

**Tristan da Cunha implementation plan for the Agreement on the Conservation of Albatrosses and Petrels (ACAP): review of current work and a prioritised work programme for the future**



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NATURE  
CONSERVATION  
COMMITTEE**

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### **Cover Illustration:**

Atlantic Yellow-nosed Albatross (*Thalassarche chlororhynchos*) in the Hottentot study area of Tristan da Cunha © Anton Wolfaardt

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## Summary

The Agreement on the Conservation of Albatrosses and Petrels (ACAP) is a recently established (2004) multi-national treaty which seeks to maintain a favourable conservation status for albatrosses and petrels that it lists in Annex 1. The United Kingdom (UK) ratified ACAP in 2004, soon after it came into force. The UK ratification of ACAP was extended to Tristan da Cunha in April 2006, after the adoption of new conservation legislation by Tristan which takes account of the text and requirements of the Agreement. Collectively the UK South Atlantic Overseas Territories are breeding range states for 12 of the 29 species currently listed by the Agreement, three of which are endemic as breeders to the Tristan da Cunha Islands. The Agreement and its Action Plan describe the actions that Parties shall progressively implement. The Agreement Action Plan is divided into seven specific but related activities: species conservation, habitat conservation and restoration, management of human activities, research and monitoring, collation of information, education and public awareness, and implementation.

This document (the Tristan da Cunha ACAP Implementation Plan) summarises the current status of ACAP-related work at the Tristan Islands, and provides a prioritised programme of future work. It is intended to serve as a tool to guide and coordinate actions that are required to be undertaken in order to meet the (UK and Tristan da Cunha) obligations of the Agreement. Each of the main sections of the plan includes a boxed summary of ACAP requirements, which have been drawn from the text of the Agreement and its Action Plan, an overview of current work related to these requirements and a list of recommended actions. A summary of the recommended actions, their priority rating, and key stakeholders is provided in Appendix 1.

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## 1. Introduction

The Agreement on the Conservation of Albatrosses and Petrels (ACAP) came into force in February 2004 (Cooper *et al.* 2006). The main objective of the Agreement is to maintain a favourable conservation status for albatrosses and petrels that it lists in Annex 1 (Anon 2006). The United Kingdom (UK), including on behalf of its South Atlantic Overseas Territories<sup>1</sup> (SAOTs), ratified ACAP in 2004, soon after it came into force. The Overseas Territory of Tristan da Cunha was not included in this initial ratification due to concerns that the conservation legislation in place at the time was not sufficiently rigorous to meet ACAP requirements. Consequently, a new ordinance, entitled *Conservation of Native Organisms and Natural Habitats (Tristan da Cunha) Ordinance 2006*, was drafted and enacted in February 2006, affording formal protection to all indigenous terrestrial and marine biota, including all species listed in Annex 1 of ACAP, whether resident breeders, or non-breeding migrants (St Helena 2006). This updated legislation enabled Tristan da Cunha to be included within the UK ratification of ACAP in April 2006.

The Tristan da Cunha Islands (hereafter referred to collectively as the Tristan Islands) consist of four islands. Three are grouped together in the Tristan da Cunha archipelago, namely Tristan da Cunha (9,600 ha), Inaccessible (1,300 ha) and Nightingale (400 ha, including offshore islets Middle and Stoltenhoff) islands, which lie in the South Atlantic about 2,800 km from South Africa and some 3,200 km from the nearest point of South America. The fourth, Gough Island (6,500 ha), is approximately 350 km south-south-east of Tristan da Cunha.

The UK SAOTs are particularly important for the conservation of albatrosses and petrels. Collectively, they are breeding range states to 12 of the 29 species currently covered by the Agreement. For most of these, the SAOTs host significant proportions of the global breeding population, three of which are endemic as breeders to the Tristan da Cunha group of islands (Table 1).

The ACAP Agreement, together with its Action Plan, describes a number of conservation measures that contracting Parties need to implement to improve the conservation status of these threatened seabirds (Anon 2006). A workshop was held in the Falkland Islands in 2006, at which the main tasks and actions required to improve the conservation status of albatrosses and petrels in the South Atlantic were discussed and assessed. Following the workshop, a report was published setting out the objectives and tasks for each of the UK SAOTs (Falklands Conservation, 2006).

This ACAP Implementation Plan for the Tristan Islands builds on the 2006 workshop and report, and has been written to meet the ACAP requirements and thus contribute to the objective of the Agreement, which is to achieve and maintain a favourable conservation status for albatrosses and petrels. Each of the main sections of the plan includes a boxed summary of ACAP requirements, which have been drawn from the text of the Agreement and its Action Plan. The Implementation Plan includes information on the current status of ACAP-related work at the Tristan Islands, as well as linkages to the relevant legislation and biodiversity plans. A summary of the recommended actions, their priority rating, and stakeholders involved in implementing these actions is provided in Appendix 1. Although this plan deals specifically

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<sup>1</sup> Falkland Islands, South Georgia and the South Sandwich Islands, British Antarctic Territory and the Tristan da Cunha Islands.

with ACAP-listed species, the activities will often respond to wider biodiversity issues, and will be implemented as part of broader programmes. Similarly, the Implementation Plan focuses on the Tristan Islands, but also encourages complementary action in other areas, particularly on the High Seas, and the jurisdictional waters of other countries, where albatrosses and petrels from the Tristan Islands are known or are thought likely to be killed.

It is important to note that a range of organisations and individuals undertakes ACAP-related work at the Tristan Islands. This Implementation Plan serves to integrate all of these activities and to ensure that the work is carried out in a coordinated manner.

## 2. ACAP species

Six of the 29 currently-listed ACAP species breed at the Tristan Islands. Three of these species, the Tristan Albatross *Diomedea dabbenena*, Atlantic Yellow-nosed Albatross *Thalassarche chlororhynchos* and Spectacled Petrel *Procellaria conspicillata*, are endemic to the Tristan Islands, breeding nowhere else. Of the remaining three species, the Tristan Islands supports the largest breeding populations globally of Sooty Albatrosses *Phoebastria fusca* and Grey Petrels *Procellaria cinerea* (Table 1). This, together with the declining population trends for most of these species and the globally threatened or near-threatened conservation status of all the species (Table 1), highlights the significant importance of the Tristan Islands for albatross and petrel conservation.

**Table 1: ACAP-listed species breeding on the Tristan Islands, relative size of the population in global terms, and recent (2009) IUCN status and population trends**

Species	Global Importance	IUCN status (2009)	Recent trend
Tristan Albatross	Endemic	CR	-2.85% to -4.2% pa <sup>2</sup>
Atlantic Yellow-nosed Albatross	Endemic	EN	-1% pa <sup>3</sup>
Sooty Albatross	Largest population	EN	-3% pa <sup>4</sup>
Southern Giant Petrel	Very small population	LC	Increasing <sup>4</sup>
Spectacled Petrel	Endemic	VU	+7% pa <sup>5</sup>
Grey Petrel	Largest population	NT	Unknown

CR – Critically Endangered, EN – Endangered, NT – Near Threatened, VU – Vulnerable, LC – Least Concern

An additional 10 non-breeding ACAP species have been recorded as visitors to the territorial waters of Tristan da Cunha (Table 2). For a list of the current species included in Annex 1 of ACAP, see Appendix 2.

<sup>2</sup> Modelled rate of population decline, from Wanless *et al.* (2009)

<sup>3</sup> Cuthbert *et al.* (2009)

<sup>4</sup> Cuthbert and Sommer 2004

<sup>5</sup> Ryan *et al.* (2006)

**Table 2: Non-breeding ACAP-listed species that have been recorded as visitors to the territorial waters of Tristan da Cunha (from information in Ryan 2007)**

Species	Visitor status	IUCN status (2009)
Wandering Albatross	Common non-breeding visitor	VU
Northern Royal Albatross	Scarce non-breeding visitor	EN
Southern Royal Albatross	Scarce non-breeding visitor	VU
Light-mantled Sooty Albatross	Scarce non-breeding visitor	NT
Black-browed Albatross	Fairly common non-breeding visitor	EN
Shy Albatross	Scarce non-breeding visitor	NT
Salvin's Albatross	One record*	VU
Grey-headed Albatross	Scarce non-breeding visitor	VU
Northern Giant Petrel	Fairly common non-breeding visitor	LC
White-chinned Petrel	Common non-breeding visitor	VU

EN – Endangered, NT – Near Threatened, VU – Vulnerable, LC – Least Concern

\* Adult bird recorded on Gough Island in 2008

### 3. Relevant legislation, conservation listings and plans

Tristan da Cunha (including Gough Island) is a United Kingdom Overseas Territory. It forms part of the UK Overseas Territory of St Helena, Ascension and Tristan da Cunha, and is administered by a UK-appointed representative, with support from an elected Island Council. *The Tristan da Cunha Conservation Ordinance, 1976* replaced an earlier Protection Ordinance, and provided broadly for the conservation of flora and fauna in all the islands and islets of the group, as well as the territorial waters. This legislation also provided for the designation of Gough Island and adjacent territorial waters extending out to three nautical miles as a Wildlife Reserve. This legislation was amended in 1984, 1986 and finally in 1997, when Inaccessible Island and its territorial waters, within 12 nautical miles of the island, was declared a Nature Reserve. The same amendment changed the designation of Gough Island from a Wildlife Reserve to a Nature Reserve, and extended the area of the Nature Reserve to include the territorial waters out to 12 nautical miles. In February 2006, the *Tristan da Cunha Conservation Ordinance, 1976* was replaced by the *Conservation of Native Organisms and Natural Habitats (Tristan da Cunha) Ordinance, 2006*, a modern and comprehensive conservation ordinance, which enables Tristan da Cunha to meet the requirements of and to engage formally in ACAP.

The Tristan da Cunha Government has recently (2008) established a Conservation Department. The Tristan Conservation Department comprises three staff members, a Conservation Officer, an Assistant Conservation Officer and a clerk. Previously, conservation issues were managed by the Tristan Agriculture and Natural Resources Department (ANRD). With effect from 15 June 2009, the ANRD was split into the Agriculture Department and the Fisheries Department. The Fisheries Department will continue to manage fisheries, including conducting research, issuing licences and facilitating observers aboard fishing vessels, and will thus continue to be involved in ACAP-related initiatives.

The Tristan da Cunha Fishery Limits Ordinance, 1983 (as amended in 1991, 1992, 1997 and 2001) defines the fishery limits of Tristan da Cunha as 200 nautical miles around each of the islands, and makes provision for the regulation of fishing activities within these limits.

Management Plans for Gough (Cooper and Ryan, 1994) and Inaccessible (Ryan and Glass, 2001) islands were published in 1994 and 2001, respectively. The Gough Island Management plan pre-dates the discovery of the deleterious impacts of mice on the island, and funding for a revision of the plan (as well as the Inaccessible Island Management Plan) has recently (April 2009) been provided by OTEP. The revisions of these Management Plans are due to be completed in early 2010. A Management Plan for Nightingale Island is currently being developed by the Tristan Conservation Department.

A Darwin Initiative Project that involved the Royal Society for the Protection of Birds working with the Tristan da Cunha Government and community to increase their control, ownership and involvement in implementing the Convention on Biological Diversity, led to the development and publication in 2006 of a Biodiversity Action Plan for the period 2006-2010 (Tristan Island Government in partnership with the Royal Society for the Protection of Birds (RSPB) and the University of Cape Town (UCT) (Tristan Natural Resources Department *et al.*, 2006)). This initiative also resulted in the publication of a series of monitoring protocols for key bird species that provide a framework for a standardised approach to monitoring, thus allowing long-term estimation of population trends and demographic parameters (Cuthbert and Sommer, 2004a, Ryan, 2005, Tristan Natural Resources Department *et al.*, 2006, Sommer *et al.*, 2008).

The Tristan da Cunha Environment Charter was signed jointly by the Government of Tristan da Cunha and the UK Minister for Overseas Territories in September 2001. The Environment Charter outlines the environmental management commitments of the UK Government and the Government of Tristan da Cunha, and serves as a framework policy to guide the development of management policies and plans.

In 1995, Gough Island, and its territorial waters (up to 12 nautical miles), was afforded World Heritage Site status by the World Heritage Convention of UNESCO, as a 'Natural Site'. In 2004, the World Heritage Site was expanded to include Inaccessible Island and its territorial waters, and renamed the 'Gough and Inaccessible Islands World Heritage Site'. In 2008, Gough and Inaccessible islands and their territorial waters were designated Wetlands of International Importance under the Ramsar Convention by the UK Government. Formal listing by the Convention followed in September 2009 as site number 1868 (Gough) and 1869 (Inaccessible).

#### **4. Breeding sites**

The obligations relating to the conservation of breeding sites encompass broadly the protection and active management of these sites, including the management of non-native species detrimental to albatrosses and petrels, minimising the risk of introducing non-native species, minimising human disturbance associated with tourism and research, and managing breeding site habitats, including the restoration of sites where appropriate.

