

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

The OSME Region List of Bird Taxa, Part E: HYPOTHETICAL TAXA, Version 6.1: July 2020

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) & Brochet et al 2019 for Arabia, Iran & Iraq (879,000-31,000,000 passerines).

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, Bright green shading of a row (eg Syrian Ostrich) indicates former presence of a taxon in the OSME Region. Light gold shading in column A indicates sequence change from the previous ORL issue. Red font indicates added information since the previous ORL version or the Conservation Threat Status (Critically Endangered = CE, Endangered = E, Vulnerable = V and Data Deficient = DD only). 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 Please do not cite them in any formal correspondence or papers.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 white text contain additional explanatory information on problem taxon groups as and when necessary.

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 spp are best considered separately.

The taxa in the Table below have not been documented sufficiently as occurring in the OSME Region. 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 names in round brackets (...), superseded (re-allocated) names in square brackets [...].

4. Scientific names: we use square brackets [...] to indicate superspecies that comprise two or more allophones – 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 indicates material added since the previous ORL version

6. Distribution maps in many references are imprecise.

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 Name	Family, Species or Taxon	Working Notes
	Phasianidae	Changes to previous taxonomies from revised relationships in eg Crowe et al 2006. H&M4 resequences genera. NB 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 et al 2015.
N1 Black-billed Capercaillie	<i>Tetrao urogallina</i>	2 spp, nominate much nearer than <i>kamschatkaensis</i> ! Unlikely any modern records due to severe range contraction, but has reached 86°30'E, 67°30'N in Krasnoyarsk Republic Rogacheva 1992. Nearest Mongolian population is in Nogooonuur, W Mongolia at 49.8°N, 89.6°E lies c220km from easternmost Kazakhstan mapped by Gombobaater & Leahy 2019, much nearer than the 850km mapped in BLDZ Jul 2019. Name <i>urogallina</i> has priority over <i>parvirostris</i> H&M4.
N2 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 Jul 2019; transit of Bab al-Mandab Strait to Yemen via island-hopping well within capabilities (longest flight 18km). Nominate breeds on Dahlak Archipelago Azeria 2004 . Escapes of introduced birds of this species encountered in UAE, but no proven breeding Aspinall & Porter 2011
N3 Tibetan Partridge	<i>Perdix hodgsoniae</i>	Occurs easternmost Ladakh BLDZ map Jul 2019, population overall is large, not known to be declining. Possibly occurs westernmost Tibet close to Afghan Wakhan, but no certain records closer than 500km from Region.
N4 Japanese Quail	<i>Coturnix japonica</i>	Monotypic. Limited possibility of irruption from N-C Mongolian population into Kazakhstan, particularly since in steady decline in wild BLDZ Jul 2019, but commonly bred, cross-bred or domesticated (Wikipedia summary) for introductions, legal or otherwise. NB Sanchez-Donoso et al 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.
N5 Rain Quail (Black-breasted Quail)	<i>Coturnix coromandelica</i>	Monotypic. Possibly irregular late Jun early Jul irruptive overshoot into Afghanistan and Iran from regular (after rains) BM in Pakistan in years of exceptional monsoons Roberts 1991, map in Grimmett et al 2009, BLDZ map Jul 2019 westernmost distribution, an isolate, just NNE of Dera Ismail Khan, some 120km from Afghan border. Increase in irrigation ponds may assist during irruptions. On Avibase website Afghanistan list Aug 08 without source cited; similarly Ladakh 2003 list.
N6 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 Jul 2019 shows now retreated to just N&W of Dehra Dun. 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

		Anatidae	Gonzalez et al 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 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 et al 2015.
N7	Pink-footed Goose	<i>Anser brachyrhynchus</i>	Monotypic. Considered vagrant Turkey Kirwan et al 1999, but removed from Turkish List Kirwan et al 2008; has reached Bulgaria in 2009 in a flock of Greater White-fronted Geese <i>A. albifrons</i> Pavel Simeonov in litt at Durankulak, only 195km from European Turkey.
PT	Greylag Goose PT	<i>Anser anser</i>	Parent Taxon: possible potential split, but separation distance 1%, strongly supporting ssp status Ruokonen et al 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
N8	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>rubirostris</i> Raffael Ayé in litt Jun 2014. Even though Delaney et al 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 et al 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 spp. Notwithstanding that H&M4 & IOC8.2 give distribution of <i>anser</i> as wintering in the Middle East, we have removed taxon <i>anser</i> to the Hypothetical List, but hope to clarify this matter further.
N9	Mandarin Duck	<i>Aix galericulata</i>	Non-native records 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> .
N10	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 et al 2015; BLDZ map Sep 2018 extends into SW Djibouti, but does not approach Khartoum as yet.
PT	Spot-billed Duck PT	<i>Anas poecilorhyncha</i>	Split to Eastern <i>A.[p.] zonorhyncha</i> (Non-Passerine List) and Indian Spot-billed Duck <i>A.[p.] 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.
N11	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>	2 spp, nominate nearer to region, <i>haringtoni</i> SE Asia, China. Reported Uzbekistan K-M&K 2005, but doubtful record Ayé et al 2012, Koblik & Arkhipov 2014; R&A 2012 map breeding Pakistan close to Khyber & Khojak (Chaman) Passes, BLDZ map Jul 2019 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 OB7). Resident Indus delta Pakistan Roberts 1991, 31 recorded Punjab 2003 Ali & Akhtar 2005, has bred close to Afghan border Grimmett et al 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.
N12	Baer's Pochard	<i>Aythya baeri</i>	Critically Endangered : declining rapidly. Monotypic. Lone nearest acceptable record from not too distant Gujarat, 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 2018.
		Caprimulgidae	
N13	Jungle Nightjar	<i>Caprimulgus indicus</i>	May wander, ssp <i>indicus</i> , from NW India BLDZ map Jul 2019; also resident C & S India H&M4 (IOC give only C & S India) where common resident, in conditions of strong E/NE winds? Recently split from <i>C. jotaka</i> Grey Nightjar IOC4.1: see Non-passerine List.
N14	Vaurie's Nightjar	Most probably <i>C. europaeus plumipes</i> Schweizer et al 2020. (Formerly <i>Caprimulgus centralasicus</i>) [synonym]	Data Deficient . Known from a single female specimen from Xinjiang, at c300km, not too distant from Afghan Wakhan & easternmost Tajikistan; Ayé et al 2012, R&A 2012 suggest worth including. Leader 2009 summarises most of what is 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 maps possible breeding area as the whole of the Tibetan Plateau (Xinjiang). A guess at its breeding habitat would be 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 et al 2020 concludes that specimen is most probably synonymous with European Nightjar <i>C. europaeus plumipes</i> , although its small size is not yet fully explained.
N15	Savanna Nightjar	<i>Caprimulgus affinis</i>	As an abundant BM, ssp <i>monticolus</i> occurs NE Pakistan almost to border near Thal (Roberts 1991, Cleere 2010, R&A 2012), overshoots are likely at times: BLDZ Jul 2019 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 2-20km from Afghan border; all the 7-9 other spp are largely sedentary. IUCN Redlist maps into Afghanistan as far as Kabul, likely an error, given that the country is not included as part of its native range..
		Apodidae	H&M4 resequences ORL Apodidae genera species; we remain with IOC. Tietze et al 2015 show ancestral <i>Hirundapus</i> as originating before all other swift genera that occur in the OSME Region: ancestral <i>Aerodramus</i> preceded ancestral <i>Cypsiurus</i> , which in turn preceded <i>Tachymarptis</i> and <i>Apus</i> .
N16	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 Jul 2019, IOC 6.3, ssp <i>somalicus</i> BM along N Somalia coast; prone to wandering Redman et al 2009.
PT	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</i> <i>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). NB2 H&M4 suggests taxon <i>cooki</i> relates more to Dark-rumped Swift <i>A. acuticauda</i> (both extralimital); indeed Päckert et al 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.
N17	Blyth's Swift	<i>Apus leuconyx</i>	Following split of Fork-tailed Swift <i>Apus pacificus</i> <i>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</i> sl suggests <i>leuconyx</i> is a summer breeder just into NE Pakistan above Islamabad.
		Otididae	
N18	Nubian Bustard	<i>Neotis nuba</i> (<i>Ardeotis nuba</i> H&M4)	Near-Threatened . Monotypic. May just wander 150km to southern Egypt from its distribution in northern Sudan, where now scarce. BLDZ map Mar 2018 shows westernmost distribution reached W Red Sea coast S of Port Sudan, from Suakin 70km southwards..

N19	Lesser Florican	<i>Syphocites indicus</i>	<p>Endangered. Monotypic. Cited (entry 158) in Zarudny 1911 (as <i>Syphocites aurita</i>) as irregular (Irrgast = irregular 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 Jul 2019, 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 Seif at Mosul 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>Syphocites 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, (Iran) 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>Syphocites aurita</i> & <i>Syphocites indicus</i> or <i>indicus</i> are synonymous.</p>
		Cuculidae	
N20	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 16km away as mapped by BLDZ Jul 2019, 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 Palistan/Afghanistan border. Global population of this sp is decreasing.
N21	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 Jul 2019 map breeding distribution to 2 isolates close to coast: Eritrea-N Ethiopia and E Ethiopia-NW Somalia.
		Pteroclidae	Cohen 2011 comprehensively analyses Pteroclidae . 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			
N22	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>indiclus</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> (Weis 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. NB Correction now apparent in Sep 2018 BLDZ maps for <i>indiclus</i> & <i>lichtensteinii</i> . However, the map for <i>indiclus</i> places the westernmost distribution in Pakistan to within 5km of the Afghan border in the Lower Kurram, for some 30km 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.
		Columbidae	H&M4 mildly resequence ORL Columbidae genera, placing <i>Turtur</i> & <i>Oena</i> last.
N23	Speckled Wood Pigeon	<i>Columba hodsoni</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 BLDZ Jul 2019 maps to N of Islamabad as far as Dhup, which is W of Gilgit & 120km from Afghan border. 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. Grimmett <i>et al</i> 1998. NB Scarce & irregular W Kashmir following fruit crop up to 3000m Roberts 1991.
N24	Ring-necked Dove	<i>Streptopelia capicola</i>	African sp. RNBWS report Farasan Islands Feb 82 (16:15:0.0N+41:3:0E) unconfirmed; report of breeding Sheikh Othman & Husseini (Aden) 1945 treated with caution in Warr 1992; possible misidentification in both cases. NB Breeds Eritrea Near coast BLDZ Jul 2019, N side of Gulf of Tadjoura, Djibouti, less than 100km from Perim Island, Yemen, Somalia & E Ethiopia Ash & Atkins 2009 H&M4; all along Somali N coast Redman <i>et al</i> 2009, BLDZ Jul 2019, but not Sudan BLDZ contra HBW4, but just into southernmost South Sudan.
N25	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.
N26	Yellow-footed Green Pigeon	<i>Treron phoenicopterus</i>	Regular winterer E-C Pakistan ssp <i>chlorogaster</i> , has increased wintering range to new irrigation projects (Roberts 1991), which now are common in the adjacent OSME Region. Population increasing BLDZ Jul 2019 and resident to Indus valley in S, then NE to below Islamabad..
		Rallidae	H&M4 resequences families, genera & within genera, but we remain with IOC sequencing..
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.
N27	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 550km from easternmost Kazakhstan Gombobaatar & Leahy 2019, occurring further E in northern Mongolia for 1900km.
N28	Ruddy-breasted Crake	<i>Zapornia fusca</i> (formerly <i>Porzana fusca</i>)	Polytypic: nominate plus 3 more distant extralimital subspecies. BLDZ map Jun 2020 maps resident Pakistan as summer-breeding isolate in roughly triangular area, Banu Daud Sha to Dara Tang and (along River Kaitu) to Spin Wam, less than 20km to Afghan border where the River Kaitu enters Pakistan. BLDZ map shows next nearest summer-breeding population 430km further E in Himachal Pradesh, India, but marks the intervening distance as a widespread wintering area. Genus change from Garcia <i>et al</i> 2020, IOC10.2.
		Gruidae	The findings of Krajewski <i>et al</i> 2010 are acknowledged by IOC7.2, reversing the conclusions of two papers co-authored earlier by Krajewski, thus restoring <i>Leucogeranus</i> , <i>Antigone</i> & <i>Anthropoides</i> . Some gruid spp continue to be introduced, particularly because many cultures have a long history of bird-keeping, but also because of developing prosperity funding the trade in exotics Blackburn <i>et al</i> 2015. NB Crane conservation and taxonomy is based on Meine & Archibald 1996, as refined or informed by subsequent fieldwork and genetic research, but many populations remain little-studied and poorly sampled.
N29	Black Crowned Crane	<i>Balearica pavonina</i>	Vulnerable. On WBDB 2008 Egypt checklist as vagrant, but not on 2013 EORC list. E-most distribution reaches Eritrean coast just S of Massawa 75km SSE inland of Mersa Fatma BLDZ Jul 2019. NB Locally abundant Sudan below Khartoum (ssp <i>ceciliae</i>), Ethiopia, albeit W of 40°E Ash & Atkins 2009.
N30	Sarus Crane	<i>Antigone antigone</i> (IOC7.2, H&M4) (<i>Grus antigone</i>)	Vulnerable. Monotypic. 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. Does occur India at Gujarat, & also N & S of Amritsar up to Pakistan border & just in Pakistan beyond Nagarparkar BLDZ map Jul 2019.
N31	Black-necked Crane	<i>Grus nigricollis</i>	Vulnerable. Monotypic. Resident E Ladakh NW India, S Tibet R&A 2012, BLDZ Jul 2019; 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.

