

The OSME Region List of Bird Taxa

Part E: HYPOTHETICAL TAXA, 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.

In **Part E**, Hypothetical Taxa, we list non-passerines (prefixed by 'N') first, then passerines (prefixed by 'P'). Such taxa may be from distributions adjacent to or have extended to the OSME Region, or be stray migrants or introduced birds. Documentation of such taxa is essential for proof of occurrence in the OSME Region. References cited below are in the Non-passerine Reference List, **Part B**, and the Passerine Reference List, **Part D**. We also append a small table of taxa that have been removed from this list after assessment of improved distributional evidence.

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 Please do not cite them in any formal correspondence or papers.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 species on BirdLife Tracking Database, <http://seabirdtracking.org/mapper/index.php>. Only a few individuals from very few colonies are involved.

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

The taxa in the Table below have not been documented sufficiently as occurring in the OSME Region & are considered Extralimital. Some, especially the seabirds, probably have occurred in that part of the Indian Ocean above 10°N and west of 61°37' 03"E (longitude of Pakistan-Iran coastline). Others have been suggested by knowledgeable observers as possible vagrants or wanderers. However, for quite a few species, the likelihood of such vagrancy is much reduced by shrinking distribution ranges. Furthermore, much habitat degradation has taken place in areas of specialist dry open forests, where human population movements across these areas have seen the trees and bushes disappear as firewood. Moreover, the paucity of observations over much of the OSME Region means former and present distributions often are poorly known, often patchily at best. It is therefore vital that any sightings are recorded comprehensively and forwarded for scrutiny. On-line reports are insufficient evidence by themselves; many such reports have been examined - some claimed species are not included here. To be accepted, records require authors to respond to genuine enquiry and to be prepared for often lengthy correspondence and discussion.

Key: In the first column of the Tables below, N = Non-passerine, P = Passerine.

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 'reported' indicates the occurrence is unconfirmed.

3. English names: 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 (Our 'don't know category').

5. Green shading eg Black-billed Capercaillie indicates likely former presence in the OSME Region. **Red font** in the texts indicates material added since the previous ORL version

6. Distribution maps in many references are imprecise, but for extralimital 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.

7. We also list separately those taxa that we have deleted from the Hypothetical List because the evidence does not support their candidacy.

Other conventions adopted are explained in the [Ornithological Basis](#) of the ORL

Please contact us if you have any information that supports the presence of these or any other unlisted species in the OSME Region.

NON-PASSERINES	English	Family, Species or Taxon	Working Notes
Name			
		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.
N1	Pink-footed Goose	<i>Anser brachyrhynchus</i>	Monotypic. Considered vagrant Turkey Kirwan <i>et al</i> 1999, but removed from Turkish List Kirwan <i>et al</i> 2008; has reached Bulgaria in 2009 in a flock of Greater White-fronted Geese <i>A. albifrons</i> Pavel Simeonov <i>in litt</i> at Durankulak, only 195km from European Turkey. However, its Netherlands wintering grounds are the nearest to the Region.
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
N2	Western Greylag Goose {Greylag Goose}	<i>Anser anser anser</i>	It now seems likely that most, perhaps all previous reports and records of this taxon occurring in the Region should refer to <i>rubrirostris</i> Raffael Ayé <i>in litt</i> Jun 2014. Even though Delaney <i>et al</i> 2014 listed taxon <i>anser</i> as breeding in SW Siberia & wintering in the Caspian, this is questionable, given they also attribute this taxon to Turkey, contra Kirwan <i>et al</i> 2008. However, it is not unlikely that the nominate occasionally or even regularly in small numbers wanders to Turkey, or even winters there (Guy Kirwan pers comm), but we think it highly unlikely that resident or visiting birders ever check the ssp identity; there is little impetus for keepers of national checklists to record geese ssp. Notwithstanding that H&M4 give distribution of <i>anser</i> as wintering in the Middle East, we have removed taxon <i>anser</i> to the Hypothetical List: IOC8.1 agreed. NB BLDZ map Sep 2021 for Greylag <i>sensu lato</i> gives no clear indication of where the boundary between the 2 ssp lies, but we flesh out the IOC "ec Europe to China" to assume it stretches roughly from eastern Poland south-south west to Slovenia on the Adriatic. The population around Neusiedlersee, eastern Austria & western Hungary, comprises <i>rubrirostris</i> : MJB pers obs.
N3	Mandarin Duck	<i>Aix galericulata</i>	All European breeding records are of, or are descended from, established introduced stock, the furthest E so far being on the German-Polish border and easternmost Austria, but vagrants have been reported in western Ukraine. Non-native records from Georgia, but uncertain whether it bred Koblik & Arkhipov 2014
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> .
N4	Blue-billed Teal (Spotted Teal, Hottentot Teal)	<i>Spatula hottentota</i> (IOC7.3, H&M4, BirdLife 2016) (formerly <i>Anas hottentota</i>)	Monotypic. Breeds Khartoum & Omdurman Sewage Ponds Jenner & Taha 2016: with little observer coverage N along the Nile Valley, this and many other spp suited to riparian habitats probably occur closer to Egypt - 725km in a straight line, twice that via the Nile. Recorded Djibouti 2014 Hering <i>et al</i> 2015; BLDZ map Sep 2021 extends into SW Djibouti, but does not yet include Omdurman or Khartoum.

PT	Spot-billed Duck PT	<i>Anas poecilorhyncha</i>	Split to Eastern A.[p.] <i>zonorhyncha</i> (Non-Passerine List) and Indian Spot-billed Duck A.[p.] <i>poecilorhyncha</i> (below) . IOC2.0 accepts split; also R&A 2005, AOU. NB Koblik & Arkhipov 2014 revised all old former USSR records to update to modern taxonomy.
N5	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>	2 sssp, nominate nearer to region, <i>haringtoni</i> SE Asia, China. Reported Uzbekistan K-M&K 2005, but doubtful record Ayé <i>et al</i> 2012, Koblik & Arkhipov 2014; R&A 2012 map breeding Pakistan close to Khyber & Khojak (Chaman) Passes, BLDZ map Sep 2021 maps discrete NW Pakistan distribution as an ellipse centred on Quetta and Kuchak only 20km from Afghan border over a length of some 120km; likely occurs in Afghanistan, but is a traded species. Introduced Oman, Lever 2005 App B, Porter & Aspinall 2010 (1995 OBL7). Resident Indus delta Pakistan Roberts 1991, 31 recorded Punjab 2003 Ali & Akhtar 2005, has bred close to Afghan border Grimmett <i>et al</i> 2009; may occur Iran or Afghanistan early in monsoon season when seeking breeding habitat. Reeber 2015 maps just into Afghanistan, but on small map of a large distribution. NB Probably takes advantage of increasing trend of building small village reservoirs that quickly gain submergent & bordering vegetation (especially in Afghanistan).
N6	Green-winged Teal	<i>Anas carolinensis</i>	One photographed lake Tuzla Bulgaria Apr 2008, only c 185 km N of European Turkey, Ivanov <i>et al</i> 2021.
N7	Baer's Pochard	<i>Aythya baeri</i> Critically Endangered	Declining rapidly. Monotypic. Lone nearest acceptable record from not too distant Gujrat, Punjab, Pakistan, 1957 – skin in BMNH Roberts 1991. Occurs E Mongolia Bräunlich 2012. Has a history of post-breeding migration overshoots to W & S. See BLDZ Sep 2021: nearest wintering areas 1490km fom Region.
		Phasianidae	Changes to previous taxonomies from revised relationships in <i>eg</i> 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.
N8	Western Tragopan	<i>Tragopan melanocephalus</i>	Shah <i>et al</i> 2022 established reliable distribution data from surveying suitable Pakistan habitat, strongly diverging from IUCN maps: nearest population from Region is only 135km distant at Palas valley, Kohistan.
N9	Black-billed Capercaillie	<i>Tetrao urogalloides</i>	2 sssp, nominate much nearer than <i>kamschatkaensis</i> ! Unlikely any modern records in Region due to severe range contraction, but has reached 86°30' E, 67°30' N in Krasnoyarsk Republic Rogacheva 1992. Nearest Mongolian population is in Nogoonnuur, W Mongolia at 49.8°N, 89.6°E lies c220km from easternmost Kazakhstan mapped by Gombobaater & Leahy 2019, much nearer than the 800km mapped in BLDZ Sep 2021. Name <i>urogalloides</i> has priority over <i>parvirostris</i> H&M4.
N10	Tibetan Partridge	<i>Perdix hodgsoniae</i>	Occurs easternmost Ladakh BLDZ map Sep 2021, population overall is large, not known to be declining. Possbly occurs westernmost Tibet close to Afghan Wakhan, but no certain records closer than 500km from Region.
N11	Red Junglefowl	<i>Gallus gallus</i>	On-line for Afghanistan, M&M 2002 & HBW2 reject. H&M4 doubtfully assume ssp <i>murghi</i> Kashmir unaffected by genetic mixing with domestic chickens. Long history of introductions to W Asia, to Americas via E Asia Lever 2005. Highly likely historical occurrence, but no certain record; nearest extant population mapped in NW India R&A 2012, BLDZ map Sep 2021 shows now retreated to Rampur Bushahr, Himachal Pradesh, just N&W of Dehra Dun, Uttarakhand, Some 680km from Afghanistan. Present extent of chicken farming makes introgression of domestic/feral chicken genes ubiquitous. NB Some historical confusion from scientific ignorance of local names applying to more than one species? Roberts 1991
N12	Japanese Quail	<i>Coturnix japonica</i>	Monotypic. Limited possibility of irruption from N-C Mongolian population into Kazakhstan. However, it is an internationally-traded species (IUCN) and is common in captive breeding worldwide, but it is in steady decline in the wild BLDZ Sep 2021. It is also cross-bred or domesticated (Wikipedia) for introductions, legal or otherwise. NB Sanchez-Donoso <i>et al</i> 2012 identified genetically the domestic form as releases into the wild in Spain; the assumption is that knowingly or otherwise, veterinarians had certified the releases as Common Quail <i>C. coturnix</i> . This may also have happened in the OSME Region. NB Introduced and established in most of Italy (including Sicily), though not yet reported in adjacent France, Switzerland, Austria or Slovenia IUCN map Feb 2022.
N13	Rain Quail (Black-breasted Quail)	<i>Coturnix coromandelica</i>	Monotypic. Possibly irregular late Jun early Jul with irruptive overshoot into Afghanistan and Iran: known rain-follower. Resident in C, NE & S India, but BM in NW India IUCN map Feb 2022, & BM in Pakistan in years of exceptional monsoons Roberts 1991, map in Grimmett <i>et al</i> 2009, BLDZ map Sep 2021 westernmost distribution, an isolate, just NNE of Dera Ismail Khan, Pakistan some 120km from Afghan border. Partially migratory northern populations are migratory: known medium-distance irruptions include Sri Lanka & montane Nepal & Sri Lanka Lees & Gilroy 2022. Increase in irrigation ponds may assist during irruptions. Internationally-traded species IUCN. On Avibase website Afghanistan list Aug 08 without source cited: similarly Ladakh 2003 list.
N14	Yellow-necked Spurfowl	<i>Pternistis leucoscepus</i>	Monotypic. Northernmost known range E South Sudan, but its distribution reaches coasts of southern Eritrea through Djibouti (ssp <i>infuscatus</i>) along to Bosaso in Somalia BLDZ Sep 2021; transit of Bab al-Mandab Strait to Yemen via island-hopping well within capabilities (longest flight 18km). Nominate breeds on Dahlak Archipelago Azera 2004. Internationally-traded species IUCN . Escapes of introduced birds of this species encountered in UAE, but no proven breeding Aspinall & Porter 2011
		Caprimulgidae	
A number of African nightjar species occur just across the Red Sea in Sudan, Eritrea, Djibouti & Somalia. This is not any kind of barrier to Plain Nightjar <i>Caprimulgus inornatus</i> (see Non-Passerine List) and so it is not unlikely that small numbers of Long-tailed Nightjar <i>C. climacurus</i> , Slender-tailed Nightjar <i>C. clarus</i> , Standard-winged Nightjar <i>C. longipennis</i> and perhaps Sombre Nightjar <i>C. fraenatus</i> and Freckled Nightjar <i>C. tristigma</i> from this crepuscular & nocturnal genus may occasionally visit the western highlands of Arabia, which contain many of the choice habitats that occur on the African side of the Red Sea.			
N15	Jungle Nightjar	<i>Caprimulgus indicus</i>	Recently split from <i>C. jotaka</i> Grey Nightjar IOC4.1: see Non-passerine List. May wander, ssp <i>indicus</i> , from just W of Amritsar, NW India BLDZ map Sep 2021; also resident C & S India H&M4, IOC where common resident, in conditions of strong E/NE winds? NB Very likely candidate for vagrancy to WP Lees & Gilroy 2021.
N16	Large-tailed Nightjar	<i>Caprimulgus macrurus</i>	BLDZ Feb 2021 gives western limit of summer breeding distribution as W of Islamabad, Pakistan, 150km from Afghanistan; spring migration overshoot not unlikely & typical habitats occur over border BLDZ Feb 2021
PT	Savanna Nightjar PT	<i>Caprimulgus affinis</i> (<i>sensu lato</i>)	Sangster <i>et al</i> 2021, from voice, call & song differences, recommend split of Savanna Nightjar into 3 spp: polytypic Franklin's Nightjar <i>C. monticolus</i> (with sssp <i>amoyensis</i> , <i>stictomus</i>), polytypic Savanna Nightjar <i>C. affinis</i> (<i>sensu stricto</i>) (with sssp <i>kasuidori</i> , <i>timorensis</i> , <i>propinquus</i>) & monotypic (<i>pro tem</i>) Kayumanggi Nighjar <i>C. griseatus</i> . Taxon <i>mindanensis</i> is poorly known, possibly extinct & is best regarded as conspecific with <i>mindenensis</i> . It may belong to <i>C. affinis</i> or be a <i>species</i> , but unless it is rediscovered, no final status is possible.
N17	Franklin's Nightjar (Formerly part of Savanna Nightjar)	<i>Caprimulgus monticolus</i> (formerly <i>Caprimulgus affinis sensu lato</i>)	Polytypic. As an abundant BM, it occurs NE Pakistan almost to Afghanistan border near Thal (Roberts 1991, Cleere 2010, R&A 2012), overshoots into Afghanistan are likely: BLDZ Sep 2021 maps as summer breeder practically to Afghan border from Mingora to W of Peshawar to SSW of Dera Ismail Khan almost to Khob: at several points, this area is only 4-20km from Afghan border: for example where the Pakistan Provinces of Khyber & Balochistan meet. All the 7-9 other sssp of <i>C. affinis sensu lato</i> are largely sedentary. IUCN Sep 2021 maps to within 4.5 & 3km of Afghanistan border in 2 widely-separated locations, Torkham border crossing & Kundar River. Several other <i>Caprimulgus</i> species occur along both sides of the Pakistan-Afghanistan border, or close to it (see ORL Non-Passerine List) & so that border is no barrier to migrant Caprimuloidae .
		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>Tachymarpis</i> and <i>Apus</i> .
N18	Nyanza Swift	<i>Apus niansae</i>	Nominate resident on 90km stretch of N Eritrean coast above Massawa to past Nakfa, opposite Dahlak archipelago only 150 km from Saudi Farasan Islands BLDZ Sep 2021, IOC 6.3: ssp <i>somalicus</i> BM along N Somalia coast; prone to wandering Redman <i>et al</i> 2009.
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 asses 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.

N19	Blyth's Swift	<i>Apus leuconyx</i>	Following split of Fork-tailed Swift <i>Apus pacificus sensu stricto</i> , taxon <i>leuconyx</i> probably occurs in Iran, Oman & UAE as a vagrant or winterer, from its mid- to high altitude breeding grounds in Pakistan (IOC5.4) eastwards; conversely, any recorded Arabia or Iran near start of breeding season in Pakistan likely to be <i>A. leuconyx</i> . R&A 2012 map as summer breeder W as far as NW India. Interpretation of BLDZ map Jul 2019 <i>A. pacificus sl</i> suggests <i>leuconyx</i> is a summer breeder just into NE Pakistan above Islamabad. Blyth's Swift has reached the Maldives, only 300-350km E of OSME Region deep-ocean area Anderson & Shimal 2020.
		Otididae	
N20	Nubian Bustard	<i>Neotis nuba</i> (<i>Ardeotis nuba</i> H&M4) Near-Threatened	Monotypic. May just wander 200km to southern Egypt from its distribution in northern Sudan, where now scarce. BLDZ map Sep 2021 shows westernmost distribution reached W Red Sea coast S of Port Sudan, from Suakin 70km southwards.
N21	Lesser Florican	<i>Sypheotides indicus</i> Endangered	Monotypic. Cited (entry 158) in Zarudny 1911 (as <i>Sypheotis aurita</i>) as irregular (Irrgast = irregulär Gast) Iran; in SE (Baluchestan) and S-C (easternmost Mesopotamian plain) into Iraq. No known specimen, but typical grassy habitat patches then existed in both locations. Present westernmost range c70°E, but R&A 2012 map (former?) summer breeding range to Mekran Coast at c64°E, near Kappar, as does BLDZ Sep 2021, 95km from Iran border; Collar <i>et al</i> 2018 note most recent record in Pakistani Baluchestan was 1987 and confirm overall decline. Former occurrence Afghanistan possible. NB1 Moore & Boswell 1941-6, 1956, under 'Little Bustard', state: "...Mention may here be made of a bird shot 2 miles from Abu Sef at Mosel in January 42 by Brig(adier) Corrie. This was examined by Williamson (for info that is W E Williamson) and thought to be a female Florican (<i>Sypheotides indica</i>). He describes it as a huge and very long necked quail, not bigger than a Houbara. It would be very interesting if this bird's presence could be confirmed. It may be an accidental wanderer" Richard Porter pers comm. NB2 Cumming 1916 states: "I once shot a smaller Bustard, in Bushire, (than) the <i>macqueeni</i> , it came into the compound of the house I was living in. Again, on a second occasion I shot a similar bird of the mouth of the Shat-el-Arab, while the steamer I was on was aground on the Fao bank". This was during a heavy rainstorm: the first was made a specimen, sent to England, but was lost in transit; the second was eaten. "This much is certain that both birds were a good deal smaller than <i>macqueeni</i> "; that this might have been Lesser Florican is strengthened by Cumming's familiarity with Little Bustard <i>Tetra tetrix</i> . NB3 <i>Sypheotis aurita</i> & <i>Sypheotides indica</i> or <i>indicus</i> are synonymous
		Cuculidae	
N22	Greater Coucal	<i>Centropus sinensis</i>	Distribution of this common and adaptable species has increased, following irrigation projects in Pakistan ssp <i>sinensis</i> close to Afghan border, especially near Khyber Roberts 1991, just 10km away as mapped by BLDZ Sep 2021, from just NW of Spin Wam, which is 30km NW of Bannu; all lie on or close to the Kaitu River, where ample sizeable patches of suitable habitat exist on both sides of the Pakistan/Afghanistan border. Global population of this sp is decreasing.
N23	Black Cuckoo	<i>Cuculus clamosus</i>	Easternmost breeding distribution BLDZ map Sep 2021 Sudan & N Eritrean coast near Dahlak Archipelago, & outlier population N Somalia just inland from Berbera.
N24	Red-chested Cuckoo	<i>Cuculus solitarius</i>	Easternmost Ethiopian of three resident population distributions BLDZ Sep 2021 closely resembles that of African Cuckoo <i>C. gularis</i> , not too distant from Yemen.
N25	Indian Cuckoo	<i>Cuculus micropterus</i>	Westernmost resident distribution BLDZ Sep 2021 is essentially identical to that of Himalayan Cuckoo <i>C. saturatus</i> , almost reaching New Mirpur City Pakistan, only 270km from Afghan border at Torkham.
N26	African Cuckoo	<i>Cuculus gularis</i>	Monotypic. Given the likely lack of differentiation in records in Ethiopia between this taxon (rains-follower, intra-tropical migrant and powerful flier) and Common Cuckoo <i>C. canorus</i> (Ash & Atkins 2009), overshoot into Yemen is possible; see also Redman <i>et al</i> 2009. BLDZ Sep 2021 map breeding distribution to 2 isolates close to coast: Eritrea-N Ethiopia and E Ethiopia-NW Somalia.
		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>).
Clade C			
N27	Painted Sandgrouse	<i>Nyctiperdix indicus</i> (<i>Pterocles indicus</i>)	Several sources without citation place in Afghanistan; H&M4 disagrees. Monotypic. Source of confusion likely Ali & Ripley 1983, citing nominate ssp as <i>indicus</i> east of Pakistan's western mountains & very similar ssp <i>arabicus</i> (then named Close-barred Sandgrouse) occurring from mountainous western Pakistan west to Afghanistan, Iran & Iraq. The latter taxon later assigned correctly to Lichtenstein's Sandgrouse. <i>P. lichtensteinii</i> (Wells 1998, H&M4) whose distribution is given ORL Non-passerine list. Ali & Ripley 1968-73 apparently intended to comply with this change (Steve Madge in litt to Mike Evans). Occurrence of Painted Sandgrouse in Afghanistan not impossible, but not proven. NB1 Correction first apparent in Sep 2018 BLDZ maps for <i>indicus</i> & <i>lichtensteinii</i> . However, the BLDZ/IUCN maps for <i>indicus</i> place the westernmost distribution in Pakistan to less than 5km from the Afghan border in the Lower Kurram, for some 35km along the border W of Alizai: indeed a tributary of the River Kurram descends from Afghanistan, suitable habitat being present along its length; overshoot into Afghanistan is likely here. NB2 IUCN Red List text accepts <i>indicus</i> as 'Extant, origin unknown' in Afghanistan, but map species only outside Afghanistan.
		Columbidae	H&M4 mildly resequence ORL Columbidae genera, placing <i>Turtur</i> & <i>Oena</i> last.
N28	Speckled Wood Pigeon	<i>Columba hodgsonii</i>	Monotypic. Possibly E Afghanistan, HBW4 map; likely very rare there R&A 2005, uncommon in west of range. A&M map ranges well into Gilgit, very close to Afghanistan, but IUCN map Mar 2022 places westernmost distribution of this resident species to N of Anpuri, Pakistan, 100km from Afghan border, SW of Gilgit. However, main habitat is dense temperate or tropical deciduous forest, which is now largely absent in E Afghanistan. Perhaps historical Bates & Lowther 1952. Evidence? Documentation? Subject to irregular movements, Grimmer <i>et al</i> 1998. NB Scarce & irregular W Kashmir following fruit crop up to 3000m Roberts 1991.
N29	Ring-necked Dove	<i>Streptopelia capicola</i>	African sp. RNBWS report Farasan Islands Feb 82 (16:15:0.0N+41:3:0.0E) unconfirmed; report of breeding Sheikh Othman & Hussein (Aden) 1945 treated with caution in Warr 1992; possible misidentification in both cases. Breeds Eritrea near coast BLDZ Sep 2021, N side of Gulf of Tadjoura, Djibouti (less than 100km from Perim Island, Yemen), N Somalia & E Ethiopia: also Ash & Atkins 2009 H&M4; all along Somali N coast Redman <i>et al</i> 2009, but not Sudan BLDZ contra HBW4, but just into southernmost South Sudan. IUCN Sep 2021: Increasing sp. Internationally traded species.
N30	Vinaceous Dove	<i>Streptopelia vinacea</i>	African species present across the Sahel and Sudan zones to Eritrean Red Sea coast for 225km between Gulgub S to the Ghelaalo Peninsula. Likely has visited the Dahlak Islands.
N31	Diamond Dove	<i>Geopelia cuneata</i>	Escape at Sohar farm, Oman Dec 2012 OBRC . Well-adapted to aridity in its native Australia, but no evidence of breeding in Emirates. Although IUCN Red List considers the species not internationally traded, captive breeding occurs in many countries & the species can be purchased on line.
N32	Yellow-footed Green Pigeon	<i>Treron phoenicopterus</i>	Regular winterer E-C Pakistan ssp <i>chorigaster</i> , has increased wintering range to new irrigation projects (Roberts 1991), which now are common in the adjacent OSME Region. Population increasing BLDZ Sep 2021 & resident across Indus valley to the S, then NE to below Islamabad.
		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</i> (<i>sensu lato</i>)	Re Parent Taxon , IOC2.0 accepts split of extralimital Brown-cheeked Rail (Eastern Water Rail) <i>Rallus indicus</i> , 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; BirdLife 2020, Brazil 2009 use Eastern Water Rail.
N33	Eastern Water Rail {Brown-cheeked Rail}	<i>Rallus indicus</i>	Formerly part of Water Rail <i>R. aquaticus</i> . Uncommon PM in NW Mongolia some 490km from easternmost Kazakhstan Gombobaatar & Leahy 2019, occurring further E in northern Mongolia for 1900km: confirmed breeding only in 2 locations, the nearer being 1400km from Kazakhstan. BLDZ & IUCN maps Sep 2021 are far cruder.
N34	Brown Rail	<i>Zapornia akool</i>	Mapped & recorded as scarce along Gilgit River in Gilgit-Baltistan Checklist Jan 2021, some 80km from Afghanistan, whereas BLDZ map Sep 2021 indicates occurrence SE of Islamabad, 375km from Afghanistan.