**ACAP requirements:  
Breeding sites**

1. Conserve and, where feasible and appropriate, restore those habitats that are of importance to albatrosses and petrels (Art III, 1a).
2. Protect breeding sites; develop and implement management plans for those sites (AP 2.2.1).
3. Prevent introductions, eliminate or control non-native species detrimental to albatrosses and petrels (Art III, 1b).
4. Minimise and prevent disturbance from tourists and researchers (AP 3.4).
5. Prohibit the deliberate taking of, or harmful interference with, albatrosses and petrels, their eggs, or their breeding sites. Exemptions are possible, but any Parties granting such exemptions shall submit full details of them to the Secretariat (Art III 2).
6. Develop and implement measures to prevent, remove, minimize or mitigate the adverse effects of activities that may influence the conservation status of albatrosses and petrels. These to include appropriate use of environmental impact assessment (Art III 1c; AP3.1).
7. Initiate or support research into the effective conservation of albatrosses and petrels (Art III 1d).
8. Contribute to UK report to Secretariat (to Advisory Committee immediately before each session of Meeting of Parties). The report should cover all above points as expanded upon in the action plan and any other relevant points. Specifically the Advisory Committee aims to include in its report:
  - a. identification of internationally important breeding sites;
  - b. reviews of the status at breeding sites of introduced animals, plants and disease-causing organisms known or believed to be detrimental to albatrosses and petrels;
  - c. reviews of the nature of, coverage by, and effectiveness of, protection arrangements for albatrosses and petrels;
  - d. identification of gaps in information as part of the above reviews, with a view to addressing these in future priorities.
9. Breeding sites working group. Submit data on each breeding site (this includes information on presence of introduced species); initiate studies to fill gaps in knowledge.

ACAP's Advisory Committee (AC) has established four Working Groups, including a Breeding Sites Working Group (BSWG), which co-ordinates and drives work associated with ACAP breeding sites on behalf of the AC. The BSWG has developed a Breeding Sites database for all ACAP-listed species, which will be integrated with other ACAP databases, and be made available via a web-portal.

There has been some debate about what constitutes a breeding site. For consistency and compatibility with other ACAP data (e.g. status and trends data), a hierarchical approach has been used to define each site. In the case of the Tristan Islands, each of the separate islands and islets (Tristan, Nightingale, Stoltenhoff, Middle, Inaccessible and Gough) is listed as a separate ACAP breeding site (Appendix 3).

This database also includes a list of threat criteria, which are used to assess the scope (proportion of population affected) and severity (intensity) of threats at each breeding site. The threat criteria are restricted to those affecting ACAP species at the breeding site (i.e. not those occurring at sea), and are only included/assessed if the threat has been documented in some

way at the site in question, and is likely to have a negative impact (population decline in the next decade) on an ACAP species. Potential or suspected threats are thus not included. The list of reviewed threats (to ACAP species) at the Tristan Islands is included in Appendix 4, and highlights the significance of predation by alien rodents – the House Mouse *Mus musculus* at Gough and the Ship or Black Rat *Rattus rattus* at Tristan. House Mice are also present on Tristan, and although not currently known to be a threat to seabirds, they could become a threat if rats are eradicated and mice are left as the sole rodent species. This possibility needs to be considered in any rodent eradication plans for Tristan.

Although the approach of only including documented threats linked to population declines (and excluding potential or suspected threats) may be viewed as insufficiently precautionary, it is the most effective means of ensuring objective assessments of threats across species and sites. The database will be continually updated, so as new evidence comes to light regarding a particular threat, this can be incorporated in the database and re-assessed. Furthermore, one of the actions required from all ACAP Parties by the Fifth Meeting of its Advisory Committee (AC5, scheduled to be held in 2010) is the compilation of a list of breeding sites with introduced vertebrates (see below), so even though the mere presence of alien vertebrates may not constitute a threat, their presence at each breeding site will be documented by way of this list, which will be maintained by the BSWG.

#### **4.1 Current status of the management of ACAP breeding sites at the Tristan Islands**

The overall goal of the Tristan Biodiversity Action Plan is *'to conserve the native biological diversity of Tristan da Cunha so that the people of Tristan da Cunha can continue to benefit from it.'* The development of the Biodiversity Action Plan for Tristan da Cunha (2006-2010) followed a process (from 2003 to 2006) of working with the Tristan community to facilitate the implementation of the Convention on Biological Diversity. The emphasis was on training local Tristanians, in particular strengthening fieldwork skills. The main output was the Biodiversity Action Plan, which provides a framework for, and prioritises, biodiversity action over the period 2006-2010. The Biodiversity Action Plan was reviewed in 2008 and is currently being reviewed again as part of the process to update the Management Plan for Gough and Inaccessible Islands. Highlighting its commitment to biodiversity conservation, the Tristan da Cunha Government created a Conservation Officer post in 2005 to carry out conservation work on the Tristan Islands, and in February 2009 established a Conservation Department, with three staff members (see also Section 3).

##### **4.1.1 Protection status of ACAP breeding sites and species**

All human activities at the Nature Reserves of Gough and Inaccessible Islands are carried out according to the policies and prescriptions of officially adopted management plans. Management Plans for Tristan and Nightingale Islands are scheduled to be written in 2010, and once adopted will guide the management of activities on these islands. All of the islands are subject to the 2006 Conservation Ordinance, which affords full protection to all ACAP species, and indeed all native species.

#### **4.1.2 Measures to eliminate, control or prevent the introduction of non-native species to breeding sites**

One of the greatest threats to wildlife at the Tristan Islands, including to ACAP species, is the impact of non-native invasive rodents. The Ship Rat and the House Mouse were accidentally introduced to the main island of Tristan, and the House Mouse to Gough Island, in the 19<sup>th</sup> Century. Although little work has been conducted to investigate the impacts of rodents on the main island of Tristan, it seems likely that the Ship Rat has led to the reduction or suppression of populations of burrowing petrels and possibly contributed to the local extirpation of species.

A project entitled “An assessment of the potential for rodent eradication in the Tristan da Cunha Islands Group”, managed by the RSPB, UCT and the Government of Tristan da Cunha, and funded by the Overseas Territories Environment Programme (OTEP), was developed and implemented from April 2005 to March 2008 to investigate the feasibility of eradicating rodents from the Tristan Islands (Angel and Cooper, 2006, Brown, 2007a, 2007b, Hilton 2007). The studies that formed part of this project concluded that whereas there were significant challenges associated with an eradication programme, with the necessary planning and resources, the prospects of eradicating rats from Tristan were very high, and although lower for mice on Tristan, still technically feasible. A preliminary Operational Plan for the eradication of rodents from the main island of Tristan (primarily Ship Rats, with House Mice as the secondary target species) has been prepared (Brown, 2007b) and discussed in March 2008 with the Government and residents of Tristan da Cunha. Concerned about the safety of people and livestock during an eradication exercise, the Tristan Island Council indicated that it was not keen at this stage to pursue rodent eradication plans at Tristan, but was supportive of and would rather see efforts directed towards eradicating mice from Gough Island.

At Gough Island, the House Mouse has been shown to prey upon and kill the chicks of several seabird species, including the ACAP-listed and Critically Endangered Tristan Albatross, endemic to the Tristan Islands (Cuthbert and Hilton, 2004, Wanless, 2007, Wanless *et al.*, 2007, 2009). The predation takes place mostly in the winter months when the other food sources of the House Mouse are substantially reduced. Mouse-induced mortality has led to greatly reduced breeding success for the Tristan Albatross (and other non-ACAP species, such as the Atlantic Petrel *Pterodroma incerta*, Great Shearwater *Puffinus gravis* and Gough Bunting *Rowettia goughensis*). Recent studies have shown that the breeding success of Tristan Albatrosses is much lower than would be expected from a *Diomedea* albatross. In the most recent season (2008), overall breeding success was only 13.9%, about one fifth of the average breeding success of other *Diomedea* albatrosses. These results, together with recent modelling of the Tristan Albatross population, show that mouse predation is linked to the ongoing population decline, and that the species faces a high risk of extinction in the presence of mice (Wanless *et al.* 2009). A recent observation (2008) on Gough Island, has also established that mice predate chicks of Sooty Albatrosses, although the impact on this species appears less severe than that recorded on the winter breeding Tristan albatross (RSPB unpublished data). There are therefore at least five bird species known to be predated by mice at Gough Island. Although not yet confirmed, the winter timing of mouse attacks suggests that other winter-breeding species, such as the ACAP-listed Grey Petrel are likely also to be impacted. It is clear that eradicating House Mice from Gough Island is essential to improve the conservation status of the Tristan Albatross, as well as other species, and to meet the general conservation goal of the Tristan Biodiversity Action Plan.

Recent work has shown that the eradication of mice from Gough Island is technically feasible, but identified several areas of uncertainty that need to be resolved before a high probability of success can be achieved and a detailed Operational Plan finalised (Parkes 2008). Some initial work has also been undertaken to test bait acceptance by mice on Gough (Wanless *et al.* 2008). The RSPB have recently received funding from OTEP to undertake further research to answer the remaining areas of uncertainty. This work, which commenced in September 2008, will involve developing and testing the optimal poison and bait for delivery to all mice on Gough Island during the winter period (when an eradication operation would occur), the susceptibility of mice in caves and underground lava tubes to an aerial baiting operation, as well as conducting a medium-scale trial bait-drop (without poison) to assess whether the bait reaches all mice in the targeted area. A more recent grant from OTEP to the RSPB allows for a study of non-target effects and husbandry trials on the endemic Gough Bunting and Gough Moorhen *Gallinula comeri*, fieldwork for which will commence in September 2009. The results of all this work will be used to inform the development of an operational plan to eradicate mice from Gough Island. One of the major challenges and arguably the greatest priority associated with ACAP-related work at the Tristan Islands is to gain high-level support and sufficient resources for the successful implementation of this eradication programme.

The SAIS project (funded by the European Union) is coordinated by RSPB on behalf of the Governments of the UK South Atlantic Overseas Territories. This initiative has combined with the feasibility work on rodent eradication and other work on alien plant management (see below) to deliver several actions that aim to reduce the impact of invasive alien species on ACAP species on Tristan, and to restore habitats. SAIS has recently developed a contingency plan and carried out training for Tristanians so that they can implement an immediate response to any rat incursion to Nightingale or Inaccessible Islands (currently rat-free) (Varnham, 2008). These islands are nesting sites for Atlantic Yellow-nosed Albatross, Sooty Albatross and Spectacled Petrel (Inaccessible only). Improved rodent control measures are also being put in place around the Settlement on the main island of Tristan; these may help to reduce the risks of rodent stowaways in materials being taken to the offshore islands. Preparations are also underway to appoint a Tristan Biosecurity Officer to be based in Cape Town. This person would be responsible for checking all goods shipped to Tristan and for taking measures to minimise the risk of hitch-hiking organisms, propagules and diseases. They would also provide advice on the importation of high-risk goods such as live animals and plants to Tristan. It was hoped that this appointment would be made by June 2008, but due to restrictions on EU funding and difficulties with visa/passport requirements and other administrative complications relating to the employment of contract staff in Cape Town, the post was not approved. An alternative arrangement is currently in place in which a staff member from Tristan House in Cape Town is responsible for checking all items coming to Tristan from Cape Town, as well as checking compliance with biosecurity measures (e.g. insect and rodent traps) in place in store rooms and other relevant facilities in Cape Town. As part of the SAIS project, an RSPB officer was seconded to the Tristan Conservation Department from December 2008 for a period of a year to provide support to the Conservation Department with these and all other aspects of conservation management at the Tristan Islands. The continuation of this support post beyond 2009 is considered a critical priority for ACAP and other conservation work at Tristan da Cunha.

OTEP funds have been provided to eradicate Loganberry *Rubus loganobaccus* from the Sandy Point area of Tristan, and Procumbent Pearlwort *Sagina procumbens* from Gough

Island. These projects are currently being implemented, and aim to safeguard the integrity of the terrestrial ecosystems of these islands.

Given the significant conservation threat posed by alien plants and animals, and the substantial investment required to deal with the impacts, a priority requirement for the Tristan Islands is the development of a Biosecurity Strategy, and capacity building to enable Tristanians to implement the strategy. The Tristan Conservation Department is currently responsible for biosecurity matters at the Tristan Islands, but there is currently no formal policy and structure in place to manage biosecurity and quarantine issues. Apart from the general importance of such a policy, it is crucial that a robust biosecurity regime is in place prior to the initiation of any eradication programmes. It is also important that a formal structure is established within the Tristan Government to manage biosecurity in a coordinated manner, one in which all relevant departments are included, and lead responsibilities identified.

#### ***4.1.3 Measures to minimise disturbance at ACAP breeding sites***

Visits to the Tristan Islands are limited, mainly due to their remoteness and the heavy seas surrounding the islands. The islands are visited by a maximum of six to ten vessels each year, each usually carrying less than 500 passengers. Tourists do not currently land on Gough Island. Official visits to Gough Island are supervised by a Tristan-appointed Environmental Officer (during the annual relief) or are met ashore by a South African-appointed voluntary Team Conservation Officer outside of the relief period. Landing on the other outer islands (Nightingale and Inaccessible Islands) requires permission from the Tristan Government. Visitors to these outer islands are always accompanied by a local guide or sometimes an expert on board the cruise vessel (maximum of eight visitors per guide). Tourism, especially wildlife tourism, is seen as an important potential source of income for the Tristan Government. However, this potential is currently constrained by the factors identified above, and the current design and position of the harbour at Tristan, as well as difficulties of landing on the outer islands.

The Tristan Biodiversity Advisory Group (T-BAG) was established following the Darwin Initiative Project “Enabling the people of Tristan da Cunha to implement the CBD.” This group consists of a small number of experts with knowledge of conservation issues at the Tristan Islands, and serves to provide conservation advice on request to the Tristan Government. This mechanism helps ensure that potential impacts of proposed activities (e.g. research work and tourist visits) are considered and that the activities are carried out in a manner that maximises the conservation benefit, and prevents or minimises disturbance or other potentially deleterious impacts. T-BAG replaced, and expanded upon, an earlier advisory group established in 1993 that reported to the Tristan Government: the Gough Island Nature Reserve Advisory Committee (GINRAC).

