</i> 2012, IOC4.4 (extending from R&A 2005, Kennedy <i>et al</i> 2005: <i>A. rufa</i> African, <i>A. melanogaster</i> Oriental & <i>A. novaehollandiae</i> (Christidis & Boles 2008) Australasian Darters) is now confirmed by genetic findings of Kennedy <i>et al</i> 2019; African & Oriental Darters separated 8-10Mya. However, Kennedy <i>et al</i> 2019 did not examine <i>chantrei</i> , <i>vulsini</i> . Many OSME records, eg Iran Scott & Adhami 2006, remained with older arrangements. Sistan birds before water supply cut off likely <i>A.r. chantrei</i> , possibly also <i>A. melanogaster</i> . Vaurie in 1950s had assessed specimens from extirpated Turkish & Iraqi populations as <i>chantrei</i> , a view upheld by Kirwan <i>et al</i> 2008, Schodde <i>et al</i> 2012. NB All <i>Anhinga</i> taxa superb soarers to high altitudes and capable of long flights.
411	Oriental Darter	<i>Anhinga melanogaster</i> (<i>sensu stricto</i>)	Monotypic. Recently reliably recorded in Uzbekistan Koblik & Arkhipov 2014; considered accidental Ayé <i>et al</i> 2012 Appendix 1. R&A 2012 mapped as wintering in Pakistan within 200km of Khyber: BLDZ map Jul 2017 shows presence just NE of Bannu, within 50km of Afghan border. NB Numerous isolated mangrove sites remain along coast from Pakistan through Iran to Iraq.
412	African Darter (Darter)	<i>Anhinga rufa</i>	2 of 3 spp in Region: rapidly-diminishing <i>chantrei</i> of Iran-Iraq waterways; <i>rufa</i> occurs African S Red Sea/Gulf of Aden coasts, & so likely recorded SW Arabia; extralimitality, <i>vulsini</i> Madagascar. Iraq, BWP1, Iran Winkel <i>et al</i> 2010, HBW2, 5 Jan-Mar 2016 Hoor-al-Azeem wetland, Khuzestan, Iran IBRC , 48 there Jan 2018 DB40(5) : 332, 1st confirmed breeding 11 juveniles Jun 2020 DB42(4) : 276; vagrant Israel Perlman & Meyrav 2009; ssp <i>chantrei</i> extirpated Amik Gölu in Turkey 1950s after drainage, HBW2. Sole Middle East breeding (<i>chantrei/rufa</i> ?) colony Iraq marshes Salim <i>et al</i> 2012. <i>A.[m.] rufa</i> (<i>chantrei</i> ?) cited sole Darter taxon in Region, Nelson 2005, but IOC2.7 note <i>melanogaster</i> in Pakistan, which may have been taxon at Sistan/Seistan wetlands Iran/Afghanistan prior to cutting water supply in Afghanistan; that supply now is diverted within Afghanistan, especially to Hamun Hilmand 60km from Sistan. Has W Madagascan <i>vulsini</i> (taxon status unclear: IOC5.4 gives as ssp of <i>rufa</i>) wandered? Egypt EORC 2018 (unsplit)
Phalacrocoracidae			A general consensus has been reached on cormorant systematics and sequencing (see Kennedy & Spencer 2014); the new genera now ease the placement of fossil species. H&M4 resequences within genera, similar to IOC 4.3 sequencing.
413	Pygmy Cormorant	<i>Microcarbo pygmaeus</i> (formerly in <i>Phalacrocorax</i>)	Monotypic. Scarce resident mid-CA, breeds also Turkey, Iran Schüz 1959, Nelson 2005, Syria Murdoch & Betton 2008, Iraq marshes Salim <i>et al</i> 2012, Israel Perlman & Meyrav 2009, migrant & likely scarce breeder N Kyrgyzstan Ven 2002, S Kazakhstan W&O 2007, but considerable expansion eastwards of breeding distribution Wassink 2022. 1st for Egypt (?) juvenile N of Abu Simbel Jun 2022 Jens Hering pers comm Jul 2022, DB44(4) : 305. First for 20 years Jordan Valley Sep 2018, 5th since 2000 Aqaba Apr 2019 JBRC , 3rd Kuwait record Aug 2013, 4th Sulaibikhat Jan 2017 SG39(2) : 207 KORC , 4th Mar 2017 DB39(3) : 205 winters more widely (1st wintering record Kazakhstan W&O 2008), largely within OSME Region, HBW1, including Afghanistan R&A 2005, where may breed R&A 2012. BLDZ Feb 2018 maps along N Afghan border with Uzbekistan & Tajikistan. Egypt Avib, BE. NB Species name spelling as per IOC 9.1
414	Reed Cormorant (BLI Long-tailed Cormorant)	<i>Microcarbo africanus</i> (formerly in <i>Phalacrocorax</i>)	2 spp, <i>pictilis</i> Madagascar, nominate across sub-Saharan Africa to Ethiopia; wanders to SW Arabia, HBW1, Socotra Aspinall <i>et al</i> 2004. 10 records Egypt, but now extinct EORC 2016. However, locally resident in Khartoum State and likely further N towards Egyptian border Jenner & Taha 2016.
415	Little Cormorant (Javanese Cormorant)	<i>Microcarbo niger</i> (formerly in <i>Phalacrocorax</i>)	Monotypic. Sympatric with Indian Cormorant <i>P. fuscicollis</i> (qv) E of Karachi; distinguishable only at short range (Roberts 1991); straggler Afghanistan Paludan 1959 (included from literature [note Whistler's specimen is <i>pygmaeus</i>]), old records Ayé <i>et al</i> 2012; may occur Afghanistan R&A 2012. H&M3 Afghan corrigenda E Dickinson pers comm; vagrant 1884, 1885 Madge 1980. Non-breeding distribution in W Pakistan lies only 75km from Afghanistan BLDZ map Jul 2020. NB1 Common winter in Punjab 2003 c 200 km from Afghan border Ali & Akhtar 2005, R&A 2012. NB2 Vagrant as far south to the Maldives Anderson & Shimal 2020.

416	Socotra Cormorant	<i>Phalacrocorax nigrogularis</i> Vulnerable	Monotypic. SW Arabian waters, Socotra archipelago, breeds on Abd al Kuri & westernmost Socotra Island BLDZ Jul 2020 in numbers 2750+ (globally significant) Porter & Suleiman 2014, also on Omani Kuria Muria Islands; breeds Gulf (27 300bp reported Hawar, Bahrain Jennings 2007b, 250,000 in 1972 on the then-uninhabited Zirku (Zarukkah) island Stewart-Smith 1997, in 2016 almost none), southern Gulf coast, UAE Aspinall 1996: breeds on eastern Saudi Arabia coast as far N as Ras al Khair: Jennings 2010 prudently assesses Arabian status as 110 000bp, given mobility of species & disturbance-related abandonment of colonies: likewise Bahrain, currently with 22K bp King 2018. Muzaffar <i>et al</i> 2017 identify short-range migrations of UAE populations, finding no mixing with populations in the southern Oman-Socotra arc, noting that populations west of Qatar in the Gulf of Salwa likely are also distinct and this should be considered as evolutionary separate units. Locally common visitor Oman, large winter roosts & flocks OBL7 . Very local breeder S Iran coast, where 29 juvs recorded Jan 2009 Winkel <i>et al</i> 2010, HBW1, confirmed scarce resident Iran Scott & Adhami 2006, Khaleghizadeh <i>et al</i> 2017. NB earlier change to <i>Leucocarbo</i> genus in limbo: <i>pro tem</i> , applies to some southern hemisphere taxa only; resolution awaited.
417	Indian Cormorant (Indian Shag)	<i>Phalacrocorax fuscicollis</i>	Likely extinct in Region. Monotypic. Historic range W to SE Iran, SE-NE Afghanistan, Nelson 2005. Unlikely now R&A 2005 (Seistan Depression now dry long-term), but being better-adapted to salt water than <i>Microcarbo niger</i> , may be overlooked in coastal mangroves Iran. However, common in winter in Punjab 2003 c200 km from Afghan border Ali & Akhtar 2005; also into much of riverine Pakistan R&A 2012. Not difficult to find in Gujarat close to the Pakistan border MB pers obs winter 2010, but BLDZ map Oct 2018 shows it no nearer to the Region than 450km to Iran, west of Gwadar. Frequently hunts with other cormorant species Kennedy <i>et al</i> 2018. NB Kennedy & Spencer 2014 noted that relationships of this species were unresolved, but Kennedy <i>et al</i> 2018 establish a close relationship to the allopatric Little Black Cormorant <i>P. sulcirostris</i> (Java to Australia), while emphasising that this widespread taxon is little-researched.
PT	Great Cormorant PT	<i>Phalacrocorax carbo</i>	IOC2.2 accepted split of <i>lucidus</i> , H&M4 does not. However, Kennedy & Spencer 2014 indicate <i>sinensis</i> , along with <i>lucidus</i> , shares a (recent) common ancestor with <i>carbo</i> (including <i>novaehollandiae</i>) & with Japanese Cormorant <i>P. capillatus</i> , the corollary being that <i>sinensis</i> is almost as distant from <i>carbo</i> as <i>lucidus</i> is. <i>Pro tem</i> , we treat as superspecies. While Harrison <i>et al</i> 2021 note that <i>carbo</i> and <i>sinensis</i> are ecologically distinct and seemingly more closely related to <i>novaehollandiae</i> (Australasian Cormorant) and <i>lucidus</i> respectively, they retain all as ssp. The nominate may straggle to the W OSME Region, but confirmed records seem not to exist .
418	'Continental Great Cormorant' {Great Cormorant}	<i>Phalacrocorax [carbo] sinensis</i>	Taxon <i>sinensis</i> almost as distant from <i>carbo</i> as is <i>lucidus</i> Kennedy & Spencer 2014. Breeds from C Europe E through much of lower Central Asia to India & China. Breeds locally N OSME Region, common BM & rare RB Kazakhstan Wassink 2015b, locally common RB S Caspian Iran Khaleghizadeh <i>et al</i> 2017, (formerly (?) Afghanistan Paludan 1959; recorded as non-breeder Bamiyan Busuttill & Ayé 2009, although R&A 2012 map as SB in N), winters to S (1st wintering record Kazakhstan W&O 2008), including Gulf, N Red Sea coast, HBW1, S Caspian Schüz 1959; breeds W Tien Shan & N Kyrgyzstan, Ven 2002. WV Arabia, one breeding record Jennings 2010 & WV Bahrain, occasional breeder King 2010, sometimes abundant WV Oman OBL7 . Egypt Avib, BE.
419	White-breasted Cormorant	<i>Phalacrocorax lucidus</i>	Monotypic. IOC 10.2 treats as independent from <i>P. carbo</i> . African taxon reaches Region on Yemen side of Bab-al Mandab (Redman <i>et al</i> 2009) (also Perim Island?) & probably irregular along adjacent E Red Sea coast; vagrant Socotra Redman <i>et al</i> 2009, 2nd Socotra, Yemen, record at Khor Mori Dec 2021 SG44(1): 257 . One record inland Saudi Arabia Stagg 1985 Jennings 2010. NB1 Some individuals, possibly intermediates with taxon <i>carbo</i> , have little or no white. NB2 May reach southernmost Egyptian Lake Nasser; recorded in Sudanese part Nikolaus 1987.
420	European Shag	<i>Gulosus aristotelis</i> { <i>Phalacrocorax aristotelis</i> } (formerly <i>Phalacrocorax aristotelis</i>)	Polytypic. Only <i>desmarestii</i> of 3 spp expected in Region. However, Thanou <i>et al</i> 2016 found 3 genetic groups comprising: N Atlantic; Spain & Corsica; E Mediterranean, which do not align with current ssp distributions. Within the Mediterranean, the observed genetic structure corresponds to at least four geographical regions, that is Corsica, Adriatic, Aegean and Crete. There is no evident physical barrier between them that might prevent overseas movements, but several hydrological boundaries have been proposed, that is underwater ridges that affect the prevailing current flows in the different Mediterranean basins, shaping their hydrological features (eg salinity and cold-water upwelling). Distribution in Region: E Mediterranean, W Turkey (Nelson 2005), declining Cyprus Hellicar 2016; Black Sea (including N Turkey) BLDZ map Jul 2020, breeds, migrant & WV Krasnodar Krai Black Sea coast Koblik & Arkhipov 2014; vagrant Israel Perlman & Meyrav 2009 2nd record Jaffa Jan 2016 SG38(2): 321 , 1 record Gulf of Suez Mike Jennings <i>in litt</i> ; 2nd (3rd?) off Carmel Coast Apr-Jul 2021 IBRCE . Iraq Salim <i>et al</i> 2012. Colony recently found in S Russia G&G 2003. Egypt EORC 2018 . Position of this taxon only now resolved by Kennedy and Spencer 2014 who erect monotypic genus <i>Gulosus</i> , now accepted by BLI, IOC11.2, Harrison <i>et al</i> 2021 & CSNA/Dutch Birding Jan 2022 . NB <i>desmarestii</i> sometimes called 'Mediterranean Shag'.
		Threskiornithidae	Some threskiornid spp continue to be introduced, particularly because many cultures have a long history of bird-keeping, but also because of developing prosperity funding the trade in exotics Blackburn <i>et al</i> 2015.
PT	Sacred Ibis PT	<i>Threskiornis aethiopicus (sensu lato)</i>	Parent Taxon: split is to extralimital monotypic Malagasy Sacred Ibis <i>T. [a.] bernieri</i> IOC1.6, BL 2008, H&M4 (who resequence genera).
421	African Sacred Ibis	<i>Threskiornis aethiopicus (sensu stricto)</i>	Monotypic. Resident, water-nomadic African species. SE Iraq population winters Iran (irregular to S Caspian Schüz 1959; 10 at Hour-al-Azeem. Khuzestan Jan 2020 DB42(2): 125), recorded Kuwait Yemen HBW1 introduced Bahrain & breeding Jennings 2007b; feral population Bahrain King 2018. Status in Arabia: scarce breeding resident in SW, feral breeder Gulf, scarce winterer Kuwait Jennings 2010; vagrant Oman OBL7 , 6th record Aug 2013, 10th Raysut Oct 2019, but 9 escape records also known. Single record of unknown status Turkey Aug 2010 Kirwan <i>et al</i> 2014. Local breeder Iraq marshes Salim <i>et al</i> 2012. 2 at Khor Mori & Khor Qadhab, Socotra, Yemen, Dec 2021 SG44(1): 257 . Introduced UAE, Lever 2005. Formerly Egypt Avib, BE.
422	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	Sporadic vagrant Uzbekistan Koblik & Arkhipov 2014
423	Northern Bald Ibis (Formerly Waldrapp)	<i>Geronticus eremita</i> Endangered: raised from Critically Endangered Nov 2018	Monotypic. Birecik colony Turkey now semi-captive; some released 2010 in hope of following Palmyra survivors. Tiny population Palmyra Syria now extinct - no birds seen 2015. Satellite-tracking (one bird for 3 years Syria Murdoch & Betton 2008) identified an Ethiopian wintering site (Ethiopia suggested by H&E 1970); N Yemen records - one Dec 84, 6 Hodeidah spring 1985 Bundy & Warr 1985, 16 Taizz area summer 1985 Jennings 1986, two shot western Hadramaut Jan 1949, but Meinertzhagen's 'specimen' in BMNH labelled Dec 1948, therefore location suspect; NW African 'stronghold', HBW1. Apr 70 (four, Krabbe 1983) & Apr 80 (one, Lambert & Grimmett 1983) records Israel, late for Birecik, Turkey, may have been Palmyran birds, like the party of 12 overwintering (immatures?) in N Yemen in 1985 (Richard Porter <i>in litt</i>). Report of cliff colony in 'Political Syria' 1942 30+ miles W of Abu Kemal Iraq Moore & Boswell 1956. First records Israel Aug 2021 since 2007: in NW Negev, one seen near Gvulot 11-23/8, second near Bnei Netzarim 27/8. Both are young birds from the Birecik semi-wild population Yoav Perlman <i>in litt</i> , IBRCE . Birecik population now 285. Formerly Egypt Avib, BE. NB Successful reintroductions in Europe in Spain (MB pers obs) & Austria; both populations have rediscovered migration; numbers steadily increasing.

424	Glossy Ibis	<i>Plegadis falcinellus</i>	Monotypic. Breeds Caucasus, CA, W Kazakhstan W&O 2007 scarce Wassink 2015b, 1st wintering Kazakh record 2 birds Karakol Lake Dec 2018 Nusbekov 2018, Wassink 2019. Breeding population decline in Turkey since 1950s, but recent increases in migrant numbers; small but increasing wintering population Onmuş & Karauz 2019. N Iran? Summer resident Scott & Adhami 2006) winters Iran Afghanistan notoriously nomadic HBW1; resident/migrant Iran Khaleghizadeh <i>et al</i> 2017, N Afghanistan BLDZ Feb 2018, Israel Perlman & Meyrav 2009, breeds Iraq Ararat <i>et al</i> 2011, 1st breeding Saudi Arabia 2010 SG33(1) , Egypt May 2016 DB38(4) p245; 367bp in 23 colonies found breeding (1st for Lake Nasser) 2020 Hering <i>et al</i> 2020b, more in 2022 Jens Hering in litt . Locally uncommon (possibly breeds) Uzbekistan Martin <i>et al</i> 2014, UAE vagrant/naturalised Colin Richardson <i>in litt</i> . Severe population decline largely due to breeding habitat loss; numbers arriving to winter in Sahel down 90% since 1980s some places Zwarts <i>et al</i> 2009.
425	Eurasian Spoonbill	<i>Platalea leucorodia</i>	3 ssp, 2 in Region: nominate Turkey-C Asia, N Middle East, extralimital to Far East & China; <i>archeri</i> probably most of Region's Red Sea coast, especially S Red Sea Egypt Hurghada down to Halaib all islands visited only 12bp Habib 2016a, but only one specimen known SW Arabia Jennings 2010; extralimital <i>balsaci</i> W Mauritania. Breeds W Red Sea coasts and islands & N Central Asia (irregular and rare at scattered wetlands Kazakhstan <650bp Wassink 2015b) S to Iran Scott & Adhami 2006, some RB Iraq marshes Salim <i>et al</i> 2012, WV Iran, Afghanistan Paludan 1959, BM Madge 1980, N Red Sea, nomadic, migrates through OSME Region to India, HBW1. Status in Arabia; RB Red Sea islands, islands off Kuwait, WV elsewhere Jennings 2010; 7th Qatar record Jan 2014 QBRC , abundant WV & PM Oman OBL7 . Up to 13 N of Abu Simbel Jun 2022 (1st summer records Lake Nasser?) Jens Hering in litt . Egypt Avib, BE
426	African Spoonbill	<i>Platalea alba</i>	Monotypic African species, nomadic, vagrant Oman OBL7 , may breed S Yemen, HBW1, Al-Saghier & Porter 1997a, attempts failed Jennings 2010. Captive bred Dubai Zoo, free-flying introduced Qatar (colony) Jennings 2010.
		Ardeidae	H&M4 resequences families, genera & within genera, but we remain with IOC sequencing..
427	Eurasian Bittern (Bittern)	<i>Botaurus stellaris</i>	2 ssp, <i>capensis</i> extralimital S of S Tanzania; only nominate in Region. Breeds locally Caucasus, CA (common Kazakhstan wetlands Wassink 2015b, rare resident Iran Scott & Adhami 2006) & E to Magadan Brazil 2009, winters S Caspian & suitable locations to S, HBW1, including Afghanistan R&A 2005; rare PM & WV Oman OBL7 , 9th Qatar record Irikaya Nov 2019, 10th Sailiya STP Oct 2020 QBRC . Egypt Avib, BE
PT	Little Bittern PT	<i>Ixobrychus minutus</i>	Parent Taxon: split is to extralimital monotypic Black-backed Bittern <i>I. dubius</i> (Australia) IOC v1.6.
428	Little Bittern	<i>Ixobrychus minutus</i>	3 ssp, only nominate in Region. H&M4 surely in error list <i>payesii</i> as breeding in Yemen, since Jennings 2010 has no breeding records at all for Yemen; perhaps its occurrence on Socotra has misled? Breeds Caucasus, CA (common SB Kazakhstan Wassink 2015b), Iran, Iraq Salim <i>et al</i> 2012 (Afghanistan Paludan 1959 H&E 1970 R&A 2005), Perlman & Meyrav 2009, migrants expected en route to India, HBW1. Juvenile recorded Socotra 1996 Kirwan 1998. Thinly widespread migrant in Arabia, but increasingly breeding artificial wetlands Jennings 2010 as residents. Fairly common SV sometimes breeding Oman OBL7 . Probably breeds Lake Nasser Hering <i>et al</i> 2020b, confirmed attempt Jun 2022 Toshka Island, S Lake Nasser Jens Hering pers comm Jul 2022 . Egypt Avib, BE.
429	Yellow Bittern	<i>Ixobrychus sinensis</i>	Monotypic. Indian & SE Asian species, occasionally wanders W, following water availability, HBW1; biology and distribution trends reviewed Barthel & Hering 2012. Uncommon increasingly regular S Oman, breeding occasionally OBL7 , 1 at East Khawr Nov 2018 SG41(1)ATR : 143. Recorded Socotra 1999 Aspinall <i>et al</i> 2004 & in 2006 Jennings 2007b, now thought resident Porter & Suleiman 2014, One at Wadi Shiq, Socotra, Yemen Dec 2021 SG44(1): 257 . Hamata Egypt May 2012 Hering <i>et al</i> 2012, found breeding mangroves Wadi Lahami Egypt Jul 2013 Hering <i>et al</i> 2012, ID confirmed by genetic analysis Päckert <i>et al</i> 2014, small colony still present 2016 Haas 2017: accepted by EORC . 1st record Djibouti Hering <i>et al</i> 2015. Status in Arabia: breeds in small numbers Dhofar Oman, seemingly resident; possibly undetected elsewhere Jennings 2010.
430	Cinnamon Bittern (formerly Chestnut Bittern)	<i>Ixobrychus cinnamomeus</i>	Monotypic. One UAE record 2000 Simon Aspinall pers comm, EBRC . 1st record Oman Apr 2014 OBRC . Indian & SE Asian species, occasionally wanders W, following water availability, HBW1. Old CA records Ayé <i>et al</i> 2012; vagrant Afghanistan Jul 1972 Madge 1980 - Seistan, now mostly dry?.
431	Dwarf Bittern	<i>Ixobrychus sturmii</i>	Monotypic African species, nearest population Ethiopia; one recorded Oman 01 Nov 2013: OBRC update 22 Sep 2014. Ash 1983 noted quite common in southern Somalia.
432	Black Bittern	<i>Ixobrychus flavicollis</i> (Formerly <i>Dupetor flavicollis</i>)	Genus change follows Wang <i>et al</i> 2014, Zhou <i>et al</i> 2014, Zhou <i>at el</i> 2016, IOC 10.1: Hrushka 2018 (thesis) strongly supports. One isolated record, highly probably nominate, from the bay at S end of Iran-Pakistan border; see map R&A 2005, 2012. Remaining 2 ssp remote, from Lesser Sundas E to Pacific.
433	Black-crowned Night Heron (formerly Night Heron)	<i>Nycticorax nycticorax</i>	4 ssp, only nominate in western hemisphere. Breeds Caucasus, CA (common BM S half Kazakhstan Wassink 2015b), Iraq, N Iran, (Afghanistan R&A 2005, 2012), Middle East, SB N Kyrgyzstan, Ven 2002, widely dispersive, winters to S CA, to Africa, including Red Sea, HBW1. Status in Arabia: widespread migrant and WV, occasional (since late 1980s) breeder Jennings 2010; common PM & WV Oman, some breeding OBL7 . Estimated 123 bp in 10 colonies Lake Nasser 2017, 1st confirmed breeding Lake Nasser 2016 Hering <i>et al</i> 2020b, more there 2022 Jens Hering in litt . Egypt Avib, BE
434	Striated Heron (Green-backed Heron, Little Green Heron)	<i>Butorides striata</i>	21-26 ssp, only two resident in Region: <i>brevipes</i> (also in Somalia) Red Sea (including Aqaba Perlman & Meyrav 2009), now breeding Mediterranean coast Israel Checklist 2015, recorded Palestine 2019 Awad <i>et al</i> 2022 , thought to breed Socotra Porter & Suleiman 2014, post-breeding dispersal, HBW1; <i>javanica</i> (priority over <i>chloriceps</i>) increasingly fairly common resident Iran in Gulf mangroves & islands Khaleghizadeh <i>et al</i> 2017, but birds in Gulf in winter may be from large Indian population <i>javanica</i> ; see R&A 2005, 2012 (who map breeding very close to SE Afghan border in Pakistan); 5-record vagrant Jordan JBRC , now regular in Aqaba area JBRC ; (2nd seen Azraq 2012) Qaneer & Butcher 2013. Bred Nile Valley Egypt Dijkstra 1997 & Bahrain Jun 2017 DB39(4): 260 & first breeding proven May 2022 Bahrain DB44(4): 305 . Found Lake Nasser in breeding season Hering <i>et al</i> 2020b. 5th record Kuwait Oct 2015 KORC , 6th Jahra Jul 2018 KORC , 7th Jahra Farms Nov 2021 KORC . 1st Cyprus record Oct-Dec 2014 Colin Richardson <i>in litt</i> . Status in Arabia: c 2000bp, largely resident, though some migration possible Jennings 2010; common breeding resident & PM Oman (incliding dark-morph ssp <i>brevipes</i> OBL7 . NB1 The name Green Heron now restricted to Nearctic <i>B. virescens</i> . NB2 IOC v2.3 lists extramital (Galapagos) Lava Heron <i>B. sundevalli</i> .
435	Squacco Heron	<i>Ardeola ralloides</i>	IOC 10.1 treats as monotypic. H&M4 identified African ssp <i>pauludivaga</i> , which reached African Red Sea & N Somalia coasts, & so those recorded mainland Yemen & Socotra possibly have been attributed to this ssp; nominate recorded in much of rest of Region. Breeds locally CA, W Kazakhstan W&O 2007 (first winter record 2008 Karpov & Kovshar 2009, Wassink 2010), (suspected occurs W Kyrgyzstan Ven 2002), locally Middle East, Iran, Iraq, Afghanistan Reeb 1977 (probably R&A 2005), winters N Gulf, Africa, HBW1; majority of Asian breeders now thought to winter in the Sahel, where vulnerable to droughts & human encroachment on natural floodlands Zwarts <i>et al</i> 2009. Status in Arabia: common passage migrant, but since 1990s has bred in small numbers near Riyadh and in the Gulf Jennings 2010, increasing Bahrain King 2018; recorded Socotra in spring from 1996 onwards Kirwan 1998. 1st bred Kuwait Aug 2013 KORC , abundant PM & WV Oman, some breed in S OBL7 . 4 nests Phasouri Plantation, Cyprus Jun 2020 SG43(1) : 167. Estimated 111 bp in 5 colonies Lake Nasser Egypt 2019, Hering <i>et al</i> 2020, more there 2022 Jens Hering in litt . Egypt Avib, BE
436	Indian Pond Heron	<i>Ardeola grayii</i>	Monotypic. Resident S Iran; follows water availability, occurred Oman S Arabia, HBW1; common PM & WV Oman OBL7 , 2-record vagrant Kuwait KORC . One reported Hamata mangroves, Egypt Mar 2019 ABC Bul/l 27(1): 107 . Socotra 10 Nov 07 (Hugh Buck pers comm), now thought resident Porter & Suleiman 2014; 8 at Khor Sirhan, Qalansiyah Lagoon, Wadi Ahq & Wadi Dibini Socotra, Yemen Dec 2022 SG44(1): 257 . 1st Qatar Feb-Dec 2016 QBRC , 1st Kazakh record 2008 (photos) Kovalenko 2009 Wassink 2010, 3rd record Dec 2014-Jan 2015 Wassink 2015a, 4th C Kazakhstan (most northerly record) Jul 2019 SG42(1) : 169, 5th Ulanbel, Zhambyl Sep 2020 Wassink <i>et al</i> 2021. Reported Tajikistan Koblik & Arkhipov 2014. Breeds close to SE Afghan border in Pakistan R&A 2012. NB One reached Finland 31 Aug-13 Sep at Turku DB38(6) : 400.

437	Chinese Pond Heron	<i>Ardeola bacchus</i>	Monotypic. One report in Kyrgyzstan G&G 2005 considered uncertain Koblik & Arkhipov 2014; possibility of wanderers to Kazakhstan from Mongolian population. Vagrant Oman, 2nd record Sep 2012 OBL7 ; 1st for Israel Jerusalem Botanic al Gardens Apr-May 2021 Yoav Perlman <i>in litt</i> . One caught & released 2011 in Pakistan's Qurumber (Karamber) NP at a location less than 5km from the Wakhan panhandle, Afghanistan Khan <i>et al</i> 2015. NB Species' status in area between Mongolia and SE Asia was not known R&A 2012, but now rare, increasing PM large swathe of C Mongolia Gombobaatar & Leahy 2019.
438	Malagasy Pond Heron (Formerly Madagascar Pond Heron)	<i>Ardeola idea</i> Endangered	Monotypic. Despite breeding Madagascar & wintering in E Africa N only to equator (HBW1), has reached Arabia, specifically Socotra Aspinall <i>et al</i> 2004. Ash 1983 logged 130 records in Somalia, even as far N as Hargeisa only 215km from southernmost Yemen.
PT	Cattle Egret PT	<i>Bubulcus ibis</i> (<i>sensu lato</i>)	Easternmost older records will refer to PT and may include <i>coromandus</i> . IOC4.1, R&A 2005 accept split, H&M4 does not. For ID & status, see Ahmed 2011a. NB Zhou <i>et al</i> 2014 place <i>Bubulcus</i> close to <i>Ardea</i> , thus questioning the validity of the former genus. However, Huang <i>et al</i> 2016 using bar-coding suggest that <i>Bubulcus</i> is closer to <i>Egretta</i> & <i>Egretta</i> is distinct from <i>Ardea</i> , while placing Great Egret in <i>Casmerodius</i> and Intermediate Egret in <i>Mesophoyx</i> : this paper lacks the sources and geographic origin of the genetic samples examined, but instead relies upon referenced published bar-code sequences & an unpublished 2013 paper by Huang. Nevertheless Hrushka 2018 (thesis) strongly supports Zhou 2014 re close relationship tp <i>Ardea</i> .
439	Western Cattle Egret (Cattle Egret)	<i>Bubulcus ibis</i> (<i>sensu stricto</i>) (May become <i>Ardea ibis</i>)	Resident W Caspian, occasionally W Kazakhstan W&O 2007, very locally in CA (recorded, photos Uzbekistan Kaysarov 2010), some Iraq, SW Iran, but wanders; spreads commensally where livestock farmed, HBW1. 100+ at Athalassa Dam Nicosia Cyprus, new breeding site SGATR41(1) . 5th Uzbekistan record Gazli, Bukhara Region Apr 2019 SG42(1) : 184 Status in Arabia: breeds S Red Sea, a few in Gulf small numbers Bahrain King 2018, perhaps Riyadh Jennings 2010; thought to breed Socotra Porter & Suleiman 2014. Breeding UAE, Aspinall 2007, Israel Perlman & Meyrav 2009. Abundant PM & WV Oman, breeding attempted OBL7 . Vagrant Wakhan NP Afghanistan Aug 2021 SG44(1): 232 . Egypt EORC 2018 (unsplit), but common breeding resident Lake Nasser 2026-2019 Hering <i>et al</i> 2020b & in 2022 Jens Hering in litt . NB Vagrant to Sind, Pakistan R&A 2012.
440	Eastern Cattle Egret (Indian Cattle Egret)	<i>Bubulcus coromandus</i> (=B. <i>ibis coromandus</i>) (May become <i>Ardea coromandus</i>)	Breeds W to Pakistan-Afghanistan border R&A 2012. H&E 1970 suggested breeds Iran; Seistan & Baluchestan, Zarudny's (1911) opinion; probable status SE Iran Khaleghizadeh <i>et al</i> 2017 validated: 2 at Fasa, Fars Apr 2020 are 3rd & 4th records, 5th at Shahdad, Kerman Jun 2021 IBRC . Until 2007 absence of records perhaps due to lack of awareness of split & ID differences: larger; longer bill, neck & legs Brazil 2009 also more rufous on back, see R&A 2005, 2012 Vol 2 p58; though sedentary in most of the Indian sub-continent, individuals wander R&A 2012; a water-follower in erratic monsoons, expected in neighbouring Afghanistan. Vagrant Oman, 6 records to 2013, probably overlooked in non-breeding plumage OBRC ; 1st record 2009 UAE Aspinall 2010, 5th record (after review of history and ID) Ajman May 2017, 8th Ajman Apr 2019, almost annual EBRC , 7th Markaniyah Farm UAE Apr 2018 EBRC . 10th al-Zorah Golf Club Sep 2021 EBRC ; 2nd for Kuwait Jahra pools Apr 2018 KORC . Status in Arabia: reported a few locations in the Gulf Jennings 2010; possible <i>ibis/coromandus</i> mixed pairs.
441	Grey Heron	<i>Ardea cinerea</i>	Only nominate of 4 spp recorded in Region. Colonial; widespread, sometimes local breeder N OSME Region, also Iran, Afghanistan (R&A 2005) WV commonly further S, HBW1, E European and Asian birds more likely to migrate long distances Zwarts <i>et al</i> 2009. 1st bred Egypt May 2016 DB38(4) p245. Status in Arabia: common PM & WV, but perhaps some 200bp (mostly Kuwait) Jennings 2010; abundant PM & WV Oman OBL7 . 1st breeding record Egypt for over 100 years, 335bp Lake Nasser 2016 in 25 colonies Hering <i>et al</i> 2020b, numerous also in 2022 Jens Hering in litt . Egypt Avib, BE
442	Black-headed Heron	<i>Ardea melanocephala</i>	Monotypic African species, wanders to SW Arabia, HBW1, 1st Saudi Arabia Jul 2010 Ahmed 2011b, 2nd record Oman Jul 1999 Gustad 2002, Gustad & Schjølberg 2002, flock of 19 reported 2005 Hodeidah, Saudi Arabia Jennings 2007b, vagrant Israel Perlman & Meyrav 2009. Status in Arabia: up to 15bp Jennings 2010; core of founder population? Vagrant 5 records Oman OBL7 . Egypt Avib
443	Goliath Heron	<i>Ardea goliath</i>	Monotypic. African population extends to SW Arabia; drought-driven nomadism eg 30 Apr 43 Kut, Iraq Moore & Boswell 1941-46. Also breeds S Iraq (rare Salim <i>et al</i> 2012), Iran HBW1 where decreasing Khaleghizadeh <i>et al</i> 2017, 3 birds Hour-al-Azeem, Khuzestan, Iran Jan 2020 DB42(2) : 125, vagrant Israel Perlman & Meyrav 2009, Egypt SG35(2) ATR , breeding recorded Wadi Lahami, Egypt SW coast apr 2006 Crochet <i>et al</i> 2018: one recorded there May 2018 DB40(4) : 259. Status in Arabia: 25-30bp in Red Sea, semi-captive population Al Ain Zoo UAE Jennings 2010, Aspinall & Porter 2011; vagrant 5 records Oman OBL7 , 6th record Jan 2016 SG38(2) : 232, 2 Mar 2016 Iran IBRC . Egypt Avib, BE. NB Very rare wintering birds in Bangladesh & coastal E India may be from Iraq or Iran breeding population.
444	Purple Heron	<i>Ardea purpurea</i>	Only nominate of 3 spp likely in Region. Widespread local breeder mid-Region, scarce BM S half Kazakhstan Wassink 2015b, winters mid-Gulf mostly Africa; heavily dependent on Sahel conditions Zwarts <i>et al</i> 2009; some resident S Iraq/Iran, HBW1, some winter Afghanistan R&A 2005, perhaps breed irregularly R&A 2012. Breeds Egypt Hoek 2007, likely second colony Hoek <i>et al</i> 2010; found breeding in 5 colonies, first records for Lake Nasser 2016-2019 Hering <i>et al</i> 2020b, numerous also 2022 Jens Hering in litt . Status in Arabia: widespread migrant, breeds Riyadh & along Red Sea in small numbers Jennings 2010; abundant PM & WV Oman OBL7 .
PT	Great Egret (Great White Egret) PT	<i>Ardea alba</i>	IOC1.6 raised <i>Ardea (alba) modesta</i> to full species, Eastern Great Egret; adopted Dong <i>et al</i> 2010, but IOC2.10 reverted to subspecies status (aligning with the prudent argument of Pratt 2011 who suggests species limits of New World taxon should be established first), which we observe, <i>pro tem</i> : to this end, IOC3.5 proposes split of American Egret A. <i>egretta</i> . NB1 BirdLife, DB 2009, Kirwan <i>et al</i> 2008 retain as/revert to <i>Casmerodius albus/modestus</i> , but DB38(2) adopted <i>Ardea</i> . NB2 Parkin & Knox 2010 note molecular data (Sheldon <i>et al</i> 2000) & osteological analysis (McCracken & Sheldon 1998) indicate closer affinity with <i>Ardea</i> .
445	'Western Great Egret' (Great White Egret) {Great Egret}	<i>Ardea (alba) alba</i> (formerly <i>Egretta alba</i>)	Widespread local breeder N & mid-Region, winters Iran, Gulf but mostly Africa, HBW1 (Iraq Moore & Boswell 1956) S Oman Porter & Aspinall 2010, occasional breeder commoner winterer Kyrgyzstan, Ven 2002, very common PM, WV Iran Khaleghizadeh <i>et al</i> 2017, resident Afghanistan R&A 2005, 2012. Increasing summer presence in Novgorod Oblast (58°N), perhaps breeding, indicative of northward expansion due to climate change; we may therefore expect its distribution in OSME Region to increase above 45-47°N Zueva <i>et al</i> 2020. Egypt Avib, BE. NB1 Ranges of <i>alba</i> and <i>modesta</i> approach each other in N China & Japan, but R&A 2012, though mentioning both taxa, frustratingly do not suggest any dividing line near Indian subcontinent. NB2 Pratt 2011 documents lack of any current DNA studies, which are needed to determine status of the 4 taxa, likely superseding Collar & Pilgrim 2007.
446	'Eastern Great Egret' {Great Egret}	<i>Ardea (alba) modesta</i>	Migrant Oman OBL7 . Long a likely vagrant from breeding grounds E of Afghanistan or from wintering (breeding?) range in the Indian subcontinent. Locally common resident (Interpreted BLDZ Great Egret map Dec 2021 suggests SB only) mangroves S Persian Gulf, Iran Khaleghizadeh <i>et al</i> 2017. Vagrant Russian S Caspian, Koblik & Arkhipov 2014.
PT	Intermediate Egret PT	<i>Ardea intermedia</i> (AOU prefers <i>Mesophoyx</i>)	del Hoyo <i>et al</i> 2014b split to Yellow-billed Egret of Africa <i>E. brachyrhyncha</i> , Intermediate Egret of Indian subcontinent & extralimital Plumed Egret <i>E. plumifera</i> of New Guinea & Australia. A somewhat fuller narrative is at Perlman <i>et al</i> 2018. Draft IOC 12.1 proposes recognition of split, citing Cake <i>et al</i> 2016 & HBW/BirdLife. NB Sangster <i>et al</i> 2016 note close phenotypic proximity of Intermediate and Great Egrets whose genetic divergence is no greater than that between Grey & Purple Herons, mitigating against separate genera for the former pair, given that reciprocal monophyly between the proposed <i>Casmerodius</i> & <i>Ardea</i> remains poorly supported; Intermediate Egret is thus best placed in <i>Ardea</i> . H&M4 agrees, as do IOC6.2.
447	Intermediate Egret	<i>Ardea (intermedia) intermedia</i>	Accidental or vagrant in Region from Indian subcontinent, HBW1, but fairly common PM & WV Oman OBL7 , 1st Qatar record Jan 2014 Morris 2014a, 2nd Mar 2019 QBRC , 4th UAE record Al Badia, Dubai, 5th record Ras al Khor Nov 2018 EBRC . 1st Iran record at Khour-e Tab. Hormozgan, Nov 2018 DB41(2) : 127. NB Australian-New Guinea extralimital populations split as Plumed Egret A. <i>plumifera</i> by del Hoyo & Collar 2014b on Tobias <i>et al</i> 2010 criteria: noted also in Inskipp & Collar 2015

