Agreement on the Conservation of Albatrosses and Petrels

Fourteenth Meeting of the Advisory Committee

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Report of the Taxonomy Working Group

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SUMMARY

A summary of progress by the Taxonomy Working Group is provided.

RECOMMENDATIONS

The Taxonomy Working Group recommends that the Advisory Committee take note of TWG's progress and comment if required.

1. MEMBERSHIP

We are pleased to welcome two new members since the thirteenth meeting of the Advisory Committee: Natalie Forsdick (New Zealand) and Alice Pereira (Brazil). Geoff Chambers has continued to assist the Working Group on an ad hoc basis. The Taxonomy Working Group would be happy for further experts to be nominated.

Imogen Foote and Kath Walker are thanked for their contributions to this report.

2. TERMS OF REFERENCE

The Taxonomy Working Group (TWG) was asked to carry out the following actions for the 2023-2025 triennium.

1. Keep the Taxonomy Working Group's bibliographic database updated.

2. Continue the establishment of a morphometric and plumage database.

3. Maintain a database of site-specific information on the availability of samples relevant to studies of population genetics of ACAP species.

4. Consider taxonomic issues relating to species proposed for addition to Annex 1 of the Agreement.

5. Respond to queries on taxonomic issues relating to ACAP species.

6. Maintain list of candidate species.

2.1. Bibliographic database

There is not a separate ACAP bibliographic database for taxonomy issues, though all members have their own databases or access to resources, including via internet search engines. The Secretariat maintains a searchable database of references accessible via the data portal (https://data.acap.aq) that includes many relevant taxonomic sources. TWG has supplied suitable references to the Secretariat for uploading.

2.2. Morphometric and plumage database

A pilot database of samples from dead birds was established a few years ago using Australian information, but this database has not been developed further. TWG notes that if a central database of morphometrics were to be established, there would be a need to ensure standardisation of methods for conducting measurements as there is evidence of considerable variation between scientists carrying out such measurements. There may also be a need to standardise ways of converting between those made when birds are alive, compared with dead specimens. TWG agree that it would be very useful to have a catalogue of standardised images of known age and sex birds from various populations, ideally tracking the same individuals over time, so that it might finally be possible make some headway on field identification of difficult taxa, for example *Diomedea dabbenena* and *D. antipodensis* in relation to *D. exulans*.

Peter Ryan is in the process of analysing several hundred known age and sex (inferred in some cases) photographs of *D. dabbenena* from Gough (age range 3-39). Older males probably can be told from *D. exulans* based on a combination of mostly white tail and relatively dark upperwing. Older birds also lack any vermiculations in the tail feathers, unlike many *D. exulans* (so presence of vermiculations excludes *dabbenena*, but does not necessarily confirm *exulans*). Comparative evidence from known age and sex *D. exulans* is being collected in April-May 2024 on Marion Island.

Imogen Foote (NZ) has generated whole genome sequence data for 43 *D. a. antipodensis* and 43 *D. a. gibsoni*. Analysis of a dataset of 60,488 independently segregating SNPs reveals significant genomic differentiation between these taxa. Analysis of contemporary gene flow also suggests a negligible level of migration between the taxa. Results from this work will be submitted for publication later in 2024.

Kath Walker (NZ) has been comparing the plumage of *D. a. antipodensis* and *D. a. gibsoni* from photographs of several hundred known age and sex (inferred in some cases) birds on Antipodes and Adams Island respectively (age range 5 to 35 years). The presence (in female *D. a. gibsoni*) or absence (in female *D. a. antipodensis*) of white feathers on the upper wings at the “elbow” was found to reliably distinguish the two taxa. The biggest change in appearance of *D. a. antipodensis* females was found to occur not with age as in most wandering albatrosses, but after a successful breeding season when extensive wear of brown-tipped body feathers exposed white feathers below, giving the birds a spotty appearance, and increasing taxon confusion at sea.

In January 2024 Kalinka Rexer-Huber on Antipodes Island and Kath Walker & Graeme Elliott on Adams Island took bill, toe and wing measures from 40 known-sex *D. a. antipodensis* and 40 known-sex *D. a. gibsoni* (20 males & 20 females). For both sexes, the combination of wing and toe length measurement correctly identified taxa 85% of the time, with longer wings and shorter toes in *D. a. antipodensis* than *D. a. gibsoni*.