		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>Anthrpoidea</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.
N35	Black Crowned Crane	<i>Balearica pavonina</i> Vulnerable	Polytypic. On WBDB 2008 Egypt checklist as vagrant, but not on 2013 EORC list. E-most distribution ssp <i>ceciliae</i> reaches Eritrean coast just S of Massawa 75km SSE inland of Mersa Fatma BLDZ Sep 2021. NB Locally abundant Sudan below Khartoum, Ethiopia, albeit W of 40°E Ash & Atkins 2009.
N36	Sarus Crane	<i>Antigone antigone</i> (IOC7.2, H&M4) (<i>Grus antigone</i>) Vulnerable	Polytypic . Largely resident. Pre-20th-century reports in their various lists by Nordmann & Pallas, Radde & by Dementiev & Gladkov as occasional vagrant to Caucasus Caspian hinterland, but no confirmed record. Nominate breeds India at Gujarat, & also N & S of Amritsar up to Pakistan border & just in Pakistan beyond Nagarparkar BLDZ map Sep 2021.
N37	Black-necked Crane	<i>Grus nigricollis</i> Vulnerable	Monotypic. Resident E Ladakh NW India, S Tibet R&A 2012, BLDZ Sep 2021; may wander.
		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.
N38	Yellow-legged Buttonquail	<i>Turnix tanki</i>	Polytypic. Irregular after rains; nominate likely overshoot to Afghan Kurram valley from Pakistan: see map Grimmett <i>et al</i> 2009, R&A 2012, citing 'movements unclear'; BLDZ Sep 2021 maps summer breeding to within 15km of Afghan border past Peshawar & within 5km along Kabul River; ample scattered riverside areas of cultivation all the way to Kabul. NB Only the female calls; polyandrous.
		Burhinidae	Černý & Natale 2021 preprint proposes revaluation 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 oedicephalus</i> (sensu lato)	Re Parent Taxon , IOC v2.0 accepts split of Indian Stone-curlew <i>Burhinus [oedicephalus] 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 Non-passerine List
N39	Indian Stone-curlew (Indian Thick-knee)	<i>Burhinus indicus</i> May move to genus <i>Oedicephalus</i> Černý & Natale 2021.	Monotypic. C Pakistan and eastwards, but may wander to ample suitable habitat Afghanistan or Iran; given ID difficulties, possibly missed already; UAE Checklist 2008 urges vigilance. BLDZ maps (Sep 2021) indicate a narrow unoccupied residency zone between this taxon & <i>B.[o.] oedicephalus</i> running along the plain of the Indus & Chenab Rivers: is this mere allopatric convenience? <i>B. oedicephalus</i> in places occurs on both sides of the Indus, according to the mapped distribution, and so there is no continuous habitat barrier between it & <i>B. indicus</i> . NB Zarudny 1911 noted that his <i>B.[o.] oedicephalus</i> specimens collected in S&E Iran accorded with Salvadori's 'intermediate' form of " <i>B.[o.] indicus</i> Salvadori 1865". Possibly recorded Jan 2009 Winkel <i>et al</i> 2010, but not accepted on Iranian Checklist Khaleghizadeh <i>et al</i> 2017.
		Charadriidae	Černý & Natale 2021 preprint proposes revaluation 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> .
N40	Wattled Lapwing	<i>Vanellus senegalensis</i> (Černý & Natale 2021 propose <i>Hoplopterus</i>)	Polytypic. Nominate occurs to Eritrean coast near Massawa BLDZ 2021 & on Dahlak Archipelago de Marchi <i>et al</i> 2009.
N41	Long-billed Plover	<i>Charadrius placidus</i>	Some evidence of vagrancy & extension of breeding distribution. Has re-established population in Russian Amur Oblast in 2002 after former area became permanently flooded by industrial construction Arkhipov 2022a. Its non-breeding preference for freshwater wetlands but not mudflats & a breeding preference for gravelly river islands may allow expansion now that rapidly retreating glaciers are increasing such habitats at altitude Lethaby 2006.
N42	White-fronted Plover	<i>Charadrius marginatus</i>	African sp, 4 ssp, <i>mechowi</i> nearest population by far. Riverine, Upper Rift Valley & coastal breeder, suspected by Ash & Atkins 2009 of breeding in low numbers along the Eritrean coast: not unlikely therefore along Yemen Red Sea coast. However, BLDZ map Sep 2021 more pessimistic, placing nearest breeding population C to SW Ethiopia & nearest Indian Ocean coast breeders S Somalia at Wisil.
		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>Heteroscelus</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.
N43	Nordmann's Greenshank (Spotted Greenshank BLI)	<i>Tringa guttifer</i> Endangered (Černý & Natale 2021 propose <i>Totanus</i>)	Monotypic. Not included by & hence unplaced in Huang & Tu 2016. Monotypic. Very unlikely, but like congeners, capable of wandering long distances – worth checking warm water coasts. Claimed occurrence Chagos Archipelago insufficiently documented Carr 2015. Documentation? One videoed Dec 2020 Alibaug district, Raigad, Maharashtra, just S of Mumbai, some 1350km from easternmost Iran: Birds Butterflies Nature BNHS website S Biswas <i>in litt</i> FB.
		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.
N44	Temminck's Courser	<i>Cursorius temminckii</i>	Polytypic. Nominate occurs to Eritrean coast near Massawa BLDZ 2021; reported from Dahlak Islands de Monti <i>et al</i> 2009.
N45	Indian Courser	<i>Cursorius coromandelicus</i>	Monotypic. Scarce resident eastern half of Pakistan, strongly nomadic after monsoon, well-adapted to fallow fields & desiccated wetland margins Grimmett <i>et al</i> 2009; increase in irrigation ponds in general region would allow spread, perhaps vagrancy to Iran & Afghanistan. Resident Pakistan close to Afghan border R&A 2012, winters W & N of Peshawar, BLDZ Sep 2021, only 30km from Torkham border post. Locally common winter N Gujarat, India, MB pers obs.
		Laridae	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 (eg 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. 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.
N46	Ross's Gull	<i>Rhodostethia rosea</i>	The single-record vagrant at Sarykamys Lake Turkmenistan 31 April 1988 (Antipov <i>et al</i> 1994, Rustamov 2015) is deemed questionable by Koblik & Arkhipov 2014. Occurrence in Region highly unlikely, the nearest breeding area being NW of Chatanga, Krasnoyarsk Krai, E Siberian Russia, 2500km from NE Kazakhstan, although 1 record a vagrancy of an adult bird to Lake Uvs, Mongolia, 400km from easternmost Kazakhstan Gombobaatar & Leahy 2019. NB Some authorities (eg Pons <i>et al</i> 2005) place this species in <i>Hydrocoleus</i> ; Harrison <i>et al</i> 2021 confirm this as most appropriate grouping, yet place it in <i>Rhodostethia</i> in their species account.

N47	Kelp Gull	<i>Larus dominicanus</i>	H&M4 treat as monotypic ' in absence of comprehensive revision': IOC4.4 treats as polytypic: <i>dominicanus</i> S Atlantic, S America then W to Australasia; migrant <i>vetula</i> of southern Africa (but resident Senegal & Gambia); <i>judithae</i> of S Indian Ocean Antarctic islands; <i>melisandae</i> of SW & S Madagascar, & <i>austrinus</i> of Antarctica & adjacent islands. Most likely vagrants to the OSME Region would be <i>vetula</i> (largest population), <i>melisandae</i> (nearest, but tiny population <300bp Harrison <i>et al</i> 2021) & <i>dominicanus</i> SW Western Australia. OBRC rejected Oman 2006 report, but surely sp will occur, although generally the species is sedentary once it breeds. Juveniles or immatures are most likely to wander, and some austral winter movement occurs into warmer waters. It has been recorded in the Chagos Archipelago Carr 2015. NB1 Harrison <i>et al</i> 2021 treat as sspp <i>vetula</i> , <i>melisandae</i> & <i>judithae</i> informally as 'Cape Gull', but include as part of Kelp Gull: DB 2009 call ssp <i>vetula</i> Cape Gull; this taxon has reached Portugal (4 records). NB2 1st for UK at Grafham Water, Cambs Aug 2022.
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 eclectic mix of the radical and the traditional, 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	American Herring Gull PT	<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 'Vega Gull <i>L. vegae</i> , with ssp <i>mongolicus</i> ' & also attributing a much larger high-Arctic breeding distribution for <i>vegae</i> than Knijff <i>et al</i> 2005 by including 'taimyrensis' (qv entry in Non-Passerine List) as synonymous with the 'birulai' claimed clinal form of <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
N48	Vega Gull	<i>Larus (smithsonianus/ vegae) vegae</i>	Revised understanding of this taxon assesses its breeding distribution as confined to NE & E Asia. No confirmed Region records. Variable leg colour; suggested nominate ssp of East Siberian Gull, Yésou 2002; now (Collinson <i>et al</i> 2008) regarded as a western ssp of American Herring Gull <i>L. smithsonianus</i> : BLDZ Sep 2021 map tacitly agrees, for the Jul 2015 <i>smithsonianus</i> map includes the <i>vegae</i> breeding distribution up to the large Uvs Lake, only 250km from Kazakhstan, but Mongolian Gull <i>L. (smithsonianus/vegae) mongolicus</i> is the likely taxon there..
		' 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 abididorsalis</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.
N49	Black-bellied Tern	<i>Sterna acuticauda</i> Endangered	Monotypic. Given that River Tern <i>S. aurantia</i> , largely sharing the same distribution in Pakistan (R&A 2012 map resident close to Afghan Nurestan), has been recorded in Iran, occurrence in Region possible, but now in severe decline and range contraction, especially in Pakistan. Once common in Punjab c 200km from Afghan border 2003 Ali & Akhtar 2005. Pakistan breeding distribution comprises 9 disparate areas, mostly along the length of the Indus River system, that around Dera Ismail Khan being the nearest to Afghanistan BLDZ Sep 2021, at some 80km.
		Stercorariidae	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, <u>but new information and the teasing out of subtler distinctions inform the contents of Howell & Zufelt 2019 and Harrison <i>et al</i> 2021.</u> Černý & Natale 2021 propose resequencing Stercorariidae : we shall await IOC decision. NB1 Sangster <i>et al</i> 2011 support recognition of the following 3 large skuas (plus Chilean <i>S. chilensis</i>), acknowledging that futher 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 Mörzer 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.
N50	Subtropical Skua (Brown Skua)	<i>Stercorarius [antarcticus] hamiltoni</i> (formerly <i>Catharacta (antarcticus) hamiltoni</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> 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 superpecies. 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. Taxonomy follows Cohen <i>et al</i> (1997) and Andersson (1999) as amended by Howell & Zufelt 2019. 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. Probably already recorded in the OSME Region but wrongly attributed to another 'large skua' sp.
		Alcidae	
N51	Common Guillemot {Common Murre}	<i>Uria aalge</i>	Two extralimital records Bulgaria, at Slanchev Bryag, Burgas Jun 1996 on Black Sea coast & 1 near Titrakan Jan 1997 on the Danube c430km from Delta mouth, 80 & 250km respectively from OSME Region, Ivanove <i>et al</i> 2021.

		Diomedidae	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. Resequenced to follow Oceanitidae IOC5.1, Hackett <i>et al</i> 2008. NB BL 2008, O&S 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.
N52	Black-footed Albatross	<i>Phoebastria nigripes</i>	Monotypic. BLI Seabird Database has tracked this trans-Pacific species to the eastern Indian Ocean, Andaman Sea at c 6°S, but IUCN & BLDZ maps Sep 2021 do not reflect this. The BLI seabird database loads the map tiles, but the display no longer works Jun 2020 (Still defunct Aug 2022).
		Procellariidae	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 (Diomedidae) 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.
N53	Southern Giant Petrel	<i>Macronectes giganteus</i>	Monotypic. Possible vagrant, given one found dead at Lac Assal Djibouti in 1991 Redman <i>et al</i> 2009. NB some evidence (Penhallurick & Wink 2004) for the two Giant Petrels to be just sssp of <i>giganteus</i> , but this wide-ranging paper has not achieved consensus. Occurs mostly well below Tropic of Capricorn, but has reached Réunion & Seychelles IUCN .
N54	Northern Giant Petrel	<i>Macronectes halli</i>	Monotypic. BLI Seabird Tracking Database Mar 2021 no longer has a few indications of individuals reaching OSME deep-ocean latitudes, datalogging limitations at times of approximately equal day/night periods presumably now taken into account. However, many supposed locations now shown as deep into continental Antarctica. Occurs mostly below Tropic of Capricorn.
N55	Broad-billed Prion	<i>Pachyptila vittata</i>	Monotypic. Harrison <i>et al</i> 2021, but not Howell & Zufelt 2019, map occurrence as just reaching the southern part of the OSME Region deep-ocean area. It has reached Réunion IUCN .
N56	Antarctic Prion (Dove Prion)	<i>Pachyptila desolata</i>	Monotypic, although considered polytypic in 1983. In 1979, a wreck of this species was discovered near Mogadishu, Somalia (Ash 1983), a latitude some 1170km S of Socotra. Ash also saw other prions of this species flying offshore. Has also reached Mauritius. May comprise cryptic species Howell & Zufelt 2019.
N57	Kerguelen Petrel	<i>Aphrodroma brevirostris</i> (formerly <i>Pterodroma brevirostris</i>)	Monotypic. In Sep 1978, one was found dead on a beach in Mallable, Somalia by John Ash. Storrs Olsen confirmed the ID, Ash 1983. The latitude was c 1200km S of Socotra. Mostly confined to below 29 deg S.
N58	White-headed Petrel	<i>Pterodroma lessonii</i>	Monotypic. R&A 2005 note unconfirmed occurrence Sri Lanka. Unlikely in OSME Region, since it mostly occurs below Tropic of Capricorn, but Howell & Zufelt 2019 tentatively map occurrence just into the SE corner of the OSME Region deep-ocean boundary; wandering to 5°S in eastern Indian Ocean. NB Mostly confined to below 36 deg S, but one vagrant reached Shetland, UK in 2020.
N59	Black-winged Petrel	<i>Pterodroma nigripennis</i>	Monotypic. Harrison <i>et al</i> 2021 note that this Pacific species has recently bred on Round Island N of Mauritius: it has also been seen off Mauritius and off St Paul Island in S Indian Ocean.
PT	Boyd's Shearwater (formerly within Macaronesian Shearwater) PT)	<i>Puffinus boydi</i> (<i>sensu lato</i>) (formerly considered <i>P. [lherminieri] baroli</i>)	PT Originally lumped with many other taxa under Audubon's Shearwater <i>P. lherminieri</i> , firstly Macaronesian Shearwater was split into the <i>lherminieri/boydi/barolo</i> complex, then Boyd's Shearwater <i>P.[l.] boydi</i> was split w1th ssp <i>barolo</i> , thus leaving <i>lherminieri</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. lherminieri</i> . BLDZ Sep 2019 remain with 3-taxa lumped <i>P. lherminieri</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> .
N60	Boyd's Shearwater	<i>Puffinus boydi</i> (<i>sensu stricto</i>) (<i>P. [lherminieri] boydi</i>)	Monotypic Austin <i>et al</i> 2004. Vagrancy possible, especially since timescale of recent taxonomic separations short, and majority of records antedate splits, but sole known breeding location Cape Verde Islands. Hypothetical report Turkey Western Anatolia Kirwan <i>et al</i> possibly this taxon or <i>P. baroli</i> , Barolo Shearwater (see Non-passerine List). Vagrancy to Region more likely through Mediterranean than via Cape of Good Hope. NB1 Flood & van der Vliet 2019 provide an excellent ID paper on separation of <i>baroli</i> & <i>boydi</i> , & detail the separation difficulties. 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 Barolo Shearwater <i>P. baroli</i> & extralimital Boyd's Shearwater <i>P. boydi</i> should be re-examined.
		Ciconiidae	
N61	Painted Stork	<i>Mycteria leucocephala</i>	Monotypic. R&A 2012 map wintering distribution close to Khyber (rare), BLDZ map Sep 2021 W past Dera Ismail Khan & almost N to Rawalpindi, as scarce non-breeder about 85km from border, but over 1100km N of its westernmost breeding area; vagrancy to Afghanistan likely and to SE Iran possible. Escape record 2 birds Oman 1986 OBL7 .
N62	African Woolly-necked Stork	<i>Ciconia microscelis</i>	Distribution S of Sahara & reaches Khartoum on the Nile. Given recent vagrancy of large soaring birds to Egypt and Israel, might wander to Region from its easternmost distribution in N Eritrea
N63	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	Polytypic; nominate S Asia to Malay Peninsula, Vietnam, <i>australis</i> New Guinea, Australia. Single isolated record ssp <i>asiaticus</i> W Pakistan coast, very close to Iran R&A 2012, elsewhere in eastern Pakistan declining BLDZ Sep 2021; 9 records NW Gujarat, India 2014 Gadhavi <i>et al</i> 2018.
N64	Saddle-billed Stork	<i>Ephippiorhynchus senegalensis</i>	Recorded Eritrean Dahlak Islands by Edgardo Moltoni prior to 1941, Moltoni & Ruscone 1940-1944. Current distribution no nearer to Red Sea than NE Ethiopia, some 230km inland.
		Sulidae	
N65	Abbot's Booby	<i>Papasula abbotti</i>	Vagrant to the Maldives only 300-350km from the easternmost boundary of the OSME deep-ocean area Praveen <i>et al</i> 2019 Anderson & Shimal 2020, from its foraging area around Christmas Island, the centre of its normal foraging area some 360km S of southernmost Java.
		Ardeidae	H&M4 resequences families, genera & within genera, but we remain with IOC sequencing..
N66	von Schrenck's Bittern	<i>Ixobrychus eurhythmus</i>	Monotypic. Erroneously listed (no citation) several 'Egypt' lists, but this strongly migratory species may well wander to easternmost OSME Region; BM to E Asia from Sundas & Philippines. Current distribution nearest to Region just E of Mongolia & SE Mynamar. Has reached Italy (2015 AERCTAC WP List)
PT	Western Reef Heron PT	<i>Egretta gularis</i>	Worthwhile separate listing on allopatry pro tem; extralimital 'Western Reef Egret' <i>E.(g.) gularis</i> occurs western Africa, 'Dimorphic Egret' <i>E.(g.) dimorpha</i> Madagascan 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 sssp <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 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.
N67	Dimorphic Egret (Mascarene Reef-egret)	<i>Egretta (gularis?) dimorpha</i>	Monotypic. Breeding distribution limits are unclear: IOC6.2 suggests E Africa coast & Madagascar, from which BLDZ & HBW Alive maps of lumped taxa presumably are taken, indicating a northern limit N of Mogadishu, Somalia, only c350km from where <i>schistacea</i> is believed to breed at 8°N on that same coast; vagrant interchange is likely. RNBWS report dark-morph May 95 Aden at 12:52:0.0N+45:1:0.0E, but database entry does not eliminate Indian Reef Heron <i>E.(g.) schistacea</i> . H&M4 retains as ssp of Little Egret <i>E. garzetta</i> . NB A detailed study of all taxa in the Little Egret and the Eastern/Western Reef Egret complex (<i>sensu lato</i>) is needed to establish the relationships of these taxa.
		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 .
N68	Spot-billed Pelican	<i>Pelecanus philippensis</i> Near-Threatened .	Monotypic. Possibly historical Seistan/Sistan or Iraq marshes. Certainly scarce but regular N Gujarat, India R&A 2012. Declining, globally, westernmost breeding W India BLDZ Jul 2019, tendency to move E or N to non-breeding areas. Has occurred as a vagrant on the Maldives Anderson & Shimal 2020.
		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 electruction

N69	Indian Vulture (Formerly Indian Long-billed Vulture)	<i>Gyps indicus</i> Critically Endangered	Monotypic. Straggler Afghanistan Smith 1974 (this record inadequate R&A 2012), also to eastern CA, rare vagrant Nuristan Argandeval 1983 (doubtful Ayé <i>et al</i> 2012), rare resident Pakistan Naoroji 2006. However, drastic population crash through diclofenac poisoning makes recurrence in OSME Region unlikely F-L&C 2005, Chris Bowden 2007 pers comm, since core populations now E & S of Pakistan/India border Arshad <i>et al</i> 2009, BLDZ Jul 2019. Included H&M3 corrigenda E Dickinson pers comm
N70	Slender-billed Vulture	<i>Gyps tenuirostris</i> Critically Endangered	Monotypic. Possibly once irregular WV to Iranian S Baluchestan (Baluchistan) Zarudny 1911, but westernmost breeding distribution limit has retreated to easternmost Shahjahanpur Uttar Pradesh BLDZ Sep 2021, a retreat of 750 km aince 1995 from NE Pakistan.
N71	Red-headed Vulture (King Vulture)	<i>Sarcogyps calvus</i> (formerly <i>Torgos calvus</i>) (R&A 2012 place in <i>Aegypius</i>) Critically Endangered	Monotypic. Formerly recorded in Pakistani Balochistan, adjoining Iranian Baluchestan, pre-1950s, Roberts 1991. This region's pre-1950s characteristic areas of open woodland has now largely disappeared due to human population increases & mass refugee exodus from Afghanistan causing deforestation. Zarudny 1911 sight records S Baluchestan Iran, status unknown. Breeding occurred Tharparker Desert Pakistan 2002 (Nadeem <i>et al</i> 2007). Diclofenac poisoning renders current occurrence in OSME Region unlikely Chris Bowden Nov 2007 pers comm; BLDZ map Sep 2021 still indicates small isolate population around Zhob, Pakistan, only some 25km from Afghan border: the River Gumar flows out of Afghanistan at around 2000m asl, a likely scavenging area: another remnant population may straddle the Pakistan/Indian border N of Bhuj, Gujarat.
N72	White-headed Vulture	<i>Trionoceps occipitalis</i>	Monotypic. Recorded Eritrean Dahlak Archipelago de Marchi <i>et al</i> 2009. BirdLife DataZone map Aug 2021 indicates present in this archipelago and along the Eritrean coast from Mitsewa down to and through Djibouti. Vagrant reported as probable north of Port Sudan Bird & Blackburn 2011.
N73	African Hawk-Eagle	<i>Aquila spilogaster</i>	Monotypic. Previously in <i>Haliaeetus</i> Helbig <i>et al</i> 2005. BLDZ map Sep 2021 as reaching N Eritrean coast & N Somalian coast Djibouti almost to Cap Guardafui. Recorded in Eritrean Dahlak Islands de Monti <i>et al</i> 2009.
N74	Eastern Chanting Goshawk	<i>Melierax poliopterus</i>	Monotypic. Given that its Horn of Africa distribution is wider than that of Dark Chanting Goshawk <i>M. metabates</i> (<i>qv</i> Non-passerine list) and that the two species closely resemble each other (Redman <i>et al</i> 2009), it may have been overlooked in Yemen. Apr 2014 Israel report reassigned to Dark Chanting Goshawk <i>M. metabates</i> , although an anomalously marked individual. BLDZ Sep 2021 maps northern breeding distribution limit as from S Djibouti, only 75km from Perim Island, Yemen, E to Cape Guardafui, then S to Tanzania. One photographed near Ethiopian border in Djibouti Sep 2018
N75	Japanese Sparrowhawk	<i>Accipiter gularis</i>	Polytypic; 3sspp, all extralimital. <i>A.g sibiricus</i> breeds montane pine forests N of easternmost Kazakhstan in Altai just 170km outside Region to NE, BLDZ , IUCN Sep 2021: HBW Alive, H&M4 W to c80°E (F-L&C 2005), but Gombobaatar & Leahy 2019 paint a gloomier picture in assessing nearest PM as 520km from Kazakhstan & isolated breeding location on NE Mongolia much further away., uncommon-rare, but regular breeder Krasnoyarsk Republic (c85°E) Rogacheva 1992. Likely juveniles on dispersal wander to easternmost Kazakhstan from Russian & Mongolian Altai population. Very secretive breeder in montane pine forests; Mark Brazil <i>in litt</i> . NB1 Forms superspecies with Besra <i>A. virgatus</i> . NB2 Has reached Australia
M76	Besra (Besra Sparrowhawk)	<i>Accipiter [virgatus] virgatus</i>	Polytypic; westernmost ssp <i>affinis</i> mapped as summer breeder in R&A 2012 to N Pakistan close to Wakhan panhandle (Afghanistan), H&M4 give its westernmost breeding range as Kashmir: BLDZ Sep 2021 maps as resident along forest foothill zone almost to Islamabad & to further N; reported close to Islamabad Nov 2016 & Jan 2017 <i>BirdingASIA</i> 27:131. IUCN Sep 2021 maps in N Pakistan N of Muzaffarabad, less than 180km from Afghanistan. 9 other sspp further E & SE. NB Forms superspecies with Japanese Sparrowhawk <i>A.[virgatus] gularis</i> .
N77	Pied Harrier	<i>Circus melanoleucos</i>	Monotypic. One sight record of straggler close to Region boundary in not too distant Salt Range in N-C Pakistan Dec 85, Mark Mallalieu <i>in litt</i> to T.J Roberts. Rare winter records Pakistan not too far from Khyber R&A 2012; BLDZ map Sep 2021 as WV in arc N and past Lahore almost to Dera Ismail Khan, Pakistan as far W as Mianwali, less than 150km from Afghanistan. Breeds not too far away from easternmost Kazakhstan in Mongolia Bräunlich 2012, but BLDZ Sep 2021 puts regular summer breeding range at least 1100km away. However, rare PM Erdene, Mongolia (Great Gobi 'A' Reserve) Gombobaatar & Leahy 2019, 900km from Kazakhstan. Winters extralimitaly as far S to Sri Lanka & Singapore, one extreme vagrant reported Chagos Archipelago Carr 2015.
PT	Black Kite PT	<i>Milvus migrans</i>	<p>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.</p> <p>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 Gujarat, 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 et al 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> .</p>
N78	'African Black Kite'	<i>Milvus [aegyptius] parasitus</i> (formerly <i>Milvus (migrans) (sensu lato) parasitus</i>)	Relationship with taxon <i>aegyptius</i> as per IOC7.2. Although conventionally this taxon thought to be remote in Africa from Region, the resident populations on Sudan's Red Sea coast, traditionally assigned as <i>M.[m.] aegyptius</i> Yellow-billed Kite, actually have black bills Nikolaus 1987; an isolated population of uncertain affinities? Nikolaus 1987 also notes the widespread presence not only of yellow-billed <i>aegyptius</i> in Sudan, but also of yellow-billed ' <i>parasitus</i> ' , seemingly in sympatry. The work of Scheider <i>et al</i> 2004 & Johnson <i>et al</i> 2005 does not accommodate Nikolaus 1987 nor adequately address these populations. <i>Pro tem</i> , we suggest the occurrence in Egypt of ' <i>parasitus</i> ' as assigned by Nikolaus 1987 very possible, but clarification of taxon identities may require revision, perhaps even involving ancestral link to Red Kite <i>M. milvus</i> . Andreyenkova <i>et al</i> 2019 map <i>aegyptius</i> in a narrow band separating <i>parasitus</i> from the southern Red Sea African coast, but that remains unproven, as yet does full 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 sspp boundaries, especially over the vast region attributed to <i>parasiticus</i> . NB Thinly widespread in Khartoum Region Jenner & Taha 2016, with suitable breeding and foraging areas north along the Nile to Egypt's border.
N79	White-bellied Sea Eagle	<i>Haliaeetus leucogaster</i>	Monotypic. One photographed Sunehra Beach, W of Karachi Oct 2014, some 520km from Region, a short distance for this wide-ranging fish specialist Akbar Ali Asif & Azam Karam <i>BirdingASIA</i> 34:134. BLDZ Oct 2021 places nearest regular occurrence just S of Mumbai, India.
		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> 2019.