N32	Yellow-legged Buttonquail	<i>Turnix tanki</i>	Irregular after rains; ssp <i>tanki</i> possible overshoot to Afghan Kurram valley from Pakistan: see map Grimmett et al 2009, R&A 2012, citing 'movements unclear'; BLDZ Jul 2019 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	NB Livezey 2010 separates as sub-families the <i>Burhinus</i> taxa into Lesser Thick-knees and includes <i>Esacus</i> in Greater Thick-knees
PT	Eurasian Stone-curlew	<i>Burhinus oedicnemus</i> (<i>sensu lato</i>)	Re Parent Taxon, IOC v2.0 accepts split of Indian Stone-curlew <i>Burhinus [oedicnemus] indicus</i> R&A 2005, as do BLI; however the two taxa are separated in Pakistan by a corridor 20-70km wide that lacks correlation with any dividing topography or habitat. H&M4 remains unsplit, noting lack of genetic data Martens & Bahr 2007, but Inskip & Collar 2015 note del Hoyo & Collar 2014b agree split on Tobias et al 2010 criteria. See Non-passerine List
N33	Indian Stone-curlew (Indian Thick-knee)	<i>Burhinus indicus</i>	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 (Jul 2019) indicate a narrow unoccupied residency zone between this taxon & <i>B.[o.] oedicnemus</i> running along the plain of the Indus & Chenab Rivers: is this mere allopatric convenience?. NB Zarudny 1911 noted that his <i>B.[o.] oedicnemus</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 et al 2010, but not accepted on Iranian Checklist Khaleghizadeh et al 2017.
		Charadriidae	NB Sangster et al 2012 recommend <i>Pluvialis</i> precede <i>Vanellus</i> .
N34	Wattled Lapwing	<i>Vanellus senegallus</i>	Occurs to Eritrean coast near Massawa & on Dahlak Archipelago.
N35	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 Jul 2019 more pessimistic, placing nearest breeding population C to SW Ethiopia & nearest Indian Ocean coast breeders S Somalia at Wisil.
		Scolopacidae	BOU (Sangster et al 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 et al 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 monophly; 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>Ereneutes</i> as a full genus for those taxa within <i>Calidris</i> (Laurent Raty in litt).
N36	Nordmann's Greenshank (Spotted Greenshank BLI)	<i>Tringa guttifer</i>	Endangered. 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?
N37	Grey-tailed Tattler	<i>Tringa brevipes</i> (formerly <i>Heteroscelus brevipes</i>)	Monotypic (Change of taxonomy Sangster et al 2007, H&M4, although Livezey 2010 reverted to <i>Heteroscelus</i>) Notorious wanderer. Permanent breeding grounds known near 86°30'E, 67°30'N in Krasnoyarsk Republic Rogacheva 1992 (1750km due N of E Kazakhstan) & Alaska BLDZ Sep 2018, rare PM W Mongolia Gombobaatar & Leahy 2019. A Tattler sp, probably Grey-tailed has reached the Chagos Archipelago Carr 2015. Migration through western Mongolia HBW 3.
		Glareolidae	Livezey 2010 places Small Pratincole in <i>Subglareola</i> . NB Considerable resequencing of genera within a revised <i>Lari</i> (which would include this family) proposed by Sangster et al 2012. We shall await IOC consideration.
N38	Temminck's Courser	<i>Cursorius temminckii</i>	Occurs to Eritrean coast near Massawa; reported from Dahlak Islands
N39	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 et al 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 2018, only 30km from Torkham border post. Locally common winter N Gujarat, India, MB pers obs.
		Laridae	The use of <i>Sternidae</i> below aligns with BOU TSC8. Since Pons et al 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 extrazonal Saunders's Gull; we now align with that view, noting that the main exceptions are the BOU & Dutch Birding. 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 Yésoü) appears in Sonstagen et al 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. It appears somewhat unusually 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). NB For useful overview of lack of taxonomic clarity of gull taxa, see Newton 2003. Also see Kerr et al 2007 for results of genetic 'barcode' large-scale Nearctic species trial.
N40	Ross's Gull	<i>Rhodostethia rosea</i>	The single-record vagrant at Sarykamysh Lake Turkmenistan 31 April 1988 (Antipov et al 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..
N41	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; <i>vetula</i> of southern Africa; <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 small, population) & <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. NB DB 2009 call ssp <i>vetula</i> Cape Gull; this taxon has reached Portugal (4 records).

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 Sonstagen et al 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 *flava/citreola* wagtails), which also merit taking the broader view.

PT	American Herring Gull PT	<i>Larus smithsonianus</i>	PT acknowledges Sangster et al 2007, Collinson et al 2008 (who note that the case for <i>vegae</i> as a species awaits further research). Pierre Yésoü (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> . Full diagnosability criteria for these 3 taxa in relation to each other yet to be proved Parkin & Knox 2010. See also Liebers-Helbig et al 2010. We expect much remains to be discovered. H&M4 include <i>vegae</i> & <i>mongolicus</i> in <i>smithsonianus</i> .
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PT	East Siberian Gull PT	<i>Larus (smithsonianus) vegae</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). 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 clear-cut - Pierre Yésou pers comm. NB1 separation from <i>L. argentatus</i> on mtDNA grounds alone, far from clear-cut (Sangster et al 2007), but other DNA criteria and morphology (Collinson et al 2008, Liebers-Helbig et al 2010) make strong case. NB2 Sangster et al 2007 (BOU) and Collinson et al 2008, Liebers-Helbig et al 2010 also make the case for the PT for <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 Mullaney
N42	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 et al 2008) regarded as a western ssp of American Herring Gull <i>L. smithsonianus</i> : BLDZ Sep 2018 mat tacitly agree, for the Jul 2015 <i>smithsonianus</i> map includes the vegae 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. IOC v2.0 & AOU accepted all changes suggested in Gochfeld & Burger 1996 & Bridge et al 2005. Dutch CSNA Sangster et al 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 Thalasseus. IOC v2.2 accepts split of New World Cabot's Tern <i>T. acuflavidus</i> from Sandwich Tern <i>T. sandvicensis</i> Efe et al 2009, as does Sangster et al 2011. Collinson et al 2017 emphasise that the molecular phylogeny of 'orange-billed terns' does not reflect morphology, West African Royal Tern <i>T. maximus abidorsalis</i> being much more closely related to Lesser Crested Tern <i>T. bengalensis</i> & Great Crested Tern <i>T. bergii</i> than to American Royal Terns <i>T.m. maximus</i> , noting that this accuracy not being achievable by the Tobias et al 2010 method that specifically excludes genetic criteria. NB Many tern spp disperse widely in N hemisphere winter WRP Bourne pers comm.
N43	Black-bellied Tern	<i>Sterna acuticauda</i>	Endangered. 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. 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 2018, at some 80km.
		Stercorariidae	Single genus Cohen et al 1997 derived from multiple evidence strands: mt & nuclear DNA, enzyme variations, feather lice, behavioural studies & calls (Parkin & Knox 2010). NB1 Sangster et al 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>maccormicki</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.
N44	Subantarctic Skua (Brown Skua)	<i>Stercorarius [antarcticus] lonnbergi</i> (formerly <i>Catharacta (antarcticus) lonnbergi</i>)	Monotypic. Taxonomy follows Cohen et al (1997) and Andersson (1999), whom IOC updates do not acknowledge. Probably already recorded in the OSME Region but wrongly attributed to another 'large skua' sp. NB despite long-standing claims, all Sri Lankan specimens this taxon De Silva 1989, 1991. However, regular Australian records come no further N than the Tropic of Capricorn, but refer to Brown Skua <i>sensu lato</i> .
		Diomedaeidae	
N45	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 BLDZ map Jun 2019 does not reflect this. The BLI databaseloads the map tiles, but the display no longer works Jun 2020.
		Procellariidae	Change to <i>Ardenna</i> for some <i>Puffinus</i> originally argued in Christidis & Boles 2008 now generally accepted. H&M4 adopts some changes to <i>Ardenna</i> , & resequences families, genera & within genera, which IOC5.4 largely follows, <i>Procellariidae</i> to follow a reduced <i>Hydrobatidae</i> Hackett et al 2008. NB Indian Ocean seabird occurrence often correlates with phytoplankton concentrations (intensities vary seasonally), whose locations also affected by variation in annual pattern of ocean currents, hence birds sometimes absent, but may also occur unexpectedly. Howell & Zufelt 2019 boldly & plausibly interpret the latest, if still fragmentary, data for many spp.
N46	Southern Giant Petrel	<i>Macronectes giganteus</i>	Monotypic. Possible vagrant, given one found dead at Lac Assal Djibouti in 1991 Redman et al 2009. NB some evidence (Penhallurick & Wink 2004) for the two Giant Petrels to be just ssp of <i>giganteus</i> , but this wide-ranging paper has not achieved consensus. Occurs mostly well below Tropic of Capricorn.
N47	Northern Giant Petrel	<i>Macronectes halli</i>	Monotypic. BLI Seabird Tracking Database Jul 2019 has a few indications of individuals reaching OSME deep-ocean latitudes, but the positions shown are uncertain due to datalogging limitations at times of approximately equal day/night periods. Occurs mostly below Tropic of Capricorn.
N48	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. May comprise cryptic species Howell & Zufelt 2019.
N49	Kerguelen Petrel	<i>Aphodroma 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.
N50	White-headed Petrel	<i>Pterodroma lessonii</i>	Monotypic. R&A 2005 note unconfirmed occurrence Sri Lanka. Highly unlikely in OSME Region, since it mostly occurs below Tropic of Capricorn, but Howell & Zufelt 2019 tentatively map occurrence justinto the SE corner of the OSME Region deep-ocean boundary; wandering to 25°N in Indian Ocean. NB One vagrant reached Shetland, UK in 2020.
N51	Kermadec Petrel	<i>Pterodroma neglecta</i>	Polytypic: 2 ssp Pacific breeding grounds, nominate & <i>juana</i> , the latter possibly taxon that once bred Cousin, Seychelles, otherwise vagrant there Sinclair & Lagrand 2013. BLDZ Jul 2018 maps some occurrence centred on Round Island, N of Mauritius, 10° below the OSME Region southernmost latitude. Known to hybridise in small numbers with Trindade Petrel <i>P. arminjoniana</i> and possibly Herald Petrel <i>P. heraldica</i> on Round Island, Seychelles Howell & Zufelt 2019: occurs in light- and dark-morph forms.
N52	Herald Petrel	<i>Pterodroma heraldica</i>	Monotypic. Predominantly Pacific Ocean distribution. Known to hybridise in small numbers with Trindade Petrel <i>P. arminjoniana</i> and possibly Kermadec Petrel <i>P. neglecta</i> on Round Island, Seychelles Howell & Zufelt 2019.
N53	Mascarene Petrel (Réunion Petrel)	<i>Pseudobulweria aterrima</i>	Critically Endangered. Monotypic. Réunion breeding endemic, exceptionally rare. RNBWS reports (different observers) Sep (12:50:0.0N+45:0:0.0E) & Dec 57 (15:0:0.0N+65:0:0.0E) attributed to this species, originally identified in previous taxonomy as Réunion Petrel <i>Pterodroma aterrima</i> , but Sea Swallow Sighting reports sceptical, as ID character and status of Jouanin's Petrel <i>Bulweria fallax</i> became known; Jouanin 1957 revisited old records from Region & reattributed them to Jouanin's Petrel <i>B. fallax</i> & Persian Shearwater <i>Puffinus persicus</i> . R&A 2005, 2012 treat as hypothetical in Indian Ocean, but <i>aterrima</i> breeding locations and habitat known in one part (burrows Shirihai et al 2014), possibly also on sea-cliffs (not extensive on Réunion) or inland cliffs as well as on more of the many steep canyons on Réunion. Extent of at-sea roaming, especially during non-breeding season or by immatures, uncertain; Howell & Zufelt 2019 vaguely suggest 'subtropical or tropical Indian Ocean'. NB1 Gangloff et al 2012 show that the <i>Puffinus/Bulweria</i> group split from the <i>Pseudobulweria</i> group c 13Mya, and within <i>Pseudobulweria</i> , Macaronesian/Fiji (<i>aterrima/macgillivrayi</i>) split from Tahiti/Beck's (<i>rostrata/becki</i>) c 6-7Mya. BLDZ Jul 2019 maps occurrence around Réunion, 10-12° below the OSME Region southernmost latitude. NB2 in 1950s, Réunion Petrel known only from four 19th-century specimens – WRP Bourne pers comm.

