

 <p>Agreement on the Conservation of Albatrosses and Petrels</p>	<p style="text-align: center;"><b>Tenth Meeting of the Advisory Committee</b> <i>Wellington, New Zealand, 11 – 15 September 2017</i></p> <p style="text-align: center;"><b>Choice of a standard taxonomy for ACAP: comments from BirdLife International</b></p> <p style="text-align: center;"><b><i>BirdLife International</i></b></p>
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### SUMMARY

1. The ACAP TWG paper “Choice of a standard taxonomy for ACAP” (AC10 Doc 22) contains a suite of factual errors in relation to the *HBW/BirdLife Illustrated Checklist of the Birds of the World*.
2. The HBW/BirdLife list is freely available, annually updated, makes extensive use of molecular evidence, and has been widely adopted by other bodies. Decisions are made by multiple experts in a consistent, transparent and repeatable manner.
3. There appears to be little advantage to ACAP of changing its current practices in relation to taxonomy. The only substantive differences for ACAP in the two main lists under consideration relate to three taxa. If any of these were deemed of interest to ACAP, their taxonomy could be reviewed at that time.
4. Adopting the IOC list would make ACAP inconsistent with CMS, AEWa and the IUCN Red List. It would also likely result in petitions to review the status of White-capped Albatross, which would absorb time and resources better spent on conservation.
5. Given the relative advantages and disadvantages of accepting the first recommendation in AC10 Doc 22, BirdLife recommends that ACAP maintains the status quo at this time.
6. If this is not acceptable, BirdLife suggests that the topic be remitted back to TWG for further consideration and consultation (including with relevant experts within CMS, IUCN, etc.).

## 1. INTRODUCTION

This paper has been prepared at short notice, as the matter only came to the attention of BirdLife and its taxonomic experts when the ACAP TWG paper (AC10 Doc 22) appeared on the ACAP website on 14 July 2017. BirdLife regrets that it was not contacted directly earlier by ACAP, as it would have been possible to correct certain errors of fact and interpretation, and to engage in constructive dialogue.

In addition, contrary to the statement in the summary of the ACAP paper, we had been unaware of any explicit instruction, in the main reports of either MoP5 or AC9, that the ACAP TWG should be charged with recommending a standard taxonomy for considering new species for the Agreement.

This paper, therefore, corrects certain factual and related assertions in the ACAP TWG paper, re-evaluates the matrix that was used to derive the ACAP TWG paper's conclusions, and offers some recommendations on how this matter might be considered further by ACAP.

## 2. GLOBAL TAXONOMIES

The ACAP TWG paper contains a number of factual inaccuracies about the HBW/BirdLife Checklist, some of which have led to errors of interpretation. We address and correct these issues in turn below.

- *“A range of experts have led on separate bird families (but only one expert for albatrosses and petrels)”*

This is not correct. All the assessments in both volumes of the HBW/BirdLife Checklist have been carried out and checked by multiple experts in a consistent, transparent and repeatable manner.

- *“The list does not use molecular evidence in primary decision making” and “The methodology underlying the list does not include molecular information (this information has been included later)”*

This is not correct. Both volumes of the HBW/BirdLife Checklist have made extensive use of and frequent reference to genetic evidence. To illustrate this, Annex 1 below presents a few sample accounts for ACAP species, each of which makes reference to and takes guidance from molecular work (and also demonstrates the transparency referred to below).

The extensive introduction to Volume 1 details how this evidence has been incorporated into the Checklist, given the (current) inability to score genetic differences using the Tobias criteria. The introduction to Volume 2 draws renewed attention to the extensive use made of genetic evidence. The introductions of both volumes are freely available online for anyone to consult (<http://www.hbw.com/introductions-hbw-and-birdlife-international-illustrated-checklist-birds-world>).

- *“There is an updating process and the list is not freely available on line, but is available on subscription”*

This is not correct. The list is freely available online as an annually updated spreadsheet at <http://datazone.birdlife.org/species/taxonomy>, as a series of factsheets for each species at <http://datazone.birdlife.org/species/search> and [www.iucnredlist.org](http://www.iucnredlist.org), and at <http://www.hbw.com> where users can freely browse the accounts for each species and read the taxonomic notes (subscription is only required for the more detailed sections on aspects unrelated to taxonomy). The detailed taxonomic notes underpinning decisions are available at <http://www.hbw.com> too.