448	Yellow-billed Egret	<i>Ardea (intermedia) brachyrhyncha</i>	Vagrant to Israel 2004: Israbirding Checklist & Israel Birding Portal Checklist (as Intermediate Egret <i>sensu lato</i>), Jordan (jordanbirdwatch Checklist [as Intermediate Egret <i>sensu lato</i>]), possibly that of J Ferguson-Lees <i>in litt</i> to SV Benson [Benson 1970], undated) and unconfirmed in Egypt. Widespread in Africa, likely has wandered across the southern Red Sea from African coastal habitat to between Jeddah (Saudi Arabia) and al Hudaydah (Yemen): likely this taxon is that recorded as vagrant Socotra Porter & Suleiman 2020. Non-breeders frequent Eritrean coast & littoral & its NW breeding distribution reaches W Djibouti & the Red Sea coast N & S of Port Sudan BLDZ Aug 2016. NB Description of one at Azraq, Jordan Apr 1963 rejected by JBRC in 2001, despite observers having matched it to specimens in BMMH Wallace 2018.
449	Black Heron (Black Egret)	<i>Egretta ardesiaca</i>	Monotypic. Sedentary African species has occurred Israel Shirihai 1999, Arabia, HBW1, 1st record for Arabia Aden wetlands al-Saghier & Porter 1996, 1997b, Porter & Warr 1985. 2-record vagrant Oman OBL7 , 2nd at Wadi Baqlat Dhofar Dec 2019 OBRC , 2nd for Saudi Arabia imaged at Jizen Feb 2022 DB44(2) : 150-1. Quite widespread in N Somalia Ash 1983, if differing names (Farakero/Quardo)in old & current gazetteers are linked. Egypt Avib, BE
450	Little Egret	<i>Egretta garzetta</i>	Only nominate of 3 sspp recorded in Region. Breeds locally CA, winters Gulf, resident populations round Arabian coasts, HBW1, N&C Iran Khaleghizadeh <i>et al</i> 2017, abundant PM & WV (some oversummer) Oman OBL7 , 1st for Turkey at Amik Dam, Hatay May 2021 TBRC . 1st breeding record Sabkhat al Fasl, Jubail, Saudi Arabia May 2020 Roberts 2021; resident W Afghanistan R&A 2005, 2012 (who also map it in Turkmenisatn at Amur Darya on N Afghan border). Noticeable shift northwards of western wintering populations, even occasionally to Kazakh NE Caspian coast Wassink 2022 , thus vulnerable to cold weather rather than Sahel droughts Zwarts <i>et al</i> 2009. 356bp in 15 colonies breeding at Lake Nasser Egypt 2016, Hering <i>et al</i> 2020b also in 2022 Jens Hering in litt . Koparde & Yésou 2017 record many probable hybrids with Indian Reef Egret <i>E. (g.) schistacea</i> in India & Sri Lanka. NB Huang <i>et al</i> 2016 note that <i>E. garzetta</i> shares one barcoding sequence with Nearctic Snowy Egret <i>E. thula</i> . <i>Dutch Birding</i> suggest that lumping may be called for, but because only 2 of the 4 <i>garzetta</i> samples in the COI phylogenetic tree align with the <i>thula</i> samples, interpretation of the results awaits deeper investigation.
PT	Western Reef Heron PT	<i>Egretta gularis</i>	Worthwhile separate listing on allopatry <i>pro tem</i> ; extralimital 'Western Reef Egret' <i>E. (g.) gularis</i> occurs western Africa, 'Dimorphic Egret' <i>E. (g.) dimorpha</i> Madagascar islands. del Hoyo <i>et al</i> 2014c separate <i>E. gularis</i> from Pacific (Eastern) Reef Heron <i>E. sacra</i> , but retain as sspp <i>schistacea</i> & <i>dimorpha</i> . Further to <u>Parkin & Knox 2010 who noted phylogeny of Little Egret <i>E. garzetta</i> & <i>E. gularis</i> would benefit from molecular analysis (as would placement of extralimital Pacific Reef Egret <i>E. sacra</i>)</u> , Collinson <i>et al</i> 2016 from shed feather of <i>E. (g.) schistacea</i> in Israel found closer affinities with two Little Egret <i>E. garzetta</i> from China than from Little Egrets from their western distribution, but a greater separation from extralimital Eastern Reef Heron <i>E. (g.) sacra</i> . Their <i>E. gularis</i> & <i>E. garzetta</i> samples were distant from all other <i>Egretta</i> spp, the closest of which was <i>E. thula</i> , Snowy Egret: these findings, and those of Huang <i>et al</i> 2016 (see above NB comment in Little Egret ORL entry) indicate that much needs to be learnt about the evolutionary history of all <i>garzetta</i> & <i>gularis</i> populations. It would be premature and unhelpful to amend ORL entries based on either Huang <i>et al</i> 2016 or Collinson <i>et al</i> 2016.
451	Indian Reef Heron (Indian Reef Egret)	<i>Egretta (gularis) schistacea</i>	Monotypic on grounds of functional allopatry from Dimorphic Egret <i>E. (g.) dimorpha</i> , although very limited overlap (Occasional? - No interbreeding documented) E African coast. However, Koparde & Yésou 2017 record many probable hybrids with Little Egret <i>E. garzetta</i> in India & Sri Lanka. Dark morphs occur no certain proportion Jennings 2010; breeds mainly Red Sea, S Arabia and Gulf, UAE Aspinall 1996 (Total Arabian breeders c3000, mostly in Gulf Jennings 2010; commonest breeding heron Bahrain King 2018), but also Iraq, HBW1 (all but one dark-phase Moore & Boswell 1941-46), breeds E Iran coast R&A 2005 where common resident Khaleghizadeh <i>et al</i> 2017; one dark-phase photographed at Tonekebon, S Caspian coast 17 Oct 2020 IBRC . Local breeding resident, abundant PM & WV Oman OBL7 . 1st for Turkey photographed at Amik Dam Hatay Province by Emin Yögurtcuoğlu May 2021. Taxon merits listing separately (as per Shirihai & Svensson <i>in litt</i> from Simon Aspinall); reversion to earlier treatment eg Moore & Boswell 1956. Claimed Cyprus Jul 2017 DB39(5) : 341 (although as <i>E. (g.) gularis</i>); Egypt Red Sea coast IUCN map Sep 2021. NB It is possible that W African of <i>gularis</i> populations differ significantly from those of <i>schistacea</i> in Middle East & India.
		Scopidae	
452	Hamerkop	<i>Scopus umbretta</i>	2 sspp, extralimital <i>minor</i> W Africa, nominate remainder of largely African distribution. SE Red Sea hinterland Saudi, SW Yemen, HBW1, resident breeder N Yemen Porter & Warr 1985. Possibly 3000bp in Arabia, no evidence of any movement across Red Sea Jennings 2010.
		Pelecanidae	Kennedy <i>et al</i> 2013 established that pelicans fall into 3 Clades : an Old World Clade of the Dalmatian (<i>Pelecanus crispus</i>), Spot-billed (<i>P. philippensis</i>), Pink-backed (<i>P. rufescens</i>) and Australian (<i>P. conspicillatus</i>) Pelicans, a New World Clade of the American White (<i>P. erythrorhynchus</i>), Brown (<i>P. occidentalis</i>) and Peruvian Pelicans (<i>P. thagus</i>), and a monospecific Clade consisting solely of the Great White Pelican (<i>P. onocrotalus</i>), weakly grouped with the Old World Clade .
453	Great White Pelican (White Pelican)	<i>Pelecanus onocrotalus</i>	Monotypic. Breeds locally & decreasingly Kazakhstan (W&O 2007), probably occasional breeder Volga Delta Arkhipov 2006, Uzbekistan Turkmenistan, Iran, Turkey, probably Iraq (Nelson 2005), rare migrant Kyrgyzstan, Ven 2002, winters SW SE Iran, N Gulf, Red Sea, Africa, HBW1 (1st wintering records Kazakhstan Jan & Dec 2014 Wassink 2015a), Iraq marshes Moore & Boswell 1956, WV Salim <i>et al</i> 2012, 8-record vagrant Oman OBL7 , likely W Afghanistan R&A 2005, 2012 (probably Kang depression, near the Iran border, if winter rains had filled it) (passage Paludan 1959, Madge 1980) (c67°&70°E? Roberts 1991). Status in Arabia: scarce migrant & WVto SW; no modern breeding record Jennings 2010. Egypt Avib, BE
545	Pink-backed Pelican	<i>Pelecanus rufescens</i>	Monotypic. Mainly African resident; small populations Farasan Islands off Yemeni Red Sea coast & just N of SW Arabia on Red Sea coast, HBW1, Nelson 2005: perhaps 800bp, but breeders known to shift & locations not surveyed regularly Jennings 2010, single-record vagrant S Oman OBL7 , vagrant Jordan Shirihai <i>et al</i> 2000, Israel Perlman & Meyrav 2009, Jul-Oct 2015 Harod Valley Israel DB37(4) , DB37(6) : 406, 9th for Israel Bet Shean valley Apr 2017 DB39(3) : 205; 1st record Turkey May 2011 Kirwan <i>et al</i> 2014. Egypt EORC 2018 , Lake Nasser (15+ May 2011 SG33(2)); occasional 2015-19 Hering <i>et al</i> 2020c) (& in Sudan Wadi Halfa 120km² grid square 21°N, 31°E on Egyptian border Nikolaus 1987).
455	Dalmatian Pelican	<i>Pelecanus crispus</i> Near-Threatened. 80-170 killed or taken annually in Iran Brochet et al 2019.	Monotypic. Breeds locally Kazakhstan, Uzbekistan, Turkmenistan, Turkey (Nelson 2005), c460 birds up to 2005 Volga Delta Arkhipov 2006, rare migrant Kyrgyzstan, Ven 2002, rare resident Iran Scott & Adhami 2006, winters locally eg SE Kazakhstan, 1st winter record Caspian Wassink 2018, Afghanistan Niethammer & Niethammer 1967, 7150+ Iran 2009/10 Edwin Winkel <i>in litt</i> , over 9500 by 2017 Ashoori <i>et al</i> 2019b Tudakul Uzbekistan Martin <i>et al</i> 2014) & further S, SE Iraq E to China coast, HBW1, scarce irregular visitor Iraq Salim <i>et al</i> 2012, probably breeds W Afghanistan R&A 2005, 2012. Breeding population of Central Asia 2915 estimated at c3000-4000 pairs, the median centre having shifted c500km NE in Kazakhstan since1980-90 Christopoulou <i>et al</i> 2020. Barboutis <i>et al</i> 2021 confirm increase in breeding population in Greece & Turkey, an increase in wintering birds along the Black Sea-Mediterranean Flyway, and a reduction in migration distance as fewer birds winter in the Indian subcontinent, due mostly to more clement conditions in the N & middle of their previous distributions. 3-record vagrant Oman OBL7 , vagrant Israel Perlman & Meyrav 2009, 1st record for 18 years Jun 2015 Lebanon (rescued bird) Ramadan-Jaradi & Itani 2016, 3rd for UAE Umm al Qalwain March 2017 EBRC (previous 1980), 4th Wadi Ghail dam Oct 2021 DB43(6) : 466. 1st bred Kuwait Jan 2017, again Mar 2018 SG40(2) : 188-194. 574 succumbed to bird flu at nearby Lake Prespa, Greece Feb 2022 DB44(2) : 15o. Egypt Avib, BE
		Pandionidae	IOC2.0 places in Pandionidae .

PT	Osprey PT	<i>Pandion haliaetus (sensu lato)</i>	IOC2.0 split into 2 spp, Western <i>P. (haliaetus) haliaetus</i> (sspp <i>haliaetus</i> & extralimital Nearctic <i>carolinensis</i> & <i>ridgewayi</i>) & monotypic extralimital (Australasian) Eastern <i>P. (h.) cristatus</i> Ospreys; Wink <i>et al</i> 2004a (mtDNA only) suggested all 4 taxa be treated as full species. However, Monti <i>et al</i> 2015 using the cyt b and ND2 mt genes also found 4 lineages, one (Far East) being new, but <i>carolinensis</i> & <i>ridgewayi</i> did <u>not</u> merit specific distinction from each other. We align with Monti <i>et al</i> 2015, noting their passing comment that Red Sea and Persian Gulf haplotypes were of particular interest (for future work?). See also Christidis & Boles 2008. Monti <i>et al</i> 2018 emphasise distinctness of <i>cristatus</i> . H&M4 does not split but notes possibility for <i>cristatus</i> . IOC12.1 draft proposes relumping (probably due to genetic closeness of American (<i>carolinensis</i>, <i>ridgewayi</i>) and Palearctic <i>haliaetus</i> birds: we remain with our intermediate position re <i>haliaetus</i> and <i>cristatus</i> . NB Parkin & Knox 2010 emphasised strong case for split into 2 or 3 species.
456	Western Osprey {Osprey}	<i>Pandion (h.) haliaetus (sensu stricto)</i>	Nominate very rare breeder Kazakhstan (<10bp) Wassink 2015b, locally elsewhere in OSME Region eg UAE Aspinall 1996, Lake Drumkul Tajikistan, winters southern Africa, NE Afghanistan (R&A 2005), Indian subcontinent Naoroji 2006; resident coasts Red Sea (majority), S Arabia (c850bp Arabia Jennings 2007a, 2010: often ground-nester Arabia); fairly common SB Iranian caspian, common WV to Gulf Khaleghizadeh <i>et al</i> 2017; local resident breeder, abundant PM & WV Oman OBL7 , Gulf, F-L&C 2001. 8 birds Lake Nasser Abu Simbel to Aswan Jun 2021, no evidence of breeding Jens Hering in litt . Population increase due to pesticide bans, protection & most wintering S of Sahel Zwarts <i>et al</i> 2009. Egyptian population appears to have declined to c30bp Habib 2017c. NB Highly unlikely that any taxon other than <i>haliaetus</i> has occurred in Region (as mapped in Monti <i>et al</i> 2015), but Habib 2017c calls for DNA research on Egyptian birds, smaller and paler than any other taxon, although he does not cite Monti <i>et al</i> 2015 in support.
		Accipitridae	IOC4.4 sequences Falconidae to follow Picidae : Falconidae are not closely related to Accipitridae . IOC3.3 resequenced Accipitridae genera and species, H&M4 resequencing further, but we await IOC analysis. For a comprehensive overview of raptor migration, wintering and persecution in the Arabian Peninsula, see McGrady 2018.
McGrady 2018 addresses risks to diurnal raptor migration across the Arabian Peninsula from illegal shooting, trapping, accidental or deliberate poisoning and accidental electrucution			
PT	Black-winged Kite (Formerly Black-shouldered Kite)	<i>Elanus caeruleus</i>	Starikov & Wink 2020 propose elevation of ssp <i>vociferus</i> to full species should their findings from a single <i>vociferus</i> specimen be replicated across <i>vociferus</i> ' distribution while applying the same rigour to the distributions of nominate & <i>hypoleucos</i> . Below is the provisional arrangement should that be the case. NB Starikov & Wink 2020 also suggested that <i>Elanus</i> kites merit their own family, Elanidae ; Donald & Collar 2021 offer qualified agreement, as easternmost taxa not included .
457	Black-winged Kite (Black-shouldered Kite)	<i>Elanus (caeruleus) caeruleus</i>	Polytypic: nominate & <i>hypoleucos</i> , the latter being extralimital to Greater and Lesser Sundas, Philippines, Sulawesi and New Guinea. Nominate breeds Egypt Nile Valley, presence recorded Israel prior to 1996, occurs from SW Iberia N Africa & W Arabia. NB Name Black-shouldered Kite now allotted to Australian <i>E. axillaris</i> .
458	'Eastern Black-winged Kite'	<i>Elanus (caeruleus) vociferus</i>	Monotypic. Before current range expansion northwestward, <i>vociferus</i> was distributed Pakistan to e China, Malay Pen. and Indochina. 1st record Israel 2003, 1st breeding Hula Valley 2011 Ławicki & Perlman 2017. 1929 record Tajikistan Ivanov 1940. Also Afghanistan, 2 records Madge 1980, F-L&C (2005), NE Afghanistan R&A 2005, numerous breeder Afghan Pamirs Argandeval 1983. Iraq, Salim 2002, confirmed Ararat <i>et al</i> 2011. May have bred & possibly resident Iran Scott & Adhami 2006, but 1st confirmed breeding 2007, now colonising rapidly Khaleghizadeh <i>et al</i> 2011, 4 breeding sites Khuzestan Jan-Feb 2019 DB41(4) : 272, Ławicki & Perlman 2017, breeding in 5 provinces Khaleghizadeh <i>et al</i> 2017; a few SW Arabia Jennings 2007a, originally vagrant Israel Perlman & Meyrav 2009, but bred 2011 & 12 Perlman & Israeli 2013, 1st for Palestine Sep 2014, now dozens of breeding pairs Awad <i>et al</i> 2022 . 3rd record Lebanon Dec 2013, previously recorded in 1863 & 1954 Gol <i>et al</i> 2014; 3rd record Cyprus Akrotiri Cyprus Oct 2018 CRBC , one at Mandria Aug 2021 (others found since) Jane Stylianou <i>in litt</i> : suspected breeding Karpas Peninsula - 2 adults May-late July 2021 & juvenile nearby late Aug 2021 DB43(5) : 396, 4 others recorded Aug-Nov SG44(1) : 234/5. 1st breeding Turkey May 2013 Kirwan <i>et al</i> 2014; 4th for Georgia Chrokhi Delta, Batumi Apr 2019 SG41(3) : 194, 1st for Armenia May 2016 DB38(4) p245 2nd Kotayk 04 Jul 16 DB38(8) : 405, 3rd Baku Feb 2022 DB44(2) : 153; 1st for Azerbaijan Nakhchivan Feb 2020 Resulzade 2020, 2nd Beshbarmag Sep 2021 DB43(5) : 396. All records Kuwait <i>vociferus</i> , also Eastern Province Saudi Arabia AbdulRahman al-Sirhan <i>in litt</i> , Roberts 2013, Alshamlh <i>et al</i> 2021; rare. Status in Arabia: perhaps 10-20bp erratically Jennings 2010, rare irregular Oman OBL7 , 1st breeding attempt UAE at undisclosed site Jul 2018 Campbell & Smiles 2019, 66 records 2021 (though no further confirmed breeding) Campbell <i>et al</i> 2022 ; increasing Iraq Salim <i>et al</i> 2012, into Middle Euphrates May 2017 SG39(2) : 204, new sites in 2018 SGATR41(1) . 1st Jordan record Mar 2013, 2nd Jun 2015 JBRC , 4th record Nov 2014 JBRC , 8 records Khoury <i>et al</i> 2017, JBRC , with possible breeding, 9th-13th records Jordan Nov 2016-Jan 2017 JBRC , confirmed breeding 2018 DB40(5) : 339; 6th Qatar record Sep 2016, 8th (3rd <i>vociferus</i>) Feb 2017 QBRC , 9th Dec 2017 QBRC ; Yemen breeding population <i>caeruleus</i> Ławicki & Perlman 2017. 2 RNBWS reports Gulf of Aden Aug 88 (12:40N+51:00E) Suez Feb 91 (30:30N+32:20:00E). Egypt Avib, BE. NB Resident India Naoroji 2006.
459	Scissor-tailed Kite (Formerly African Swallow-tailed Kite)	<i>Chelictinia riocourii</i>	Monotypic African species. Vagrant S Yemen semi-desert Jun or Jul 1960 Porter & Aspinall 2010, Mitchell 2017.
460	Lammergeier {Bearded Vulture}	<i>Gypaetus barbatus</i>	3 of 4 sspp (H&M4) in Region: <i>aureus</i> & <i>haemachalanus</i> Turkmenistan, Bukreev 1997 (Some include <i>haemachalanus</i> in <i>aureus</i> ; not H&M4; IOC5.3 subsumes <i>aureus</i> in nominate). CA, Afghanistan (resident Madge 1980, Argandeval 1983; <i>aureus</i> Paludan 1959), often daily Redman 1981, N Iraq Ararat <i>et al</i> 2011, Iran, F-L&C (2005); resident Kyrgyzstan, Ven 2002, very rare (50-100bp) resident SE & E Kazakhstan Wassink 2015b, vagrant E Kazakhstan Wassink 2010; resident CA mountains to E & S Ayé <i>et al</i> 2012. Declining Arabia (<i>meridionalis</i>), c50bp Jennings 2010. BLDZ Jun 2018 record as Near-Threatened , but Iran designates nationally as Endangered , but remains fairly common resident in Iranian distribution Khaleghizadeh <i>et al</i> 2017: Zarei <i>et al</i> 2018 in a survey of Marivan County, Kurdistan Province recorded 1st record for that location. Juvenile Nov 2016-Jan 2017 Israel Golan heights 1st since 2004 IRDC , one reported at Ma'ale Gilboa, Israel Nov 2021 Yoav Perlman <i>in litt</i> ; one reported Oman 6 Nov 2013: await OBRC decision. N Egyptian records assigned to <i>aureus</i> , but only 2-4bp estimated Garrido <i>et al</i> 2021. Extralimital montane <i>aureus</i> Indian subcontinent Naoroji 2006. Egypt Avib, BE. RNBWS report of pair Bandar Abbas Nov 77 at 27:11:0.0N+56:17:0.0E. English name used here iconic.

461	Egyptian Vulture	<i>Neophron percnopterus</i> Endangered	<p>Only taxon <i>percnopterus</i> in Region: scarce to rare summer breeder CA, Iran F-L&C (2005), southernmost Kazakhstan 80-100bp Wassink 2015b, range extension SW Kazakhstan Kyzylkum Martin <i>et al</i> 2018, commoner Afghanistan Argandeval 1983, once sporadically common Iraq Moore & Boswell 1956, breeds now only in N Salim <i>et al</i> 2012, Apr-Jun 2016 survey of Qara Dag & Khoshk mountain areas, a ridge between Kirkuk & Sulaymaniya found 50bp SG39(1)ATR; sometimes winters Kyrgyzstan, Ven 2002, locally fairly common BM Uzbekistan Martin <i>et al</i> 2014; tagged birds hatched in Uzbekistan tracked to wintering areas in Yemen, Pakistan & India, transiting Turkmenistan, Iran, Kuwait, Saudi Arabia, Tajikistan & Afghanistan, Ten & Soldatov 2022. Uncommon BM Israel Perlman & Meyrav 2009, resident population Arabia mainland c2000bp only 10% of 1960 figures Jennings 2010 (+ 500bp Socotra; c 800 pairs/1900 birds Porter & Suleiman 2012, regionally significant and at 3-9% of world opulation, globally significant Porter & Suleiman 2014). 2 passage records Cyprus Sep 2018 SGATR41(1). Thinly widespread resident, abundant PM & WV Oman OBL7, at least 400 wintering Muscat's main waste disposal site al Fazari & McGrady 2016: larger than thought Masirah population Angelov <i>et al</i> 2013, but main waste disposal is closing there, waste now being sent to the mainland modern facilities, & so mean monthly total of 40 visiting the Masirah dump may reduce overall population on the island al-Farsi <i>et al</i> 2019; a survey of the Muscat-Quriyah-Al-Harar region revealed a much larger population than previously estimated Angelov <i>et al</i> 2020 & conservative extrapolation suggests Oman resident population may be 4 times larger. Tracked for 800 days, a bird tagged in eastern Oman explored the entire eastern Oman littoral many times before crossing from Fujairah to Iran, where it engaged in territorial behaviour, travelling in excess of 50,000km McGrady <i>et al</i> 2022. Summer breeder S half of CA Ayé <i>et al</i> 2012, resident extralimital Indian subcontinent Naoroji 2006. Egypt Avib, BE.</p> <p>NB1 N Caucasus population: 80+ bp in IBAs Dzhamirzoev & Bukreev 2009. NB2 Observed kleptoparasitising Sooty Falcon <i>Falco concolor</i> in Israel Goren & Segall 2020. NB3 Disparate Egypt populations in S Sinai & SE Egypt breed in areas with few human settlements & are not frequenters of rubbish dumps Benmammar Hasnaoui <i>et al</i> 2021b.</p>
462	European Honey Buzzard (Formerly Western Honey-buzzard)	<i>Pernis apivorus</i>	<p>Monotypic. Occasional BM N Kazakhstan & common PM generally Wassink 2015b, NW Turkey, Caucasus, N Iran (scarce Scott & Adhami 2006), migrant Kyrgyzstan Ven 2002 Kabul Region Afghanistan Argandeval 1983 (not supported Ayé <i>et al</i> 2012, R&A 2012), winters Africa, although some seen at any month, F-L&C 2001, possibly dependent on lowland rainforest Bijlsma 2002. 100K counted Eilat, Israel May 2019 SG41(3): 194; rare PM Oman OBL7 (though confusion with next sp likely); 4th full record Qatar Mar 2017, 10th Retaj Al Rayyan Hotel, Doha West Bay (2 birds, pale & dark morphs) Feb 2021 QBRC. One recorded Aswan, Egypt Jun 2022, Jens Hering in litt. NB1 not closest relative of <i>P. ptilorhynchus</i> (qv) Gamauf & Haring 2004, although hybrids recorded, eg Qatar Nov 2014-Mar 2015. NB2 Average annual autumn count Batumi Georgia 2011-2018 above 0.5 million, more than current estimate of world population DB41(3): 198: 513800 autumn 2019 DB41(6): 428 .</p>
463	Crested Honey Buzzard (Formerly Oriental or Eastern Honey Buzzard)	<i>Pernis ptilorhynchus</i>	<p>6 ssp., 2 in Region: <i>orientalis</i> probably regular as migrant through E Kazakhstan Arend Wassink <i>in litt</i> Dec 2014 scarce PM Wassink 2015b, scarce (20 birds May 16) but regular Korgalzhy, Aqmola Province Wassink 2016b; 2 juveniles (2014) at 4500m asl in Ili-Alatau national park, Zailiyskiy Alatau raise tantalising possibility of occasional breeding Kazakhstan; Kyrgyzstan, Tajikistan, F-L&C (2005), Afghanistan Wakhan 2006 Ayé 2007, mapped Ayé <i>et al</i> 2012 passage these locations & into Indian subcontinent; R&A map only sedentary <i>ruficollis</i>; vagrant Turkey Kirwan <i>et al</i> 1999, uncommon (under-reported?) 5th reported Istanbul Apr 2021 DB43(3): 227, 8th record for Turkey Aras Ringing Station, Iğdir Aug 2021 TBRC; migrant Kyrgyzstan, Ven 2002; status Uzbekistan & Tajikistan Schweizer & Mitropolskiy 2008. Has hybridised with <i>P. apivorus</i>. Scarce winter Iran Ducquet & Richardson 2000 Scott & Adhami 2006, uncommon regular & increasing WV Oman OBL7, has wintered Israel Koss <i>et al</i> 2008, 18 migrating Eilat 2016 DB38(4) p245, increasingly so Arabia Babbington & Campbell 2016, 29 Batumi autumn 2019 DB41(6): 428, up to 17 wintering Bandar Abbas area Iran Jan 2016 SG38(2): 231, now fairly common WV Hormozgan & southern Baluchestan coastal lowlands & islands Khaleghizadeh <i>et al</i> 2017; c 100 Kish Island Hormazgan Dec 2020 DB43(1): 65: 1st for Iraq near Zakho Mar 2018 DB44(4): 312, 3rd E of Central Marshes Sep 2021 SG44(1): 128. Likely commoner PM & WV Bahrain than <i>P. apivorus</i> King 2018; 1st record Jordan Apr 2015, 3rd record May 2016, 7th record Aqaba Apr 2019 JBRC, 8th there Apr 2020 SG42(2): 325, 9th at Azraq May 2021 JRBC. 1st for Egypt 9 May 96 EORC 2011, one Elba National Park (Halaib) May 2016 EORC, another (6th record) Gebel el Zayt May 2019 EORC, who consider sp as under-reported. 1st for Cyprus 21 Oct 2012 DB 34(6): 398, 2nd Lady's Mile Sep 2021 SG44(1): 235; more than 10 records Qatar by Apr 2020 SG42(2): 328, one photographed Eilat Mar 2016 DB38(2): 189. 5th summer record Wadi Wadj, Taif Jul 2018 Saudi Arabia SG41(1)ATR: 147, 1st for Azerbaijan May 2019 DB41(4): 272, 2nd May 2020 Baku DB42(4): 278: 1st for Iraq Salim & Ali Abed 2019 E of Zakho, northernmost Kurdistan.</p> <p>NB1 Resident India (<i>ruficollis</i>) Naoroji 2006: treated as full sp Collar 2017. NB2 Gamauf & Haring 2004 retained taxa <i>orientalis</i> & <i>ptilorhynchus</i> as ssp., but subsequent suggested PT split in Brazil 2009 to (migratory) Eastern Honey Buzzard <i>P.[p.] orientalis</i> (the taxon in this Region) & (sedentary) Crested Honey Buzzard <i>P.[p.] ptilorhynchus</i> (5 ssp., all extralimital breeders). NB3 Eaton <i>et al</i> 2016 split <i>ruficollis</i> as Sunda Honey Buzzard.</p>
464	Hooded Vulture	<i>Necrosyrtes monachus</i> Critically Endangered	<p>Monotypic. African sp. RNBWS record of bird on 01 Sep 59 settling on board ship at approx 20:0:0.0N+38:0:0.0E (near centreline of Red Sea); widespread but rare E Sudan to Red Sea coast between 18-20°N Nikolaus 1987. NB Breeds on Eritrean Dahlak Islands di Marchi <i>et al</i> 2009; recorded in half-degree map square containing Perim Island (Yemen) Ash & Atkins 2009.</p>
465	White-backed Vulture	<i>Gyps africanus</i> Critically Endangered	<p>1st record for Egypt & OSME Region, 6th WP record (Łukas Ławicki <i>in litt</i>): one adult (photos) at Bir Shalatein Mar 2017 DB39(3): 206, EORC 2018, 1st for Palestine Apr 2021 Awad <i>et al</i> 2022, 1st for Israel Nahal Og, Judean Desert late Apr-early May 2021 Yoav Perlman <i>in litt</i>, 2nd camera-trapped Judean desert Jun 2021 IBRC; nearest known distribution northernmost Eritrea BLDZ Jun 2017. 690km away.</p>
466	White-rumped Vulture (Formerly Indian White-backed Vulture)	<i>Gyps bengalensis</i> Critically Endangered	<p>Monotypic. SE Iran (may breed or be rare resident Scott & Adhami 2006), S Afghanistan, F-L&C 2005, C Afghanistan R&A 2005, Argandeval 1983; straggler from 'India' Paludan 1959, no Afghan specimens, nowadays very local R&A 2012. Single USSR record, location not given, Flint <i>et al</i> 1984, S Russian Caspian Koblik & Arkhipov 2014. Status 2011 vagrant to CA Ayé <i>et al</i> 2012; one photographed (http://www.club300.de/gallery/photo.php?id=59585) Bir Shalatein 25 Mar 2017 putative 1st for Egypt: origin?. NB1 Rare & decreasing Indian subcontinent Naoroji 2006 - Nov 2007 estimate of wild population now 0.1% of pre-diclofenac populations – Chris Bowden & BNHS pers comm. NB2 map in Arshad <i>et al</i> 2009 of Iran distribution probably derived from FL&C 2005 & R&A 2005, not reflecting post-diclofenac era. Now considered probable vagrant SE Iran. last record 1972 Khaleghizadeh <i>et al</i> 2017.</p>
467	Rüppell's Vulture	<i>Gyps rueppelli</i> Critically Endangered	<p>2 sssp, likely both wander to Region. Sub-Saharan African species wanders to Arabia, one 1935 record 'Arabia' Mike Jennings <i>in litt</i>, F-L&C 2005 (One listed for UAE 1973, 2 1977 SW of Dubai Bundy & Warr 1979), Jennings 2010. 1st for Israel May 2013 DB36(3): p200, likely ssp <i>rueppelli</i>, 2nd record 42nd floor of Tel-Aviv building 18 May 2021 & died 19 May in care Yoav Perlman <i>in litt</i>: 1st documented record for Saudi Arabia & for Arabian Peninsula Oct 2018 Tanoumah Mts Asir Babbington 2019; ssp <i>erlangeri</i> likely wanders across Bab-el-Mandab strait from Eritrea (Meinertzhagen records discounted). Egypt Avib, BE. NB Species name revised IOC3.5</p>
Apr-May 2017 survey of Karatau reserve, W Tien-Shan, Kazakhstan suggested declines of Himalayan Griffon & other scavengers, likely due to land-use changes Oppel <i>et al</i> 2018			
468	Himalayan Griffon Vulture {Himalayan Vulture}	<i>Gyps himalayensis</i>	<p>Monotypic. Kyrgyzstan, Kazakhstan, Tajikistan, Afghanistan, F-L&C (2005), NE Afghanistan R&A 2005 rare resident SE Kazakhstan W&O 2007, 50bp 100-150 non breeders Wassink 2015b, uncommon SE Kazakhstan to E Afghanistan Ayé <i>et al</i> 2012; Iran records 2007 & 2011 Ayé <i>et al</i> 2014, Khaleghizadeh <i>et al</i> 2017 (likely uncommon non-breeding visitor from Afghanistan): 3rd for Iran between Sarbaz & Rask, Sistan & Baluchestan, Dec 2020 DB43(5): 369 (image DB43(6): 468) 4th by Ali Musavi, imaged at Nowbandian, SE Iran Feb 2022 Birding Iran. 1st for UAE & Arabia Oct 2012 EBRC, extralimital distributed to Bhutan Naoroji 2006. English name used here is that retained in core range.</p>