PT	Boyd's Shearwater (formerly within Macaronesian Shearwater) PT)	<i>Puffinus boydi (sensu lato)</i> (formerly considered <i>P. [lherminieri] boydi</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 with 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>
N54	Boyd's Shearwater	<i>Puffinus boydi (sensu stricto)</i> (<i>P. [lherminieri] boydi</i>)	Monotypic Austin et al 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 et al possibly this taxon or <i>P. baroli</i> , Barolo Shearwater (see Non-passserine List).
	Ciconiidae		
N55	Painted Stork	<i>Mycteria leucocephala</i>	Monotypic. R&A 2012 map wintering distribution close to Khyber (rare), BLDZ map Jul 2019 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.
N56	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 Jul 2019; 9 records NW Gujarat, India 2014 Gadhavi et al 2018.
	Ardeidae		
N57	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. Has reached Italy (2015 AERCAC 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 et al 2014c separate <i>E. gularis</i> from Pacific (Eastern) Reef Heron <i>E. sacra</i> , but retain as ssp <i>schistacea</i> & <i>dimorpha</i> . Further to 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>). Collinson et al 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 Egretta spp, the closest of which was <i>E. thula</i> , Snowy Egret: these findings, and those of Huang et al 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 et al 2016 or Collinson et al 2016.
N58	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		
N59	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.
	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 electrification			
N60	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 Argandev 1983 (doubtful Ayé et al 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 Pakistani/India border Arshad et al 2009. BLDZ Jul 2019. Included H&M3 corrigenda E Dickinson pers comm
N61	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 Uttar Pradesh BLDZ Jul 2019.
N62	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 et al 2007). Diclofenac poisoning renders current occurrence in OSME Region unlikely Chris Bowden Nov 2007 pers comm; BLDZ map Jul 2019 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.
N63	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> (qv Non-passserine list) and that the two species closely resemble each other (Redman et al 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 Jul 2019 maps northern breeding distribution limit as from S Djibouti, only 7-km from Perim Island, Yemen, E to Cape Guardafui. One photographed near Ethiopian border in Djibouti Sep 2018
N64	Japanese Sparrowhawk	<i>Accipiter gularis</i>	<i>A.g sibiricus</i> breeds montane pine forests N of easternmost Kazakhstan in Altai just 170km outside Region to NE, BLDZ Jul 2019: 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 wanderer to easternmost Kazakhstan from Russian & Mongolian Altai population. Very secretive breeder in montane pine forests; Mark Brazil in litt. NB1 Forms superspecies with Besra <i>A. virgatus</i> . NB2 Has reached Australia
N65	Besra (Besra Sparrowhawk)	<i>Accipiter [virgatus] virgatus</i>	Polytypic; 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 Jul 2019 maps as resident along forest foothill zone almost to Islamabad & to further N; reported close to Islamabad Nov 2016 & Jan 2017 BirdingASIA 27:131. NB Forms superspecies with Japanese Sparrowhawk <i>A.[virgatus] gularis</i> .
N66	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 Mallieau in litt to TJ Roberts. Rare winter records Pakistan not too far from Khyber R&A 2012; BLDZ map Jun 2019 as WV in arc N and past Lahore almost to Dera Ismail Khan, Pakistan. Breeds not too far away from easternmost Kazakhstan in Mongolia Bräunlich 2012, but BLDZ Jun 2019 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 extralimitally as far S to Sri Lanka & Singapore, one extreme vagrant reported Chagos Archipelago Carr 2015.

N67	'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 'parasitus', 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 'parasitus' 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. NB Thinly widespread in Khartoum Region Jenner & Taha 2016, with suitable breeding and foraging areas north along the Nile to Egypt's border.
PT	Eastern Buzzard PT {Common Buzzard}	<i>Buteo japonicus</i>	Jowers <i>et al</i> 2019 propose full species. PT previous history: IOC2.0, H&M4 accepted split of <i>B. japonicus</i> and also of Himalayan Buzzard <i>B.(b.) refectus</i> Lerner <i>et al</i> 2008; IOC2.7 revised as <i>B. burmanicus</i> ; this name claimed as priority (Penhallurick & Dickinson 2008) over <i>refectus</i> : the priority case therein was compiled & inserted by the lead author alone; this discord is superseded by Dickinson & Svensson 2012, in which the name <i>B. hodgsoni</i> is erected for (extralimital) eastern Himalayan populations. However, exactly which populations comprise <i>burmanicus</i> , <i>japonicus</i> or even <i>hemilasius</i> is far from clear. BLDZ Sep 2018 maps Himalayan Buzzard (as <i>B. refectus</i>) along Himalayan southern flank from Islamabad Pakistan E to Arunachal Pradesh in NE India, but also maps Japanese Buzzard (as <i>B. japonicus</i>) as wintering exactly in the same area (and points E & S). Kruckenhauser <i>et al</i> 2004 note that <i>B. buteo</i> can be regarded as a superspecies with <i>rufinus</i> taxa. Nevertheless, Lindholm & Forsten 2013 suggest a practical <i>pro tem</i> arrangement would confine <i>B. japonicus</i> to Japan & islands Korea & Manchuria, with <i>burmannicus</i> being a BM in N China & Siberia & <i>refectus</i> being the taxon in Himalayas & C China mountains, but as sspp of <i>japonicus</i> (Perhaps worth a small wager?). NB Dickinson & Walters 2006 originally had recommended priority for <i>B. plumipes</i> , now superseded by <i>hodgsoni</i> ; H&M4 treat <i>B. refectus</i> as full sp.
N68	Himalayan Buzzard	<i>Buteo japonicus burmanicus</i>	IOC1.7 elevates to full species as <i>B. japonicus</i> Kruckenhauser <i>et al</i> 2004, Lerner <i>et al</i> 2008. Lindholm & Forsten 2014 suggest that <i>burmanicus</i> populations are BM in N China & Siberia, and so would occur in the Region only as vagrants. Although some authorities have made synonymous <i>B.(b.) burmanicus</i> Hume 1875 & <i>B.(b.) refectus</i> Portenko 1935, which would give <i>burmanicus</i> priority, it is doubtful whether both names have been applied scrupulously and consistently to the same breeding distributions. We adopt the slightly speculative but nevertheless practical proposals of Lindholm & Forsten 2014 considering <i>burmanicus</i> as ssp of <i>japonicus</i> , but with an as yet undefined Himalayan distribution some distance eastward. BLDZ Jul 2019 gives easternmost wintering range (As Japanese Buzzard <i>B. japonicus</i>) <u>as coincident with our 'Eastern Buzzard' <i>B. japonicus refectus</i>' resident range, to the Tarbela Dam in Haripur Pakistan</u> . NB re validity of <i>burmanicus</i> and implications, see PT Notes above.
		Strigidae	H&M4 heavily resequences ORL Strigidae genera, species and within species; we remain with IOC.
PT	African Scops Owl PT	<i>Otus senegalensis</i> (<i>sensu lato</i>)	K&W 2008, IOC4.4 agree split Arabian Scops Owl <i>O.(s.) pamela</i> (qv), previously regarded as ssp. African Scops Owl <i>O.(s.) senegalensis</i> <i>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>pamela</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.
N69	African Scops Owl	<i>Otus senegalensis</i> (<i>sensu stricto</i>)	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 Jul 2019 maps breeding distribution to N Eritrean coast, W Djibouti & to NW Somalian coast.
PT	Scops Owl PT Indian Ocean/Indo-Malayan clade	<i>Otus sunia</i> (<i>sensu lato</i>)	IOC2.7 split. K&W 2008 recognised <i>O.[sp] socotranus</i> as separate (morphology & isolated distribution) but reinforce König <i>et al</i> 1999 queries: song relates to that of Oriental Scops Owl <i>O. sunia</i> ; previous treatments placed <i>socotranus</i> as ssp of Pallid Scops Owl <i>O. brucei</i> or African Scops Owl <i>O. senegalensis</i> : strangely H&M4 continue to do so. Song of Arabian Scops Owl <i>O. pamela</i> (qv) relates to African Scops Owl. Redman <i>et al</i> 2009 treated <i>pro tem</i> as <i>O.(sunia) socotranus</i> . Pons <i>et al</i> 2013 established taxon <i>socotranus</i> as meriting species status; its closest relatives are extralimital Seychelles Scops Owl <i>O. insularis</i> & <i>O.sunia</i> ; the island endemics evolved rapidly
N70	Oriental Scops Owl	<i>Otus sunia</i> (<i>sensu stricto</i>)	Older maps speculative eg König <i>et al</i> 1999, ssp <i>sunia</i> covering E Afghanistan and Tajikistan, Shimba (2007) map suggesting S Kyrgyzstan, possibly because of mis-allocation of ssp to other <i>Otus</i> spp. R&A 2005 excludes from Region by some distance, as does Grimmett <i>et al</i> 1998. K&W 2008, H&M4 westernmost range NE Pakistan, BLDZ Jun 2019 specifically to an area just N of Lahore as far as Islamabad. However, given westward & northward drift of several small passerines occupying niches in growth around proliferation of small dams, may follow prey species into remaining semi-open woodland Afghanistan or Iran.
PT	Eurasian Eagle Owl <i>Bubo bubo</i> PT	<i>Bubo bubo</i> (<i>sensu lato</i>)	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. 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.
N71	Indian Eagle Owl (Rock Eagle Owl, Dusky Eagle Owl)	<i>Bubo [bubo] bengalensis</i>	Monotypic. 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. Grimmett <i>et al</i> 2009 map to Pakistan/Iran border along Gokprosh and Makran Coastal Ranges. BLDZ Jul 2019, 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. 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.
N72	Dusky Eagle Owl	<i>Bubo coromandus</i>	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 in the north of Pakistan S in the cultivated and vegetated Indus catchment to Karachi. 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 not included in molecular analyses cited in ORL) is apparent in BLDZ Jul 2019 map: this gap also shows <i>coromandus</i> S of Himalayas, <i>bubo</i> to N. Maps in K&W 2008, R&A 2005, Grimmett <i>et al</i> 1998 and Roberts 1991 suggest <i>coromandus</i> unlikely in OSME Region, for traditional well watered woodland 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.