This highly complex group has considerable individual plumage variation within & across populations; morphological data are of limited value Pellegrino *et al* 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 is not final, but 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 Nieuwenhuyse <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>glaux</i> , <i>lilith</i> & <i>indigena</i> ; <i>glaux</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.
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			<p>NB1 In a study of 282 Little Owl skins from across the Extended Western Palearctic, Pellegrino et al 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. 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).</p>
N80	Ethiopian Little Owl	<i>Athene (noctua) spilogastra</i>	<p>K&W 2008, Wink et al 2009 support elevation to sp (with 2 sspp); <i>spilogastra</i> E Sudanese Red Sea along coastal hinterland S to Eritrea & <i>somaliensis</i> E Ethiopia to N Somalia; latter likely on African side (Djibouti) of Bab-el-Mandab Strait; Ash & Atkins 2009. Claim of specimen from Ha'laib triangle SW Egypt resembling <i>spilogastra</i> BinE 2009. Recorded Sudan only c180km S of Ha'laib Triangle Nikolaus 1987, according to map in Mikkola 2012. NB BirdLife still lump all taxa in the <i>noctua</i> complex, but interpretation of the Sep 2018 map in BLDZ, allows attribution of taxon <i>spilogastra</i> to coasts of Sudan & N Eritrea & taxon <i>somaliensis</i> to coastal N Somalia.</p>
M81	Pearl-spotted Owlet	<i>Glaucidium perlatum</i>	<p>Polytypic: 2 sspp. Recorded in the Eritrean Dahlak Islands de Marchi <i>et al</i> 2009: ssp <i>licua</i> resident coast N Eritrea opposite Dahlak Islands, close to coastal inlet Djibouti and on a short stretch of N Somali coast E of Berbera IUCN, BLDZ Oct 2021.</p>
PT	African Scops Owl PT	<i>Otus senegalensis (sensu lato)</i>	<p>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.</p>
N82	African Scops Owl	<i>Otus senegalensis (sensu stricto)</i>	<p>Polytypic: nominate to Red Sea, <i>nivosus</i> elsewhere in Africa. Post-splits, absence of evidence of occurrence ssp <i>senegalensis</i> in Region; nearest population on African side of Bab-el-Mandab Straits, although Ash & Atkins 2009, not covering Djibouti, locate it more distantly. BLDZ Oct 2021 maps breeding distribution to N Eritrean coast, W Djibouti & to NW Somali coast, areas & locations similar to Pearl-spotted Owlet qv. The taxonomic identity of many mainland Africa populations is uncertain as are their affinities to each other, to African island populations and to Arabian Scops Owl <i>O. pamelae (av)</i> Collar & Boesman 2020.</p>
PT	Eurasian Eagle Owl <i>Bubo bubo</i> PT	<i>Bubo bubo (sensu lato)</i>	<p>PT – <i>ascalaphus</i> & <i>interpositus</i> reported often as <i>B. bubo</i>. IOC2.0 accepts split of Indian Eagle Owl <i>B.[b.] bengalensis</i> (see ORL Hypothetical List) 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.</p>
N83	Indian Eagle Owl (Rock Eagle Owl, Dusky Eagle Owl)	<i>Bubo [bubo] bengalensis</i>	<p>Monotypic. <u>In following the split of <i>B. bengalensis</i> from Eurasian Eagle Owl <i>B. bubo</i>, taxonomy follows König <i>et al</i> 1999, R&A 2005, IOC1.6, K&W 2008. Although maps in König <i>et al</i> 1999 & K&W 2008 cover the SE quadrant of Afghanistan and Iranian Baluchistan, texts do not mention these countries: Mikkola 2012 reproduces this doubtful map; R&A 2005, 2012 map species quite close to the Khyber Pass, Pakistan, but not to Iran. Grimmitt <i>et al</i> 2009 map to Pakistan/Iran border along Gokprosh and Makran Coastal Ranges. BLDZ Jul 2019, Feb 2021, after refinement via contouring algorithm applied to Himalayan chain & not to Afghan border, maps residency consistently close to Afghan border in Pakistan from N of Charbagh (near Mingora) in a <u>suspiciously fairly straight line</u> SW through Peshawar W of Zhob & then on to Ormara on the Indian Ocean. Closest line comes to Afghanistan is 25km near Zhob. <u>However, found in Central Karakoram, Pakistan north of BLDZ Map of Nov 2020 Abbas <i>et al</i> 2014: survey elevations of valley floors ranged from 2400m to 4200m; the lowest pass into Wakhan, Afghanistan is the Broghol, at 4270m; see the account below for a summary of current lack of knowledge of separation of distributions in Pakistan of <i>B. bubo</i> and <i>B. bengalensis</i>.</u> NB1 Early references to occurrence in Afghanistan rejected by Whistler (1944-5): 'too pale'; assigned to <i>B.b. turcomanus</i> (Paludan 1959) but we know of no subsequent analysis of extant specimens. K&W 2008 aver sympatric with <i>turcomanus</i> in Kashmir; possibly also in SE quadrant of Afghanistan. NB2 Occurs close to habitation and human activity in Gujarat, India, often perching on cliffs or rock faces at water sources where prey comes to drink MB pers obs.</u></p>
N84	Dusky Eagle Owl	<i>Bubo coromandus</i>	<p>Map in König <i>et al</i> (1999) covers northeasternmost Afghanistan, also HBW5; would be ssp <i>coromandus</i>. Range in R&A 2005 much further to S, & K&W 2008 seem to agree: BLDZ Jul 2019 map places this sp in lower altitudes irregularly from Dera Ismail Khan & Mianwali in the north of Pakistan (140km from Afghanistan), then S in the cultivated and vegetated Indus catchment to Karachi; IUCN map Mar 2022, places westernmost Pakistan distribution close to Tank, 100km from Afghanistan. Apparent 'quarantine corridor' shown in K&W 2008 (also R&A 2005, 2012) between this & Eurasian Eagle Owl <i>B. bubo</i> from coast mid-Pakistan N to Kashmir then SE to Nepal (but <i>coromandus</i> not included in molecular analyses cited in ORL) is also apparent in BLDZ Feb 2021 maps: this gap also shows <i>coromandus</i> S of Himalayas, <i>bubo</i> to N: however, IUCN maps Mar 2022 indicate the 2 species may overlap in a smallish area of Naushera/Therī Brahmani, Balochistan, Pakistan. Overlaid on these 2 distributions is that for Indian (Rock) Eagle Owl <i>B. bengalensis</i> whose straight-line separation from <i>B. bubo</i> is a worthless artefact because no fieldwork seems to have been done to define their detailed distributions nor identify any hybrid zone. Maps in K&W 2008, R&A 2005, Grimmitt <i>et al</i> 1998 and Roberts 1991 suggested <i>coromandus</i> unlikely in OSME Region, for traditional well-watered woodland was then scarce in Afghanistan, but proliferation since then of small dams and in places new irrigation channels provides possible Afghan plantation habitat, to which species had adapted in Pakistan Roberts 1991.</p>
PT	Brown Fish Owl PT	<i>Bubo zeylonensis</i>	<p>Recent work to establish distribution limits in southern Turkey (van den Berg <i>et al</i> 2010) complemented by molecular analysis (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 sspp <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> 2019 found <i>Ketupa</i> to be embedded in <i>Bubo</i>, noting further research may split <i>Bubo</i> into 3 genera.</p>
N85	Eastern Brown Fish Owl	<i>Bubo (zeylonensis) leschenaulti</i>	<p>Polytypic if split. BLDZ Jul 2019 maps only Brown Fish Owl <i>sensu lato</i>, but also without any boundary between the 3 sspp that would comprise Eastern Brown Fish Owl. Given that at least 10 recently-found disjunct locations in Iran are currently attributed to <i>semenowi</i> (Western Brown Fish Owl), it would clarify matters if these populations can be confirmed as such (or otherwise). The nearest continuous BLDZ mapped distribution to the east is in remote NW Pakistan within 10km of the Afghan border, but it has not been revised by the contouring algorithm; the species is likely to occupy vegetation in valleys, perhaps nesting on adjacent cliffs. Although this Pakistan population is currently assigned to <i>semenowi</i>, confirmation or reassignment would be useful to establish just how near Eastern Brown Fish Owl distribution comes to the OSME Region. <i>Pro tem</i> and somewhat provocatively, we make the working assumption that the NW Pakistan birds are <i>leschenaulti</i> whose distribution closely resembles that of numerous other species whose westernmost limits are close to the Afghan border with Pakistan, or just inside Afghanistan.</p>
		Coliidae	
N86	Blue-naped Mousebird	<i>Urocolius macrourus</i>	<p>Recorded, likely ssp <i>griseogularis</i>, along Sudan Nile Valley to within c 150km S of Egypt Nikolaus 1987. BLDZ map Jul 2019 shows resident W Red Sea coast from Port Sudan S & E to N Somalia & N in Nile Valley to al Goled, Sudan, some 350km from Egypt. Has been recorded Eritrean Dahlak Islands de Monti <i>et al</i> 2009. Heavily traded species, particularly for the US pet market.</p>
		Coraciidae	<p>Johansson <i>et al</i> 2018 revise relationships within Coraciidae, but postpone endorsement of taxonomic revisions save to recommend re-evaluation of (Asian Clade) Dollarbird <i>Eurystomus orientalis</i> species limits.</p>
N87	Dollarbird	<i>Eurystomus orientalis</i>	<p>Vagrant to Pakistan (eBbird cited by Lees & Gilroy 2021). Given its Himalayan breeding population in Himachal Pradesh is only 250km from Pakistan, this strong-flying species with a tendency to wander huge distances may well reach the OSME Region.</p>
		Meropidae	<p>Marks <i>et al</i> 2007 confirmed status of ORL taxa (<i>M. orientalis</i>, pre-split).</p>
N88	Little Bee-eater	<i>Merops pusillus</i>	<p>Widespread and common in Ethiopia, ssp <i>cyanostictus</i>, Ash & Atkins 2009, Redman <i>et al</i> 2009: family are powerful fliers; nearest sspp <i>cyanostictus</i> of W Somalia or <i>ocularis</i> of W Ethiopia; likely the latter resident on N Eritrean coast around Massawa, W Djibouti & NW Somali coast in Hargeisa Province BLDZ Jul 2019. NB Confusable with extralimital Blue-breasted Bee-eater <i>M. variegatus</i> (mostly W of 40°N Ethiopia) & Cinnamon Bee-eater <i>M. oreobates</i>, W & S of Ethiopia.</p>

N89	Ethiopian Bee-eater	<i>Merops lafresnayii</i>	Split from Blue-breasted Bee-eater <i>M. variiegatus</i> IOC11.2. Occurs Eritrean Red Sea coast opposite Dahlak Archipelago: nearest Saudi Farasan island only 105km from nearest Dahlak island, in line-of-sight at under 1000m altitude, above which bee-eaters often fly.
N90	Olive Bee-eater [Madagascar Bee-eater]	<i>Merops superciliosus</i>	ssp <i>superciliaris</i> occurs as intra-tropical breeder in NW Somalia, SE Djibouti & parts of Ethiopia and coastal Eritrea S of Massawa Redman <i>et al</i> 2009, BLDZ Jul 2019.
N91	Blue-tailed Bee-eater	<i>Merops philippinus</i>	Westernmost Pakistan range (ssp <i>javanicus</i>) close (25km) to Khyber; spring overshoot to Afghanistan possible; map Grimmett <i>et al</i> 2009, R&A 2012, mapped close to Afghan border beyond Mingora, below Arandu, Pakistan BLDZ Jul 2019. Vagrant SE Iran?
		Megalaimidae	
N92	Coppersmith Barbet	<i>Psilopogon haemacephalus</i> (formerly <i>Megalaima haemacephala</i>)	Formerly in Afghan Khyber? See maps Grimmett <i>et al</i> 2009, R&A 2012; resident Pakistan from near Islamabad SW to Mutan, about 120-150 km from Afghan border BLDZ Jul 2019. H&M4 place in new genus, ssp <i>indicus</i> western distribution 'S Asia'. Unmistakeable loud call.
N93	Vielliot's Barbet	<i>Lybius vielliotti</i>	African barbets in <i>Megalaima</i> (<i>Psilopogon</i>) transferred to <i>Lybius</i> Moyle 2004. Nominate breeds Eritrean Dahlak Islands de Monti <i>et al</i> 2009, BLDZ map Sep 2020: shortest sea-crossing to nearest Farasan island 105km, visible from only 1000m altitude..
		Indicatoridae	
N94	Yellow-rumped Honeyguide	<i>Indicator xanthonotus</i>	Monotypic IOC11.2. Reported on-line Afghanistan. Possible, but nearest documented population NE Pakistan thought extinct or fragmentary but shown as isolate 210km from Afghan border NE of Islamabad at Murree in BLDZ Jul 2021 map. R&A 2005, 2012 say no. In H&M3 corrigenda E Dickinson pers comm
		Picidae	Winkler <i>et al</i> 2013 revise Picidae , mostly via mtDNA, but link to other molecular studies. Genera 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 .
N95	Black-rumped Flameback (Lesser Goldenback, Black-rumped Woodpecker)	<i>Dinopium benghalense</i>	IOC2.10 new English name. Resident (ssp <i>dilutum</i>) in main vale of Peshawar Roberts 1991, BLDZ Jul 2019 maps to within 10km of Torkham border post, which distribution area similar to Sind Woodpecker (Sind Pied) <i>Dendrocopos assimilis</i> – (formerly?) in similar habitat on Afghan side of Khyber? NB Winkler <i>et al</i> 2014 note that the relationships within <i>Dinopium</i> have not been researched, the genus is not close to <i>Chrysocolaptes</i> Flamebacks, whatever the plumage similarities; Shakya <i>et al</i> 2017 confirm the superficiality of plumage similarities, noting also that <i>Dinopium</i> is not monophyletic because extralimittally, Olive-backed Woodpecker <i>D. rafflesii</i> is sister to Pale-headed Woodpecker <i>Gecinulus grantia</i> . IOC 10.2 then placed Olive-backed Woodpecker in <i>Gecinulus</i> .
N96	Yellow-crowned Woodpecker (Yellow-fronted Pied Woodpecker)	<i>Leiopicus mahrattensis</i> {formerly <i>Dendrocopos mahrattensis</i> }	Genus change follows Winkler <i>et al</i> 2013; Fuchs & Pons 2015 convert to monospecific genus. Pakistan populations ssp <i>pallascens</i> Gorman 2014: probably once occurred in Afghan Khyber. See map Grimmett <i>et al</i> 2009, where now uncommon Pakistan, although BLDZ Jul 2019 maps it 10km E of Peshawar N almost to Mingora where only 60km from Afghan border. NB Middle-Spotted <i>L. medius</i> & Brown-fronted <i>L. auriceps</i> Woodpeckers complete this new genus (see Non-Passerine List)
		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 electrcution			
N97	Greater Kestrel	<i>Falco rupicoloides</i>	Recorded (ssp <i>fieldi</i>) on Eritrean Dahlak Islands, whose easternmost island is only 60km from Yemen's Jabal al-Tair Island NW of Al -Hudaydah, & in S Eritrea near Bab-el-Mandab Ash & Atkins 2009; also resident in S Djibouti & NW Somalia at coast BLDZ Jul 2019: note Dahlak Archipelago lies 160km in a straight line from nearest Eritrean distribution, including a 50km sea-crossing; if that bird had wandered as far as the Ghelaalo Peninsula, then the longest sea-crossing to the archipelago, island-hopping, is 10km..
N98	Fox Kestrel	<i>Falco alopex</i>	Recorded once in the Dahlak Islands de Marchi <i>et al</i> 2009
N99	Grey Kestrel	<i>Falco ardosiaceus</i>	Recorded once in the Dahlak Islands de Marchi <i>et al</i> 2009
N100	African Hobby	<i>Falco cuvierii</i>	Monotypic. 2 RNBWS reports: Jun 73 Red Sea off Eritrea at 17:46:0.0N+40:26:0.0E & Nov 77 of bird on board for 2 days off Salahat at 15:12:0.0N+56:48:0.0E – misidentification possible given the state of knowledge of identification criteria at the time. NB Common resident Eritrea & Ethiopia Ash & Atkins 2009, although BLDZ map 2019 omits from Eritrea, the Ethiopian populations being 125-180km from the coast.
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 treats as nominate of Barbary Falcon <i>F. pelegrinoides</i> , which the balance of evidence now indicates, although it is unlikely to be the final word. H&M4 list 18 ssp, 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.
N101	Shaheen	<i>Falco (peregrinus) peregrinator</i>	Wink 2018 omits this taxon (not a Palearctic sp) but given his comment that <i>babylonicus</i> seems very distinct genetically & that its alternative English name is 'Red' or 'Red-naped Shaheen', we consider <i>peregrinator</i> likely also to be quite distinct. Naoroji 2006 notes <i>F.p. peregrinator</i> (Shaheen) is sedentary resident India, NE Pakistan, but Zarudny 1911 assessed that population as then wintering in Persia's Kerman-Kohistan; in modern Iran, this could be S Khorasan, N Sistan-va-Baluchestan or E Kerman. Perhaps unlikely nowadays, but immature falcons prone to wander. Birds that migrate to winter continental SE Asia, including N Thai-Malay Peninsula have unknown breeding grounds, possibly S or E China H&M4. NB BirdLife lump all forms of <i>Falco peregrinus</i> complex BLDZ Jul 2019, but resident mainland India distribution shown as 35% of that in Naoroji 2006.
		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.
N102	Blossom-headed Parakeet (Rosy-headed Parakeet)	<i>Psittacula roseata</i> (May move to <i>Himalayapsitta</i> BLI/HBW)	Escapes encountered in UAE, but not proven breeding Aspinall & Porter 2011. Natural distribution no nearer OSME Region than E Indian Bihar & E Nepal R&A 2012, BLDZ Sjul 2019, sssp <i>roseata</i> & <i>juneae</i> ..
PASSERINES, English Name			
		Family, Species or Taxon	Working Notes; includes 'recent' material. NB Secondary references often unvalidated
		Pittidae	
P1	Indian Pitta	<i>Pitta brachyura</i>	Monotypic. van Els & Brady 2014 identified a specimen, a juvenile female collected along the Karkheh River, "17 km sw of Shush", Khuzestan, SW Iran, 19 Nov 1968. The age and timing (collected in November) align with normal migration/dispersal timings; <i>Dutch Birding</i> WP List Jan 2015. Origin uncertain (Unclear whether claimed feather abrasion attributable to natural causes, captivity before being traded or captivity after capture somewhere in Iran), & so has been rejected by IRBC DB40(3): 188-189, Khaleghizadeh <i>et al</i> 2017, and so was removed from ORL Passerine List, but since, rather awkwardly, has been accepted as vagrant by Shirihai & Svensson 2018 & Lees & Gilroy 2021! Lees & Gilroy 2021 raise the prospect of vagrancy to the southern limits of the Extended Western Palearctic. We note this possibility, but until a documented case of probable vagrancy in this direction can be made, we retain this account in the ORL Hypothetical section. NB Nearest known populations 1000km+ away near Islamabad Pakistan (Haripur) and Gujarat India. Haripur is but 165km from Afghanistan. BLDZ Sep 2021 notes it is a long-distance migrant, some populations moving c 2500km, which indicates misoriented birds could reach Khuzestan, Iran, and almost certainly, Afghanistan. Examination of IUCN map Feb 2022 shows that the minimum migration distance undergone by this westernmost breeding population is c 2175km to Paniji, North Goa, but the non-breeding area extends south from the coast nland in a band c 130km wide to Kanyakumari on the subcontinent's southern tip, a migration distance of c 3005km (or c 3250km to southernmost Sri Lanka). Although it occupies montane forest in much of its range, it occurs in low-altitude deciduous or scrub forests, much of which no longer exists in SE Iran nowadays, due to human agrarian population movement out of Afghanistan into marginally fertile areas.
		Tephrodornithidae	
P2	Common Woodshrike	<i>Tephrodornis pondicerianus</i>	Though ssp <i>pallidus is</i> sedentary in Pakistani wooded lowlands, it does penetrate ravines & occurs close to Afghan border near Thal & at Khyber Roberts 1992, within 25km at Torkham Pass, down to 10km N of Zhob & 30km NW of Bannu to up to 75km in numerous places BLDZ Sep 2021, the western line of occurrence is in an almost straight line from N of Peshawar to Ormara, Pakistan.
		Campephagidae	
P3	Small Minivet	<i>Pericocotus cinnamomeus</i>	R&A 2012 map in Pakistan close to E&NE Afghan border (ssp <i>pallidus</i>). BLDZ Sep 2021 maps occurrence in Pakistan to within 35km of Afghan border at Peshawar & N of Kohat. This species may be split in future.