469	Eurasian Griffon Vulture {Griffon Vulture}	<i>Gyps fulvus</i>	Taxon <i>fulvus</i> Caucasus, Iran, CA rare SE Kazakhstan W&O 2007 80-100bp & c 100 immatures Wassink 2015b, Iraq Moore & Boswell 1956, Apr-Jun 2016 survey of Qara Dag & Khoshk mountain areas, a ridge between Kirkuk & Sulaymaniya found 30bp SG39(1)ATR ; now but thinly widespread across once Iranian distribution Khaleghizadeh <i>et al</i> 2017; <i>fulvescens</i> Afghanistan F-L&C (2005), Argandeval 1983, & just into Pakistan Naoroji 2006. Likely present in smallish colonies on Turkmenistan plains Longlei 2013. Resident & often recorded Kyrgyzstan, Ven 2002. Status in Arabia: c2000bp W Yemen, c1000bp SW & NC Saudia Arabia; both resident and migrant numbers have decreased Jennings 2010; occasional UAE EBRC , uncommon PM & WV Oman OBL7 ; 1st record Qatar at Shamal (juv) Apr 2020 SG42(2) : 328, 2nd at al Thakira Nov 2021 QRBC . Status in CA 2011, uncommon in open habitats largely W of <i>Gyps himalayensis</i> & at lower altitudes Ayé <i>et al</i> 2012. Egypt Avib, BE. English name used here mirrors distribution. Has wandered (<i>fulvescens</i>) to Tajikistan Ivanov 1940
470	Cinereous Vulture (Eurasian Black Vulture)	<i>Aegypius monachus</i>	Monotypic. Caucasus, CA (rare BM Kazakhstan 150-300bp, 500-900 non-breeders Wassink 2015b) Afghanistan (BM Madge 1980, rare/accidental Argandeval 1983; non-breeding Bamiyan Busuttill & Ayé 2009), immature Aktogolay Kazakhstan Wassink 2013, Iran, F-L&C (2005), probably Afghanistan R&A 2005, resident on Afghanistan-Pakistan border Naoroji 2006, scarce across Iran Khaleghizadeh <i>et al</i> 2017, rare winterer Iraq Salim <i>et al</i> 2012, Israel Perlman & Meyrav 2009, thinly widespread winterer Arabia Jennings 2010 1st for UAE Oct 2012, 2nd Dubai Desert Conservation Reserve Jan 2018 EBRC , 3rd Al Marmoom Nov 2019 DB41(6) : 428, 6th record Nov 2016 Oman OBRC , 7th, at Arift Dec 2016 OBRC , 8th Raysut Nov 2017 OBRC ; 8th Jordan record Jan 2017 JBRC , 9th Azraq Nov 2019 SG42(2) : 325; status in CA 2011 scarce in forests CA SE quadrant Ayé <i>et al</i> 2012; 1st for UAE Oct 12. Before 1992, bred Cyprus Flint & Stewart 1992. Efrat & Hatzofe 2021 geotracked a juvenile that had been trapped in Israel in autumn, & found it wintered near al Dabbah, Sudan, beside the Nile. On return migration, it spent most of the breeding season (probably not breeding) in N Turkey. This is the first evidence of the route taken from Turkey 3500km to its previously unknown wintering area.
471	Lappet-faced Vulture (Nubian Vulture)	<i>Torgos tracheliotos</i> (formerly <i>Torgos tracheliotus</i> , <i>Aegypius tracheliotos</i>) Endangered	Reversion to <i>Torgos</i> IOC v2.3. Sub-Saharan African ssp <i>tracheliotos</i> wanders F-L&C 2005, to E Egypt H&M4, ssp <i>negevensis</i> UAE Aspinall 1996: reintroduction scheme Israel releases post-2016, one at Hai Bar NR 25 May Yoav Perlman <i>in litt</i> ; c600bp, mostly C Arabia, also some UAE, Oman (where common breeding resident & WV OBL7) & E Yemen; until 1980s reported as Eurasian Griffon Vulture <i>Gyps fulvus</i> ; plains inhabitant, population seemingly increasing Arabia Jennings 2010. Sudanese Halayeb (Halaib), 50 recorded just inland from Dungunab Bird & Blackburn 2011; Egypt, 20 reported Apr 2010 Bir Shalatein Halaib Triangle DB32(3) : 205, 19 in Feb 2016 DB39(2) : 126, resident Halaib Triangle Dora 2019; thinly widespread resident SE Egypt W&N of Halaib IUCN Redlist map Dec 2021, Raid <i>et al</i> 2021a. NB Final spelling <i>tracheliotos</i> IOC3.2 (Rookmaaker 1986 citing Forster 1796 in which <i>tracheliotos</i> is badly printed (p362, last line), the second 'o' having an open top).
472	Short-toed Snake Eagle (Short-toed Eagle)	<i>Circaetus gallicus</i>	<i>C.g. heptneri</i> claimed Turkmenistan, Bukreev 1997, but now subsumed within nominate Dickinson 2003, but extralimtal ssp <i>sacerdotis</i> now known from Lesser Sundas. Caucasus, CA (rare Kazakhstan Wassink 2015b), BM Afghanistan Madge 1980, probably Afghanistan F-L&C (2005), likely rare/accidental Argandeval 1983 in Afghan Pamirs (resident Indian population also reaches SE Afghanistan R&A 2005), fairly common SV Caspian lowlands Iran, scarce elsewhere Khaleghizadeh <i>et al</i> 2017, Iraq Ararat <i>et al</i> 2011, Israel (& passage) Perlman & Meyrav 2009. Status in Arabia: passage migrant, winterer, but a few scattered breeding records, where birds may be resident (historical lack of observers?) Jennings 2010: common PM & WV Oman, has bred OBL7 . Egypt Avib, BE
473	Bateleur	<i>Terathopius ecaudatus</i> Endangered	Monotypic. Sub-Saharan African species, population in SW Arabia, F-L&C (2005) possibly now extinct breeder in Region Porter & Aspinall 2010, but still occurs along the Afro-Tropical Tihama in SW Arabia in winter, adult pairs recorded in early breeding season Jennings 2010; last recorded Iraq 1950s Salim <i>et al</i> 2012. Likely now Near-Threatened Mike McGrady 2010 unpub. Recorded Cyprus 2007; vagrant Israel Perlman & Meyrav 2009, 13 accepted records wef Apr 2019 IRDC , last of which same bird recorded Dec 2018 Sharm el Sheik, Egypt EORC . DB37(3) notes 2015 Israel bird became 1st for Turkey: 2nd for Egypt Gabal el Zeit Apr 2022 DB44(3): 225 perhaps not also 2nd for Turkey at northernmost city of Turkey, Sinop, Apr 2022, imaged by Berkay Özünlü, Emin Yoğurtcuoğlu in litt, DB44(3): 225.
474	Mountain Hawk-Eagle	<i>Nisaetus nipalensis</i>	BLDZ maps close (3km) to Afghan border in Pakistan, SSW Mirkhani-Arandu for 22km & S into Afghanistan below Arandu for 10km, then SSE for 10km within 5km of Afghan border Jan 2020. We interpret this as indicating occasional presence.
Lerner <i>et al</i> 2017 erect a new phylogeny and taxonomy of the Aquilinae. In <i>Clanga</i>, taxon <i>hastata</i> is basal.			
475	Indian Spotted Eagle	<i>Clanga hastata</i> (formerly <i>Aquila [pomarina] hastata</i>) Vulnerable	Monotypic. IOC v2.0, BirdLife, Clements 2007, R&A 2005 accept Indian Spotted Eagle as <i>A. hastata</i> , as per Väli 2006, as now do IOC. Zarudny 1911 assessed as rare breeder in southern Iranian Baluchestan. We note Ayé <i>et al</i> 2012 App 1 citing Afghanistan & Turkmenistan reports of <i>pomarina/hastata</i> , but given Sangster <i>et al</i> 2013 conclusions, we speculate these reports should be viewed as possible <i>hastata</i> sightings. Although sedentary, immatures may still wander; likely occurred in OSME Region when habitats were more complete. Iranian collections may hold specimen under Lesser Spotted Eagle <i>A. pomarina</i> . May be closer to African genus <i>Lophaetus</i> Helbig <i>et al</i> 2005, Lerner & Mindell 2005. Endangered: >500 ind Mike McGrady 2010 unpub; R&A 2012 show likely distribution reduced to W of NC India-W Ghats, but acknowledge many reports to NW, all lacking current ID discrimination between <i>hastata</i> & <i>clanga</i> . One recorded Margalla Hills, just N of Islamabad, Pakistan, Nov 2019 (Bird Forum discussion <i>in litt</i>), only 180 km from Afghan Torkham pass: possibly breeding Marala, Sialkot, Punjab <i>BirdingASIA</i> 36 : 125.
476	Lesser Spotted Eagle	<i>Clanga pomarina</i> (formerly <i>Aquila [pomarina] pomarina</i>)	Breeds Caucasus, N Iran (rare Scott & Adhami 2006), F-L&C (2005), 4300+ at Batumi, Georgia autumn 2019 DB41(6) : 428; winters to S, especially via Israel Perlman & Meyrav 2009, 1st Iraq record Jul 2013 Ararat 2016.. Rare PM & WV Oman OBL7 . Northern Caucasus population 200-300bp Melnikov & Mischenko 2019, Mischenko & Melnikov 2019. Over 2500 pass through newly-found narrow corridor in Lebanon in autumn Meyburg <i>et al</i> 2020. May be closer to African genus <i>Lophaetus</i> Helbig <i>et al</i> 2005, Lerner & Mindell 2005. 5th for UAE Siniyah Island Nov 2013 EBRC . 4th Kuwait record Khuwaisat Sep 2018 KORC . NB1 Caucasus population both old & genetically diverse; monotypicity certain (Väli <i>et al</i> 2009). NB2 Hybrid <i>pomarina/clanga</i> Kazakhstan Oct 2014 Wassink 2015a.
577	Greater Spotted Eagle	<i>Clanga clanga</i> (formerly <i>Aquila clanga</i>) Vulnerable. More than 1% (33 birds) of minimum global population estimated killed or taken annually in OSME Region, perhps mostly in Qatar Brochet <i>et al</i> 2019 (but site not identified nationally through lack of information).	Monotypic. Breeds N Kazakhstan (NW & NE W&O 2007, NE only Ayé <i>et al</i> 2012, possibly further S, very rare BM 10-25bp Wassink 2015b), 1st winter record Dec 2014 Wassink 2015a, 2nd Sorbula Lakes Alamay Jan 2022 Wassink 2022 . 500+ at Batumi, Georgia autumn 2019 DB41(6) : 428; on migration CA, Azerbaijan (Rare: one at Qobustan Oct 2021 SG44(1): 232), Iran, Afghanistan F-L&C (2005) (accidental Bāmīān & Band-e Amir Mts Argandeval 1983), some wintering Afghan-Pakistani border Ayé <i>et al</i> 2012, uncommon PM Uzbekistan Martin <i>et al</i> 2014; rare migrant Iraq Moore & Boswell 1956 uncommon passage, some wintering S Iraq marshes Salim <i>et al</i> 2012, up to 20 may winter in southern Turkey Per <i>et al</i> 2018; fairly common WV S Caspian wetlands Iran Khaleghizadeh <i>et al</i> 2017; Maciorowski <i>et al</i> 2018 found up to 400 wintering in Mediterranean basin; Per <i>et al</i> 2018 recorded one wintering in northern Turkey at Soğuksu National Park - it had been ringed in Ukraine in 2015. Estonian, Polish & Belarussian breeding populations differ in selection of non-breeding areas: Estonian birds winter in S Europe, Polish split between SE Europe & E Sahelian Africa & Belarussian birds favour E Sahelian Africa; male and female birds mostly differ in selection of wintering grounds, thus providing severe conservation challenges Väli <i>et al</i> 2021. Abundant PM & WV Oman OBL7 , some may oversummer Saudi Arabia Babbington & Roberts 2012, N Kyrgyzstan, Ven 2002, rare passage & winterer Israel Perlman & Meyrav 2009. Egypt Avib, BE. NB Widespread winter Indian subcontinent Naoroji 2006. May be closer to African genus <i>Lophaetus</i> Helbig <i>et al</i> 2005, Lerner & Mindell 2005
478	Wahlberg's Eagle	<i>Hieraaetus wahlbergi</i>	Monotypic. Recorded Egypt, west coast of Gulf of Suez, Red Sea, near Ras Shuqeir, some 120 kms north of Hurghada on May 3rd, 2013: Dick Forsman <i>in litt</i> http://www.dickforsman.com/2014/04/22/wahlbergs-eagle-a-new-bird-for-the-western-palaeartic-list/ , Waheed 2016, accepted by EORC .

479	Booted Eagle	<i>Hieraaetus pennatus</i> (recently <i>Aquila pennata</i> , which had superseded earlier treatment as <i>Hieraaetus pennatus</i>)	Monotypic. Reversion to <i>Hieraaetus</i> IOC3.3 follows extensive resequencing of raptor genera contingent upon a swathe of completed advanced DNA research, particularly demonstrated in Lerner <i>et al</i> 2017; conclusively, relationship of this species to all other Accipitrid raptors places it in <i>Hieraaetus</i> (notwithstanding Anderson <i>et al</i> 2009 & Sangster <i>et al</i> 2009). Summer breeder Central Asia (K-M&K 2005), rare BM & PM Kazakhstan Wassink 2015b. As <i>A.p. pennata</i> & <i>minuta</i> Turkmenistan, Bukreev 1997 (Now treated as monotypic); Caucasus, RB SE Afghanistan BLDZ map Mar 2018, MB Afghanistan Madge 1980, rare on passage Abe-Istada Afghanistan Argandeval 1983; 7550+ autumn 2019 Batumi Georgia DB41(6) : 428. Iraq Ararat <i>et al</i> 2011, Iran (scarce Scott & Adhami 2006 though fairly common in S Caspian Khaleghizadeh <i>et al</i> 2017), F-L&C (2005), fairly common PM & WV Oman OBL7 , common passage Israel Perlman & Meyrav 2009. Egypt Avib, BE. NB Winters extensively Indian sub-continent Naoroji 2006.
PT	Tawny/Indian Tawny/ Steppe Eagle PT	<i>Aquila rapax/vindhiana/nipalensis</i>	Older records of Parent Taxon likely unclear as to which present-day taxon was recorded, but significant skull structure differences suggest separation of <i>nipalensis</i> was ancient. Prudent to treat separately <i>pro tem</i> .
480	Indian Tawny Eagle {Tawny Eagle}	<i>Aquila (rapax) vindhiana</i> Vulnerable	Sedentary Indian subcontinent; treated here separately from sedentary SW Arabian <i>A.(r.) belisarius</i> . R&A 2012 retain in <i>rapax</i> , mapping residency near Khyber. Iraq record Ticehurst <i>et al</i> 1921-23. One collected Iran 1901 (Zarudny), Roselaar & Aliabadian 2010; 1970s sight records Iran (D Scott, R. Porter pers obs). Jennings 2010 suggests <i>A. rapax</i> records from E Arabia (Nov-Mar) likely include <i>vindhiana</i> , OBL7 concurs. Lerner <i>et al</i> 2017 note minimal plumage and genetic differences with <i>A. rapax</i> in Africa. Nevertheless, in the absence of evidence of gene-flow other than by stragglers between the S Asia and (largely) African populations, we invoke the null hypothesis that these are separate conservation units worthy of recognition. Earlier status, breeding or rare resident Iran Scott & Adhami 2006; (Jul 2016) & Khaleghizadeh <i>et al</i> 2016 agree. Has probably bred SE Iranian Baluchestan since Zarudny 1911, always in small numbers. Mapped wintering to SE Iran Arlott 2009. Recent records: 2 recorded Jan 2009 Winkel <i>et al</i> 2010. At least 5 recorded Gwadr near Pakistan border 2009 or slightly further W along Iran coast winter Jan 2009 Lantsheer & Vermoolen 2009, which document is in final version of Amini & van Roomen 2009. In addition to these recent sight records, BLDZ map Jul 2017 indicates presence in SW Iran over an area of c16000km ² . Intriguingly, it excludes the Bahookalat Protected Area, a c35km-wide 'buffer zone' between the mapped distribution and the Pakistan Border. Khaleghizadeh <i>et al</i> 2017 assess as local resident in SE Iranian Baluchestan. NB1 1901 Zarudny specimen in AMNH New York. NB2 Iran 'Zarudny' specimen may be <i>nipalensis</i> A Khaleghizadeh pers comm). NB3 Destruction of open woodland since 1960s likely deters wanderers. NB4 BLDZ May 2020 maps as unsplit Tawny Eagle in Pakistan to within 90km of Afghan border near Quetta, and 50km of Afghan border N of Peshawar; rare resident near W Pakistan-Iran border & resident Pakistan Khyber Naoroji 2006; Roberts 1991 map suggests breeding likely in tiny area of Afghanistan N of Khyber; Paludan 1959 notes one sight record, but by Meinertzhagen & so is discounted. H&E 1970 mapped Iran from Straits of Hormuz to Pakistan to c28°N.
481	'African Tawny Eagle'	<i>Aquila (rapax) rapax</i> Vulnerable	In OSME Region, ssp <i>belisarius</i> uncommon sedentary resident SW Arabia (ssp <i>rapax</i> largely sub-equatorial Africa) F-L&C 2005, Jennings 2010 (c300bp, S Tihama & foothills mostly E Yemen). Has occurred Egypt rarely, latest being May 2015 Marsa Alam EORC ; earlier records save that of 2011, doubtful, including putative 1st record of Meinertzhagen: 1st fully documented record May 2011 EORC . Israel vagrant Perlman & Meyrav 2009, 6th record NW Negev July 2016 IRDC , 7th Beth El Kibbutz Jun 2021 DB43(4) : 309, IBRC ; 1st for Palestine Jun 2021 Awad <i>et al</i> 2022 . Pre-split from Steppe Eagle <i>A. nipalensis</i> , F-L&C 2001 map this sp also as occurring near Iran-Pakistani coast. F-L&C (2005) omit this area but indicate that the line of separation for Indian Tawny Eagle <i>A.(r.) vindhiana</i> covers that location in Iran and also E Oman: Jennings 2010 suggests records (Nov-Mar) from E Arabia likely <i>A. (r.) vindhiana</i> , OBL7 concurring. Wintered Iran Seistan & N Baluchestan Zarudny 1911, but that likely relates to all 3 taxa being treated as a single species. Egypt Avib, BE (1924 record Egypt, but associated with Meinertzhagen, all of whose records are suspect unless verifiable – Garfield 2007).
482	Steppe Eagle	<i>Aquila nipalensis</i> Endangered: mean autumn count 2014-18 Eilat down 20% since 1977-88	Taxon <i>orientalis</i> breeds N half Kazakhstan Ayé <i>et al</i> 2012, possibly Caucasus, also rarely other CA, taxon <i>nipalensis</i> breed E Kazakhstan (H&M4): Wassink 2015b treats as monotypic, occurring across broad central belt, up to 59 000bp. PM Afghanistan Madge 1980, BLDZ Feb 2018 (likely this taxon in Argandeval 1983 as 'Steppe Eagle' rare to very rare on passage & winter Afghanistan), <i>orientalis</i> (?) Iran migrant (Zarudny 1911 records as passage migrant from NE border to Badakhshan) F-L&C (2005); only 3 recorded (as first county records) Marivan County, Kurdistan Province, Iran Zarei <i>et al</i> 2018, but nationally, fairly common PM Khaleghizadeh <i>et al</i> 2017. Several nesting pairs found in Turkey since 2003, mostly in Kirşehir & Konya Provinces Horváth <i>et al</i> 2022; habitat preferences identified, giving optimism that other pairs will be found in adjacent provinces. Widespread migrant and winterer Iraq Salim <i>et al</i> 2012, scarce winterer Iran Scott & Adhami 2006, 5th record Nov 2015 Qatar, 6th Umm Bab Apr 2021 QBRC , common to abundant PM & WV Oman OBL7 . 1st accepted record for Egypt Jabal Zayt, Ras Gharib, El-Bahr El-Ahmar (Gulf of Suez) May 2011 EORC DB42(3) : 212. Egypt c7200 counted at Ushaiker waste site, Riyadh Province, Saudi Arabia, the largest-ever gathering, recorded in Jan 2020; likely many more were within a few km, as tracked birds do not feed every day Keijmal <i>et al</i> 2020. Common migrant, doubtful breeder Kyrgyzstan, Ven 2002, but common migrant Israel Perlman & Meyrav 2009, winterer Yemen SG33(1) ; currently winters Indian subcontinent across much of the same distribution as sedentary Indian Tawny Eagle <i>A.(r.) vindhiana</i> BLDZ map May 2017. G&G 2005 consider 2 sspp <i>nipalensis</i> & <i>orientalis</i> . NB Common winterer Indian subcontinent Naoroji 2006.
483	Eastern Imperial Eagle (Asian Imperial Eagle)	<i>Aquila heliaca</i> Vulnerable. More than 1% (25 birds) of minimum global population estimated killed or taken annually in OSME Region, perhaps mostly in Qatar Brochet <i>et al</i> 2019 (but site not identified nationally through lack of information).	Monotypic. Breeds Caucasus, most of CA (Rare BM 3500-4500bp Kazakhstan Wassink 2015b), occurs widely on migration, F-L&C (2005), Iraq Salim <i>et al</i> 2012, 11 seen Dec 2016 between Arbat & Darbandikan, Iraqi Kurdistan SG39(1)ATR ; former, doubtfully present breeder Kyrgyzstan, Ven 2002; rare summer breeder N half CA, resident in centre, winterer in S Ayé <i>et al</i> 2012, uncommon PM/WV Uzbekistan Martin <i>et al</i> 2014. Common to abundant PM & WV Oman OBL7 , 6th Qatar record Nov 2017, 7th Abu Nakhla Jan 2021 QBRC . 1st confirmed record Egypt (very pale bird) now confirmed May 2011 EORC 2019.; WV Afghanistan Madge 1980, accidental passage, winter Bāmīān & Band-e Amir Mts Afghanistan Argandeval 1983; winterers in small numbers Kazakhstan W&O 2008, uncommon winter Israel Perlman & Meyrav 2009. Rare resident, commoner winterer Iran Scott & Adhami 2006, extraliminally W&C Indian subcontinent Naoroji 2006. GPS loggers on Kazakhstan-breeding/bred birds found all wintered in Iran or the Middle East in desert or dry open habitats Poessel <i>et al</i> 2018, not in forests & away from waterbodies. Once bred Cyprus Flint & Stewart 1992, extinct 1995 Flint 2019. NB H&M4 confirms extralimital Spanish Imperial Eagle <i>A. adalberti</i> as separate.
PT	Golden Eagle PT	<i>Aquila chrysaetos</i>	Lerner & Mindell 2005 refined raptor relationships, then with advanced techniques, Nebel <i>et al</i> 2015 examined the mtDNA lineage of Golden Eagles, sample bias towards Palearctic populations, finding a Mediterranean haplotype that largely coincided with the distribution of <i>homeyeri</i> , & a northern haplotype that appeared in all other Holarctic populations. The 2 haplotypes likely originated from separate glacial refugia that recolonised different regions at different times. Other molecular techniques would be required to determine if there was any evidence to discriminate in favour of the sspp <i>chrysaetos</i> , <i>daphanea</i> , <i>kamschatica</i> , <i>japonica</i> & <i>canadensis</i> , although Nearctic birds and <i>kamschatica</i> are similarly sized. Doyle <i>et al</i> 2016 analyse the genetic structure in Nearctic Golden Eagle populations and find 4 distinct populations within taxon <i>canadensis</i> : the preservation of their genetic variability would require each population to be treated as a distinct management unit. Sonsthagen <i>et al</i> 2012 studied a population of Golden Eagles that had colonised offshore islands in California (max sea crossing 42km), finding rapid reduction of genetic diversity in only 15 years, gene-flow from the mainland having stopped because all island territories were occupied and defended. These 3 papers provide a circumstantial basis for listing separately the 3 groupings occurring in the OSME Region. Nebel <i>et al</i> 2019 find general agreement in Europe for the distinctiveness of 'Northern' and 'Southern' populations via microsatellite analysis: we postulate that this evidence extends eastwards until <i>canadensis</i> is encountered in easternmost Kazakhstan.

			NB1 H&M4 recognise 6 Golden Eagle ssp: <i>chrysaetos</i> (Europe [less Iberia] to Yenisey: <i>daphanea</i> (Pamirs to SW & C China, S to W&C Himalayas); <i>kamtschatica</i> (NE Asia Yenisei, Mongolia-Kamchatka & NE China); <i>japonica</i> (Korea, Japan); <i>homereyi</i> (Iberia, N Africa, Middle East, Arabia to Caucasus Iran & E Uzbekistan & isolate in Ethiopia); <i>canadensis</i> Alaska, Canada, US, NW Mexico. NB2 Nebel <i>et al</i> 2015 comment on closeness of <i>canadensis</i> & <i>kamtschatica</i> . NB3 Many Golden Eagle populations remain unsampled or poorly known.
484	Northern Golden Eagle	<i>Aquila (chrysaetos) chrysaetos</i>	English name informal@OSME. Palearctic taxa boundaries are uncertain, hence contradictory conclusions between pre-2012 authors re taxa distributions. We tentatively assess the ' <i>chrysaetos</i> group' as including <i>daphanea</i> , taxon <i>japonica</i> being of uncertain affinity. Nebel <i>et al</i> 2015 found <i>homereyi</i> haplotype distribution extended N of Mediterranean to Alps & E to Turkey, noting presence of <i>chrysaetos</i> haplotypes within some northern <i>homereyi</i> populations, but whether this represents long- established or more recent gene-flow is not yet known. All non- <i>homereyi</i> populations in Region share mtDNA lineage with N Europe & rest of Eurasia, including some at least of North America (which may have a 3rd or more lineages) Nebel <i>et al</i> 2015, Doyle <i>et al</i> 2016. NB1 <i>kamtschatica</i> we regard as occurring Altai & may be synonymous with <i>canadensis</i> ('American Golden Eagle' English name informal@OSME), perhaps one reason for Wassink 2015 allotting E Kazakhstan birds to <i>canadensis</i> : if that were proven, it would mirror distributions of American Swallow <i>Hirundo (rustica) erythrogaster</i> , Northern Shrike <i>Lanius borealis</i> and American Herring Gull/Vega Gull <i>Larus (smithsonianus) vegae</i> . NB2 taxon <i>daphanea</i> we regard as probably occurring Tajikistan/Kyrgyzstan/Uzbekistan/Afghanistan mountains.
485	Mediterranean Golden Eagle (Homeyer's Golden Eagle)	<i>Aquila (chrysaetos) homereyi</i>	English name informal@OSME. We tentatively assess <i>homereyi</i> as being the sole taxon in the group. Populations <i>homereyi</i> Turkey-Caucasus-Iraq share mtDNA lineage with Mediterranean & C Europe populations (Informal name Homeyer's Golden Eagle <i>Dutch Birding</i>), likely this taxon 10th record Kuwait Oct 2015 KORC . Turkey <i>homereyi</i> resident Kirwan <i>et al</i> 2008, who suggested possibly synonym of <i>chrysaetos</i> ; <i>homereyi</i> & <i>daphanea</i> resident Turkmenistan, Bukreev 1997, RB Afghanistan Madge 1980. Thinly widespread Caucasus, Iraq Ararat <i>et al</i> 2011 fairly common & widespread in Iranian mountains Khaleghizadeh <i>et al</i> 2017, CA (Kazakh ssp <i>chrysaetos</i> & <i>daphanea</i> Ayé <i>et al</i> 2012, but Wassink 2015b gives <i>chrysaetos</i> [N half Kazakhstan] & <i>canadensis</i> instead of <i>daphanea</i> [S half], the implications of which, as a taxon previously considered solely Nearctic, are considerable, given Nebel <i>et al</i> 2015), Afghanistan, Iran, F-L&C (2005) east as far as Bhutan Naoroji 2006. Rare resident & visitor Israel Perlman & Meyrav 2009: Status in Arabia: locally widespread uncommon resident (c 250bp) population trend uncertain, possible Oman montane decline possibly offset by increased carrion from irrigated area stock farms Jennings 2010, but OBL7 confirms decline, possibly to non-breeder. A status review covering 1980-2017 concludes that the species is functionally extinct in Oman Harrison & Green 2021: increased disturbance, raptor poaching, quarrying, and wood collection from increasing human habitation are factors in the decline. Egypt Avib, BE. NB ssp <i>chrysaetos</i> likely occurs sporadically in N Kazakhstan (it occurs from Europe to Yenisey valley H&M4.
486	American Golden Eagle	<i>Aquila (chrysaetos) canadensis</i>	Taxon <i>kamtschatica</i> we regard as occurring Altai & may be synonymous with <i>canadensis</i> American Golden Eagle which English name adopted as informal@OSME; certainly Nebel <i>et al</i> 2015 noted closeness of <i>canadensis</i> & <i>kamtschatica</i> , which <i>pro tem</i> we infer is therefore within the <i>canadensis</i> group. This appears to be the reason for Wassink 2015 allotting E Kazakhstan birds to <i>canadensis</i> : should that be borne out, 'American Golden Eagle' would largely mirror the Eastern Palearctic distributions of American Swallow <i>Hirundo (rustica) erythrogaster</i> , Northern Shrike <i>Lanius borealis</i> and American Herring Gull/Vega Gull <i>Larus (smithsonianus) vegae</i> .
487	Verreaux's Eagle	<i>Aquila verreauxii</i>	Monotypic. Established breeding pair in Aqaba-Eilat region Shirihi 1996, still also in St Katherine area of Egyptian Sinai, very rare visitor S Israel Perlman & Meyrav 2009. 1st breeding record Saudi Arabia Eichacker 1990, status in Arabia: scarce breeding resident (200-3000m asl) Red Sea hinterland, mostly W Yemen, but also W Oman, c 60bp Jennings 2010, Dhofar mountains OBL7 ; 54 recorded Wadi Sayq Dhofar Jan-Mar 2012-13 Ball <i>et al</i> 2015. One photographed Gebel Elba Nov 2017, another Eilat Mts Feb 2018 IRDC .
488	Bonelli's Eagle	<i>Aquila fasciata</i> (formerly <i>Hieraetus fasciatus</i>)	Lerner <i>et al</i> 2017 in new phylogeny & taxonomy of 'booted' eagles place this sp by 3 separate DNA methods firmly in <i>Aquila</i> . Region ssp is <i>fasciata</i> . Vagrant Kazakhstan, Uzbekistan, Kyrgyzstan (K-M&K 2005, Ven 2002), 2-record vagrant Kazakhstan Wassink 2015b, breeds Armenia Belik 1990 uncommon to scarce resident breeder Iran Khaleghizadeh <i>et al</i> 2017, PM Madge 1980, rare on passage Dasht-e-Navar Afghanistan Argandev 1983, occurs Wakhan 2006 Ayé 2007, rare resident SW Turkmenistan, S Uzbekistan, Kyrgyzstan & SE Afghanistan Ayé <i>et al</i> 2012, RB SE & N-C Afghanistan BLDZ map Mar 2018, rare local breeder Turkey mis-ID commonplace Kirwan <i>et al</i> 2014; Iran (resident Scott & Adhami 2006), Iraq, F-L&C (2005), uncommon widespread resident Arabia Jennings 2004, 2010 (perhaps 500bp; some migration) - uncommon localised breeder; 3rd Qatar record Jun 2017 QBRC , common PM & WV Oman OBL7 , but rare Israel Perlman & Meyrav 2009; 31-39bp Cyprus 2009 Kassinis 2011. Egypt Avib, BE NB1 Main population Indian subcontinent Naoroji 2006. NB2 genus change (supported by Anderson <i>et al</i> 2009, references summarised in Sangster <i>et al</i> 2009) is in IOC v2.7. NB3 IOC2.7, Wink 2011 split extralimital <i>A. spilogaster</i> , African Hawk-Eagle.
489	Gabar Goshawk	<i>Micronisus gabar</i>	African species, small population ssp <i>niger</i> SW Arabia, Porter <i>et al</i> 1996, 1st nest found in Arabia in Tihama Apr 2001 Castell 2001, estimated 200bp Jennings 2007a, possibly 1000bp as Tihama resident Jennings 2010; Wadi Rima 2007 Scholte 2010. Vagrant Egypt Mitchell 2017.
490	Dark Chanting Goshawk	<i>Melierax metabates</i>	African species, ssp <i>ignoscens</i> population in SW Arabia, Porter <i>et al</i> 1996, estimated 1000bp Jennings 2007a, perhaps as many as 2500bp, mostly in Tihama Plains Jennings 2010, but some decline indicated, possibly partly due to harassment by increasing House Crow <i>Corvus splendens</i> population. One seen at Jebel al Qahar, Jazan Province SW Saudi Arabia was the first confirmed record there since 2010 SG43(2) : . Vagrant Israel Perlman & Meyrav 2009: 2nd record Apr 2013 DB36(3) : p200.
PT	Shikra PT	<i>Accipiter badius</i>	Breman <i>et al</i> 2012 suggest a superspecies thus: 2 clades, one (extralimital) of Frances's Sparrowhawk <i>Accipiter francesiae</i> (Madagascar) + Chinese Sparrowhawk <i>A. soloensis</i> (E Orient), the other of Shikra <i>A. badius</i> + Levant Sparrowhawk <i>A. brevipes</i> . Levant Sparrowhawk breeds SE Europe, SW Asia, wintering N sub-Saharan Africa & is closely related to the 2 African ssp of <i>A. badius</i> (extralimital <i>polyzonoides</i> & into SW Arabia <i>sphenurus</i>); the 3 taxa show similar intraspecific sequence divergences supportive of treatment as of equivalent taxonomic rank to other <i>Accipiter</i> spp (c 2.8% Breman <i>et al</i> 2012), hence the superspecies merits further taxonomic revision; the populations in Arabia appear to have two lines of ancestry. NB1 Taxonomic revision suggested for Accipitridae species (as delineated by John Boyd 'Taxonomy in Flux' May 2020), indicates that <i>Accipiter</i> may be restricted to Eurasian Sparrowhawk, a few African taxa & American relatives, placing other taxa into <i>Tachyspiza</i> ; in following this concept, Eaton <i>et al</i> 2016 assign species status to <i>T. badia</i> 'Asian Shikra', potentially splitting off the African subspecies <i>sphenurus</i> & <i>polyzonoides</i> . NB2 <i>A. brevipes</i> previously had been suggested as being closely related to <i>A. soloensis</i> (Thiollay 1994), so superspecies revision should include extralimital SE Asian ssp of <i>A. badius</i> ('Eastern Shikra': <i>dussumieri</i> , <i>badius</i> , <i>poliopsis</i>) as indicated by Eaton <i>et al</i> 2016. H&M4 makes no mention of breeding populations from Caucasus to Arabia (Breman <i>et al</i> 2012 is still [IOC11.2] not on WorldBirdNames Reference List), but updates may illuminate the taxonomic flux inferred below. NB3 Long treated in Russian-language literature as separate from Levant Sparrowhawk <i>A. brevipes</i> Red'kin <i>et al</i> 2015.