PT	Brown Fish Owl PT	<i>Bubo zeylonensis</i>	Recent work to establish distribution limits in southern Turkey (van den Berg <i>et al</i> 2010) complemented by molecular analysis (NB 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 spp <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.
N73	Eastern Brown Fish Owl	<i>Bubo (zeylonensis) zeylonensis leschenaulti</i>	Polytypic if split. BLDZ Jul 2019 maps only Brown Fish Owl <i>sensu lato</i> , but also without any boundary between the 3 spp 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.
This <i>Athene</i> group is highly & has much apparent individual plumage variation. Taxa breeding distributions are poorly known, as are extent of sympatry, allopatry and hybridisation. There are also indications of song variation that need to be validated in the field. Our tentative listing is unlikely to be final, but it keeps the uncertainties in view.			
PT	Little Owl PT NB Suspicion that many records will continue under PT; field experience suggests many populations cryptically similar in appearance and plumage variations within populations not well documented.	<i>Athene noctua</i>	K&W 2008 make <i>A.(n.) liliith</i> a species (qv) as in Wink <i>et al</i> 2008. Wink in van Nieuwenhuysse <i>et al</i> 2009 differs little in detail; genetic analyses of <i>A. noctua</i> & <i>A. cunicularia</i> (Nearctic Burrowing Owl) taxa incomplete (Wink <i>et al</i> 2009, Michael Wink pers comm June 2009). Because of detected phylogeographic variation in both complexes, more detailed study across whole distribution range will reveal more complex pattern of several distinct species & subspecies; of particular interest (to OSME) are <i>glaux</i> , <i>liliith</i> & <i>indigena</i> ; <i>glaux</i> & <i>liliith</i> appear genetically close Wink <i>et al</i> 2009), thus we list the taxa occurring in the Region separately <i>pro tem</i> . In a study of 282 Little Owl skins from across the Extended Western Palearctic, Pellegrino <i>et al</i> 2020 found an absence of clear-cut differences between spp and a huge variation of morphological and colour patterns between individuals collected within any geographical area; no spp could safely be identified on morphological data. Wink 2011 lists <i>noctua</i> , <i>liliith</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> (qv) too may be separable; occurs from Altai eastwards. Extralimital Ethiopian Little Owl <i>A.(n.) spilogaster</i> may also be species (qv Hypothetical List). H&M4 note that limited taxon-sampling delays subspecies-group recognition. NB1 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> . NB2 On Cyprus, plumages of birds near sea level noticeably darker than of those in the low hills away from the coast (MB pers obs).
N74	Ethiopian Little Owl	<i>Athene (noctua) spilogaster</i>	K&W 2008, Wink <i>et al</i> 2009 support elevation to sp (with 2 spp); <i>spilogaster</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>spilogaster</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>spilogaster</i> to coasts of Sudan & N Eritrea & taxon <i>somaliensis</i> to coastal N Somalia.
	Coliidae		
N75	Blue-naped Mousebird	<i>Urocolius macrourus</i>	Recorded, likely spp <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. Heavily traded species, particularly for the US pet market.
	Meropidae		Marks <i>et al</i> 2007 confirmed status of ORL taxa (<i>M. orientalis</i> , pre-split).
N76	Little Bee-eater	<i>Merops pusillus</i>	Widespread and common in Ethiopia Ash & Atkins 2009, Redman <i>et al</i> 2009: family are powerful fliers; nearest spp <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.
N77	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.
N78	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		
N79	Coppersmith Barbet (formerly <i>Megalaima haemacephala</i>)	<i>Psilopogon haemacephalus</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.
	Indicatoridae		
N80	Yellow-rumped Honeyguide	<i>Indicator xanthorhynchos</i>	Reported on-line Afghanistan. Possible, but nearest documented population (ssp <i>xanthorhynchos</i>) NE Pakistan thought extinct or fragmentary but shown as isolate 210km from Afghan border NW of Islamabad in BLDZ Jul 2019 map. R&A 2005, 2012 say no. In H&M3 corrigenda E Dickinson pers comm
	Picidae		Winkler <i>et al</i> 2013 revise <i>Picidae</i> , mostly via mtDNA, but link to other molecular studies. Genera sequence changes follow Winkler <i>et al</i> 2014 Appendix 2.
N81	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.
N82	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>palaescens</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.
N83	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 Eritrean 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.
N84	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 Salalah 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</i> (<i>sensu lato</i>)	Parent Taxon here included <i>pelagrinooides</i> due to highly unclear status of this taxon, but IOC4.4 treats as nominate of Barbary Falcon <i>F. pelagrinooides</i> , which the balance of evidence now indicates, although it is unlikely to be the final word. H&M4 list 18 spp, including <i>babylonicus</i> & <i>pelagrinooides</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.
N85	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 et al 2015.
N86	Blossom-headed Parakeet (Rosy-headed Parakeet)	<i>Psittacula roseata</i>	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 Jul 2019, spp <i>roseata</i> & <i>juneae</i> ..
PASSERINES, English Name		Family, Species or Taxon	Working Notes; includes 'recent' material. NB Secondary references often invalidated
		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; Dutch Birding 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 et al 2017, and so was removed from ORL Passerine List, but since, rather awkwardly, has been accepted as vagrant by Shirihai & Svensson 2018! Nearest known populations 1000km+ away near Islamabad Pakistan and Gujarat India. However, BLDZ Jul 2017 notes it is a long-distance migrant, some populations moving c 2500km, which indicates misoriented birds could reach Khuzestan, Iran. Although occupies montane forest in much of its range, it occurs in low-altitude deciduous or scrub forests, much of which no longer exists in 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</i> is sedentary in Pakistani wooded lowlands, does penetrate ravines & occurs close to Afghan border near Thal & at Khyber Roberts 1992, within 25km at Torkham Pass, down to 10km N of Zob & 30km NW of Bannu to up to 75km in numerous places BLDZ Jul 2019, the western line of occurrence in an almost straight line from N of Peshawar tp Ormara, Pakistan.
		Campephagidae	
P3	Small Minivet	<i>Pericrocotus cinnamomeus</i>	R&A 2012 map in Pakistan close to E&NE Afghan border (ssp <i>pallidus</i>). BLDZ Jul 2019 maps occurrence in Pakistan to within 35km of Afghan border N of Kohat. This species may be split in future.
		Laniidae	Zhang et al 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 et al 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
Fuchs et al 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 et al 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 ' <i>arenarius</i> ' (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 ' <i>arenarius</i> ', that merges into that of (now referred to as) <i>speculigerus</i> is uncertain. Both ' <i>arenarius</i> ' (= <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 may be from this group (DB 31 pp193 & 198); specimens from E Iran are mentioned in H&E 1970, but Vaurie was non-committal Khaleghizadeh et al 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 in litt.). From limited specimen data, intermediates with <i>isabellinus</i> (probably the population formerly attributed to ' <i>arenarius</i> ') and <i>speculigerus</i> are likely (Evgeniy Panov in litt.). BLDZ Apr 2020 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 ' <i>arenarius</i> ' in NW China is found to be closer to <i>tsaidamensis</i> than to <i>speculigerus</i> in Mongolia & just in the Russian Federation; seemingly, there is no gap in that arc Evgeniy Panov pers comm.
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 Jul 2019 places nearest breeding are a 150km S of Ladakh near Tabo & 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 et al 2018 report it much further NW in Kashmir Marusdar catchment.