- *“The list has been adopted as a standard by the Convention on Migratory Species, IUCN and CITES”*

The HBW/BirdLife Checklist has not yet been adopted by CITES, but is currently under consideration by the Animal Committee for adoption by CITES. It has indeed been adopted by

CMS, as well as by its daughter agreements, AEWA and the Raptors MoU. In addition to IUCN, it has also been adopted by the EU.

### 3. TREATMENT OF ALBATROSSES AND PETRELS

As noted in the TWG paper, of the four taxonomies considered, “Only the HBW/BirdLife Checklist uses ACAP’s taxonomy for ACAP species”. We would add that the Checklist accounts (at least for albatrosses) simply defer to the ACAP taxonomy (for reasons explained in some detail on pages 37 and 38 of the introduction to Volume 1), and emphasise that we think it fair to consider our taxonomic notes on all taxa to be considerably more transparent than anything to be found in the other lists (see examples in Annex 1).

In respect of the summary of differences between the four treatments, we feel that the potentially most important category is the second one (i.e. whether taxa are ranked as species or subspecies). In this regard, we note that, between the two apparent primary “candidates” (IOC and HBW/BirdLife), these differences – in relation to species under any kind of realistic potential consideration by ACAP – relate to three taxa: Vanuatu Petrel, Barolo Shearwater and Boyd’s Shearwater (all IOC species; HBW/BirdLife subspecies). Thus, in practical terms and in relation to advancing the aims of ACAP, it is not clear why there is any need to make any choice and/or change the status quo. Indeed, if any of these three taxa were ever suggested for adding to Annex 1 of the Agreement, the ACAP TWG could readily, at that time, be asked to review their taxonomic status.

We also note that a difference between the two lists is that IOC treats White-capped Albatross as a subspecies, whereas HBW/BirdLife accords it species rank. If ACAP were to adopt the IOC list, it would likely be very difficult to resist the logical consequence of a need for the status of this taxon to be reviewed – both for CMS and in relation to (or on behalf of) the IUCN Red List. This might not be helpful to ACAP, and would certainly be time-consuming, for no practical advantage whatsoever.

We also note that the Appendix to AC10 Doc 2 omits MacGillivray’s Prion *Pachyptila macgillivrayi* (recognised as a full species and added to the HBW/BirdLife Checklist in 2016).

### 4. CHOICE BETWEEN LISTS

On the basis of the corrected information provided above, we suggest that the matrix table be updated as below, to reflect that the HBW/BirdLife Checklist does use all available peer-reviewed evidence (including molecular) systematically. This leaves all but Howard & Moore with equal scores (using this very simple scoring system), further supporting the lack of rationale for ACAP to need to make any choice at all.

Treatment	Scientific approach	Transparent	All evidence	Frequency of review
IOC	X	X	X	X
Clements	X	X	X	X
Howard & Moore	X		X	
HBW/BirdLife	X	X	X	X

## **5. GENERAL COMMENTS**

1. We have difficulty understanding any advantage to ACAP of changing its current practices in relation to taxonomy. The only substantive differences for ACAP in the two main lists under consideration relate to three taxa, none of which has yet been suggested for ACAP consideration and for two of which the sole breeding range state is not a member of ACAP.
2. We are concerned that adopting the IOC list would result in petitions to review the status of White-capped Albatross, which would absorb time and resources better spent on conservation.
3. We are also concerned that, by adopting the IOC list, ACAP would, at least in part, be adopting taxonomies inconsistent with those of its parent agreement CMS, its sister agreement AEWA and the Raptors MOU, and with those used for the IUCN Red List. It would also run counter to the prevailing global trend to increase harmony and synergy between multilateral environmental agreements.
4. We note that, within the next couple of years, a definitive review of seabird taxonomy will be published by Bretagnolle & Shirihai, and that the conclusions and recommendations of this are likely to have implications for many current taxonomic arrangements of seabirds. In our opinion, a more appropriate time to revisit this issue would be when that review appears, rather than now.

## **6. BIRDLIFE RECOMMENDATIONS**

In the light of our specific and general points above, we recommend that:

1. Given the relative advantages and disadvantages of accepting the first recommendation in the TWG paper (AC10 Doc 22), we suggest that ACAP maintains the status quo at this time.
2. If this is not acceptable, we suggest that the topic be remitted back to TWG for further consideration and consultation (including with relevant experts within CMS, IUCN, etc.).

