 <p>Agreement on the Conservation of Albatrosses and Petrels</p>	<p><b>Third Meeting of the Population and Conservation Status Working Group</b> <i>La Serena, Chile, 5 – 6 May 2016</i></p> <p><b>ACAP Priority Population Assessment – Grey- headed albatross at South Georgia (Islas Georgias del Sur)<sup>1</sup></b></p> <p><b><i>R.A. Phillips, D. Pardo and A.G. Wood</i></b></p>
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### **SUMMARY**

Five breeding populations of ACAP species were identified at AC6 as priority populations for conservation management because they represented sizeable proportions (>10%) of the global total and were in rapid decline (>3% a year), and for which a major underlying cause was incidental mortality in fisheries. Counts of Grey-headed Albatrosses at Bird Island indicate a decline of 3.6% per year over the 20-year period from 1994/95 to 2014/15. The decline in the island group over the last 11 years from 2003/04 to 2014/15 has been even steeper (5.1% per year). Grey-headed Albatrosses disperse widely in the nonbreeding season, and are recorded as bycatch in substantial numbers in at least one major fishery, including ringed birds from Bird Island. As such, Grey-headed Albatrosses at South Georgia (Islas Georgia del Sur)<sup>1</sup> meet the criteria that suggests it is a suitable candidate to be considered as an ACAP priority population for conservation management.

### **RECOMMENDATION**

That the PaCSWG requests the Advisory Committee to:

1. Include Grey-headed Albatrosses at South Georgia (Islas Georgia del Sur)<sup>1</sup> as an ACAP priority population for conservation management.

<sup>1</sup> "A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Islas Malvinas), South Georgia and the South Sandwich Islands (Islas Georgias del Sur y Islas Sandwich del Sur) and the surrounding maritime areas".

## **Evaluación de las poblaciones prioritarias del ACAP – Albatros de cabeza gris en las islas Georgias del Sur (South Georgia)<sup>1</sup>**

### **RESUMEN**

Durante la CA6, cinco poblaciones reproductoras de las especies amparadas por el ACAP fueron identificadas como poblaciones prioritarias en materia de ordenación para su conservación porque representaban proporciones considerables (>10 %) de la población mundial total y registraban una rápida disminución (>3 % por año), cuya causa principal era la mortalidad incidental en pesquerías. Los conteos de albatros de cabeza gris en la isla Bird dan cuenta de una disminución del 3,6 % anual a lo largo de dos décadas, en el período comprendido entre 1994/95 y 2014/15. La disminución en el grupo de islas que tuvo lugar al cabo de 11 años, entre 2003/04 y 2014/15, ha sido incluso más pronunciada (5,1 % anual). Los albatros de cabeza gris se dispersan ampliamente durante las temporadas no reproductivas, y en al menos una de las principales pesquerías, se registran grandes cantidades de estas aves como captura secundaria, incluidas las aves anilladas presentes en la isla Bird. En tal sentido, los albatros de cabeza gris en las islas Georgias del Sur (South Georgia)<sup>1</sup> cumplen con los criterios por los cuales se podría considerar que constituyen una población prioritaria del ACAP en materia de ordenación para su conservación.

### **RECOMENDACION**

Que el GdTPEC solicite al Comité Asesor lo siguiente:

1. Incluir al albatros de cabeza gris en las islas Georgias del Sur (South Georgia)<sup>1</sup> como población prioritaria del ACAP en materia de ordenación para su conservación

## **Évaluation des populations prioritaires de l'ACAP – Albatros à tête grise de Géorgie du Sud (South Georgia/Islas Georgias del Sur)<sup>1</sup>**