Median lay date for the 2 taxa, re-calculated now data is available for 30 breeding seasons, differed by 15 days (*D. a. gibsoni* 10 Jan [26 Dec–7 Feb]; *D. a. antipodensis* 25 Jan [6 Jan–15 Feb]). Intensive at-sea tracking of juveniles, subadults and adults in 2009—2024 confirmed *D. a. gibsoni* never forage in the south-eastern Pacific and off Chile, whereas *D. a. antipodensis* of both sexes regularly do.

Results from these studies of plumage, morphology, distribution and lay date will hopefully be submitted for publication in late 2024. The main aim of these studies has been to investigate and quantify any differences between *D. a. gibsoni* and *D. a. antipodensis*. Distinguishing them morphologically from *D. dabbenena* and *D. exulans* was not a focus of the work, but as far as possible, morphometric measures taken replicated the methods used by Cuthbert et al (2003).

Cuthbert, R.J., R.A. Phillips and P.G. Ryan 2003. Separating the Tristan Albatross and the Wandering Albatross using morphometric measurements. Waterbirds 26: 338-344.

2.3. Genetic samples database

Following a lack of progress on the issue in the past, the Population and Conservation Status Working Group (PaCSWG) decided at AC9 that ACAP should just produce a list of nodes/contact institutions that people could use to find samples/dead birds. This became Task 2.14 in the AC Work Programme.

Two TWG members, Andrea Polanowski and Julie McInnes, have been investigating a genetic samples database. Work in the current year focused on a sequence gap analysis for ACAP species and identification of sequence availability for three commonly used markers for species detection. The next stage of the work is to develop a database to identify sample availability and enable the data gaps to be populated. We have explored the use of an online database to store curated DNA sequences so we can confidently ID bycaught birds to species. A database form will be circulated to ACAP and others in mid-2024 to identify data sources for genetic material.

2.4. Additions to Annex 1

There have been no proposals for Addition to Annex 1.

2.5. Queries on taxonomic issues

2.5.1. IOC Updates

Following the adoption of the IOC standard taxonomy by ACAP, TWG has followed developments published by the IOC (see worldbirdnames.org). Since the last TWG report (AC13 Doc 10) there has been only one Procellariiformes-related change to IOC's listing when the linear sequence of genera and species within the albatrosses Diomedeidae was revised based on the work of Estandia et al. (2021). This does not affect ACAP. As noted in AC13 Doc 10, Obiol *et al*. (2023) had found no support for the split of Balearic Shearwater (*Puffinus mauretanicus*) and Yelkouan Shearwater (*P. yelkouan*). This led to IOC posting a proposed lump on their forum in order to gain views of others on the work. There has not been a decision on this proposal at the time of writing this paper.

Estandía, A., R.T. Chesser, H.F. James, M.A. Levy, J.F. Obiol, V. Bretagnolle, J. González-Solís, and A.J. Welch. 2021. Substitution rate variation in a robust Procellariiform seabird phylogeny is not solely explained by body mass, flight efficiency, population size or life history traits. BioRxiv doi: https://doi.org/10.1101/2021.07.27.453752

Obiol, J.F., J.M. Herranz, J.R. Paris, J.R. Whiting, J. Rozas, M. Riutort, J. Gonzalez-Solís. 2023. Species delimitation using genomic data to resolve taxonomic uncertainties in a speciation continuum of pelagic seabirds. Molecular Phylogenetics and Evolution 179: 107671 https://doi.org/10.1016/j.ympev.2022.107671

2.5.2 Taxonomic Status of Buller's Albatross

The taxonomic status of of the two taxa (Northern *Thalassarche bulleri platei* and Southern *T. b. bulleri*) currently comprising Buller's Albatrosswas evaluated by the Taxonomic Working Group in 2022 (TWG report (AC13 Doc 10). Quiñones *et al*. (2023) has since provided diagnosable head plumage differences between adult *platei* and *bulleri* but there was only a sample size of one for *bulleri*. TWG understands that further work on the morphology of these two taxa is ongoing, and will therefore re-evaluate this taxonomy once the results of this research are published.