## **4.2 Recommendations**

- 4.2.1** Ensure that policies and prescriptions in current Management Plans (including the Tristan Biodiversity Action Plan) are implemented and regularly reviewed.
- 4.2.2** Revise and implement Gough Island (1994) and Inaccessible Island (2001) Management Plans. The revision of the Gough Island Management Plan is of particular importance, given that the current (1994) Management Plan pre-

dates the discovery of the mouse problem at Gough. OTEP has recently funded the RSPB to prepare a combined Management Plan for both islands as a single World Heritage Site. Complete the compilation of the Tristan and Nightingale Management Plans (and implement).

- 4.2.3** Informed by the final feasibility work on eradicating House Mice from Gough Island, raise high level awareness, support and endorsement (within the UK) for an eradication programme. Raise funds and resources required to implement the eradication programme.
- 4.2.4** In the longer term, consider the feasibility of eradicating rats and mice from Tristan, especially once lessons have been learned from the planned eradication programme at Gough Island, and from eradication interventions undertaken at or planned for other human-populated islands (e.g. Lord Howe).
- 4.2.5** Develop and implement a formal biosecurity strategy and plan with strict quarantine measures to prevent the introduction of invasive animals, plants and diseases, especially in respect of rodents and avian diseases (for ACAP species). Objective 4 in the Tristan Biodiversity Action Plan: *The impact of alien species is reduced or eliminated* lists a suite of actions aimed at maintaining a rigorous biosecurity regime and controlling invasive alien species already present on the islands. It is important that these actions are taken up in biosecurity/quarantine legislation and protocols and are strictly implemented. The most significant threat to ACAP species arising from alien species at the Tristan Islands is predation by rodents (Appendix 4). Some key biosecurity requirements for ACAP species include the following:
- a.** Ensure that Inaccessible and Nightingale Islands remain rodent-free (and Gough Island rat free) by implementing and expanding the quarantine-monitoring-contingency plan developed by the RSPB for these islands.
  - b.** Develop quarantine protocols for vessels leaving Cape Town for Tristan and Gough, and establish capacity in Cape Town to carry out these measures.
  - c.** Ensure that strict quarantine protocols are implemented on all other vessels visiting the Tristan Islands or moving between islands, which should also be expected to demonstrate that they are rodent-free.
- 4.2.6** Formalise a structure within the Tristan Government to implement biosecurity policies and measures.
- 4.2.7** Investigate funding opportunities for the erection of a biosecurity building on the main island of Tristan.
- 4.2.8** Continue to support and strictly manage tourism activities at the Tristan Islands, especially in relation to biosecurity.
- 4.2.9** Compile and maintain a list indicating the presence or otherwise of alien mammals at all ACAP breeding sites, the current status (eradicated or extant), the year of the eradication, whether it was deliberate, the method used, whether an eradication campaign is being planned, the proposed methods, and an indicative year (this is an ACAP-reporting requirement by AC5).
- 4.2.10** Compile and maintain a list of islands from which ACAP species are known to have bred in the past, but have since been extirpated, to include the relevant

island characteristics (location, size, presence of alien mammals etc) and, if documented, the peak number of breeding pairs and year, year of last breeding attempt, and the likely reasons why breeding no longer takes place (ACAP-reporting requirement by AC5).

- 4.2.11** Secure funding to ensure the continuation of the support position for the Tristan Conservation Department.

## 5. Status and trends of populations

The UK has an obligation to monitor the status and trends of ACAP-listed species breeding at each of its Overseas Territories, and thus contribute to the overall assessments of the conservation status of each species.

### **ACAP requirements: Status and trends**

1. Initiate or support research into the effective conservation of albatrosses and petrels (Art III 1d).
2. Undertake relevant research and monitoring (AP 4.1).
3. Contribute to UK report to Secretariat (to Advisory Committee to each session of Meeting of Parties). The report should cover all above points as expanded upon in the Action Plan and any other relevant points. Specifically the Advisory Committee aims to include in its report assessments and reviews of the status of populations of albatrosses and petrels, including an assessment of population trends of the species, especially those in poorly known areas and of species for which few data are available.

ACAP's *Status and Trend Working Group* (STWG) is responsible for collecting, collating and updating demographic and population data for each ACAP-listed species and to produce assessments of the status and trends of each species. The STWG, together with the other ACAP Working Groups, has developed a relational database that integrates and curates status and trends, breeding sites and taxonomy data. In addition to facilitating the coordinated storage and management of these data, the database is also used for the ACAP Species Assessments; the framework for which is built in to the ACAP database. The ACAP Species Assessments aim to collate the most recent scientific information on population status and trends, distribution, threats, as well as any conservation measures that are in place for the 29 albatross and petrel species currently listed under the Agreement. The usefulness of the ACAP database as a management tool is dependent on the timely provision of updated data from the breeding range states (or data holders) to the STWG so that it can be incorporated into the database and used in analyses. The information collated in the database can also be used for the purposes of education and public awareness. These data and the Species Assessments will be made available through the data portal on the ACAP website. The Species Assessments can presently be downloaded from <http://www.acap.aq/acap-species>. It is important to note that the Species Assessments will be routinely updated.

## **5.1 Current activities relating to monitoring the status and trends of ACAP-listed species at the Tristan Islands**

When considering the monitoring of ACAP listed species, it is useful to distinguish between annual monitoring of study plots and intermittent much larger-scale censuses of entire islands or archipelagos. Both forms of monitoring take place at the Tristan Islands, and are currently undertaken by a number of different individuals and organisations, including the Tristan Government, RSPB, and UCT.

### **5.1.1 Tristan Albatross**

The Tristan Albatross is almost totally restricted to Gough Island, with only a couple of pairs breeding at Inaccessible Island. The earliest census of Tristan Albatrosses at Gough Island was in 1956, when the numbers of incubating birds at Gonydale, Green Hill and Albatross Plain were counted. Collectively, these areas currently support about 38% of the Gough population. Subsequently, whole-island censuses of incubating Tristan Albatrosses (or Apparently Occupied Nests, AONs – see Cuthbert and Sommer (2004a)) have been conducted at Gough Island in 1999/2000 (Ryan *et al.*, 2001), 2001 (Cuthbert *et al.*, 2004), 2004, 2005 (near-complete census), 2006, 2007, 2008 and 2009. These censuses took place in January/February, soon after egg-laying. Whole-island counts of large chicks have also been carried out in 1999, 2000, 2001, 2003, 2007, 2008 and 2009, all in September, thus allowing an estimation of breeding success for these periods. The number of incubating Tristan Albatrosses (AONs) counted decreased from 2400 in 2001 to 1279 in 2007, and 1793 in 2009. It is important to note that these figures represent actual counts of the annual breeding population (or demi-population) then present and do not account for possible failures prior to the count.

Incubating birds have been counted and their identities recorded, adults and fledglings banded, and breeding success determined at one small sub-colony (“Tafelkop”) since 1989, with some additional counts of fledglings in “Gonydale” since 1976. Since 2005, an intensive study has been established in the large (100-140 pairs) Gonydale site, recording identities of all adults and fledglings and measuring breeding success. These data are used to estimate adult survival, annual variation in breeding success, and population trends. Since 2007 the position of each nest in these study areas has been recorded by hand-held GPS, and used to produce maps showing the distribution of study nests. The breeding success estimates from the whole-island chick counts and from the more intensively monitored study colonies confirm the much lower breeding success of Tristan Albatrosses than would be expected from a *Diomedea* albatross, due to chick predation by the House Mouse. In September 2009, 502 large chicks were counted, equating to a maximum breeding success of 28% (based on the 1793 incubating birds counted in January 2009). Although this figure is double the estimate for the 2008 season, it is still far too low to sustain the population.

The most recent survey of Tristan Albatrosses at Inaccessible Island was carried out by the Tristan Conservation Department and RSPB in February 2009. A male bird was observed flying over a presumed female on Gony Ridge, but there was no evidence of a breeding attempt.

### **5.1.2 Atlantic Yellow-nosed Albatross**

The Atlantic Yellow-nosed Albatross is endemic to the Tristan Islands, and breeds at Tristan, Gough, Nightingale (including Stoltenhoff and Middle islands) and Inaccessible Islands (i.e. all of the listed ACAP breeding sites for the Tristan Islands). Given the difficulty of conducting island-wide counts of breeding birds, sample-counts of incubating birds have been undertaken. At Gough Island sample-censuses have been conducted in October-November of 2000, 2003, 2005 and 2008. The area covered by these ground counts was estimated to comprise about 11% of the available nesting habitat for Atlantic Yellow-nosed Albatrosses (Cuthbert and Sommer, 2004b) and can thus be used to provide an extrapolated estimate of the overall population size. Similar sample censuses have been carried out on Nightingale Island (in the Ponds area) in 1999 and again in 2007. Although formal analysis is still pending, the data indicate an apparently stable population at Gough, and an increase at Nightingale where initial estimates suggest an increase from 1999 to 2007 of approximately 20% in the Ponds area. The main island of Tristan supports the majority of the Atlantic Yellow-nosed Albatross population. In the 1970s the Tristan population was roughly estimated to comprise about 20 000 pairs. Although the present population is thought to be much smaller, there have been no recent estimates.

A demographic study of Atlantic Yellow-nosed Albatrosses was established at a colony near the meteorological station on Gough Island in 1979 (mean 47 pairs per year). Monitoring takes place annually by volunteers from the South African meteorological team, with supervision from scientists in South Africa and the UK. Incubating birds are counted, breeding adults and chicks banded, and breeding success determined. These data have been used to estimate adult and juvenile survival, reproductive output, and population trends (Cuthbert *et al.*, 2003), and reveal that there has been a recent increase in numbers of breeding pairs at Gough Island. On Tristan, one sub-colony (mean 34 pairs per year), has been studied from 1984-1992, and from 2005 until present, with intermittent monitoring between these two intervals. Incubating birds have been counted, breeding adults and chicks banded, and breeding success determined. These data have been used to estimate adult survival, reproductive output, and population trends. However, the study colony is too small and recent data from Tristan too intermittent for sufficient confidence in estimating these variables, or in extrapolating to the island as a whole.

As part of the Darwin Initiative Project, a number of study plots were established on Tristan and Nightingale to collect and monitor Atlantic Yellow-nosed Albatross demographic data. On Tristan, study plots were originally established at two sites: the Hottentot and Tristan Ponds study areas. The Tristan Ponds site is no longer used. Two additional study sites were established in 2008: one at Tripot and the other at Sandy Point. The Hottentot study colony is the most intensively monitored and was established as a demographic study to monitor breeding success, adult and juvenile survival and population trends. The Tripot and Sandy Point areas are visited twice during the breeding season, once to count incubating birds, and again to count large chicks, to determine breeding success and monitor population trends. During these visits, all adult birds (during the incubation count) and chicks (during the chicks count) are ringed. Adults are fitted with metal rings and plastic alpha-numeric colour bands, and chicks are fitted with metal bands only.

At Nightingale Island four study plots have been established at the Nightingale Ponds. Nightingale is visited twice during the breeding season. At each of the four study plots the

number of incubating birds is counted early in the season and the number of large chicks later on. In one of the plots, breeding adults and chicks are banded to allow more detailed demographic monitoring (adult survival and recruitment of juveniles into the population). The monitoring work on Tristan and Nightingale forms part of a broader long-term seabird monitoring programme carried out by the Tristan Conservation Department, subject to the availability of funding and resources. Formal monitoring protocols have been written up by the RSPB and included in the Biodiversity Action Plan (see Sommer *et al.* 2008 for detailed protocols).

### **5.1.3 Sooty Albatross**

The Tristan Islands support over 50% of the global population of Sooty Albatrosses. They breed on the main island of Tristan, Nightingale (including Stoltenhoff), Inaccessible and Gough Islands. Due to their cliff-nesting habits and between-year variability in breeding numbers, it has been difficult to obtain robust and regular population estimates. Estimates obtained from scan-counting sections of coastline on Gough Island in the 1970s and again in 2000 suggest that the number of birds on the south-east coast of Gough have declined by almost 60% during this period, an annual rate of decline of about 3% (Cuthbert and Sommer, 2004b). The 2000 census counted *ca* 5% of the total population, which enabled an extrapolated estimate of the overall population size on Gough to be made (Cuthbert and Sommer, 2004b). In addition, counts of large chicks in Feb 2001 allowed an estimate of breeding success by comparison with the incubating adult count in Oct-Nov 2000. Additional sample counts of sooty albatrosses have been conducted at Gough in 2003, 2005 and 2008. These counts suggest a relatively stable population on Gough over this period. However there was some evidence for varying trends in breeding numbers for inland nesting (declining) and coastal cliff-nesting pairs (increasing), together with evidence for lower levels of breeding success at inland sites (RSPB unpublished data). There have been no recent (post 1970s) estimates of the breeding populations on the other Tristan Islands.

### **5.1.4 Southern Giant Petrel**

Within the Tristan Islands, the Southern Giant Petrel is currently restricted to Gough Island, where they breed in three separate areas. The Gough population is very small (318 pairs in 2009) in relation to the global population (*ca* 31 000 pairs). An almost-complete census in 2000/01 (Cuthbert and Sommer, 2004b) and censuses in each year from 2003 to 2009 indicate an increase from previous counts. This increase is consistent with populations elsewhere, and is thought attributable to the increased availability of food associated with the increasing Subantarctic Fur Seal *Arctocephalus tropicalis* population on Gough (Cuthbert and Sommer, 2004b). Breeding success was monitored at one colony in Giant Petrel Valley in 2007/08 (one survey during incubation and a chick count shortly before fledging). These counts indicate a breeding success of 57%, the first estimate for the species at Gough, its most northerly breeding locality.