## ANNEX 1: SAMPLE ACCOUNTS OF ACAP SPECIES FROM THE HBW/BIRDLIFE CHECKLIST (VOLUME 1)

### 2. *Hydrobates castro* **Band-rumped Storm-petrel** LC

HBW 1: 269 as *Oceanodroma castro*

**French:** Océanite de Castro / **German:** Madeirawellenläufer / **Spanish:** Paíño de Madeira

**Other common names:** Madeiran Storm-petrel; Cape Verde Storm-petrel (*jabejabe*); Grant's Storm-petrel (*granti*)

**Taxonomic notes.** *Thalassidroma castro* Harcourt, 1851, Desertas Islets, Madeira.

Recent molecular studies indicated that this species is sister to all other members of genus<sup>1343, 1533</sup>; it has therefore been proposed that it be separated in monotypic genus *Thalobata*<sup>1343, 200</sup>. Several molecular and morphological studies, as well as investigation of vocalizations<sup>172, 1524</sup>, have revealed that the species hitherto known as *H.* (= *Oceanodroma*) *castro* actually consists of several distinct taxa, one of which has already been separated as *H. monteiroi* (see below): in addition, population breeding in Cape Verde Is appears to be a distinct taxon, for which the name *jabejabe* has been used<sup>1702</sup>, while cool-season breeders in Azores, Madeira, Salvages and the Berlengas Is (off C Portugal) differ from hot-season breeders (in Madeira and Salvages) in vocalizations<sup>1524</sup> and morphology<sup>1251</sup> and have been proposed as *granti*, but genetic differences less obvious than those found among Azores populations<sup>585, 1711</sup>, and all are therefore retained meantime in *castro*, pending further investigation. Further, studies of vocalizations and phylogeography suggest that a number of additional forms exist elsewhere in the currently defined range of *H. castro* and that these, too, may merit treatment as full species<sup>172, 585, 1711</sup>. Treated as monotypic.

**Distribution.** Tropical and subtropical Atlantic, breeding in E Atlantic from Berlengas Is (off C Portugal) and Azores S to Ascension I and St Helena; also in tropical and subtropical Pacific, breeding in E Japan, Kauai (Hawaii) and Galapagos Is.

### 4. *Diomedea antipodensis* **Antipodean Albatross** VU

HBW SV: 188

**French:** Albatros des Antipodes / **German:** Antipodenalbatros / **Spanish:** Albatros de las Antípodas

**Taxonomic notes.** *Diomedea exulans antipodensis* Robertson and Warham, 1992, Antipodes Island and Campbell Island, in South Pacific.

Initially described as a race of *D. exulans*; later elevated to species level on basis of ecological differences, although this appears to refer only to timing of breeding, and morphological diagnosability, consisting of: adult female dark brown, pattern resembling immature plumage of other taxa, and adult male smaller with shorter bill<sup>1537</sup>. However, "there are no simple plumage features to distinguish [it] from other 'wanderers'"<sup>1289</sup>, and some specimens indistinguishable from *D. amsterdamensis*<sup>1289, 1340</sup>; hence no scoring attempted (see also comments under *D. amsterdamensis*). Level of genetic differentiation reported to be low<sup>267</sup> or relatively high<sup>1450</sup>; one work argues that each form (less *gibsoni*) in the *exulans* group represents "a distinct, evolutionarily important population for which a unique biological history

exists<sup>1450</sup>, based on natal philopatry and at-sea distribution patterns. This arrangement, although rejected by several authorities<sup>1485, 442</sup>, is accepted by ACAP (Agreement on the Conservation of Albatrosses and Petrels)<sup>3</sup> and, pending further clarifications, provisionally and precautionarily also here. Races differ subtly in morphology, and their distinctiveness as either two species or two races of one species remains unclarified<sup>1535, 267, 1340</sup>. Two subspecies currently recognized.

#### **Subspecies and Distribution.**

*D. a. antipodensis* Robertson & Warham, 1992 – Antipodean Albatross – breeds in Antipodes Is and (few pairs) on Campbell I, and Pitt I in Chatham Is, E & S of New Zealand; forages in S Pacific E of New Zealand, E as far as coast of Chile.