Quiñones, J.; C. Zavalaga, and C.J.R. Robertson. 2023. Identifying northern Buller´s albatross (*Thalassarche bulleri* subsp.) in offshore waters of southern Perú. Notornis 70: 49–59.

2.6 List of candidate species

A list of candidate species is provided in **Table 1**, sorted by suitability of species for inclusion on Annex 1 of the Agreement. The suitability scores are based on those agreed and used previously by ACAP (**Table 2**). There has been no progress on reviewing the criteria for suitability so issues of overlap between categories and circularity remain. Species presently on Annex 1 are included for completeness.

3. OTHER ISSUES

3.1 Working Group on Avian Checklists (WGAC)

The International Ornithologists' Union (IOU) has formed the Working Group on Avian Checklists (WGAC) with the aim of bringing together the three main global bird taxonomies (IOC, eBird/Clements and BirdLife/Birds of the World) to produce and maintain on the IOU website an open-access global checklist of birds (the IOU Global Checklist), intended to serve as the benchmark reference for all taxa of the class Aves.

It will classify the Aves from class to subspecies based on up-to-date, corroborative information on the phylogeny of birds and the differentiation of species and subspecies. It will also provide authors and references to the original description of all taxa of all ranks covered by the International Code of Zoological Nomenclature (ICZN). Type localities for species and subspecies, and type taxa for all ranks from subgenus to superfamily will be specified. Sources for taxonomic and nomenclatural decisions also will be referenced. Although English names for species will be drawn primarily from the IOC World Bird List, modifications to better align with preferences of checklist committees of individual continents, such as the North American Checklist Committee (NACC) and South American Checklist Committee (SACC) will also be incorporated. Geographic distributions will synchronize with those in the Birds of the World project. Ultimately, type data and deposition for species-group names and synonyms are planned for inclusion as well.

The WGAC is split into two teams. One, the taxonomic team, is responsible for all classificatory decisions and for the geographical distribution of species-group taxa. This team comprises leading avian systematists specializing in different avifaunal regions around the globe. The

other team includes experienced bibliographers who provide authors, dates, references to original publications of names, type data and nomenclatural explanations.

The final checklist will produce more than just a hierarchical list of species and recommended names. It will provide, through its detailed fields and connections to external references, the basic information for all ornithology – professional ornithologists, citizen scientists, conservationists and students – to draw on the full record of diversity of Earth's birdlife.

The latest announcement from WGAC indicated that work is continuing on the Checklist and it expected that the final draft will be completed by late 2024. There will be a period of cross-checking before it is made public in early 2025, along with summary statements on the decisions made.

It is expected that the IOU Global Checklist will eventually supersede the IOC World Bird List, at which point we recommend adopting the Global Checklist for non-ACAP listed species. TWG will consider and make recommendations if differences arise between the Global Checklist and the taxonomy of Annex 1 of ACAP.

Table 1. List of Procellariiformes following IOC World Bird List v14.1[1,2], sorted by suitability of species for inclusion on Annex 1 of the Agreement (descending total weighted score with at-sea threats double weighted). Asterisks and red font indicate species already listed on Annex 1 of the Agreement, with a cut-off line under the lowest scoring species currently on Annex 1 of the Agreement. Cells highlighted in yellow indicate taxonomic and score changes since the table was last presented to ACAP's Meeting of Parties, while those highlighted in green are scores not previously presented, primarily due to new taxonomic treatments.