		Laniidae	Zhang <i>et al</i> 2007 formally concluded that Brown Shrike <i>Lanius cristatus</i> & Red-backed Shrike <i>L. collurio</i> are independent species & that Long-tailed Shrike <i>L. schach</i> & extralimital Grey-backed Shrike <i>L. tephronotus</i> are distinct species. Fuchs <i>et al</i> 2019 validates these conclusions, adding that <i>L. phoenicuroides</i> & <i>L. isabellinus</i> are just as distant as <i>L. collurio</i> is from <i>L. cristatus</i> ; all are separate lineages. NB The documented tendency for migratory birds to spend the non-breeding season increasingly futher north in the northern hemisphere has now been proven linked to Climate Change Lehtikoinen <i>et al</i> 2021.
Fuchs <i>et al</i> 2019, in demonstrating as separate lineages, render previous concepts of <i>isabellinus</i> & <i>phoenicuroides</i> as 2 subspecies, or as split separate species from recent ancestry, or as superspecies redundant. Therefore there has been no Parent Taxon since the ancient common ancestor. IOC2.0 & Svensson <i>et al</i> 2009 had accepted split into 2 species. Note that the name <i>isabellinus</i> previously only applied to N China birds (since usually referred to as <i>arenarius</i> , <i>isabellinus</i> then name applying to Central Asian birds). Pearson 2000 suggested that <i>isabellinus</i> is the correct name for those then named <i>speculigerus</i> , the basis of which argument Panov 2009 suggests is invalid; Panov synonymises <i>arenarius</i> with <i>isabellinus</i> , noting type specimen of <i>isabellinus</i> does not differ greatly from several long series of <i>speculigerus</i> , & that the type location is not within <i>isabellinus</i> breeding distribution. <i>L. isabellinus</i> likely winterer Iran & <i>L. phoenicuroides</i> breeds & winters. The extralimital breeding populations of WC China comprise 'arenarius' (undefined) & <i>tsaidamensis</i> , & form separate group, raised to species status by some Russians; <i>pro tem</i> , we treat <i>tsaidamensis</i> as potentially separable, but see account below.			
P4	'Eastern Red-backed Shrike' ('Chinese Shrike')	<i>Lanius tsaidamensis</i>	The identity of the population in China, once labelled 'arenarius', that merges into that of (now referred to as) <i>speculigerus</i> is uncertain. Both 'arenarius' (= <i>L. isabellinus speculigerus</i> Panov 2009) and <i>tsaidamensis</i> from WC China winter in N India and Pakistan: 2 reported & photographed in Golestan, Iran Jan 2009 <u>may</u> be from this group (DB 31 pp193 & 198); specimens from E Iran are mentioned in H&E 1970, but Vaurie was non-committal Khaleghizadeh <i>et al</i> 2017. The taxon <i>tsaidamensis</i> is the largest in the <i>cristatus-collurio-isabellinus</i> complex, but is the least studied, perhaps being associated with saxaul and salt cedar habitat (from Przhevalsky's 1886 expedition); however, size decreases to N of breeding range until it approaches that of <i>speculigerus</i> (Evgeniy Panov <i>in litt</i>). From limited specimen data, intermediates with <i>isabellinus</i> (probably the population formerly attributed to 'arenarius') and <i>speculigerus</i> are likely (Evgeniy Panov <i>in litt</i>). BLDZ Sep 2021 remains with lumped <i>L. isabellinus</i> , hence map is unhelpful. NB1 English name 'Isabelline Shrike' here inappropriate, hence interim name informal@OSME. NB2 Should <i>tsaidamensis</i> be elevated to full sp, it would be monotypic, unless part of the undefined population of 'arenarius' in NW China is found to be closer to <i>tsaidamanensis</i> than to <i>speculigerus</i> in Mongolia & just in the Russian Federation; seemingly, there is no gap in that arc Evgeniy Panov <i>pers comm</i> .
P5	Grey-backed Shrike	<i>Lanius tephronotus</i>	R&A 2012 map summer breeder ssp <i>lahulensis</i> W to E Ladakh, Manali in Uttar Pradesh & in Tibet much further E. BLDZ Sep 2021 places nearest breeding are a 150km S of Ladakh near Tabo in Himachal Pradesh & also indicates BM in adjacent China then E along (mostly) Indian Himalayas to vast area of C China N to include Gansu; wintering in lowlands S of Himalayas & Yunnan Plateau. On 2017 Ladakh Checklist as fairly common SV without comment. Sharma <i>et al</i> 2018 report it much further NW in Kashmir Marusudar catchment.
In the 12 years since the draft of Olsson <i>et al</i> 2010 was submitted in 2009 for publication, the consensus interpretation of their results & the results of Panov 2011 & of Bannikova 2010 (in Panov 2011) is: Southern Grey Shrike <i>Lanius meridionalis</i> is a monotypic isolate confined to Iberia & southern France (& now named Iberian Shrike), being related ancestrally most closely to Nearctic Northern Grey Shrike <i>L. borealis</i> & not to any Palearctic taxa; those formerly attributed as sspp of <i>L. meridionalis</i> are actually related to 2 other <i>Lanius</i> spp, Great Grey Shrike <i>L. excubitor</i> & Northern Grey Shrike <i>L. borealis</i> . The latter's eastern Palearctic sspp are <i>sibiricus</i> , <i>bianchii</i> , <i>mollis</i> & <i>funereus</i> , only the nominate being in the New World. Within the WP & Africa, the 12 or 13 taxa related to <i>L. excubitor</i> comprise not only sspp, but probably also full species here considered as part of a large superspecies that includes all the above. This general position is accepted by BLDZ 2018, IOC8.2, Shirihaï & Svensson 2018, Poelstra 2010, Poelstra 2014, Tajkova & Red'kin 2014, Peer <i>et al</i> 2011 & the AOU in 2017 as proposed by Rasmussen 2017 (Almost the exact arrangement as Vaurie 1959!). That the results of Olsson <i>et al</i> 2010 were obtained solely from mtDNA explains their decision not to attribute species status to some of the taxa in their derived Clades. However, Fuchs <i>et al</i> 2019 not only sequenced mtDNA, but also two nuclear regions. Their view of the Olsson <i>et al</i> 2010 findings was uncompromising: "We will not discuss these relationships again as the original results were corroborated here". We therefore list below our overall interpretation of the status and relationships of the large grey shrike taxa much less provisionally than before.			
NB1 This kind of taxonomic complexity is far from uncommon; eg the <i>flava/citreola</i> wagtails, the large white-headed gulls, Pacific island hawk owls & Paradise Kingfishers, all meriting a broader view. NB2 Isenmann & Bouchet 1991 as amended by Isenmann & Lefranc 1994 had placed taxon elegans within the <i>L. meridionalis</i> complex (also as proposed by Panov 1983) on priority grounds within the context of perceived morphological and feathering trends across 'southern' taxa, a hypothesis that depended upon radiations of post-glacial populations conforming with a plausible sequence pattern of successive pre- and post-glacial refugia. The more nuanced understanding today of the complexities and geographical variability of successive glaciation advances and retreats aligns better with the arrangements of large grey shrike taxa in Olsson <i>et al</i> 2010 & Fuchs <i>et al</i> 2019.			
PT	Chinese Grey Shrike PT	<i>Lanius sphenocercus</i>	Olsson <i>et al</i> 2010 support split on molecular data into Chinese Grey Shrike <i>L.(s.) sphenocercus</i> (Cabanis 1873) & 'Giant Grey Shrike' <i>L.(s.) giganteus</i> (Przevalski 1887) (both monotypic); latter English name used in 1920s for this taxon. IOC4.4 treats <i>sphenocercus</i> & <i>giganteus</i> as the 2 sspp of Chinese Grey Shrike, noting resolution of their status awaited. Yang <i>et al</i> 2016 sequence complete mt genome of <i>L.s. sphenocercus</i>
P6	Chinese Grey Shrike	<i>Lanius sphenocercus</i>	Monotypic H&M4, but IOC5.4 lists as polytypic Chinese Grey Shrike nominate and <i>giganteus</i> : Yang <i>et al</i> 2016 note shared ancestry of Corvidae & Laniidae & <i>L.s. sphenocercus</i> being distant from Laniidae other than the large grey shrikes: the previous English names 'Tibetan Grey Shrike' or 'Giant Grey Shrike' now referable to taxon <i>giganteus</i> as ssp of <i>sphenocercus</i> : H&M4 & Eaton <i>et al</i> 2016 splits these taxa; much clearly to be researched. Map in Shimba 2007 suggests <i>sphenocercus sensu stricto</i> likely wanderer to E Kazakhstan, Kyrgyzstan & Tajikistan. However, BLDZ Sep 2021 map of unsplit taxa shows breeding from Sichuan NE to Russian Amur, but c 90% are BM, which increases likelihood of long-distance vagrancy, but taxon not known for certain to breed nearer than 2000 km from Region, although as a rare PM & vagrant breeder Mongolia, it may be only 1450km from Region Gombobaatar & Leahy 2019.. NB The English name 'Tibetan Grey Shrike' previously has been applied rather haphazardly to both <i>giganteus</i> (eg Brazil 2009) & to Grey-backed Shrike <i>L. tephronotus</i> of Himalayas (qv). The shrike taxon name ' <i>tibetanus</i> ' (as in 'Tibetan Grey Shrike' <i>L.s. 'tibetanus</i> ' (dark grey; possibly separable) is of uncertain derivation & appears to have been used in multiple fashion to describe taxa of both Chinese Grey (possibly = <i>giganteus</i>) & Grey-backed Shrikes. It is not listed in major references.
		Vireonidae	IOC v2.3 moves this & several other species from Timaliidae , placing as Old World members of Vireonidae . Cibois 2003 showed that <i>Pteruthius</i> spp are not babblers.
P7	Green Shrike-babbler	<i>Pteruthius xanthochlorus</i>	Occurs up to 3350m R&A 2005. Map in Arlott 2007 suggests narrow breeding area Afghanistan; R&A map westernmost limit ssp <i>occidentalis</i> S Kashmir as does HBW 12 map. Roberts 1992 tends to support, but notes declining population of already rare sp, supported by map & text. BLDZ Sep 2021 suggests not regular in Pakistan, but occurs in Kashmir only 60km from Islamabad but 210km from Afghan border. NB Reddy 2008 suggests split into 4 spp (this taxon would be <i>P. occidentalis</i> , 'Western Green Shrike-Babbler'); findings subject to evaluation under Biological Species Concept Rheindt & Eaton 2009.
		Rhipiduridae	<i>Rhipidura sensu lato</i> generally adaptable and inquisitive genus. Nyári <i>et al</i> 2009 & Jönsson <i>et al</i> 2016 rearrange <i>Rhipidura</i> for monophyly, the 2 spp below now part of true <i>Leucocirca</i> .
P8	White-throated Fantail	<i>Leucocirca albicollis</i> { <i>Rhipidura albicollis</i> }	Polytypic. Occurs up to 2300m R&A 2005. Map (very small scale) in Arlott 2007 suggests: that in R&A 2012 just reaches Pakistan from E. Grimmett <i>et al</i> 2009 map in Pakistan, 3 small disjunct areas, Murree Hills, Gilgit & Kunar valley in NW; H&M4 place ssp <i>canescens</i> in NE Pakistan, BLDZ map Sep 2021 indicates presence as far W as Islamabad, but only in winter; isolate breeding populations possible in Afghan Daryā-ye & Konar valleys (prefers damp shady ravines). NB This taxon along Himalayas breeds at higher altitudes than <i>L. aureola</i> & so may wander more easily into Afghanistan.
P9	White-browed Fantail	<i>Leucocirca aureola</i> { <i>Rhipidura aureola</i> }	Polytypic. Contra Arlott 2007 map, Grimmett <i>et al</i> 2009, R&A 2012 map extensively along riverine (including artificial) valleys, up to E end Safed Koh, close to Afghan Khyber, BLDZ Sep 2021 maps this sedentary taxon (as <i>Rhipidura aureola</i>) W of Peshawar & Kohat only 30km from Torkham Pass on Afghan border & only 20km from border slightly further S: ssp <i>aureola</i> ; other 2 sspp extralimital to E. NB Nominate along Himalayas breeds at lower altitudes than <i>L. albicollis</i> above.
		Corvidae	

P10	Plain-crowned Jay	<i>Garrulus bispecularis</i>	Split from Eurasian Jay <i>G. glandarius</i> by BLDZ & IUCN : nominate in W Himalayas as far as Namal, eastern Abbottabad, Khyber Pakhtunkhwa Pakistan, some 215km from Afghanistan; 5 other extralimital sssp E to easternmost China & Taiwan.
P11	Azure-winged Magpie (Asian Azure-winged Magpie)	<i>Cyanopica cyanus</i>	Westward range expansion ssp <i>cyanus</i> increases vagrancy chance; probable vagrants noted E of Region at c100°E at 56°N Rogocheva 1992, over 500km from BLDZ Sep 2018 mapped occurrence, Fefelov pers comm cited in Haring <i>et al</i> 2007. M&P 2000 map westernmost limit 200km E of Kazakhstan, Shimba 2007 map suggests likely wanderer to easternmost Kazakhstan. Now although HBW14 maps only to c110°E, BLDZ Sep 2021 maps in Mongolia to c96°E, some 700km from Kazakhstan. However, Gombobaater & Leahy map to 92°E at Ulaangom, only some 340km from Kazakhstan, suggesting westward spread is being maintained. Buddhists have introduced this species near Urumqi, Xinjiang, NW China, perhaps at Sikeshu, only 170km from the Kazakh border Ma <i>et al</i> 2013; it is thriving. On-line claim of occurrence in Iran (2013) was in-country hoax. NB Svensson <i>et al</i> 2009, H&M4 strangely make no mention of split of extralimital Iberian Magpie <i>C. cooki</i> as per Fok <i>et al</i> 2002, Kryukov <i>et al</i> 2004, Kryukov 2019. 3rd ssp is <i>japonensis</i> , only on Honshu Island.
P12	Yellow-billed Blue Magpie (Gold-billed Magpie)	<i>Urocissa flavirostris</i>	ssp <i>cucullata</i> of interest. Occurs up to 3500m R&A 2005. Map in Arlott 2007 suggests; R&A 2005 map almost reaches E to Pakistani Khyber. Indication of some support in M&P 2000. However, likely map in Roberts 1992 (p420) has been misread – 2 species on 1 map, but shading densities not greatly different – Eurasian Magpie <i>Pica pica</i> is mapped to border, but <i>U. flavirostris</i> in only 3 small patches of moist temperate forest 150-300km from border. However, BLDZ Sep 2021 maps 2 isolate populations NE & NW of Islamabad, the nearer to Afghanistan being some 75km from the border. Although citations probably based on Bates & Lowther 1952, their 'Kashmir' comprised only c20% of 21st-century disputed area: species on 2017 Ladakh Checklist without comment..
P13	Rufous Treepie (Indian Tree-pie)	<i>Dendrocitta vagabunda</i>	Hills of SE Iran, E Afghanistan? M&B say Pakistani Hazara is western limit. Roberts 1992 maps to Afghan border at S Kurram, as do R&A 2012. BLDZ Sep 2021 maps it at Spin Wam, within 20km of Afghan border, settlements along the border-crossing Kaitu River having ample trees (NW of Bannu, Pakistan). H&M4 ssp <i>bristoli</i> resident Pakistan. All 8 other sssp extralimital further E.
P14	Biddulph's Ground Jay (Xingjiang Ground-jay)	<i>Podoces biddulphi</i>	Probably in dry valley areas on Kazakhstan-China border, E of Zharkerit area, where M&B 1994 map neatly stops, as does HBW14 map. Perhaps coincidentally, M&P 2000 also map it to E end of Wakhan, but also ESE Kazakh border. 2003 survey estimate >10 000 birds, but fragile habitats degraded by 20-fold human population increase HBW14. Known to occur within 140km of China-Kyrgyzstan border Ma-Ming & HK Kwok 2004, Londei 2011. BLDZ Sep 2021 map to within 50km of Kyrgyzstan N of Aksu, Xinjiang (a relatively-low-altitude pass through mountains) & within 65km of Kyrgyzstan N of Kashgar; also occurring 300km E of Wakhan..
P15	Cape Crow (Cape Rook)	<i>Corvus capensis</i>	ssp <i>kordofanensis</i> of interest. Two reported Egypt 29 Nov 07 at Shalateen (notified to <i>Sandgrouse</i> ATR) were not accepted on EORC list. Occurs N Somali coast BLDZ map Sep 2021, but not near Bab al Mandab Strait & maps Eritrean population occurring away from coast, <i>contra</i> Ash & Atkins 2009 (who suggested it breeds Eritrean Red Sea coast); breeds Somali N coast Redman <i>et al</i> 2009. NB HBW14 notes largely sedentary, but has wandered occasionally, but if amongst numerous other corvid spp would be difficult to confirm.
PT	Rook PT	<i>Corvus frugilegus</i>	Kryukov 2019 as a byproduct of research into the phylogeography & hybridisation of Palearctic corvids found after sequencing the control region of mtDNA a deep split into two lineages between western and eastern Rook populations, thus reinforcing previous conclusions expressed by HBW14, HBW Alive & Haring <i>et al</i> 2007.
P16	'Eastern Rook'	<i>Corvus (frugilegus) pastinator</i>	Reports from Kazakhstan of occasional nesting or vagrancy are plausible, but lack specimens or other definitive proof Arend Wassink pers comm Jul 2019. Various authorities conflict on extent of distribution. Some indicate a boundary with <i>C.(f.) frugilegus</i> in forests N of easternmost Kazakhstan, others indicate 900km gap from Kazakhstan to central Mongolia. Kryukov 2019 on Corvid Phylogeography mentions peripherally that some degree of separation is indicated, but other molecular techniques are required for certainty. Even Kryukov cannot advise on the distribution limits, Alexey Kryukov pers comm Jul 2019. Currently BLDZ Sep 2021 maps East Asian SB populations of <i>frugilegus</i> & <i>pastinator</i> as separated by only 280km in N Mongolia, between Ulaangom & Tec. Gombobaatar & Leahy 2019 make the point that nowhere is either taxon common, although their allopatric separation distance accords with BLDZ .
P17	Dwarf Raven (Somali Crow)	<i>Corvus edithae</i>	Monotypic. Occurs in half-degree square containing Perim Island Ash & Atkins 2009. Common, widespread & commensal on African side of Bab-el Mandab Strait HBW14 & also on Eritrean islands Londei 2005, breeding on 5 large islands of the Dahlak Archipelago Azeria 2004, more widespread de Monti <i>et al</i> 2009. BLDZ Sep 2021 maps breeding to coast from Ghelaalo Peninsula Eritrea continuously for over 1220km S almost to Somalian Laasgabay: also maps its presence on the Dumeira Islands on the Djibouti- Eritrea border, 26km from Perim Island, Yemen; likely it has visited Djibouti's Seven Brothers Islands only 17km from Perim. It is probable that it has reached Yemen on occasions, but has been overlooked among the abundant Brown-necked Raven <i>C. ruficollis</i> ; the longest sea-crossing leg if island-hopping is only 17km: Google Maps. NB Closely related to Pied Crow <i>C. albus</i> Jönsson <i>et al</i> 2012.
		Stenostiridae	IOC2.0 places this species in new family Stenostiridae, Fairy Flycatchers.
P18	Grey-headed Canary-flycatcher (Grey-headed Flycatcher)	<i>Culicicapra ceylonensis</i>	ssp <i>calochrysea</i> of interest. Occurs up to 2700m R&A 2005. Map in Arlott 2007 suggests breeding area reaches Afghanistan; R&A 2005 map westernmost limit SE Kashmir, Roberts 1992 less optimistic, but H&M4 refers to Himalayan foothills E of N Pakistan. However, BLDZ Sep 2019 maps N & just W of Islamabad as BM, westernmost limit along a Haripur-Thakot line, some 170km from Afghanistan. Steve Madge suggests Arlott 2007 error perpetuated from Baker 1922-29. Eastern SB populations have given rise to some vagrancy eastward as far as S Korea Lees & Gilroy 2021, c 1400km if crossing the Yellow Sea, but c2750km if limited to land. NB English name amendment reflects separation from true flycatchers IOC2.7
		Paridae	Largely we follow Johansson <i>et al</i> 2013, IOC3.5, & Alström <i>et al</i> 2013b. Until then the dismemberment of the <i>Parus</i> genus had been premature. IOC3.5 reflects the new standard, though earlier authorities such as Scott & Adhami 2006 retain <i>Parus</i> throughout. Current taxonomic listings may change further when more is known about contact zones, acoustics and molecular genetics Eck & Martens 2006 NB1 Dai <i>et al</i> 2010 found <i>Poecile</i> diverged earlier than <i>Parus</i> . NB2 although some regard <i>Poecile</i> as feminine, JJ Kaup, the originator of the genus name did not specify it as such, and by default under ICZN rules, it is masculine: case endings of species names follow suit.
P19	Fire-capped Tit	<i>Cephalopyrus flammeiceps</i>	Claimed summer visitor NE Afghanistan, R&A 2005, 2012 (map), maps M&P 2000, Arlott 2007 also suggest reaches Afghanistan, of which no mention in HBW13 H&M4 (ssp <i>flammeiceps</i> N Pakistan). Occurs up to 3000m on open mountain slopes with bushes and scattered deciduous trees & may well occur in such patches in Nurestan & Wakhan; however, Roberts 1992 sceptical of single previous 1924 claim for Afghanistan & R&A 2005 cite 1 record NE Afghanistan, Kandahar; best-known Kandahar is in S Afghanistan; Bates & Lowther record range from Afghan border of Pakistan eastwards. Grimmett <i>et al</i> 2009 map to Chinese, not Afghan border; spring overshoot to Wakhan? Ayé <i>et al</i> 2012 make no mention. BLDZ Sep 2021 maps as reaching Islamabad N to Sazin River to N of Gilgit, some 100km S of Afghan Wakhan. Gilgit-Baltistan Bird website 2021 as SB maps within 45 km of Wakhan, Afghanistan.
P20	Yellow-browed Tit	<i>Sylviparus modestus</i>	2015 Ladakh Checklist; <i>simlaensis</i> Kashmir westernmost range H&M4. BLDZ Sep 2021 notes declining population & distribution, but maps within 25km of Pakistan in Kashmir at westernmost distribution between Gulmarg & Rajouri.
PT	Eurasian Blue Tit PT	<i>Cyanistes caeruleus</i> (formerly <i>Parus caeruleus</i>)	IOC2.0 accepted split of African Blue Tit <i>C.[c.] teneriffae</i> , under which all related North African sspp appear to be grouped, the split arising from Salzburger <i>et al</i> 2002b. NB Dai <i>et al</i> 2010 find <i>C. caeruleus</i> diverged before any <i>Parus</i> listed in the ORL.
PT	Teneriffe Blue Tit PT {African Blue Tit}	<i>Cyanistes [caeruleus] teneriffae</i>	All related Canarian & North African sspp were grouped, the split arising from Salzburger <i>et al</i> 2002b. Sangster 2006 was the first to argue that the evidence supported 4 or 5 separate Blue Tit spp in the Canary Islands. Stervander <i>et al</i> 2015 noted incomplete lineage sorting of nuclear markers across the Canary Islands and N Africa, mitigating somewhat against full speciation as noted Illera <i>et al</i> 2011. However Illera <i>et al</i> 2016, synthesising more recent molecular data, reverses the conclusions of Illera <i>et al</i> 2011 and vindicates Sangster 2006, while emphasising that taxon <i>cyrenaicae</i> is a relict population from ancestral stock that colonised the Canary Islands on 3 separate occasions.
P21	Cyrenaic Blue Tit {Cyrenaican Blue Tit}	<i>Cyanistes [teneriffae] cyrenaicae</i>	Monotypic if split from <i>teneriffae</i> ; taxon <i>cyrenaicae</i> occurs NE Libya IOC6.3, in Cyrenaica from al-Militaniya 150km ENE to al Qubah & to Mechili: <i>C. teneriffae sensu lato</i> mapped by BLDZ Sep 2021, some 265km from NW Egypt Isenmann <i>et al</i> 2016 & 350km from inland al-Jaghhub Oasis close to Egyptian border. Storm-driven vagrancy Egypt likely? BLDZ Jul 2019 partially accept Dai <i>et al</i> 2010, Olsson <i>et al</i> 2013 & Alström <i>et al</i> 2013b, but retain <i>cyrenaicae</i> in <i>C. teneriffae</i> . NB Very different in plumage colours from North African Great Tit <i>C. (teneriffae) ultramarinus</i> Isenmann <i>et al</i> 2016.