### **RÉSUMÉ**

Cinq populations reproductrices des espèces inscrites à l'ACAP ont été identifiées lors du CC6 en tant que populations prioritaires en terme de conservation, car leurs proportions importantes par rapport aux chiffres mondiaux (>10 %) ont été réduites en peu de temps (>3 % par an), en majeure partie à cause de la mortalité accidentelle dans les pêcheries. Le recensement des Albatros à tête grise sur l'île Bird révèle une chute démographique de 3,6 % par an sur une période de 20 ans, entre 1994/1995 et 2014/2015. Le déclin de cette population de l'île a été particulièrement important les 11 dernières années, entre 2003/2004 et 2014/2015 (5,1 % par an). Les Albatros à tête grise migrent en masse lors de la saison de reproduction et un grand nombre de captures accessoires est signalé dans au moins l'une des principales pêcheries, incluant des oiseaux bagués de l'île Bird. En l'état, les Albatros à tête grise de Géorgie du Sud (South Georgia/Islas Georgias del Sur)<sup>1</sup> satisfont les critères pour figurer dans les populations prioritaires de l'ACAP en terme de gestion de conservation.

### **RECOMMANDATION**

Que le GTSPC demande au Comité Consultatif :

1. d'inclure les Albatros à tête grise de Géorgie du Sud (South Georgia/Islas Georgias del Sur)<sup>1</sup> dans les populations prioritaires de l'ACAP en terme de gestion de conservation.

## 1. BACKGROUND

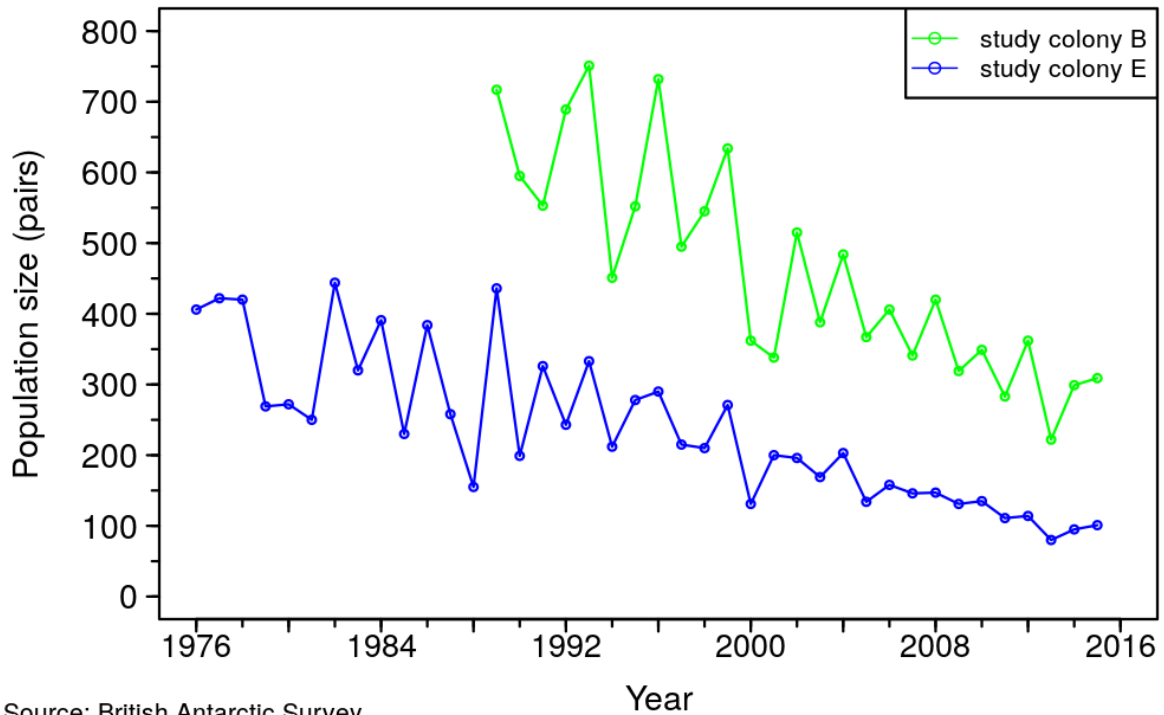
Five breeding populations of ACAP species were identified at AC6 as priority populations for conservation management, to which particular attention should be paid; these were Wandering *Diomedea exulans* and Black-Browed *Thalassarche melanophris* albatrosses at South Georgia (Islas Georgia del Sur)<sup>1</sup>, Tristan Albatross *D. dabbenena* at Gough Island, and Sooty Albatross *Phoebetria fusca* at Crozet and Prince Edward Islands. These five populations were selected because they represented sizeable proportions (>10%) of the global total, were in rapid decline (>3% a year), and for which a major underlying cause was incidental mortality in fisheries, requiring concerted international action. Several other breeding populations of ACAP species were identified at AC8 that might meet these criteria because they had been declining at >3% per year over a 20-year period, including Grey-headed Albatrosses at South Georgia (Islas Georgia del Sur)<sup>1</sup>.