Common name	Scientific name	IUCN[3] status	CMS[4] listing	Endemism	Migratory	Land-based threats	At-sea threats	Weighted Total
Grey-headed Albatross*	*Thalassarche chrysostoma*	3	1	4	4	3	4	**23**
White-chinned Petrel*	*Procellaria aequinoctialis*	2	1	3	4	4	4	**22**
Grey Petrel*	*Procellaria cinerea*	1	1	4	4	4	4	**22**
Wandering Albatross*	*Diomedea exulans*	2	1	3	4	3	4	**21**
Southern Giant Petrel*	*Macronectes giganteus*	0	1	4	4	4	4	**21**
Sooty Albatross*	*Phoebetria fusca*	3	1	2	4	3	4	**21**
Light-mantled Albatross*	*Phoebetria palpebrata*	1	1	4	4	3	4	**21**
Northern Giant Petrel*	*Macronectes halli*	0	1	4	4	3	4	**20**
Indian Yellow-nosed Albatross*	*Thalassarche carteri*	3	1	1	4	3	4	**20**
Black-browed Albatross*	*Thalassarche melanophris*	0	1	4	4	3	4	**20**
Salvin's Albatross*	*Thalassarche salvini*	2	1	2	4	3	4	**20**
Sooty Shearwater	*Ardenna grisea*	1	0	3	4	3	4	**19**
Antipodean Albatross*	*Diomedea antipodensis*	3	4	0	3	1	4	**19**
Tristan Albatross*	*Diomedea dabbenena*	4	1	0	4	2	4	**19**
Northern Fulmar	*Fulmarus glacialis*	0	0	4	4	3	4	**19**
Laysan Albatross*	*Phoebastria immutabilis*	1	1	2	4	3	4	**19**
Yelkouan Shearwater	*Puffinus yelkouan*	2	0	4	4	3	3	**19**
Flesh-footed Shearwater	*Ardenna carneipes*	1	0	2	4	3	4	**18**
Wedge-tailed Shearwater	*Ardenna pacifica*	0	0	4	4	4	3	**18**
Scopoli's Shearwater	*Calonectris diomedea*	0	0	4	4	4	3	**18**
Short-tailed Albatross*	*Phoebastria albatrus*	2	2	0	4	2	4	**18**
Black-footed Albatross*	*Phoebastria nigripes*	1	1	1	4	3	4	**18**
Westland Petrel*	*Procellaria westlandica*	3	1	0	4	2	4	**18**
Balearic Shearwater*	*Puffinus mauretanicus*	4	2	0	4	2	3	**18**
Northern Royal Albatross*	*Diomedea sanfordi*	3	1	0	4	1	4	**17**
Waved Albatross*	*Phoebastria irrorata*	4	1	0	2	2	4	**17**
Black Petrel*	*Procellaria parkinsoni*	2	1	0	4	2	4	**17**
Atlantic Yellow-nosed Albatross*	*Thalassarche chlororhynchos*	3	1	0	4	1	4	**17**
Chatham Albatross*	*Thalassarche eremita*	2	1	1	4	1	4	**17**
Pink-footed Shearwater*	*Ardenna creatopus*	2	2	0	4	2	3	**16**
Cory's Shearwater	*Calonectris borealis*	0	0	2	4	4	3	**16**