In the 10 years since the draft of Olsson *et al* 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 *Lanius meridionalis* is a monotypic isolate confined to Iberia & southern France, being related ancestrally most closely to Nearctic Northern Grey Shrike *L. borealis* & not to any Palearctic taxa. Palearctic taxa formerly attributed as sspp of *L. meridionalis* are now considered related to 2 other *Lanius* spp, Great Grey Shrike *L. excubitor* & Northern Grey Shrike *L. borealis*. The latter's eastern Palearctic sspp are *sibiricus*, *bianchii*, *mollis* & *funereus*, only the nominate being in the New World. Within the WP & Africa, the 12 or 13 taxa related to *L. excubitor* comprise not only sspp, but probably also full species that might best be considered as part of a large superspecies that includes all the above. This general position is accepted by BLDZ 2018, IOC8.2, Shirihai & Svensson 2018, Poelstra 2010, Poelstra 2014, Tatkova & Red'kin 2014, Peer *et al* 2011 & the AOU in 2017 as proposed by Rasmussen 2017 (Almost the exact arrangement as Vaurie 1959!). That the results of Olsson *et al* 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 *et al* 2019 not only sequenced mtDNA, but also two nuclear regions. Their view of the Olsson *et al* 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 flava/citreola 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 *L. meridionalis* 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 *et al* 2010 & Fuchs *et al* 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 Jul 2019 map of unsplit taxa shows breeding from Sichuan NE to Russian Amur, but c90% 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 'tibetanus' (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 babbler.
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 Jul 2019 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 monophly, the 2 spp below now part of true <i>Leucocirca</i> .
P8	White-throated Fantail	<i>Leucocirca albicollis</i> { <i>Rhipidura albicollis</i> }	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 Jul 2019 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).
P9	White-browed Fantail	<i>Leucocirca aureola</i> { <i>Rhipidura aureola</i> }	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 Jul 2019 maps this sedentary taxon 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 ssp extralimital to E.
		Corvidae	
P10	Azure-winged Magpie (Asian Azure-winged Magpie)	<i>Cyanopica cyana</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 Jul 2019 maps in Mongolia to c96°E, suggesting a westward spread. However, Gombobaatar & Leahy map to 92°E at Ulaangom, some 340km from Kazakhstan. Buddhists have introduced this species into Urumqi, Xinjiang, NW China, 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.
P11	Yellow-billed Blue Magpie (Gold-billed Magpie)		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 Jul 2019 maps 2 isolate populations N & E of Peshawar, 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, although on 2017 Ladakh Checklist without comment..
P12	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 Aug 2019 maps no nearer than 25km, NW of Bannu. H&M4 ssp <i>bristoli</i> resident Pakistan. All 8 other ssp extralimital further E.
P13	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 Kazakhstan 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 Jul 2019 map to within 50km of Kyrgyzstan N of Aksu Xinjiang & within 65km of Kyrgyzstan N of Kashgar; also occurring 300km E of Wakhan..

P14	Cape Crow (Cape Rook)	<i>Corvus capensis</i>	ssp <i>kordofanensis</i> far more likely in Region than nominate. Two reported Egypt 29 Nov 07 at Shalateen (notified to Sandgrouse ATR, but not accepted on EORC list). No evidence of becoming established. Occurs N Somali coast BLDZ map Jul 2019, but not near Bab al Mandab Strait. BLDZ Jul 2019 maps Eritrean population occurring away from coast, <i>contra</i> Ash & Atkins 2009 (breeds Eritrean Red Sea coast); Somali N coast Redman et al 2009. NB HBW14 notes largely sedentary, but has wandered occasionally.
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 et al 2007.
P15	'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.
P16	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. BLDZ maps breeding to coast from Ghelaalo Peninsula Eritrea continuously for over 1220km S almost to Somalian Laasgoray and so likely 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 18km: Google Maps. NB Closely related to Pied Crow <i>C. albus</i> Jönsson et al 2012.
		Stenostiridae	IOC2.0 places this species in new family Stenostiridae , Fairy Flycatchers.
P17	Grey-headed Canary-flycatcher (Grey-headed Flycatcher)	<i>Culicicapa 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 Jul 2019 maps N & just W of Islamabad as BM. Steve Madge suggests Arlott 2007 error perpetuated from Baker 1922-29. NB English name amendment reflects separation from true flycatchers IOC2.7
		Paridae	Largely we follow Johansson et al 2013, IOC3.5, & Alström et al 2013b. NB1 Note that until now the dismemberment of the <i>Parus</i> genus was premature. IOC3.5 reflects the new standard, though earlier authorities such as Scott & Adhami 2006 retain <i>Parus</i> throughout. NB2 Dai et al 2010 found <i>Poecile</i> diverged earlier than <i>Parus</i> . NB3 although some regard <i>Poecile</i> as feminine, JJ Kaup, the originator of the genus name did not specify as such, and by default under ICBN rules, it is masculine: case endings of species names follow suit. NB4 Current taxonomic listings may change further when more is known about contact zones, acoustics and molecular genetics Eck & Martens 2006
P18	Fire-capped Tit	<i>Cephalopyrus flammiceps</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>flammiceps</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 et al 2009 map to Chinese, not Afghan border; spring overshoot to Wakhan? Ayé et al 2012 make no mention. BLDZ Jul 2019 maps as reaching Islamabad N to Sazin River to within 60km of Kamdesh E Afghanistan & N of Gilgit, some 100km S of Afghan Wakhan.
P19	Yellow-browed Tit	<i>Sylviparus modestus</i>	2015 Ladakh Checklist; <i>simlaensis</i> Kashmir westernmost range H&M4. BLDZ Aug 2016 notes declining population & distribution, but maps to within 25km of Pakistan within Kashmir at Menh.
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 spp appear to be grouped, the split arising from Salzburger et al 2002b. NB Dai et al 2010 find <i>C. caeruleus</i> diverged before any <i>Parus</i> listed in the ORL.
PT	Teneriffe Blue Tit PT	<i>Cyanistes [caeruleus] teneriffae</i>	All related Canarian & North African spp were grouped, the split arising from Salzburger et al 2002b. Sangster 2006 was the first to argue that the evidence supported 4 or 5 separate Blue Tit spp in the Canary Islands. Stervander et al 2015 noted incomplete lineage sorting of nuclear markers across the Canary Islands and N Africa, mitigating somewhat against full speciation as noted Illera et al 2011. However Illera et al 2016, synthesising more recent molecular data, reverses the conclusions of Illera et al 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.
P20	Cyrenaic Blue Tit {Cyrenian 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 (as now mapped by BLDZ Jul 2019, some 265km from NW Egypt Isenmann et al 2016 & 350km from inland al-Jaghbul Oasis close to Egyptian border. Storm-driven vagrancy Egypt likely? BirdLife Jul 2019 Partially accept Dai et al 2010, Olsson et al 2013 & Alström et al 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 et al 2016.
P21	Green-backed Tit	<i>Parus monticolus</i>	Johansson et al 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 et al 2009 map to border at Kunar river; Afghan occurrence ssp <i>monticolus</i> in Daryā-ye & Konar valleys? BLDZ Jul 2019 maps close to (3km) Afghan border W of Dir & near Maskeni & Pashat on tributaries of Panjikora & Babukara Rivers respectively, 80km N of Mardan, at Afghanistan's Nuristan Forest reserve reaches its easternmost point . Sedentary, little altitudinal migration, avoids drier Himalayan forests Roberts 1992. 3 extrazonal spp 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. Furthermore, we adopt Alström et al 2013a, 2013b in their comprehensively reviewed phylogeny as per IOC4.2, but modified <i>pro tem</i> for <i>Calandrella sensu stricto</i> by the inferred Clades in Stervander et al 2016; the same team are conducting a consequent taxonomic revision. IOC8.1 provided a resequencing of Alaudidae .
P22	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 Jul 2019 confining Pakistan isolate population to C Pakistan N of Multan as far as Dullawala & Sawihai; only other ssp <i>testacea</i> extrazonal in S India.
P23	Chestnut-backed Sparrow-Lark	<i>Eremopterix leucotis</i>	Normally ssp <i>melanocephalus</i> reaches in Nile Valley Sudan c150km S of Egyptian border (BLDZ Jul 2019 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.
P24	Ashy-crowned Sparrow-Lark	<i>Eremopterix griseus</i>	Monotypic. R&A 2012 map in Pakistan close to E&NE Afghan border, BLDZ Jul 2019 map as far N as Mingora & halfway to Afghan border from Peshawar, only about 20km from the border for about 30km.
P25	Mongolian Lark	<i>Melanocorypha mongolica</i>	Monotypic. On-line report for Kyrgyzstan, but more likely to be vagrant eastermost Kazakhstan, which is 750km nearer species' western range limit which lies another 330km further E in Mongolia, W of Lake Uvs - BLDZ map Jul 2019.
P26	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 Jul 2019 map includes easternmost Kashmir, 300km from OSME Region. NB Afghan citation in John Gould's Birds of Asia (vol 4 1867) in error - type locality was Sikkim (Hartert).
		Hirundinidae	

PT	Rock Martin PT	<i>Ptyonoprogne fuligula</i> (formerly <i>Hirundo fuligula</i>)	IOC2.0 accepts split to <i>obsoleta</i> & <i>fuligula sensu novo</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</i> <i>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). However, note further complication of understanding of taxon identities below. Unfortunately, Svensson <i>et al</i> 2009, Shirihai & Svensson 2018 remain with <i>P. fuligula</i> <i>sensu lato</i> , the related maps liable to misinterpretation of distribution of <i>fuligula</i> <i>sensu novo</i> & <i>sensu stricto</i> (<i>qv</i>). HBW Alive/BLI have undertaken a deeper split, somewhat differently from previous proposals, erecting Large Rock Martin as <i>P. fuligula</i> <i>sensu stricto</i> for the species only in southern Africa, and Red-throated Rock Martin <i>P. ruficula</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 <i>P. fuligula</i> <i>sensu stricto</i> (or post-subsequent BLI split <i>P. ruficula</i> <i>sensu superstricto</i>) in the OSME Region; all earlier records refer to pre-split Rock Martin <i>P. fuligula</i> <i>sensu lato</i> . 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 <i>P. fuligula</i> <i>sensu stricto</i> 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 <i>P. ruficula</i> with spp <i>ruficula</i>, <i>bansoensis</i>, <i>pusilla</i>. Large Rock Martin <i>P. fuligula</i> <i>sensu stricto</i> <i>reductio</i> comprises spp <i>fuligula</i>, <i>anderssoni</i>, <i>pretoriae</i> occurring largely S of diagonal from C Angola to S Mozambique BLDZ maps 2018.			
P27	Red-throated Rock Martin (Rock Martin, African Rock Martin)	<i>Ptyonoprogne [fuligula] ruficula</i> (Formerly <i>P. (f.) fuligula</i> , <i>Hirundo (fuligula) fuligula</i>)	3 extralimital spp. African species T&R 1989. Unconfirmed reports post-split as occurring in Region (Richard Klim <i>in litt</i>), but spp <i>pusilla</i> (Ethiopia & Eritrea) & <i>ruficula</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 maps the sole Red Sea breeding distribution as north of Asmara in Eritrea, & (as <i>Hirundo fuligula</i>). However, BLDZ Jul 2019 now map breeding at least 150km inland from N coasts of Eritrea & W Ethiopia.
		Cettidae	IOC v2.0 placed <i>Cettidae</i> ahead of <i>Aegithalidae</i> . 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 <i>Cettia</i> , but many taxa formerly included in <i>Cettia</i> removed to new genera, including <i>Horornis</i> . English name below informal @OSME.
P28	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> 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 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 Jul 2019 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 assesses it as patchily widespread, making no allusion to its 'Kashmir' distribution beyond their specified area.
		Aegithalidae	
P29	Red-throated Tit (formerly part of Black-throated Tit)	<i>Aegithalos iredalei</i> (formerly part of <i>A. concinnus</i>)	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 Jul 2019 map westernmost continuous distribution of <i>A. iredalei</i> as just reaching Islamabad, Pakistan, but with an isolate N&E of Mingora only 22km from the Afghan border near Barawali Bandi. This valley climbs west and then southwest into Afghanistan, merging into the Kunar Valley.
P30	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 Jul 2019 to within 84km of Khyber & in an arc including & N of Islamabad to Mingora, N of Sazin, but just short of Gilgit.
		Phylloscopidae	IOC2.0 removes <i>Phylloscopus</i> from <i>Sylviidae</i> and places with <i>Seicercus</i> in new family <i>Phylloscopidae</i> , ahead of <i>Acrocephalidae sensu stricto</i> , but the use of that family name considered invalid on priority grounds (Ed Dickinson <i>in 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 <i>Phylloscopidae</i> : 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 <i>Phylloscopidae</i> , 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 show 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.
P31	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</i> <i>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).
P32	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 Jul 2019 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 spp to E.
		Acrocephalidae	IOC v2.0 removes <i>Acrocephalus</i> & <i>Hippolais</i> from <i>Sylviidae</i> & places with some African genera in new <i>Acrocephalidae</i> , after <i>Phylloscopidae</i> <i>sensu stricto</i> . 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 sl below) providing less phylogenetic information than the other (<i>sensu stricto</i> : ss), 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>Calamodus</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