### **5.1.5 Spectacled Petrel**

The Spectacled Petrel is endemic to Inaccessible Island. A complete island census was conducted in 1999 (Ryan and Moloney, 2000) and again in 2004 (Ryan *et al.*, 2006). These censuses accounted for levels of burrow occupancy and observer error, and indicate a substantial increase from the 1930s at which time the population had been driven to a low level due to the impacts of feral pig predation. The increase from the 1930s to 2004 translates

into an annual increase of approximately 7%, with the current breeding population estimated to be approximately 10 000 breeding pairs (Ryan *et al.* 2006). The species was down-listed from Critically Endangered to Vulnerable in 2008 as a result of the continued population increase. A seabird monitoring manual has been developed, and published in 2005, as a tool for the ongoing monitoring of the threatened seabirds of Inaccessible Island, including the spectacled petrel (Ryan, 2005).

### **5.1.6 Grey Petrel**

The Grey Petrel breeds predominantly on Gough (>10 000 pairs), with smaller numbers on Tristan (>100 pairs), where it was formerly abundant (Ryan, 2007). It may also breed on Inaccessible Island, but this has yet to be demonstrated. Very little work has been conducted on the Grey Petrel population of the Tristan Islands, and so its population status remains poorly understood. Recent work on Gough has established a small number of study burrows to allow breeding success of this winter-breeder to be assessed.

## **5.2 Recommendations**

The monitoring of the status and trends of ACAP-listed species at the Tristan Islands is important to determine if management measures are achieving their objectives. The monitoring strategy should ideally include a combination of annual monitoring of breeding numbers (one survey during incubation) and productivity (one chick count shortly before fledging) of representative (selected) study colonies, comprehensive demographic studies at a sample of study colonies to assess adult and juvenile survival, recruitment and other demographic parameters that help identify the underlying causes of population trends, and complete archipelago censuses much less frequently – once every five to 10 years. However, for many of the ACAP species and island populations, this frequency of monitoring will likely not be possible.

Because ACAP species are long-lived, for monitoring programmes to contribute useful information on the status and trends of ACAP species and possible reasons for population changes, they need to be of a long-term nature. For certain species (Sooty Albatross, Southern Giant Petrel, Spectacled Petrel and Grey Petrel), intensive monitoring is problematic due to logistical challenges and/or the sensitivity of the species – including nesting habitat - to disturbance. The bird monitoring manuals developed for Gough, Inaccessible and Tristan Islands are valuable tools to guide the long-term monitoring of seabird populations at the Tristan Islands (including ACAP species). It is important that the protocols outlined in these manuals are followed to ensure that monitoring carried out by different field workers remains consistent, thus allowing robust analysis of these long-term data.

### **Tristan Albatross**

- 5.2.1** Maintain annual monitoring of population size and demographic parameters at Gough Island study colonies (including banding adults and chicks), ensuring sufficient sample size to estimate accurately these demographic parameters.
- 5.2.2** Continue island-wide counts of incubating birds and large chicks at Gough Island. The frequency of these counts will depend on the availability of capacity and resources. Annual whole-island counts of chicks in September remains feasible as the timing coincides with the annual relief period.

- 5.2.3 Undertake annual visits to Inaccessible Island from February to early March to determine breeding status of Tristan Albatrosses, with follow up visits if an incubating bird was observed.

#### ***Atlantic Yellow-nosed Albatross***

- 5.2.4 Maintain annual monitoring of population trends and demography at long-term study colony on Gough Island.
- 5.2.5 Maintain annual monitoring of population trends and demography at recently established study colonies on Tristan and Nightingale islands.
- 5.2.6 Repeat sample-counts of incubating birds on Gough Island once every five years or more frequently if possible.
- 5.2.7 Investigate the feasibility of and undertake an island-wide census (based on the same approach used at Gough – scan counts of sample areas and using density figures in different habitats to estimate the overall population for the island) of incubating birds to assess overall population size at the main island of Tristan. The feasibility of such a census, including the desired frequency, should be considered and built into the routine monitoring programme. Some of the practical challenges include the thick tree and fern cover of the nesting habitat, and the variable densities of nests on Tristan.

#### ***Sooty Albatross***

- 5.2.8 Repeat scan-counts of incubating birds (Apparently Occupied Nests) in defined count areas (Cuthbert and Sommer, 2004a, 2004b, Sommer *et al.* 2008) at Gough Island every three years, or more frequently if possible, and annual sample monitoring at Tristan according to the guidelines provided in Sommer *et al.* (2008).
- 5.2.9 When visiting Inaccessible Island during the breeding season count the number of incubating birds at as many of the six inland sites in Figure 6 of Ryan (2005) as possible, with the large colonies on Long Ridge and Gony Ridge most important.

#### ***Southern Giant Petrel***

- 5.2.10 Monitor breeding numbers and success (if possible) annually at the two major breeding colonies on Gough Island.

#### ***Spectacled Petrel***

- 5.2.11 Count the number of burrows in the eight stream catchments in upper Ringeye Valley, Inaccessible Island, and determine level of burrow occupancy (see Ryan, 2005, and Ryan *et al.*, 2006 for details of methods), once every one to three years to monitor population trends.
- 5.2.12 Conduct an island-wide census of Inaccessible Island once every five years.

## **Grey Petrel**

- 5.2.13** Investigate feasibility of setting up and implementing a study plot(s) at Gough Island, where population trends can be monitored at intervals of one to three years.
- 5.2.14** Survey Inaccessible Island during winter months for evidence of breeding.

## **6. Foraging range and areas**

Albatrosses and petrels face a range of threats, both on land and at-sea. Chief amongst these is at-sea fisheries-related mortality. It is important to acquire data on foraging ranges and key foraging areas within these ranges for all ACAP species so that the spatial and temporal overlaps between the distribution of these species and fishing effort can be assessed, and used to inform the better management of seabird-fisheries interactions.

The Global Procellariiform Tracking Database, developed and maintained by BirdLife International as a repository for all albatross and petrel tracking data, is an important international tool for the conservation of albatrosses and petrels (BirdLife International 2004). All researchers collecting albatross and petrel tracking data are encouraged to contribute their data to the database so that they can be collated and used for regional analyses, especially to determine overlap between seabird distribution and fisheries effort. BirdLife International and others have already used these data for a range of conservation purposes, especially relating to assessments for Regional Fishery Management Organisations (RFMOs), demonstrating their value as an important conservation tool. It should be noted that access to these data is subject to the approval of the dataholders.

### **6.1 Current work on foraging ecology at the Tristan Islands**

Breeding Tristan Albatrosses have been satellite tracked (in 2000/01) to determine at-sea distribution and assess overlap with fishing effort during the breeding season (Cuthbert *et al.*, 2005). The results of this work show that breeding Tristan Albatrosses spend about 41% of their at-sea time within the Tristan Exclusive Economic Zone (EEZ - 200 nautical miles around the islands), and that 32% of the bird-hook interactions reported took place within this area. Most of the remaining interactions took place on the high seas and the territorial waters of southern African (South Africa and Namibia) and South American countries, between the latitude of 30°S and 40°S (Cuthbert *et al.*, 2005). Geolocators have been deployed on adult birds for periods of up to three years to assess the distribution of birds throughout the year, especially during the non-breeding period. No tracking data have been collected on the movements of juvenile birds (including the dispersal of fledglings). This represents a critical gap which need to be filled, especially in light of the Critically Endangered status of the Tristan Albatross, and the fact that it is known to be caught as bycatch in fisheries off South Africa and South America (Favero *et al.*, 2003, Neves and Olmos, 1998, Neves *et al.*, 2000, Petersen *et al.*, 2008, Ryan *et al.*, 2002). Moreover, it seems that younger birds may be more susceptible to fisheries mortality than adult birds (Ryan *et al.*, 2001).

The RSPB have collected diet information for the Tristan Albatross and some limited data for the Atlantic Yellow-nosed Albatross from Gough Island (RSPB unpublished data).

**ACAP requirements:  
Foraging range and areas**

1. Conserve and, where feasible and appropriate restore those (marine) habitats, which are of importance to albatrosses and petrels (Art III, 1a).
2. Develop management plans for important areas at sea (AP 2.3.2).
3. Develop and implement measures to prevent, remove, minimise or mitigate the adverse effects of activities that may influence the conservation status of albatrosses and petrels (at sea). These include appropriate use of environmental impact assessment (Art III 1c; AP 3.1).
4. Initiate or support research into the effective conservation of albatrosses and petrels (at sea) (Art III 1d).
5. Contribute to the UK report to the Secretariat (to Advisory Committee and to each session of Meeting of Parties). The report should cover all above points as expanded upon in the Action Plan and any other relevant points. Specifically, the Advisory Committee aims to include in its report:
  - a) reviews to characterise, on the best available evidence, the foraging range (and principal feeding areas within this range) and migration routes and patterns, of populations of albatrosses and petrels;
  - b) reviews of data on the distribution and seasonality of fishing effort in fisheries which affect albatrosses and petrels;
  - c) identification of information gaps as part of the above reviews, with a view to addressing these in future priorities.

Small numbers of Atlantic Yellow-nosed and Sooty Albatrosses from Gough Island have been satellite tracked and a larger number of birds, including some from Tristan, tracked using geolocators over the period 2001-2006. These data have been processed, and although not yet published, have been submitted, together with the Tristan Albatross tracking data, to the Global Procellariiform Tracking Database. The data have recently being used in a scientific assessment of the impacts of the International Commission for the Conservation of Atlantic Tunas (ICCAT) fisheries on seabirds. Given the high degree of overlap of ACAP species from Tristan with ICCAT fisheries, the results of this assessment and the implementation of management recommendations to reduce bycatch levels are of critical importance (see Section 7.1).

ACAP species which have not yet been tracked from Tristan include the Southern Giant Petrel, Spectacled Petrel (eight satellite or platform terminal transmitters (PTT) will be deployed on Spectacled Petrels in September 2009) and Grey Petrel. All three of these species are known to be killed as a result of incidental mortality in longline and trawl fisheries, so information on their distribution at sea and overlap with fisheries would be of great value. Given the relative sizes of the Tristan populations of these species in global terms, the Spectacled and Grey Petrels are of higher priority than is the Southern Giant Petrel. As part of a study to determine their marine habitat utilization and overlap with fisheries in the south

western Atlantic Ocean, wintering Spectacled Petrels were caught and tracked off the coast of Brazil in 2006 and 2007 (Bugoni *et al* 2009).

## 6.2 Recommendations

- 6.2.1 Identify priority gaps in the tracking data, and attempt to fill these. Suggested priorities for ACAP species at the Tristan Islands, in order of priority are: juvenile and pre-breeding Tristan Albatrosses, adult Spectacled and Grey petrels, juveniles and pre-breeders of other ACAP species (i.e. besides Tristan Albatross). Although Southern Giant Petrels are known to be killed incidentally by fishing activities, the relatively small size of the population at Gough Island in relation to the global population, and the increasing trend of the population make this species the lowest-order priority of the ACAP species.
- 6.2.2 Ensure all tracking data are submitted regularly and made available to the Global Procellariiform Tracking Database for use in updated analyses.
- 6.2.3 Seek opportunities to collaborate with researchers and institutions involved with tracking work on ACAP species at other sites and thus contribute to regional and global assessments and/or reviews of albatross and petrel distribution and overlap with fisheries.
- 6.2.4 Following the analysis and publication of the diet data already collected, consider designing and implementing a diet-sampling programme, based on the protocols outlined in Phillips (2006). This method involves inducing regurgitation by chicks immediately after they have been fed, and was tested on Black-browed and Grey-headed Albatrosses *Thalassarche chrysostoma* at Bird Island, South Georgia, without any deleterious impacts on the subsequent survival or fledging mass of chicks sampled. A diet-sampling programme would provide information on the extent to which albatrosses include and rely on discards and offal in their diet, as opposed to natural prey. The methods are relatively simple and do not pose the risk of nest desertion by adults. Routine sampling (30 samples once every three years per species) could be built into existing monitoring initiatives.

## 7. Fishery-related issues

The management of seabird-fisheries interactions, particularly the reduction of incidental mortality of seabirds in longline and trawl fisheries, is a critical component of ACAP. The waters around the Tristan Islands are especially important for albatrosses and petrels, both those breeding on the islands, and non-breeding visitors. Given the wide-ranging nature of albatrosses and petrels, fisheries activities outside of the waters managed by the Tristan da Cunha Government, pose a significant threat to Tristan Island birds, particularly during migration and when not breeding. The management of these threats – both on the high seas and in the jurisdictional waters of other nations - requires concerted international action.