*D. a. gibsoni* Robertson & Warham, 1992 – Gibson's Albatross – breeds in Auckland Is (Disappointment I, Auckland I and Adams I), S of New Zealand; may forage mostly W of New Zealand over Tasman Sea and S of Australia.

#### 43. *Pterodroma deserta* **Desertas Petrel** VU

HBW SV: 189

**French:** Pétrel des Desertas / **German:** Desertassturmvogel / **Spanish:** Petrel de las Desertas

**Taxonomic notes.** *Pterodroma deserta* Mathews, 1934, Bugio Island, Desertas Islands, off south-east Madeira.

This taxon was previously considered dubious and the population included within a monotypic *P. feae* (itself sometimes treated as conspecific with *P. mollis*). It has recently been accorded rank of full species on basis primarily of molecular data<sup>854</sup>, although there are also differences between the two in bill morphology (slight, allow 1) and vocalizations (seemingly moderate, but possibly decisive, so 3); moreover, there is a marked difference from *P. feae* in timing of breeding (Jul–Aug vs Dec–Jan) (currently unscorable on system used herein, but clearly important). Treatment as separate species is here provisionally accepted on the basis of remarkable disjunction in breeding season and other characters. Monotypic.

**Distribution.** Atlantic Ocean, breeding on Bugio I, in Desertas Is, off Madeira<sup>1452</sup>. Recently recorded a few times in Azores<sup>1193</sup>.

#### 47. *Pterodroma lessonii* **White-headed Petrel** LC

HBW 1: 238

**French:** Pétrel de Lesson / **German:** Weißkopf-Sturmvogel / **Spanish:** Petrel cabeciblanco

**Taxonomic notes.** *Procellaria Lessonii* Garnot, 1826, “Dans les parages du Cap Horn et de la mer Pacifique par 52° de lat. sept. [= austr.] et 85° de longit.”

Genetic data indicate that this species forms a clade with *P. magentae*, *P. incerta*, *P. macroptera* and *P. gouldi*<sup>1002</sup>; also, feather lice shared with these taxa<sup>383</sup>. Has been considered conspecific with *P. macroptera*, but timing of breeding cycles quite different; no mixed pairs reported, despite extensive sympatry. *P. incerta* sometimes considered sister-species. Monotypic.

**Distribution.** Temperate to subantarctic Southern Ocean, breeding in New Zealand region at Macquarie I, Auckland Is, Antipodes Is and possibly Campbell I; S Indian Ocean at Crozets, Kerguelen Is and possibly Prince Edward Is.

64. *Calonectris borealis* **Cory's Shearwater** LC

HBW 1: 251 as *Calonectris diomedea borealis*

**French:** Puffin cendré / **German:** Corysturmtaucher / **Spanish:** Pardela cenicienta canaria

**Taxonomic notes.** *Puffinus borealis* Cory, 1881, off Chatham Island, Massachusetts.

Until recently considered conspecific with *C. edwardsii* (see below) and *C. diomedea*, differing from latter in its usually darker, browner head (1); more extensive dark tip of underwing (no white bases on primaries) (2); larger size, as expressed by mean wing length of males<sup>210</sup>, effect size of 4.6 (score 2); calls delivered in threes vs twos, and in *diomedea* the notes are longer and with a high-pitched hiccup between them (2). Molecular evidence supports this split in one study<sup>648</sup>, but is equivocal in another, with further research being called for<sup>628</sup>. Monotypic.

**Distribution.** E Atlantic, breeding from Berlengas Is (off WC Portugal) W to Azores and S to Canary Is; outside breeding season ranges widely in Atlantic, but wintering mainly in upwelling systems of the Benguela and Agulhas Currents<sup>656</sup>. Has bred occasionally in Mediterranean (Columbrets, Giraglia)<sup>1789</sup>; population of Almería apparently belongs in this species, based on both morphometric and genetic evidence<sup>649</sup>.