491	'Northern Shikra' (English name informal@OSME) (May become 'Asian Shikra' following Eaton <i>et al</i> 2016)	<i>Accipiter (badius) cenchroides</i> (May move to <i>Tachyspiza</i> & become <i>T. badius cenchroides</i>)	<i>A. b. cenchroides</i> Turkmenistan, Bukreev 1997, largest & palest ssp. Breeds CA (scarce but widespread BM S-C & SE Kazakhstan Wassink 2015b), fairly common Sb, PM Iran H&E 1970 Khaleghizadeh <i>et al</i> 2017, Afghanistan F-L&C (2005) (Kabul Region & Nurestan Argandeval 1983), <i>cenchroides</i> Afghanistan Paludan 1959; breeds N Kyrgyzstan, migrant, Ven 2002; CA <i>cenchroides</i> winters NW Indian subcontinent. 50-150 bp now estimated breed Azerbaijan Heiss & Gauger 2009, breeding expansion to Armenia Ananian <i>et al</i> 2010; very rare captures claimed 1970s by Turkish falconers Smith 2012, 1st record Sep 2006 Smith 2012 Kirwan <i>et al</i> 2014, 3rd Trabzon June 2020 DB42(4) : 278: 1st for Iraq at Ad-Daghara Sep 2019, juvenile Mudhafar Salim <i>in litt</i> Mar 20, DB44(4) : 312 ; Ayé <i>et al</i> 2012 map residency along S Turkmenistan border; vagrant Israel Perlman & Meyrav 2009; rare PM & WV Oman OBL7 may be this taxon, but Forsmann 2018 suspects <i>dussumieri</i> of C India from its bluish cast (perhaps some introduced/escape). 1st record Qatar May 2017 QBRC , 2nd al Shamal Park Sep 2018 QBRC 3rd there Apr 2020 SG42(2) : 328, currently 400+ birds across UAE, likely dozens of nesting pairs 2021 Campbell <i>et al</i> 2022 : scarce migrant & WV Kuwait AbdulRahman al-Sirhan <i>in litt</i> Jan 2016: also Oct 2019 SGATR41(1) ; occurs Bujagh (Bojag) NP, Gilan, Iran Ashoori 2018b. Introduced Dubai 1996 UAE checklist 2008 Cat C. Extralimital, resident Indian subcontinent Naoroji 2006. NB Fomer informal name unsuitable, hence alignment with others' choice of 'Northern Shikra'.
492	'Tihama Shikra' (English name informal@OSME) (Name may change to 'African Shikra' if <i>sphenurus</i> & extralimital <i>polyzonoides</i> are split from the revised <i>Tachyspiza badia</i>)	<i>Accipiter (badius/brevipes) sphenurus</i> (As part of the 'African' taxa of <i>A. badius sensu lato</i> , given that <i>sphenurus</i> distribution stretches W to Senegal SW to DR Congo likely to remain in <i>Accipiter</i>)	Breman <i>et al</i> 2012 conclude that taxon <i>sphenurus</i> deserves same taxonomic rank as Shikra <i>A. badius</i> . Taxon <i>sphenurus</i> 400+ pairs Arabia Jennings 2007a; status in Arabia: max estimated 600bp in southern Tihama (A few Dubai of uncertain origin) Jennings 2010, but records now accepted as of wild birds EORC ; specimen in BMNH from Riyadh, Saudi Arabia Oct 1938 (Clark & Parslow 1991). NB1 Resident (? - see BirdLife Species Account map), PM & WV populations in N Oman perhaps <i>cenchroides</i> , possibly <i>dussumieri</i> Forsmann 2018, hence our use of informal name for taxon <i>sphenurus</i> 'Tihama Shikra'. NB2 If <i>Tachyspiza</i> becomes genus & African ssp <i>sphenurus</i> & <i>polyzonoides</i> are split from <i>A. badius sensu lato</i> , then species name would be <i>T. sphenura</i> on priority grounds, but being African taxa, the taxonomic decision could be that they are retained in <i>Accipiter</i> , as <i>A. sphenurus</i> . NB3 The 'Tihama Shikra' may well qualify either as a separate ssp. or even as a full species, due to its two lines of ancestry, which apparently are not present to a significant degree in African <i>sphenurus</i> populations.
493	Levant Sparrowhawk	<i>Accipiter brevipes</i> (May move to <i>Tachyspiza</i>)	See PT Notes for Shikra <i>A. badius</i> above; very closely related to African Shikra ssp extralimital <i>polyzonoides</i> & all <i>sphenurus</i> . Very rare BM & PM NW&C Kazakhstan Wassink 2015b 1st fully documented record C Kazakhstan May 2021 Wassink 2022 , Armenia Ananian <i>et al</i> 2011, local N Iraq Ararat <i>et al</i> 2011, Iran, E Caucasus, CA (Vagrant (?) Kyrgyzstan Ven 2002), Iran, Afghanistan, F-L&C 2005, migrant through Syria Murdoch & Betton 2008, Israel (very common: 30 000+ Apr 2017 DB39(3) : 209) & Jordan Shirihai 1996, less than annual PM Cyprus CRC , but 4 Akrotiri Salt Lake Oct 2020 SG43(1) : 168. Egypt Avib BE
494	Eurasian Sparrowhawk (Northern Sparrowhawk)	<i>Accipiter nisus</i> (May stay in <i>Accipiter</i> if the arrangement favoured by John Boyd in TiF becomes accepted)	Breman <i>et al</i> 2012 suggest non-monophyly of <i>A. nisus</i> , but complexity demands more detailed research: Scherer <i>et al</i> 2021 developed 2 microsatellite markers from a small sample set of mostly European ssp, which found no evidence of divergence, but noted that larger studies were required to determine whether this applied over the entire distribution; also, nuclear DNA research has not yet been attempted. <i>A. n. dementjevi</i> & <i>nisus</i> Turkmenistan, Bukreev 1997, Kazakhstan W&O 2007, <i>nisosimilis</i> rare passage, <i>dementjevi</i> rare resident or BM Wassink 2015b. Breeds Caucasus, N Kazakhstan (rare Tajikistan Abdusayamov 1988), Dare-Adzhar Mts & Kabul Region Afghanistan (common passage, <i>nisosimilis</i> ; <i>melaschistos</i> breeding Khyber NE Afghanistan Paludan 1959 & suggested by map in Roberts 1991) Argandeval 1983, rare Iran Scott & Adhami 2006 but fairly common in S Caspian forests Khaleghizadeh <i>et al</i> 2017, uncommon resident, common PM & WV Oman OBL7 , common migrant winterer Israel Perlman & Meyrav 2009, winters CA, Iran, Afghanistan, F-L&C (2005), Iraq Salim <i>et al</i> 2012; widespread resident Kyrgyzstan, Ven 2002. ssp <i>punicus</i> may reach E Egypt. Egypt Avib, BE. NB Breman <i>et al</i> 2012 found extralimital Ovambo Sparrowhawk <i>A. ovampensis</i> & Madagascan Sparrowhawk <i>A. madagascariensis</i> comprise a distinct clade from (Nearctic) Sharp-shinned Hawk <i>A. striatus</i> , (Ethiopia S&W to S Africa) Rufous-breasted Sparrowhawk <i>A. rufiventris</i> & Eurasian Sparrowhawk <i>A. nisus</i> .
PT	Northern Goshawk PT	<i>Accipiter gentilis</i>	Within <i>A. gentilis</i> Breman <i>et al</i> 2012 find two strongly diverged haplotypes (c2.8%) that correspond to the taxa <i>A. g. atricapillus</i> (<i>atricapillus</i> , <i>laingi</i> , <i>apache</i>) from N America and W Mexico & to <i>A. g. gentilis</i> (<i>gentilis</i> , <i>marginatus</i> , <i>schvedowi</i> , <i>buteoides</i> + 3 extralimital taxa) that occur in Europe, Asia & extreme NW Africa. This DNA bar-coding study, though strong, would benefit from support from other types of DNA research: Kunz <i>et al</i> 2019 examine all taxa of the Northern Goshawk <i>A. [gentilis]</i> superspecies: the Holarctic Northern Goshawk <i>A. gentilis</i> , & the extralimital Meyer's Goshawk <i>A. meyerianus</i> (New Guinea), Hensst's Goshawk <i>A. henstii</i> (Madagascar) and Black Goshawk <i>A. melanoleucus</i> (non-arid habitats largely S of 10°N and disjunctly in the arid & montane region of SE Sudan, Eritrea, Djibouti just into Somalia to C Ethiopia & NE South Sudan); the 3 Nearctic taxa formed a monophyletic group distant from all other taxa, thus supporting Breman <i>et al</i> 2012; other DNA techniques would need to confirm this, but <i>pro tem</i> we recognise <i>A. [gentilis] atricapillus</i> informally as 'North American Goshawk'. 'Eurasian Goshawk' <i>A. [gentilis] gentilis</i> taxa are all quite closely related. Sangster 2022 found by vocal analysis regional congruency within both the Nearctic and Palearctic populations; sample sizes were large, geographic distribution was extensive, though not all ssp were sampled; the results strongly support the haplotype divergence pattern found by Breman <i>et al</i> 2012. NB1 There is some evidence that Meyer's Goshawk is close to 'Eurasian Goshawk' but as a remote island endemic, any future reassessment of its relationship to OSME Region taxa will have little practical effect. NB2 Black Sparrowhawk <i>A. melanoleucus</i> (Africa) is closely related to <i>A. (g.) gentilis</i> , but not to <i>A. (g.) atricapillus</i> Breman <i>et al</i> 2012. NB3 BLDZ Apr 2019 map suggests occurs along or close to Gulf of Aden/Red Sea W coast from Jidhli in NE Somalia to Tokar in E Sudan and is a potential vagrant via islands in OSME Region. However, map in Kunz <i>et al</i> 2019 indicates a much more reduced & fragmentary distribution in that area, away from the coast entirely except, oddly, for a much larger NE Somalia distribution, E to Maydh.
495	Eurasian Northern Goshawk	<i>Accipiter [gentilis] gentilis</i> (May move to <i>Astur</i>)	English name informal@OSME. Resident Caucasus (<i>marginatus</i> : 'caucasicus' invalid), S Kazakhstan <i>buteoides</i> rare PM & WV; N Kazakhstan scarce resident & PM <i>schvedowi</i> Wassink 2015b, Tajikistan, N Kyrgyzstan, rare Iran Scott & Adhami 2006, 5-record vagrant Afghanistan Madge 1980, rare breeder Bāmīān, Band-e Amir & Dare Adzhar Mts Afghanistan Argandeval 1983; northern populations (including <i>gentilis</i>) winter CA, Iran, Afghanistan, Reeb 1977, F-L&C (2005) R&A 2012; vagrant Iraq Salim <i>et al</i> 2012, 2nd record Oman 2011 OBL7 , 7th for UAE Wadi Wurayah NP Feb 2019 EBRC . G&G 2005 – <i>schvedowi</i> breeds N Kazakhstan (winters Indian subcontinent Naoroji 2006), <i>buteoides</i> on migration; rare winterer Israel Perlman & Meyrav 2009. Report UAE Dec 06 PH pers comm. Egypt Avib. BE.
496	Western Marsh Harrier	<i>Circus aeruginosus</i>	ssp <i>aeruginosus</i> resident Caucasus, N Iran, S Turkmenistan, breeds CA, F-L&C (2005), Afghanistan R&A 2005, resident breeder S Iraq marshes Salim <i>et al</i> 2012, all main wetlands Iran Khaleghizadeh <i>et al</i> 2017, resident S CA, summer breeder N CA Ayé <i>et al</i> 2012; winters to S; abundant PM & WV Oman OBL7 . 9150+ autumn 2019 Batumi Georgia DB41(6) : 428; common passage Israel Perlman & Meyrav 2009 (1st wintering record Almaty, Kazakhstan W&O 2008) & India; ssp <i>harterti</i> possible in Egypt. Egypt Avib, BE. Migratory (northern) populations dependent on Sahel floodplain size, hence vulnerable to droughts Zwarts <i>et al</i> 2009. NB1 Eastern Marsh Harrier <i>C. spilonotus</i> (qv) male & juv distinctive; NB2 hybrids occur.
497	Eastern Marsh Harrier	<i>Circus spilonotus</i> (formerly <i>C. aeruginosus spilonotus</i>)	Monotypic (Oatley <i>et al</i> 2015 removed ssp <i>spilothorax</i> , reassigning it to the Pacific [Australasian] Harrier <i>C. approximans</i>). Probably occurs E Kazakhstan, E Tajikistan, E Kyrgyzstan, F-L&C (2005); single-vagrant E Kazakhstan Wassink 2015b; two collected Iran 1898, 1900 Zarudny 1911, Roselaar & Aliabadian 2010; Ayé <i>et al</i> 2012 treat as vagrant to CA, R&A 2012 to S Asia. Probably under-recorded. Uncommon PM, local SV Mongolia, but boundary between Western and Eastern Marsh Harriers uncertain & may be further W due to ID confusion Gombobaatar & Leahy 2019. NB1 G&G 2005 record as undocumented. Possible first record 2001 Kyrgyzstan Ven 2002. NB2 Vagrant winter Indian subcontinent Naoroji 2006.

PT	Northern Harrier PT	<i>Circus cyaneus (sensu lato)</i>	Split in IOC2.11 in monotypy to Northern Harrier <i>C. [c.] hudsonius</i> and Hen Harrier <i>C. [c.] cyaneus</i> del Hoyo <i>et al</i> 2014 & reinforced by Oatley <i>et al</i> 2015, who show <i>C. hudsonius</i> to be sister taxon to Cinereus Harrier <i>C. cinereus</i> , the pair being sister group to <i>C. cyaneus</i> . Sangster <i>et al</i> 2016 agree. Etherington & Mobley 2016 provide evidence for separate species.
498	Hen Harrier (Formerly treated as conspecific with Northern Harrier)	<i>Circus cyaneus (sensu stricto)</i>	Monotypic: Oatley <i>et al</i> 2015 show that <i>cyaneus</i> & <i>hudsonius</i> are not sister taxa, but sister groups. Breeds N Kazakhstan, winters CA, Iran, Afghanistan F-L&C (2005). Smith <i>et al</i> 2011 agree reasonableness of separation case on allopatry grounds; see also Dobson & Clarke 2011. Ayé <i>et al</i> 2012 map two resident populations S-C & SE Kazakhstan, summer breeders in N & wintering open country from N to S, Wassink 2015b agrees, noting it a common PM. Known to breed in S Kyrgyzstan Ayé <i>et al</i> 2012, found in Suusamyrl Valley N Kyrgyzstan during breeding season van Els & Hiddes 2022. Uncommon passage, winterer Iraq Salim <i>et al</i> 2012, common WV N Iran, less so C Iran Khaleghizadeh <i>et al</i> 2017. Often recorded spring Kyrgyzstan but breeding unproven, Ven 2002. Uncommon PM & WV Oman OBL7 , common winterer Israel Perlman & Meyrav 2009, 3rd record Qatar Irkayya Farm Apr 2020 SG42(2): 328. 2nd Bahrain record Dumistan Poultry Farm, Hamal Nov 2021 SG44(1): 233
499	Pallid Harrier	<i>Circus macrourus</i>	Monotypic. Breeds E Tajikistan, common Kazakhstan Wassink 2015b; 398 autumn 2019 Batumi Georgia DB41(6): 428 , occurs migration CA, Caucasus, Iran (may breed Scott & Adhami 2006), once commonly so Iraq Moore & Boswell 1956, now passage, winterer only Salim <i>et al</i> 2012. Afghanistan (some may winter) F-L&C (2005). Breeds N Kyrgyzstan, Ven 2002, common & widespread PM, WV Iran Khaleghizadeh <i>et al</i> 2017, common PM & WV Oman OBL7 , fairly common PM Cyprus Flint & Stewart 1992, CBR 2016 ; Israel Perlman & Meyrav 2009, winters also Indian subcontinent Naoraji 2006. Egypt Avib, BE
500	Montagu's Harrier	<i>Circus pygargus</i>	Monotypic. Breeds Kazakhstan, N Tajikistan, N Uzbekistan, Iran (scarce Scott & Adhami 2006); 2540 at Batumi Georgia autumn 2019 DB41(6): 428 , occurs on migration Caucasus, CA, Iran, Iraq (2012), Afghanistan, F-L&C (2005); widespread breeder Kyrgyzstan, Ven 2002, local SV N Iran Khaleghizadeh <i>et al</i> 2017; almost common PM & WV Oman OBL7 , winters to S & also India Naoraji 2006. Particularly vulnerable to industrial agriculture in breeding areas reducing numbers and variety of small mammal prey; protection alone insufficient to halt decline; unlikely ever to approach 19th century population levels Trierweiler & Koks 2009. Egypt Avib, BE
501	Red Kite	<i>Milvus milvus</i>	Probably never common in Region & now mostly irregular and rare. Uncommon summer & passage migrant Turkey Kirwan <i>et al</i> 1999, no evidence of breeding Kirwan <i>et al</i> 2014. Vagrant Israel Perlman & Meyrav 2009. Best regarded as former vagrant to Iraq, F-L&C (2005). 5 spring migrants 1956 S Caspian Schüz 1959. Persistent poorly-documented sightings Afghanistan R&A 2005. Winter vagrancy Iran (Scott & Adhami 2006) rare S Caspian WV Khaleghizadeh <i>et al</i> 2017 (& elsewhere) needs confirmation of elimination of <i>M. lineatus</i> (qv) or reddish-tailed (<i>migrans</i>) individuals, but note first that Scheider <i>et al</i> 2004, 2009 confirmed that 'African Black Kite' <i>M. [migrans] parasitus</i> is closer to Red Kite <i>M. milvus</i> than <i>M. migrans</i> ; Scheider 2009 also suggest that <i>aegyptius</i> origin perhaps from <i>M. milvus</i> (interbreeding with <i>M. migrans</i> taxa possibly continuing) & that <i>lineatus</i> closer to <i>govinda</i> than to <i>migrans</i> . Also note that Johnson <i>et al</i> 2005 revealed differences between <i>parasitus</i> and <i>M.[m.] aegyptius</i> populations; perhaps former may be closer to Red Kite and the latter to Black Kite. Primarily a breeding bird of W & C Europe, northern populations are generally migratory & Mediterranean populations are resident. NB1 Haplotypes of the Yellow-billed Kite from Africa differed from all other Black Kite haplotypes to the same extent as those of the Red Kite Andreyenkova <i>et al</i> 2021. NB2 Wintering Red Kites in SW Europe select one or two wintering areas each year and remain within them, but make different selections year-on-year Garcia-Macia <i>et al</i> 2022. NB3 36 Red Kites that were radiotagged in a small area where the borders of Austria, Slovakia and Czechia trisect it wintered mostly in 3 widely-separated regions: C & S Italy, SW France & NE Spain (including the Pyrenees) and C & S Spain: year-on-year wintering site fidelity occurred, though local wandering likely forced by food availability or late arrival Panter <i>et al</i> 2021.
PT	Black Kite PT	<i>Milvus migrans</i>	Old & quite recent records both may refer only to Parent Taxon and include <i>lineatus</i> under <i>migrans</i> . IOC2.7 split of Yellow-billed Kite <i>M. aegyptius</i> . Heneberg <i>et al</i> 2016. sampling 311 birds from C Europe (mtDNA & nuclear DNA of 184 <i>M. milvus</i> , 124 <i>M. migr. migrans</i> and 3 F1 hybrid individuals) found populations of both examined species were characterized by a high gene flow within populations, with all of the major haplotypes widely distributed. They did not find mtDNA of one species in individuals with the plumage of the other species, except in F1 hybrids, which agrees with Haldane's Rule . Andreyenkova <i>et al</i> 2019 detail the essentially intermediate status of several populations/subspecies. That has always been the assumption in the ORL principles, but now it is mapped by Andreyenkova <i>et al</i> 2021. NB1 IOC has deferred any appraisal (<i>milvus</i> & <i>migrans sensu lato</i>) given recent studies requiring broader molecular data before publication. <i>Pro tem</i> , we remain with ORL arrangements. Likely some <i>migrans/lineatus</i> populations indeterminate, but diagnosable. Scheider <i>et al</i> 2009 suggest from small sample that taxa relationships complex & call for further study. NB2 Even with hundreds of birdwatchers present in Dec 2010 in Gujrat, I alone showed interest in trying to ID the next 3 taxa (MB pers obs)! NB3 Andreyenkova <i>et al</i> 2018, in a preliminary examination of data-deficient populations from the eastern Palearctic and India, found ancestral genetic connection between <i>migrans</i> , <i>lineatus</i> & <i>govinda</i> populations, & several specimens that may have two lines of ancestry (heteroplasmy): Andreyenkova <i>et al</i> 2021 develop understanding about geographic extent of this admixture. Andreyenkova <i>et al</i> 2019 consider the taxa <i>aegyptius</i> & <i>parasitus</i> perhaps are separate species, but together they are separate from <i>migrans</i> .
502	Eurasian Black Kite	<i>Milvus [migrans] migrans</i>	English name informal@OSME. IOC4.1 retains reversion of subsuming <i>lineatus</i> and <i>govinda</i> within <i>migrans</i> ; we align with F-L&C 2005 for <i>M. (m.) lineatus</i> (qv), <i>M.(m.) govinda</i> (qv). Summer breeder Caucasus, CA (scarce Kazakhstan Wassink 2015b), Arabia, Iran (not in S & SW Khaleghizadeh <i>et al</i> 2017), Afghanistan (Paludan 1959, Madge 1980); almost 239000 counted autumn 2019 Batumi Georgia DB41(6): 428 , scarce PM Kuwait KORC , fairly common (including <i>lineatus</i>) PM & WV Oman OBL7 , winters to S, India, sub-Saharan Africa, F-L&C 2005. Various hybrids between Black & Black-eared Kites – some (' <i>migrans</i> types') like the former, others (' <i>lineatus</i> types') resembling the latter – occur in Kazakhstan while documented records of pure Black Kite or pure Black-eared Kite (Dick Forsman <i>in litt</i>) seem to be lacking in Kazakhstan W&O 2008. Ayé <i>et al</i> 2012 suggest <i>migrans</i> occupies W CA. Egypt Avib, BE. NB occasional hybrid Black Kite × Common Buzzard <i>Buteo buteo</i> (Corso & Gildi 1998, Kruckenhauer <i>et al</i> 2004) present ID complications.

503	Black-eared Kite (Large Black Kite) {Black Kite}	<i>Milvus (migrans) lineatus</i> (formerly <i>M. migrans lineatus</i>)	<p><i>Ayé et al</i> 2012 had noted that identity of Afghan populations uncertain, raising the possibility of a <i>migrans x lineatus x govinda</i> mix (heteroplasmy), an arrangement confirmed by Andreyenkova <i>et al</i> 2019. Mapped by Andreyenkova <i>et al</i> 2021: Common passage Afghanistan, probably summer breeder far NE & Wakhan (R&A 2012 map), Tajikistan, Kyrgyzstan; Turkmenistan (Bukreev 1997: <i>M. migrans lineatus</i>). F-L&C 2005 full sp. Various hybrid Black/Black-eared Kites, some ('<i>migrans</i> types') resembling former, many ('<i>lineatus</i> types') resembling latter, occur Kazakhstan (documented records of pure Black Kite (Wassink & Oreel 2007) or pure Black-eared Kite (Dick Forsman <i>in litt</i>) lacking Arend Wassink pers comm, more research needed Wassink 2015b); intergradation zone between <i>migrans</i> & <i>lineatus</i> expanding W as <i>lineatus</i> itself expands W Andreyenkova <i>et al</i> 2021: Literák et al 2020 (?) map migration of Russian 2 breeding populations, hybrid migrans/lineatus W of lineatus further E: the former migrated W & N of Kazakhstan's southern mountains, whereas the latter flew E & S of them, crossing the Taklaman Desert; the two routes joined only at the non-breeding grounds in coastal SW India. 1st winter record Kazakhstan Dec 2014 Wassink 2015a; occurs E Afghanistan (Paludan 1959, PM Madge 1980), Iraq 1940s Moore & Boswell 1956 ('Large Black Kite'), Iraq May 2011 SG33(2), noted Jalalabad Sep 1977 Inskipp & Inskipp 1979, Kuwait Gregory 2003, Wakhan 2006 Ayé 2007, Turkmenistan Bukreev 2005; breeds N Kyrgyzstan, large-scale migration Ven 2002, occasionally wintering E Arabia UAE 2008 Checklist, Jennings 2010, common PM, WV Kuwait KORC, likely regular Oman OBL7, scarce passage, winters Iraq & Iran H&E 1970 (S & SW Iran only Khaleghizadeh <i>et al</i> 2017), 1st for Lebanon Nov 2017 LBRC. Common winterer India Naoroji 2006 (mapped R&A 2012). As of Nov 09, no definite record Israel Yoav Perlman <i>in litt</i>. Brazil 2009 lists <i>M. lineatus</i>, also BirdLife 2008, DB 2009. NB Scheider <i>et al</i> 2009, Parkin & Knox 2010 note <i>lineatus</i> & <i>govinda</i> (& extralimital <i>affinis</i>) more closely related to each other than to <i>migrans</i>.</p>
504	Indian Black Kite	<i>Milvus (migrans) govinda</i>	<p>Sedentary Indian subcontinent R&A 2005 Naoroji 2006, rare breeder S Baluchestan Iran Zarudny 1911, straggler Afghanistan Paludan 1959, provisional records UAE Aug & Oct 2014 EBRC. Likely main taxon in central-east Iran Abolghasem Khaleghizadeh <i>in litt</i> draft Iran New Checklist 2015, Khaleghizadeh <i>et al</i> 2017; Andreyenkova <i>et al</i> 2019, 2021 confirm Afghanistan population a mix of <i>migrans x lineatus x govinda</i> (heteroplasmy), their map indicating that those in central-east Iran likely attributable to at least <i>migrans x govinda</i>.</p> <p>NB1 R&A 2012 map resident <i>govinda</i> to Pakistan/Afghan border in NE & S, & almost to SE Iran border; stragglers must occur beyond Pakistan. NB2 resident Pakistani Baluchistan Roberts 1991: may occur SE Iran. NB3 Lack of records E Arabia, Iran & Afghanistan arguably due to ID criteria uncertainties, absence of awareness of possibility of occurrence, disinclination to differentiate 'black kites' or any combination of the three Khaleghizadeh <i>et al</i> 2017; affinities of Indian subcontinent populations uncertain in any season R&A 2012: most summer birds assumed to be <i>govinda</i>. NB4 Andreyenkova <i>et al</i> 2019, 2021 note that no DNA sequences of reliable <i>M. m. govinda</i> have been published so far.</p>
505	Yellow-billed Kite {Black Kite}	<i>Milvus [migrans] aegyptius</i> (formerly <i>M. migrans aegyptius</i>). Regional assessment in Egypt of Critically Endangered likely if recognised as full species.	<p>Common resident Yemen, Warr 1992. Egypt, S Red Sea, SW Arabia, F-L&C 2005, Jennings 2010 estimates c30 000bp SW Saudi Arabia & mostly SW Yemen including Socotra Porter & Suleiman 2020, breeding resident SW Oman OBL7. IOC2.7 gives species status, citing Johnson <i>et al</i> 2005: Andreyenkova <i>et al</i> 2021 strongly support. 1st record Israel Yoav Perlman <i>in litt</i> Nov 09, 2nd May 2016 DB38(4) p247 3rd Jul 2018 IRDC, 4th Eilat Apr 2019 DB41(3): 198. Bred Lake Nasser, Egypt Jan 2018 Bull ABC 25(2): 235: Habib <i>et al</i> 2019 found almost 70 active nests along Lake Nasser & at Abu Simbel. Some authors (eg Scheider <i>et al</i> 2004) suggest southern African taxon <i>parasitus</i> (Daudin 1800) as a more valid ssp than <i>aegyptius</i> (Gmelin 1788), but did not sample <i>aegyptius</i>; we treat <i>aegyptius</i> (Gmelin 1798) as separate from <i>parasitus</i>, but related closely to it IOC3.3; other authors have included both populations under <i>aegyptius</i>. Benmammar Hasnaoui <i>et al</i> 2021a acknowledge that should full species status be recognised, then the Egypt population would merit Regional CE assessment. Andreyenkova <i>et al</i> 2019, 2021 map <i>parasitus</i> northeastmost distribution as c20°N, 30°E in Sudan SSE to Khartoum, then ESE to the Eritrea-Ethiopia border, SE through inland Djibouti & then S, easing to ssw down the Kenya-Somalia border to the Indian Ocean coast: the narrow strip W of this described boundary is occupied by aegyptius. Andreyenkova <i>et al</i> 2019 also indicate data so far support separation of these taxa, but more is needed to confirm species status: Andreyenkova <i>et al</i> 2021 repeat this conclusion, emphasising that sample numbers are very low: they also found that the 2 main haplogroups (genetic patterns that show common ancestry) in Africa showed little relationship to current sssp boundaries, especially over the vast region attributed to <i>parasiticus</i>. Scheider <i>et al</i> 2004 found <i>parasitus</i> (qv ORL Hypotheticals) to be closer to Red Kite <i>M. milvus</i> than to <i>M. migrans</i> (see also Scheider <i>et al</i> 2009), but Johnson <i>et al</i> 2005 revealed differences between <i>parasitus</i> and <i>aegyptius</i> populations; perhaps former may be closer to Red Kite and the latter to Black Kite. NB Haplotypes of the Yellow-billed Kite from Africa differed from all other Black Kite haplotypes to the same extent as those of the Red Kite Andreyenkova <i>et al</i> 2021.</p>
506	Brahminy Kite	<i>Haliastur indus</i>	<p>Probably breeds SE Afghanistan on Pakistani NW Frontier (ssp <i>indus</i> Naoroji 2006), but Pakistan population sedentary Roberts 1991; elsewhere wanders, F-L&C (2005). Two records UAE 186 & 87 of uncertain status Mitchell 2017. An Oman occurrence presumed escape Porter & Aspinall 2010, but an adult at Wadi Darbat Nov 2015 was 1st for Oman OBRC. 1st for Iran photographed Bahukalat, Sistan & Baluchestan Oct 2013 DB42(3): 215.</p>
507	African Fish Eagle	<i>Haliaeetus vocifer</i>	<p>Monotypic. Accidental. One shot at Aswan 01 Nov 1947 now in Giza Museum (Marcel Haas <i>in litt</i> May 2014).</p>
508	Pallas's Fish Eagle (Pallas's Sea Eagle)	<i>Haliaeetus leucoryphus</i> Endangered	<p>Monotypic. Formerly (1950s) likely bred Kazakhstan W&O 2007, but inadequately documented Wassink 2015b, now very rare PM and non-breeding SV: former resident Uzbekistan and Tajikistan, F-L&C (2005), one reported Sep 2011 in Tajik Pamirs (SG34(2) ATR), also locally Afghanistan (3 20th-century records Madge 1980) R&A 2005, but (formerly [?]) common breeder Afghan Pamirs Argandeval 1983; few modern records Kyrgyzstan, Ven 2002; status in Region 2011 likely vagrant only Ayé <i>et al</i> 2012. Rare local breeding populations Mongolia Gombobaatar & Leahy 2019, one of which is 250km from easternmost Kazakhstan: 1st record W Kazakhstan Jul-Sep 2020 off Bautino, E Caspian coast 125km away from Europe Wassink <i>et al</i> 2021. Mapped as resident Pakistan, across N India & just E of Wakhan R&A 2012: Birds of Gilgit-Baltistan 2021 map as rare resident just over 100 km S of Wakhan. Scattered Iran records 1896-1941 Roselaar & Aliabadian 2010, one reported Khor-e Tiab Dec 2011 (SG34(1) ATR). Two 1943/4 records Iraq Moore & Boswell 1956, two 1972 UAE records (Jan & Oct) Bundy & Warr 1979, one 3 Apr 2014 Ra's al Khor, UAE EBRC; probably former winterer (before 1986) western Saudi Arabia Symens <i>et al</i> 1994; 4-record vagrant 1984-2004 Oman OBL7, 5th record Jan 2016 juv Raysut Jens Eriksen <i>in litt</i> SG38(2): 232. Scarce winterer Iran Scott & Adhami 2006 (Schüz 1959 refers only to 1866 & 1903 records S Caspian), now considered vagrant Iran Khaleghizadeh <i>et al</i> 2017, but one at Golil and Sarani Protected Area N Khorosan Aug 2018 SGATR41(2) 251. RNBWS report Apr 79 Jebel Dhanna 24:10:0.0N+52:35:0.0E</p>
509	White-tailed Eagle (Formerly White-tailed Fish or Sea Eagle)	<i>Haliaeetus albicilla</i>	<p>Bred Turkey – E Iran H&E 1970. Rare, quite widespread rare or scarce breeder Kazakhstan Wassink 2015b, likely also Tajikistan, Kyrgyzstan, F-L&C (2005); former Kyrgyzstan breeder, but common winterer Ven 2002, uncommon resident common WV S Caspian Iran, less so elsewhere Khaleghizadeh <i>et al</i> 2017; Severe decline in breeding population in Iran Ashoori <i>et al</i> 2019a. Re-introduced Israel Perlman & Meyrav 2009, 1st wild pair for 70 years bred 2015 DB37(4), 3rd record Kuwait Nov 2015 (all juveniles), 4th Jahra Feb 2017, 5th there Dec 2017, 7th Nov 2019 KORC, 9th Nov 2021 KORC; in winter Afghanistan R&A 2005, on passage Kabul Region Argandeval 1983, also wintering Indian subcontinent Naoroji 2006. Rare breeder, common winterer Iran Scott & Adhami 2006. Egypt Avib. BE</p>
510	White-eyed Buzzard (White-eyed Buzzard-Hawk)	<i>Butastur teesa</i>	<p>Rare Iran (1st record 1872 Roselaar & Aliabadian 2010), rare breeder Iran Scott & Adhami 2006 (bred S Baluchestan Zarudny 1911), mapped H&E 1970 in southern third of Iranian Baluchestan, where may still breed, if irregularly Mitchell 2017: BLDZ map Sep 2018 breeding that location accordingly, & status from Bandar Abbas eastward in coastal lowlands confirmed Khaleghizadeh <i>et al</i> 2017; perhaps summer visitor NE Afghanistan F-L&C 2005, 2-record vagrant Madge 1980, rare on passage Abe-Istada Afghanistan Argandeval 1983, vagrant Smith 1974. Single-record vagrant Oman Mar 04 OBL7. Most in Indian subcontinent resident Naoroji 2006; R&A 2012 map summer breeders at Pakistan/AFG border.</p>