P22	Green-backed Tit	<i>Parus monticolus</i>	Johansson <i>et al</i> 2013 assess as sister to <i>Pseudopodoces humilis</i> and to the <i>Parus major</i> complex. Occurs locally above 3300m R&A 2005. Very similar appearance to European populations of Great Tit <i>P. major</i> . Map in Arlott 2007 suggests occurrence; R&A 2005, 2012 map easternmost limit exactly at Afghan border S of western end of Wakhan, as does map in HBW 12. Grimmett <i>et al</i> 2009 map to border at Kunar river; Afghan occurrence ssp <i>monticolus</i> in Daryā-ye & Konar valleys? BLDZ Sep 2021 maps close to (3km) Afghan border W of Dir & near Maskeni & Pashat on tributaries of Panjikora & Babukara Rivers respectively, 80km N of Mardan, where Afghanistan's Nuristan Forest reserve reaches its easternmost point. Sedentary, little altitudinal migration, avoids drier Himalayan forests Roberts 1992. 3 extralimital sssp further E Eck & Martens 2006.
		Alaudidae	Since the 1990s, large-scale revisions worldwide of lark taxonomy have occurred, here mainly of <i>Calandrella</i> and incorporating recent Russian rationalisation of their disparate earlier treatments. IOC8.1 provided a resequencing of Alaudidae . We follow Alström <i>et al</i> 2013a, 2013b in their comprehensively reviewed phylogeny as per IOC4.2, but modified <i>pro tem</i> for, inter alia, <i>Calandrella sensu stricto</i> by the inferred Clades in Stervander <i>et al</i> 2016: the same team have produced a consequent taxonomic revision, Stervander <i>et al</i> 2020 who applied molecular species delimitation, employing coalescence-based multi-rate Poisson Tree Processes (mPTP) on cytochrome b sequences to the lark species. They found new and supporting evidence for divergences between taxa so deep that likely splits, as Clades , probably will mostly be reinforced by the application of other genetic techniques. Many lark spp occur over remote open habitats, including deserts, that have been little studied. We have in most of these cases (where the number of sssp was small) listed potential species that will require further research. Where there were multiple sssp, most of which were not sampled, there as yet is no means of allocating the unsampled sssp to any Clade Per Alström pers comm Sep 2021. Furthermore, some of these multiple sssp may later be deemed invalid, but in any case sssp breeding distribution limits & boundaries are often poorly known or guessed at.
P23	Rufous-tailed Lark	<i>Ammomanes phoenicura</i>	On Avibase website Afghan list without citing source, but R&A 2012 conclusive mapping westernmost population ssp <i>phoenicura</i> in NE Pakistan, BLDZ Sep 2021 confining Pakistan isolate population to C Pakistan N of Multan as far as Dullawala & Sawihal, some 200km from Afghanistan; only other ssp <i>testacea</i> extralimital in S India.
P24	Chestnut-backed Sparrow Lark	<i>Eremopterix leucotis</i>	Normally ssp <i>melanocephalus</i> reaches in Nile Valley Sudan 200km S of Egyptian border (BLDZ Sep 2021 map just S of Wawa), but movements N occur during rains Nikolaus 1987: possible overshoot in years of exceptional rains; ssp <i>leucotis</i> in S&E Sudan, Eritrea near coast, Ethiopia and NW Somalia near coast.
P25	Ashy-crowned Sparrow-Lark	<i>Eremopterix griseus</i>	Monotypic. R&A 2012 map in Pakistan close to E&NE Afghan border, BLDZ Sep 2021 map as far N as Mingora & halfway to Afghan border from Peshawar, only about 20km from the border for about 30km.
P26	Mongolian Lark	<i>Melanocorypha mongolica</i>	Monotypic. On-line report for Kyrgyzstan, but more likely to be vagrant easternmost Kazakhstan, which is 750km nearer species' western range limit as SB/Resident, which lies another 330km further E in Mongolia, W of Lake Uvs: BLDZ map Sep 2021. However, Gombobaater & Leahy 2019 state species is fully resident, their map apparently showing its presence in all Mongolia: their map may possibly be an accidental copy of the preceding species in their book, listed as Horned Lark <i>Eremophila alpestris</i> ; this taxon now is Steppe Horned Lark/Mongolian Horned Lark <i>E.(a.) brandti</i> .
P27	Tibetan Lark	<i>Melanocorypha maxima</i>	Monotypic. Arlott 2007 map shows extensive area just SE of Wakhan, but <i>Melanocorypha</i> spp prone to wander widely. R&A 2005 map just N of Afghanistan, but R&A 2012 reduce nearest distribution to India-China border. M&P 2000 maps distribution as being S of Wakhan but probably on Pakistan-China border? 2003 Web list Ladakh; BLDZ Sep 2021 map includes easternmost Ladakh/Kashmir, 530km from OSME Region. NB Afghan citation in John Gould's Birds of Asia (vol 4 1867) in error - type locality was Sikkim (Hartert).
		Pycnonotidae	Many bulbul 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	Common Bulbul PT	<i>Pycnonotus barbatus sensu lato</i>	Although IOC2.2 shows the split (Sibley & Monroe 1990 p583), it seems unrecognised elsewhere until Fishpool & Tobias 2017 documented monotypic Somali Bulbul <i>P. somaliensis</i> (Djibouti, NW Somalia, NE Ethiopia), monotypic Dodson's Bulbul <i>P. dodsoni</i> (N Somalia, SE Ethiopia, E-C Kenya) & polytypic Dark-capped Bulbul <i>P. tricolor</i> (S Ethiopia, then to E C & S Africa). H&M4 & BLDZ remain with <i>P. barbatus sensu lato</i> ; 10 sssp, but IOC10.2 maintains the splits. For Somali & Dodman's Bulebuls, see ORL Hypothetical List. NB Sibley & Monroe 1990 initially proposed an extensive superspecies of 11 spp based on Red-vented Bulbul <i>P. cafer</i> : <i>P. barbatus sensu stricto</i> simultaneously was separated from <i>P.somaliensis</i> , <i>P. dodsoni</i> & <i>P. tricolor</i> . This superspecies has now dissolved into 11 separate spp.
P28	Somali Bulbul	<i>Pycnonotus somaliensis</i>	Monotypic. Fishpool & Tobias 2017 split off from polytypic Common Bulbul <i>P. barbatus sensu stricto</i> monotypic Somali Bulbul <i>P. somaliensis</i> (Djibouti, NW Somalia, NE Ethiopia), monotypic Dodson's Bulbul <i>P. dodsoni</i> (N Somalia, SE Ethiopia, E-C Kenya) & polytypic Dark-capped Bulbul <i>P. tricolor</i> (S Ethiopia, then to E C & S Africa). Likely only the first might wander or be traded to mainland Arabia. Prior to the split, Common Bulbul <i>P. barbatus</i> ssp <i>arsinoe</i> already existed in the OSME Region in Egypt, down the Nile Valley, the then ssp <i>somaliensis</i> being acknowledged as abundant in Djibouti on African side of Bab-el-Mandab Straits Ash & Atkins 2009, Redman <i>et al</i> 2009. Common Bulbul and Somali Bulbul are both traded species (IUCN Red List), and so now any occurrence in southern Arabia may well be the latter. NB Common Bulbul ssp <i>schoanus</i> occurs within reasonable distance of African S Red Sea coast.
P29	Dodson's Bulbul	<i>Pycnonotus dodsoni</i>	Monotypic. From its northernmost distribution (N Somalia, SE Ethiopia, E-C Kenya), this species might reach Socotra. See above for summary of split.
		Hirundinidae	IOC11.2 revises linear sequence of Hirundinidae .
PT	Sand Martin PT	<i>Riparia riparia</i>	Re Parent Taxon IOC update 2.0 accepted split of <i>diluta</i> : Dickinson & Dekker 2001b, Sangster <i>et al</i> 2011, AERCTAC 2011, H&M4 agree. Loskot 2006 denotes ID characteristics, some greater detail of <i>riparia sl/diluta sl</i> differences tabled in Chandran 2017. Tanq <i>et al</i> 2021 found clear divergence between <i>R. riparia</i> & <i>R.diluta</i> .
P30	Undescribed Martin	<i>Riparia</i> sp	Located & mapped by Gedeon & Töpfer 2021 in 8 locations 2013-2019 within 6 quadrats of Ash & Atkins 2009 distribution maps of Ethiopia & Eritrea. Breeds sympatrically with Brown-throated Martin <i>R. paludicola</i> : nests in burrows in a variety of habitats; main ID features are overall light greyish upperparts, white or very pale underparts - size similar to <i>R. paludicola</i> & Sand Martin <i>R. riparia</i> . Very probably has a much wider distribution Gedeon & Töpfer 2021, having been overlooked. Potential for vagrancy to OSME Region is high.
PT	Rock Martin PT	<i>Ptyonoprogne fuligula</i> (formerly <i>Hirundo fuligula</i>)	IOC2.0 accepts initial split to <i>obsoleta</i> & <i>fuligula sensu stricto</i> , as do www.zoonomen.net, H&M4, Goodman <i>et al</i> 1986 treated as full sp; no proven records of <i>P.[f.] fuligula sn</i> in Region (nearest residents coastal N Eritrea BLDZ map Jul 2016), but weather-system-driven vagrants likely Egypt, Yemen or SW Saudi Arabia (see Hypothetical List). <u>However, note further complication of understanding of taxon identities below</u> . Unfortunately, Svensson <i>et al</i> 2009, Shirihai & Svensson 2018 remain with <i>P. fuligula sensu lato</i> , the related maps liable to misinterpretation of distribution of <i>fuligula sensu lato</i> & <i>sensu stricto</i> (qv). HBW Alive/BLI have undertaken a deeper split, somewhat differently from previous proposals, erecting Large Rock Martin as <i>P. fuligula sensu superstricto</i> for the species only in southern Africa, and Red-throated Rock Martin <i>P.rufigula</i> for the species occupying the region south of the Sahara as far as the northern edge of southern Africa. NB1 There are no records of post-split P. fuligula sensu stricto (or post-subsequent BLI split P. rufigula sensu superstricto) in the OSME Region; all earlier records refer to pre-split Rock Martin P. fuligula sensu lato . Should a 1st record for the OSME Region occur, the species would be listed after P. obsoleta (IOC11.2). NB2 Sibley & Monroe 1990 noted that Somalian populations of <i>obsoleta</i> occur without any sign of intermediacy toward <i>fuligula</i> in neighbouring Ethiopia; not all agree & a genetic analysis is sorely needed.
BLI have further split P. fuligula sensu stricto thus: populations (all extralimital) from S of the Sahel southwards, then in eastern half of Africa to from Ethiopia to S Mozambique are Red-throated Rock Martin P. rufigula with sssp rufigula, bansoensis, pusilla . Large Rock Martin P. fuligula sensu stricto reductio comprises sssp fuligula, anderssoni, pretoriae occurring largely S of diagonal from C Angola to S Mozambique BLDZ maps 2018.			
P31	Red-throated Rock Martin (Rock Martin, African Rock Martin)	<i>Ptyonoprogne [fuligula] rufigula</i> (Formerly <i>P. (f.) fuligula</i> , <i>Hirundo (f.) fuligula</i>)	3 extralimital sssp. African species T&R 1989. Unconfirmed reports post-split as occurring in Region (Richard Klim <i>in litt</i>), but sssp <i>pusilla</i> (Ethiopia & Eritrea) & <i>rufigula</i> , which is no longer pre-occupied in genus, (W&S Sudan, W-C Ethiopia) may occur; all hirundines liable to displacement by weather systems; <i>bansoensis</i> remote from Region. NB1 Ash & Atkins 2009, Redman <i>et al</i> 2009 map <i>pusilla</i> on African side of Bab-el-Mandab Strait. NB2 IUCN Redlist Sep 2021 & BLDZ Sep 2021 maps now agree: there is no Red Sea breeding distribution: the nearest (allopatric) breeding are is in C & SW Ethiopia, at least 460km from the OSME Region.
P32	Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	Though a resident species in its distribution, it occurs in southeasternmost Pakistan (BLDZ Sep 2021), 685km from Iran and 860km from Oman, not such a remarkable distance for such an aerial species, especially in strong easterly winds.
		Cettiidae	IOC v2.0 placed Cettiidae ahead of Aegithalidae . NB family name may be invalid on priority grounds Ed Dickinson <i>in litt</i> . Alström <i>et al</i> 2011c found <i>Tesia</i> , <i>Tickellia</i> & Mountain Tailorbird <i>Orthotomus cucullatus</i> to be nested within Cettia , but many taxa formerly included in Cettia removed to new genera, including <i>Horornis</i> . English name below informal @OSME.

P33	Pale Bush Warbler (<i>pallidus</i> only) (formerly included in Brown-flanked Bush Warbler which also known as Brownish-flanked or Strong-footed Bush Warbler)	<i>Horornis [fortipes] pallidus</i> (Wei <i>et al</i> 2019: formerly <i>H. fortipes</i> & <i>Cettia fortipes</i>) (Alström <i>et al</i> 2011c & IOC 2.11)	Monotypic if split. Taxon <i>pallidus</i> of W Himalayas differs from taxon <i>fortipes</i> of West Bengal & even more so from taxon <i>fortipes</i> of Myanmar, Alström <i>et al</i> 2011c: Wei <i>et al</i> 2019 establish strong genetic evidence, largely supported by discernable plumage differences for 3 Clades , <i>pallidus</i> , <i>fortipes</i> , & (<i> davidianus</i> + <i>robustipes</i>), but noted little morphological or song differences and so in the broad sense the Clades are incipient species. Nevertheless, under the General Lineage Concept of Species they may be regarded as full species. We treat taxon <i>pallidus</i> slightly conservatively as an allospecies in a group of 3 forming a superspecies. Taxon <i>pallidus</i> occurs up to 3300m R&A 2005. Map in Arlott 2007 for <i>H. fortipes sensu lato</i> suggests narrow breeding area Afghanistan; R&A map westernmost limit W corner Kashmir. Roberts 1992, Grimmett <i>et al</i> 2009 maps suggests Afghan breeders most likely in Nurestan (Daryā-ye & Konar valleys), WSW of Chitral in Pakistan, as does map in Kennerley & Pearson 2010; BLDZ Sep 2021 (also for <i>H. fortipes sl</i>) maps continuous summer breeding W into Pakistan from Himalayas sweeping NW past Mingora & Dir, just SSE of Mirkhani, where only 7km from Afghan border. As <i>Homochlamys pallidus pallidus</i> , Bates & Lowther 1959 asses it as patchily widespread, making no allusion to its 'Kashmir' distribution beyond their specified area.
		Aegithalidae	Sequence changes in Aegithalidae follow Päckert <i>et al</i> 2010 accepted in IOC 12.1
P34	Red-throated Bushtit (formerly part of Black-throated Bushtit)	<i>Aegithalos iredalei</i> (formerly part of <i>A. concinnus</i>). IOC 12.1 places as ssp of <i>A. concinnus</i> , but notes possibility of 3-way split of <i>concinnus</i> taxa.	As Black-throated Tit, on WBDB 2008 Afghanistan checklist as uncertain. H&E 1970 suggest the possibility; likely ssp <i>iredalei</i> of NE Pakistan. Polytypic, nominate & <i>rubricapillus</i> C Himalayas. <i>Aegithalos concinnus</i> , <i>A. iredalei</i> and <i>A. annamensis</i> split by del Hoyo and Collar 2016 into Black-throated Tit ss, Red-throated Tit & Grey-crowned Tit respectively. BLDZ Sep 2021 map westernmost continuous distribution of <i>A. iredalei</i> as just reaching Islamabad, Pakistan, but with an isolate N&E of Mingora only 20km from the Afghan border near Barawal Bandi. This valley climbs west and then southwest into Afghanistan, merging into the Kunar Valley.
P35	White-throated Bushtit (White-throated Tit)	<i>Aegithalos niveogularis</i>	Monotypic. Occurs up to 4000m R&A 2005. Map in Arlott 2007 suggests occurs Afghanistan; R&A 2005 map westernmost limit of mid-Kashmir, largely according with Bates & Lowther 1952, whose area ended there, but BLDZ map Sep 2021 to within 84km of Khyber & in an arc including & N of Islamabad to Mingora, N of Sazin, but just short of Gilgit: Gilgit-Baltistan Checklist Sep 2021 includes this species as common in the south of the province.
		Phylloscopidae	IOC2.0 removes <i>Phylloscopus</i> from Sylviidae and places with <i>Seicercus</i> in new family Phylloscopidae , ahead of Acrocephalidae sensu stricto , but the use of that family name considered invalid on priority grounds (Ed Dickinson in <i>litt</i> 2012), which decision is asserted in H&M4, where <i>Phylloscopus</i> & <i>Seicercus</i> are retained as families within a much expanded Phylloscopidae : H&M4 uses as rationale the findings of Olsson <i>et al</i> 2005 to : transfer some species from <i>Phylloscopus</i> to <i>Seicercus</i> , producing an expanded <i>Seicercus</i> : <i>Phylloscopus</i> is further reduced by H&M4 erecting the genera <i>Rhadina</i> & <i>Abromis</i> , again citing Olsson <i>et al</i> 2005. However, Alström <i>et al</i> 2018b, in a wide-ranging review of the phylogeny of Phylloscopidae , persuasively argue that the relationships between taxa are better presented within a single genus. Accordingly, we align with that decision but we follow IOC8.2 resequencing. NB Kolesnikova <i>et al</i> 2019 shoe that song did not function as a signal of direct aggression in 2 leaf warbler spp, Large-billed <i>P. magnirostris</i> & extralimital Sulphur-breasted <i>P. ricketti</i> , and if typical of the genus, thus song aggression may be a labile trait prone to rapid evolution.
P36	Eastern Crowned Warbler	<i>Phylloscopus coronatus</i> (<i>Seicercus coronatus</i> H&M4)	Monotypic. BLDZ Jul 2019 maps breeding E of Baikal & Mongolia in Russian Far East mostly below 55°N, Sakhalin, S into China, Korean Peninsula & Japan. Previously plausibly but erroneously <i>occipitalis</i> was considered a ssp of, then a split from <i>P. coronatus sensu stricto</i> on morphology, but now known to be but distantly related Olsson <i>et al</i> 2005: note Vaurie in 1950s treated <i>occipitalis</i> as full species, but subsequently considered it conspecific with <i>coronatus</i> Olsson <i>et al</i> 2005. Rare vagrant to WP, Harrop 2007, 1st for UK Oct 2009; such vagrants must cross the OSME Region. NB Sikkim Meinertzhagen record fraudulent (see history in Garfield 2007), also in Assam Meinertzhagen records misidentified Blyth's Leaf-Warbler <i>P. reguloides</i> – R&A 2005 (see also Garfield 2007).
P37	Kamchatka Leaf Warbler	<i>Phylloscopus examinandus</i>	First for Western Palearctic trapped Kilpisjärvi Finland Jul 2021 by Petteri Lehikoinen (image Esko Pasanen) possibly crossed OSME Region on journey from its breeding grounds in Kamchatka & Yakutia: see BLDZ map Jul 2021.
P38	Grey-hooded Warbler	<i>Phylloscopus xanthoschistos</i> (formerly <i>Seicercus xanthoschistos</i> , to which H&M4 revert)	Occurs up to 2700m R&A 2005. Map in Arlott 2007 suggests wintering area ssp <i>xanthoschistos</i> NE Afghanistan; R&A 2005 map westernmost limit W corner of Kashmir, similarly M&P 2000, but BLDZ Sep 2021 places westernmost limit N & E of Islamabad, close to the Tarbela Dam, above Haripur. Grimmett <i>et al</i> 2009 status resident or altitudinal migrant; any Afghan population therefore isolated. 3 extralimital sspp to E.
		Acrocephalidae	IOC v2.0 removes <i>Acrocephalus</i> & <i>Hippolais</i> from Sylviidae & places with some African genera in new Acrocephalidae , after Phylloscopidae sensu stricto . Restructuring of <i>Acrocephalus</i> genus inevitable from Fregin <i>et al</i> 2009; details per taxon, but 2 alternative taxonomic approaches outlined, the broader (<i>sensu lato</i> , or <i>sl</i> below) providing less phylogenetic information than the other (<i>sensu stricto</i> : <i>ss</i>), the 2nd option has some conclusions inevitably based on reduced range of DNA samples. Further work may clarify. H&M4 does not mention any adoption of <i>Calamodius</i> or <i>Notiocichla</i> genera as discussed in Fregin <i>et al</i> 2009. NB Kennerley & Pearson 2010 adopt a nominally conservative taxonomic approach, but emphasise strongly that much change is likely to follow
<p>The status of a number of African and Arabian populations within the <i>Acrocephalus scirpaceus</i>/<i>A. baeticatus</i> complex do not align comfortably as spp or sspp. We apply the ORL approach of emphasising that where we 'don't know', we use round brackets. Hering <i>et al</i> 2011 found <i>avicenniae</i> breeding in date palm & olive trees in Siwa, Egypt in high numbers; the genetic distance from <i>scirpaceus</i> & <i>fuscus</i> is small, but its ecological niche is very different. They also found 'baeticatus' -type (<i>ambiguus</i>) birds in nearby oases just into Libya; <i>avicenniae</i> is also strongly bound to mangroves along the Red Sea, and so we consider separate recognition is warranted <i>pro tem</i>. Winkler <i>et al</i> 2012 further discovered that birds in SW Iberia appeared to belong more to the <i>baeticatus</i> (<i>ambiguus</i>) grouping, & that <i>fuscus</i> characteristics predominate in SE Europe: they suggest that many populations throughout the <i>A. [scirpaceus]</i> superspecies need thorough re-examination to determine their inter-relationships so that clear taxonomic decisions can be made. Olsson <i>et al</i> 2016, a wide-ranging in-depth study, found 8 lineages in total, but not all aligned with previous taxonomies. The main difference is that populations in the southern half of Iberia, Morocco & the whole of North Africa probably are best reassigned to a new species, <i>A. ambiguus</i>, (named 'Brehm's Reed Warbler' informal@OSME) whose ancestry separated from Sahelian <i>minor</i> (<i>sensu</i> Olsson <i>et al</i> 2016) 0.53MYa & from the 'southern group' (including <i>A. baeticatus</i>, now limited to southern Africa <i>sensu stricto</i>) 0.64MYa. Hering <i>et al</i> 2022 examine 4 oasis populations in S Algeria, placing them firmly in the <i>ambiguus</i> Clade genetically and by voice, though noting a W-E cline through to the western Clade containing <i>inter alia</i>, <i>ammon</i> and <i>avicenniae</i>, but note that further evidence is required to determine taxonomic status. They agree with Olsson <i>et al</i> 2016 that treating all populations within a Reed Warbler superspecies is merited.</p>			
<p>Pavia <i>et al</i> 2018 applied to a SW Burkina Faso taxonomically undescribed population of <i>A. baeticatus</i> a combination of DNA barcode analysis and the methodology of Malmhagen <i>et al</i> 2013 in wing morphology analysis to establish subtle ID distinctions by new criteria, and suggest that this approach would assist if applied over the whole range of Reed Warbler <i>A. scirpaceus sensu lato</i>.</p>			
PT	Reed Warbler PT	<i>Acrocephalus [scirpaceus]</i> (NB Shirihai & Svensson 2018 lump Mangrove, Eurasian, Brehm's and African Reed Warblers under 'Reed Warbler' until most populations are fully assessed)	HBW Alive notes 8 lineages across 10 sspp require detailed future analysis. Olsson <i>et al</i> 2016, in a wide-ranging study, found 8 lineages (<i>scirpaceus</i> , <i>fuscus</i> , <i>avicenniae</i> , <i>ambiguus</i> , <i>minor</i> , <i>cinnamomeus</i> , <i>hallae</i> , <i>baeticatus</i> : <i>halle</i> & <i>baeticatus sensu stricto</i> are (so far) wholly extralimital; <i>ambiguus sp novo</i> may occur in westernmost Egypt). Olsson <i>et al</i> 2016 call for reed warbler complex to be comprehensively re-analysed (Iaw Parkin & Knox 2010, Winkler <i>et al</i> 2012; reinforcing the need for redefining sspp boundaries as flagged by Kennerley & Pearson 2010 who had also suggested SW Asian and C Asian populations may be separable since origin of some wintering birds unknown). Identity & relationships of isolated small breeding populations at oases in SE Egypt & SW Libya have yet to be finally settled: unfortunately Goodman <i>et al</i> 1986, 1989 had no reason to question 'scirpaceus' taxa at western Egypt oases. Kirwan <i>et al</i> 2008 warned individual variations risked blurring morphological & ID conclusions, since documented by significant rate of mislabelled specimens found by Arabi <i>et al</i> 2014a who also proved <i>avicenniae</i> basal to <i>scirpaceus</i> & <i>fuscus</i> (0.7MYA v 0.48mya). Babbington <i>et al</i> 2019 show that Arabian Red Sea populations in mangroves comprise <i>avicenniae</i> ; they note Palestinian samples aligned with that taxon. We align with Olsson <i>et al</i> 2016 & Hering <i>et al</i> 2022 in treating the complex as a superspecies while recognising that considerable future rearrangement is likely.