Genus *PUFFINUS* Brisson, 1760

Until recently included all species currently placed in *Ardenna*, but these have now been shown to represent a distinct lineage<sup>298, 61, 1343, 1438</sup>. Taxonomy of the *P. assimilis/P. lherminieri* complex has long been debated. Recent molecular analysis by one group of researchers<sup>61</sup> and further refinements by another<sup>1289</sup> have resulted in a major rearrangement of taxa and the promotion of many of them to species rank. Owing to the sheer number of taxa in the complex, the inaccessibility of much museum material for comparative purposes, the subtlety of many phenotypical characters and the expectation that nocturnal vocalizations, many unknown, will play a significant part in species limits, this is a particular case where the scoring system used herein is currently impractical. With the exception of N Atlantic taxa (see below under *P. lherminieri*) we therefore accept the taxonomy set out in one recent (2007) treatment<sup>1289</sup> as the most coherent reorganization of the complex based on the available evidence.

82. *Puffinus lherminieri* **Audubon's Shearwater** LC

HBW 1: 256

**French:** Puffin d'Audubon / **German:** Audubonsturmtaucher / **Spanish:** Pardela de Audubon

**Taxonomic notes:** *Puffinus* [sic] *Lherminieri* Lesson, 1839, Antilles

Treated in HBW as comprising ten subspecies including *P. bailloni*, *P. persicus* and *P. bannermani*, but present races *baroli* and *boydi* were then treated as subspecies of *P. assimilis*. In recent past *baroli* and *boydi* have been split from *P. lherminieri* as one species<sup>1615</sup> or as two species<sup>1278</sup>, while in a third treatment *baroli* was split from *lherminieri* and *boydi*<sup>1289</sup>. Given that (a) the various points of morphological similarity and divergence in these taxa

compose a mosaic of half-shared characters, (b) a recent molecular analysis<sup>61</sup> identified a clade involving *Iherminieri*, *baroli* and *boydi*, and (c) these three taxa are geographically grouped together in the N Atlantic, for the present we opt to retain them as one species, with race *loyemilleri* (breeding on islands off NW Panama) now regarded as synonym of nominate<sup>61</sup>. Three subspecies currently recognized.

### Subspecies and Distribution

- *P. I. Iherminieri* Lesson, 1839 – AUDUBON'S SHEARWATER – tropical and subtropical W Atlantic Ocean, breeding in Bahamas, West Indies, islets E of Nicaragua (Providencia I), islands off NW Panama; formerly also Bermuda.
- *P. I. baroli* (Bonaparte, 1857) – BAROLO SHEARWATER – tropical and subtropical E Atlantic Ocean, breeding in Azores, Madeira, Desertas, Salvages and Canary Is.
- *P. I. boydi* Mathews, 1912 – BOYD'S SHEARWATER – tropical and subtropical E Atlantic Ocean, breeding in Cape Verde Is.

### 36. *Pterodroma cervicalis* **White-necked Petrel** VU

HBW 1: 244

**French:** Pétrel à col blanc / **German:** Weißnacken-Sturmvogel / **Spanish:** Petrel cuelliblanco

**Taxonomic notes:** *Oestrelata cervicalis* Salvin, 1891, Kermadec Islands

Often included in *P. externa*. Has been considered a subspecies of *P. hasitata*. Taxon *occulta* ("Vanuatu Petrel") was established for a population previously included in *P. externa*, and later referred to *P. cervicalis*, to which it appears closely related on basis of molecular data. No comparison of vocalizations of this form with those of latter from Macauley (in Kermadec Is) yet published. Some authors declined to recognize *occulta* as a full species<sup>210</sup>, and others, having observed birds at sea and examined museum specimens, concluded that "overall, Vanuatu Petrel is only slightly smaller" and that underwing pattern shows "significant overlap", and hence "we prefer to complete our own genetic and acoustic work on this matter before commenting on the taxonomy of the Vanuatu Petrel"<sup>1671</sup>. Meanwhile (and to date), the differences in total appear to be: smaller size including smaller eggs (1); proportionately longer tail (1); greyer underwing (1); dark outer tail (1); earlier breeding period, albeit by only 6 weeks<sup>1781</sup> (ns). Two subspecies recognized.

### Subspecies and Distribution

- *P. c. cervicalis* (Salvin, 1891) – WHITE-NECKED PETREL – subtropical NW (rarely, also E) Pacific Ocean, breeding on Macauley I (Kermadec Is), with a new small colony established on Phillip I (S of Norfolk I)<sup>1428</sup>.
- *P. c. occulta* Imber & Tennyson, 2001 – VANUATU PETREL – SW Pacific Ocean, breeding in Banks Is (N Vanuatu): breeding so far recorded only on Vanua Lava; reported probable breeding also on Mere Lava now appears unlikely.