511	Rough-legged Buzzard	<i>Buteo lagopus</i>	Circumpolar distribution. In OSME Region sssp <i>lagopus</i> (PM & WV mostly in W of Region) & <i>menzbieri</i> (PM & WV in E of Region); WV & PM to Kazakhstan; listed by Argandeval 1983 as common Bāmīān & Band-e Amir Mts Afghanistan, but probably best considered as possibles; <i>B. rufinus</i> more likely). Occurs sporadically further S in CA F-L&C (2005) Ayé <i>et al</i> 2012, also Caucasus Schüz 1959; winters N Kyrgyzstan, Ven 2002, rare WV Turkey Kirwan <i>et al</i> 2014, vagrant Israel Perlman & Meyrav 2009, 4th accepted record Kedma Feb 2016 IRDC , uncommon WV S Caspian Iran Roselaar & Aliabadian 2010 Khaleghizadeh <i>et al</i> 2017.
512	Socotra Buzzard	<i>Buteo socotraensis</i> Vulnerable	Monotypic. Socotra main island endemic resident. Relationships to other <i>Buteo</i> taxa uncertain. Description: Porter & Kirwan 2010, accepted IOC2.7, summarised Porter & Aspinall 2010. Perhaps only 200bp Jennings 2010, certainly fewer than 250 pairs Porter & Suleiman 2014. NB 3 spelling variants of taxon name in literature, <i>socotranus</i> , <i>sokotrae</i> & <i>socotrae</i> . Richard Klim pers comm.
PT	Buzzard Superspecies PT	<i>Buteo [buteo/rufinus/hemilasius/oreophilus]</i>	Haring <i>et al</i> 1999 first proposed from a detailed genetic study that Common Buzzard <i>Buteo buteo</i> , Long-legged Buzzard <i>B. rufinus</i> , Upland Buzzard <i>B. hemilasius</i> (then classed as <i>B.r. hemilasius</i>) & Mountain Buzzard <i>B. oreophilus</i> formed a superspecies; <i>B. oreophilus</i> is extralimital to the OSME Region, in eastern & southern African 'sky islands'. However, the relationships between members of this group and other Palearctic <i>Buteo</i> taxa remained undefined. Riesing <i>et al</i> 2003 examined relationships between <i>Buteo</i> taxa within the Nearctic and Palearctic, finding <i>inter alia</i> that <i>japonicus</i> , <i>hemilasius</i> & <i>refectus</i> were close to all taxa within the then-defined <i>B. buteo</i> . Jowers <i>et al</i> 2019 (accepted paper) focused on the taxa within the Buzzard superspecies via a battery of DNA techniques. Amongst their conclusions is that taxon <i>cirtensis</i> is best considered an allospecies of Common Buzzard (<i>buteo</i> , <i>vulpinus</i>), although it has two lines of ancestry, the other being Long-legged Buzzard (<i>rufinus</i>); the Buzzard superspecies concept as here considered is valid, as is the separate identity of <i>B. hemilasius</i> .
PT	Buzzard/Common Buzzard PT	<i>Buteo [buteo] buteo</i>	Superspecies as per Jowers <i>et al</i> 2019. Although taxon <i>buteo</i> is molecularly close to <i>vulpinus</i> , the range of techniques applied has been limited, but <i>menetriesi</i> clusters with <i>vulpinus</i> Kruckenhauser <i>et al</i> 2004; since that paper, little work has been done on the <i>vulpinus/menetriesi</i> relationship & so we list each taxon separately <i>pro tem</i> . Note that since <i>menetriesi</i> in Turkey breeds almost as far west as <i>vulpinus</i> does further north, the informal names of 'Northern' and 'Southern' are more appropriate than earlier versions.
513	Common Buzzard (Buzzard)	<i>Buteo [buteo] buteo</i>	Polytypic. W Turkey H&M4. Odd occurrences likely in Caucasus, decreasingly so further E, breeds Iran Scott & Adhami 2006, common winter Israel Perlman & Meyrav 2009, 1st confirmed record Jordan Nov 2015 Khoury & Massis 2017, although likely regular in small numbers; 10th record South Shuna, Jordan Valley Mar 2020 SG42(2) : 325. Egypt Avib, BE. NB occasional hybrid Common Buzzard × Black Kite <i>Milvus migrans</i> (Corso & Gildi 1998, Kruckenhauser <i>et al</i> 2004) present ID complications.
514	'Northern Steppe Buzzard' (Steppe Buzzard) {Common Buzzard}	<i>Buteo buteo vulpinus</i>	Migratory. Breeds N Kazakhstan (scarce BM Wassink 2015b), & in scattered CA locations; perhaps this form widespread resident Kyrgyzstan (Listed only as <i>B. buteo</i> , Ven 2002), common PM through CA, Afghanistan (common Kabul Region Argandeval 1983), Iran, F-L&C (2005), Afghan Wakhan 2006 Ayé 2007; <u>however, Ayé <i>et al</i> 2012 map as wintering N AFG & passage migrant to Indian subcontinent, whereas R&A2005 map it absent from Afghanistan except for a single vagrant: 300170+ autumn 2019 Batumi Georgia DB41(6): 428; fairly common PM throughout Iran Khaleghizadeh <i>et al</i> 2017; Iraq Ararat <i>et al</i> 2011 (likely cline <i>vulpinus/menetriesi</i>); common spring passage Israel Perlman & Meyrav 2009. Uncommon PM & WV Oman OBL7, 10 records by May 2021 QBRC. Bird ringed Bredasdorp, Cape Province, SA, Nov 1968, shot in Rawa, Iraq 6 months later in 1969, having travelled at least 6700km Bull Iraq NHM V(1): (1971), 1st recovery Iraq from Africa. English name informal @OSME.</u>
515	'Southern Steppe Buzzard' ('Eastern Steppe Buzzard', 'Caucasian Buzzard')	<i>Buteo buteo menetriesi</i>	Sedentary. Turkey Kirwan <i>et al</i> 2008; <i>B.b. menetriesi</i> Turkmenistan, Bukreev 1997. Turkey, Caucasus to Iran, common resident S Caspian Iran Khaleghizadeh <i>et al</i> 2017. Iraq Ararat <i>et al</i> 2011 (likely cline <i>vulpinus/menetriesi</i>). English name informal@OSME. NB DB 2009 call ssp <i>menetriesi</i> Caucasian Buzzard, which Schüz 1959 reported as common breeder in foothills of S Caspian.
516	'North African Buzzard' ('Atlas Long-legged Buzzard')	<i>Buteo [buteo] cirtensis</i>	Jowers <i>et al</i> 2019 confirm two lines of ancestry in taxon <i>cirtensis</i> : <i>buteo+vulpinus</i> & <i>rufinus</i> ; balance of genetic information obtained clearly supports taxon <i>cirtensis</i> placement as allospecies of <i>B. buteo</i> & not of <i>B. rufinus</i> . Taxon <i>cirtensis</i> (N Africa & recently S Spain taxon) casual breeder in Region, scarce passage, winter Egypt (István Moldován <i>in litt</i>); one <i>cirtensis</i> ringed Eilat Yosef <i>et al</i> 2002, one Qatar Nov 2016 QBRC , uncommon breeding resident Oman OBL7.3 , rare breeding resident UAE EBRC . ID guide to cirtensis in Rodriguez <i>et al</i> 2013 . English name informal@OSME, based on Jowers <i>et al</i> assignment as allospecies of <i>B. buteo</i> . Garrido <i>et al</i> 2021 recognise this dichotomy & are supportive of the English name because of its geographical distribution. <i>Dutch Birding</i> 2011 WP list assigned name Atlas Long-legged Buzzard.
PT	Long-legged Buzzard PT	<i>Buteo rufinus</i>	Formerly considered within Parent Taxon to form supersepecies with Upland Buzzard <i>B.(r.) hemilasius</i> , but now placed closer to <i>B.(b.) japonicus</i> , although <i>rufinus/hemilasius</i> hybridisation does occur; likely also with <i>japonicus</i> in places?
517	Long-legged Buzzard	<i>Buteo [buteo] rufinus</i>	Monotypic, after Jowers <i>et al</i> 2019. Caucasus, CA (Common BM, PM, rare resident & WV Kazakhstan Wassink 2015b), Iran (few S Caspian Schüz 1959 but common in mountains Khaleghizadeh <i>et al</i> 2017), Iraq Salim <i>et al</i> 2012, winters Afghanistan (Kabul Region & Nurestan Argandeval 1983, Bamiyan Busuttil & Ayé 2009), resident breeding numbers thought declining C Arabia Jennings 2004 (800+ bp Jennings 2004a, c900 Jennings 2010); former breeding sites possibly abandoned in favour of sites nearer irrigated agriculture Jennings 2010, but presence of migrants & winterers confuses picture; fairly common resident breeder Oman OBL7 . N populations migratory, widespread resident Kyrgyzstan, Ven 2002. Scarce migrant western Egypt Goodman <i>et al</i> 1986. NB1 Two morphs; pale (from very pale through rufous to dark rufous) and dark (blackish) Ayé <i>et al</i> 2012. NB2 Formerly considered as forming supersepecies only with Upland Buzzard <i>B.(b.) hemilasius</i> , & then placed closer to <i>B. japonicus</i> , which now full species (Haring <i>et al</i> 1999, Jowers <i>et al</i> 2019), although <i>rufinus/hemilasius</i> hybridisation does occur; possibly also with <i>japonicus</i> in places? Hybrid <i>hemilasius/rufinus</i> individuals recorded Charyn canyon Kazakhstan 2012. NB3 Fossils of this species from 40-50KYa have been found in England Jowers <i>et al</i> 2019.
518	Upland Buzzard	<i>Buteo [buteo] hemilasius</i>	Monotypic. Species status strongly supported Kruckenhauser <i>et al</i> 2004, IOC3.5, H&M4: IOC8.1 sequence before <i>B. japonicus</i> & following <i>B. lagopus</i> , suggestive of more distant ancestry from <i>B. rufinus</i> than indicated previously. CA, vagrant Uzbekistan (K-M&K 2005), rare resident, BM & PM E Kazakhstan along Chinese border (spreading S&W) Wassink 2015b, common RB throughout Mongolia Gombobaatar & Leahy 2019; wintering Tajikistan, Kyrgyzstan F-L&C 2005 also in S Kazakhstan W&O 2007, Ayé <i>et al</i> 2012; migrant & winterer Kyrgyzstan Ven 2002. Perhaps this taxon is 'Common Buzzard' of Madge 1980 as PM in Afghanistan. One collected Iran 1900 by Zarudny, Roselaar & Aliabadian 2010; 2nd record at Lar, Fars Province Jan 2019 DB41(2) : 131. Some hybridisation with <i>B. rufinus</i> in band across Kazakhstan W&O 2007. NB1 Hybrid <i>hemilasius/rufinus</i> individuals recorded Charyn canyon Kazakhstan 2012. NB2 proven to breed E Ladakh Himalayas 1998 Naoroji & Forsman 2001, thus mapped R&A 2012. NB3 Likely many IDs confused by changing taxonomy & wrongly-named populations in older references.
519	Himalayan Buzzard (Eastern Buzzard, Common Buzzard) ('Western Himalayan Buzzard' if informal names applied to sssp)	<i>Buteo refectus</i> (formerly <i>Buteo [buteo] refectus</i>)	Polytypic only if eastern Himalayan populations recognised as <i>B.(r.) hodgsoni</i> , 'Eastern Himalayan Buzzard': the geographical boundary between the nominate and <i>hodgsoni</i> is uncertain. Nominate mostly resident but altitudinal migrant, although individuals likely wander to Afghanistan: one imaged Altit, Hunza, Gilgit-Baltistan, Pakistan, only 75km from Afghan border pass near Baba Ghundi Ziarat, Imran Shah in litt . BLDZ map Feb 2021 gives breeding distribution (as <i>B. refectus</i>) from N Pakistan E along Himalayas, almost exactly that mapped by BLDZ of B. japonicus (burmanicus) wintering distribution , to the Tarbela Dam just N of Haripur, Pakistan. Our previous alignment with Lindholm & Forsten 2013 by <i>pro tem</i> assigning <i>refectus</i> as the resident sp now aligns with IOC 11.2. The taxon throughout Himalayan chain that R&A 2012 map fairly close to Afghan border at N Nuristan (winter) & Wakhan (breeding) as <u><i>burmanicus</i> is thus <i>refectus</i></u> . NB See PT Notes below.

	PT Eastern Buzzard PT {Common Buzzard} (Japanese Buzzard)	<i>Buteo japonicus</i> (If treated as part of a superspecies: <i>Buteo [buteo] japonicus</i>)	<p>Jowers <i>et al</i> 2019 propose full species. PT previous history: IOC2.0, H&M4 accepted split of <i>B. japonicus</i> and also of Himalayan Buzzard <i>B.(b.) refectus</i> from <i>B. buteo</i> Lerner <i>et al</i> 2008; IOC2.7 revised as <i>B. burmanicus</i> (Hume 1875); this name argued as synonym of <i>refectus</i> (Portenko 1935) or claimed as priority (Penhallurick & Dickinson 2008) over <i>refectus</i>: the priority case therein was compiled & inserted by the lead author alone; this discord is superseded by Dickinson & Svensson 2012, also in which the name <i>B. hodgsoni</i> is erected for (extralimital) eastern Himalayan populations. However, exactly which populations comprise <i>burmanicus</i>, <i>japonicus</i> or even <i>hemilasius</i> was far from clear. PT as considered for IOC11.2: 1. <i>B. refectus</i> is NOT a synonym for <i>burmanicus</i>. 2. The type of <i>burmanicus</i> (collected in Burma) is attributable to the form of <i>B. japonicus</i> that breeds in ne Asia and regularly migrates to s and se Asia, & is considered a subspecies of <i>B. japonicus</i> (Temminck & Schlegel 1845) as per Lindholm & Forsten 2013: other authorities subsume <i>burmanicus</i> in <i>japonicus</i>: H&M4 Online now revise distribution to include <i>burmanicus</i> breeding distribution under <i>B. japonicus</i>. 3. Early ornithologists noted two Himalayan forms of the taxon now treated as Himalayan Buzzard <i>B. refectus</i>: the eastern form seemingly comprises the populations of the <i>B.(b.) hodgsoni</i> of Dickinson & Svensson 2012; at least until such time that in-depth DNA techniques can establish its status, <i>pro tem</i> we treat as a putative extralimital ssp of Himalayan Buzzard, <i>B. refectus hodgsoni</i> (post-David Donsker pers comm discussions Feb 2021) See ORL Hypothetical List). IOC11.2 revises to monotypic <i>B. refectus</i> for Himalayan Buzzard Dickinson & Remsen 2013: qv entry below.</p> <p>NB1 BLDZ Sep 2018 maps Himalayan Buzzard (as <i>B. refectus</i>) along Himalayan southern flank from Islamabad Pakistan E to Arunachal Pradesh in NE India, but also maps Japanese Buzzard (as <i>B. japonicus</i>) as wintering exactly in the same area (and points E & S). NB2 Kruckenhauser <i>et al</i> 2004 note that <i>B. buteo</i> can be regarded as a superspecies with <i>rufinus</i> taxa. NB3 James 1988 noted statistically valid differences of plumage and measurements of many Asian buzzard populations; Lindholm & Forsten 2013 suggested a practical <i>pro tem</i> arrangement which would confine <i>B. japonicus</i> to Japan & islands Korea & Manchuria, with <i>burmanicus</i> being a BM in N China & Siberia & <i>refectus</i> being the taxon in Himalayas & C China mountains, which aligns well with IOC11.2. NB4 Dickinson & Walters 2006 originally had recommended priority for <i>B. plumipes</i>, now superseded by <i>hodgsoni</i>.</p>
520	Japanese Buzzard (Under earlier taxonomies: Eastern Buzzard, Common Buzzard, Himalayan Buzzard)	<i>Buteo japonicus burmanicus</i>	<p>Polytypic: In OSME Region, ssp <i>burmanicus</i>. The largely resident Japanese populations mostly comprise the nominate & 2 island residents <i>toyoshimae</i> of Izu & Bonin & <i>oshiroi</i> of Daitu; the long-distance migratory <i>burmanicus</i> winters in SE & S Asia. Occurs Kazakhstan G&G 2005, W&O 2007 (see Kruckenhauser <i>et al</i> 2004) R&A 2005, IOC1.7 elevated <i>japonicus</i> to full species (Kruckenhauser <i>et al</i> 2004); possibly rare E Kazakhstan mountain resident (G&G 2005), more likely rare PM & scarce WV Wassink 2015b; PM throughout Mongolia Gombobaatar & Leahy 2019, breeding only in N & NE Mongolia. One specimen from Afghanistan James 1988. Status in CA vagrant Ayé <i>et al</i> 2012; 1st for Turkmenistan 2005 Rafael Ayé pers comm, 1st record Tajikistan Ayé 2016. Brazil 2009 treats as <i>B. japonicus</i>. BLDZ map Feb 2021 gives wintering distribution from Rustam, N Pakistan (only 105km from Afghanistan) E along Himalayas.</p>
		Tytonidae	
	PT Barn Owl PT	<i>Tyto alba (sensu lato)</i> PT addresses <i>Tyto alba/javanica/furcata</i> complex	<p>IOC2.0, H&M4 originally split Barn Owl into Western <i>Tyto (alba) alba</i>, extralimital Eastern <i>T.(a.) deliculata</i> Barn Owl of Lesser Sundas, Australasia and sundry islands between & also E to Pacific islands (the initial split had referred to <i>javanica</i> of Malay Peninsula, Greater & (part) Lesser Sundas, but <i>javanica</i> & also <i>stertens</i> of Indian Subcontinent were then grouped in <i>T. alba</i>) and extralimital Andaman (Barn) Masked Owl <i>T.(a.) deroepstorffi</i>, Wink <i>et al</i> 2004b, Christidis & Boles 2008. Consequently, IOC2.5-6.2 listed <i>javanica</i> & <i>stertens</i> under <i>T. alba</i>. However, Aliabadian <i>et al</i> 2016 from their results devised Clades for the barn owl complex & showed that <i>javanica</i> & <i>stertens</i> belong to the <i>deliculata</i> Clade and not the <i>alba</i> Clade: consequently, the name <i>javanica</i> had priority over <i>deliculata</i> for that geographically much-enlarged Clade; Uva <i>et al</i> 2018 strongly support Aliabadian <i>et al</i> 2016. Eaton <i>et al</i> 2016 note that good vocal and plumage differences yet to be documented. Note <i>stertens</i>, from the maps in BLDZ & Xeno-canto, occurs just into Afghanistan past the Torkham border post, as part of the <i>sensu lato javanica</i> Clade; No other Barn Owl taxon occurs in Afghanistan except by vagrancy. Split supported by Collar 2017.</p> <p>NB1 Cumer <i>et al</i> 2021 deduce from a study of landscape & climatic variations of the Quaternary that all phenotypic variations in mainland Europe are <i>T.a. alba</i>; they make no reference to island sssp. NB2 Aliabadian <i>et al</i> 2016 place all taxa comprising American Barn Owl <i>T. furcata</i> in a separate Clade. Presumably their detailed analyses of <i>alba</i>, <i>javanica</i> & <i>furcata</i> were sufficient to persuade IOC10.1 to sequence it between Western and Eastern Barn Owls, suggesting that the latter two are not each other's closest relatives. We therefore provisionally treat as three individual species.</p>
Clade Western Barn Owl sensu Aliabadian et al 2016			
521	Western Barn Owl	<i>Tyto alba (sensu stricto)</i>	<p>Predominant barn owl taxon (pre Aliabadian <i>et al</i> 2016) in Region <i>erlangeri</i> H&M4: Cumer <i>et al</i> 2021 synonymise with the nominate. Scattered throughout Turkey Kirwan <i>et al</i> 2008 & the Middle East, Porter <i>et al</i> 1996 (950+ pairs Arabia Jennings 2007a), S Yemen Warr 1992. Ill-omen superstitious persecution Arabia, likely under-recorded; pessimistic 2000bp around Arabia coastal rim Jennings 2010; uncommon, widespread resident breeder Oman OBL7: S Iraq, S Iran, König <i>et al</i> 1999, N Iran Ashoori <i>et al</i> 2011, as far as E Iran Aliabadian <i>et al</i> 2016: thinly widespread Iran but increasing range Khaleghizadeh <i>et al</i> 2017. In Egypt, <i>erlangeri</i> occurs in Sinai and <i>alba</i> along Egypt's western N coast & up Nile Valley Goodman <i>et al</i> 1989, IOC11.2. NB1 Aliabadian <i>et al</i> 2016 via several genetic analyses, reduce <i>T.[a.] alba</i> distribution by attributing sssp <i>stertens</i> & <i>javanica</i> to Eastern Barn Owl, formerly <i>T. deliculata</i>, now through naming priority, <i>T.[a.] javanica</i>. NB2 A bird found dead in Afghanistan 4 Apr 2006, had been ringed in Oxfordshire in Jun 2005 DB39(2): 124.</p>
Clade Eastern Barn Owl sensu Aliabadian et al 2016			
522	Eastern Barn Owl	<i>Tyto javanica</i>	<p>Only ssp likely in Region <i>stertens</i> H&M4, but antedating Aliabadian <i>et al</i> 2016, was allocated to <i>T. alba</i>. BLDZ map Sep 2021 for 'Barn Owl' & Xeno-canto map for (implied) <i>stertens</i> area Aug 2016 indicate presence in Afghanistan NW of Torkham border post on Peshawar-Jalabad road (ample habitat just ESE of Jalalabad): only likely taxon is <i>stertens</i>, the presence of Eastern Barn Owl sensu stricto in the OSME Region being assumed here. NB Aliabadian <i>et al</i> 2016 via several genetic analyses attribute sssp <i>stertens</i> & <i>javanica</i> to Eastern Barn Owl, formerly <i>T. deliculata</i>, now through naming priority, <i>T.[a.] javanica</i>, as do Uva <i>et al</i> 2018.</p>
		Strigidae	H&M4 heavily resequenced ORL Strigidae genera, species and within species; we remained with IOC, whose v11.1 extensively revises the sequence, following Salter <i>et al</i> 2020.
523	Collared Owlet	<i>Taenioptynx brodiei</i> (IOC11.1, Gwee <i>et al</i> 2019, Salter <i>et al</i> 2020. Formerly <i>Glaucidium brodiei</i>)	<p>Afghanistan Vielliard 1969, not obviously supported in König <i>et al</i> (1999), map stops conveniently just short of Afghanistan Wakhan corridor to China, as does that in HBW5; mapped W Chitral Pakistan Grimmett <i>et al</i> 2009. Ayé <i>et al</i> 2012 similarly cautious. However, ssp <i>brodiei</i> resident NE Afghanistan in R&A 2005, 2012, mapped Grimmett <i>et al</i> 1998, BLDZ maps broad E-W swathe from Pakistan into Afghanistan just NE of Kabul Jul 2019; H&M4 list. K&W 2008 distribution wrong in this area. Extralimital former ssp taxon <i>sylvaticum</i> elevated to sp Sunda Owlet with as ssp <i>borneense</i>, Eaton <i>et al</i> 2016 & reinforced by Gwee <i>et al</i> 2019, who together with Salter <i>et al</i> 2020, make the case for Collared & Sunda Owlets to be placed in the resurrected genus <i>Taenioptynx</i>. NB Easily attracted by playback.</p>
PT	Boreal Owl PT	<i>Aegolius funereus</i>	<p>From Nijman & Aliabadian 2013 molecular analysis, Robb & the Sound Approach 2015 (voice), split Palearctic taxa (<i>funereus</i>), Tengmalm's Owl from Nearctic taxa (<i>richardsoni</i>), Boreal Owl. Homel <i>et al</i> 2020 conducted a wide-ranging study of Eurasian populations, confirming a significant genetic difference only from Nearctic populations, thus supporting Nijman & Aliabadian 2013 and Robb & the Sound Approach 2015 (citing neither), while addressing all populations as Boreal Owl! They found no significant genetic differentiation within its Eurasian continental range, which comprised a singular expansive population</p>

524	Tengmalm's Owl {Boreal Owl}	<i>Aegolius funereus</i>	ssp <i>funereus</i> N Turkey (isolates elsewhere) Kirwan <i>et al</i> 2008; 1st reported breeding attempt Turkey 2010 DB32 , 1st confirmed Bolu Apr 2020 DB42(3) : 215, one in Giresun, NE Turkey Oct 2021 SG44(1) : 251. Caucasus, N & SE Kazakhstan, König <i>et al</i> 1999, ssp <i>pallens</i> rare resident occasional WV Kazakhstan Wassink 2015b, wanders to E Kazakhstan W&O 2008. Possibly winters Kyrgyzstan, Tajikistan; N Afghanistan (map HBW5), presumed so NE Afghanistan R&A 2005, but breeding proven Bamiyan Plateau, Afghanistan 2018 Mostafawi <i>et al</i> 2019, 2nd record there of recently fledged juvenile Jun 2020 SG43(1) : 164: 1st for Iran Parvar Protected Area, Semnan Apr 2021 IBRC . Widespread resident Kyrgyzstan Ven 2002 confirming Flint <i>et al</i> 1984. Winter migrants sometimes wander far (up to 1350km) S of breeding distribution K&W 2008. NB Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.
525	Spotted Owlet (Spotted Little Owl)	<i>Athene brama</i>	ssp <i>indica</i> SE Iran (Baluchestan Mikkola 2012), Afghanistan König <i>et al</i> (1999). R&A 2005, 2012 say Afghan verification (specimen) needed, Ayé <i>et al</i> 2012 agree, mapped Grimmer <i>et al</i> 1998, 2009. K&W 2008 less informative; no mention of Afghanistan, but they map distribution exactly to Pakistan/Afghanistan border in two places. This caution is mirrored in BLDZ map, where the 2 affected populations are quite discrete: the Iranian distribution runs parallel to (but c20km from) the western Pakistan border for 130km (mostly in the Bahookalat Protected Area), whereas that in Pakistan occurs on the coast from 325km eastwards and then northeastwards to the Sadda-Peshawar area, neatly matching much of the Afghan border. Despite this wide geographical separation, the 2 populations belong to the same ssp, <i>indica</i> .
This highly complex group has considerable individual plumage variation within & across populations; morphological data are of limited value Pellegrino <i>et al</i> 2020. Taxa breeding distributions are poorly known, as are extent of sympatry, allopatry & hybridisation. There are also indications of song variation that need to be validated in the field. Our tentative listing will not be final, but it keeps the uncertainties in view.			
PT	Little Owl PT NB Suspicion that many records will continue under PT ; field experience suggests many populations cryptically similar in appearance and plumage variations within populations not well documented.	<i>Athene noctua</i>	K&W 2008 make <i>A.(n.) lilith</i> a species (<i>qv</i>) as in Wink <i>et al</i> 2008. Wink in van Nieuwenhuysse <i>et al</i> 2009 differs little in detail; genetic analyses of <i>A. noctua</i> & <i>A. cunicularia</i> (Nearctic Burrowing Owl) taxa incomplete (Wink <i>et al</i> 2009, Michael Wink pers comm June 2009). Because of detected phylogeographic variation in both complexes, more detailed study across whole distribution range will reveal more complex pattern of several distinct species & subspecies; of particular interest (to OSME) are <i>glauca</i> , <i>lilith</i> & <i>indigena</i> ; <i>glauca</i> & <i>lilith</i> appear genetically close Wink <i>et al</i> 2009), thus we list the taxa occurring in the Region separately <i>pro tem</i> . Wink 2011 lists <i>noctua</i> , <i>lilith</i> & <i>plumipes</i> . Four 'forms' recorded Israel Yoav Perlman <i>in litt</i> Nov 09. K&W 2008, Wink <i>et al</i> 2009 suggest <i>A.(n.) plumipes</i> (<i>qv</i>) too may be separable; occurs from Altai eastwards. Extralimital Ethiopian Little Owl <i>A.(n.) spilogastra</i> may also be species (<i>qv</i> Hypothetical List). H&M4 note that limited taxon-sampling delays subspecies-group recognition. NB1 In a study of 282 Little Owl skins from across the Extended Western Palearctic, <u>Pellegrino <i>et al</i> 2020 found an absence of clear-cut differences between sspp and a huge variation of morphological and colour patterns between individuals collected within any geographical area; no ssp could safely be identified on morphological data. Furthermore, the geographic distributions allotted to most subspecies are now suspect, as are sspp IDs.</u> NB2 Other DNA research under way on <i>Athene</i> owls; more song data is being collected, possibly why IOC3.3 does not split <i>noctua</i> . NB3 On Cyprus, plumages of birds near sea level noticeably darker than of those in the low hills away from the coast (MB pers obs).
PT	Proposed alternative PT Little Owl	<i>Athene (noctua) noctua</i>	Robb <i>et al</i> 2015 name the western European taxon <i>Athene (noctua) vidalii</i> as 'Little Owl' <i>sensu stricto</i> (extralimital to OSME Region) and 'A.(n.) vidalii' 'Cucumaiu', & lump <i>glauca</i> & <i>lilith</i> . Re the latter point, we'll await establishment of taxa breeding boundaries.
526	Little Owl ('Cucumaiu': Robb <i>et al</i> 2015)	<i>Athene (noctua) noctua</i>	<i>A.n. bactriana</i> & <i>orientalis</i> Turkmenistan, Bukreev 1997, <i>bactriana</i> common resident S half Kazakhstan <i>orientalis</i> rare resident E Kazakhstan Wassink 2015b, <i>bactriana</i> Afghanistan Paludan 1959, CA, Caucasus, Afghanistan König <i>et al</i> (1999), E Iran R&A 2005, Iran K&W 2008, Iraq Salim <i>et al</i> 2012. Fairly common widespread resident breeder Oman OBL7 , but Jennings 2010 uncertain as to ssp ID. In Arabia, <i>lilith</i> (<i>qv</i>) may be the taxon in N-C Arabia, <i>saharae</i> seemingly in E: however, various morphs may exist, requiring investigation as to sspp ID Jennings 2010. Informal English name 'Saharan Little Owl' used by some - also extralimital across Sahara. Andreyenkov <i>et al</i> 2019 attribute the Russian Altai Krai population & the Novosibirsk populations to <i>A. (n.) noctua</i> eastward expansion; in both these areas, the species is thinly widespread and so <i>orientalis</i> has not been ruled out. NB1 sister taxon <i>vidalii</i> does not occur in the Region. NB2 <i>Dutch Birding</i> proposed 'Italian Little Owl' for taxon <i>noctua</i> (seemingly superseded by 'Cucumaiu' in Robb <i>et al</i> 2015), 'Byzantine Little Owl' for <i>indigena</i> & subsume <i>lilith</i> in <i>glauca</i> as <i>Lilith's Owl</i> ; because sspp distribution limits far from agreed: 1st, English name choices debated; 2nd, English name admirable should species rank be attained; 3rd, lumping awaits confirmation of status of <i>lilith</i> & <i>glauca</i> .
527	'Byzantine Little Owl' (Little Owl)	<i>Athene (noctua) indigena</i>	(Monotypic). See PT Notes above. English name informal @OSME - the extent of the early Byzantine empire encompasses much of the taxon's distribution (from Michael Wink pers comm) of the Balkans, Greece, Crete, W Turkey & Cyprus (Pellegrino <i>et al</i> 2015 map two different genotype clusters in Cyprus populations linked to clusters centred on Sardinia and Italy). This taxon cited as present in NW CA (presumably Kazakh hinterland of N Caspian) Ayé <i>et al</i> 2012, very rare resident, WV NW Kazakhstan Wassink 2015b; also thought to be the form in NW Iran Khaleghizadeh <i>et al</i> 2017. May occupy lush and lower-altitude habitats than <i>lilith</i> . NB specimen obtained by Radde in 'SW Caspian', but there <i>A.n. bactriana</i> (also then collected) now sole expected taxon
528	Lilith Owllet (Little Owl, Lilith Owl)	<i>Athene (noctua) lilith</i>	See PT Notes above. K&W 2008 map SE Turkey (much of E Turkey, Michael Wink pers comm), Cyprus (Pellegrino <i>et al</i> 2015 map two different genotype clusters in Cyprus populations linked to clusters centred on Sardinia and Italy), E Sinai, E to Iraq (probably this taxon in Moore & Boswell 1956, and so also pair photographed in SE Iraq desert 2010 Salim <i>et al</i> 2012) & SW Iran on Gulf, & S to C Saudi Arabia: <i>saharae</i> said to be in E Arabia, uncertain which taxa in Yemen & W Oman Jennings 2010, reinforced in OBL7 ; Mikkola 2012 assigns <i>lilith</i> to all Arabia. 5700bp (all taxa) Arabia Jennings 2007a, 5000-6000bp Jennings 2010. Scarce resident breeder Gaza al-Safadi 2006, <i>lilith</i> -type SE Turkey Kirwan <i>et al</i> 2008, <i>lilith</i> -type breeding Qatar Jan 2014 SG36(2) ATR , taxon undeclared UAE Aspinall 1996. K&W separation on DNA, song, sympatry with <i>A. noctua</i> ssp. May occupy drier and hillier habitats than <i>indigena</i> . NB IOC11.1 limits <i>lilith</i> eastern range in Iraq & attributes <i>bactriana</i> to Iraq, Azerbaijan to Pakistan & India, but <i>cave</i> Pellegrino <i>et al</i> 2020.
529	'Northern Little Owl' (Little Owl)	<i>Athene (noctua) plumipes</i>	Monotypic. See PT Notes above. rare resident NE-most Kazakhstan Wassink 2015b, Ayé <i>et al</i> 2012, Mikkola 2012. K&W 2008 suggest elevation possible & note extralimital distribution stretches from Altai to S of Lake Baikal, Mongolia, China to Korea. NB English name informal@OSME, but used elsewhere subsequently eg <i>Birding Asia</i> 14 Dec 2010.
530	'North African Little Owl' (Little Owl, 'Lilith Owl')	<i>Athene (noctua) glauca</i>	English name here informal @OSME, but based on distribution information from Michael Wink pers comm. NB DB 2009 citing van Nieuwenhuysse <i>et al</i> 2009 list Lilith Owl as <i>A. glauca</i> , sspp <i>glauca</i> & <i>indigena</i> (latter sometimes called Caspian Little Owl), treating <i>lilith</i> under <i>glauca</i> (priority), but see PT Notes above. Individual variation in Western Desert Egypt masks differences between <i>glauca</i> and taxon <i>saharae</i> Goodman <i>et al</i> 1986, possibly why some authors subsume <i>saharae</i> into <i>glauca</i> . However, HBW (Alive) & IOC7.2 treat <i>saharae</i> separately, hence we add it as the next entry. Taxon <i>glauca</i> occurs coastal Israel, probably C to S Sinai from opinion attributed to Vaurie. May be unsafe to separate from <i>lilith</i> .
531	'Kleinschmidt's Little Owl' ('Desert Little Owl', Saharan Little Owl')	<i>Athene (noctua) saharae</i>	HBW (Alive) gives taxon distribution as N & C Sahara (S to Mauritania, Mali, Niger, Chad & Sudan) E, discontinuously, into Arabian Peninsula; IOC7.2 as Morocco to W Egypt, C Arabia, aligning well with earlier assumption of <i>A.n. saharae</i> being present in Egypt (not Nile Valley) & C Arabia; Birds resembling this taxon deemed common in Al Namas, Asir Province, Saudi Arabia SG41(1)ATR : 147; several there & at Billasmer Jul 2020 SG43(1) : 182. English name informal@OSME & relating to type specimen description.

532	Northern Hawk-Owl	<i>Surnia ulula</i>	Easternmost Kazakhstan (<i>ulula</i> very rare resident Altai Tarbagatai, <i>tianschanica</i> very rare N&C Tien Shan & Zhungarskiy Alatau Wassink 2015b, Kyrgyzstan König <i>et al</i> (1999), perhaps Tajikistan HBW5 (not recorded pre-1940 Ivanov 1940). Isolated population N Kyrgyzstan, Ven 2002 (Tajikistan?). Irruptive southwards when food in short supply K&W 2008.
533	Eurasian Pygmy Owl	<i>Glaucidium passerinum</i>	ssp <i>passerinum</i> N Kazakhstan (K-M&K 2005), König <i>et al</i> (1999), HBW5, e-most Kazakhstan only, rare W&O 2007, Ayé <i>et al</i> 2012. Also SE Kazakhstan G&G 2005.
PT	Eurasian Scops Owl PT	<i>Otus scops (sensu lato)</i>	Cyprus Scops Owl <i>O.[s.] cyprius</i> split from <i>O. scops</i> Robb <i>et al</i> 2015 (song), Flint <i>et al</i> 2015 (evaluation of plumage, biometrics & voice: phylogenetics from several series of museum specimens; residential status, breeding season and detailed application of BSC criteria also analysed). IOC6.3.
534	Eurasian Scops Owl (European or Common Scops Owl)	<i>Otus scops (sensu stricto)</i>	Turkey, Syria Murdoch & Betton 2008, all CA & many Middle East countries in semi-open habitat, seemingly scarce Iraq Moore & Boswell 1956, fairly widespread summer visitor Salim <i>et al</i> 2012, 24000 pairs Arabia Jennings 2007a, mostly away from CA desert & semi-desert centre, uncommon PM Oman OBL7 ; <i>cycladium</i> SW Turkey & Levant; <i>scops</i> N Turkey to Caucasus; <i>uranicus</i> Iraq SW Turkmenistan to Afghanistan; <i>pulchellus</i> Kazakhstan to Afghanistan König <i>et al</i> (1999) Paludan 1959. Common PM Cyprus Flint & Stewart 1992. Common SV N&W Iran Khaleghizadeh <i>et al</i> 2017. Egypt Avib, BE.
535	Cyprus Scops Owl	<i>Otus cyprius</i>	Cyprus endemic taxon <i>cyprius</i> H&E 1970, named Cyprus Scops Owl in 2001 by Flint <i>et al</i> 2015 and listed by <i>Dutch Birding</i> 2011, Robb <i>et al</i> 2015, <i>contra</i> Mikkola 2012 suggestion that it occurs Asia Minor. Taxon probably partially migratory, but migratory component may be reducing due to more benign winters in Cyprus Flint & Richardson 2017. Elevated IOC6.3, BLI .
536	Pallid Scops Owl (Striated or Bruce's Scops Owl)	<i>Otus brucei</i>	Confirmed as full species Pons <i>et al</i> 2013, but as early offshoot of Indian Ocean/Indo-Malayan clade. Rare, declining SE Anatolia (<i>obsoletus</i>) Kirwan <i>et al</i> 2008. N Middle East, once thought rare winterer S Israel Perlman & Meyrav 2009 but now known as sympatric breeder with Eurasian Scops Owl <i>O. scops</i> Rift Valley Ben Dov & Kiat 2016, CA (C & S) summer breeder in semi-open areas Ayé <i>et al</i> 2012, uncommon Turkmenistan Rustamov 2015, rare BM SSE Kazakhstan Wassink 2015b; Afghanistan (Wakhan Paludan 1959) König <i>et al</i> 1999, formerly (?) bred Syria Murdoch & Betton 2008; 1st breeding for 105 years Dead Sea area Israel, 50 territories 10 confirmed breeding pairs Ben Dov & Kiat 2016. 4th Jordan record Azraq Wetland Reserve Jul 2021, 1st breeding (5th record) at Karamah, Jordan Jul 2021 Khoury <i>et al</i> 2021 JRBC : in Turkey a pair bred (3 young) at Balaban Köyü, a new site near Gaziantep SG44(1) : 251. Thinly widespread resident/summer breeder Iraq Salim <i>et al</i> 2012, probably fairly common resident or SV E & S Iran Khaleghizadeh <i>et al</i> 2017; 3100 <i>obsoletus/exiguus</i> ? pairs Arabia Jennings 2007a, revised to 2600bp Jennings 2010: breeding <i>exiguus</i> confirmed only E UEA, NE Oman where uncommon to fairly common OBL7 : one photographed between Shalateen and Berenice (Baranis), SE Egypt Dec 2018 EORC 2019; records from W Saudi & elsewhere considered migrant <i>obsoletus</i> from further N. Present all "-stans" (K-M&K 2005) <i>brucei</i> S&E of Aral Flint <i>et al</i> 1984), resident Uzbekistan (Kreuzberg-Mukhina <i>et al</i> 2005), <i>exiguus</i> NE UAE Aspinall 1996, Iran Scott & Adhami 2006; mostly W Kyrgyzstan, Ven 2002; <i>obsoletus</i> rare breeder S-C & SE Kazakhstan W&O 2007 to N Afghanistan H&M4: BLDZ map Mar 2018 shows as SB N, NE, E & SE Afghanistan. Egypt Avib, BEöüü
PT	African Scops Owl PT	<i>Otus senegalensis (sensu lato)</i>	K&W 2008, IOC4.4 agree split Arabian Scops Owl <i>O.(s.) pamelae (qv)</i> , previously regarded as ssp. African Scops Owl <i>O.(s.) senegalensis sensu stricto novo</i> now relegated to ORL Hypothetical List: no evidence found of this taxon in Region. Pons <i>et al</i> 2013 admit taxon <i>pamelae</i> as full species & early offshoot from Afro-Palearctic clade, IOC7.1 agreed, del Hoyo <i>et al</i> 2014 also; long separation from rest of clade warrants omission from superspecies
537	Arabian Scops Owl	<i>Otus pamelae</i> (formerly treated as <i>Otus [senegalensis] pamelae</i>)	Monotypic. Pons <i>et al</i> 2013 confirm taxon as full species, an early offshoot from Afro-Palearctic clade, IOC4.1 accepts. Resident SW Yemen SW Saudi Arabia & NE to S Oman K&W 2008, as <i>O.s. pamelae</i> Porter <i>et al</i> 1996 & as <i>O.(s.) pamelae</i> Porter & Aspinall 2010: BLDZ map Feb 2018 agrees (as full sp). Status in Arabia: potentially 30 000bp in highlands of SW Saudia Arabia, W Yemen & Yemen/Oman border areas Jennings 2010; fairly common likely widespread SW Oman OBL7 . Collar & Boesman 2020, from: the limited museum specimens in some cases; the limited and possibly contradictory vocal recordings; the limited field research; the often inconclusive plumage markings; and the lack of conclusive distributional data for <i>O. senegalensis sensu stricto</i> , conclude that the purist view of treating <i>O. senegalensis</i> , <i>O. socotranus</i> & Annobón Scops Owl <i>O.faeae</i> as a single species should be rejected as a null hypothesis (Gill 2014). Accordingly, the onus is on the purists to provide the evidence, and so Collar & Boesman 2020 argue with precise reasoning that all 3 taxa are separate species as the most tenable conclusion to date. However, Collar & Boesman 2020 note similarities with Annobón Scops Owl <i>O. faeae</i> (accepted as full sp IOC11.1 Dec2020), a remote island endemic in the southern Gulf of Guinea (more precisely, the Bight of Bonin Islands), Atlantic Ocean. Although Collar & Boesman 2020 note there is some genetic evidence that Horn of Africa birds are closely related to Kenyan birds, a vocal recording from the Kenyan Highlands resembles Arabian Scops Owl <i>O. pamelae</i> ! Furthermore, the recordings from Arabia and Annobón (5500km apart) are near-identical, but may generally distinguishable from those of mainland Africa of African Scops Owl. Much more data are required. NB1 Collar & Boesman 2020 cite several other examples of species pairs extremely remote from each other whose genetic make-up and vocal repertoire are very similar. NB2 Martim Melo <i>et al</i> (details unavailable) have a paper in prep on the closeness of the molecular link between <i>senegalensis</i> & <i>faeae</i> . This may also involve vocal comparisons with <i>Otus hartlaubii</i> , São Tomé Scops Owl, with the as yet undescribed Principé Scops Owl (https://forever-principe.com/conservation-projects/scops-owl/). NB3 Taxon name suggested by Athenaeum Club member Harry St John Bridger Philby in 1937 after the Club librarian, Pamela Lovibond: Jobling 2010 (the Athenaeum emblem is an owl).
PT	Scops Owl PT Indian Ocean/Indo-Malayan clade	<i>Otus sunia (sensu lato)</i>	IOC2.7 split. K&W 2008 recognised <i>O.[sp] socotranus</i> as separate (morphology & isolated distribution) but reinforced König <i>et al</i> 1999 queries: song relates to that of Oriental Scops Owl <i>O. sunia (qv Hypothetical List)</i> ; previous treatments placed <i>socotranus</i> as ssp of Pallid Scops Owl <i>O. brucei</i> or African Scops Owl <i>O. senegalensis (qv Hypothetical List)</i> : strangely, H&M4 continued to do so. On the other hand, song of Arabian Scops Owl <i>O. pamelae (qv)</i> relates to African Scops Owl <i>O. senegalensis (qv)</i> . Redman <i>et al</i> 2009 treated <i>pro tem</i> as <i>O.(sunia) socotranus</i> . Pons <i>et al</i> 2013 established taxon <i>socotranus</i> as meriting species status; its closest relatives are extralimital Seychelles Scops Owl <i>O. insularis</i> & <i>O.sunia</i> ; the island endemics evolved rapidly.
538	Socotra Scops Owl	<i>Otus socotranus</i>	Monotypic. Pons <i>et al</i> 2013 confirm ancestry with <i>sunia</i> clade & validate species status. Jennings 2008d suggested <i>socotranus</i> for species name (Ogilvie-Grant & Forbes 1899), which now adopted by K&W 2008, IOC2.7 & Mikkola 2012: qv also Porter & Aspinall 2010 for justification. Socotra endemic; no record elsewhere in Socotra archipelago; 300bp from survey estimates, perhaps more (Richard Porter in Jennings 2010).
539	Oriental Scops Owl	<i>Otus sunia (sensu stricto)</i>	1st record (if accepted) for Iran & OSME Region at Chabahar SE Iran Dec 2021, image by Mehdi Pourabedi <i>in litt, Birding Iran</i> , only 100km from Pakistan border. Polytypic: nominate in Pakistan; 8 other sspp to E. Given westward & northward breeding drift of several small passerines occupying niches in growth around proliferation of small dams, it was strong candidate to follow such prey species into remaining semi-open woodland Afghanistan or Iran. NB Older maps were speculative eg König <i>et al</i> 1999, ssp <i>sunia</i> believed to occur E Afghanistan and Tajikistan; Shimba (2007) map suggested S Kyrgyzstan, possibly because of mis-allocation of sspp to other <i>Otus</i> spp. R&A 2005 excluded it from Region by some distance, as did Grimmett <i>et al</i> 1998. K&W 2008, H&M4 gave westernmost range NE Pakistan, but BLDZ Oct 2021 specifically only to an area just N of Lahore as far as Islamabad & Rawalpindi.
PT	Collared Scops Owl PT (Indian Scops Owl)	<i>Otus bakkamoena (sensu lato)</i>	IOC1.6 splits Collared Scops Owl. English name Collared Scops Owl now applies to extralimital taxon <i>O [b.] lettia</i> . Remaining splits are Indian Scops Owl <i>Otus [bakkamoena] bakkamoena</i> , (just in Region) and extralimital Japanese Scops Owl <i>O.[b.] semitorques</i> and Sunda Scops Owl <i>O.[b.] lempiji</i> : H&M4 await better definition of vocal repertoires. NB Pons <i>et al</i> 2013 split Socotran (<i>socotranus</i>) as originating from Indian Ocean/Indo-Malayan clade and Arabian (<i>pamelae</i>) as early offshoot of East African clade.