## 2. TRENDS IN POPULATION SIZE AND DEMOGRAPHIC TRAITS

### 2.1 Population size

The Grey-headed Albatross is listed as Endangered by IUCN because of population declines, particularly at South Georgia (Islas Georgias del Sur)<sup>1</sup> (Agreement on the Conservation of Albatrosses and Petrels 2009). At the last complete census in 2003/04, South Georgia (Islas Georgias del Sur)<sup>1</sup> held 47,674 pairs of Grey-headed Albatrosses (Poncet et al. 2006), which is considerably more than any other island group, representing c.50% of the global total (Agreement on the Conservation of Albatrosses and Petrels 2009). Bird Island held 11% of the Grey-headed Albatross breeding population of South Georgia (Islas Georgias del Sur)<sup>1</sup> in 2003/4 (Poncet et al. 2006). Eleven colonies on Bird Island (c.62% of total numbers on the island) are counted each year; these counts, corrected for previous breeding failure indicate a decline from 4664 pairs in 1994/95 to 2248 pairs in 2014/15, equivalent to 3.6% per year over the 20-year period (British Antarctic Survey, unpublished data). If the counts from these colonies in 2003/04 and 2014/15 are combined with photo-counts from colonies elsewhere in the island group in 2003/04 and 2014/15 (representing c.70% of all breeding pairs counted in 2003/04), they indicate an even more rapid overall decline of 5.1% per year in the last 11 years (Poncet *et al.* in prep). Trends in the two study colonies at Bird Island for which the longest time-series are available are show in Fig. 1.

### Grey-headed Albatross breeding population at Bird Island

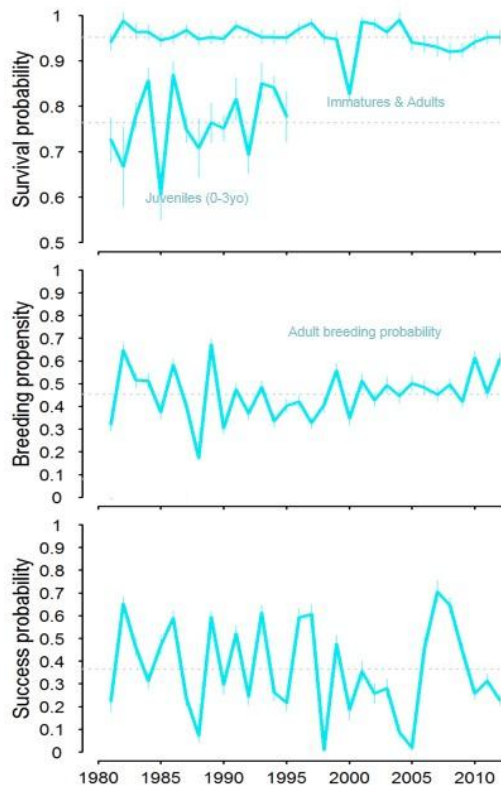


Source: British Antarctic Survey

**Fig. 1.** Population trends of Grey-headed Albatrosses from two colonies monitored at Bird Island.

### 2.2. Demographic traits

There do not appear to be consistent long-term trends in survival rates of juveniles, immatures and adults, or in breeding probability; however, there is some indication of a decline in survival of immatures and adults in the late 2000s (Fig. 2; British Antarctic Survey unpublished data). Breeding success is highly variable, probably related to fluctuations in the availability of the two main prey, Antarctic krill *Euphausia superba* and the squid, *Martialia hyadesi*. Breeding probability and breeding success of Grey-headed Albatrosses are considerably higher at Marion Island, suggesting environmental conditions there are more favourable than at South Georgia (Islas Georgias del Sur)<sup>1</sup> (Ryan et al. 2007).