Common name	Scientific name	IUCN[3] status	CMS[4] listing	Endemism	Migratory	Land-based threats	At-sea threats	Weighted Total
Southern Royal Albatross*	*Diomedea epomophora*	2	1	0	4	1	4	**16**
Shy Albatross*	*Thalassarche cauta*	1	1	0	4	2	4	**16**
Campbell Albatross*	*Thalassarche impavida*	2	1	0	4	1	4	**16**
Amsterdam Albatross*	*Diomedea amsterdamensis*	3	2	0	4	2	2	**15**
Polynesian Storm Petrel	*Nesofregetta fuliginosa*	3	0	4	4	4	0	**15**
Spectacled Petrel*	*Procellaria conspicillata*	2	1	0	4	0	4	**15**
Buller's Albatross*	*Thalassarche bulleri*	1	1	0	4	1	4	**15**
White-capped Albatross*	*Thalassarche steadi*	1	1	0	4	1	4	**15**
Short-tailed Shearwater	*Ardenna tenuirostris*	0	0	0	4	2	4	**14**
Phoenix Petrel	*Pterodroma alba*	2	0	3	4	4	0	**13**
Cape Verde Shearwater	*Calonectris edwardsii*	1	0	0	4	2	3	**13**
Cape Petrel	*Daption capense*	0	0	4	4	3	1	**13**
Leach's Storm Petrel	*Hydrobates leucorhous*	2	0	4	4	3	0	**13**
Bermuda Petrel	*Pterodroma cahow*	3	2	0	2	2	2	**13**
Grey-backed Storm Petrel	*Garrodia nereis*	0	0	4	4	4	0	**12**
Blue Petrel	*Halobaena caerulea*	0	0	4	4	4	0	**12**
Antarctic Prion	*Pachyptila desolata*	0	0	4	4	4	0	**12**
Fairy Prion	*Pachyptila turtur*	0	0	4	4	4	0	**12**
South Georgia Diving Petrel	*Pelecanoides georgicus*	0	0	4	4	4	0	**12**
Tahiti Petrel	*Pseudobulweria rostrata*	1	0	4	4	3	0	**12**
Collared Petrel	*Pterodroma brevipes*	2	0	3	4	3	0	**12**
White-necked Petrel	*Pterodroma cervicalis*	2	0	2	4	4	0	**12**
Black-capped Petrel	*Pterodroma hasitata*	3	0	1	4	4	0	**12**
Gould's Petrel	*Pterodroma leucoptera*	2	0	2	4	4	0	**12**
Great-winged Petrel	*Pterodroma macroptera*	0	0	4	4	4	0	**12**
Kermadec Petrel	*Pterodroma neglecta*	0	0	4	4	4	0	**12**
Galapagos Petrel	*Pterodroma phaeopygia*	4	2	0	4	2	0	**12**
Great Shearwater	*Ardenna gravis*	0	0	0	4	1	3	**11**
Bulwer's Petrel	*Bulweria bulwerii*	0	0	4	4	3	0	**11**
Streaked Shearwater	*Calonectris leucomelas*	1	0	3	4	1	1	**11**
White-bellied Storm Petrel	*Fregetta grallaria*	0	0	4	4	3	0	**11**
Black-bellied Storm Petrel	*Fregetta tropica*	0	0	4	4	3	0	**11**
Band-rumped Storm Petrel	*Hydrobates castro*	0	0	4	4	3	0	**11**
Fork-tailed Storm Petrel	*Hydrobates furcatus*	0	0	3	4	4	0	**11**
Swinhoe's Storm Petrel	*Hydrobates monorhis*	1	0	3	4	3	0	**11**
European Storm Petrel	*Hydrobates pelagicus*	0	0	4	4	3	0	**11**
Wilson's Storm Petrel	*Oceanites oceanicus*	0	0	4	4	3	0	**11**
Slender-billed Prion	*Pachyptila belcheri*	0	0	3	4	4	0	**11**
MacGillivray's Prion	*Pachyptila macgillivrayi*	4	0	1	2	4	0	**11**

Common name	Scientific name	IUCN[3] status	CMS[4] listing	Endemism	Migratory	Land-based threats	At-sea threats	Weighted Total
White-faced Storm Petrel	*Pelagodroma marina*	0	0	4	4	3	0	**11**
Peruvian Diving Petrel	*Pelecanoides garnotii*	1	2	1	3	4	0	**11**
Henderson Petrel	*Pterodroma atrata*	3	2	1	3	2	0	**11**
Herald Petrel	*Pterodroma heraldica*	0	0	4	4	3	0	**11**
Soft-plumaged Petrel	*Pterodroma mollis*	0	0	4	4	3	0	**11**
Hawaiian Petrel	*Pterodroma sandwichensis*	3	2	0	4	2	0	**11**
Desertas Petrel	*Pterodroma deserta*	2	0	1	4	4	0	**11**
Tropical Shearwater	*Puffinus bailloni*	0	0	4	4	3	0	**11**
Audubon's Shearwater	*Puffinus lherminieri*	0	0	4	4	3	0	**11**
Christmas Shearwater	*Puffinus nativitatis*	0	0	4	4	3	0	**11**
Manx Shearwater	*Puffinus puffinus*	0	0	4	4	3	0	**11**
Kerguelen Petrel	*Aphrodroma brevirostris*	0	0	2	4	4	0	**10**
Ashy Storm Petrel	*Hydrobates homochroa*	3	0	1	2	4	0	**10**
Salvin's Prion	*Pachyptila salvini*	0	0	2	4	4	0	**10**
Broad-billed Prion	*Pachyptila vittata*	0	0	2	4	4	0	**10**
Trindade Petrel	*Pterodroma arminjoniana*	2	0	1	4	3	0	**10**
Fea's Petrel	*Pterodroma feae*	1	0	1	4	4	0	**10**
White-headed Petrel	*Pterodroma lessonii*	0	0	2	4	4	0	**10**
Magenta Petrel	*Pterodroma magentae*	4	0	0	4	2	0	**10**
Black-winged Petrel	*Pterodroma nigripennis*	0	0	3	4	3	0	**10**
Little Shearwater	*Puffinus assimilis*	0	0	1	2	3	0	**6**
Newell's Shearwater	*Puffinus newelli*	4	0	1	3	2	0	**10**
Markham's Storm Petrel	*Hydrobates markhami*	1	0	1	4	3	0	**9**
Barau's Petrel	*Pterodroma baraui*	3	0	0	4	2	0	**9**
Atlantic Petrel	*Pterodroma incerta*	3	0	0	4	2	0	**9**
Zino's Petrel	*Pterodroma madeira*	3	0	0	4	2	0	**9**
Hutton's Shearwater	*Puffinus huttoni*	3	0	0	2	2	1	**9**
Buller's Shearwater	*Ardenna bulleri*	2	0	0	4	2	0	**8**
Black Storm Petrel	*Hydrobates melania*	0	0	1	4	3	0	**8**
Wedge-rumped Storm Petrel	*Hydrobates tethys*	0	0	1	4	3	0	**8**
Tristram's Storm Petrel	*Hydrobates tristrami*	0	0	1	3	4	0	**8**
Beck's Petrel	*Pseudobulweria becki*	4	0	1	2	1	0	**8**
Chatham Petrel	*Pterodroma axillaris*	2	0	0	4	2	0	**8**
Cook's Petrel	*Pterodroma cookii*	2	0	0	4	2	0	**8**
Juan Fernandez Petrel	*Pterodroma externa*	2	0	0	4	2	0	**8**
Bonin Petrel	*Pterodroma hypoleuca*	0	0	1	4	3	0	**8**
Stejneger's Petrel	*Pterodroma longirostris*	2	0	0	4	2	0	**8**
Pycroft's Petrel	*Pterodroma pycrofti*	2	0	0	4	2	0	**8**
Murphy's Petrel	*Pterodroma ultima*	0	0	1	4	3	0	**8**