The status of a number of African and Arabian populations within the *Acrocephalus scirpaceus/A. baeticatus* 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 *et al* 2011 found *avicenniae* breeding in date palm & olive trees in Siwa, Egypt in high numbers; the genetic distance from *scirpaceus* & *fuscus* is small, but its ecological niche is very different. They also found '*baeticatus*'-type (*ambiguus*) birds in nearby oases just into Libya; *avicenniae* is also strongly bound to mangroves along the Red Sea, and so we consider separate recognition is warranted *pro tem*. Winkler *et al* 2012 further discovered that birds in SW Iberia appeared to belong more to the *baeticatus* (*ambiguus*) grouping, & that *fuscus* characteristics predominate in SE Europe: they suggest that many populations throughout the *A. [scirpaceus]* superspecies need thorough re-examination to determine their inter-relationships so that clear taxonomic decisions can be made. Olsson *et al* 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, *A. ambiguus*, (named 'Brehm's Reed Warbler' informal@OSME) whose ancestry separated from Sahelian *minor* (*sensu* Olsson *et al* 2016) 0.53MYa & from the 'southern group' (including *A. baeticatus*, now limited to southern Africa *sensu stricto*) 0.64MYa.

Pavia *et al* 2018 applied to a SW Burkina Faso taxonomically undescribed population of *A. baeticatus* a combination of DNA barcode analysis and the methodology of Malmhagen *et al* 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 *A. scirpaceus sensu lato*.

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>halla</i> , <i>baeticatus</i> : <i>halla</i> & <i>baeticatus</i> <i>sensu stricto</i> are (so far) wholly extralimital; <i>ambiguus</i> sp novo 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). 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 ' <i>baeticatus</i> ' individuals of Hering <i>et al</i> 2011; <i>ambiguus</i> may yet be found in western Egypt oases. Hering <i>et al</i> 2016 propose a new sspp 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> ! 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 sspp 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. Hering <i>et al</i> 2009, 2010a, 2010b, 2011 documented puzzlingly 'odd' breeding populations scattered across N Africa. Kirwan <i>et al</i> 2008 warned individual variations risked blurring morphological & ID conclusions, since documented by significant rate of mislabelled specimens found by Arbab <i>et al</i> 2014a who also proved <i>avicenniae</i> basal to <i>scirpaceus</i> & <i>fuscus</i> (0.7MYA v 0.48mya). 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 ' <i>scirpaceus</i> ' taxa at western Egypt oases. Babington <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. NB 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
P33	'Brehm's Reed Warbler' ('Ambiguous Reed Warbler' - Dutch Birding)	<i>Acrocephalus [scirpaceus] ambiguus</i> (formerly part of <i>A.[s.] baeticatus</i>)	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</i> sp novo, 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>Calamoherpa ambigua</i> (Brehm 1857). 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.
		Helopsaltes	New family Alström <i>et al</i> 2018a.
P34	Gray's Grasshopper Warbler	<i>Helopsaltes fasciolatus</i> (formerly <i>Locustella fasciolata</i>)	Monotypic. Easternmost breeding range fairly close to NE Kazakhstan, Flint <i>et al</i> 1984, Shimba 2007, Kennerley & Pearson 2010 & N of NE Kazakhstan BLDZ Jul 2019, only 250km from E-most Kazakhstan, but Gombobaatar & Leahy 2019 put nearest occurrence in Mongolia 800km away . Arlott 2007 map tentatively suggests 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..
		Locustellidae	IOC v2.0 removed <i>Bradypterus</i> & <i>Locustella</i> from <i>Sylviidae</i> and placed in existing <i>Megaluridae</i> , which followed new families of <i>Phylloscopidae</i> and <i>Acrocephalidae</i> . IOC 2.6 reverted to <i>Locustellidae</i> on priority grounds; H&M4 follows. Kennerley & Pearson 2010 remained with <i>Locustellidae</i> 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 <i>Locustellidae</i> : extensive revision required at genus level, but little effect on Region taxa.
P35	Chinese Bush Warbler	<i>Locustella taconowskia</i> (Formerly <i>Bradypterus taconowskii</i>)	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 2018 indicates 830km distance more likely. 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.
PT	Spotted Bush Warbler PT	<i>Locustella thoracica</i> (Formerly <i>Bradypterus [thoracicus]</i> <i>davidi</i>)	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> .
P36	Baikal Bush Warbler (Siberian Bush Warbler) (Père David's Bush Warbler)	<i>Locustella davidi</i> (Formerly <i>Bradypterus [thoracicus]</i> <i>davidi</i>)	Alström <i>et al</i> 2008a map northeastermost 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. BLDZ map Jun 2019 as long-distance BM breeding N & E of Mongolia 1250km from Kazakhstan to disparate wintering areas in SE Asia; nominate breeds further E.