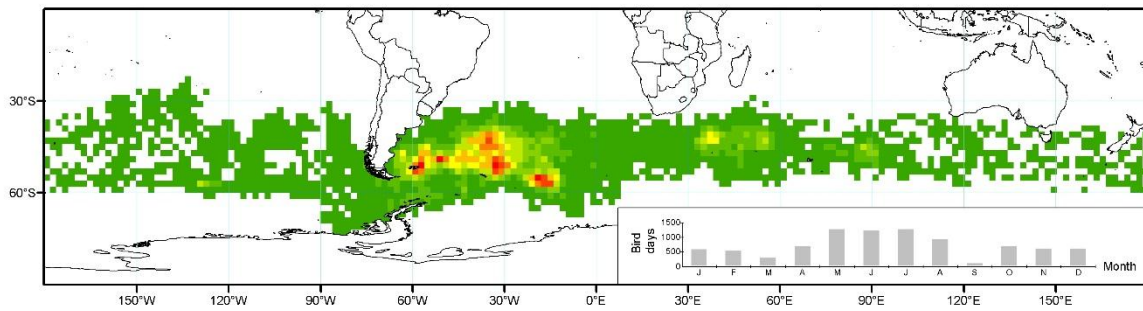
**Fig. 2.** Long-term changes in survival probability of juveniles, immatures and adult, breeding probability of adults, and breeding success of Grey-headed Albatrosses at Bird Island, South Georgia (Islas Georgias del Sur)<sup>1</sup>. Data are from the British Antarctic Survey.

### 3. LAND-BASED THREATS

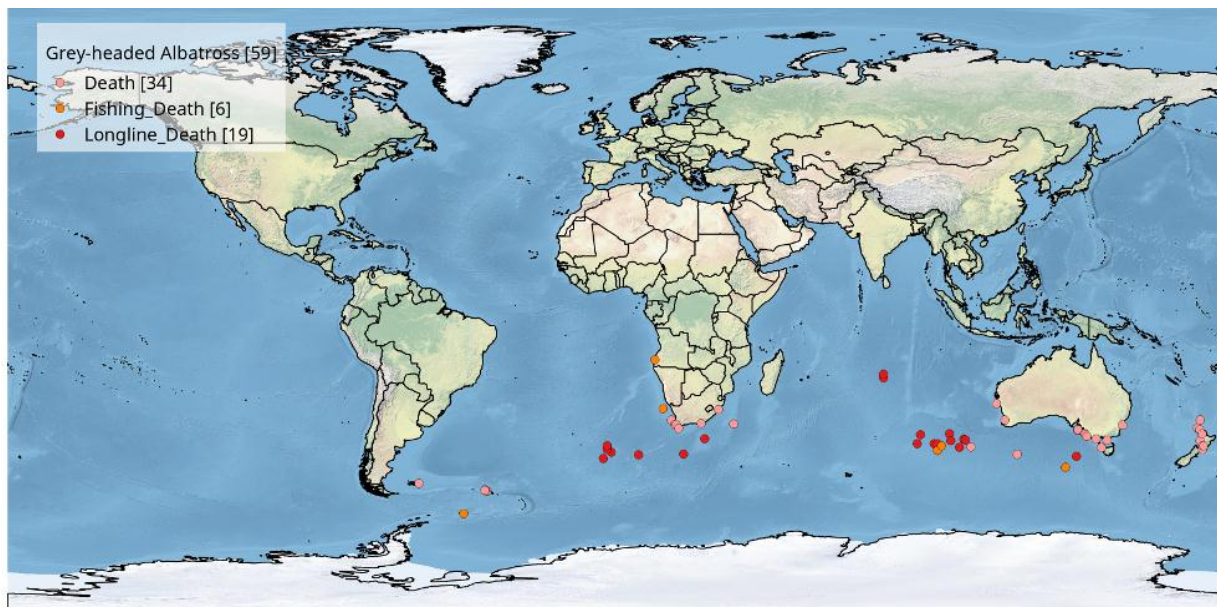
There is no evidence of any substantial land-based threats (human disturbance or introduced species), or disease, to Grey-headed Albatrosses at South Georgia (Islas Georgias del Sur)<sup>1</sup> (Agreement on the Conservation of Albatrosses and Petrels 2009).