Common name	Scientific name	IUCN[3] status	CMS[4] listing	Endemism	Migratory	Land-based threats	At-sea threats	Weighted Total
Subantarctic Shearwater	*Puffinus elegans*	0	0	1	4	3	0	**8**
Townsend's Storm Petrel	*Hydrobates socorroensis*	3	0	0	3	1	0	**7**
New Zealand Storm Petrel	*Fregetta maoriana*	4	0	0	2	1	0	**7**
Ainley's Storm Petrel	*Hydrobates cheimomnestes*	2	0	0	4	1	0	**7**
Matsudaira's Storm Petrel	*Hydrobates matsudairae*	2	0	0	4	1	0	**7**
Elliot's Storm Petrel	*Oceanites gracilis*	0	0	1	4	2	0	**7**
Snow Petrel	*Pagodroma nivea*	0	0	3	4	0	0	**7**
Common Diving Petrel	*Pelecanoides urinatrix*	0	0	3	4	?	0	**7**
Mascarene Petrel	*Pseudibulweria aterrima*	4	0	0	1	2	0	**7**
Vanuatu Petrel	*Pterodroma occulta*	0	0	0	3	4	0	**7**
Mottled Petrel	*Pterodroma inexpectata*	1	0	0	4	2	0	**7**
Townsend's Shearwater	*Puffinus auricularis*	4	0	0	1	2	0	**7**
Barolo Shearwater	*Puffinus baroli*	0	0	1	4	2	0	**7**
Persian Shearwater	*Puffinus persicus*	0	0	2	4	1	0	**7**
Galapagos Shearwater	*Puffinus subalaris*	0	0	0	4	3	0	**7**
Bryan's Shearwater	*Puffinus bryani*	4	0	1	2	0	0	**7**
Jouanin's Petrel	*Bulweria fallax*	1	0	0	4	1	0	**6**
Southern Fulmar	*Fulmarus glacialoides*	0	0	2	4	0	0	**6**
Cape Verde Storm Petrel	*Hydrobates jabejabe*	0	0	0	4	2	0	**6**
Ringed Storm Petrel	*Hydrobates hornbyi*	1	0	1	3	1	0	**6**
Magellanic Diving Petrel	*Pelecanoides magellani*	0	0	1	2	3	0	**6**
Fiji Petrel	*Pseudobulweria macgillivrayi*	4	0	0	1	1	0	**6**
Providence Petrel	*Pterodroma solandri*	0	0	0	4	2	0	**6**
Fluttering Shearwater	*Puffinus gavia*	0	0	0	2	2	1	**6**
Heinroth's Shearwater	*Puffinus heinrothi*	2	0	1	2	1	0	**6**
Black-vented Shearwater	*Puffinus opisthomelas*	1	0	0	3	2	0	**6**
Rapa Shearwater	*Puffinus myrtae*	4	0	0	0	2	0	**6**
Least Storm Petrel	*Hydrobates microsoma*	0	0	0	4	1	0	**5**
Monteiro's Storm Petrel	*Hydrobates monteiroi*	2	0	0	1	2	0	**5**
Fulmar Prion	*Pachyptila crassirostris*	0	0	1	2	2	0	**5**
Masatierra Petrel	*Pterodroma defilippiana*	2	0	0	1	2	0	**5**
Antarctic Petrel	*Thalassoica antarctica*	0	0	0	4	0	0	**4**
Boyd's Shearwater	*Puffinus boydi*	0	0	0	2	2	0	**4**
Bannerman's Shearwater	*Puffinus bannermani*	3	0	0	0	1	0	**4**
Grey-faced Petrel	*Pterodroma gouldi*	0	0	0	3	0	0	**3**
New Caledonian Storm Petrel	*Fregetta lineata*	0	0	0	2	?	0	**2?**
Pincoya Storm Petrel	*Oceanites pincoyae*	0	0	0	0	1	0	**1**