540	Indian Scops Owl (formerly Collared Scops Owl)	<i>Otus bakkamoena (sensu stricto)</i>	SE Afghanistan ssp <i>deserticolor</i> König <i>et al</i> (1999), König & Weick 2008 (=K&W 2008); may occur SE Iran. R&A suggest Indian subcontinent endemic resident, although mapped exactly to Afghan border, where overlaps with summer-breeding <i>O. scops</i> . However, BLDZ map May 2017 includes a long sliver of Afghanistan centred on the Golan River, the distribution covering up to 5km from Pakistan.
541	Long-eared Owl (Northern Long-eared Owl: distinguishing from African Long-eared Owl, aka Abyssinian Owl)	<i>Asio otus</i>	ssp <i>otus</i> CA, Turkey, Levant, Caucasus, Afghanistan König <i>et al</i> 1999, common BM, PM, rare resident, WV Kazakhstan Wassink 2015b, N Iraq (confirmed Ararat <i>et al</i> 2011; one site Salim <i>et al</i> 2012), NE Iran K&W 2008; winters to S, HBW5 6-record vagrant Oman OBL7 . Has bred at El Arish and in Cairo Egypt Darling 2005. NB Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.
542	Short-eared Owl	<i>Asio flammeus</i>	ssp <i>flammeus</i> CA, Caucasus, wintering Afghanistan König <i>et al</i> (1999); HBW5 has wintering not breeding CA, Iran Afghanistan: widespread winterer Iraq Salim <i>et al</i> 2012, K&W 2008 have breeding in N Iran not far from NW Afghanistan, but given as WV S to Khuzestan KJaleghizadeh <i>et al</i> 2017, Ayé <i>et al</i> 2012 map breeding Kazakhstan only, but widely, Wassink 2015b details common BM, PM, rare resident, WV Kazakhstan. Egypt Avib, BE. Rare to uncommon PM & WV Oman OBL7 ; recorded winter Iraq Moore & Boswell 1956, likewise Israel Perlman & Meyrav 2009, 1st record for 40 years Nov 2014 Lebanon Ramadan-Jaradi & Itani 2016.
543	Snowy Owl	<i>Bubo scandiacus</i> (formerly <i>Nyctea scandiaca</i>) Vulnerable	Monotypic. Wintering birds only in CA, König <i>et al</i> 1999. Follow BOU re <i>Bubo</i> . Vagrant NW Pakistan R&A 2005. 2012. Rare WV N Kazakhstan G&G 2005, rare WV mostly in N but irregular numbers Wassink 2015b, Uzbekistan (Elena Kreuzberg-Mukhina <i>in litt</i>), extremely scarce Turkmenistan Rustamov 2015. Irregular WV Iran S Caspian shores (Schüz 1959, Ghaemi 2006), but more likely vagrant Scott & Adhami 2006 (collected 1903 Roselaar & Aliabadian 2010), 3-record vagrant Iran Khaleghizadeh <i>et al</i> 2017.
PT	Eurasian Eagle Owl PT	<i>Bubo bubo (sensu lato)</i>	PT – <i>ascalaphus</i> & <i>interpositus</i> reported often as <i>B. bubo</i> . IOC2.0 accepted split of Indian Eagle Owl <i>B.[b.] bengalensis</i> (but see ORL Hypothetical List for comment on the mapped arbitrary straight-line separation of distributions in Pakistan) from Eurasian Eagle Owl <i>Bubo bubo</i> . Taxonomy follows König <i>et al</i> (1999), R&A 2005, K&W 2008, Wink <i>et al</i> 2009. K&W 2008 note that <i>ascalaphus</i> differs from <i>bubo</i> by 3.5% nucleotide substitutions and <i>interpositus</i> by 2.8%; the degree of genetic distance normally considered indicative of species level being 2% or greater (Wink <i>et al</i> 2008, 2009). Sangster <i>et al</i> 2013 agree, as do Collar & Boesman 2019, who treat <i>ascalaphus</i> & <i>milesi</i> as full species based on sonograms & Tobias criteria; IOC11.1 accepts split.. H&M4 very conservative. Egypt BE. NB1 1450+ pairs Arabia Jennings 2007a. Eagle Owl complex worth stable-isotope ratio studies? (see Fox & Bearhop 2008). NB2 Mikkola 2012 mentions <i>interpositus</i> interbreeding freely with <i>ascalaphus</i> , & <i>turcomanus</i> with Rock Eagle Owl <i>B. bengalensis</i> , but fails to cite references.
544	Eurasian Eagle Owl {Eurasian Eagle-Owl}	<i>Bubo [bubo] bubo (sensu stricto)</i>	<i>B.b. turcomanus</i> & <i>omissus</i> Turkestan. Breeds Caucasus (<i>ruthenus</i> N slopes), CA, Iran (SE Caspian Schüz 1959 <i>omissus</i> NE Iran <i>turcomanus</i> SE Caspian Khaleghizadeh <i>et al</i> 2017), Afghanistan, HBW5, rare Iraq Moore & Boswell 1956 (but likely inhabitant montane woods in N. S & E Iraq Salim <i>et al</i> 2012 [including <i>interpositus</i> ?]) & Negev Israel Perlman & Meyrav 2009. Scarce across Kazakhstan, but 5 ssp involved; <i>ruthenus</i> , <i>yenisseensis</i> , <i>turcomanus</i> , <i>hemachalanus</i> scarce resident breeders in separate habitat niches, <i>sibiricus</i> very rare resident & WV Wassink 2015b. Existence and extent of clines unknown. Afghanistan <i>turcomanus</i> Paludan 1959; H&M4 cite <i>nikolskii</i> from Iraq to Afghanistan as do IOC8.2 & Khaleghizadeh <i>et al</i> 2017. Apparent 'quarantine corridor' between this & Dusky Eagle Owl <i>B. coromandus</i> (not included in molecular analyses cited here) from coast mid-Pakistan N to Kashmir then SE to Nepal R&A 2005.
545	'Byzantine Eagle Owl' {Eurasian Eagle-Owl}	<i>Bubo (bubo) interpositus</i>	Monotypic if split. König <i>et al</i> (1999) & K&W 2008 cite DNA work of Wink & Heidrich (1999) to support full species; Wink <i>et al</i> 2009 reinforces. Lack of known vocalisation differentiation (Kirwan <i>et al</i> 2008) is supportive of treating as ssp <i>pro tem</i> . Sangster <i>et al</i> 2013 similarly cautious on lack of overall data. Caucasus, Asia Minor (perhaps sole taxon in Turkey Kirwan <i>et al</i> 2008) S to Palestine, E to Iran, where occurs N & NW Iran Khaleghizadeh <i>et al</i> 2017. Intermediate <i>interpositus/ascalaphus</i> specimen claimed collected Egypt 1918 (BinE 2009). H&E 1970 suggested hybridisation possible at range limits with <i>ascalaphus</i> , but K&W 2008 note <i>interpositus</i> sympatric. Now not thought to occur SW Kazakhstan where allotted to <i>turcomanus</i> ; resident NE UAE Aspinall 1996, rare Iraq deserts Salim <i>et al</i> 2012. English name informal @OSME, but suggest worth retaining as taxon name whatever treatment decided upon. NB Present distribution limit to SW is Israel/Palestine.
546	Pharaoh Eagle Owl (Desert Eagle Owl)	<i>Bubo ascalaphus</i>	Monotypic. Wink <i>et al</i> 2009 confirm taxonomic status, H&M4, Sangster <i>et al</i> 2013, Collar & Boesman 2019 agree. Formerly (still?) from Western Desert Egypt Goodman <i>et al</i> 1986 through Egypt N to Syria (note uncommon S Israel Perlman & Meyrav 2009, though present in West Bank Awad <i>et al</i> 2022), E to Gulf, SE to Oman, HBW5, vagrant Bahrain Mitchell 2017, W Iraq K&W 2008 who note sympatric with <i>B. (b.) interpositus</i> (H&E suggest reached al-Haditha in W Iraq); confirmed breeding 2011 al-Sheikly 2012. Status in Arabia: widespread resident, c2500bp Jennings 2010; indications of spread adjacent to irrigated areas; rare widespread resident breeder Oman OBL7 . K&W 2008 treat <i>ascalaphus</i> as monotypic, subsuming <i>desertorum</i> (Desert Owl); more field research needed, including sizable (Svensson <i>et al</i> 2009) extralimital distribution of: NW Africa, Sudan to Ethiopia & W Libya-Tunisia to Chad-Mauritania BLDZ Feb 2021. Egypt Avib, BE. NB May have reached Iran where Iraq border meets Gulf. In addition, the type locality for ' <i>B. paradoxus</i> ' on Iran/Turkmenistan border needs re-examination: it was assumed that it might be subsumed in <i>B. ascalaphus</i> in Khaleghizadeh <i>et al</i> 2017, citing Domaniewski 1933, which paper refers to 2 Polish museum specimens collected at Pul-i-chatum (Pulikhatum, just in Turkmenistan north of Doosti Dam) on the north-flowing Hari Rud & at Serachs (the town Sarakhs today) NE Iran. However, Domaniewski 1933 suggests <i>paradoxus</i> is a ssp of <i>B. bubo</i> from its strong horizontal stripes on the belly sides, but since then it has been subsumed (as in Weick 2006) in <i>B.b. omissus</i> , the resident taxon (Others have suggested in <i>nikolskii</i>). However, al-Sheikly <i>et al</i> 2020, noting that the 2 <i>paradoxus</i> specimens are small and within the limits of Pharaoh Eagle Owl <i>B. ascalaphus</i> , suggest that this may prove the existence of <i>B. ascalaphus</i> in NE Iran.
PT	Spotted Eagle Owl PT	<i>Bubo africanus (sensu lato)</i>	K&W 2008 suggested allopatric Arabian populations taxon <i>milesi</i> be elevated to species level on colour, size & vocalisation grounds, Robb <i>et al</i> 2018 reinforcing this view based on considerable differences in bare part coloration, vocalisations and plumage, all from increased data: Robb <i>et al</i> 2018 also emphasise these differences for Vermiculated Eagle Owl <i>B. [a.] cinerascens</i> , further emphasised via sonograms & application of Tobias <i>et al</i> 2010 method Collar & Boesman 2019. <i>B.(b.) africanus sensu novo</i> has not been recorded in Region, K&W 2008, Ash & Atkins 2009, Redman <i>et al</i> 2009, IOC v2.3 separated sub-Saharan Vermiculated Eagle Owl {Greyish Eagle Owl} <i>B.[a.] cinerascens</i> , monotypic, which occurs on African side of Bab-el-Mandab Straits, & has occurred once in Region south of Socotra. <i>B.(a.) africanus sensu novo</i> [monotypic after split] occurs no nearer Region than C Kenya, at least 1480 km distant. NB RNBWS records over 50 years in <i>Sea Swallow</i> have numerous references to 'large owls', 'Eagle Owls' & ' <i>Bubo bubo</i> ' circling ships or coming aboard in the area from the southernmost Red Sea to well out in the Gulf of Aden/Arabian Sea. It seems likely that those nearest the Arabian shore were taxon <i>milesi</i> but those nearest the African shore were taxon <i>cinerascens</i> , which may thus be an accidental in the Region That many hunted and fed on tired migrants suggests that many ships lacking bird observers are visited by large owls as learned behaviour.
547	Arabian Eagle Owl (Arabian Spotted Eagle Owl: formerly part of Spotted Eagle-Owl <i>B. africanus</i>)	<i>Bubo milesi</i> (formerly treated as ssp of <i>B. africanus</i>)	Monotypic IOC11.1. SW Saudi Arabia-N Yemen & Oman populations (4000bp Jennings 2007a) possibly full species HBW5, likely K&W 2008, Mikkola 2012, confirmed Robb <i>et al</i> 2018, Collar & Boesman 2019. Status in Arabia: breeds S from Jeddah in SW Saudi Arabia, W Yemen, Oman (Dhofar & Muscat areas), perhaps 2000bp overall Jennings 2010; likely rare resident breeder N & S Oman OBL7 ; 2 recorded Al Hajar Mts UAE Nov 2017 DB40(1) : 51, two there Apr 2018, but c 10 territories mapped by May 2018 EBRC ; see also Robb <i>et al</i> 2018; one at Wadi Wurrayah, Fujairah Dec 2021 SG44(1) : 254. RNBWS report Kuria Muria Is Nov 87. NB1 English name almost as accepted by IOC 11.1; we decline to use the term 'Eagle-Owl'. NB2 BLDZ map Feb 2021 unsplit for <i>milesi</i> .

548	Vermiculated Eagle Owl {Greyish Eagle Owl}	<i>Bubo [africanus] cinerascens</i>	Monotypic. One recorded 09:45N, 53:45E 22 Nov 1987 c200km S of Socotra (location inside OSME Region deep-ocean extension) near a ship Casement 1979 <i>Sea Swallow</i> 28 p38. K&W 2008 elevated <i>cinerascens</i> to species level; Barlow <i>et al</i> 2022 confirmed its species status, noting that it is sister to African Eagle Owl <i>B. africanus</i> . However, its nearest occurrence to the OSME Region is on the African side of the Red Sea, firstly from 90km N of Port Sudan S some 635km to the borders of the Eritrean provinces of Central and Southern Danikalia (it has been recorded on the Dahlak Islands) and secondly, along 645km of coastline from Behid in SE Eritrea through Djibouti into Somalia as far as Berber, also being recorded at the Bab-el-Mandab Straits (Ash & Atkins 2009); it has straggled N to Egypt's Ha'laib Triangle with Sudan Nikolaus 1987: IUCN map Mar 2022 concurs: may occur in Region in W Yemen or Tihama Saudi Arabia. NB Ash & Atkins 2009 place nearest African Eagle Owl <i>B. (a.) africanus</i> ssp <i>africanus</i> just into Kenya some 1100km away; its distribution across Africa lies mainly between 2.5° & 19°N.
PT	Brown Fish Owl PT	<i>Bubo zeylonensis</i>	Recent work to establish distribution limits in southern Turkey (van den Berg <i>et al</i> 2010) complemented by molecular analysis (Note n=1) suggests this population could be separable, but much data needed. <i>Pro tem</i> we consider <i>semenowi</i> if split to be monotypic, the 3 extralimital ssp <i>zeylonensis</i> , <i>leschenaulti</i> , <i>orientalis</i> forming Eastern Brown Fish Owl. However, <i>zeylonensis</i> is a Sri Lanka endemic and may also warrant future elevation; <i>leschenaulti</i> occurs from the Indian subcontinent to Myanmar & <i>orientalis</i> from Myanmar to China, but the latter's separate identity is disputed. NB Salter <i>et al</i> 2020 found <i>Ketupa</i> to be embedded in <i>Bubo</i> , noting further research may split <i>Bubo</i> into 3 genera, but other examples of 'embedded' taxa are used as evidence towards lumping. <i>Pro tem</i> , we remain with the <i>Bubo</i> genus here.°
549	Western Brown Fish Owl (Turkish Fish Owl Robb & the Sound Approach 2015)	<i>Bubo (zeylonensis) semenowi</i> { <i>Ketupa zeylonensis</i> } (<i>Bubo semenowi</i> Robb & the Sound approach 2015)	Monotypic if split. Occurs from SW Turkey disjunctly to Iran. BLDZ Sep 2018 then map Brown Fish Owl <i>sensu lato</i> continuously from NW Pakistan (less than 10km from Afghan border) through S Kashmir & NW India looping S & W to SE Pakistan, Kashmir: no boundary mapped between remaining 3 ssp. Confirmation of the taxon identity in NW Pakistan is needed to establish whether that population is <i>semenowi</i> or <i>leschenaulti</i> (Eastern Brown Fish Owl: see Hypothetical Section) Genus change suggested König <i>et al</i> 1999 supported Collinson 2006, K&W 2008, Wink <i>et al</i> 2009 (not in IOC6.3). Disjunct NW Levant when specimen collected Tristram 1865, others 1879-80 Saeed & Qumsiyeh 2020, probably extinct locally by 1960s SV Benson 1970, extinct Israel Perlman & Meyrav 2009; pair collected E of Ali al-Gharbi Iraq 1920-23 Ticehurst <i>et al</i> 1926: last recorded Iraq 1920s Salim <i>et al</i> 2012 (may still exist); first (ssp <i>semenowi</i>) known in Region from SE Turkey Yöntem 2007, suggestion of breeding; van den Berg <i>et al</i> 2010 proved small population, 3 bp 2014 DB36(3) : p200. First bred S Turkey 2009, 1st for WP, imaged & recorded Arnoud van den Berg pers comm, Kirwan <i>et al</i> 2014 note multiple (10+) sites now known. Declared extinct Syria Murdoch & Betton 2008, possibly relict in N near Turkish record, or has recolonised. Iraq König <i>et al</i> (1999). SE Iran (scarce Scott & Adhami 2006); a male brought from 'Gach-i-Turush' (2750 ft, but current location name not found) by Capitano in NE Gulf Iran Jul 1924 (Capitano 1931); one recorded Rafsanjan, Kerman Province Iran Oct 2016 IBRC , another in Khaez Protected Area, Zagros Kohgiluyeh & Buyer-Ahmad Province Iran Nov 2016 IBRC ; now known from 10+ sites in Iran DB39(5) : 348; also recorded Bushehr DB40(1) : 51; 1st proven breeding Iran at Khaez, Kohgiluyeh, Buyer-Ahmad May 2018 DB40(4) : 263; first fully documented record from 1977 photographs at Dez River, Dezful, Khuzestan DB41(2) : 131, one photographed Dez Dam Oct 2019 DB41(6) : 428: one Ilam Province, one Khuzestan Province Mar & Apr 2020 SG42(2) : 323, 1st for Sistan & Baluchestan found dead at the Gang River, just N of Nikshahr Dec2020 DB43(2) : 152. On-line report for S Afghanistan (<i>leschenaulti</i>) - corrected spelling in H&M3 Afghanistan corrigenda E Dickinson pers comm
PT	Tawny Owl PT (Wood Owl)	<i>Strix aluco (sensu lato)</i>	IOC2.0 accepts split of extralimital Himalayan Owl <i>S. (a.) nivicolum</i> R&A 2005, K&W 2008, which includes other ssp <i>ma</i> & <i>yamadae</i> ; Inskipp & Collar 2015 note split supported by del Hoyo & Collar 2014b on Tobias <i>et al</i> 2010 criteria. H&M4 notes different opinion, but remains unsplit.
550	Tawny Owl (Wood Owl)	<i>Strix aluco (sensu stricto)</i>	Asia Minor (<i>aluco</i> , <i>sylvatica</i>) to Levant & Iran; <i>S. a. wilkenskii</i> , <i>harmsi</i> Turkmenistan, Bukreev 1997; König <i>et al</i> (1999) not mapped there; cites 'Turkestan'. CA (Kazakhstan, <i>siberiae</i> vagrant <i>harmsi</i> very rare resident Wassink 2015b), (Iran Scott & Adhami 2006), perhaps rare resident/winterer in N Iraq Salim <i>et al</i> 2012 not Afghanistan König <i>et al</i> (1999) contra H&E 1970 & R&A 2005, E&NE Afghanistan, also Roberts 1991 Paludan 1959 <i>bidulphi</i> (<i>bidulphi</i> in König <i>et al</i> 1999); voice suggests relict of western <i>aluco</i> group rather than member of adjacent <i>nivicolum</i> (Chinese) group. However, map of Tawny Owl world distribution in Doña <i>et al</i> 2015 allots Afghanistan population to <i>sanctinicolae</i> . NB The general conclusions of Doña <i>et al</i> 2015 are that phylogeographic differences are marked (based on DNA barcoding research of Iberian and North African populations) indirectly suggesting that other subspecies may merit molecular research as to status; Maghreb Owl <i>S. mauretanica</i> split off IOC10.1 Doña <i>et al</i> 2015, Robb <i>et al</i> 2015.
PT	Hume's Owl PT	<i>Strix butleri</i>	PT Understanding of the taxonomy of and linkage within this complex is rapidly evolving. Some comments here are provisional. Kirwan <i>et al</i> 2015 demonstrate that the population of <i>S. butleri</i> from Egypt to W Arabian peninsula & SW Oman (excluding taxon <i>omanensis</i> in N Oman) differ morphologically and in DNA from the type specimen labelled as taken at Ormara in SW Pakistan. Ormara is 200km from the present Iran border, but then was considered as being part of eastern Baluchistan, a tribal area that nowadays also includes easternmost Iran & southernmost Afghanistan. No other records are documented from this immediate area, although there are 7 national parks or protected area in its southernmost half. Kirwan <i>et al</i> 2015 renamed the sampled Arabian populations (save <i>omanensis</i>) as Desert Tawny Owl <i>S. hadorami</i> . A <i>Strix</i> owl photographed Jan 2015 near Mashhad in N Iran appeared similar to the <i>S. butleri sensu lato</i> type specimen. DNA samples were obtained from the Mashhad bird and from a trapped Omani Owl in 2015, both proven to be the same species, Robb <i>et al</i> 2015 preprint. Kirwan <i>et al</i> 2015 did not include any specimen from Eastern Province Saudi Arabia, nor did Robb <i>et al</i> 2015, which population we attribute <i>pro tem</i> to <i>S. butleri sensu stricto</i> . NB It would be useful if the DNA of specimens of the desert form of Tawny Owl <i>S. aluco sactinicolae</i> of SE Iraq/SW Iran could be compared with the <i>S. [b.] hadorami</i> & <i>S. [b.] butleri</i> type specimen data. Schweizer 2020 suggests that these two spp may be an example of an east-west split across Palearctic deserts, although <i>hadorami</i> may be more closely related to African Owl <i>S. woodfordi</i> .
551	Desert Owl (Hume's Tawny Owl, Desert Tawny Owl, formerly treated also as Hume's Owl)	<i>Strix [butleri] hadorami</i>	Monotypic. This taxon, known as <i>butleri</i> for decades until Kirwan <i>et al</i> 2015 showed it to be a separate species-level taxon from its type specimen (for which see entry for <i>butleri</i> above): patchily from SE Egypt, Sinai K&W 2008, S Sinai & Qesm Marsa Alam, Red Sea Governate Habib <i>et al</i> 2018, where sedentary on territory year-round, S Israel to Arabian Peninsula, HBW5 (1700bp patchily widespread Arabia Jennings 2007a (Saudi Arabia, Yemen, W Oman), revised from survey work to c3000bp Jennings 2010); breeds also Sinai, Palestine, Jordan Mitchell 2017, uncommon breeding resident SW Oman OBL7 . Suggested occurs Iran König <i>et al</i> (1999), but unlikely, Derek Scott pers comm: latter vindicated by Robb <i>et al</i> 2015. Aural report S Oman Wadi A'Shuwaymiyah Dec 06, 2 Khor Mughsayl Jan 07, IH pers comm. Detailed breeding biology studied in Israel 2015-16 Ben Dov <i>et al</i> 2017. NB1 Neither Kirwan <i>et al</i> 2015 nor Robb <i>et al</i> 2015 obtained specimens or samples from Eastern Province Saudi Arabia populations previously attributed to <i>S. butleri sensu lato</i> , & so <i>pro tem</i> , we leave these unsampled populations designated as <i>Strix</i> taxon <i>inquirenda</i> . NB2 English name proposed by Robb <i>et al</i> 2015 & noted by IOC is here adopted <i>pro tem</i> : assigning the eponym to any of the <i>sensu stricto</i> taxa would compound confusion. NB3 The Eastern Province Saudi Arabia populations previously attributed to <i>S. butleri sensu lato</i> , are technically unidentified and need to be confirmed, but more important is that the current relationship between <i>hadorami</i> & <i>butleri sensu stricto</i> populations is unknown. Is there allopatry, sympatry or a separate taxon?

552	Omani Owl (Hume's Tawny Owl)	<i>Strix [butleri] butleri</i> Data Deficient	<p>Discovered in northern Oman in 2013 Robb <i>et al</i> 2013 and then named <i>S. omanensis</i>; seemingly tiny relict population in remote and rocky ravine-wadis, further calling heard here Oct & Nov 2012, 3 newly-discovered pairs Apr 2013 DB36(3): p200. Second locality identified from calls heard (but not then attributed) 2008, 33km N of first discovery van Eijk 2013. However, Robb <i>et al</i> 2016 showed by molecular analysis that the type specimen of <i>S. butleri</i>, the population attributed as <i>S. omanensis</i> and an owl trapped near Mashhad Jan 2015 are all the same species. Musavi <i>et al</i> 2016 confirmed that the Mashhad bird and another seen in 2000 near Minab Hormozgan, and another found at Jam Game Guard Station Bushehr are all Omani Owl: 3rd record Mehriz Yazd Province Oct 2015 IBRC, another Jan 2016 Bafgh, Yazd Province, one Bandar-e Lengeh, Hormozgan Province Aug 2016 IBRC (another photographed there Jul 2018 DB40(4): 263, one at Shadab, Dezful, Khuzestan rescued & released Dec 2018 SGATR41(2) 251, only 95km from Iraqi border DB41(1): 56; first-ever juvenile photographed Kangan, Bushehr, Iran May 2019 DB41(3): 198; one photographed Dez Dam Oct 2019 DB41(6): 428; one at Gharbeh, Jam, Bushehr Nov 2019 DB41(1): 55; 3 juveniles photographed Rayan Valley, Bushehr June 2020 DB42(4): 278; one Lamerd, Fars, Jan 2021 IBRC one Nehbandan, S Khorasan Jun 2021 (1st for province) DB43(4): 309. 1st record UAE Mar 2015 EBRC, heard in Wadi Wurayah, Fujairah in mountainous area some 15km wide between the E89 (al-Halah) & E99 (al-Abidya) roads DB39(3): 209, 2nd record there Mar 2017 EBRC, but one photographed there Jul 2020 (camera trap at night) & in Dec 2020 EBRC now cited as 2nd record. Circumstantial evidence of its occurrence at the eastern end of the lower plateau of Jebel Sarah, northern Oman at roughly 23.3N, 57.1E: within a 1.5km circle to the E, there are at least 12 similar canyon complexes Jennings 2018. One at Wadi al Muaydin, Birkat al Mawz Oct 2021, new site, SG44(1): 245. The previous attribution of the type specimen of Hume's Tawny Owl was in error. The name <i>omanensis</i> is thus a junior synonym of <i>butleri</i>.</p> <p>NB1 English name proposed by Robb <i>et al</i> 2015 & noted by IOC is here adopted <i>pro tem</i>: assigning the eponym to any of the <i>sensu stricto</i> taxa would compound confusion. NB2 The breeding distribution of <i>S. butleri sensu stricto</i> is unknown; other adjacent <i>Strix</i> taxa may yet be discovered. NB3 The map in Doña <i>et al</i> 2015 of Tawny Owl world distribution places <i>S. aluco wilkenskii</i> in NW Iran sympatrically with the Mashhad Omani Owl. Some re-evaluation of the Iran <i>wilkenskii</i> population may be called for.</p>
553	Ural Owl	<i>Strix uralensis</i>	N Kazakhstan (K-M&K 2005), HBW5; rare resident n & NE Kazakhstan Wassink 2015b (Originally rejected W&O 2007 Arend Wassink <i>in litt</i> as rare breeder E Kazakhstan province, but <i>uralensis</i> confirmed breeder in N Kazakhstan Zuban 2013, NE Wassink 2014; just inside NE Kazakh border Flint <i>et al</i> 1984). NB Characteristically very local and in small numbers in parts of Europe, and so may exhibit same behaviour in underwatched southern taiga zone of Region.
PT	Great Grey Owl PT	<i>Strix nebulosa</i>	Paleartic <i>lapponica</i> separated by molecular analysis from Nearctic taxa (<i>nebulosa</i> & <i>yosemitensis</i>) by Nijman & Aliabadian 2013, named Lapland Owl & separated by voice by Robb & the Sound Approach 2015; no recognition of this split IOC11.1. <i>Pro tem</i> , we treat as superspecies. NB Hull <i>et al</i> 2014 formally recognise <i>yosemitensis</i> as ssp novo, IOC6.1 noting further consideration needed, but still awaited in IOC12.1.
554	Lapland Owl {Great Grey Owl}	<i>Strix [n.] lapponica</i> { <i>Strix nebulosa</i> }	N Kazakhstan detail HBW5 incorrect, very rare resident easternmost Kazakhstan (S Altai) W&O 2007 Arend Wassink <i>in litt</i> 2009 Wassink 2015b, one record N Kazakhstan, 1st record not in Altai Wassink 2016b. Irruptive southwards when food in short supply K&W 2008.
		Upupidae	IOC2.0 recognised extralimital African and Madagascan Hoopes (<i>U. africana</i> & <i>U. marginata</i>); H&M4 does not.
555	Eurasian Hoopoe	<i>Upupa epops</i>	ssp <i>epops</i> breeds Asia Minor-Afghanistan, Caucasus, CA (common BM, PM throughout Kazakhstan accidental resident, WV Wassink 2015b), but resident in suitable habitat many locations S&E CA Ayé <i>et al</i> 2012, UAE Aspinall 1996, widespread summer breeder Iraq Salim <i>et al</i> 2012, ssp <i>major</i> breeds Egypt, but <i>epops</i> of eastern Libya may wander Isenmann & Thevenot 2018. In Arabia, residency is increasing & likely range expansion into irrigated area. Wang <i>et al</i> 2017 conclude that except for Armenian populations, all the European populations exhibited an admixed phylogeographic pattern; genetic restriction may separate Armenian birds from all other populations. Widespread also as migrant, perhaps 46 000bp overall Jennings 2010, common breeder NE UAE, but may slowly increasing its range into SW UAE Campbell <i>et al</i> 2022 ; abundant PM & WV, scarce breeder Oman OBL7 ; Iran (some resident), Afghanistan (<i>epops</i> & <i>orientalis</i> Paludan 1959; <i>orientalis</i> now either synonym of <i>ceylonensis</i> or included in <i>epops</i>), winters to S; resident Arabia, HBW6; evidence of breeding between Aswan & Abu Simbel, Lake Nasser June 2022 Jens Hering <i>in litt</i> Jul 2022 . Egypt Avib, BE. ssp <i>senegalensis</i> occurs Somalia & may wander to SW Arabia.
		Bucerotidae	
556	African Grey Hornbill	<i>Lophoceros nasutus</i> (formerly <i>Tockus nasutus</i>)	Genus revision Gonzalez <i>et al</i> 2013a, 2013b. African species, ssp <i>nasutus</i> resident population SW Arabia, HBW5. Likely steady slow range contraction, essentially Tihama only; perhaps 8000bp Arabia Jennings 2010. Egypt escapes, no breeding recorded Robel 1997; EORC 2018 have rejected all records as insufficiently documented.
		Coraciidae	Johansson <i>et al</i> 2018 revise relationships within Coraciidae , but postpone endorsement of taxonomic revisions save to recommend re-evaluation of Dollarbird <i>Eurystomus orientalis</i> species limits. Clade names here are informal@OSME.
Clade A. Johansson <i>et al</i> 2018 show this sp as sister to the dissimilar African extralimital Racket-tailed Roller <i>C. caudatus</i> (Occurs from S Tanzania latitudes S to Botswana)			
557	Purple (Rufous-crowned) Roller	<i>Coracias naevius</i>	African species, vagrant Yemen, HBW6, nearest known breeding population ssp <i>naevius</i> Somalia H&M4.
Clade B. Johansson <i>et al</i> 2018 show that extralimital Purple-winged Roller <i>C. temmincki</i> of Sulawesi groups with taxon <i>affinis</i> (Indochinese Roller) as sister to <i>C. benghalensis</i>.			
558	Indian Roller	<i>Coracias benghalensis</i>	Polytypic; nominate & extralimital <i>indicus</i> of C & S India. Former ssp <i>affinis</i> found to be separate species Indochinese Roller, sister to extralimital Purple-winged Roller <i>C. temmincki</i> of Sulawesi Johansson <i>et al</i> 2018. Nominate resident Iraq (parts), Iran (mapped Martins & Hirschfeld 1998), Oman, HBW6, NE UAE Aspinall 1996; status in Arabia, resident N UAE & Oman, greatly increased since 1970s in irrigated areas, but possible recent reduction to below 15 000bp Jennings 2010, declining rapidly Oman OBL7 . NE Afghanistan Vielliard 1969, R&A 2005, mapped Khyber area Ayé <i>et al</i> 2012, R&A 2012. 1 accepted record Turkey Kirwan <i>et al</i> 2008, vagrant 1998 Socotra Redman <i>et al</i> 2009, 1954 S Yemen Warr 1992. NB Extralimital taxon <i>affinis</i> split by Inskipp & Collar 2015, del Hoyo & Collar 2014b iaw Tobias <i>et al</i> 2010 criteria as Indochinese Roller, reinforced by Johansen <i>et al</i> 2018.
Clade C. Johansson <i>et al</i> 2018 group the 3 listed below as sister to Asian <i>Coracias</i> rollers			
559	Lilac-breasted Roller	<i>Coracias caudatus</i>	African species, likely ssp <i>forti</i> , vagrant Yemen, HBW6, Oman Porter & Aspinall 2010 (single record 1998 OBL7).
560	Abyssinian Roller	<i>Coracias abyssinicus</i>	Monotypic African species, resident population SW Yemen, HBW6, Porter & Aspinall 2010, Jennings 2010, possibly 2500bp, vagrant Socotra Porter & Suleiman 2020. Only 3 pre-1986 records Egypt Goodman <i>et al</i> 1986; 4th record Abu Simbel Sep 1995 & May 1997 Pfütze & Halley 1995, Haas & Ławicki 2018: now officially 2nd & 3rd records EORC .