### 4. THREATS FROM FISHERIES

Comprehensive data on distribution of Grey-headed Albatrosses from Bird Island, South Georgia (Islas Georgias del Sur)<sup>1</sup> are available from deployment of satellite-transmitters and GPS loggers on breeding adults, and GLS loggers (geolocators) on breeders, respectively (Croxall et al. 2005; Phillips et al. 2004; Prince et al. 1998; Scales et al. in press). During the breeding-season, breeding adults remain largely in waters around or to the south of the Antarctic Polar Front, and show little overlap with fisheries because of a time-area closure of the local fishery for Patagonian toothfish *Dissostichus eleginoides* (Phillips et al. 2004; Scales et al. in press). In contrast, during the non-breeding period, birds are widely-distributed in the Southern Ocean, with concentrations in the south-west Atlantic (from the Patagonian Shelf to c.15°W), south-west and central south Indian Ocean (Fig. 3). Based on recovery reports, ringed Grey-headed Albatrosses have been killed in demersal longline fisheries in the southwest Atlantic, and pelagic longline fisheries, particularly in the southeast Atlantic and southeast Indian Ocean (Fig. 4). It is also possible that reports of dead ringed birds found on beaches in Australia and New Zealand (Fig. 4) may be of individuals killed in fisheries that are later washed ashore.



**Fig. 3.** Density distribution of Grey-headed Albatrosses from South Georgia (Islas Georgias del Sur)<sup>1</sup> during the 18-month non-breeding season. Green to red indicates low to high density. Inset indicates the sample size in bird days per month - note that birds were tracked for one summer and two winters, and that coverage was poor around the equinoxes. Figure from Croxall et al. (2005).



**Fig. 4.** Reported recoveries of rings and cause of death (if known) for Grey-headed Albatrosses ringed at Bird Island, South Georgia (Islas Georgias del Sur)<sup>1</sup> since 1960.

Grey-headed Albatrosses have been recorded as bycatch, although usually in low numbers, in pelagic longline fisheries off Australia (Gales et al. 1998; Trebilco et al. 2010), and South Africa (Petersen et al. 2009). They were recorded more frequently in demersal longline fisheries for Patagonian toothfish around Crozet, Kerguelen and the Prince Edward islands, but bycatch rates are now much lower because of the introduction of mitigation measures or a reduction in fishing effort (Delord et al. 2005; Nel et al. 2002). However, the grey-headed albatross was the most common species among the several thousand seabirds reported as bycatch by Japanese pelagic longliners between 1992-2010, mainly vessels at 35-45°S operating in two regions, one extending from the southeast Atlantic to southwest Indian oceans, and the other in the southeast Indian Ocean (Inoue *in litt.*). These correspond to the clusters of ring recoveries reported as Fishing Deaths in Fig. 4. It is possible that Grey-headed Albatrosses are bycaught in other fisheries, as observer coverage of seabird bycatch

rates is often poor or non-existent, dead birds are not identified to species, and rings are not reported.

## 5. CONCLUSIONS

The Grey-headed Albatross breeding population at South Georgia (Islas Georgias del Sur)<sup>1</sup> is declining rapidly and shows considerable overlap with several fisheries, including those in which bycatch of this species has been reported. Breeding success is variable, but shows no consistent long-term pattern. There is no evidence that land-based threats are affecting birds. Given the high levels of bycatch recorded for this species in at least one major pelagic longline fishery, the breeding population would seem to merit listing as a priority for conservation management by ACAP.

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