Extinct

Common name	Scientific name	IUCN[3] status	CMS[4] listing	Endemism	Migratory	Land-based threats	At-sea threats	Weighted Total
Guadalupe Storm Petrel	*Hydrobates macrodactylus* [5]	4	0	0	2	2	0	**8**
Jamaica Petrel	*Pterodroma caribbaea* [5]	4	0	0	2	2	0	**8**
Olson's Petrel	*Bulweria bifax*	4	0	0	0	2	0	6
St. Helena Petrel	*Pseudobulweria rupinarum*	4	0	0	0	2	0	6

[1] Gill, F., D. Donsker, and P. Rasmussen (Eds). 2024. IOC World Bird List (v 14.1). doi: 10.14344/IOC.ML.14.1.

[2] The taxonomic treatment used currently for species already listed on Annex 1 remains unchanged

[3] IUCN 2023. The IUCN Red List of Threatened Species. Version 2022-2. https://www.iucnredlist.org

[4] Effective 22 May 2020 www.cms.int/sites/default/files/basic_page_documents/appendices_cop13_e_0.pdf

[5] CR according to IUCN 2023

Table 2. The scoring system for listing criteria for candidate ACAP species.

Global conservation status - IUCN	
Critically Endangered	4
Endangered	3
Vulnerable	2
Near-threatened	1
Not Threatened/Least Concern/Data Deficient/not classified	0
Listing within the Convention on Migratory Species	
Listing on either or both Appendices I and II with a subsequent call for concerted and/or collaborative action	4
Listing on both Appendices I and II	3
Listing on Appendix I	2
Listing on Appendix II	1
No listing within the CMS	0
Level of endemism	
Species breeds within more than four states	4
Species breeds within four states	3
Species breeds within three states	2
Species breeds within two states	1
Species breeds within one state only	0
Migratory nature	
Species occurs in territorial/EEZ waters of more than three states	4
Species occurs in territorial/EEZ waters of three states	3
Species occurs in territorial/EEZ waters of two states	2
Species occurs in only one state's waters but also visits international waters	1
Species does not leave territorial/EEZ waters of a single state	0
Land–based threats	
Species known to face severe land-based threats in two or more breeding range states	4
Species known to face detectable land-based threats in two or more breeding-range states	3
Species known to face severe land-based threats in at least one breeding-range state	2
species known to face detectable land-based threats in at least one breeding-range state	1
No land-based threats have been identified	0
At-sea conservation threats (weighted double in total scores)	
Species known to face severe threats in international waters and/or territorial/EEZ waters of at least two states	4
Species known to face a detectable level of threat in international waters and/or territorial/EEZ waters of at least two states	3
Species known to face a severe level of threat in international waters and/or territorial/EEZ waters of at least one state	2
Species known to face a detectable level of threat in international waters and/or territorial/EEZ waters of at least one state	1
Species not known to face at-sea threats	0