P37	West Himalayan Bush Warbler (Himalayan Grasshopper Warbler)	<i>Locustella kashmirensis</i> (Formerly <i>Bradypterus (thoracicus) kashmirensis</i>)	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 Jul 2019 gives W limit as just E of Simla, Chandigarh, India, almost 600km from Afghanistan.
		Cisticolidae	Alström et al 2011a, IOC2.7 find that Scrub Warbler <i>Scotocerca inquieta</i> belongs to Cettidae (qv) & not Cisticolidae; H&M4 place in Scotocercidae, as does IOC4.4.
P38	Rufous-fronted Prinia	<i>Prinia burchanani</i>	Monotypic. On-line claim Afghanistan not supported Baker 1997, but mapped Pakistan along border at Khyber; R&A 2005, the same; map Grimmett et al 1998 on NE Pakistan-Afghanistan border. Roberts 1992 maps into Afghanistan at Khyber and nearly so at Thal to S; Grimmett et al 2009 map likewise. Resident from N of Peshawar to W of Multan, Pakistan BLDZ Jul 2019, occupying the plains W of the Indus all the way to Karachi.
P39	Grey-breasted Prinia	<i>Prinia hodgsonii</i>	Grimmett et al 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 Jul 2019 maps N&W past Mingora, almost reaching Mardan to the S. 5 other, extrazonal spp to SE & E.
P40	Yellow-bellied Prinia	<i>Prinia flaviventris</i>	ssp <i>sindiana</i> locally common along water margins in Pakistan almost to the Kurram (Grimmett et al 2009), where may extend irregularly into Afghanistan; BLDZ Jul 2019 map to Peshawar in N, 10km W of Bannu down the Indus valley to Karachi. 6 other extrazonal spp to SE & E to Borneo.
P41	Ashy Prinia	<i>Prinia socialis</i>	R&A map ssp <i>stewarti</i> in Pakistan close to E Afghan border; BLDZ Jul 2019 maps W-most Pakistan distribution just reaching the Indus River near Jabba, half-way between Islamabad & Peshawar. 3 other extrazonal spp to E & S.
P42	Cricket Longtail (Cricket Warbler H&M4)	<i>Spiloptila clamans</i>	Monotypic genus. Recorded Sudan in 120km ² square 21°N, 31°E, 90km SSE of Wadi Halfa, just below Egyptian border Nikolaus 1987, possibly an isolate population; BLDZ Jul 2019 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 et al 2011
P43	Common Tailorbird (Formerly Indian Tailorbird)	<i>Orthotomus sutorius</i>	Roberts 1992 maps ssp <i>guzuratus</i> almost to Afghan border at Thal & Khyber, also Grimmett et al 2009. BLDZ Jul 2019 maps to Peshawar then SSW to Karachi. Species adaptable to most deciduous habitats. IOC v2.0, H&M4 place in Cisticolidae. 8 other extrazonal spp to S & E. Alström et al 2011c find that <i>Tesia</i> , <i>Tickellia</i> & Mountain Tailorbird <i>Orthotomus cucullatus</i> are nested within Cettia.
		Pellorneidae	Ground-babblers. Transfer from <i>Prinia</i> Olsson et al 2013b, IOC 3.4 draft
P44	Rufous-vented Prinia (Long-tailed/Rufous-vented Grass Babbler)	<i>Laticilla burnesi</i> (formerly in <i>Prinia</i>); Olsson et al 2013b	Species is unaffected in the babbler phylogeny (Clade E) of Cai et al 2019; ssp <i>burnesi</i> widespread along water margins in Pakistan almost to the Khyber (Grimmett et al 2009), where possibly extends irregularly into Afghanistan; BLDZ Jul 2019 maps W of Dera Ismail Khan & close to Sibi, SE of Quetta. This sp may yet be split H&M4. 2 other extrazonal spp to E & S.
		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 et al 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 extrazonal to the Region; they also strongly support <i>Argya</i> , hence our adoption here. The genera <i>Trochalopteron</i> & <i>Argya</i> are included in Clade G of the comprehensive babbler phylogeny of Cai et al 2018.
Clade D1: Cibois et al 2018.			
P45	Striated Babbler	<i>Argya earlei</i> (<i>Turdoides earlei</i>)	ssp <i>sonivia</i> mapped to Afghan border NE of Jalalabad Roberts 1992, Grimmett et al 2009, but BLDZ Jul 2019 maps W of Utmanzai near Peshawar, only 24km from Afghan border; 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 extrazonal to E & SE.
Clade D4: Cibois et al 2018 (and Clade D in Cai et al 2019)			
P46	White-throated Laughingthrush	<i>Pterorhinus albogularis</i> (formerly <i>Garrulax albogularis</i>)	Clade G in Cai et al 2019 babbler phylogeny. IOC2.6 revises R&A 2005 proposal to transfer swathe of spp from <i>Garrulax</i> to <i>Trochalopteron</i> , reducing it slightly, leaving this sp unchanged. However, Moyle et al 2012 revise Timaliidae, proposing inclusion of this taxon in <i>lantocrinidae</i> ; many genera subsumed under subfamily Leiothrichinae. Map in Arlott 2007 suggests ssp <i>whistleri</i> (NE Pakistan) in Region, but possible error of map swap in Arlott 2007 with Variegated Laughingthrush <i>T. [g.] variegatus</i> (qv in ORL Passerines)? Arlott 2007 may have used maps or same source data as M&P 2000, whose texts agree with R&A texts but not with maps. R&A 2005 maps & species accepted here as correct – westernmost limit isolated (& declining?) population NE Pakistan: BLDZ Jul 2019 maps distribution as almost reaching Islamabad, but just covering Abbottabad, N to Naran; 3 other extrazonal spp to E as far as China. NB Remaining <i>whistleri</i> population Pakistan only in Poonch Grimmett et al 2009; noisy & conspicuous species. H&E 1970 speculate 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). On WBDB Afghanistan checklist as uncertain - same error as above? We consider OSME Region occurrence now unlikely.
		Sylviidae	As of 2011, considerable body of convincing evidence required rearrangement of <i>Sylviidae sensu lato</i> , separating new Phylloscopidae & Acrocephalidae and placing <i>Locustella</i> & <i>Bradypterus</i> in existing Megaluridae; see eg Alström et al 2006; IOC v2.0 adopted this major revision, but Alström et al 2011b notes Megaluridae junior to Locustellidae, which is reinstated IOC2.7. Voelcker & Light 2011, inter alia, revealed within <i>Sylviidae</i> 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>Currucà</i> for Clades 2 & 3 (25 spp including lumped Lesser Whitethroat spp), involving considerable resequencing. Although IOC 9.1 draft omits reference to these changes (& notwithstanding Sangster et al 2015 regarding <i>Currucà</i> as a sub-genus), we adjudge the comprehensive examination of babbler phylogeny (402 of 452 spp including the <i>Sylviidae</i>) of Cai et al 2019 as fully establishing <i>Currucà</i> as a full genus. The genera <i>Sylvia</i> & <i>Currucà</i> form Clade A in Cai et al 2019.
PT	Desert Warbler PT	<i>Currucà nana</i> (<i>sensu lato</i>) (formerly <i>Sylvia nana</i>)	Basal to Clades 2 & 3 Voelcker & Light 2011. HBW Alive & BLDZ now accept split. IOC2.0 & H&M4 split to African Desert Warbler <i>S. deserti</i> . Parkin & Knox 2010 note the lack of published DNA evidence (believed to show wide separation). Although there are wide differences on vocalisation between the two spp, there is also wide variation within each sp Boesman 2016.
P47	African Desert Warbler	<i>Currucà deserti</i> (H&M4, Cai et al 2019) (formerly <i>Sylvia [n.] deserti</i> & <i>S. n. deserti</i>)	Resident W Libya; BLDZ Jul 2019 confines occurrence W Libya, resident & wintering to c 15% of W-most Libya: Isenmann et al 2016 cite 2 records from E Libya; 2 birds S of Tobruk al Adam Dec 1958 105km from Egypt, 4 birds Mar 1970 al Sasir 200km from Egypt near latitude of Dhakla Oasis. Claimed Egypt Avib. Highly likely vagrant.
PT	Marmora's Warbler PT	<i>Currucà sarda</i> (<i>sensu lato</i>) (formerly <i>Sylvia sarda</i>)	PT: Bairlein et al 2006 split to extrazonal Balearic Warbler <i>S.[s.] balearica</i> (on morphology, vocalisation & genetics, Anderson et al 2009) BLDZ now concurs, as did IOC2.0, Sangster et al 2012, H&M4.
P48	Balearic Warbler {Marmora's Warbler}	<i>Currucà 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; 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).
P49	Tristram's Warbler	<i>Currucà deserticola</i> (formerly <i>Sylvia deserticola</i>)	BLDZ Jul 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 spp) <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> (\equiv <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 Zucccon <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 Zucccon <i>et al</i> 2020.
P50	Moltoni's Warbler	<i>Curruca subalpina</i> (formerly <i>Sylvia [cantillans] subalpina</i> syn. <i>S. moltonii</i>)	Monotypic Zucccon <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 Zucccon <i>et al</i> 2020. Most related taxa winter N of the Sahel or deep in the western Sahara, see BLDZ Sep 2019 map: <i>albistriata</i> & <i>cantillans</i> <i>sensu stricto</i> probably winter in E Sahara, & thus might reasonably be encountered in SW Egypt. However, BLDZ Sep 2018 map indicates 2 isolate wintering areas in Libya, possibly <i>subalpina</i> , but <i>cantillans</i> ss is more likely.
		Paradoxornithidae	Paradoxornithidae resurrected by Cai <i>et al</i> 2019
P51	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 Jun 2019 maps distribution to the broad Kabul River 2.5km after it enters Pakistan; identical riverside agricultural habitats exist upstream on the Afghan side of the border, though at slightly higher altitude. NB Change to <i>Sylviidae</i> follows Gelang <i>et al</i> 2009; IOC 2.6. 5 other extrazonal sspp 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 extrazonal Beijing babbler <i>R. [p.] pekinensis</i> . IOC5.3 agrees; H&M4, BLI 2017 do not split.
P52	Tarim Babbler (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 extrazonal <i>R. pekinensis</i> <i>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' yoq Oqsu in Tajikistan; extrapolated from Baker 1997: BLDZ Jun 2019 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 the SW Mongolian border Gombobaatar & Leahy 2019. HBW 12 suggests just reaches Region as above, but removes from <i>Cisticolidae</i> , as does IOC v2.0. Nominate only other ssp much further E, Documentation! NB Change to <i>Sylviidae</i> follows Johanson <i>et al</i> 2008, Gelang <i>et al</i> 2009; IOC 2.6.
		Zosteropidae	Included as Clade C in the comprehensive babbler phylogeny of Cai <i>et al</i> 2019. although many <i>Zosterops</i> spp were not covered therein, given the upheaval of Husemann <i>et al</i> 2016, Pearson & Turner 2016 and current studies within the genus, eg Lim <i>et al</i> 2018 who separate extrazonal eastern of <i>Z. palpebrosus</i> <i>sensu lato</i> taxa into separate spp, hence need for new English name. Ottenburghs 2019 noted that evidence of rapid evolution within the white-eye complex was postulated by Cowles & Uy 2019, resulting in little or no hybridisation between sympatric populations exploiting different niches. Cai <i>et al</i> 2020 in an examination of babbler diversity reinforce this view, but as atypical of babblers, in that <i>Zosterops</i> island populations diverged most rapidly. We speculate that mangrove-living populations in Arabia are in effect living in 'islands' in desert or semi-desert.
P53	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. NB ssp <i>senegalensis</i> fairly common resident in W Ethiopia Ash & Atkins 2009, N Eritrea isolate population 60km from coast BLDZ Jun 2019 map; all other 13 spp extrazonal in Africa by some distance. NB1 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. NB2 Pearson & Turner 2017 review the taxonomy of <i>Zosterops</i> in East Africa; <i>Z. senegalensis</i> African White-eye (extrazonal) & <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.
		Sturnidae	Zucccon <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.
P54	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.
P55	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.
P56	Purple Starling	<i>Lamprotornis purpureus</i>	Breeds sub-Saharan 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	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.
PT	Plain-backed Thrush PT	<i>Zoothera mollissima</i> (<i>sensu lato</i>)	Alström <i>et al</i> 2016 split Plain-backed Thrush <i>Z. mollissima</i> <i>sensu lato</i> into 3 spp: <i>Z. mollissima</i> <i>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</i> sp novo Himalayan Forest Thrush. <i>Z. mollissima</i> s.s. 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. Taxa <i>griseiceps</i> and <i>salimalii</i> are wholly extrazonal.
P57	Alpine Thrush	<i>Zoothera mollissima</i> (<i>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 2018.

P58	Grandala	<i>Grandala coelicolor</i>	Occurs Karakoram Pakistan to within 80km of Kandesh E Afghanistan and 100km from Wakhan, N & just E of Islamabad, the W-most contiguous distribution begins in Himachal Pradesh. BLDZ map Sep 2018.
P59	Grey-winged Blackbird	<i>Turdus boulboul</i>	Monotypic. NE Afghanistan from map Clement & Hathway 2002, likely habitat, ban oak <i>Quercus incana</i> , HBW10, but not supported R&A 2005. Grimmett et al 1998, 'common, but very local' in Pakistan. Roberts 1992 text suggests unlikely, as it prefers Himalayan-type moist forest community. BLDZ Jul 2019 map shows W-most contiguous distribution covering Islamabad and Abbottabad, some 165km from Afghan border.
		Muscicapidae The sequence of genera below largely follows the recommendations of Sangster et al 2011	IOC4.1 subsumes <i>Erythropygia</i> in <i>Cercotrichas</i> . NB Disappointingly, Svensson et al 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 <i>Muscicapidae</i> from <i>Turdidae</i> ; their policy of 'author's choice' of taxonomy vague option. However, Svensson, as co-author in Sangster et al 2011 supports the revisions wholeheartedly!
P60	White-bellied Redstart (Hodgson's Shortwing)	<i>Luscinia phoenicuroides</i> (IOC) (<i>Hodgsonius phoenicuroides</i> BLI) (not <i>phaenicuroides</i>) (H&M3 corrigena 8, IOC 2.6) H&M4 <i>phaenicuroides</i>	H&M4 listed distributions remote from Region for both spp. Not recorded Afghanistan. However, Bates & Lowther were unusually emphatic "known breeding range extends from NW Frontier, the Kurram Valley" (which is also into Afghanistan; Grimmett et al 2009 map disjunct population in Hindu Kush, c60km NW of Chitral polo ground. Furthermore, Clement & Rose 2015 cite Raja et al 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 Jul 2019 map opts for W-most BM distribution, an isolate, just short of Islamabad, over 250km 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 et al 2010, Zuccon & Ericsson 2010b find this taxon nested in the <i>Luscinia</i> clade.
PT	White-tailed Rubythroat	<i>Calliope pectoralis</i> (<i>sensu lato</i>) <i>Luscinia pectoralis</i>	Liu et al 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> (spp <i>pectoralis</i> & <i>bailloni</i>) & extralimital polytypic Chinese Rubythroat <i>C. tschebaiewi</i> (spp <i>tschebaiewi</i> & <i>confusa</i>): Collar 2017 accepts. Himalayan Rubythroat is listed in Passerine Section.
P61	Chinese Rubythroat	<i>Calliope tschebaiewi</i>	2 spp, extralimital <i>confusa</i> Nepal to Bhutan & nominate N Kashmir through Tibet C China to Myanmar; Kashmir birds may stray into OSME Region, but BLDZ Jul 2019 now maps splits separately; nominate <i>tschebaiewi</i> summer breeding area under 400km 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.
P62	Golden Bush Robin	<i>Tarsiger chrysaeus</i>	Very diverse habitat preferences; up to 4600m Himalayas HBW11. Rare Pakistan Grimmett et al 2009, where ssp <i>whistleri</i> recorded for the first time at up to 3350m: BLDZ Jul 2019 maps sizeable isolate resident distribution between Islamabad N to Naran, which mostly is at a lower altitude, 100km from Afghan border; ssp <i>chrysaeus</i> remote to E. On higher slopes of Afghan Daryā-ye & Konar valleys?
P63	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 Barezzani & Ebels 2012. Nearest breeding population to Region is in Russian Altai just beyond Kazakh Altai: BLDZ Jul 2019 maps as BM to within 110km of E-most Kazakhstan. Breeds abundantly in southern taiga & Sayan Mts just to NE of Region Rogacheva 1992. Map in Shimba 2007 covers easternmost Kazakhstan – error?
P64	Kashmir Flycatcher	<i>Ficedula subrubra</i>	Vulnerable. Monotypic. Rare and local Pakistan Grimmett et al 2009, Neelum watershed, but only one record in S Chitral; Kashmir population and range declining BLDZ Jul 2019; 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.
P65	Moussier's Redstart	<i>Phoenicurus moussieri</i>	Nearest occurrence to Egypt was 460km at Benghazi Libya Nov 1967 Isenmann et al 2016.
P66	Chestnut-bellied Rock Thrush	<i>Monticola rufiventris</i>	Monotypic. Common in scattered populations up to 3000m Pakistan Grimmett et al 2009; any Afghan population in rocky terrain would be in moist temperate forest, possibly in Daryā-ye & Konar valleys. BLDZ Jul 2019 maps W-most distribution 40km E of Abbottabad.
PT	Siberian Stonechat PT	<i>Saxicola [torquatus] maurus</i>	PT IOC v2.2 recognised separation of <i>maurus</i> via Illera et al 2008. The extralimital Stejneger's Stonechat S.(m.) <i>stejnegeri</i> accepted as split from <i>S. maurus</i> Zink et al 2009, IOC v2.4, as summarised in Parkin & Knox 2010. Sangster et al 2011 cautious, because if <i>przewalskii</i> is placed in <i>stejnegeri</i> , the former is the priority name! Svensson et al 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 et al 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 et al 2009. NB2 see PT for <i>S. rubicola</i> in the ORL Passerine Section.
P67	'Przewalski's Stonechat' ('Pleske's Stonechat')	<i>Saxicola (maurus) przewalskii</i>	Opaev et al 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 (still unsplit as <i>S. torquatus</i>) along both sides of the western Himalayas !all the way N to Kazakhstan!. Opaev et al 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.
P68	White-tailed Stonechat	<i>Saxicola leucurus</i>	Monotypic. R&A 2012 map in Pakistan close to E&NE Afghan border, but BLDZ Jul 2019 map at lower levels in mid-Pakistan S to Hyderabad along Indus Valley.
P69	Grey Bush Chat (Grey Bushchat)	<i>Saxicola ferreus</i> (formerly <i>Saxicola ferrea</i>)	2 spp, 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, Grimmett et al 2009 agrees; perhaps in Daryā-ye & Konar valleys. Vaurie vaguely cites 'from the Afghan border' - Steve Madge in litt to Mike Evans. BLDZ Jul 2019 map as BM W-most limit just W of Rawalpindi-Abbottabad axis, & northernmost summer breeders only 75km 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			
P70	Heuglin's Wheatear	<i>Oenanthe heuglini</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 Jul 2019 maps no nearer Red Sea than 380km.
P71	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 Somal 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. philippisi</i> . BLDZ not following this split (Apr 2020).