561	European Roller	<i>Coracias garrulus</i>	<i>C.g. semenowi</i> Turkmenistan, Bukreev 1997, Afghanistan Paludan 1959 this & <i>garrulus</i> Kazakhstan W&O 2007: Wassink 2015b has <i>garrulus</i> as scarce BM, PM N&W Kazakhstan, <i>semenowi</i> common BM locally S&E Kazakhstan: 1st confirmed breeding SW Kazakhstan Karakol Lake on E Caspian coast Wassink 2022 . Hellicar 2015a records moderate decline Cyprus 2006-2015. Karaardıç & Kızılkaya 2021 find high populations locally SW Turkey nesting in roadside sand cliffs, a niche fairly common beside modern roads road-building sites . Breeds Asia Minor, Middle East, Caucasus, CA (avoiding most desert Flint <i>et al</i> 1984), Iraq (uncommon Salim <i>et al</i> 2012), Iran, Afghanistan, winters Africa, HBW6; in boreal autumn some, likely taxon <i>semenowi</i> may be trans-oceanic migrant India-E Africa (loop migration) preying on dragonflies exploiting ITCZ movement Anderson 2009: this hypothesis would explain virtual absence central Arabia in spring (Jennings 2010); nevertheless, occasional breeder Kuwait, N UAE, N Oman Jennings 2010, where common to abundant PM Oman OBL7 , PM Socotra Porter & Suleiman 2020. Egypt Avib, BE. NB1 Nebel <i>et al</i> 2018 show genetic decline through inbreeding in diminished habitat causes population extirpation. NB2 This species in areas of good-quality resources can thrive in agricultural areas (eg southern Hungary), not their usual habitat, if nest-boxes are available, because the change in arthropod/insect spectrum post-harvesting is more nutritious than in traditional habitats Kiss <i>et al</i> 2014.
Clade D. Johansson <i>et al</i> 2018 group the sp below with Blue-throated Roller <i>E. gularis</i> as an African Clade; the Asian Clade (Clade E in our naming) comprises extralimital Dollarbird <i>E. orientalis</i> & Azure Roller <i>E. azurea</i> of Halmahera.			
562	Broad-billed Roller (Cinnamon Roller)	<i>Eurystomus glaucurus</i>	Nearest population Eritrea BLDZ map May 2018. One, perhaps ssp <i>afar</i> of Sudan, found dead, Adal Deeb, Elba Protected Area Egypt, by Ahmed Badry Sayed, Area Ranger 30 Oct 2010, EORC 2019. One photographed at Zikim. Karmiya Israel Sep 2019 Ottens & Perlman 2021. IRDC .
		Alcedinidae	
563	White-throated Kingfisher (White-breasted Kingfisher, Smyrna Kingfisher)	<i>Halcyon smyrnensis</i>	Resident, ssp <i>smyrnensis</i> , E Mediterranean coasts, probably Syria Murdoch & Betton 2008, Iraq, Kuwait, Iran, NE Afghanistan, HBW6 (<i>smyrnensis</i> Khyber-Kabul Ayé <i>et al</i> 2012), easternmost UAE Aspinall 1996: Kuwait numbers small (Jennings 2010), but increased sightings elsewhere in E Arabia suggest slow range expansion. Rare migrant visitor Cyprus CBR11 , one at Akrotiri Marsh Aug-Sep 2021 SG44(1): 235 : 1st Masirah, Oman Nov-Dec 2015 OBRC . Breeding in at least 5 locations Abu Simbel Jun 2022, now southernmost African population Jens Hering pers comm Jul 2022 . Egypt Avib, BE.
564	Grey-headed Kingfisher	<i>Halcyon leucocephala</i>	Resident African species, with breeding populations, endemic Arabian ssp <i>semicaerulea</i> , SW Arabia S Yemen just to Oman, HBW6: breeds foothills, perhaps 6000bp in Arabia Jennings 2010; common breeding SV SW Oman OBL7 . 1st for Iran at Jask, Hormozgan May-Jun 2021 IBRC .
565	Collared Kingfisher (White-collared Kingfisher)	<i>Todiramphus chloris</i> (formerly <i>Halcyon chloris</i>)	Much splitting of former 50+ sspp Red Sea African coast to S Pacific now (IOC6.2) reduced to 14 sspp eg Andersen <i>et al</i> 2015; ssp <i>abyssinicus</i> S Red Sea coasts, hinterland, SW Arabia; Oman <i>kalbaensis</i> , HBW6; Joint Oman & (larger) UAE Khor Kalba mangrove population (<i>kalbaensis</i>) small & vulnerable: BLDZ Jun 2020 maps residence around Barr Al Hikman, taxon identity uncertain, although Oman Bird List v7.9 mentions only <i>kalbaensis</i> ; there are many scattered Grey Mangrove (<i>Avicennia</i>) patches de Fouw <i>et al</i> 2018. Red Sea population, perhaps 200+bp mostly in Saudi Arabia, but expected in Yemen Jennings 2010, so vagrant status Yemen Stanton 2009 liable to revision; uncommon highly localised resident breeder N Oman. Gaber <i>et al</i> 2019 use bar-coding DNA techniques to confirm the separate ssp identity of <i>kalbaensis</i> of UAE & Oman & <i>abyssinicus</i> of the Red Sea. Egypt Avib, BE.
566	Malachite Kingfisher (African Malachite Kingfisher)	<i>Corythornis cristatus</i> (<i>Alcedo cristata</i>)	Taxonomy follows Moyle <i>et al</i> 2007, IOC 2.6. African species, 2 records, likely ssp <i>cyanostigma</i> of Sudan to Ethiopia (resident?) Yemen, HBW6, but mis-labelling more than possible in one case Warr 1992. Has bred S Yemen, probably opportunistically, but perhaps 100bp needed in any single area for viable population Jennings 2010. Recorded Oman 2004, 4th reported 11 Jan 2010 SG 32(2) : 7-record vagrant Oman OBL7
567	Common Kingfisher (European Kingfisher)	<i>Alcedo atthis</i>	Only ssp <i>atthis</i> known in Region; Turkey-Afghanistan, scarce BM, PM, rare resident, WV in suitable habitat in SE Kazakhstan Wassink 2015b, 2nd winter record Lake Karakol, Caspian W Kazakhstan Wassink 2018, resident Caucasus, SE Iraq (uncommon Salim <i>et al</i> 2012), SW & NW Iran; breeds CA, resident permanent waters S-C & C CA Ayé <i>et al</i> 2012, Afghanistan (<i>pallasi</i> Paludan 1959; <i>atthis</i> now includes <i>pallasi</i>), winters N Red Sea, Gulf, S Iran, HBW6: common PM & WV Oman OBL7 . May have bred NW Saudi Arabia where permanent streams Jennings 2010, vagrant Socotra Porter & Suleiman 2020. Egypt Avib, BE
568	Crested Kingfisher	<i>Megaceryle lugubris</i>	NE Afghanistan, IOC, Fry <i>et al</i> 1992, HBW6, (?) Ayé <i>et al</i> 2012, ssp <i>continentalis</i> . BLDZ maps just into Afghanistan near the Nari-Upper Dir border as the westernmost distribution.
569	Pied Kingfisher	<i>Ceryle rudis</i>	Fry <i>et al</i> 1992, resident W, SC & SE Turkey, Levant, Syria, Iraq (Average of 300+ per month recorded in Iraq Marshes survey 2013/4 Oct-Jun Fazaa <i>et al</i> 2017), SW Iran (ssp <i>syriacus</i>), NW Afghanistan (Sistan? Now dry) (<i>leucomelaneura</i> [now <i>leucomelanurus</i>] Paludan 1959), SE Khyber area only Ayé <i>et al</i> 2012, ssp <i>rudis</i> Egypt; vagrant Cyprus HBW6, one found Akhna Dam Sep 2020 Martin Hellicar <i>in litt</i> , 2nd Cyprus breeding (1st successful) record Kouris Dam June 2021 DB43(4) : 310: 9-record vagrant Oman Oct 2019 OBRC . Egypt Avib, BE
		Meropidae	Marks <i>et al</i> 2007 confirmed status of ORL taxa (<i>M. orientalis</i>, pre-split).
570	White-throated Bee-eater	<i>Merops albicollis</i>	Monotypic. African species with breeding population SW Arabia, HBW6. Breeding in Tihamra & foothills, but not greatly site-faithful, E towards C coastal S Yemen, perhaps 4000bp Jennings 2010; 2-record vagrant Oman OBL7 . 1st for Israel Aug 2019 Ottens & Perlman 2021, still present Oct 2019 DB41(6) : 428
PT	Green Bee-eater PT (Little Green Bee-eater)	<i>Merops orientalis</i>	Split by del Hoyo <i>et al</i> 2014d, BLDZ into superspecies, African Green Bee-eater <i>M. [o.] viridissimus</i> (2 sspp, nominate & <i>cleopatra</i> , latter in Region). Arabian Green Bee-eater <i>M. [o.] cyanophrys</i> (2 sspp nominate & <i>muscatensis</i>) & Asian Green Bee-eater <i>M. [o.] orientalis</i> (4 sspp, only <i>beludschicus</i> reaching Region, the rest from India to China). IOC11.2 has accepted this split, as has CSNA/Dutch Birding Jan 2022 .
571	African Green Bee-eater	<i>Merops [orientalis] viridissimus</i>	Only sspp in Region <i>cleopatra</i> Nile Valley Egypt H&M4, has occurred Western Desert Egypt Goodman <i>et al</i> 1986; nominate S Sudan west to Senegal, E to Ethiopia. Extralimitals: nominate occurs Senegal to Eritrea, Ethiopia and w Sudan & <i>flavoviridis</i> (restored ssp Niethammer 1955: Fry <i>et al</i> 2020) Chad to e Sudan.
572	Arabian Green Bee-eater	<i>Merops [orientalis] cyanophrys</i>	2 sspp, endemic to Region: nominate S Israel, W Jordan, W&S Arabian littoral; <i>muscatensis</i> (includes <i>najdamus</i>) C Arabian plateau and E Arabia (E Yemen to Oman and United Arab Emirates). RB Arabia, but augmented in E by WV, widespread & numerous, slowly spreading into irrigated agriculture UAE, perhaps 150 000bp Jennings 2010: abundant RB N & S Oman OBL7 .
573	Asian Green Bee-eater	<i>Merops [orientalis] orientalis</i>	Only <i>beludschicus</i> of 4 sspp reaches Region in S Iran, where resident S lowlands Khaleghizadeh <i>et al</i> 2018, from Pakistan border NW past Bandar Bushehr, noted NE Gulf, Iran Feb-Mar & October 1924-28 Capito 1931; possibly also in southern E Afghanistan R&A 2005, BLDZ Mar 2018, ssp <i>beludschicus</i> vagrant Iraq Salim <i>et al</i> 2012, vagrant CA Ayé <i>et al</i> 2012, but may reach Oman hidden among resident <i>muscatensis</i> ssp of Arabian Green Bee-eater. Extralimitals: nominate w India e to Bangladesh, <i>ceylonicus</i> Sri Lanka & <i>ferrugineiceps</i> ne India to sc China and Indochina.
574	Blue-cheeked Bee-eater (Persian Bee-eater) [Madagascan Bee-eater]	<i>Merops persicus</i> (formerly subsumed in <i>M. superciliosus</i>)	ssp <i>persicus</i> in Region: only other ssp <i>chrysocercus</i> extralimital W Sahara. Breeds SC-SE Turkey Kirwan <i>et al</i> 2008, Middle East, E Caucasus, W, C & S CA Ayé <i>et al</i> 2012, (not C & N Kazakhstan Flint <i>et al</i> 1984, but common BM W & S Kazakhstan W&O 2007, Wassink 2015b, rare breeder Volga Delta Arkhipov 2016), Iraq, Iran, Afghanistan, winters Africa, HBW6. Rare breeder N Kyrgyzstan, Ven 2002. Summer breeder Kuwait, N UAE, Oman, perhaps 1500bp Jennings 2010; common breeding SV to N Batinah Oman, common to abundant PM Oman OBL7 . First June record 2022 at Kasr Ibrim, Lake Nasser Jens Hering pers comm Jul 2022 . 1 shot Lebanon (1st record for 70 years) Dec 2016 Ramadan-Jaradi <i>et al</i> 2017, PM Socotra Porter & Suleiman 2020. Egypt Avib, BE.

			NB1 DB 2009 call ssp <i>chrysocercus</i> Saharan Blue-cheeked Bee-eater. NB2 Name Madagascar Bee-eater was applied to extralimital <i>M. superciliosus</i> , but since has been superseded as Olive Bee-eater, which sp occurs as intra-tropical breeder in NW Somalia and parts of Ethiopia and coastal Eritrea Redman <i>et al</i> 2009. NB3 In boreal autumn some <i>persicus</i> are trans-oceanic migrants India-E Africa (loop migration) preying on dragonflies exploiting ITCZ movement Anderson 2009; this raises the possibility that individuals may join existing largely sedentary populations in Arabia for a season or two (or permanently) before continuing their return migration to India.
575	European Bee-eater	<i>Merops apiaster</i>	Monotypic. Breeds Asia Minor–Afghanistan incl Caucasus, common BM much of Kazakhstan Wassink 2015b; much of Middle East; declining UAE, Oman below 1990s max of 2000bp Jennings 2010. Now almost uncommon BM N Batinah Oman, fairly common PM OBL7 , CA (incl NE Kazakhstan Flint <i>et al</i> 1984), Iran, Afghanistan, winters Africa, HBW6. Egypt Avib, BE
		Picidae	Winkler <i>et al</i> 2013 revise Picidae , mostly via mtDNA, but link to other molecular studies. Genus sequence changes follow Winkler <i>et al</i> 2014 Appendix 2. Shakya <i>et al</i> 2017 constructed a Bayesian tree to analyse rates of diversification and biogeographic patterns within the Picidae .
576	Eurasian Wryneck	<i>Jynx torquilla</i>	ssp <i>torquilla</i> breeds Asia Minor Kirwan <i>et al</i> 2008, W Caucasus, <i>sarudnyi</i> BM & PM N-C & NE Kazakhstan (Wassink 2015b), E Afghanistan (E Dickinson pers comm Ayé <i>et al</i> 2012 [<i>himalayana</i> may occur]) migrant through Region to India or sub-Saharan Africa, HBW7, uncommon N Yemen Porter & Warr 1985, fairly common PM & WV Oman OBL7 . Migrant Kyrgyzstan, Ven 2002. Decline of western populations strongly linked to Sahel rainfall, aggravated by loss of breeding habitat Zwarts <i>et al</i> 2009. Shakya <i>et al</i> 2017 indicate that <i>J. torquilla</i> includes 2 branches, but make no comment as to the significance; presumably, the geographical locations of origin of specimens are behind a paywall for the Supplementary data. From the IOC sssp list, there is no obvious divide of subspecies. Egypt Avib, BE.
577	Speckled Piculet	<i>Vivia innominata</i> (formerly <i>Picumnus innominatus</i>)	Nominate <i>innominata</i> in Region. Given that all other taxa in genus are in New World, relationship under question Gorman 2014: placed in <i>Vivia</i> from genetic studies in Dufort 2015; IOC7.1 retains <i>Picumnus</i> . Common Nurestan Afghanistan Niethammer & Niethammer 1967; NE Afghanistan, H&E 1970, Sayer & van der Zon 1981, Winkler <i>et al</i> (1995), HBW7; Ayé <i>et al</i> 2012 map in Nuristan, as does BLDZ Mar 2018.
578	Eurasian Three-toed Woodpecker	<i>Picoides tridactylus</i>	NE (Altai: ssp <i>tridactylus</i>) & SE-most Kazakhstan (Tien Shan: <i>tianschanicus</i>) scarce residents Wassink 2015b; Kyrgyzstan, K-M&K (2005). NB IOC v2.3 separates from Nearctic American Three-toed Woodpecker <i>P. dorsalis</i> .
579	Arabian Woodpecker	<i>Dendrocoptes dora</i> (formerly <i>Dendropicos dora</i> , <i>Dendrocopos dora</i>) IUCN 2020 assess as Near-Threatened, up from Vulnerable	Monotypic. Genus change: Fuchs & Pons 2015 refine Winkler <i>et al</i> 2013, while noting further work may confirm or revert. SW Arabia, E Red Sea coast, HBW7. Arabian endemic resident where acacia present in woodland & bushy forest in Tihama & foothills, possibly 75 000bp Jennings 2010 who suggested that Near-Threatened should supplant its previous Vulnerable status. Boland & Burwell 2020 in an important paper propose a ranking methodology for taxa at risk in Saudi Arabia; <i>D. dora</i> is nevertheless near the top of the list. The basis of their methodology appears sound, but likely will need development to account for finer-scale subtleties. NB Winkler <i>et al</i> 2014 indicate that this sp may link the <i>Leiopicus</i> & <i>Dendropicos</i> genera as sisters.
580	Brown-fronted Woodpecker (Brown-fronted Pied Woodpecker)	<i>Dendrocoptes auriceps</i> (formerly <i>Leiopicus auriceps</i> , <i>Dendrocopos auriceps</i>)	Genus change: Fuchs & Pons 2015 refine Winkler <i>et al</i> 2013, while noting further work may confirm or revert; ssp <i>auriceps</i> . NE Afghanistan, Paludan 1959 (Nurestan) H&E 1970 Winkler <i>et al</i> (1995), IOC, HBW7, mapped Grimmer <i>et al</i> 1998, 2009, Ayé <i>et al</i> 2012. Westernmost populations are isolates BLDZ Feb 2018.
PT	Middle Spotted Woodpecker PT	<i>Dendrocoptes medius</i> (formerly <i>Leiopicus medius</i> , <i>Dendrocopos medius</i>)	Kamp <i>et al</i> 2019 reveal a deep ancestral divergence of 1.42MY between European populations (<i>medius</i>) & Asian populations (<i>sanctijohannis</i> [isolate Zagros mountain forests, Iran & E into Iraq], <i>caucasicus</i> [N coastal Turkey E to N&S Caucasus, including S Krasnodar as far as Sea of Azov] and <i>anatoliae</i> [coastal W Turkey from Ayvalik S, then E along Mediterranean & S again into coastal N Syria in a thin strip as far as northernmost Lebanon]). Geographically, the distributions are separated by continuous water through the Dardanelles, Sea of Marmara, Black Sea and Sea of Azov. The overwater distances between Krasnodar & Crimea (bridged for the first time in 2018) & between European & Asian Turkey are trivial: <i>anatolia</i> clearly managed a much longer sea-crossing to colonise Lesbos. The 2 clades have little morphological or plumage differences & on mtDNA alone, they are not genetically distant. However, their ancestral divergence & continuous allopatry are sufficient for us to list the 2 clades separately <i>pro tem</i> as likely species within a superspecies. Schweizer <i>et al</i> 2022, using genome-wide data, corroborate the existence of these 2 independent evolutionary lineages. The unexpected marked genomic differentiation, consistent with the mtDNA variation of Kamp <i>et al</i> 2019, reinforces the discordance of the absence of phenotypic divergence, because the narrow separation across the Sea of Marmara & Bosphorous is not an effective barrier. That an undetected broad secondary contact zone might exist requires investigation, as do potential vocalisation differences. Furthermore, the population on Lesbos appears to have some genetic differences from Mainland Turkey populations, and the monotypicity of <i>medius</i> merits further research. English names are informal@OSME. Shakya <i>et al</i> 2017 found a deep split in their Bayesian tree but made no comment on it; <i>pro tem</i> we presume it refers to our putative arrangement below. NB Genus change: Fuchs & Pons 2015 refine Winkler <i>et al</i> 2013, while noting further work may confirm or revert: Sangster <i>et al</i> 2016 prefer placement in <i>Dendropicos</i> at this stage; we await further work.
581	European Middle Spotted Woodpecker	<i>Dendrocoptes [medius] medius</i>	Monotypic. Taxon <i>medius</i> limited in OSME Region to European Turkey. English name informal@OSME. NB IUCN map shows nominate to just NW of Volgograd, but recent record of one at Elton, 210km E of Volgograd and only c 13km from Kazakh border, suggest colonization of road and railway shelterbelts planted to anchor snowdrifts Wassink 2022.
582	Asian Middle Spotted Woodpecker	<i>Dendrocoptes [medius] sanctijohannis</i>	Polytypic: 3 ssp: <i>sanctijohannis</i> Iran, Kermanshah to Shiraz, scarce into E Iraq, <i>caucasicus</i> N Turkey, Izmir E along Black Sea coast to S & N of Caucasus, then WNW to Kerch Strait at Sea of Azov, <i>anatoliae</i> S of Izmir along deep coastal swathe Aegean S & E then into Syria Kamp <i>et al</i> 2019. See Kirwan <i>et al</i> 2008, also Syria Murdoch & Betton 2008, <i>sanctijohannis</i> SW Iran, H&M4, very local E Iraq Ararat <i>et al</i> 2011. English name informal@OSME
583	Lesser Spotted Woodpecker	<i>Dryobates minor</i> (formerly <i>Dendrocopos minor</i>)	Genus change to <i>Dryobates</i> follows Brazil 2009, Winkler <i>et al</i> 2013 & Fuchs & Pons 2015: all other spp in genus are New World spp. Resident (<i>danfordi</i>) much of Turkey (Not C) Kirwan <i>et al</i> 2008; <i>quadrifasciatus</i> SE Azerbaijan, <i>colchicus</i> Caucasus, very local N Iraq Ararat <i>et al</i> 2011, N (<i>hyrcanus</i>) & SW (<i>morgani</i>) Iran HBW7; NW & NE Kazakhstan ssp <i>kamtschatkensis</i> rare resident, WV Wassink 2015b.
584	Himalayan Woodpecker	<i>Dendrocopos himalayensis</i>	2 ssp, only <i>albescens</i> in Region, NE Afghanistan Paludan 1959 (E) H&E 1970 Winkler <i>et al</i> 1995 IOC; HBW7 & Grimmer <i>et al</i> 1998, 2009 maps. Ayé <i>et al</i> 2012 map from near Wakhan SW to past Khyber.
585	Sind Woodpecker (Pied Woodpecker)	<i>Dendrocopos assimilis</i>	Monotypic. SE Iran (E Hormozgan Jan 2009 Winkler <i>et al</i> 2010, perhaps Afghanistan (?), HBW7, R&A 2005, maps in Roberts 1991, Grimmer <i>et al</i> 1998 suggest, but Grimmer <i>et al</i> 2009, R&A 2012 map along much of Afghanistan SE & E border, as does BLDZ .
586	Syrian Woodpecker	<i>Dendrocopos syriacus</i>	ssp <i>syriacus</i> Turkey-Levant & W&S Iran, Caucasus, NE Iraq, SW Iran, HBW7, W Afghanistan (?) R&A 2005, <i>transcaucasicus</i> Transcaucasia & NW Iran, <i>milleri</i> Kuh-e-Taftan Mts SE Iran. Egypt Avib, BE. May be decreasing S Turkey (Kirwan <i>et al</i> 2008), despite N&W range expansion in Europe & further E; now perhaps breeding Kazakhstan Jul 2010 Wassink <i>et al</i> 2011 (single-record vagrant so far Wassink 2015b). Nest-site competition with Great Spotted Woodpecker <i>D. major</i> perhaps avoided in part by preference of <i>syriacus</i> for S- & SE-facing excavations in non-indigenous tree stands, eg False Acacia (Black Locust) <i>Robinia pseudoacacia</i> : only 3 native tree spp out of 14 used in Hungary (Gorman 2020); accordingly, range expansion was eased by this preference.
587	White-winged Woodpecker	<i>Dendrocopos leucopterus</i>	Now treated as monotypic. CA K-M&K 2005. (rare resident S-C & SE Kazakhstan Wassink 2015b). <i>D.I. albipennis</i> & <i>leptorhynchus</i> (now synonymous) Turkmenistan, Bukreev 1997. C & E CA Ayé <i>et al</i> 2012, perhaps N Iran, HBW7, but all suitable habitat in extreme NE Iran has disappeared, Derek Scott pers comm no records since 1950s Scott & Adhami 2006: nevertheless BLDZ maps in Iran near Zabol on Afghanistan border. Resident N Afghanistan Paludan 1959 (as <i>leptorhynchus</i>) R&A 2005, Kyrgyzstan Ven 2002. NB May hybridise with <i>D. major</i> in easternmost Kazakhstan (<i>'tianschanicus'</i>) Ayé <i>et al</i> 2012.

PT	Great Spotted Woodpecker PT	<i>Dendrocopos major</i>	Perktas & Quintero 2012, in a wide-ranging molecular study, found that <i>D. major</i> comprises 4 Clades headed by: <i>major</i> (Eurasia & N Africa), <i>poelzami</i> (Azerbaijan & Iran), <i>japonicus</i> (Japan [& nearby China?]) & <i>cabanisi</i> (China): this arrangement agrees with the morphological criteria of Winkler <i>et al</i> 1995; supporting studies needed to determine the extent of any further splitting, as suggested also in Gorman 2014 & in Winkler <i>et al</i> 2014, the latter additionally citing caution until relationships of some <i>major/leucopterus</i> taxa are clarified. <i>Pro tem</i> , we follow Perktas & Quintero 2012 in their suggested species status for each Clade , but as parts of a superspecies, while awaiting deeper studies. NB1 Shakya <i>et al</i> 2017 do not cite Perktas & Quintero 2012. NB2 Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.
Perktas & Quintero 2012 propose 4 Clades at species level comprising Great Spotted Woodpecker <i>Dendrocopos [major]</i> : the 2 clades in the OSME Region are <i>major</i> & <i>poelzami</i> .			
major clade: comprises major, brevirostris, kamtschaticus, anglicus, pinetorum, parroti, harterti, italiae, hispanus, canariensis, thanneri, mauritanus, numidus			
588	Great Spotted Woodpecker	<i>Dendrocopos [major] major</i>	Sole taxon from <i>major</i> clade in Region is <i>brevirostris</i> , common resident N Kazakhstan Wassink 2015b; Kyrgyzstan (<i>brevirostris</i>), HBW7, Iran Scott & Adhami 2006. NB Wassink 2015b has ' <i>tianschanicus</i> ' scarce resident SE-most Kazakhstan but this taxon may be a hybrid of <i>brevirostris</i> with White-winged Woodpecker <i>D. leucopterus</i> Winkler <i>et al</i> 1995, Ayé <i>et al</i> 2012.
Perktas & Quintero 2012 propose 4 Clades at species level comprising Great Spotted Woodpecker <i>Dendrocopos [major]</i> : the 2 clades in the OSME Region are <i>major</i> & <i>poelzami</i> .			
poelzami clade: comprises poelzami, tenuirostris & paphlagoniae			
589	Hyrcanian Spotted Woodpecker	<i>Dendrocopos [major] poelzami</i>	All 3 taxa of <i>poelzami</i> clade occur in Region: <i>poelzami</i> SE Azerbaijan, N Iran (Scott & Adhami 2006), SW Turkmenistan H&M4, Tajikistan HBW7; <i>tenuirostris</i> Caucasus & Transcaucasia, & <i>paphlagonia</i> in N Asia Minor. English name informal@OSME suggested by Abolghasem Khaleghizadeh <i>in litt</i> as more contemporary than the previous informal epithet 'Sasanian'. NB English name informal@OSME; DBWP List (Jan 2018) uses English name 'Caspian Great Spotted Woodpecker'.
PT	White-backed Woodpecker PT	<i>Dendrocopos leucotos</i>	IOC2.11 draft suggested split of <i>D. lilfordi</i> as Lilford's Woodpecker from <i>D. leucotos</i> , but IOC10.2 avoids split, presumably because Fuchs <i>et al</i> 2013 concentrated on a single gene: Pons <i>et al</i> 2020 remedy that deficiency & support split. Shakya <i>et al</i> 2017 appear not to have sampled <i>lilfordi</i> , making no mention.
590	White-backed Woodpecker	<i>Dendrocopos [leucotos] leucotos</i>	Gorman 2014 notes ssp <i>leucotos</i> occurs to NW, N & NE of Region; ssp <i>uralensis</i> disparate areas NW & NE Kazakhstan rare resident Wassink 2015b, HBW7 (& to points E).
591	Lilford's Woodpecker	<i>Dendrocopos [leucotos] lilfordi</i>	Re PT aspect: Degree of clinal overlap & position of extralimital Asian taxa still unsettled: Brazil 2009 speculates on 9 such ssp, & Gorman 2014 also lists 9. Kirwan <i>et al</i> 2008 map <i>lilfordi</i> as scattered on Turkish mountains away from C&W. N Turkey-E Caucasus Gorman 2014: Pons <i>et al</i> 2020 extend that to Georgia (Specimen location coordinates place it in westernmost Georgia, although the listed location name is in the Russian Krasnodarskiy Kray) and perhaps just into Iran at the Azerbaijan border.
592	Black Woodpecker	<i>Dryocopus martius</i>	Only taxon in Region <i>martius</i> ; taxon <i>khamensis</i> extralimital to China E Gorman 2014, Winkler <i>et al</i> 2014 elevating to species rank . N Turkey-Caucasus-Turkmenistan border, N Iran N, NE & NW Kazakhstan HBW7; rare resident W&O 2007, 2008, revised to NW, N & E-most Kazakhstan Arend Wassink <i>in litt</i> 2009, Ayé <i>et al</i> 2012, Wassink 2015b.
593	Scaly-bellied Woodpecker	<i>Picus squamatus</i>	<i>P. s. flavirostris</i> SE Turkmenistan, Bukreev 1997, extinct Koblik & Arkhipov 2014. Afghanistan, Winkler <i>et al</i> 1995 (resident <i>flavirostris</i> S&W, <i>squamatus</i> E Paludan 1959), HBW7; mapped Afghanistan Grimmer <i>et al</i> 1998, 2009, occurs Wakhan Ayé 2007: BLDZ Feb 2018 maps W Afghanistan/S Turkmenistan & NE Afghanistan; E Iran R&A 2005, but unlikely since time of Zarudny (1911), habitat now lacking, Derek Scott pers comm, no records since 1900s Khaleghizadeh <i>et al</i> 2017. BLDZ May 2021 also maps in W, E & SE Afghanistan.
PT	European Green Woodpecker PT	<i>Picus viridis</i>	Perktas <i>et al</i> 2011 reinforce separation of extralimital Iberian Green Woodpecker <i>P. [v.] sharpei</i> (IOC3.5) & Levaillant's Green Woodpecker <i>P. [v.] levaillanti</i> , but note that <i>viridis</i> i& <i>innominatus</i> are not reciprocally monophyletic, don't clearly meet BSC criteria and appear to be poorly differentiated morphologically (<i>ie</i> would likely fail the test of Tobias <i>et al</i> 2010). However, Pons <i>et al</i> 2019 find strong genetic divergence between <i>sharpei</i> and <i>viridis</i> , & identify a narrow hybrid zone in SW France that limits introgression at both boundaries. Shakya <i>et al</i> 2017 find a divergence within <i>P. viridis</i> , but do not comment further; presumably it involves <i>P. levaillantii</i> . In the ORL, we place <i>innominatus</i> as ssp, Zagros Green Woodpecker: IOC3.4 supports foregoing. NB Collar 2013 counsels caution on conflicting morphological/reproductive isolation and molecular data as to assigning rank
594	European Green Woodpecker (Eurasian Green Woodpecker)	<i>Picus viridis</i>	Nominate not recorded in OSME Region. N&E Turkey, Caucasus, NE Iraq (<i>karelini</i>), (S Caspian <i>karelini</i> not <i>viridis</i> Khaleghizadeh <i>et al</i> 2017), HBW7, SE&SC Turkey Kirwan <i>et al</i> 2008, ssp <i>karelini</i> SW Turkmenistan Ayé <i>et al</i> 2012. H&M4 give <i>karelini</i> for N Iran (but see ssp <i>innominatus</i> below).
595	Zagros Green Woodpecker ('Iranian Green Woodpecker')	<i>Picus viridis innominatus</i>	N Iran (Zagros Mountains taxon <i>innominatus</i>), HBW7. Because <i>innominatus</i> is geographically separated in Iran's Zagros Mountains, it is convenient to refer to that taxon as 'Iranian' or 'Zagros Green Woodpecker'. NB DBWP List (Jan 2018) assigns English name 'Mesopotamian Green Woodpecker'; Ancient Mesopotamia bordered the Zagros mountains, but did not include them..
596	Grey-headed Woodpecker	<i>Picus canus</i>	ssp <i>canus</i> N Turkey (isolates S-SC Turkey) Kirwan <i>et al</i> 2008, <i>canus</i> very rare non breeding SV, WV <i>jessoensis</i> (or <i>canus/jessoensis</i> intergrades) scarce resident montane NE-most Kazakhstan Wassink 2015b, Ayé <i>et al</i> 2012. NB1 IOC reverts to English name Grey-headed Woodpecker (earlier reassignment to <i>Dendropicos spodocephalus</i> [E Sudan-Tanzania] invalid when its elevation to species rank was not accepted). NB2 Splits of extralimital taxa: <i>P. dedemi</i> Sumatran accepted split IOC 11.2 as Sumatran Woodpecker; <i>P. guerini</i> Grey-faced (8 ssp) Woodpeckers is strong candidate Gorman 2014.
		Falconidae	H&M4, IOC4.2 place Falconidae remote from Accipitridae , preceding Cacatuidae . Recent studies show that falcons and several parrots share the same moult sequence, suggesting descent from a common ancestor Leo Joseph 2017. For a comprehensive overview of raptor migration, wintering and persecution in the Arabian Peninsula, see McGrady 2018.
McGrady 2018 addresses risks to diurnal raptor migration across the Arabian Peninsula from illegal shooting, trapping, accidental or deliberate poisoning and accidental electrctution			
597	Lesser Kestrel	<i>Falco naumanni</i>	Monotypic. Colonial, declining, summer breeder widespread N OSME Region: scarce BM Kazakhstan (5000-10-000bp Zollinger & Hagemeyer 1994) & PM (1997 survey SE Kazakhstan Parr <i>et al</i> 2000) Wassink 2015b; rare Afghan Pamirs Argandeval 1983), Wakhan 2006 Ayé 2007, SB N Afghanistan, PM S BLDZ map Mar 2018, including Iraq Ararat <i>et al</i> 2011, Iran Scott & Adhami 2006 locally common SB N&W Iran Khaleghizadeh <i>et al</i> 2017, extinct Cyprus by 1950 Flint 2019. Few resident, some winter S of Region, most to Africa, easternmost OSME populations may winter in India, Naoroji 2006; some are trans-oceanic migrants boreal autumn India-E Africa preying on dragonflies exploiting ITCZ movement through OSME sea area Anderson 2009; this correlates with Oman migrant status - fairly common PM spring, rare PM autumn OBL7 . Declining, Ferguson-Lees & Christie (F-L&C) 2001. Egypt Avib. BE
598	Common Kestrel	<i>Falco tinnunculus</i>	4 of 12 sssp in Region, where <i>tinnunculus</i> resident in much of Region, migratory in N, FL&C 2001. Resident & winterer Afghanistan Argandeval 1983; <i>stegmanni</i> (now subsumed in <i>perpallidus</i>) breeding <i>tinnunculus</i> passage Paludan 1959: <i>archeri</i> resident Socotra (Taxonomic status worth investigating?), <i>rupicolaeformis</i> in Egypt & S Yemen H&M4. Abundant PM, WV, thinly widespread resident Oman OBL7 . Perhaps 10 000bp Arabia Jennings 2010. Egypt Avib. BE
PT	Red-necked Falcon PT	<i>Falco ruficollis (sensu lato)</i>	Split from African extralimital <i>F. (c.) horsbrughii</i> Red-necked Falcon, Africa by F-L&C 2005, hence our reversion to previous English name, Red-headed Falcon. IOC10.1, H&M4 remain unsplit. However, del Hoyo & Collar 2014b support split, noting <i>horsbrughii</i> junior ssp to <i>ruficollis</i> making Red-necked Falcon <i>F. ruficollis</i> (2 ssp), leaving Red-headed as <i>F. chiquera</i> : Inskipp & Collar 2015 concur, citing Tobias <i>et al</i> 2010 criteria; draft IOC11.2 proposes this split. NB Fuchs <i>et al</i> 2015 multiple molecular techniques demonstrate that <i>F. chiquera</i> belongs to the Hierofalcon and Peregrine/Barbary Falcon clade.