**ACAP requirements:  
Fishery related issues**

1. Develop management plans for important areas at sea (AP 2.3.2).
2. Ensure sustainability of marine living resources that provide food for albatrosses and petrels (AP 2.3.1 a).
3. Take appropriate operational, management and other measures to reduce or eliminate the mortality of albatrosses and petrels resulting incidentally from fishing activities (AP 3.2.1).
4. Adopt measures agreed in other fora for the conservation of albatrosses and petrels [at sea].
5. Help ensure others do the same. Take all measures to eliminate IUU fishing (AP 3.2.2).
6. Support the implementation of the actions elaborated in the FAO International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries, which complement the objectives of this Agreement (Art III 1h).
7. Tackle/avoid pollution (AP 2.3.1 b).
8. Initiate or support research into the effective conservation of albatrosses and petrels [at sea] (Art III 1d)
9. Collect reliable and verifiable data on interactions with fisheries (AP 4.2).
10. Contribute to UK report to Secretariat (to Advisory Committee to each session of Meeting of Parties). The report should cover all above points as expanded upon in the Action Plan and any other relevant points. Specifically the Advisory Committee aims to include in its report:
  - a. identification and assessment of known and suspected threats affecting albatrosses and petrels [at sea];
  - b. identification of existing and new methods by which these threats may be avoided or mitigated;
  - c. reviews, and updating on a regular basis, of data on the mortality of albatrosses and petrels in, *inter alia*, commercial, and other relevant fisheries;
  - d. reviews of data on the distribution and seasonality of effort in fisheries which affect albatrosses and petrels;
  - e. reviews of the nature of, coverage by, and effectiveness of, protection arrangements for albatrosses and petrels [at sea].

ACAP's *Seabird Bycatch Working Group* (SBWG) works together with the ACAP Parties to assess reduce and mitigate negative interactions between fisheries activities and albatrosses and petrels. The overall aims of the SBWG are to identify actions that will assist in assessment, mitigation and reduction of negative interactions between fishing operations and albatrosses and petrels, and to develop technical information and products to assist Parties, Regional Fisheries Management Organisations (RFMOs) and other relevant international and national bodies to reduce seabird bycatch.

The SBWG has undertaken work to develop a strategy for the Agreement and Parties to engage and assist RFMOs and other relevant bodies to assess and minimise bycatch of albatrosses and petrels. At the most recent Advisory Committee meeting (AC4), it was decided that the proposed approach of appointing RFMO Coordinators to coordinate ACAP engagement at each RFMO meeting would be pursued in a step-wise manner. In the first phase, the RFMO Coordinator approach will be trialled in four RFMOs: the Indian Ocean Tuna

Commission (IOTC), Inter-American Tropical Tuna Commission (IATTC), ICCAT and Western and Central Pacific Fisheries Commission (WCPFC).

### **7.1 Current status of fisheries-related issues at the Tristan Islands**

The Tristan da Cunha Fishery Limits Ordinance, 1983 (as amended in 1991, 1992, 1997 and 2001) defines the fishery limits of Tristan da Cunha as 200 nautical miles around each of the islands, and makes provision for the regulation of fishing activities within these limits. The main commercial fishery at Tristan is for Tristan Rock Lobster *Jasus tristani*, for which there is currently a single concession holder. This fishery is managed by means of a quota system, and has relatively little impact on the seabird populations of the Tristan Islands (Ryan, 1991).

About 70% of licensed fishing vessels within Tristan's EEZ carry observers. There is not full observer coverage on the lobster fishing boats. There is only one longliner licensed to fish for whitefish at any one time throughout the year. The number of licences for tuna longline vessels is not limited, as these vessels only stay in the area for a short period whilst they are following the tuna through Tristan's EEZ. The longline vessels may not fish within 50 nautical miles of Tristan da Cunha, Nightingale, Inaccessible or Gough Islands. Permit conditions require a range of mitigation measures to be used, including shooting lines at night and using bird-scaring (tori) lines. All bird mortalities have to be recorded in the logbooks. More recently, efforts have been directed towards the better weighting of lines and better use of tori lines.

There has been a problem in the past with keeping Tristanian observers on the vessels for the entire period of fishing at Tristan, and/or requiring that vessels return to Tristan to change observers, thus hampering fishing operations. Consequently, the Tristan Government has formalised an agreement of understanding with CAPFISH (South Africa) that, in the event of Tristanian observers not being available, observers from CAPFISH will be placed on longliners operating out of Cape Town and fishing within Tristan's EEZ. The seabird bycatch data collected thus far await further analysis.

Of major concern for the management of fish resources and seabirds in the waters around the Tristan Islands is the lack of resources to ensure compliance with the fisheries ordinance and permit conditions, and to prevent Illegal, Unreported and Unregulated (IUU) fishing. The current Tristan fisheries patrol boat, based on the main island, has a range of about 150 nautical miles, which means that it can only patrol a maximum of 75 nautical miles, and realistically only 50 nautical miles, from the harbour. Consequently, the seamounts around the Tristan da Cunha archipelago where IUU fishing is thought to take place cannot be patrolled. The current harbour also limits the size of the patrol vessel that can operate out of Tristan.

On the basis of the reduction in the number of vessels, especially tuna vessels, applying for fishing licences, it is thought that IUU fishing is ongoing and possibly increasing around Tristan. Previously, applications for fishing licences were received from up to six vessels per year. Over the last few years, the number of vessels applying for licences has been reduced to one or none per year. As indicated earlier, a large proportion of the spatial interaction between Tristan Albatrosses (and likely other species susceptible to bycatch) and longline fishing activities takes place within the Tristan EEZ, especially during the breeding season. Consequently, strengthening the fisheries protection regime in this area is of utmost importance, both for the fishery and economy of Tristan and for the conservation of its globally

important seabirds, as well as the non-breeding ACAP species visiting the Tristan EEZ (Table 2). The Marine Resource and Assessment Group (MRAG) of Imperial College, London have been contracted by the UK Department for International Development (DFID) to undertake a desktop study on how best to combat IUU fishing in the UK SAOTs of St Helena, Ascension and Tristan da Cunha. This work is presently underway and once completed will hopefully provide guidance on how to strengthen the fishery protection regime around the Tristan Islands.

ACAP species from Tristan are also impacted by longline and trawl fishing activities outside of its EEZ - on the high seas, and within the jurisdictional waters of other countries, mainly Angola, Brazil, Namibia, South Africa and Uruguay. On the basis of the degree of overlap between seabirds and RFMO fisheries and the characteristics of species that are known or likely to be caught in these fisheries, ICCAT is the most important RFMO for albatrosses and petrels from Tristan. Scientists from the British Antarctic Survey (BAS), the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and BirdLife International have recently completed an assessment of the impact of ICCAT fisheries on seabirds. The Tristan Albatross and the Atlantic Yellow-nosed Albatross were two of the candidate species used in the models to assess fishery impacts. The assessment was presented at a meeting of the Ecosystems sub-committee in June 2009. On the basis of this work, the committee concluded that ICCAT fisheries have measurable impacts on some seabird populations, including several that are threatened with extinction, and that minimizing seabird mortality in ICCAT fisheries should result in improved population status and reduced conservation concerns. The committee consequently recommended that the existing ICCAT rules on the use of mitigation methods be strengthened to include a wider suite of cost-effective measures that, if properly applied, are known to reduce levels of bird bycatch. The committee also recognised that the ability to assess and monitor impacts of fisheries on seabird populations was severely hampered by low levels of observer coverage and thus inadequate bycatch reporting, and so recommended much more extensive and rigorous information on seabird bycatch rates be collected. These recommendations still need to be endorsed by the Commission, the decision-making body of ICCAT. It is important that the results of this assessment are translated into the development and implementation of improved seabird bycatch mitigation policy and action.

It would be useful to check (through fishing logbooks) whether any ICCAT-registered vessels (fishing logbooks) have recorded seabird mortalities around the Tristan Islands, which may provide an indication that there has been fishing activity in this area without a licence.

## **7.2 Recommendations**

A multi-pronged approach is required to eliminate or minimise bycatch of Tristan Islands' albatrosses and petrels. Firstly, it is important that rigorous management and monitoring of the various fisheries within the Tristan EEZ takes place to ensure full compliance with conservation and other measures and so minimise incidental mortality of seabirds in fisheries. Because mortality is also taking place outside of the Tristan EEZ, it is important that organisations and countries responsible for fisheries management in these areas (on the high seas and within the jurisdictional waters of other nations) are encouraged and assisted to reduce and ultimately eliminate seabird bycatch.

- 7.2.1** Analyse seabird bycatch data already collected from observers on board vessels within the Tristan EEZ to produce updated statistics on seabird bycatch levels within the regulated fisheries. Ensure continued collection and reporting of seabird bycatch data (see 7.2.13).
- 7.2.2** Provide a summary of what bycatch data are currently being collected by observers on vessels within the Tristan EEZ, with detailed information on how the fisheries are being monitored and bycatch data collected. Participate in the process to develop and test a prototype bycatch data collection form for ACAP (reporting requirement for the intersessional period up to AC5). Use this process to design a form to be used by the Tristan Fisheries Department to collect and report the relevant data.
- 7.2.3** Informed by the outcome of the MRAG study, develop and implement a strategic, and all-encompassing fisheries protection regime for the Tristan EEZ (including the potential role of intelligence sharing, VMS, satellite, targeted patrolling, support from the Royal Navy and other vessels, and monitoring of catch landings).
- 7.2.4** Undertake an IPOA-Seabirds Assessment for Tristan da Cunha (and develop and implement a national plan of action for reducing the catch of seabirds in longline and trawl fisheries).
- 7.2.5** UK with other EU ACAP Parties (France, Spain) to seek to ensure better engagement by European Commission in environmental issues relating to external fisheries, especially to address the matter of seabird-fisheries interactions and seabird bycatch mitigation in RFMOs.
- 7.2.6** UK to include seabird bycatch expertise at priority RFMO meetings (or at least engage experts prior to and following relevant meetings).
- 7.2.7** UK to participate actively in ACAP RFMO coordinator approach, which will be piloted in IOTC, IATTC, ICCAT and WCPFC. In this approach, an RFMO coordinator will work with ACAP Parties and Advisory Committee officials to develop an ACAP-agreed engagement strategy for each RFMO meeting. Of these pilot RFMOs, ICCAT is of particular importance for birds from the Tristan Islands and the rest of the South Atlantic.
- 7.2.8** Use results of the ICCAT seabird risk assessment study to develop an influencing strategy aimed at reducing/eliminating seabird bycatch by the use of a suite of appropriate mitigation measures and an effective observer scheme in ICCAT fisheries. Coordinate with other ACAP parties as envisaged in the ACAP-RFMO interaction plan.
- 7.2.9** UK to seek to ensure that other ACAP Parties (such as Brazil, South Africa and Uruguay) support or initiate measures to reduce seabird bycatch within relevant RFMOs.
- 7.2.10** Collaborate with other countries/organisations to help reduce bycatch (sharing of expertise and advice) and IUU fishing within and outside of the Tristan EEZ.
- 7.2.11** Support and participate in relevant bycatch mitigation research.

- 7.2.12 Encourage and support initiatives by industry, governments and RFMOs to combat IUU fishing.
- 7.2.13 Ensure that the seabird bycatch data collection and reporting requirements of ACAP are met (new protocols are currently being developed – see above, point 7.2.2).

## **8. Data acquisition and management**

ACAP requires Parties to cooperate in the development and implementation of systems for collecting, analysing and curating a range of data, as well as exchanging information. The ACAP Working Groups have developed databases for breeding sites and status and trend data, and most recently a relational database to curate and coordinate data from all the ACAP Working Groups. The centralised storage and management of these data is a requirement of the Action Plan of the Agreement, and enables regular monitoring and review of the collective success of Parties in addressing the objective of the Agreement (i.e. to achieve and maintain a favourable conservation status for albatrosses and petrels). These data and information are also used for the compilation of the ACAP Species Assessments, and for education and public awareness purposes.

The ACAP Action Plan requires the Advisory Committee to review and update regularly data on mortality of albatrosses and petrels in commercial and other relevant fisheries (Action Plan 5.1 (f)). It is envisaged that the bycatch trends for ACAP species will serve as a performance indicator of the Agreement. Consequently, Parties will be required to submit these data, in a standardised manner, to the SBWG as part of their annual reporting. At the Fourth Meeting of the Advisory Committee (AC4), it was agreed that prior to the Parties submitting seabird bycatch data, a step-wise process needs to be followed to determine the precise purpose and objective for the data collection, what data Parties are currently collecting, and finally develop and test a prototype bycatch data collection form with comprehensive instructions for its use.

### **8.1 Current status of ACAP data management at the Tristan Islands**

Most of the historical and present breeding site and status and trend data on albatrosses and petrels at the Tristan Islands have and continue to be collected by Tristan Government officers (now the Tristan Conservation Department), the RSPB, UCT (and volunteers from the South African weather station on Gough Island). The relevant data have been submitted to the ACAP Breeding Sites and Status and Trends Working Groups. Much of these data have been analysed and included in various reports, monitoring manuals, management and action plans and scientific publications. As part of the Darwin Initiative Project, a data and management system was set up by the RSPB and Tristan Government for the capture, storage and management of long-term seabird monitoring data. A survey of all available data from the relevant parties should be carried out and a protocol for copying outstanding and new data to a Tristan held database established, including protocols for maintaining backup copies elsewhere (such as RSPB and UCT).

**ACAP requirements:  
Data acquisition, management, transmission and dissemination**

1. Collect reliable and verifiable data on interactions with fisheries (AP 4.2).
2. Exchange information and results from albatross and petrel, and other relevant, conservation programmes (Art III 1g).
3. Collaborate to develop systems for collecting and analysing data, and exchanging information (Art V a).
4. Exchange information regarding adoption and enforcement of legislative and other management approaches to conservation of albatrosses and petrels (Art V b).
5. Contribute to UK report to Secretariat (to Advisory Committee to each session of Meeting of Parties). The report should cover all above points as expanded upon in the Action Plan and any other relevant points. Specifically the Advisory Committee aims to include in its report:
  - a) assessments and reviews of the status of populations of albatrosses and petrels, including an assessment of population trends of the species, especially those in poorly known areas and of species for which few data are available;
  - b) reviews, and updating on a regular basis, of data on the mortality of albatrosses and petrels in, *inter alia*, commercial, and other relevant fisheries;
  - c) reviews of data on the distribution and seasonality of effort in fisheries which affect albatrosses and petrels;
  - d) reviews of the status at breeding sites of introduced animals, plants and disease causing organisms known or believed to be detrimental to albatrosses and petrels; identification of gaps in information as part of the above reviews, with a view to addressing these as future priorities.