PT	Black-eared Wheatear PT NB We follow Schweizer et al 2019, Schweizer & Burri 2019.	<i>Oenanthe hispanica</i> (<i>sensu lato</i>)	IOC10.1 supports split. Molecular analysis of Randler et al 2011 suggested separation merited, likewise Aliabadian et al 2012. Randler et al 2011 also found mtDNA differences between North African populations of Western Black-eared Wheatear <i>O.(h.) hispanica</i> . Schweizer et al 2018 in a genome-wide study of 4 wheatear taxa are emphatic that both forms are full species & also support the Aliabadian et al 2012 suggestion that Cyprus Wheatear <i>O.cypriaca</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 et al 2019a agree: Schweizer et al 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. NB1 both <i>hispanica</i> taxa include pale- and dark-throated morphs. NB2 Wink 2011 accepts split. NB3 Outlaw et al 2010 found in passing that <i>hispanica</i> and <i>pleschanka</i> genetically are very close. Although Randler et al 2011 agree, they provide rationale for separation on song and reaction to dummies. NB4 The presence of taxon <i>hispanica</i> in N Croatia long had support, but Kralj et al 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> that may reach and pass through W Turkey (especially Aegean islands), Cyprus or Egypt are misoriented vagrants.
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P72	Western Black-eared Wheatear {Black-eared Wheatear}	<i>Oenanthe hispanica</i> (<i>sensu stricto</i>) (formerly <i>Oenanthe (hispanica) hispanica</i>)	Monotypic: Schweizer et al 2018, Schweizer et al 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 et al 2016.
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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

P73	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 & Maudera (N & S). Includes Cape Guardafui in range (95km from Socotra Archipelago). For the distribution map of this species, Clements & Rose 2015 map a line between Cape Guardafui 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 Guardafui: 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 Jul 2019 gives no closer than North Somali coast, but not quite reaching Djibouti, but at Cape Guardafui only a few short island-hops to Socotra. Overlaps the small distribution of Schalow's Wheatear <i>O. schalowi</i> .
P74	Familiar Chat (Red-tailed Chat)	<i>Oenanthe familiaris</i> { <i>Cercomela familiaris</i> }	Extralimital African species (7 spp), either <i>falkensteinii</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 Jul 2019 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 et al 2010, Sangster et al 2010, Zucco & Ericsson 2010b. See previous row.
Passeridae			
P75	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; spp <i>pallida</i> occurs in isolated populations E from Senegal to coastal SE Eritrea BLDZ map Jul 2019. 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.
P76	Père David's Snowfinch (Small Snowfinch)	<i>Pyrgilauda davidiana</i> (formerly <i>Montifringilla davidiana</i>)	2 spp: <i>potanini</i> westernmost Russian breeding range SE Russian Altai, where scarce, very close to easternmost Kazakhstan, Flint et al 1984, Clement et al 1993. M&P 2000 map near NE Kazakhstan border; resident in W Mongolia Bräunlich 2012; BLDZ Jul 2019 maps no closer in Mongolia than 440km from Kazakhstan, but Gombobaatar & Leahy 2019 map to westernmost Mongolian Altai, less the 50km from Kazakhstan. 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 curzoniae</i> burrows Li et al 2013.
P77	Blanford's Snowfinch (Plain-backed Snowfinch)	<i>Pyrgilauda blanfordi</i> (formerly <i>Montifringilla blanfordi</i>)	3 spp, nominate Ladakh to China, other spp further E: winters in a wide area N of Himalayas & related mountain chains BLDZ Jul 2019, 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. Occurs up to 5500m R&A 2005. Map in Arlott 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.
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 et al 2015.
P78	Black-winged Red Bishop (Black-winged Bishop)	<i>Euplectes hordeaceus</i>	African species, 2 spp; likely <i>craspedopterus</i> of South Sudan source of Region introduction. Nearest population N Ethiopia on Eritrean border BLDZ Jul 2019. 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 et al 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.
P79	Cut-throat Finch	<i>Amadina fasciata</i>	African species, 4 spp, 2 spp 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 120km ² square just below Egyptian border, 21°N, 31°E Nikolaus 1987, mapped BLDZ Sep 2018 only 50km from Egyptian border below Lake Nasser, likely vagrant. Internationally traded species IUCN. Single escape record Oman 1998 OBL7 .
P80	Red-billed Firefinch	<i>Lagonosticta senegala</i>	African species, 7 spp, 3 close to Region: <i>rhomopsis</i> Sudan to Red Sea coast Port Sudan, Nile valley to N of Amara West BLDZ Sep 2018 & 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>somalensis</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. HBW15 maps (<i>rhomopsis</i> ?) very close to Egypt-Sudan border along Nile Valley
P81	Chestnut Munia (formerly spp of Black-headed Munia as per H&M4)	<i>Lonchura atricapilla atricapilla</i>	Black-headed Munia may split, as long proposed, into 3 spp, H&M4. awaits better sampling density & further molecular techniques, but IOC9.2 lists <i>L. atricapilla</i> with 7 spp. Escapes encountered in UAE, but breeding status uncertain Aspinall & Porter 2011. Internationally traded species. Natural distribution E India eastwards BLDZ map Jul 2019.
P82	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> .
Viduidae			
P83	Pin-tailed Whydah	<i>Vidua macroura</i>	Monotypic brood parasite, specialising in Estrildid finches: nearest population N Eritrea, to coast BLDZ Jul 2019 & 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 accentor species. Those in Clade B are allopatric, with the exception of extralimital <i>P. koslowi</i> .
P84	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 Jul 2019 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 Apr 2020. Sympatric in extreme N & in extreme S of distribution with Brown Accentor <i>P. fulvescens</i> . Drovetski <i>et al</i> 2013.
	Fringillidae	Zuccon <i>et al</i> 2012 examine the phylogenetic relationships and generic limits of Fringillidae, with considerable changes of genera; IOC3.3 largely agrees, with resequencing of species
P85	Dark-breasted Rosefinch	<i>Procarduelis nipalensis</i> (Zuccon <i>et al</i> 2011; IOC3.3) (formerly <i>Carpodacus nipalensis</i>) 2 ssp, <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 Jun 2020 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.

Tietze *et al* 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. rodopeplus</i> , Sharpe's Rosefinch <i>C. verreauxii</i> (related closely to Pink-browed Rosefinch <i>C. rodochroa</i>), and Dark-rumped Rosefinch <i>C. edwardsii</i> .	
P87	Beautiful Rosefinch	<i>Carpodacus pulcherrimus</i> Gombobaatar & Leahy 2019 map as occupying Mongolian Altai, less than 50km from Kazakhstan, whereas BLDZ map Jun 2020 indicates two isolate populations in W-C Mongolia both at c650km from Kazakhstan.
P88	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 Jul 2019, 105km from Afghan border. Chokpak record considered questionable.
P89	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 are in European Russia at Magnitka, some 190km from Kazakhstan border, but 220km from first sizeable woodland BLDZ Jul 2019. 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.
	Emberizidae	
P90	Crested Bunting	<i>Emberiza lathami</i> (Formerly <i>Melophus lathami</i>) 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 Jul 2019 map as BM from Charhoi (NE of New Mirpur City) N & NE to close to Mingora, c80km 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) *Anthus (r.) rubescens*, which if amongst Palearctic *A. (r.) japonicus* 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 *Vireo* sp or *Dendroica* sp occurring in the OSME Region in future. In the north of the Region, we might reasonably expect 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 *Oenanthe oenanthe* – 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 *Vanellus gregarius* 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 Cairina moschata	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
	Fregatidae	
B	Magnificent Frigatebird Fregata magnificens	08/08. Monotypic. Vagrant Israel WBDB 2008 checklist; error, now deleted. Mike Evans pers comm
	Strigidae	
C	Spot bellied Eagle Owl (Spot-bellied Eagle-Owl) (Forest Eagle Owl) Bubo nipalensis	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.
C+	Brown Hawk Owl Ninox scutulata	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	
D	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	
E	Short-billed Minivet <i>Pericrocotus brevirostris</i>	05/08. 4 spp, 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.
	Turdidae	
F	Indian Blackbird <i>Turdus [merula] simillimus</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. simillimus</i> as occurring in C & S India.
	Muscicapidae	
G	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 in litt to Mike Evans: BLDZ Jul 2019 distance from OSME Region 1250km. NB <i>Tarsiger</i> may yet be subsumed in <i>Luscinia</i> .
H	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 et al 2015.
I	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	
J	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)