			<p>NB1 Olsson <i>et al</i> 2016 via a suite of molecular techniques, found all lineages (Clades) diverged before the last glacial maximum; in places, Clades misalign with current understanding: in particular, populations in Iberia & probably all of North Africa E to E Libya belong to a new species <i>A. ambiguus</i> 'Brehm's Reed Warbler' (see Hypothetical section), incorporating the 'baeticatus' individuals of Hering <i>et al</i> 2011; <i>ambiguus</i> may yet be found in western Egypt oases. NB2 Hering <i>et al</i> 2016 propose a new ssp of <i>A. scirpaceus</i>, <i>ammon</i> ('Siwa Reed Warbler' Isenmann <i>et al</i> 2016: breeds in trees & palms & reeds) for largely sedentary & tree-breeding population at oases in C & W Egypt & W Libya: <i>pro tem</i>, we concur with this arrangement while recognising it may later be placed in <i>baeticatus</i>, <i>avicenniae</i> or <i>ambiguus</i>! NB3 Given that Olsson <i>et al</i> 2016 represents a single line of study, that there is a lack of proof of reproductive isolation between taxa, and that corroborative studies are needed, they conclude that the most conservative taxonomy to adopt would be to consider all lineages as ssp of <i>A. scirpaceus</i>. However, in the ORL, we will accept <i>pro tem</i> the null hypothesis of a lack of free interbreeding to suggest possible full species, but within the constraint of an overall superspecies. NB4 Hering <i>et al</i> 2009, 2010a, 2010b, 2011 documented puzzlingly 'odd' breeding populations scattered across N Africa. NB5 Iahinae <i>et al</i> 2022, analysing genetic history of Italian & other southern European populations, show genetic cohesion & population structure likely linked at glaciation refugia in Iberia for <i>A. baeticatus ambiguus</i>, <i>Caucasus</i> for <i>A.s. fuscus</i> and Italy & Balkans for <i>A.s. scirpaceus</i>. NB6 BLDZ Jul 2019 remains with a lumped <i>A. scirpaceus</i>, but the map has changed to show fully resident populations as defined in much of the recent literature: IOC 12.2 proposes lumping African <i>A. baeticatus</i> & Eurasian <i>A. scirpaceus</i> as Common Reed Warbler <i>A. scirpaceus sensu lato</i>.</p>
P39	'Brehm's Reed Warbler' ('Ambiguous Reed Warbler' - Dutch Birding)	<i>Acrocephalus [scirpaceus] ambiguus</i> (formerly part of <i>A.[s.] baeticatus</i>)	<p>Clade 4 in Olsson <i>et al</i> 2016. Monotypic. IOC v2.3 accepted split of <i>baeticatus</i>, which removed this taxon from the OSME Passerine List, making it wholly an African species (see also BoA Vol V), Mangrove Reed Warbler <i>A.(b.) avicenniae</i> thus being separated from this complex (Dickinson 2003 placed this taxon under <i>A. scirpaceus</i>). However, Olsson <i>et al</i> 2016 further reduce <i>A.(s.) baeticatus</i> to southern Africa (Clade 6), & recast Iberian & North African populations into <i>A. ambiguus sp novo</i> (accepted in IOC 11.2), raising possibility of this taxon (part of '<i>baeticatus</i>' in Hering <i>et al</i> 2011 in E Libya) in W Egypt. Note that the '<i>ambiguus</i>-type' taxon at al Jaghbub Oasis Libya is less than 50km from taxon <i>A.s. ammon</i> at Siwa, Egypt; occasional occurrence of the '<i>ambiguus</i>-type' taxon in the OSME Region is highly probable. Much depends of the final ID of the al-Jaghbub birds. As of Sep 2018, no provisional map of <i>ambiguus</i> distribution has yet been proposed. See also Hering <i>et al</i> 2009, 2010. English name informal@OSME, derived from lectotype <i>Calamoherpe ambigua</i> (Brehm 1857)</p> <p>NB1 Ash & Atkins 2009 omit any mention. NB2 May move to new genus <i>Notiocichla</i>. NB3 DNA & vocalisation separation of <i>baeticatus</i> taxa & <i>scirpaceus</i> taxa low, but see Hering <i>et al</i> 2010b for first finding of molecular separation and sympatric breeding with Eurasian Reed Warbler <i>A. scirpaceus</i> in Libya. NE African populations to be better sampled; other factors perhaps involved Kennerley & Pearson 2010.</p>
		Helopsaltes	<p>New family Alström <i>et al</i> 2018a, but IOC10.2, having agreed in draft stage, reverted simply to new genus within Locustellidae, but since have accepted new genus Helopsaltes. BLDZ remain with Locustellidae.</p>
P40	Gray's Grasshopper Warbler	<i>Helopsaltes fasciolatus</i> (formerly <i>Locustella fasciolata</i>)	<p>Monotypic. Easternmost breeding range fairly close to NE Kazakhstan, Flint <i>et al</i> 1984, Shimba 2007, Kennerley & Pearson 2010: N of NE of easternmost Kazakhstan in Tuva Republic BLDZ Sep 2021 places as BM only 340km from E-most Kazakhstan, but in Mongolia Gombobaatar & Leahy 2019 put nearest occurrence 800km away. Arlott 2007 map tentatively suggested easternmost Kazakhstan. Occurs Krasnoyarsk Republic Rogacheva 1992. BM (wintering Micronesia). NB Rare vagrant to WP, Harrop 2007; westernmost breeders due N of easternmost 460km of Kazakhstan, which they should cross if initial migration direction is predominantly southwards.</p>
		Locustellidae	<p>IOC v2.0 removed <i>Bradypterus</i> & <i>Locustella</i> from Sylviidae and placed in existing Megaluridae, which followed new families of Phylloscopidae and Acrocephalidae. IOC 2.6 reverted to Locustellidae on priority grounds; H&M4 follows. Kennerley & Pearson 2010 remained with Locustellidae as family name, although they were unable to take into account the most recent molecular phylogenetic conclusions. Alström <i>et al</i> 2011b subsume all Asian <i>Bradypterus</i> in <i>Locustella</i>, noting Common Grasshopper Warbler <i>L. naevia</i> seems closer to former <i>B. major</i> Long-billed Bush Warbler than to other <i>Locustella</i> warblers, but there is yet no widely-sampled molecular phylogeny of the <i>L. naevia</i> complex, although song and morphology divide into 'eastern' and 'western' groups Miles <i>et al</i> 2015. Alström <i>et al</i> 2018 examined all bar 3 Locustellidae: extensive revision required at genus level, but little effect on Region taxa.</p>
P41	Chinese Bush Warbler	<i>Locustella tacsanowskia</i> (Formerly <i>Bradypterus tacsanowskii</i>)	<p>Monotypic. Vagrant in Sayan Mts Krasnoyarsk Republic, not far from easternmost Kazakhstan Rogacheva 1992, Kennerley & Pearson 2010 suggesting nearest breeding grounds c600km to NE, but BLDZ map Sep 2019 indicates 800km distance more likely. However, Gombobaatar & Leahy 2019 map it as occurring no nearer in N Mongolia than 1500km, which suggests that earlier estimates were conflated with <i>L. davidi</i> (previously treated as part of <i>Bradypterus thoracicus sensu lato</i>) NB A wintering population crosses Himalayas to winter S Nepal, N India R&A 2005. Shimba 2007 map suggests westernmost range limit roughly at 90°E.</p>
PT	Spotted Bush Warbler PT	<i>Locustella thoracica</i> (Formerly <i>Bradypterus thoracicus</i>)	<p>Alström <i>et al</i> 2008a, H&M4 split into <i>B. (t.) thoracicus</i> (extralimital, E of central Himalayas), West Himalayan Bush Warbler <i>B.kashmirensis</i> and Baikal Bush Warbler <i>B. davidi</i>, which is Siberian Bush Warbler of HBW11. Kennerley & Pearson 2010 treat <i>davidi</i> as separate as do Alström <i>et al</i> 2011b, who also subsume all Asian <i>Bradypterus</i> in <i>Locustella</i>.</p>
P42	Baikal Bush Warbler (Siberian Bush Warbler) (Père David's Bush Warbler)	<i>Locustella davidi</i> (Formerly <i>Bradypterus [thoracicus] davidi</i>)	<p>Alström <i>et al</i> 2008a map northeasternmost breeding range of ssp <i>suschkini</i> near source of Ob, Altai S-C Russia, within reasonable distance of easternmost Kazakhstan, Kennerley & Pearson 2010 placing just to N. Flint <i>et al</i> 1984, also Sayan Mts Krasnoyarsk Republic Rogacheva 1992. Shimba 2007 map suggests in easternmost Kazakhstan, as Spotted Bush Warbler <i>B. thoracicus</i> & so is discounted. Although BLDZ Sep 2021 maps as long-distance BM breeding N & E of Mongolia, 1250km from Kazakhstan, to disparate wintering areas in SE Asia, nominate breeding further E, Gombobaatar & Leahy 2019 attribute 4 small possible breeding locations in Mongolia, the nearest 2 being 1000km from easternmost Kazakhstan, although they map likely migration occurrence within 700km.</p>
P43	West Himalayan Bush Warbler (Himalayan Grasshopper Warbler)	<i>Locustella kashmirensis</i> (Formerly <i>Bradypterus (thoracicus) kashmirensis</i>)	<p>Monotypic. This W Himalayan taxon, an altitudinal migrant whose distribution covers only 450km along Himalayas, might possibly be a vagrant to suitable habitat in Wakhan valleys, but Kennerley & Pearson 2010 map much more distantly than earlier authors. BLDZ Sep 2021 gives W limit as at Katol & Tosh, Himachal Pradesh (some 600km from Afghan Wakhan & Torkham Pass), its wintering areas beginning just E of Simla, Chandigarh, India.</p>
		Cisticolidae	<p>Alström <i>et al</i> 2011a, IOC2.7 find that Scrub Warbler <i>Scotocerca inquieta</i> belongs to Cettidae (<i>qv</i>) & not Cisticolidae; H&M4 place in Scotocercidae, as does IOC4.4.</p>
P44	Rufous-fronted Prinia	<i>Prinia buchanani</i>	<p>Monotypic. On-line claim Afghanistan not supported Baker 1997, but mapped Pakistan along border at Khyber; R&A 2005, the same; map Grimmett <i>et al</i> 1998 on NE Pakistan-Afghanistan border. Roberts 1992 maps into Afghanistan at Khyber and nearly so at Thal to S; Grimmett <i>et al</i> 2009 map likewise. Resident from N of Peshawar only 35km from Afghanistan to W of Multan, Pakistan BLDZ Jul 2019, occupying the plains W of the Indus all the way to Karachi.</p>
P45	Grey-breasted Prinia	<i>Prinia hodgsonii</i>	<p>Grimmett <i>et al</i> 2009 map <i>rufula</i> in N Pakistan up to N Swat, dense scrub or dry forest, could well occur similar habitat Afghan Daryā-ye & Konar valleys; BLDZ Sep 2021 maps N&W past Mingora 64km from Afghanistan, almost reaching Mardan to the S. 5 other, extralimital ssp to SE & E.</p>
P46	Yellow-bellied Prinia	<i>Prinia flaviventris</i>	<p>ssp <i>sindiana</i> locally common along water margins in Pakistan almost to the Kurram (Grimmett <i>et al</i> 2009), where may extend irregularly into Afghanistan; BLDZ Sep 2021 map to Peshawar in N & only 25km from Afghan border near Spin Wam, 10km W of Bannu down the Indus valley to Karachi. 6 other extralimital ssp to SE & E to Borneo.</p>
P47	Ashy Prinia	<i>Prinia socialis</i>	<p>R&A map ssp <i>stewarti</i> in Pakistan close to E Afghan border; BLDZ Sep 2021 maps W-most Pakistan distribution just reaching the Indus River near Jabba, half-way between Islamabad & Peshawar. 3 other extralimital ssp to E & S.</p>
P48	Red-fronted Prinia	<i>Prinia rufifrons</i>	<p><i>Urorhipis</i> subsumed in <i>Prinia</i> Olsson <i>et al</i> 2013b. Recorded Eritrean Dahlak Islands de Monti <i>et al</i> 2009. Distributed Sudan southern Red Sea Coast, northern & southernmost coastal Eritrea, Djibouti & northern Somali coast: also inland & S to N Tanzania.</p>
P49	Cricket Longtail (Cricket Warbler H&M4)	<i>Spiloptila clamans</i>	<p>Monotypic genus. Recorded Sudan in 120km² square 21°N, 31°E, 90km SSE of Wadi Halfa, just below Egyptian border Nikolaus 1987, possibly an isolate population; BLDZ Sep 2021 maps near-circular area from 45km SSE Wadi Halfa to 125km; also maps separate trans-Africa latitudinal band to Eritrean coast. Also recorded Morocco, N of Sahara Amezian <i>et al</i> 2011</p>
P50	Common Tailorbird (Formerly Indian Tailorbird)	<i>Orthotomus sutorius</i>	<p>Roberts 1992 maps ssp <i>guzuratus</i> almost to Afghan border at Thal & Khyber, also Grimmett <i>et al</i> 2009. BLDZ Sep 2021 maps to Peshawar some 45km from Afghan border then SSW to Karachi. Species adaptable to most deciduous habitats. IOC v2.0, H&M4 place in Cisticolidae. 8 other extralimital ssp to S & E. Alström <i>et al</i> 2011c find that <i>Tesia</i>, <i>Tickellia</i> & Mountain Tailorbird <i>Orthotomus cucullatus</i> are nested within <i>Cettia</i>.</p>
		Pellorneidae	<p>Ground-babblers. Transfer from <i>Prinia</i> Olsson <i>et al</i> 2013b, IOC 3.4 draft</p>

P51	Rufous-vented Prinia (Long-tailed/Rufous-vented Grass Babbler)	<i>Laticilla burnesii</i> (formerly in <i>Prinia</i>) ; Olsson <i>et al</i> 2013b	Species is unaffected in the babbler phylogeny (Clade E) of Cai <i>et al</i> 2019; ssp <i>burnesii</i> widespread along water margins in Pakistan almost to the Khyber (Grimmett <i>et al</i> 2009), where possibly extends irregularly into Afghanistan; BLDZ Sep 2021 maps W of Dera Ismail Khan & close to Sibi, SE of Quetta. This sp may yet be split H&M4. 2 other extralimital ssp to E & S.
		Sylviidae	As of 2011, considerable body of convincing evidence required rearrangement of Sylviidae sensu lato , separating new Phylloscopidae & Acrocephalidae and placing <i>Locustella</i> & <i>Bradypterus</i> in existing Megaluridae ; see eg Alström <i>et al</i> 2006; IOC v2.0 adopted this major revision, but Alström <i>et al</i> 2011b notes Megaluridae junior to Locustellidae , which is reinstated IOC2.7. Voelcker & Light 2011, <i>inter alia</i> , revealed within Sylviidae a genus-level divergence (Clade 1 versus Clade 2 + Clade 3); H&M4 retain <i>Sylvia</i> for Clade 1 (4 spp) and resurrect <i>Curruca</i> for Clades 2 & 3 (25 spp including lumped Lesser Whitethroat ssp), involving considerable resequencing. Although IOC 9.1 draft omits reference to these changes (& notwithstanding Sangster <i>et al</i> 2015 regarding <i>Curruca</i> as a sub-genus), we adjudge the comprehensive examination of babbler phylogeny (402 of 452 spp including the Sylviidae) of Cai <i>et al</i> 2019 as fully establishing <i>Curruca</i> as a full genus as do IOC 10.2. The genera <i>Sylvia</i> & <i>Curruca</i> form Clade A in Cai <i>et al</i> 2019. Abdizadeh <i>et al</i> 2019, 2020 confirm the identity of <i>Sylvia</i> warblers in Iran.
P52	Tristram's Warbler	<i>Curruca deserticola</i> (formerly <i>Sylvia deserticola</i>)	BLDZ Sep 2019 maps wintering area halfway towards Egypt in Libya. Likely vagrant .
PT	Subalpine Warbler PT (Taxa morphologically very similar, esp. ♀♀; syntopic populations consequential of pre-mating isolation (Brambilla <i>et al</i> 2008) in winter quarters? cf <i>Ficedula</i> females Sætre & Sæther 2010	<i>Curruca cantillans</i> (<i>sensu lato</i>)(formerly <i>Sylvia cantillans</i>)	PT history is complex: initially, 1 sp (4 sspp) <i>inornata</i> (NW Africa) <i>albistriata</i> (W form: Trieste area down Dalmatian coast. E form: continuously to Greece, Crete, Tyrrhenian islands & W Turkey) <i>cantillans</i> (W form: Iberia & S France. E form Italy) & (the then doubtful) <i>moltonii</i> (≡ <i>subalpina</i> ; often subsumed in <i>cantillans</i>) of W Mediterranean islands. 1st taxonomic revision: the split into E & W groups (as in ORL to v2.2) was arbitrary, less evidence-based. 2nd taxonomic revision based on breeding dynamics (Italian mainland, mostly); DNA & song research supports 3 main mt lineages (but across previous concepts): <i>moltonii</i> (Balearics, Sardinia, Corsica & NW Italy [formerly partly within <i>cantillans</i> continuity]); western <i>cantillans</i> Iberia/S France; Italian (southern) <i>cantillans</i> & <i>albistriata</i> (data then lacking for <i>inornata</i> assessment Brambilla <i>et al</i> 2008). Although <i>moltonii</i> partly cryptic (Brambilla <i>et al</i> 2009), thus occupies different distribution to any ever described under ' <i>subalpina</i> '; warrants species status. IOC v2.3 agreed as Moltoni's Warbler (see Hypothetical List), but in 3rd revision, Svensson 2013 finalises relationships into 3 lineages as forecast by Brambilla <i>et al</i> 2008, but name <i>subalpina</i> has priority over <i>moltonii</i> . We aligned with Svensson 2013 & H&M4. Voelcker & Light 2011 acknowledge Brambilla <i>et al</i> 2008 as did Svensson 2013, but the samples in all 3 papers did not include all the above taxa. IOC10.1 did not split to Eastern and Western Subalpine Warbler, but recognised Moltoni's Warbler <i>S. subalpina</i> . The 4th revision of Zuccon <i>et al</i> 2020 examined the history and DNA of all available type, syntype and lectotype specimens, finding errors of attribution of type location (such as a migrant bird assumed by later authors to have been breeding). Essentially, this moved a population from one taxon relationship to another; they also concluded that taxon <i>iberia</i> differed too little from taxon <i>inornata</i> to be considered separate, making Western Subalpine Warbler monotypic; that Balearic and mainland Italy populations of Moltoni's Warbler are likewise inseparable, leaving it monotypic; that Eastern Subalpine Warbler comprises two subspecies, <i>cantillans</i> and <i>albistriata</i> . IOC10.2 draft adopts Zuccon <i>et al</i> 2020.
P53	Moltoni's Warbler	<i>Curruca subalpina</i> (formerly <i>Sylvia [cantillans] subalpina</i> syn. <i>S. moltonii</i>)	Monotypic Zuccon <i>et al</i> 2020. Clade 2 Voelcker & Light 2011. Unlikely spring vagrant; partly-cryptic species; Tyrrhenian islands & parts of NW Italy Brambilla <i>et al</i> 2008, 2009; Svensson <i>et al</i> 2009, & Balearics Zuccon <i>et al</i> 2020. Most related taxa winter N of the Sahel or deep in the western Sahara, see BLDZ Sep 2021 map: <i>albistriata</i> & <i>cantillans sensu stricto</i> probably winter in E Sahara, & thus might reasonably be encountered in SW Egypt.
PT	Marmora's Warbler PT	<i>Curruca sarda</i> (<i>sensu lato</i>) (formerly <i>Sylvia sarda</i>)	PT : Bairlein <i>et al</i> 2006 split to extralimital Balearic Warbler <i>S.[s.] balearica</i> (on morphology, vocalisation & genetics, Anderson <i>et al</i> 2009) BLDZ now concurs (see ORL Hypothetical List), as did IOC2.0, Sangster <i>et al</i> 2012, H&M4. Nespoli <i>et al</i> 2021 carried out phylogenetic & phylogeographic analyses of <i>sarda</i> & <i>balearica</i> , revealing a wide separation between them; indeed <i>balearica</i> is closer to Dartford Warbler <i>C. undata</i> .
P54	Balearic Warbler {Marmora's Warbler}	<i>Curruca balearica</i> (formerly <i>Sylvia [sarda] balearica</i> or <i>S.s. balearica</i>)	Clade 2 Voelcker & Light 2011. Monotypic. Balearic Archipelago except Menorca, Presumably mostly resident, hence unlikely to reach OSME Region from W Mediterranean, although vagrancy possible when very strong spring westerlies occur (not uncommon when depressions over northern Mediterranean countries, eg 35 days out of 42 Cyprus Apr-May 2008).
		Paradoxornithidae	Paradoxornithidae resurrected by Cai <i>et al</i> 2019
P55	Yellow-eyed Babbler	<i>Chrysomma sinense</i>	Clade B in Cai <i>et al</i> 2019 babbler phylogeny. Main habitat preference ssp <i>hypoleucum</i> Pakistan cane grass, but adaptable to artificial habitats Grimmett <i>et al</i> 2009; extensive range mapped close to Khyber; perhaps irregular on Afghan side; BLDZ Sep 2021 maps distribution to the broad Kabul River 2.5km after it enters Pakistan at 388m asl; identical riverside agricultural habitats exist upstream on the Afghan side of the border, though at slightly higher altitude at 395m asl. NB Change to Sylviidae follows Gelang <i>et al</i> 2009; IOC 2.6. 5 other extralimital ssp to E & SE.
PT	Chinese Hill Warbler PT	<i>Rhopophilus pekinensis</i> (<i>sensu lato</i>)	Leader <i>et al</i> 2013 split into Tarim Babbler <i>R. [p.] albosuperciliaris</i> and distantly extralimital Beijing Babbler <i>R. [p.] pekinensis</i> . IOC5.3 agrees; H&M4, BLI 2017 do not split.
P56	Tarim Babbler (Tarim Hill-warbler BLDZ ; Chinese Hill Warbler; Chinese Bush-dweller, HBW 12)	<i>Rhopophilus albosuperciliaris</i> (<i>Rhopophilus pekinensis</i>)	Clade B in Cai <i>et al</i> 2019 babbler phylogeny. Geographically separated from extralimital <i>R. pekinensis sensu stricto</i> , both monotypic Leader <i>et al</i> 2013, IOC5.3; breeds westernmost China, may occur where Toxkan He river enters Kyrgyzstan, or on E slopes above river Dar' yoi Oqsu in Tajikistan; extrapolated from Baker 1997: BLDZ Sep 2021 maps only 30km from S Kyrgyzstan, NE of Kashgar Xinjiang (W Tibet) & Perhaps 200km NNE of E Wakhan, Afghanistan. Earlier estimates were map in Arlott 2007, suggesting likewise; M&P 2000 map westernmost limit at E end Wakhan; Shimba 2007 map suggests resident along these borders but also in easternmost Kazakhstan. Has reached theSW Mongolian border Gombobaatar & Leahy 2019. HBW 12 suggests just reaches Region as above, but removes from Cisticolidae , as does IOC v2.0. Nominate only other ssp much further E, Documentation! NB Change to Sylviidae follows Johanson <i>et al</i> 2008, Gelang <i>et al</i> 2009; IOC 2.6.
		Zosteropidae	This family is being subjected to considerable revision across its vast distribution. The diversification of <i>Zosterops</i> highlights contrasting evolutionary trends and dynamics for continental versus island species. it is suggested the different trajectory of evolution in insular lineages arises from reduced species competition leading to an increase in ecological opportunity, thereby providing a release to phenotypic constraints experienced by continental taxa, where altitudinal niches play a part Day <i>et al</i> 2020. Manthey <i>et al</i> 2020 find strongly supportive evidence in the southwest Pacific White-eye radiation. Gwee <i>et al</i> 2020, using the multispecies coalescent (MSC) approach, found it useful in reducing gene tree discordance by allowing the evolutionary histories of each locus to be inferred independently: they untangled the complex evolutionary history of <i>Zosterops</i> into 3 main clades: Indo-African, Asian, & Australasian. Borneo is the prime centre of diversity; only here do the 3 main clades overlap. NB Cibois 2022 notes that Martins <i>et al</i> 2020 showed that <i>Z. abyssinicus</i> & <i>Z. senegalensis</i> are not monophyletic, and together may encompass up to 20 lineages of species rank.
P57	Northern Yellow White-eye (African Yellow White-eye, Senegal White-eye)	<i>Zosterops senegalensis</i>	IOC 9.1 revised <i>Z. senegalensis</i> complex after Cox <i>et al</i> 2014, Pearson & Turner 2017. African species, at one time reported on-line in Arabia. Documentation? No records Oman, Jens Eriksen pers comm. NB1 ssp <i>senegalensis</i> fairly common resident in W Ethiopia Ash & Atkins 2009, N Eritrea isolate population 60km from coast BLDZ Sep 2021 map; all other 13 sspp extralimital in Africa by some distance. NB2 Husemann <i>et al</i> 2016 found that East African <i>Zosterops</i> were non-monophyletic and that African Yellow White-eye <i>Z. senegalensis</i> was polyphyletic, one population of which being basal to all the <i>Zosterops</i> taxa examined, and the other population being sister to Abyssinian White-eye <i>Z. abyssinicus</i> ; this contradicts findings from earlier microsatellite and sequence data, implying the existence of cryptic taxa within the overall distribution. NB3 Pearson & Turner 2017 review the taxonomy of <i>Zosterops</i> in East Africa; <i>Z. senegalensis</i> African White-eye (extralimital) & <i>Z. abyssinicus</i> Abyssinian White-eye were much over-lumped, perhaps an indicator of the latter's status in the OSME Region, particularly for mangrove-breeding taxa.
		Leiothrichidae	New family as per IOC 2.6 for certain taxa formerly in Timaliidae . H&M4 & del Hoyo & Collar 2016 extract several spp from <i>Turdoides</i> into new genus <i>Argya</i> on molecular trends indicating monophyly. Cibois <i>et al</i> 2018 construct a dense phylogeny of Leiothrichidae from which a revised taxonomy at genus level is erected, and a species taxonomy suggested: most Clades and Subclades are extralimital to the Region; they also strongly support <i>Argya</i> , hence our adoption here. The genera <i>Trochalapteron</i> & <i>Argya</i> are included in Clade G of the comprehensive babbler phylogeny of Cai <i>et al</i> 2018.
Clade D1: Cibois et al 2018.			
P58	Striated Babbler	<i>Argya earlei</i> (<i>Turdoides earlei</i>)	ssp <i>sonivia</i> mapped to Afghan border NE of Jalalabad Roberts 1992, Grimmett <i>et al</i> 2009, but BLDZ , IUCN Sep 2021 map westernmost occurrence W of Utmanzai near Peshawar, only 24km from Afghan border at 915m asl; just before that, the Kabul river doglegs E after a 40km southerly descent from the Afghan border. Breeds up to 1800m & becomes dominant in irrigated forest plantations. Nominate only other ssp extralimital to E & SE.