Fisheries observer data, including incidental mortality of seabirds, are currently included in reports produced by CAPFISH for the Tristan Government. These data are also analysed by the Tristan Government. With the establishment of the Tristan Conservation Department, and the appointment of Norman Glass as the Assistant Conservation Officer, who has worked as a Fisheries Observer on most of the longline vessels operating in Tristan's EEZ, it would be sensible for this department (together with the Fisheries Department) routinely to compile and report on seabird bycatch data.

All banding data are submitted to the African Bird Ringing Unit (AFRING), with separate databases shared between the RSPB, UCT and Tristan Conservation Department. A bibliography of research into the natural sciences at the Tristan da Cunha islands from 1719 to 1983 was published in 1984 (Watkins *et al.* 1984). More recently a bibliography of popular and scientific literature for Gough Island, covering the period 1505 to 2005 has been published (Hänel, 2008).

## **8.2 Recommendations**

- 8.2.1** Survey all relevant parties to identify outstanding data and ensure that all historical and recent data on albatrosses and petrels are incorporated into the Tristan seabird database, and that future (updated) data are captured routinely and properly maintained.

- 8.2.2** Ensure that updated population status and trends and breeding site management data are submitted to ACAP on a regular basis.
- 8.2.3** Request all researchers (data holders) conducting research and monitoring activities on albatrosses and petrels at the Tristan Islands make their data available to the Tristan Government for inclusion in the seabird database and for use by ACAP, subject to the ACAP rules for accessing and using such data and intellectual property rights.
- 8.2.4** Maintain a list of research and monitoring projects of relevance to albatrosses and petrels at the Tristan Islands.
- 8.2.5** Maintain the Gough Island bibliography of popular and scientific literature, and consider expanding the bibliography to cover the other islands of the group.
- 8.2.6** Ensure that seabird bycatch reporting requirements of ACAP are met (new protocols are currently being developed – this is the same action as in **7.2.13**).

## **9. Education and awareness**

Dissemination of information and targeted training and awareness programmes are crucial to promote and support the objectives of ACAP. It is also important that efforts in this area are coordinated, and that information, lessons learnt and experience are exchanged and shared between ACAP Parties and other target audiences to maximise the benefits of education and awareness building initiatives.

### **9.1 Current status of education and awareness at the Tristan Islands**

The Tristan school curriculum incorporates a range of local environmental issues. The Tristan Conservation Department provides annual talks and presentations to school groups. The development of new educational and interpretive materials forms part of the new Assistant Conservation Officer's work program. All tourist vessels visiting Nightingale and Inaccessible Islands are required to collect a guide (one per eight tourists) from Tristan to ensure the visitors are well informed about the biodiversity of the islands, and to ensure that any potential disturbance is prevented. The Darwin Initiative Project (from 2003-2006) contributed to raising public awareness through the production of a range of media, from press articles, a project leaflet, an education pack for teachers and newsletters. This project also led to the development of the Tristan Biodiversity Action Plan, and a number of projects and initiatives to support the implementation of this plan. These include the development of monitoring manuals, field-work and data management training and the active involvement of Tristanians in a broad range of field-work activities. A range of educational materials has been produced as part of the SAIS project. These include leaflets designed for tourists visiting the different islands (covering information on the wildlife and biosecurity measures), educational posters on invasive species together with a lesson plan for the local school, and the production in 2009 of two conservation newsletters highlighting the work of the Tristan Conservation Department and the Darwin Marine Project.

### **ACAP requirements: Education and awareness**

1. Exchange information and results from albatross and petrel, and other relevant, conservation programmes (Art III 1g).
2. Undertake exchange of expertise, techniques and knowledge (Art V f).
3. Ensure the existence and appropriateness of training for, *inter alia*, the implementation of conservation measures (Art III 1e)
4. Develop and implement training programmes on conservation techniques and measures to mitigate threats affecting albatrosses and petrels (Art V e).
5. Develop and maintain programmes to raise awareness and understanding of albatross and petrel conservation issues (Art III 1f).
6. Implement education and awareness programmes for users of areas where albatrosses and petrels may be encountered (Art V c).
7. Design and implement comprehensive programmes for public information in relation to the conservation of albatrosses and petrels (Art V d).
8. Promote the objectives of this Agreement and develop and maintain coordinated and complementary working relationships with all relevant international, regional and subregional bodies.
9. Contribute to UK report to Secretariat (to Advisory Committee to each session of Meeting of Parties). The report should cover all above points as expanded upon in the action plan and any other relevant points. Specifically the Advisory Committee aims to include in its report:
  - a) reviews of education and information programmes aimed at conserving albatrosses and petrels.

An illustrated booklet on the natural history of Tristan da Cunha has been produced for the local school on Tristan (Tyler and Rothwell 2006). A field guide to the animals and plants of Tristan and Gough was published in 2007 (Ryan, 2007). An ACAP poster featuring the Tristan Albatross was produced in 2007 by ACAP and the Tristan ANRD. A wildlife and conservation section is maintained on the Tristan da Cunha website (<http://www.tristandc.com/wildlife.php>). It is presently under construction and in the process of being expanded.

## **9.2 Recommendations**

- 9.2.1** Promote the objectives of ACAP through the fora and mechanisms available (e.g. school curriculum, website, meetings); identify additional mechanisms to disseminate information.
- 9.2.2** Make best use of opportunities that arise as a result of outside researchers or individuals working at or visiting the Tristan Islands, by for example requiring that they present a public talk or presentation while on Tristan, and provide every opportunity for Tristanians to participate in research and monitoring activities.
- 9.2.3** Maintain the profile of the Tristan Islands as critical sites for the conservation of albatrosses and petrels, and of the work that is being undertaken to address the range of threats at the Tristan Islands and elsewhere.

- 9.2.4** Collaborate with other Parties and organisations in the development and implementation of regional and international education and awareness programmes.
- 9.2.5** Share expertise and collaborate with other South Atlantic Overseas Territories and other countries whose jurisdictional waters are important for South Atlantic albatrosses and petrels (Angola, Argentina, Brazil, Chile, Namibia, South Africa and Namibia) to encourage conservation (principally bycatch mitigation) of albatrosses and petrels in these areas.

## **10. Monitoring and review**

The progress of this Implementation Plan should be reviewed at regular intervals to ensure continued communication among parties and ongoing assessment of the conservation status of albatrosses and petrels at the Tristan Islands and the efficacy of actions directed at addressing threats. This will allow the Implementation Plan to be updated in response to review results, and for further refinement of actions and priorities, thus ensuring an adaptive management approach. The progress of the plan should be reviewed annually. The relevant recommendations of the ACAP Implementation Plan should be incorporated into the reviewed Management Plans for all islands and actions identified in the subsequent work programmes. It will primarily be the responsibility of the Tristan Conservation Department to fulfil the objectives of these plans in collaboration with other departments and agencies (RSPB, UCT, relevant South African Government bodies, etc.). In addition to reviewing formally the progress of the Implementation Plan, the annual review process will also be used for stakeholders to provide feedback on their ACAP-related activities. Ideally, the review process should take place prior to ACAP Advisory Committee meetings, allowing enough time to collate the necessary information and prepare the UK ACAP Implementation Report. A comprehensive review of the Implementation Plan should be carried out once every five years.

Given the range of individuals and organisations involved in ACAP-related work at the Tristan Islands, the review process will be conducted via email. It is proposed that the UK SAOT ACAP coordinator draft a template for the annual review, solicit the necessary inputs from stakeholders, undertake the review with the Tristan da Cunha stakeholders, and email the written review document to all stakeholders for further inputs. A comprehensive review of the Implementation Plan should be carried out once every five years.

### **10.1 Recommendations**

- 10.1.1** Develop a standardised template for the annual review of the Implementation Plan that links with the progress indicators being developed by ACAP.
- 10.1.2** Conduct annual review of plan, with inputs from all stakeholders.

## **11. Funding and prioritisation**

A range of organisations and individuals undertakes ACAP-related work at the Tristan Islands. This plan covers the full range of ACAP work and serves to ensure that this work is properly

integrated. The Government of Tristan da Cunha, together with Central Government in the UK, have overall responsibility for meeting the ACAP objectives. The Government of Tristan da Cunha will never have sufficient resources to carry out (or fund) all of the actions listed in this plan itself, and external funding will be necessary. In both cases, it is important that actions are prioritised.

Priority ratings (**High, Medium, Low**) for actions in Appendix 1 are based on the following principles:

- a) links to the UK's main formal obligations of reporting to ACAP should be afforded High priority;
- b) the main focus now should be on species of worst conservation status and on actions most likely to promote improvements to conservation status;
- c) the need to focus on at-sea issues as these are the most important, the most difficult and will likely take the longest;
- d) compilatory and related exercises should not be afforded High priority, unless directly related to a) above or are an essential precursor for crucial conservation action.

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### 13. Glossary of acronyms

<b>AC</b>	Advisory Committee of ACAP
<b>ACAP</b>	Agreement on the Conservation of Albatrosses and Petrels
<b>ACo</b>	ACAP coordinator South Atlantic Overseas Territories, JNCC
<b>ANRD</b>	Agriculture and Natural Resources Department, Tristan da Cunha
<b>BAS</b>	British Antarctic Survey
<b>BSWG</b>	Breeding Sites Working Group of ACAP's Advisory Committee
<b>CAPFISH</b>	Capricorn Fisheries, Cape Town, South Africa (manage fisheries observer programme on behalf of the Tristan da Cunha Fisheries Department)
<b>CBD</b>	Convention on Biological Diversity
<b>CSIRO</b>	Commonwealth Scientific and Industrial Research Organisation
<b>DCMS</b>	UK Department of Culture, Media and Sport
<b>Defra</b>	UK Department for Environment, Food and Rural Affairs
<b>DFID</b>	UK Department for International Development
<b>EEZ</b>	Exclusive Economic Zone
<b>FAO</b>	Food and Agriculture Organisation of the United Nations
<b>FCO</b>	British Foreign and Commonwealth Office
<b>IATTC</b>	Inter-American Tropical Tuna Commission
<b>ICCAT</b>	International Commission for the Conservation of Atlantic Tunas
<b>IOTC</b>	Indian Ocean Tuna Commission
<b>IPOA-S</b>	International Plan of Action for Reducing the Incidental Catch of Seabirds in Longline Fisheries (recent guidelines have extended this to cover also trawl and potentially gillnet fisheries)
<b>IUU</b>	Illegal, Unreported and Unregulated (fishing)
<b>IUCN</b>	International Union for Conservation of Nature
<b>JNCC</b>	Joint Nature Conservation Committee, UK
<b>RSPB</b>	Royal Society for the Protection of Birds
<b>OTEP</b>	Overseas Territories Environment Programme
<b>PTT</b>	Satellite or Platform transmitter terminals (used to track seabirds and other wildlife)
<b>RFMO</b>	Regional Fisheries Management Organisation
<b>RSA</b>	South African Government departments responsible for the weather station at Gough Island, and management of activities at Gough Island. The former is currently managed by the South African Weather Service, and the latter by the Antarctic and Islands Directorate of the Department of Environmental Affairs. These departments are currently in a state of flux.
<b>SAIS</b>	South Atlantic Invasive Species Programme
<b>SAOT</b>	South Atlantic Overseas Territories
<b>SBWG</b>	Seabird Bycatch Working Group of ACAP's Advisory Committee
<b>STWG</b>	Status and Trends Working Group of ACAP's Advisory Committee
<b>T-BAG</b>	Tristan Biodiversity Advisory Group
<b>TCD</b>	Tristan Conservation Department (part of Tristan Government)
<b>TDC</b>	Government of Tristan da Cunha
<b>TFD</b>	Tristan Fisheries Department (part of Tristan Government)
<b>UCT</b>	University of Cape Town, South Africa
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>WCPFC</b>	Western and Central Pacific Fisheries Commission

**Appendix 1: Summary of recommended actions, priority ratings, stakeholders, scheduling and funding arrangements for the Tristan Islands ACAP Implementation Plan. See Section 13 for a full list of acronyms**