599	Red-headed Falcon (Red-necked Falcon) (Red-headed Merlin)	<i>Falco chicquera</i>	Possibly occurred SE Iran since collected by Zarudny 1911, Roselaar & Alianbadian 2010, but no records since 1950s Scott & Adhami 2006 now likely extinct Iran Khaleghizadeh <i>et al</i> 2017, (Afghanistan?) R&A 2005, mapped Afghan border Grimmer <i>et al</i> 1998, 2009, following Roberts 1991 (S of Khyber), as does BLDZ Mar 2021 (6km from Torkham crossing), rare Pakistani side of Khyber pass Naoroji 2006. However, BLDZ Mar 2021 also maps as an isolate residency in large part of SE Iran. Breeds Gujarat Naoroji 2011 (1988 records), who does not split, nor does IOC7.1. NB Nearest <i>F. ruficollis</i> Red-necked Falcon population Ethiopia, SW of Djibouti.
PT	Red-footed Falcon PT	<i>Falco vespertinus (sensu lato)</i>	IOC4.2, H&M4 separate the next two taxa. Fuchs <i>et al</i> 2015 apply multiple molecular techniques to show a distant relationship, noting also the very different female plumages.
600	Red-footed Falcon (Briefly Western Red-footed Falcon)	<i>Falco vespertinus (sensu stricto)</i> IUCN re-assess from Near-Threatened to Vulnerable	Monotypic. Common BM N Caucasus, N Caspian, N Kazakhstan, migrant to southern Africa F-L&C 2001 (uncommon spring Israel, common autumn Perlman & Meyrav 2009, vagrant Kyrgyzstan, scarce migrant (?), Ven 2002, N Iran Roselaar & Aliabadian 2010. Iraq Salim <i>et al</i> 2012, 3 records Kuwait, one juv Malekshahi City, Ilam Province Iran Nov 2016 IBRC , 3rd for UAE Saih al Salam Apr 2018 EBRC . Possibly Afghanistan R&A 2005 (accidental or on passage Dasht-e-Navar Mts Afghanistan Argandeval 1983, but are these records F.[v] <i>amurensis</i> ?), vagrant Iran Scott & Adhami 2006. Egypt Avib, BE. NB Katzner <i>et al</i> 2016 reveal a clockwise loop migration of C Asian populations, funnelling outward migration through Krasnoyarsk, Caucasus, Iraq & Saudi Arabia, but return migration crosses the Sahara to Libya to southern Europe (Italy-Greece) before heading WNW to breeding grounds.
601	Amur Falcon (Briefly Eastern Red-footed Falcon)	<i>Prunella ocularis ocularis</i>	Monotypic. Migrates 11000km from E China to southern Africa, occurs OSME Region; most (many?) cross Indian Ocean F-L&C 2001 in autumn; trans-oceanic migrants in boreal autumn, India-E Africa preying on dragonflies exploiting ITCZ WSW movement through OSME sea area Moreau 1938 (Unspecified "falcons"), Anderson 2009; now satellite-tracked by WWGBP & also via UAE funding support Dixon <i>et al</i> 2011. When ITCZ more westerly, possible explanation of irregular occurrence large numbers Socotra Redman <i>et al</i> 2009 & scarcity S Yemen Nov 84 Warr 1992 & Socotra 03 Dec 99 Aspinall <i>et al</i> 2004. Although most perform a land-based return loop migration to India on their way to their breeding grounds, some (in appropriate weather conditions) cross the Indian Ocean from West Africa directly to India: a female tracked from S Africa crossed the Indian Ocean to Mizoram India 4800km in 5 days DB42(3) : 215. (Paludan 1959 – Afghan passage 'F. <i>vespertinus</i> ssp (?) likely <i>amurensis</i> ?). 1st record Iran Jan 2009 Winkel <i>et al</i> 2010, 2nd Anarestan, Bushehr 31 Oct 2016 IBRC ; 1st record Kuwait May 2010 (photo) DB 2010, 2nd record female May 2012 KORC , 3rd Jahra May 2018 KORC ; one al-Abraq (Saudi Arabia?) Sep 2015 Haas 2017, 12 Qatar records by Apr 2021 QBRC ; 1st for Cyprus Paphos Apr/May 2016 SG38(2) : 226, (28 Apr 2016 Colin Richardson <i>in litt</i> , image DB38(4) : 241, CRC), 2nd Avdimou Bay, Limassol Oct 2021 DB43(6) : 469; 1st for Georgia Kochebi Lake Apr 2019 & 1st for Uzbekistan at Berdelsay May 2019 DB41(3) : 198. 3 at Qhooqa Plain, Socotra, Yemen & other close locations Dec 2021 SG44(1) : 257. Uncommon PM Oman OBL7 . H&M3 Afghan corrigenda E Dickinson pers comm. Reported Dec 06 Oman IH pers comm UAE PH pers comm.
602	Eleonora's Falcon	<i>Falco eleonora</i>	Monotypic. Dark-phase comprises 2% (homozygous dark) of juveniles, but after 1st year, a further 28% (heterozygous dark) Ristow <i>et al</i> 1998, Ristow <i>et al</i> 2000. Small, but probably largely undiscovered population Turkey Kirwan <i>et al</i> 2008; may breed Syria Murdoch & Betton 2008, which birds possibly rare spring & autumn migrants Israel Perlman & Meyrav 2009. Migrates Oct-Nov from W Mediterranean mainly to Madagascar (juveniles 2 weeks after fledging) mostly across the Sahara Gschwend <i>et al</i> 2008, López-López <i>et al</i> 2009, Mellone <i>et al</i> 2013, not via Suez (Israel) & Red Sea <i>contra</i> F-L&C 2001. Those from the E Mediterranean have been tracked following the Nile or the land on either side of the Red Sea (Hellenic Ornithological Society website accessed Apr 2020; Jem Babbington <i>in litt</i>), as have those from Cyprus Hadjikyriakou <i>et al</i> 2020a. Hadjikyriakou <i>et al</i> 2020b revealed that in the non-breeding season, the species first occupies dry habitats in Madagascar, then gradually shifts to more cultivated areas before spending the last 2 months before the return migration in humid rain-forest at higher altitudes, following seasonal changes in insect abundance on the island: humid forest habitat is declining at over 10% per decade. 1st for Oman Jun 2015 OBRC ; 1st accepted record Kuwait at Jahra Jun 2018 KORC . Vagrant Georgia, Armenia Koblik & Arkhipov 2014, 5th for Georgia Chorokhi Delta May 2022 DB44(3) : 225. Winter habitat in Madagascar is degraded humid forest edge Mellone <i>et al</i> 2012. Egypt Avib, BE
603	Sooty Falcon	<i>Falco concolor</i> Vulnerable (IUCN 3.1) .	Monotypic. Vagrant E Mediterranean Kirwan <i>et al</i> 2008. Only distantly related to <i>F. eleonora</i> (closer to Eurasian Hobby <i>F. subbuteo</i> & African Hobby <i>F. cuvieri</i> Fuchs <i>et al</i> 2015), breeds Suez, Red Sea, Oman, Gulf, scarce breeders Iran Scott & Adhami 2006, rare & local 2 sites Qeshm Island & Tabas S Khorasan Khaleghizadeh <i>et al</i> 2017, high-altitude records 2013 at 2900m asl Tehran Province & 2015 Central Alborz at 2400m asl, well above previously documented altitude of 1400m asl Kashfi <i>et al</i> 2019: declining Bahrain Kavanagh & King 2008, UAE Aspinall 1996, uncommon summer visitor Israel Perlman & Meyrav 2009 (thinly widespread breeder Judean & Negev deserts & Eilat mountains whose numbers estimated at 75-92bp Goren 2019; vagrant C&N Israel Yoav Perlman <i>in litt</i> Nov 09), W Pakistan coast Naoroji 2006, 450+ pairs Arabia Jennings 2007a, (based on Kavanagh & King 2008 revisionist case for reducing world population estimate by 40 times) & restated in Jennings 2010; Winters W & SW Madagascar, some in coastal Mozambique; Oman breeders & juveniles tracked overland, crossing Gulf of Aden, some arcing as far W via S Sudan & Uganda Aljahdhami <i>et al</i> 2021. McGrady <i>et al</i> 2017 conclude that adult mortality is the main driver of population decline, hence the IUCN rating. McGrady <i>et al</i> 2018 conclude that reduced numbers of pairs occupy much the same Omani range as before, but are vulnerable to disturbance and construction activities, though some recovery is possible if constant monitoring is achieved, though mortality rates are likely to thin the population further. Habib 2019a estimates from 6 years of survey, including Red Sea islands, that Egyptian population is no greater than 190 bp, a drop of 27% in less than two decades. However, Western Desert surveys indicate Egyptian population likely 300-400bp and Libyan population 250-500bp Riad <i>et al</i> 2021b. 7 at different locations Jun 2022 between Aswan & Abu Simbel, Egypt, one carrying prey, so possibly nesting Jens Hering pers comm Jul 2022 (New records for Lake Nasser). 3rd Qatar record Jun 2014 QBRC . Fairly common localised & decreasing SB Oman OBL7 . Seemingly bred at El Moghra Oasis (Markaz?) Western Desert Egypt Goodman <i>et al</i> 1986, certainly breeds Sep al Jaghub Oasis E Libya only 60km from Siwa Oasis Egypt Isenmann <i>et al</i> 2016; 1st record for Iraq Zibliya Sep 2020 SG43(1) : 172, 2nd (4th?) for Turkey Milleyha, Samandag, Hatay Jul 2021 TBRC . Migrates Oct, wintering Madagascar, Angola, F-L&C 2001. NB Observed being parasitised by Egyptian Vulture <i>Neophron percnopterus</i> in Israel Goren & Segall 2020. Egypt Avib, BE
PT	Merlin PT proposed	<i>Falco columbarius</i>	Mindell <i>et al</i> 2018 propose split of American Merlin <i>F. columbarius sp novo reductio</i> & Eurasian Merlin <i>F. aesalon sp novo</i> . We await further acceptance pro tem
604	Merlin (European Merlin) (Eurasian Merlin: Mindell al 2018)	<i>Falco columbarius (F. aesalon</i> Mindell <i>et al</i> 2018)	All 4 ssp occurring in Region occur Kazakhstan; <i>aesalon</i> (PM, WV), <i>insignis</i> (unconfirmed but highly probable PM), <i>pallidus</i> (scarce BM, PM) & rare resident <i>lymani</i> (Tien Shan, S Altai, Taur Mts) Wassink 2015b. Holarctic taiga breeder, N Kazakhstan, widespread resident Kyrgyzstan (<i>insignis</i> ? <i>lymani</i> ?), Ven 2002, winters mid-OSME Region (uncommon Israel Perlman & Meyrav 2009, common WV N Iran Khaleghizadeh <i>et al</i> 2017) to Pakistan, rare in India Naoroji 2006, wanders widely, F-L&C 2001, winterer Afghanistan R&A 2005 (<i>insignis</i> Paludan 1959, <i>pallidus</i> in far W R&A 2012), common winterer Afghan Pamirs Argandeval 1983, mountain breeder E boundary of CA Ayé <i>et al</i> 2012. 4-record vagrant Oman OBL7 , 5th record Feb 2016 SG38(2) : 233. 12 Qatar records by Nov 2021 QBRC . Egypt Avib, BE. NB1 Though DB 2009 calls sssp <i>subaesalon</i> & <i>aesalon</i> European, <i>columbarius</i> Taiga, & <i>pallidus</i> Pallid Merlins, Fuchs <i>et al</i> 2015 convincingly demonstrate that <i>F. aesalon</i> is a separate species, American Merlin. NB2 Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009.

605	Eurasian Hobby (Northern Hobby)	<i>Falco subbuteo</i>	ssp <i>streichi</i> extralimital S China; <i>subbuteo</i> breeds N Eurasia, N OSME Region, common BM, PM Kazakhstan Wassink 2015b, Iran, Levant, Afghanistan (R&A 2005) (common winterer, may breed Kabul Region Argandeval 1983) E as far as Bhutan Naoroji 2006, winters southern Africa, F-L&C 2001; fairly common PM Oman OBL7 ; some are trans-oceanic migrants boreal autumn India-E Africa preying on dragonflies exploiting ITCZ movement Anderson 2009, vagrant Socotra Porter & Suleiman 2020. Egypt Avib, BE
PT	Hierofalcon assemblage PT	<i>Falco biarmicus</i> , <i>F. jugger</i> , <i>F. cherrug</i> , <i>F. rusticolus</i>	The term Parent Taxon here accommodates the findings of Nittinger <i>et al</i> 2005 & Nittinger <i>et al</i> 2007 whose studies' wide range of genetic markers show little differentiation in this assemblage. Hence it is be feasible to regard the assemblage as a superspecies Extralimital Prairie Falcon <i>F. mexicanus</i> was found to be related more closely to Peregrine <i>F. peregrinus</i> [<i>contra</i> some earlier studies] & so is not unequivocally a hierofalcon): any shared ancestry is recent.
Corso <i>et al</i> 2018 documents by inference greater declines of Lanner <i>F. biarmicus</i> sspp <i>feldeggii</i> , <i>tanypterus</i> & <i>erlangeri</i> populations than previously considered. Corso Apr 2019 <i>in litt</i> & Ali Boyla Apr 2019 <i>in litt</i> note that the rapid declines in Italy & Turkey continue unabated toward regional & continental extinction & call for urgent reclassification of IUCN/BirdLife risk category (currently EN in Europe & V Worldwide) to CE in Europe, the Middle East and North Africa.			
606	Lanner Falcon	<i>Falco biarmicus</i>	CE (informally adopted@OSME). See PT notes & banner above. Corso 2018 through circumstantial analysis indicates rapid decline of <i>feldeggii</i> & <i>tanypterus</i> populations in OSME Region & of <i>erlangeri</i> population in N Africa towards impending extinction. A proximate cause is illegal poaching for falconry mostly in Arabia, the problem made worse by lack of studies in the remote breeding areas in the Region and by confusion of observers with Saker <i>F. cherrug</i> and with the <i>calidus</i> ssp of Peregrine Falcon <i>F. peregrinus</i> . Distribution: <i>feldeggii</i> Transcaucasia & NW Levant, <i>tanypterus</i> Egypt, Israel, Arabian Peninsula & Iraq; 3 extralimital sspp H&M4. The analysis of Fuchs <i>et al</i> 2015 indicates that <i>F. biarmicus</i> is not monophyletic. Scattered populations Turkey (c20bp Corso 2018), Middle East, Caucasus, N Iraq F-L&C 2005, rare Israel Perlman & Meyrav 2009, scarce resident Iran Scott & Adhami 2006, but few recent records Khaleghizadeh <i>et al</i> 2017. Now rare but still widespread Arabia, but modern confirmed breeding records only SW Yemen & SW Saudi Arabia, best estimate <100bp Jennings 2010: rare PM & WV Oman, escapes also occur OBL7 . 4th for Cyprus Cape Drepanum Feb 2020 CRBC . Prime habitat (less steep open slopes than preferred by Peregrine <i>F. peregrinus</i>) & secondary habitat characteristics unquantified, thus affecting conservation startegy Amati <i>et al</i> 2014. Egypt <i>eg</i> Sándor & Moldován 2010.
607	Laggar Falcon	<i>Falco jugger</i>	Monotypic. See PT notes above. S Tajikistan, NE Afghanistan R&A 2005 (Nurestan Argandeval 1983). Afghanistan & (formerly?) some other CA countries, F-L&C (2005): vagrant (former?) Turkmenistan, Kyrgyzstan, Tajikistan Koblik & Arkhipov 2014. Formerly bred Syria Murdoch & Betton 2008. Extralimital, Indian subcontinent Naoroji 2006; poss vagrant Kyrgyzstan, Ven 2002. Iran once, Misonne 1976, Khaleghizadeh <i>et al</i> 2017. NB doubts re some Afghan (& other?) records on habitat grounds; suspect individual variation in other large falcons & earlier ID inadequacy (Raffaël Ayé <i>in litt</i>). However, Ayé <i>et al</i> 2012 map in Afghan E Nuristan province on Pakistan border, but BLDZ maps as resident to beyond Kabul Mar 2018; scarce Baluchistan Pakistan up to longitude of Iran border.
PT	Saker Falcon PT NB Pfeffer 2009 notes uncritical acceptance of earlier incomplete assumptions of taxa distribution; he revives <i>coatsi</i> and erects <i>anatolicus</i> , <i>inter alia</i> . Support from Igor Karyakin & Evgeny Potapov.	<i>Falco cherrug</i> Endangered	Parent Taxon rare in winter Oman <i>eg</i> Dec 06 IH pers comm. Nittinger <i>et al</i> 2007 strongly suggest not only is PT not definable from ratio of mt haplotypes in both <i>cherrug</i> & <i>milvipes</i> populations, but that the two sspp are not upheld by microsatellite analyses. However, they also suggest that besides genetic drift, morphological and phenotypic traits characteristic of the sspp evolved quickly (but with long gradual W-E cline) as adaptations to changing environmental conditions and hunting behaviour (as for some other raptors). However, Zhan <i>et al</i> 2015 examined exonic & intronic single nucleotide polymorphism in many Saker populations concluding that the species essentially is monotypic and that any differences between these populations do not match any hypothesised subspecies' distribution: plumage differences are clinal between populations previously identified as <i>cherrug</i> & <i>milvipes</i> ; furthermore datasets are available in supplementary info and in GenBank. <i>Pro tem</i> , the ORL will refer to ' <i>cherrug</i> -type' and ' <i>milvipes</i> -type' populations, while accepting the clines described in Zhan <i>et al</i> 2015. On those grounds PT is applied as an informal label for these groups. That said, the analysis of Fuchs et al 2015 indicates that <i>F. cherrug</i> is not monophyletic. Note also that Karyakin 2011 provides convincing phenotypical & molecular rationales to regard ' <i>altaicus</i> ' as but one of two colour morphs that appear in a variety of appropriately-marked broods in several Saker populations both inside and beyond breeding areas previously hypothesised as being core ' <i>altaicus</i> ' range: <i>pro tem</i> , we discount all earlier hypotheses on this form, <i>eg</i> Nittinger <i>et al</i> 2007. Saker <i>sensu lato</i> shares ancestry with <i>F. biarmicus</i> , <i>jugger</i> , separation recent Nittinger <i>et al</i> 2007. Kovács <i>et al</i> 2014 present a detailed & viable conservation action plan, but several nations declined to respond to their questionnaire, thus weakening the likely implementation. First recent record of Saker Falcon breeding in Armenia in 2018 considered to be escapes (I Karyakin <i>in litt</i> to Korepov & Aghababayn) from Arabian falconry birds Korepov & Aghababayn 2020: such birds likely to be disparate crosses from earlier generations across unknown populations, and so cannot be included in ' <i>cherrug</i> -type' or ' <i>milvipes</i> -type' categories. Dixon et al 2019 document reasonable success of hacking captive-bred birds into the wild, surviving birds returning to breed in the same general area as the release site in Bulgaria. NB1 One drawback of Karyakin 2011 is that the main thrust of the paper, that all sspp are valid, is weakened by the lack of a published dataset for the molecular conclusions reached therein. NB2 Given the maps in Karyakin 2011, the modifiers 'Eastern' and 'Western' are hideously inappropriate & are superseded by the informal@OSME modifiers 'Northern' and 'Southern' respectively. NB3 Sielecki <i>et al</i> 2009 demonstrate extensive mobility & movements of radiotracked individuals over hundreds of km, Hungarian birds reaching Spain & Ukraine. NB4 Rozsypalová <i>et al</i> 2021 by radiotracking, establish strong tendencies for Pannonian Basin birds (small sample size) to undergo short-distance migration to wintering grounds within a day's flight of the breeding areas.
608	'Northern Saker Falcon' ('Western Saker Falcon') {Saker Falcon}	<i>Falco cherrug</i> (' <i>cherrug</i> -type') Endangered	See hierofalcon PT notes above. Group comprises only the remarkably homogenous <i>cherrug</i> -type: <i>saceroides</i> is an invalid taxon, being in a narrow zone of hybridisation from the Altai along the Russia-Mongolia border with <i>milvipes</i> -type. Up to the 1970s, <i>cherrug</i> -type occupied a continuous area from SW Germany to eastern Mongolia, but is now absent from western Russia, possibly as an inevitable effect of putting the steppes under agriculture. PM, WV Turkmenistan Rustamov 2015. Winterer only Israel Perlman & Meyrav 2009; uncommon PM & WV Oman, escapes also occur OBL7 ; 1700+ electrocuted Mongolian power lines 2013-2018 (88% 1st-calendar-year) DB42(4) : 279. NB cline <i>cherrug</i> / <i>milvipes</i> intergrades C Kazakhstan W&O 2007. Egypt Avib, BE.
609	'Southern Saker Falcon' ('Eastern Saker Falcon') {Saker Falcon}, (Shangar Falcon)	<i>Falco cherrug</i> (' <i>milvipes</i> type') Endangered	See hierofalcon PT notes above. Group comprises <i>milvipes</i> -type populations, but those attributed formerly as sspp <i>anatoliae</i> , <i>aralocaspi</i> , <i>coatsi</i> , & extralimital <i>hendersoni</i> & <i>progressus</i> do not coincide with any molecular research differentiation. <i>F.c coatsi</i> Turkmenistan, Bukreev 1997, resident Rustamov 2015. CA, Caucasus, now rare breeder N Iraq Salim <i>et al</i> 2012, Afghanistan (mostly winterers of <i>cherrug</i> -type, steppe breeder, recorded Redman 1981); <i>milvipes</i> -type, scarce, widespread breeder N Afghanistan BLDZ map Mar 2018 (interpreted), protection poorly enforced Kyrgyzstan, Ven 2002; locally fairly common resident Uzbekistan Martin <i>et al</i> 2014 [Records from Turkey-Iran-southern Kyrgyzstan thence to northern China may better be assigned to <i>milvipes</i> -type group, montane breeders, but vagrancy of <i>cherrug</i> -type possible (interpretation of Ayé <i>et al</i> 2012 text)], although polymorphism more likely explanation Zhan <i>et al</i> 2015, almost extinct Syria Murdoch & Betton 2008. Breeds NW Afghanistan (Pamirs Argandeval 1983), E Kazakhstan W&O 2007, R&A 2005, scarce resident Iran Scott & Adhami 2006; only 2 recorded Marivan County, Kurdistan Province, Iran Zarei <i>et al</i> 2018. Certainly <i>cherrug</i> -type straggler to India R&A 2012] NB Phenotypical separability of <i>cherrug</i> & <i>milvipes</i> bedevilled by gradual cline of plumage change from brown (west) to barred russet-brown & grey (east), highly variable populations in between, and variable individuals within, W&O 2007. Winters C-E Afghanistan, C-W Pakistan (from map in Roberts 1991)

610	Gyr Falcon	<i>Falco rusticolus</i>	Monotypic, but note that the analysis of Fuchs <i>et al</i> 2015 indicates that <i>F. rusticolus</i> is not monophyletic. See hierofalcon PT notes above. N Kazakhstan F-L&C 2005 (only as 10-record vagrant Arend Wassink <i>in litt</i> Nov 2014, Wassink 2015b) vagrant N Kyrgyzstan Ven 2002, rare WV G&G 2005, vagrant Stavropol Krai, Krasnodar Krai, rare vagrant Georgia, has wintered Kazakhstan, Uzbekistan & Tajikistan Koblik & Arkhipov 2014; possibly NE Afghanistan R&A 2005, accidental/rare Afghan Pamirs Argandeval 1983. Very rare WV Mongolian Altai some 50km from easternmost Kazakhstan Gombobaatar & Leahy 2019.
PT	Peregrine Falcon PT	<i>Falco peregrinus (sensu lato)</i>	Parent Taxon here included <i>pelegrinoides</i> due to highly unclear status of this taxon, but IOC4.4 treated as nominate of Barbary Falcon <i>F. pelegrinoides</i> . However, IOC9.2 now follows Wink 2018. H&M4 list 18 sssp, including <i>babylonicus</i> & <i>pelegrinoides</i> , but many taxa are poorly known. Wink 2018 presents a phylogeny of Falconidae and a phylogeography of Peregrine Falcons; taxa radiation & evolution relatively recent. NB Eurasian Arctic migrant breeders use 5 separate flyways to reach wintering areas in Asia, showing strong fidelity to route and breeding location: 2021 <i>Nature</i> 591 : 259-264 (from DB43(3) : 229).
611	Peregrine Falcon ('European Peregrine')	<i>Falco peregrinus (sensu stricto)</i>	<i>F.p. brookei</i> (popular informal name 'Mediterranean Peregrine') Turkmenistan (not supported Ayé <i>et al</i> 2012), Bukreev 1997, Turkey Kirwan <i>et al</i> 2008, N Iraq Ararat <i>et al</i> 2011. Scarce in most CA: <i>calidus</i> (popular informal name 'Siberian Tundra Peregrine') very rare, irregular BM & PM E-most Kazakhstan, <i>peregrinus</i> scarce PM, WV NE Kazakhstan Wassink 2015b, WV, PM Ayé <i>et al</i> 2012, may breed Iran, but WV, PMScott & Adhami 2006, widespread S Yemen Warr 1992, uncommon to rare Israel Perlman & Meyrav 2009, 10th record Jordan Al Jafr Oct 2018 JBRC ; fairly common to common PM & WV Oman, rare breeder OBL7 , but escapes also known, Afghanistan (likely ssp <i>calidus</i> in winter R&A 2005) F-L&C (2005), migrant & rare winterer Kyrgyzstan, Ven 2002, winterer (<i>calidus</i>) Indian subcontinent Naoroji 2006; Yamal-breeding birds (<i>calidus</i>) tracked to winter in Hormozgan, Iran DB41(2) : 133. Argandeval 1983 gives PT as breeding Nurestan (Afghanistan). Egypt Avib, BE. NB1 all Peregrine taxa probably recently diverged from common ancestral population (Naoroji 2006). NB2 DB 2009 call sssp <i>calidus</i> Tundra & <i>brookei</i> Mediterranean Peregrine Falcons. NB3 The Socotra resident taxon morphologically resembles <i>F.p. minor</i> specimens; taxon <i>minor</i> has been suggested as occurring Yemen, but <i>calidus</i> is the migrant and WV in Arabia Jennings 2010: taxonomic position examined in Porter & Forsman in prep. Oman breeding records possibly assignable to escapes.
PT	Barbary/Red-capped' Falcon PT	<i>Falco (peregrinus) pelegrinoides</i>	Molecular data from Fuchs <i>et al</i> 2015 indirectly gave weight to <i>babylonicus</i> as ssp of <i>peregrinus</i> , but differentiation of many taxa historically less than clear Wink <i>et al</i> 2000, 2010. Confusion of existing taxonomic opinions: <i>eg</i> attribution of <i>babylonicus</i> to <i>F. peregrinus</i> or <i>F. pelegrinoides</i> , or to superspecies to include all these taxa (Summarised very well by Naoroji 2006, who notes <i>F.peregrinus peregrinator</i> (Shaheen/ 'Black Shaheen') is sedentary resident India, NE Pakistan, but see Hypothetical List). White <i>et al</i> 2013 balance the evidence in favour of <i>pelegrinoides</i> being ssp of <i>peregrinus</i> . Wink 2018 agrees, noting lack of genetic distinction in most sssp due to recent evolution. However, taxon <i>babylonicus</i> is more distinct, occupying a band from SE Caspian E to easternmost China, narrowest just S of Himalayas. We retain separate lines for the next two taxa; we suspect that there is more to the story. NB1 In CA, name "Barbary Falcon" applied inconsistently to various breeding and wintering populations. NB2 Older attribution of some populations to <i>babylonicus</i> or <i>pelegrinoides</i> inconsistent then & now. IOC7.2 treated <i>babylonicus</i> as ssp of <i>pelegrinoides</i> . IOC9.2 lists as sssp of <i>peregrinus</i> . BLDZ map all taxa under <i>peregrinus</i> .
612	Barbary Falcon	<i>Falco peregrinus pelegrinoides</i>	Fuchs <i>et al</i> 2015, through multiple molecular techniques, strongly supported <i>pelegrinoides</i> as a full species, thus displacing the good, but not all-encompassing case for treating <i>pelegrinoides</i> & <i>babylonicus</i> as allospecies within <i>peregrinus</i> superspecies Wink <i>et al</i> 2000 (see also Naoroji 2006); H&M4 acknowledged this, noting the suggestion that Wink <i>et al</i> 2010 negates Wink <i>et al</i> 2000. However, we suggest that White <i>et al</i> 2013, Wink 2018 provides an improved understanding of many sssp of <i>peregrinus</i> being only a short distance along the evolution path. Very rare resident SE Kazakhstan Wassink 2015b, winter resident Turkmenistan, Kyrgyzstan, Uzbekistan & Tajikistan Koblik & Arkhipov 2014. Iraq breeders possibly this taxon Salim <i>et al</i> 2012, status Syria uncertain Murdoch & Betton 2008, uncommon resident E UAE Aspinall 1996, 2 records Qatar Nov 2014 QBRC , S Israel Perlman & Meyrav 2009; breeds Aden Crater Warr 1992: status in Arabia as thinly widespread breeding resident (perhaps 1300bp) Jennings 2010, but likely some are <i>babylonicus</i> . In CA K-M&K 2005; scarce resident N, SW Kyrgyzstan, Ven 2002, resident Iran Scott & Adhami 2006, SW Iran only Mitchell 2017, Afghanistan F-L&C (2005); <i>one wild-hatched in Israel geotracked to western Cyprus (1st record) Jun 2022 Ohad Hatzofe, Jane Stylianou in litt</i> . Egypt Avib, BE
613	'Red-capped Falcon' ('Red-naped Shaheen', 'Red Shaheen') (See PT for mapping details of <i>babylonicus</i> in Wink 2018)	<i>Falco (peregrinus) babylonicus</i>	Wink 2018 notes that <i>babylonicus</i> is unusually distinct for a Peregrine ssp. We therefore acknowledge this by the use of round brackets for the species name. <i>F.(p.) babylonicus</i> resident Turkmenistan, Bukreev 1997 & 2005, Kazakhstan G&G 2005, W&O 2007. Probably this taxon in easternmost CA Koblik & Arkhipov 2014, Wink 2018 (as Barbary), in Turkmenistan Rustamov 2015 (as Barbary), breeds Afghanistan (Paludan 1959), resident SE Afghanistan F-L&C (2005), both <i>pelegrinoides</i> & <i>babylonicus</i> thought to breed Iraq Ararat <i>et al</i> 2011, but if so, <i>babylonicus</i> would be an outlier Wink 2018, NW Pakistan Naoroji 2006: breeders in Oman likely this taxon OBL7 (Wink 2018 suggests <i>peregrinoides</i>), but the fairly common PM & WV birds not identified to taxon. Ayé <i>et al</i> 2012, R&A 2012 treat <i>babylonicus</i> as ssp of <i>F. pelegrinoides</i> , as did IOC6.2. IOC9.2 aligns with White <i>et al</i> 2013, Wink 2018. H&M4 acknowledges this taxon as breeding sympatrically among other <i>peregrinus</i> taxa, perhaps involving differing ecological needs. Mitchell 2017 suggests this taxon occurs in E Iran. NB Wintering <i>babylonicus</i> in Pakistan & NW India occupies desert & semi-desert; residents and summer breeders along Afghanistan-Pakistan border occupy montane terrain, but mixed habitats R&A 2005
		Cacatuidae	Many cockatoo & parrot spp continue to be introduced, particularly because many cultures have a long history of bird-keeping, but also because of developing prosperity funding the trade in exotics Blackburn <i>et al</i> 2015.
614	Sulphur-crested Cockatoo	<i>Cacatua galerita</i>	Introduced. Breeds freely in private location Arabia Jennings 2008d, likely Jeddah Aspinall 2010. Has bred ferally, probably sssp mix from captive breeding, but overall, conditions may be too harsh Jennings 2010; single escape record Oman OBL7 .
		Psittacidae	Many parrot spp continue to be introduced, particularly because many cultures have a long history of bird-keeping, but also because of developing prosperity funding the trade in exotics Blackburn <i>et al</i> 2015.
615	Monk Parakeet	<i>Myiopsitta monachus</i>	Introduced; likely sssp mix from captive breeding. Common in Tel Aviv region Israel Perlman & Meyrav 2009, present in Palestine Awad <i>et al</i> 2022. Escapes Dubai Aspinall & Porter 2011
616	Nanday Parakeet (Black-hooded Parakeet)	<i>Aratinga nenday (Nandayus nenday)</i>	Monotypic. Introduced. Small breeding population Israel since 1980s Perlman & Meyrav 2009. Escapes reported Dubai Aspinall & Porter 2011. Taxonomic change follows Tavares <i>et al</i> 2006, Remsen <i>et al</i> 2013.
		Psittaculidae	Many parrot spp continue to be introduced, particularly because many cultures have a long history of bird-keeping, but also because of developing prosperity funding the trade in exotics Blackburn <i>et al</i> 2015.
617	Slaty-headed Parakeet (Himalayan Parakeet)	<i>Psittacula himalayana</i> (may move to HBW/BLI <i>Himalayapsitta</i>)	Monotypic. E Afghanistan, Madge 1980, HBW4, R&A 2005, mapped Grimmett <i>et al</i> 1998, 2009. Summer breeder across Afghan-Pakistani border N Khyber Roberts 1991, Nurestan Paludan 1959 H&E 1970, mapped thus Ayé <i>et al</i> 2012, R&A 2012: BLDZ map Mar 2018 isolated populations, N of Jalalabad & in S of Khost.
618	Plum-headed Parakeet	<i>Psittacula cyanocephala</i> (may move to HBW/BLI <i>Himalayapsitta</i>)	Monotypic. Introduction: has bred Dubai UAE since at least 2007, Jennings 2008b. Likely to increase Jennings 2010, but perhaps more from escapes than natural expansion; not yet naturalised Aspinall & Porter 2011; 3 escape records Oman OBL7 . Nearest natural population to OSME Region in NE Pakistan R&A 2012.

619	Alexandrine Parakeet	<i>Psittacula eupatria</i> (may move to HBW/BLI <i>Palaeornis</i>)	ssp <i>nipalensis</i> SE Afghanistan Puget 1970, HBW4. NE Afghanistan R&A 2005, Ayé <i>et al</i> 2012 map resident in Nuristan; BLDZ map Mar 2108 centred on Jalalabad. Also common introduction worldwide, including Kuwait Gregory 2002, UAE, Bahrain, Saudi Arabia, Lever 2005, rare & increasing Oman OBL7 : Arabian feral population perhaps 400+bp Jennings 2010, but restricted to mangroves & adjacent cultivation where no increases noted in populations on Saudi Arabia Red Sea or Gulf coasts Alshamliah <i>et al</i> 2021. Iran Scott & Adhami 2006, Turkey Kirwan <i>et al</i> 2008, Egypt BinE 2009, reported Yemen. Needs larger holes than <i>P. krameri</i> Aspinall 1996, but aggressive enough to drive Hooded Crow <i>Corvus cornix</i> from nest area Kirwan <i>et al</i> 2008.
620	Rose-ringed Parakeet (Ring-necked Parakeet)	<i>Psittacula krameri</i> (may move to HBW/BLI <i>Alexandrinus</i>)	Circumstantial evidence (Greek texts, Roman mosaics) that historical W limit of natural range ssp <i>borealis</i> reached mountains of NE Iran, probably Caucasus. Breeding birds Iraq 1935 summer visitors Moore & Boswell 1956, but likely (?) introduced. Highly adaptable, especially as commensal species. Introductions: Turkey since perhaps 1950s (Kirwan <i>et al</i> 2008), Iraq until 1960s, Iran cities, Kuwait Gregory 2002, Egypt, Saudi Arabia, Oman, Yemen, Bahrain, Qatar, UAE (evidence of cross-Gulf movements Aspinall 1996); Arabian population (Red Sea ssp <i>parvirostris</i> of EC Sudan, Gulf) perhaps 12 000bp Jennings 2010, although Alshamliah <i>et al</i> 2021 suggest pet trade trapping of feral birds is reducing feral population. Common increasing resident Oman OBL7 . Israel, Lever 2005, Syria Murdoch & Betton 2008; introduced and spreading Armenia (Useful article on BBC website). Probably natural Iran-S Afghanistan border, HBW4 (mapped thus Ayé <i>et al</i> 2012), Jalalabad & Kabul Niethammer & Niethammer 1967 possibly traded from Pakistan, NE Afghanistan R&A 2005. Egypt Avib, BE. Resident W Eritrea to coast at c 17°N Redman <i>et al</i> 2009, possibly accounting for 3 RNBWS reports Red Sea Feb 87, 20:0:0.0N+38:0:0.0E; also in Gulf Nov 89 & Oct 90, 25:0:0.0N+54:0:0.0E & 25:0:0.0N+55:0:0.0E
621	Budgerigar	<i>Melopsittacus undulatus</i>	Monotypic. Introduced. Breeds freely private location Arabia Jennings 2008d, Salalah, S Oman & Doha Qatar Aspinall 2010, introduced Kuwait Gregory 2002. Very popular cagebird worldwide. Is breeding ferally Arabia, several locations & may succeed if it occupies irrigated agriculture Jennings 2010. 6 escape records; breeding recorded Oman OBL7 .

NON-PASSERINE REFERENCES [See Part B for full Non-passerine Reference List](#)

The ‘Notes’ column of this Table cites abbreviated versions of References. Full citations are given in [Part B](#).

NB IH = Ian Harrison, ST = Simon Tull, Oman former report collators and PH = Peter Hellyer, former UAE report collator.

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(As amended by subsequent developments, subject to interpretation by the ORL team)

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EBRC = Emirates Bird Records Committee

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IBRC = Iran Bird Records Committee

JBRC = Jordan Bird Records Committee

KORC = Kuwait Ornithological Records Committee

LBRC = Lebanon Bird Records Committee

OBRC = Oman Bird Records Committee

QBRC = Qatar Bird Records Committee

TBRC = Turkish Birds Record Committee

SG = *Sandgrouse* . ATR = Around The Region

OTHER ACKNOWLEDGED CURRENT MAJOR BIRD LISTS & SOURCES

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