Clade D4: Cibois <i>et al</i> 2018 (and Clade D in Cai <i>et al</i> 2019)			
P59	White-throated Laughingthrush	<i>Pterorhinus albobularis</i> (formerly <i>Garrulax albobularis</i>)	Clade G in Cai <i>et al</i> 2019 babler phylogeny. IOC2.6 revised R&A 2005 proposal to transfer swathe of spp from <i>Garrulax</i> to <i>Trochalapteron</i> , reducing it slightly, leaving this sp unchanged. Moyle <i>et al</i> 2012 revised Timaliidae , proposing inclusion of this taxon in <i>lanthocincla</i> ; many genera subsumed under subfamily Leiothrichinae , but we remain with IOC. BLDZ map Sep 2021 now indicates contiguous residence along Himalayan chain from Abbottabad & Naran, Pakistan eastwards; ssp whistleri in Pakistan, 2 other extralimital ssp to E as far as China. Map in Arlott 2007 may have been swapped for Variegated Laughingthrush (now) <i>Trochalapteron variegatum</i> (qv in ORL Passerines). Arlott 2007 may have used maps or same source data as M&P 2000, whose texts agreed with R&A 2005 texts but not with maps. R&A 2005 maps & species accepted here as correct & probably subsequently by BLDZ . NB <i>whistleri</i> population Pakistan mostly in Poonch Grimmer <i>et al</i> 2009; noisy & conspicuous species. H&E 1970 speculated Vaurie accepted 1 record in Safed Koh but this range is also in Pakistan under the same name (Roberts 1991); no confirmed record from Afghan territory (Steve Madge pers comm to Mike Evans).
		Troglodytidae	
PT	Eurasian Wren PT	<i>Troglodytes troglodytes</i> (may move to <i>Nannus</i> Barker 2017)	PT : Kerr <i>et al</i> 2007 reinforced case for splitting Nearctic <i>T. troglodytes</i> into 6 lineages; AOU & IOC 2.6 recognise 3, that below & 2 Nearctic spp, Winter Wren <i>T. hiemalis</i> & Pacific Wren <i>T. pacificus</i> . Rice <i>et al</i> 1999 proposed erecting <i>Nannus</i> for this species only from others in <i>Troglodytes</i> , citing song differences. Recently the DBWP List followed suit. Barker 2017 made a strong case for <i>Nannus</i> to include Palearctic Eurasian Wren <i>T. troglodytes</i> , & Nearctic Pacific Wren <i>T. pacificus</i> & Winter Wren <i>T. hiemalis</i> . Albrecht <i>et al</i> 2020 (also using <i>Nannus</i>) found evidence that taxa <i>hyrcanus</i> , <i>juniperi</i> , <i>cypristes</i> , <i>tianshanicus</i> & <i>nipalensis</i> , from some aspects of genetic analysis, featured in different clades, but not unambiguously so: not all taxa in the species' distribution were analysed, and not all techniques were applied; sample sizes also were small. However, two basal lineages of Eurasian Wren, <i>kabylorum</i> of the Maghreb (NW Africa) and <i>juniperi</i> of NE Libya (a short distance from Egypt) were distinctive and may merit full species status, but the first requires differentiating from populations described as <i>kabylorum</i> in S Iberia & the second requires much more fieldwork to establish its distribution in an exceedingly unstable political area. We have <i>pro tem</i> , added <i>T.(t.) juniperi</i> Cyrenaic Wren to the ORL Hypothetical List as a likely vagrant. Hering <i>et al</i> 2021a, 2021b note the relict nature of the North African populations.
P60	Cyrenaic Wren	<i>Troglodytes (troglodytes) juniperi</i>	Potential vagrant to Egypt from the Cyrenaica mountains: Jens Hering <i>in litt</i> agrees the possibility. There are few specimens, its distribution is poorly known and has not been surveyed, but is thought to be fairly common from Benghazi District to Derna District. Hering <i>et al</i> 2021a, 2021b note that the first images were obtained in 2010, almost 100 years after Ernst Hartert assigned the subspecific identity from specimens he had collected.
		Sturnidae	Zucon <i>et al</i> 2008 found relationships of Palearctic-Oriental starlings & mynas in need of revision. NB Many sturnid 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.
P61	Jungle Myna	<i>Acridotheres fuscus</i>	Imaged near Besham, Khyber, Pakistan within 110km of Afghanistan border opposite lowest-altitude passes, by Imran Shah 2021 <i>in litt</i> . Westward expansion forecast: Besham is c 25km W of IUCN map Jan 2022.
P62	White-cheeked Starling	<i>Spodiospar cineraceus</i>	Map in Gombobaatar & Leahy 2019 indicates much more extensive SV & PM occurrence in N-C & E Mongolia than BLDZ Sep 2019. Nearest breeding area to Region is 790km, & nearest PM is 540km, suggesting recent distribution expansion, given BLDZ estimates of 1350km. This colonial & adaptable species may well soon reach our Region.
P63	Daurian Starling (formerly Purple-backed Starling: BLI still)	<i>Agropsar sturninus</i> (formerly <i>Sturnus sturninus</i>)	Monotypic. Change of genus follows Lovette & Rubenstein 2007, Lovette <i>et al</i> 2008, Knox <i>et al</i> 2008. Rare vagrant WP Harrop 2007 & so must cross OSME Region from breeding grounds 1400km from easternmost Kazakhstan BLDZ Jul 2019. Vagrant N Pakistan near Wakhan R&A 2005. Commonly traded cagebird. NB BM from C&N China, E Mongolia to Amur, WV Thailand, Malaysia, Greater Sundas.
		Turdidae	Voelker & Outlaw 2008 show genus <i>Geokichla</i> , comprising some dozen taxa, is much older than <i>Zoothera</i> and originates from an earlier radiation when present-day Arabia was forested. Batista <i>et al</i> 2020 show the phylogenomics & biogeography of Turdidae follow a linear evolutionary history from ancestral thrushes in the WP, accounting for the great variety of taxa in the New World. IOC11.2 revises linear sequence of Turdidae .
P64	Grandala	<i>Grandala coelicolor</i>	Reported as occurring Karakoram Pakistan to within 80km of Kamdesh E Afghanistan and 100km from Wakhan, N & just E of Islamabad. The westernmost contiguous distribution begins in Jammu & Kashmir E of Srinagar BLDZ map Sep 2021.
PT	Plain-backed Thrush PT	<i>Zoothera mollissima (sensu lato)</i>	Alström <i>et al</i> 2016 split Plain-backed Thrush <i>Z. mollissima sensu lato</i> into 3 spp: <i>Z. mollissima sensu stricto</i> , Alpine Thrush, absorbing <i>whiteheadi</i> (as not worthy of recognition, synonymous with <i>simlaensis</i>); <i>Z. griseiceps</i> , Sichuan Thrush: <i>Z. salimalii sp novo</i> Himalayan Forest Thrush. <i>Z. mollissima s.s.</i> occurs from northernmost Pakistan (hence its inclusion here) to India and also in Yunnan, China; the discontinuity may be more apparent than real, but 'Yunnan Thrush' may be a new species. <i>Taxa griseiceps and salimalii are wholly extralimital</i> .
P65	Alpine Thrush	<i>Zoothera mollissima (sensu stricto)</i>	Westernmost distribution of this open-space thrush is C-E Pakistan in a small summer breeding isolate just E & N of Islamabad BLDZ map Sep 2021, from Kahuta N to Muzaffarabad, just including Abbottabad.
P66	Scaly Thrush	<i>Zoothera dauma</i>	Westernmost distribution of this boreal thrush is at Kotli, W of Poonch in Kashmir, usually between 2400-3600m asl, some 260km from Afghanistan BLDZ Sep 2021; it descends to lower latitudes in winter.
P67	Grey-winged Blackbird	<i>Turdus bouboul</i>	Monotypic. NE Afghanistan from map Clement & Hathway 2002, likely habitat, ban oak <i>Quercus incana</i> , HBW10, but not supported R&A 2005. Grimmer <i>et al</i> 1998, 'common, but very local' in Pakistan. Roberts 1992 text suggests unlikely, as it prefers Himalayan-type moist forest community. BLDZ Sep 2021 map shows W-most contiguous distribution covering Islamabad and Abbottabad, some 165km from Afghan border.
P68	Tibetan Blackbird	<i>Turdus maximus</i>	Monotypic. Imaged at Mayoan Berr, Hunza, Gilgit-Baltistan, Pakistan, less than 75km S of Wakhan, Afghanistan Dec2021, Imran Shah <i>in litt</i> .
		Muscicapidae The sequence of genera below largely follows the recommendations of Sangster <i>et al</i> 2011	IOC4.1 subsumes <i>Erythropgia</i> in <i>Cercotrichas</i> . NB Disappointingly, Svensson <i>et al</i> 2009 declined to accord with the not-so-recent revision that placed eg <i>Luscinia</i> , <i>Phoenicurus</i> , <i>Saxicola</i> , <i>Oenanthe</i> & <i>Monticola</i> into Muscicapidae from Turdidae ; their policy of 'author's choice' of taxonomy vague option. However, Svensson, as co-author in Sangster <i>et al</i> 2011 supports the revisions wholeheartedly!
P69	White-bellied Redstart (Hodgson's Shortwing)	<i>Luscinia phaenicuroides</i> (IOC) (<i>Hodgsonius phaenicuroides</i> BLDZ , <u>not</u> <i>phaenicuroides</i>) (H&M3 corrigenda 8, IOC 2.6 & H&M4 opt for <i>phaenicuroides</i>)	H&M4 listed distributions remote from Region for both sspp. Not recorded Afghanistan. However, Bates & Lowther were unusually emphatic "known breeding range extends from NW Frontier, the Kurram Valley" (which is also into Afghanistan; Grimmer <i>et al</i> 2009 map disjunct population in Hindu Kush, c60km NW of Chitral polo ground. Furthermore, Clement & Rose 2015 cite Raja <i>et al</i> 1999 recording breeding at Palas, NW Frontier, just 70km from Afghanistan at same latitude. Moreover, a known Pakistan breeding site at 3350m tree limit is very close to S side of Wakhan where much little-known land is at this altitude Roberts 1992, but R&A 2012 map only in India. BLDZ Sep 2021 map opts for W-most BM distribution, an isolate, just short of Islamabad, some 215km from Afghan border: if relict populations exist in high valleys to N & W, none are acknowledged by BLI. NB1 spelling correction scientific name H&M4. NB2 Sangster <i>et al</i> 2010, Zucon & Ericsson 2010b find this taxon nested in the <i>Luscinia</i> clade.
PT	White-tailed Rubythroat PT	<i>Calliope pectoralis</i> ((<i>sensu lato</i>) <i>Luscinia pectoralis</i>)	Liu <i>et al</i> 2016 demonstrate through integrative taxonomy that White-tailed Rubythroat <i>C. pectoralis sensu lato</i> merits separation into two species, polytypic Himalayan Rubythroat <i>C. pectoralis sensu stricto</i> (sspp <i>pectoralis</i> & <i>bailloni</i>) & extralimital polytypic Chinese Rubythroat <i>C. tschebaiewi</i> (sspp <i>tschebaiewi</i> & <i>confusa</i>): Collar 2017 accepts. Himalayan Rubythroat is listed in Passerine Section.
P70	Chinese Rubythroat	<i>Calliope tschebaiewi</i>	2 sspp, extralimital <i>confusa</i> Nepal to Bhutan & nominate N Kashmir through Tibet C China to Myanmar; Kashmir birds <u>may</u> overshoot into OSME Region. BLDZ Sep 2021 maps both spp separately; nominate <i>tschebawei</i> summer breeding areasome 430km from Wakhan, NE Afghanistan. However, the two BLDZ maps show extensive overlap of summer breeding areas from Jammu & Kashmir east for over 2000km. It is likely that the breeding grounds are altitudinally separated, but the accounts are confused.
P71	Golden Bush Robin	<i>Tarsiger chrysaeus</i>	Very diverse habitat preferences; up to 4600m Himalayas HBW11. Rare Pakistan Grimmer <i>et al</i> 2009, where ssp <i>whistleri</i> recorded for the first time at up to 3350m: BLDZ Sep 2021 maps sizeable isolate resident distribution from below Rawalpindi through Islamabad N to Naran, which mostly is at a lower altitude, W of Thakot 110km from Afghan border; ssp <i>chrysaeus</i> remote to E. On higher slopes of Afghan Daryā-ye & Konar valleys?
P72	Mugimaki Flycatcher (Black-and-Orange Flycatcher)	<i>Ficedula mugimaki</i>	Monotypic. Rare vagrant to WP, Harrop 2007, must cross the OSME Region, note accepted record Italy Oct 2011 Barezani & Ebels 2012. Nearest breeding population to Region is in Russian Altai just beyond Kazakh Altai: BLDZ Sep 2021 maps as BM across Mongolia to within 75km of E-most Kazakhstan, but Gombobaatar & Leahy 2019 map as migrant in 4 disparate areas, the nearest of which may hold a small breeding population some 390km from our Region. Breeds abundantly in southern taiga & Sayan Mts just to NE of Region Rogacheva 1992, which may be less than 150km from E-most Kazakhstan. Map in Shimba 2007 in error covers easternmost Kazakhstan.

P73	Kashmir Flycatcher	<i>Ficedula subrubra</i> Vulnerable	Monotypic. Rare and local Pakistan Grimmert <i>et al</i> 2009, Neelum watershed, but only one record in S Chitral; Kashmir population and range decling BLDZ Sep 2021; nearest breeders at Mendhar, Poonch in Jammu & Kashmir, 285km from Afghanistan. Any Afghan occurrence might be spring overshoot from Sri Lanka winterers in deciduous temperate forest, in eg Daryā-ye & Konar valleys.
P74	Moussier's Redstart	<i>Phoenicurus moussieri</i>	Nearest occurrence to Egypt was 460km at Benghazi Libya Nov 1967 Isenmann <i>et al</i> 2016; current easternmost distribution is Zliten, Libya BLDZ Sep 2021, some 1100km from Egypt.
P75	Chestnut-bellied Rock Thrush	<i>Monticola rufiventris</i>	Monotypic. Common in scattered populations up to 3000m Pakistan Grimmert <i>et al</i> 2009; any Afghan population in rocky terrain would be in moist temperate forest, possibly in Daryā-ye & Konar valleys. BLDZ Sep 2021 maps W-most distribution 40km E of Abbottabad, 230km from Afghan border, but Gilgit-Baltistan Checklist 2021 maps to Yasim Valley Pakistan, 55km from mid-Wakhan Afghanistan.
PT	Siberian Stonechat PT	<i>Saxicola [torquatus] maurus</i>	PT IOC v2.2 recognised separation of <i>maurus</i> via Illera <i>et al</i> 2008. The extralimital Stejneger's Stonechat <i>S. (m.) stejnegeri</i> accepted as split from <i>S. maurus</i> Zink <i>et al</i> 2009, IOC v2.4, as summarised in Parkin & Knox 2010. Sangster <i>et al</i> 2011 cautious, because if <i>przewalskii</i> is placed in <i>stejnegeri</i> , the former is the priority name! Svensson <i>et al</i> 2012 reduce <i>variegatus</i> distribution, subsume <i>armenicus</i> & name result <i>hemprichii</i> for N Caspian population, limiting <i>variegatus</i> to populations below the Caspian, on priority grounds. van Doren <i>et al</i> 2017, in work on relationships between Stonechat species groups, confirm that the <i>maurus</i> group is basal to the <i>torquatus</i> & <i>rubicola</i> groups, but did not include the <i>stejnegeri</i> group in the research. NB1 Populations bear divergent cytochrome c oxidase 1 (CO1) lineages, potentially including cryptic taxa Kerr <i>et al</i> 2009. NB2 see PT for <i>S. rubicola</i> in the ORL Passerine Section.
P76	'Przewalski's Stonechat' ('Pleske's Stonechat')	<i>Saxicola (maurus) przewalskii</i>	Opaev <i>et al</i> 2018 tentatively map an isolate population that just crosses the eastern Tajikistan border from Tibet; Rangkul, Tajikistan appears to have suitable habitat in a flattish area amid mountains, only 5km from the disputed border with China. More important, their map indicates several populations as putative isolates, whereas BLDZ Jul 2019 maps a continuous occurrence of breeding Stonechats (<i>still</i> unsplit as <i>S. torquatus</i> !) along both sides of the western Himalayas all the way N to Kazakhstan). Opaev <i>et al</i> 2018 show no other breeding Stonechat taxon in this area. They also call for a suite of DNA techniques to be applied to all taxa formerly lumped under <i>S. rubicola</i> . English names informal@OSME. NB If this taxon is genetically closer to Stejneger's Stonechat <i>S. stejnegeri</i> (Parrot 1908) as has been suggested than to any other, then <i>przewalskii</i> (Pleske 1889) has priority.
P77	White-tailed Stonechat	<i>Saxicola leucurus</i>	Monotypic. R&A 2012 map in Pakistan close to E&NE Afghan border, but BLDZ Sep 2021 map at lower levels in mid-Pakistan S to Hyderabad along Indus Valley, an isolate population reaching Mianwali, about 135 km from Afghanistan.
P78	Grey Bush Chat (Grey Bushchat)	<i>Saxicola ferreus</i> (formerly <i>Saxicola ferrea</i>)	2 sssp, nominate Pakistan & to E&SE; <i>haringtoni</i> S Tibet & China. R&A 2012 place in <i>Rodophila</i> . Occurs up to 3000m R&A 2005. Map in Arlott 2007 suggests narrow breeding area reaches Afghanistan; R&A 2005 map westernmost limit in Pakistan W of Kashmir; Clement & Rose 2015 map to close to Wakhan corridor in N Pakistan. Roberts 1992 maps away from Afghan border, E of Chitral, Grimmert <i>et al</i> 2009 agrees; perhaps in Daryā-ye & Konar valleys. Vaurie vaguely cites 'from the Afghan border' - Steve Madge <i>in litt</i> to Mike Evans. BLDZ Sep 2021 map as BM W-most limit just W of Rawalpindi-Abbottabad axis, & northernmost summer breeders only 65km S of Wakhan Corridor.

Aliabadian *et al* 2012 found that open-habitat chats belong to several Clades; Clades 3 and 4 apply to the OSME Region. Future taxonomic separation of these clades might occur.

Clade 3			
P79	Heuglin's Wheatear	<i>Oenanthe heuglinii</i>	Monotypic. Previously regarded as ssp of Red-breasted Wheatear <i>O. bottae</i> , but split since IOC v1.7 at least. May occur (may have occurred when treated as <i>O. bottae</i> ?) as vagrant in Arabia from SW Sudan or South Sudan. BLDZ Sep 2021 maps no nearer Red Sea than 365km, W of Kassala, Sudan. Mapped distribution: curiously, the distribution lies 5 to 60km outside Ethiopia from just N of Kassala S to Uganda, some 1475km along an obtuse angle of c125 deg. NB Spelling of species name corrected to <i>heuglinii</i> IOC11.1: van den Elzen <i>et al</i> 2011.
P80	Schalow's Wheatear	<i>Oenanthe schalowi</i>	Polytypic. Mentioned in passing by Shirihai & Svensson 2018 as a split from Mourning Wheatear <i>O. lugens</i> of a taxon distributed beyond the 'Greater WP' region: nominate S Kenya & NE Tanzania, <i>vaurei</i> along N Somali coast from 50km W of Laasgoray to 210km east, just 25km short of Qandala; easternmost distribution only 270km from nearest island in Socotran Archipelago (Longest sea crossing to Socotra 95km). Total distribution area roughly 210km x 100km, sharing a small part of the much more extensive distribution of Somali Wheatear <i>O. phillipsi</i> . BLDZ , IUCN not following this split (Sep 2021).
PT	Black-eared Wheatear PT NB We follow Schweizer <i>et al</i> 2019, Schweizer & Burri 2019.	<i>Oenanthe hispanica (sensu lato)</i>	IOC10.1 supports split. Molecular analysis of Randler <i>et al</i> 2011 suggested separation merited, likewise Aliabadian <i>et al</i> 2012. Randler <i>et al</i> 2011 also found mtDNA differences between North African populations of Western Black-eared Wheatear <i>O. (h.) hispanica</i> . Schweizer <i>et al</i> 2018 in a genome-wide study of 4 wheatear taxa are emphatic that both forms are full species & also support the Aliabadian <i>et al</i> 2012 suggestion that Cyprus Wheatear <i>O. cyprica</i> separated from Western Black-eared Wheatear <i>O. (hispanica) hispanica</i> before Eastern Black-eared Wheatear <i>O. (h.) melanoleuca</i> did, at which time Pied Wheatear <i>O. [h.] pleschanka</i> split from <i>O. (h.) melanoleuca</i> , thus accounting for close DNA relatedness of all these taxa. Schweizer <i>et al</i> 2019a agree: Schweizer <i>et al</i> 2019b, in a genome-wide analysis of open-habitat chats (wheatears) reinforce not only this conclusion, but also strongly support the concept of the concept of pervasive parallel phenotypic evolution. The corollary is that it rendered plumage characters inadequate predictors of species' relationships in this clade. BLDZ. IUCN still remain with O. hispanica sensu lato. Sep 2021. NB1 both <i>hispanica</i> taxa include pale- and dark-throated morphs. NB2 Outlaw <i>et al</i> 2010 found in passing that <i>O. hispanica</i> and <i>O. pleschanka</i> genetically are very close. Although Randler <i>et al</i> 2011 agree, they also provide rationale for separation on song and reaction to dummies. NB3 Wassink 2015a, 2015b & Wassink (unpub data) assess taxa relationship in Mangstau population thus: the polymorphic hybridogenous breeding population is due to an ancient hybridization event involving Pied Wheatear <i>O. pleschanka</i> & Eastern Black-eared Wheatear <i>O. melanoleuca</i> . At present there is no gene flow into this population other than from Pied Wheatear. Hence the ' <i>aurita</i> '-type should be regarded as a morph of Pied Wheatear, with c 11% of the ' <i>aurita</i> '-type being part of the white-throated ' <i>vittata</i> ' morph (Panov 2005). Though rare, this morph is regularly recorded elsewhere, mostly in S Kazakhstan, E to the Zhungarskiy Alatau foothills. However, in Jun 2012 a male was found at Bukhtarma on the Irtysh River (Jochen Roeder <i>in litt</i> to Arend Wassink) only c 27km from easternmost Kazakhstan, indicating a wider distribution. Extraliminally, it has been recorded as far E as W China. Males with ' <i>aurita</i> '-type characters were at Atyrau Jun 2013 & at Inderbor on 1 June 2016 (birds.kz). NB4 The presence of taxon <i>hispanica</i> in N Croatia long had support, but Kralj <i>et al</i> 2017 examined all specimens held in Croatian museums from throughout the country & found all were <i>melanoleuca</i> . Shirihai & Svensson 2018 map <i>hispanica</i> no nearer than just W of Genoa on Italy's Tyrrhenian Sea coast. Any certain individuals of Western Black-eared Wheatear <i>O. (h.) hispanica</i> (see Hypothetical List) that may reach and pass through W Turkey (especially Aegean islands), Cyprus or Egypt are misoriented vagrants.
P81	Western Black-eared Wheatear (Black-eared Wheatear)	<i>Oenanthe hispanica (sensu stricto)</i> (formerly <i>Oenanthe (hispanica) hispanica</i>)	Monotypic: Schweizer <i>et al</i> 2018, Schweizer <i>et al</i> 2019. Svensson in Shirihai & Svensson 2018 draw boundary between <i>hispanica</i> & <i>melanoleuca</i> much further W by 350km than earlier estimates, which possibly marks the eastern limit of zone of intermediacy. Nearest record taxon <i>hispanica</i> in Libya to Egypt remote in W Libya Isenmann <i>et al</i> 2016.

Aliabadian *et al* 2012 found that open-habitat chats belong to several Clades; Clades 3 and 4 apply to the OSME Region. Future taxonomic separation of these clades might occur.

Clade 4			
P82	Somali Wheatear	<i>Oenanthe phillipsi</i>	Monotypic. Somalia almost from Djibouti in north, then south to Eyl on Indian Ocean east coast, and west into Ethiopia to Dire Dawa & Mandera (N & S). Includes Cape Guardafui in range (95km from Socotran Archipelago). For the distribution map of this species, Clements & Rose 2015 map a line between Cape Gardafui and Socotra, but in error included Abd-al-Kuri, which lies in the OSME Region. In any case, Abd-al-Kuri is but 95km from Cape Gardafui: a bird at only 500m altitude can see 80km to the horizon, but Mount Šālih at 700+m, the highest point on Abd al -Kuri, can be seen from Cape Guardafui, whose hinterland rises rapidly to 1000+m. BLDZ map Sep 2021 gives no closer than North Somali coast, but not quite reaching Djibouti, but at Cape Gardafui only a few short island-hops to Socotra. NB Overlaps the small distribution of Schalow's Wheatear <i>O. schalowi</i> .