	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
<b>4.</b>	<b>Breeding Sites</b>				
4.2.1	Ensure that policies and prescriptions in current Management Plans (including the Tristan Biodiversity Action Plan) are implemented and regularly reviewed	HIGH	TCD, T-BAG, RSPB, UCT, ACo	Ongoing	
4.2.2	Revise and implement Gough Island (1994) and Inaccessible Island (2001) Management Plans. Complete the compilation of the Tristan and Nightingale Management Plans (and implement)	HIGH	TCD, T-BAG, RSPB, UCT, ACo, Defra, JNCC, DCMS and DFID	2009, then ongoing	The revision of the Gough Island Management Plan is of particular importance, given that the current (1994) Management Plan pre-dates the discovery of the extent of the mouse problem at Gough. RSPB and Tristan Conservation Department have recently received funds from OTEP to carry out the revision, which is due to be completed in early 2010. The Tristan and Nightingale Island Management Plans are scheduled to be written by the Tristan Conservation Department in 2010.
4.2.3	Complete feasibility work on mouse eradication programme at Gough Island, and raise awareness and resources to implement eradication programme	HIGH	TCD, T-BAG, RSPB, UCT, ACo, Defra, FCO, JNCC, OTEP and DFID	2009-2010, then ongoing	Once the feasibility work has completed, this will inform the development of an operational plan. Need to raise sufficient funds to implement the operational plan. This is one of the most critical conservation needs.
4.2.4	Consider eradicating rats and house mice from Tristan	MEDIUM	TCD, T-BAG	Longer term consideration	Informed by lessons from the planned eradication programme at Gough Island, and from eradication interventions undertaken at or planned for other human-populated islands (e.g. Lord Howe).
4.2.5	Develop and implement a formal biosecurity strategy with strict quarantine measures to prevent the introduction of pests and diseases, especially in respect of rodents and avian diseases (for ACAP species).	HIGH	TCD, TDC, T-BAG, RSPB, UCT, ACo	2009-2010	A lot of work has already been undertaken in this area, and is formally included (as Objective 4) in the Tristan Biodiversity Action Plan. It is important that the actions listed in the Action Plan and elsewhere are taken up in biosecurity/quarantine legislation and that the protocols are strictly implemented and compliance is monitored
4.2.5a	Ensure that Inaccessible and Nightingale Islands remain rodent-free by implementing the quarantine-monitoring-contingency plan developed by the RSPB for these islands	HIGH	TCD, T-BAG	Ongoing,	Details contained in Varnham 2008

	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
4.2.5b	Develop quarantine protocols for vessels leaving Cape Town for Tristan, and establish capacity in Cape Town to carry out these measures	HIGH	TDC, TCD, RSPB/SAIS, T-BAG	Ongoing	Arrangements are currently being made to formalise capacity in Cape Town with assistance from CAPFISH and Tristan House staff to implement quarantine measures
4.2.5c	Ensure that strict quarantine protocols are implemented on all other vessels visiting the Tristan Islands or moving between islands, which should also be expected to demonstrate that they are rodent-free	HIGH	TDC, TCD	Ongoing	Part of ongoing and overall biosecurity/quarantine strategy
4.2.6	Formalise a structure within the Tristan Government to implement biosecurity policies and measures in a coordinated manner	HIGH	TDC, TCD	2009-2010	The recently established Conservation Department are currently responsible for biosecurity matters. Clearly, biosecurity policies and practices apply to a number of departments, and it is important to formalise a structure within Government to coordinate activities
4.2.7	Investigate funding opportunities to erect a biosecurity building on the main island of Tristan	MEDIUM	TDC, TCD, T-BAG, RSPB/SAIS, JNCC	2009-2010	A biosecurity store/building would be helpful in checking supplies and materials coming into the islands. Investigations are currently underway to determine the cost of a purpose made structure and opportunities to fund the erection of such a structure
4.2.8	Continue to support and strictly manage tourism activities at the Tristan Islands, especially in relation to biosecurity	MEDIUM	TDC, TCD, T-BAG	Ongoing	
4.2.9	Compile and maintain a list indicating the presence or otherwise of alien mammals at all ACAP breeding sites	HIGH	ACo, TCD, T-BAG, RSPB, UCT	2009 (before AC5)	Include information about the current status (eradicated or extant), the year of the eradication, whether it was deliberate, the method used, whether an eradication campaign is being planned, the proposed methods, and an indicative year (this is an ACAP reporting requirement by AC5)
4.2.10	Compile and maintain a list of islands from which ACAP species are known to have bred in the past, but have since been extirpated	MEDIUM	ACo, TCD, T-BAG, RSPB, UCT	2009 (before AC5)	To include the relevant island characteristics (location, size, presence of alien mammals etc) and, if documented, the peak number of breeding pairs and year, year of last breeding attempt, and the likely reasons why breeding no longer takes place (ACAP reporting requirement by AC5)

	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
4.2.11	Secure funding to ensure continuation of the support position for the Tristan Conservation Department	HIGH	TCD, RSPB, Defra, FCO, DFID, JNCC, ACo	Funding needed from 2010	RSPB have seconded a staff member to work with the Tristan Conservation Department from December 2008 for a period of a year. It has been a very successful intervention in building capacity to undertake ACAP and a range of other conservation work at Tristan, and needs to continue beyond the currently funded period (ending December 2009)
<b>5.</b>	<b>Status and Trends</b>				
<b>Tristan Albatross</b>					
5.2.1	Maintain annual monitoring of population size and demographic parameters at Gough Island study colonies (including banding adults and chicks), ensuring sufficient sample size to estimate accurately these demographic parameters	HIGH	UCT/RSA, RSPB, TCD	Ongoing	Some ACAP funding has been provided to continue work, but long-term funding is required to ensure continuation of work
5.2.2	Continue island-wide counts of incubating birds and large chicks at Gough Island.	HIGH	UCT, RSPB, TCD	The frequency of these counts will depend on the availability of capacity and resources	Some funding is available to continue work in the short-term, but long-term funding is required to ensure continuation of work
5.2.3	Survey Inaccessible Island for evidence of breeding by Tristan Albatrosses	MEDIUM	TCD, RSPB, T-BAG	February to early March of each year	Can be tied in with other routine and opportunistic conservation work at Inaccessible Island.
<b>Atlantic Yellow-nosed Albatross</b>					
5.2.4	Maintain annual monitoring of population trends and demography at long-term study colony on Gough	HIGH	UCT/RSA, RSPB, TCD	Ongoing	Ensure continuation of long-term monitoring project
5.2.5	Maintain annual monitoring of population trends and demography at recently established study colonies on Tristan and Nightingale islands	HIGH	TCD, RSPB, T-BAG	Ongoing	Ensure long-term monitoring in recently established study plots. Currently carried out by TdC Conservation Department, subject to the availability of resources (e.g. petrol to visit Nightingale), which need to be secured to ensure long-term implementation
5.2.6	Repeat sample-counts of incubating birds on Gough Island once every five years or more frequently if possible	HIGH	TCD, RSPB, UCT, T-BAG	Once every five years or more frequently if possible	Based on methodology in Gough monitoring manual

	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
5.2.7	Investigate the feasibility of and undertake an island-wide census (based on the same approach used at Gough – scan counts of sample areas and using density figures in different habitats to estimate the overall population for the island) of incubating birds to assess overall population size at the main island of Tristan	MEDIUM	TCD, RSPB, UCT, T-BAG	In the medium term, if practical/feasible	It would be useful to obtain a current estimate for the Tristan population, but this would depend on the feasibility and costs involved. Some of the challenges include the thick tree and fern cover of the nesting habitat, and variable densities of the nests on Tristan. The feasibility of such a census, including the desired frequency, should be considered and built into the routine monitoring programme
<b>Sooty Albatross</b>					
5.2.8	Repeat scan-counts of incubating birds (Apparently Occupied Nests) in defined count areas (Cuthbert and Sommer, 2004a, 2004b) at Gough Island every three years, or more frequently if possible. Annual sample monitoring at Tristan.	HIGH	RSPB, UCT, TCD, T-BAG	Once every three years or more frequently if possible (Gough). Annual monitoring of sample plots at Tristan	According to methodology and count areas defined in Gough Monitoring manual and Tristan and Nightingale Monitoring manuals. At Tristan and Nightingale, the initial focus of seabird monitoring efforts is on Atlantic Yellow-nosed Albatrosses and Rockhopper Penguins, and the plan is to include Sooty Albatrosses more formally as capacity is increased
5.2.9	When visiting Inaccessible Island during the breeding season count the number of incubating birds at as many of the six inland sites in Figure 6 of Ryan (2005) as possible, with the large colonies on Long Ridge and Gony Ridge most important.	MEDIUM	RSPB, UCT, TCD, T-BAG	Opportunistic. When visiting the island at the right time of year (during the breeding season), and time permits.	See Section 4.4 and Fig. 6 in Ryan (2005) for a description of the methodology and the location of the inland sites. Repeated checks of these sites should give an indication of population trends. However, the results should be treated with caution as the inland sites are possibly peripheral to the main breeding habitat along the coastal cliffs. Moreover, scan counts from a distance will not give an indication of failed nests
<b>Southern Giant Petrel</b>					
5.2.10	Monitor breeding numbers and success (if possible) annually at the two major breeding colonies on Gough Island	MEDIUM	RSPB, UCT/RSA, TCD, T-BAG	Ongoing/annually	Counts have been conducted annually since 2003. Long-term continuation will require a commitment of resources
<b>Spectacled Petrel</b>					
5.2.11	Count the number of burrows in the eight stream catchments in upper Ringeve Valley, Inaccessible Island, and determine level of burrow occupancy	HIGH	TCD, UCT, RSPB, T-BAG	Once every one to three years	Use methodology and areas defined in Ryan, 2005, and Ryan <i>et al.</i> , 2006. Will depend on access to the island
5.2.12	Conduct an island-wide census of Inaccessible Island once every five years	HIGH	TCD, UCT, RSPB, T-BAG	Once every five years	Last counts conducted in 1999 and 2004. These counts show that the population is increasing, but given the susceptibility of the species to longline mortality, it is important to

					continue monitoring numbers
	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
<b>Grey Petrel</b>					
5.2.13	Investigate feasibility of setting up and implementing a study plot(s) at Gough Island, where population trends can be monitored at intervals of one to three years	MEDIUM	UCT/RSA, RSPB, TCD, ACo, T-BAG	2009 and then at intervals of one to three years if considered feasible	This could be considered, together with other aspects of the monitoring activities at Gough, in the review of the Management Plan
5.2.14	Survey Inaccessible Island for evidence of breeding	MEDIUM	UCT, RSPB, TCD, T-BAG	When next possible. Would require a winter visit to Inaccessible	
<b>6</b>	<b>Foraging range and areas</b>				
6.2.1	Identify priority gaps in the tracking data, and attempt to fill these	HIGH/MEDIUM	RSPB, UCT, TCD, T-BAG	2008/09, then ongoing	In order of priority (ACAP spp): juvenile and pre-breeding Tristan albatrosses, adult spectacled and grey petrels, juveniles and pre-breeders of other ACAP species (besides Tristan Albatross).
6.2.2	Ensure all tracking data are submitted to the Global Procellariiform Tracking Database	HIGH	RSPB, UCT, TCD, T-BAG, ACo, BirdLife	Ongoing	Ensure that all researchers collecting tracking data on Tristan species routinely submit their tracking data to the Global Procellariiform Tracking Database, subject to intellectual property rights and user agreements.
6.2.3	Seek opportunities to collaborate with researchers and institutions involved with tracking work on ACAP species at other sites	MEDIUM	RSPB, UCT	Ongoing	Collaboration essential to monitor status of regional and global populations
6.2.4	Following the analysis and publication of the diet data already collected, consider designing and implementing a diet-sampling programme. Design and implement a diet sampling programme, based on the protocols outlined in Phillips (2006)	LOW	RSPB, UCT, TCD, ACo, T-BAG	2009-2010 (investigate feasibility and design programme), and then ongoing (once every three years) if feasible	Diet data have been collected for Tristan Albatross, and some limited data for the Atlantic Yellow-nosed Albatross from Gough Island. Once these data have been analysed and published, consideration should be given to a routine diet sampling programme, building on methods already used, and the protocol described in Phillips (2006). This protocol involves inducing regurgitation by chicks immediately after they have been fed, and was tested on black-headed and grey-headed albatrosses at Bird Island, without any deleterious impacts on the subsequent survival or fledging mass of chicks sampled. Routine sampling (30 samples once every three years per species) could be built into existing monitoring initiatives

	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
7	<b>Fishery-related issues</b>				
7.2.1	Analyse seabird bycatch data already collected from observers on board vessels within the Tristan EEZ to produce updated statistics on seabird bycatch levels within the regulated fisheries. Ensure continued collection and reporting of seabird bycatch data (see 7.2.13)	HIGH	TFD, TCD, CAPFISH, ACo	2009 and then ongoing	To provide an up to date estimate of seabird bycatch in regulated fisheries, and then to ensure that observer monitoring, data collection, analysis and reporting is routinely and rigorously maintained
7.2.2	Provide a summary of what bycatch data are currently being collected by observers on vessels within the Tristan EEZ, with detailed information on how the fisheries are being monitored and bycatch data collected. Design standard form to be used to collect, curate and report relevant data	HIGH	TFD, TCD, CAPFISH, ACo	2009	Participate in the process to develop and test a prototype bycatch data collection form for ACAP (reporting requirement for AC5). As part of this process, design a form that will be used by the Tristan Fisheries Department to collect and report these data
7.2.3	Develop and implement a strategic, and all-encompassing fisheries protection regime for the Tristan EEZ (including the potential role of intelligence sharing, VMS, satellite, targeted patrolling, support from the Royal Navy and other vessels, monitoring of catch landings)	HIGH	TFD, ACo, Defra, FCO, JNCC, CAPFISH, RSPB, UCT, T-BAG	2009-09 and ongoing	A critical requirement, both for the Tristan fisheries and the conservation of its seabirds. MRAG is currently undertaking a desktop study of how to combat IUU fishing around St Helena, Ascension and Tristan. The outcomes of this study should inform the development and implementation of a fishery protection strategy for the Tristan EEZ
7.2.4	Undertake an IPOA-S Assessment for Tristan da Cunha (and develop and implement a national plan of action for reducing the catch of seabirds in longline and trawl fisheries)	MEDIUM	TFD, ACo, CAPFISH, Defra, FCO, RSPB, UCT, JNCC, BirdLife, T-BAG	2009-10 and ongoing	This is linked with 7.2.3. Information from the ICCAT seabird assessment will be an important informant to this process
7.2.5	UK with other EU ACAP Parties (France, Spain) to seek to ensure better engagement by European Commission in environmental issues relating to external fisheries, especially to address the matter of seabird-fisheries interactions and seabird bycatch mitigation in RFMOs	HIGH	Defra and FCO fisheries representatives, JNCC, ACo, BirdLife, ACAP, TFD	Ongoing, 2009 will provide an opportunity to engage ICCAT on the issue with the completion of the seabird assessment	Need a coordinated and joined up approach to ensure seabird bycatch issues are strongly motivated and supported at RFMO meetings. Also need to engage with other ACAP parties as part of the ACAP-RFMO interaction plan
7.2.6	Include seabird bycatch expertise in representation at, or in conjunction with, priority RFMO meetings	HIGH	Defra and FCO fisheries representatives, JNCC, ACo, BirdLife, ACAP, TFD	Ongoing, 2009 will provide an opportunity to engage ICCAT on the issue with the completion of the seabird assessment	Delegations should ideally include seabird bycatch experts at the priority RFMO meetings, or at least ensure thorough interaction with experts prior to and following the meetings