P82	Familiar Chat (Red-tailed Chat)	<i>Oenanthe familiaris</i> (<i>Cercomela familiaris</i>)	Extralimital African species (7 ssp), either <i>falkensteini</i> (NW Ethiopia) or <i>omoensis</i> (SE Sudan, SW Ethiopia) thought likely to be rare visitor to SW Arabia, likely following rains. HBW10, report of vagrant S Yemen Warr 1992, but by current ID standards not separable from Red-tailed Wheatear <i>O. chrysopygia</i> Mitchell 2017, hence relegation to Hypothetical status. BLDZ map Sep 2021 shows no closer to Region than 70km from sea on Eritrea/Ethiopia border. IOC3.5 accepts subsuming all <i>Cercomela</i> in <i>Oenanthe</i> , following Outlaw <i>et al</i> 2010, Sangster <i>et al</i> 2010, Zuccon & Ericsson 2010b. See previous row.
		Passeridae	IOC11.2 revised the sequence of taxa within Passeridae
P83	Tibetan Snowfinch	<i>Montifringilla henrici</i>	The niche innovation plot in Cobos <i>et al</i> 2021 suggests occurrence in easternmost Wakhan Pass, Afghanistan & in southeastermost Tajikistan; their nearest records (eBird) to Afghanistan (on a small-scale map) are in northernmost Pakistan, in the mountains either size of the Karambar and Shkuk Koz rivers, only some 5-25km from the border passes; however, the eBird records may refer to Black-winged Snowfinch <i>M. adamsi</i> . However, the indicator of rising mean annual regional temperatures adjacent to the Wakhan area suggests that a slow contracting distribution is occurring (Cobos <i>et al</i> 2121 Supplementary Fig 3)
P85	Père David's Snowfinch (Small Snowfinch)	<i>Pyrgilauda davidiana</i> (formerly <i>Montifringilla davidiana</i>)	2 ssp: <i>potanini</i> westernmost Russian breeding range SE Russian Altai, where scarce, very close to easternmost Kazakhstan, Flint <i>et al</i> 1984, Clement <i>et al</i> 1993. M&P 2000 map near NE Kazakhstan border; resident in W Mongolia Bräunlich 2012; BLDZ Sep 2021 maps no closer in Mongolia than 440km from Kazakhstan, but Gombobaatar & Leahy 2019 map to westernmost Mongolian Altai, less than 50km from Kazakhstan: innovation niche plot in Cobos <i>et al</i> 2021 suggests occurrence in easternmost Kazakhstan Altai, but increasing mean annual temperatures favours a range expansion, but decreasing mean annual rainfall favours the reverse at lower breeding altitudes (Supplementary Fig 3). This population may be more distantly related to adjacent Blanford's Snowfinch <i>P. blanfordi</i> than those to E & S in China Päckert <i>et al</i> 2021. Nominate remote S Mongolia, NC China. NB1 HBW14 uses English name of 'Ground-sparrow' for <i>Pyrgilauda</i> taxa and maps remote from Region, but it has occurred in SW Tuva Republic, close to easternmost Kazakhstan Rams 1991. NB2 In Tibet, breeds in abandoned black-lipped pika <i>Ochotona curzonia</i> burrows Li <i>et al</i> 2013.
P86	Blanford's Snowfinch (Plain-backed Snowfinch)	<i>Pyrgilauda blanfordi</i> (formerly <i>Montifringilla blanfordi</i>)	3 ssp, nominate Ladakh to China, other ssp further E: winters in a wide area N of Himalayas & related mountain chains BLDZ Sep 2021, nearest breeding site to Region over 800km in Himalayas to E; wintering areas are Tibetan plains to N, no nearer than 440km from Region at Wakhan Corridor. However, niche innovation plot in Cobos <i>et al</i> 2021 suggests occurrence in a tiny part of southeastermost Tajikistan & on both sides of the easternmost Wakhan Pass; their nearest records (eBird) to Afghanistan (on a small-scale map) are in northernmost Pakistan, in the mountains either size of the Karambar and Shkuk Koz rivers, only some 5-25km from the border passes. This population may be more distantly related to adjacent Père David's Snowfinch <i>P. davidiana</i> than those to E & S in China. Päckert <i>et al</i> 2021. Occurs up to 5500m R&A 2005. Map in Ariotti 2007 suggests resident close to E end of Wakhan; R&A 2005 map westernmost limit E of Kashmir. M&P 2000 map in China to Pakistan border just S of Wakhan. NB HBW14 uses English name of 'Ground-sparrow' for <i>Pyrgilauda</i> taxa & maps remote from Region.
P87	Yellow-spotted Bush Sparrow	<i>Gymnoris pyrgita</i>	Nominate resident from E Tanzania & Ugnada to S Sudan & NE to S Ethiopia & much of Somalia, especially along its N coast; ssp <i>pallida</i> occurs in isolated populations E from Senegal to coastal SE Eritrea BLDZ map Sep 2021 opposite Dahlak Islands, but a population established from Khartoum to Atbara. However, is seemingly sympatric in Africa with the much commoner and more widespread Sahel Bush Sparrow <i>G. dentata</i> , which has an outlier population in SW Yemen (see Passerine List) and so the presence of <i>G. pyrgita</i> in SW Yemen might remain undetected. NB Päckert <i>et al</i> 2021 support <i>Gymnoris</i> as a separate genus, but were unable to include this sp in their phylogeny.
		Ploceidae	Many ploceid 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.
P88	Black-winged Red Bishop (Black-winged Bishop)	<i>Euplectes hordeaceus</i>	African species, 2 ssp; likely <i>craspedopterus</i> of South Sudan source of Region introduction. Nearest population N Ethiopia on Eritrean border BLDZ Sep 2021. Likely breeds small numbers Dubai Aspinall 2010. Not internationally traded IUCN . Possibly established for some time due to confusion with Southern Red Bishop <i>E. orix</i> (qv ORL Passerine section).
		Estrildidae	Many estrildid 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. Olsson & Alström 2020, in a wide-ranging examination of estrildid phylogeny, make extensive taxonomic suggestions, but none affect those listed in the ORL Passerine section.
P89	Cut-throat Finch	<i>Amadina fasciata</i>	Polytypic. Internationally traded African species, mapped BLDZ Sep 2021 near Marshadi East, S of Wadi Halfa, only 40km from Egyptian border below Lake Nasser, likely vagrant. 4ssp, 2 ssp close to Region: <i>alexanderi</i> N Eritrea & SE Sudan (to Eritrean coast BLDZ Sep 2018), Ethiopia, Somalia to SE South Sudan & nominate Sudan, likely that recorded Sudan in 120km² square just below Egyptian border, 21°N, 31°E Nikolaus 1987. Internationally traded species IUCN . Single escape record Oman 1998 OBL7 .
P90	Red-billed Firefinch	<i>Lagonosticta senegala</i>	Polytypic African species, 6 ssp, 3 close to Region: <i>rhodopsis</i> Sudan to Red Sea coast Port Sudan, Nile valley as far N as Delgo only c250km from Egyptian Lake Nasser, N of Amara West BLDZ Sep 2021 & around Port Sudan, Sudan, N Eritrean coast, N&W South Sudan, around Djibouti city, & NW Somalia; <i>brunneiceps</i> SE South Sudan, SW, C&E Ethiopia; <i>somaliensis</i> S Djibouti, NW Somalia, SE Ethiopia to ports of E Kenya, E Tanzania BLDZ Jul 2019. Introduced Egypt WBDB 2008 checklist, on WCMC list as extirpated introduced breeder, but lacks reference & any indication of duration. Traded species. NB Extraliminally in Algerian oases, has reached latitude of 27.30N
P91	Chestnut Munia (formerly ssp of Black-headed Munia as per H&M4)	<i>Lonchura atricapilla atricapilla</i>	Polytypic, extralimital sp. IOC 9.2 splits polytypic Black-headed Munia <i>L. malacca sensu lato</i> into monotypic Tricolored Munia <i>L. malacca sensu stricto</i> & Chestnut Munia <i>L. atricapilla</i> with 7 ssp. H&M4 suggested 3-way split likely, but awaits better sampling density & further molecular techniques. Escapes encountered in UAE, but breeding status uncertain Aspinall & Porter 2011. Internationally traded species. Natural distributions: 3 disperate C, SE & S india plus Sri Lanka (<i>L. malacca</i> ss); E India (<i>L. atricapilla</i>) eastwards & to SE via Indonesia BLDZ maps Sep 2021.
P92	Java Sparrow	<i>Padda oryzivora</i> (formerly <i>Lonchura oryzivora</i> & <i>Padda oryzivora</i>) Endangered	Monotypic. Rapidly diminishing as a Java island endemic through over-trapping. Very popular cagebird worldwide. Escapes encountered in UAE, but breeding status uncertain Aspinall & Porter 2011, single 1999-2005 record Oman OBL7 . Internationally traded species IUCN. Olsson & Alström 2020 make overwhelming case for restoration of the genus <i>Padda</i> .
		Fringillidae	Zuccon <i>et al</i> 2012 examined the phylogenetic relationships and generic limits of Fringillidae , with considerable changes of genera; IOC3.3 largely agreed, with resequencing of species. Recuerda <i>et al</i> 2021 recommend North African Chaffinch taxa <i>spodiogenys</i> , <i>africana</i> and <i>harterti</i> be split off as <i>Fringilla spodiogenys</i> (ssp <i>spodiogenys</i> & <i>harterti</i> not sampled): nominate & <i>africana</i> are distantly extralimital, but <i>harterti</i> (Svensson 2015) less so, being given as resident in Cyrenaica, NE Libya, but not east of Derna. However, there seemingly is another resident population, identity uncertain, in a small area just south of Tobruk (IUCN , BLDZ maps Aug 2021). Svensson & Shirihai 2018 map <i>harterti</i> as per Svensson 2018, but include a small population of wintering birds (taxon not given) in NE Libya near Nardiyah just on the Egyptian border: they also map <i>F. coelebs schiebeli</i> as being the sole taxon in Egypt, and only as wintering there (BoA Vol VII & Goodman <i>et al</i> 1989 agree wintering aspect, but do not assign ssp ID). However IUCN & BirdLife confidently map four separate breeding populations (taxon/taxa unattributed) in northern Egypt, largely aligning with the distribution of wintering populations which also are taxon/taxa unattributed. Lastly, most authorities subsume <i>schiebeli</i> in <i>coelebs</i> . CSNA/Dutch Birding Jan 2022 adopt findings of Recuerda <i>et al</i> 2021, but note that Tunisian & Moroccan call & song have consistent differences, indicating that further changes are possible.
P93	'North African Chaffinch'	<i>Fringilla spodiogenys</i>	Polytypic: nominate & <i>africana</i> are distantly extralimital, <i>harterti</i> known to breed in Libya. Identity of taxon shown as breeding 4 locations Egypt on BLDZ & IUCN maps unspecified, but may be an error (see above). Split follows Recuerda <i>et al</i> 2021. English name informal@OSME: CSNA/Dutch Birding prefer 'African Chaffinch' .
		Viduidae	
P94	Pin-tailed Whydah (Pin-tailed Widowbird Turner 2022)	<i>Vidua macroura</i>	Monotypic brood parasite, specialising in Estrildid finches: nearest population N Eritrea, to coast BLDZ Sep 2021 opposite Dahlak islands & patchily inland SE just into NW Somalia. Escapes encountered in UAE, but breeding status uncertain Aspinall & Porter 2011 due to seeming lack of host species: Indian Silverbill <i>Euodice malabarica</i> one possibility. Internationally traded species IUCN.
		Prunellidae	Stepanyan 2003, Hatchwell 2005 subdivided <i>Prunella</i> into two, erecting <i>Laiscopus</i> for the 2 larger taxa. Drovetski <i>et al</i> 2013 acknowledged that this may be valid. <i>Pro tem</i> , we align with Drovetski <i>et al</i> 2013 in treating the difference as 2 Clades . Clade A contains the only truly sympatric accenter species. Those in Clade B are allopatric, with the exception of extralimital <i>P. koslowi</i> .

P95	Kozlov's Accentor (Mongolian Accentor)	<i>Prunella koslowi</i>	Monotypic. H&M4 place from W Mongolia to points E, and so probably not far from Region; occurs on plains in winter. Inclusion here suggested Axel Bräunlich <i>in litt</i> : BLDZ Sep 2021 maps W to within 300km of E-most Kazakhstan & also in southernmost Mongolian Altai, some 415 km SSE; suitable habitat exists between Mongolian mountain ranges in intervening distance. Gombobaatar & Leahy 2019 map to within 270km of E-most Kazakhstan, but overall a more refined and nuanced distribution than in BLDZ Sep 2021. Sympatric in extreme N & in exteme S of distribution with Brown Accentor <i>P. fulvescens</i> . Drovetski <i>et al</i> 2013. Double-brooding feasible Campbell & Ensor 2020b (Juvenile photographed September 2019).
		Fringillidae	Zuccon <i>et al</i> 2012 examined the phylogenetic relationships and generic limits of Fringillidae , with considerable changes of genera; IOC3.3 largely agreed, with resequencing of species. Recuerda <i>et al</i> 2021 recommend North African Chaffinch taxa <i>spodiogenys</i> , <i>africana</i> and <i>harterti</i> be split off as <i>Fringilla spodiogenys</i> (ssp <i>spodiogenys</i> & <i>harterti</i> not sampled): nominate & <i>africana</i> are distantly extralimital, but <i>harterti</i> (Svensson 2015) less so, being given as resident in Cyrenaica, NE Libya, but not east of Derna. However, there seemingly is another resident population, identity uncertain, in a small area just south of Tobruk (IUCN , BLDZ maps Aug 2021). Svensson & Shirihai 2018 map <i>harterti</i> as per Svensson 2018, but include a small population of wintering birds (taxon not given) in NE Libya near Nardiyah just on the Egyptian border: they also map <i>F. coelebs schiebeli</i> as being the sole taxon in Egypt, and only as wintering there (BoA Vol VII & Goodman <i>et al</i> 1989 agree wintering aspect, but do not assign ssp ID). However IUCN & BirdLife confidently map four separate breeding populations (taxon/taxa unattributed) in northern Egypt, largely aligning with the distribution of wintering populations which also are taxon/taxa unattributed. Lastly, most authorities subsume <i>schiebeli</i> in <i>coelebs</i> . CSNA/Dutch Birding Jan 2022 adopt findings of Recuerda <i>et al</i> 2021, but note that Tunisian & Moroccan call & song have consistent differences, indicating that further changes are possible..
P96	Dark-breasted Rosefinch	<i>Procarduelis nipalensis</i> (Zuccon <i>et al</i> 2011; IOC3.3) (formerly <i>Carpodacus nipalensis</i>)	2 sssp, <i>kangrae</i> in Kashmir, apparently occurs up to 3300m R&A 2005. Map in Arlott 2007 suggests breeding E Afghanistan; R&A map westernmost limit 200km E of easternmost Pakistan, as does M&P 2000 and also Roberts 1992, where scarce at c3000m. HBW15 maps remote from Pakistan to E; BLDZ Sep 2021 maps W-most population 2500km SE straddling the Nepal-India border, yet species data table still states 'Extant' in Pakistan. Map error? HBW Alive gives <i>kangrae</i> as 'perhaps Kashmir' as westernmost population: Sharma <i>et al</i> 2018 report as occurring Matsudar & Neeru catchments, Jammu & Kashmir & provide image. Nominate E of W Nepal & in China. Likely improved ID & molecular techniques have reduced former confusion with similar species.
P97	Sillem's Rosefinch (Sillem's Mountain Finch)	<i>Carpodacus sillemi</i> (<i>Leucosticte sillemi</i>) Data Deficient	Sangster <i>et al</i> 2016 show by molecular analysis that this taxon is a full species belonging to <i>Carpodacus</i> , not <i>Leucosticte</i> . Its lack of red pigmentation is likely to represent a secondary loss related to differences in carotenoid metabolism, in dietary intake of carotenoids or in exposure to environmental factors affecting pigmentation Inouye <i>et al</i> 2001, Olson & Owens 2005. The large distance (1500 km) between the specimen collection site (Western Tibet, 1929, & current estimated westernmost occurrence BLDZ Sep 2021, less than 300km from the Wakhan Corridor, Afghanistan) and the sightings in 2012 and 2013 (Western Xinghai) suggest that <i>C. sillemi</i> is a wide-ranging species that probably occurs only locally at low densities at 4500-5400m, possibly due to narrow habitat or dietary requirements. Much topography within that altitude band also exists west and north of the collection site within the easternmost part of the OSME Region.
Tietze <i>et al</i> 2013 established rosefinch clades			
Clade 3a also includes extralimital Vinaceous Rosefinch <i>C. vinaceus</i> , Taiwan Rosefinch <i>C. formosanus</i> , Spot-winged Rosefinch <i>C. rodeopeplus</i> , Sharpe's Rosefinch <i>C. verreauxii</i> (related closely to Pink-browed Rosefinch <i>C. rodochroa</i>) & Dark-rumped Rosefinch <i>C. edwardsii</i> .			
P98	Beautiful Rosefinch	<i>Carpodacus pulcherrimus</i>	Gombobaatar & Leahy 2019 map as occupying Mongolian Altai, less then 50km from Kazakhstan, whereas BLDZ map Sep 2021 indicates two isolate populations in W-C Mongolia both at c650km from Kazakhstan.
P99	Pink-browed Rosefinch	<i>Carpodacus rodochroa</i>	Monotypic IOC3.3. Recorded Chokpak Kazakhstan before 2000 Dernjatin 2005, but supporting documentation not found. On-line reports for Kyrgyzstan, Tajikistan, Uzbekistan, but no supporting data in Clement <i>et al</i> 1993. Erroneously mapped Arlott 2007 narrow NE-SW breeding area Uzbekistan, Tajikistan Afghanistan. To 3000m Pakistan Grimmett <i>et al</i> 1998 also Bates & Lowther 1959 who found it only on south-facing slopes, main Himalayan range. Maps Grimmett <i>et al</i> 2009 HBW15 indicate isolated nature of any Afghan population. Nearest mapped population to Region Dhup, Pakistan, N of Islamabad BLDZ Sep 2021, 105km from Afghan border. Chokpak record considered questionable.
P100	Parrot Crossbill	<i>Loxia pytyopsittacus</i>	Arlott 2007 indicated occurrence in Region in NW Kazakhstan & likely occasional irruptive occurrence further S. This species' irruptive movements usually short -distance, but although long-distance irruptions have been documented, none are adequate for Kazakh records to meet modern ID standards. It is likely that the species has occurred in W Kazakhstan, but until an accepted record is published, this taxon is considered hypothetical. Nearest regular breeding grounds to NW Kazakhstan were in European Russia at Magnitka, some 190km from Kazakhstan border, but 220km from first sizeable woodland BLDZ Sep 2021, but BLDZ , IUCN maps now place that limit at Mesyagutuvo, 250km distant. NB This taxon not genetically distinct from Common Crossbill <i>L. curvirostra</i> , but is distinct morphologically, & mates assortatively Summers <i>et al</i> 2007, Johnsen <i>et al</i> 2010: Hill & Powers 2021 disagree with morphological distinctness.
		Emberizidae	Emberizidae may yet be subdivided into several genera or more deeply into subgenera: Sangster <i>et al</i> 2015 regard the suggested genera (<i>Fringillaria</i> , <i>Granativora</i> , <i>Schoenicius</i>) as subgenera; we await IOC consideration, still unaddressed IOC6.3. The phylogeny of Päckert <i>et al</i> 2020b divides Emberizidae into 4 sub-families, which John Boyd in Taxonomy in Flux (TIF) has adopted: TIF here is largely coincident in intent with H&M4 & Sangster <i>et al</i> 2015, but not necessarily in taxonomic genus. We await further evaluation, but <i>pro tem</i> note proposed changes in Column C. NB Should the phylogeny of Päckert <i>et al</i> 2020b be adopted in the unification of World Lists, then the sequence of genera within Emberizidae will change, as will the overall sequence of species.
P101	Crested Bunting	<i>Emberiza lathamii</i> (Formerly <i>Melophus lathamii</i> to which TIF reverts)	Alström <i>et al</i> 2008b synonymise in <i>Emberiza</i> , H&M4 do not. Known to breed up to 150km from Afghan border in Swat district, Pakistan; BLDZ Sep 2021 map as BM from Charhoi (NE of New Mirpur City) N & NE to close to Mingora at Bajot, c85km from Afghan border. Closely associated with 'Chir' pine <i>Pinus roxburghii</i> tracts at 1000-1800m asl. Satellite IR-response analysis could identify <i>P. roxburghii</i> tracts in nearby Afghanistan. Not site-faithful during migration Bates & Lowther 1959.
Forecast Hypothetical Taxa – additional notes			
1. Conspicuous by their absence from the OSME Region are a whole range of migratory Nearctic breeding taxa that have occurred as vagrants in Europe. Also, many eastern Palearctic migrants have demonstrated 180° misorientation (Berthold 1999). A Great Circle course brings them through the Region, where there is a very low observer density. Other vagrant migrant types expected in the Region are western (especially Alaskan) Nearctic taxa, such as American Pipit (IOC = Buff-bellied Pipit) <i>Anthus (r.) rubescens</i> , which if amongst Palearctic <i>A. (r.) japonicus</i> in a flock would not only would be easy to overlook, but also might not even be searched for by the very few birdwatchers and ornithologists in the vastnesses of the OSME Region. Doubtless readers can think of other candidates, but it would not be unreasonable to predict a <i>Vireo</i> sp or <i>Dendroica</i> sp occurring in the OSME Region in future. In the north of the Region, we might reasonably expected misoriented North American forest specialist species, because quite a number have occurred as vagrants in Europe, having crossed the Atlantic, probably often driven by strong westerly winds. Furthermore, the appearance of Nearctic taxa in the OSME Region is more likely than might be at first thought, taking as an example the annual migration cycle of the Alaskan population of Northern Wheatear <i>Oenanthe oenanthe</i> – these birds migrate across Asia to winter south of the Sahara (Bairlein 2008) and on their return. In any case, analysis of the stable-isotope ratios of feathers of vagrants might indicate accurately the breeding and wintering areas - see Fox & Bearhop 2008.			
2. Radio-tagging Sociable Lapwing <i>Vanellus gregarius</i> from the eastern breeding grounds in E Kazakhstan has shown that this species uses the Wakhan and Khyber Passes to reach the Indian Subcontinent (Rob Sheldon RSPB 2008 presentation). Other species (some not yet in the ORL?) may migrate this way across Afghanistan.			
3. Improvements in seabird ID criteria will increase accuracy of Indian Ocean sightings (ORL boundaries: southern 10°S, eastern reaches 70°), but numbers of potential observers have greatly reduced (fewer RN ships, fewer RNBWS members, automation reducing merchant ship crews) and so annual totals of such pelagic records will be greatly reduced. BirdLife International's Seabird Tracking and Marine IBA databases represent a step function improvement in seabird knowledge.			
Species removed from Hypothetical List			
		Anatidae	
A	Muscovy Duck	<i>Cairina moschata</i>	09/18 . On Avibase website Israel list Aug 08 as Introduced. WCMC do not include feral/introduced/escaped domestic birds (usually mostly white with black markings outwith New World, whereas wild birds are black with white) within New World. Error: Yoav Perlman pers comm
		Caprimulgidae	

B	Vaurie's Nightjar	Most probably <i>C. europaeus plumipes</i> Schweizer <i>et al</i> 2020. (Formerly <i>Caprimulgus centralasicus</i>)	03/20 . Known from a single female specimen from Xinjiang, at c300km, not too distant from Afghan Wakhan & easternmost Tajikistan; Ayé <i>et al</i> 2012, R&A 2012 suggested worth including. Leader 2009 summarised most of what was known about this taxon; its putative wintering area is the Thar desert and the Rann of Kutch area of the NW Indian subcontinent. BLDZ Sep 2018 mapped possible breeding area as the whole of the Tibetan Plateau (Xinjiang). A former guess at its breeding habitat was the long old alluvial plain north of the Western Himalayas, essentially a desert plateau cut by meltwater ravines, but whose steep, high northern edge is visibly evident from Google satellite imagery. However, the genetic analysis of Schweizer <i>et al</i> 2020 concluded that the specimen is most probably synonymous with European Nightjar <i>C. europaeus plumipes</i> , although its small size is not yet fully explained.
		Ardeidae	
C	Yellow-crowned Night Heron	<i>Nyctinassa violacea</i>	09/21 . This Nearctic sp reported as photographed Jan 2021 Sharm el Sheikh Egypt by Janusz Muranowicz. However, the image was taken in the Dominican Republic: Łukasz Ławicki. Had it been genuine it would have been a first record for the OSME Region.
		Fregatidae	
D	Magnificent Frigatebird	<i>Fregata magnificens</i>	08/08 . Monotypic. Vagrant Israel WBDB 2008 checklist; error, now deleted. Mike Evans † pers comm
		Strigidae	
E	Spot-bellied Eagle Owl {Spot-bellied Eagle-Owl} (Forest Eagle Owl)	<i>Bubo nipalensis</i>	11/08 . Map in König <i>et al</i> 1999 in error covering E Afghanistan, Uzbekistan and Tajikistan, although text disagrees. Maps in R&A 2005 & K&W 2008 correct, showing species as remote even from Pakistan in C Himalayas, 650km from Region.
F	Brown Hawk Owl	<i>Ninox scutulata</i>	07/19 . Map in Shimba 2007 in error suggesting close to E Tajikistan and S Kyrgyzstan borders. Mikkola 2012 maps remotely from OSME Region, as does BLDZ Jul 2019 at 800km distance from Region, deep into India in 2 areas of residency New Delhi & Ahmedabad. IOC9.2, HBW Alive agree.
		Psittacidae	
G	Yellow-collared Lovebird	<i>Agapornis personatus</i>	09/18 . Monotypic Tanzanian sp. On Avibase website Israel list Aug 08 as Introduced; internationally traded species IUCN . Error: Yoav Perlman pers comm
		Campephagidae	
H	Short-billed Minivet	<i>Pericrocotus brevirostris</i>	05/08 . 4 ssp, 3 remote in China, nominate NE India nearest, at over 1000km distance BLDZ Jul 2019. Paludan 1959 lists as summer visitor E Afghanistan, ssp <i>brevirostris</i> , 6 being collected Nurestan 1948, but subsequently only Long-tailed Minivet <i>P. ethologus</i> shown to occupy western range; earlier ID confusion now apparent. Bates & Lowther 1952 also in error for Kashmir.
		Sturnidae	
I	Purple Starling	<i>Lamprolornis purpureus</i>	09/21 . Breeds sub-Sahel band E to W Kenya HBW14, no nearer to Region than South Sudan BLDZ Jul 2019 map; on Avibase website Israel list Aug 2016 as Introduced: error; Yoav Perlman pers comm Sep 2018. Internationally traded species IUCN Jul 2019.
		Turdidae	
J	Indian Blackbird	<i>Turdus [merula] similimus</i>	07/18 . Monotypic. Breeds below 23N in India and Sri Lanka BLDZ Jul 2019. Bates & Lowther 1952 had noted this taxon as commonplace 'not below 11 000 feet (3400m) while breeding', but conflated it with taxa now placed in Tibetan Blackbird <i>T. [merula] maximus</i> ; see ORL Passerine section. G: IOC8.2 gives <i>T. similimus</i> as occurring in C & S India.
		Muscicapidae	
K	Rufous-breasted Bush Robin	<i>Tarsiger hyperythrus</i>	08/08 . Monotypic. 'Uncertain', WBDB 2008 Afghanistan checklist. However, likely originated in misquoted 'Afghanistan' on Sayer's website; the Steve Madge record actually is from Nepal (the westernmost range) Steve Madge <i>in litt</i> to Mike Evans: BLDZ Jul 2019 distance from OSME Region 1250km. NB <i>Tarsiger</i> may yet be subsumed in <i>Luscinia</i> .
L	Jerdon's Bushchat	<i>Saxicola jerdoni</i>	11/15 . Monotypic. On Avibase website Afghan list, unsourced: most unlikely, may be extant NE India 1000km from Region BLDZ Jul 2019, but definite residency 2000km near Bangladesh border to points E.
		Ploceidae	Many ploceid 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.
M	African Masked Weaver {Southern Masked Weaver}	<i>Ploceus velatus</i>	09/18 . Monotypic; from southern Africa. Internationally traded species. Not an introduced species as earlier checklists averred: Yoav Perlman pers comm
		Motacillidae	
N	Long-legged Pipit	<i>Anthus pallidiventris</i>	01/09 . Erroneous web entry of this west African species (Guinea to Angola), as having bred in Egypt; correct species was Long-billed Pipit <i>A. similis</i>

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