	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
7.2.7	UK to participate actively in ACAP RFMO coordinator approach, which will be piloted in IOTC, IATTC, ICCAT and WCPFC	HIGH	Defra and FCO fisheries representatives, BAS, JNCC, ACo, BirdLife, ACAP, TFD	Ongoing, 2009 will provide an opportunity to engage ICCAT on the issue with the completion of the seabird assessment	In this approach, an RFMO coordinator will work with ACAP Parties and Advisory Committee officials to develop an ACAP-agreed engagement strategy for each RFMO meeting. Of these pilot RFMOs, ICCAT is of particular importance for birds from South Georgia and the rest of the South Atlantic
7.2.8	Use results of the ICCAT seabird risk assessment study (due in 2009) to develop an influencing strategy aimed at reducing/eliminating seabird bycatch by the use of a suite of appropriate mitigation measures and an effective observer scheme in ICCAT fisheries	HIGH	Defra and FCO fisheries representatives, BAS, JNCC, ACo, BirdLife, ACAP, TFD, TCD	2009, and then ongoing	Coordinate with other ACAP parties as envisaged in the ACAP-RFMO interaction plan
7.2.9	UK to seek to ensure that other ACAP Parties/Range States (such as Brazil, Uruguay and South Africa) support or initiate measures to reduce seabird bycatch within relevant RFMOs	HIGH	UK/EC delegates (Defra and FCO fisheries), JNCC, ACo, BirdLife, ACAP, TFD	Ongoing	Need a coordinated and joined-up approach to seabird bycatch at RFMO meetings
7.2.10	Collaborate with other countries/organisations to help reduce bycatch (sharing of expertise and advice) and IUU fishing within and outside of the Tristan EEZ	HIGH	TFD, FCO, MOD, ACo	Ongoing	Share expertise and seek advice on fisheries protection and bycatch mitigation matters with other OTs and organisations/authorities
7.2.11	Support and participate in relevant bycatch mitigation research	MEDIUM	TFD, ACAP,	Ongoing	The key area of research for fisheries which affect Tristan seabirds (including those in the Tristan EEZ) is investigating potential mitigation measures to reduce risk of bycatch in pelagic longline fisheries. This has been identified as a priority research area by the ACAP Seabird Bycatch Working Group (together with a list of priority research questions within this area).
7.2.12	Encourage and support initiatives by industry, governments and RFMOs to combat IUU fishing	HIGH	TFD, FCO, Defra, ACAP,	Ongoing	Make use of legal vessels to assist with patrolling and reporting efforts to combat IUU fishing
7.2.13	Ensure that the seabird bycatch data collection and reporting requirements of ACAP are met	HIGH	TFD, TCD, CAPFISH, ACo	2009 and ongoing	The ACAP reporting requirements (including the reporting of seabird bycatch data) are currently being revised. The annual submission of these data to ACAP is required so that they can be collated. Currently, these data are collected by CAPFISH on behalf of TdC. Need to determine the most efficient process of including these data in the annual reporting to ACAP

	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
8	<b>Data acquisition and management</b>				
8.2.1	Ensure all historical and recent data on albatrosses and petrels are incorporated into the Tristan seabird database, and that future (updated) data are captured routinely and properly maintained	HIGH	TCD, RSPB, UCT, ACo, T-BAG	2008/09 and ongoing	The Tristan Seabird Database has been set up to serve as the central repository for the status and trend and breeding site data. Need to make sure this is up to date, and properly maintained (and that ACAP have the most recent data for species assessments). Brad Robson of RSPB is currently working on this as part of the process to develop a Conservation Working Manual
8.2.2	Ensure that updated population status and trends and breeding site management data are submitted to ACAP on a regular (annual) basis	HIGH	TCD, RSPB, UCT, ACo, T-BAG	Ongoing/annually	ACAP reporting requirement to ensure that ACAP can collate the most recent data from Parties and use for regional analyses and assessments. This process will be made easier once the ACAP databases and web portal have been finalised
8.2.3	Request all researchers/data holders conducting research/monitoring on albatrosses and petrels at the Tristan Islands to make available this information to TdC for inclusion in their seabird database and for use by ACAP, subject to the ACAP rules for accessing and using such data and intellectual property rights	HIGH	TCD	ongoing	To ensure albatross and petrel data collected by outside researchers at the Tristan Islands is submitted to TdC and ACAP so that it can be used for management purposes
8.2.4	Maintain a list of research and monitoring projects of relevance to albatrosses and petrels at the Tristan Islands	MEDIUM	TCD, RSPB, UCT, ACo, JNCC, T-BAG	ongoing	Would be good to have a current list of projects being undertaken, that could be updated as part of the annual review
8.2.5	Maintain the Gough Island bibliography of popular and scientific literature, and consider expanding the bibliography to cover the other islands of the group	LOW	TCD, RSPB, UCT, ACo, JNCC, T-BAG, Christine Hänel	ongoing	A bibliographic database of research and other publications has recently been developed by Christine Hänel. It would be useful to maintain/update this as a tool for those involved/interested in research and management of Gough Island. It is likely the Gough and Inaccessible Islands World Heritage Site Management Plan will contain an updated combined bibliography

	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
8.2.6	Ensure that seabird bycatch reporting requirements of ACAP are met (new protocols are currently being developed – this is the same action as in <b>7.2.13</b> )	HIGH	TFD, TCD, CAPFISH, ACo	2009 and ongoing	The ACAP reporting requirements (including the reporting of seabird bycatch data) are currently being revised. The annual submission of these data to ACAP is required so that they can be collated. Currently, these data are collected by CAPFISH on behalf of TdC. Need to determine the most efficient process of including these data in the annual reporting to ACAP
<b>9</b>	<b>Education and awareness</b>				
9.2.1	Promote the objectives of ACAP through the fora and mechanisms available (e.g. website, meetings); identify additional mechanisms to disseminate information	HIGH	TCD, FCO, Defra, RSPB, UCT, T-BAG, JNCC, ACo	ongoing	Specific education and public awareness initiatives will be presented in the annual ACAP Implementation report. The TdC annual review of the ACAP Implementation Plan could serve as an opportunity to identify specific opportunities
9.2.1	Make best use of opportunities that arise as a result of outside researchers or individuals working at or visiting the Tristan Islands	HIGH	TCD, RSPB, UCT, T-BAG	ongoing	There are a number of opportunities. For example, requiring that they present a public talk or presentation while on Tristan, and provide every opportunity for Tristanians to participate in research and monitoring activities
9.2.2	Maintain the profile of the Tristan Islands as critical sites for the conservation of albatrosses and petrels, and of the work that is being undertaken to address the range of threats at the Tristan Islands and elsewhere	HIGH	TCD, RSPB, UCT, FCO, Defra, JNCC, ACo, T-BAG	ongoing	Specific education and public awareness initiatives will be presented in the annual ACAP Implementation report. The Tristan Islands annual review of the ACAP Implementation Plan could serve as an opportunity to identify specific opportunities
9.2.3	Collaborate with other Parties and organisations in the development and implementation of regional and international education and awareness programmes	HIGH	TCD, RSPB, UCT, JNCC, ACo, T-BAG	ongoing	
9.2.4	Share expertise and collaborate with other South Atlantic Overseas Territories and other countries whose jurisdictional waters are important for South Atlantic albatrosses and petrels (Chile, Argentina, Uruguay, Brazil, South Africa and Namibia) to encourage conservation (principally bycatch mitigation) of albatrosses and petrels in these areas	HIGH	TCD, TdCf, RSPB, UCT, JNCC, ACo, T-BAG	ongoing	Due to their wide ranging movements, the conservation of albatrosses and petrels from the Tristan Islands requires international collaboration to ensure that seabird bycatch is minimised on the high seas (by engaging with RFMOs) and in the jurisdictional waters of other countries. The ACo is in the process of developing a strategy to encourage and work with other countries on this issue, which will provide more specific information

	<b>ACTIONS</b>	<b>PRIORITY</b>	<b>STAKEHOLDERS*</b>	<b>TIMEFRAME</b>	<b>DETAILS &amp; FUNDING</b>
10	<b>Monitoring and review</b>				
10.1.1	Develop a standardised template for the annual review of the Implementation Plan that links with the progress indicators being developed by ACAP	HIGH	ACo, TCD, TFD	2009 and then annual review	Need to establish a formal and efficient monitoring and reporting framework that links with the ACAP progress indicators.
10.1.2	Conduct annual review of plan, with inputs from all stakeholders	HIGH	TCD, TFD, TDC, ACo, RSPB, UCT, Defra, FCO, CAPFISH, JNCC, T-BAG	Annually	Required for stakeholders to provide feedback of their activities and to monitor progress of the plan. Review process to take place via email.

\* See Section 13 for a full list of acronyms

## Appendix 2: ACAP listed species (2009)

Common name	Scientific name	IUCN status (2009)
Northern Royal Albatross	<i>Diomedea sanfordi</i>	EN
Southern Royal Albatross	<i>Diomedea epomophora</i>	VU
Wandering Albatross	<i>Diomedea exulans</i>	VU
Antipodean Albatross	<i>Diomedea antipodensis</i>	VU
Amsterdam Albatross	<i>Diomedea amsterdamensis</i>	CR
Tristan Albatross	<i>Diomedea dabbenena</i>	CR
Sooty Albatross	<i>Phoebastria fusca</i>	EN
Light-mantled Sooty Albatross	<i>Phoebastria palpebrata</i>	NT
Waved Albatross	<i>Phoebastria irrorata</i>	CR
Short-tailed Albatross*	<i>Phoebastria albatrus</i>	VU
Black-footed Albatross*	<i>Phoebastria nigripes</i>	EN
Laysan Albatross*	<i>Phoebastria immutabilis</i>	VU
Atlantic Yellow-nosed Albatross	<i>Thalassarche chlororhynchos</i>	EN
Indian Yellow-nosed Albatross	<i>Thalassarche carteri</i>	EN
Grey-headed Albatross	<i>Thalassarche chrysostoma</i>	VU
Black-browed Albatross	<i>Thalassarche melanophris</i>	EN
Campbell Albatross	<i>Thalassarche impavida</i>	VU
Buller's Albatross	<i>Thalassarche bulleri</i>	NT
Shy Albatross	<i>Thalassarche cauta</i>	NT
White-capped Albatross	<i>Thalassarche steadi</i>	NT
Chatham Albatross	<i>Thalassarche eremite</i>	CR
Salvin's Albatross	<i>Thalassarche salvini</i>	VU
Southern Giant-Petrel	<i>Macronectes giganteus</i>	LC
Northern Giant-Petrel	<i>Macronectes halli</i>	LC
White-chinned Petrel	<i>Procellaria aequinoctialis</i>	VU
Spectacled Petrel	<i>Procellaria conspicillata</i>	VU
Black Petrel	<i>Procellaria parkinsoni</i>	VU
Westland Petrel	<i>Procellaria westlandica</i>	VU
Grey Petrel	<i>Procellaria cinerea</i>	NT

\* The, Short-tailed, Black-footed and Laysan Albatrosses were added to Annex 1 of ACAP at the Third Session of the Meeting of the Parties in April-May 2009

### Appendix 3: ACAP breeding sites at the Tristan Islands

Island Group	Island/Breeding site	Island Size (ha)	Protection status	Remarks
Tristan da Cunha	Tristan	9600		
Tristan da Cunha	Nightingale	400		
Tristan da Cunha	Stoltenhoff	20		Islet of Nightingale group
Tristan da Cunha	Middle /Alex	50		Islet of Nightingale group
Tristan da Cunha	Inaccessible	1400	Nature Reserve	
Tristan da Cunha	Gough	6500	Nature Reserve	

#### Appendix 4: Assessment of threats identified at ACAP breeding sites of the Tristan Islands

Breeding site	Key species	Nature of threat	Threat subcategory	Threat species	Scope	Severity	Level	Current management action
Gough Island	Tristan Albatross	Predation by alien species	Predation by alien species	House Mouse	High	Medium	Medium	Eradication under consideration
Gough Island	Grey Petrel	Predation by alien species	Predation by alien species	House Mouse	High	Medium	Medium	Eradication under consideration
Tristan Island	Grey Petrel	Predation by alien species	Predation by alien species	Ship Rat	High	Medium	Medium	Eradication under consideration