



Agreement on the Conservation of Albatrosses and Petrels

Fourth Meeting of Advisory Committee

Cape Town, South Africa, 22 – 25 August 2008

Title: Breeding Sites Working Group Report

Author: Breeding Sites WG Convenor

1. PURPOSE

This paper outlines intersessional progress against the Breeding Sites Working Group (hereafter BSWG) Work Programme and recommendations that were endorsed at the ACAP Advisory Committee (AC3) meeting in 2007 (see Annex 1 and 2). It also reflects the discussions that took place at the BSWG meeting on 19 August 2008 at Hermanus, South Africa, and includes a number of recommendations to AC4.

2. MEMBERSHIP AND MEETING PARTICIPANTS

Current membership of the BSWG is listed in Annex 3. Participants at the Hermanus meeting were from South Africa (3), Argentina (4), Chile (2), UK (3), France (3), New Zealand (2), Australia (3), Spain (1), USA (2), Canada (1), Ecuador (1), the Scientific Committee on Antarctic Research (1), BirdLife International (1), and the Human Society International (1), of which nine were Members of the BSWG. Dr. Wieslawa Misiak acted as rapporteur.

3. ACAP DATABASE AND WEB PORTAL

ACAP has been developing a web-based database framework that integrates data submitted to the Secretariat on breeding sites, status and trends, demography and taxonomy. Data are made available through a web portal, and can potentially be used to automatically update the web-based ACAP Species Assessments. With respect to breeding sites data, this has involved considerable dialogue between the BSWG Convenor and the developers to try and resolve inconsistencies in the existing breeding sites threats and management data (see Item 5 below), in order to compile a definitive site list that also matches the data on population status and trends (which was collected and collated independently). Dialogue is also in progress to ensure that the web-based database is sufficiently flexible that it can be readily edited, updated and expanded, including with the addition of new sites and site characteristics (fields). The web portal should facilitate search and data querying options across multiple species or breeding sites, and is an invaluable resource for progressing ACAP.

4. CONDITIONS OF DATA USE

In light of the development of the web portal, the BSWG considered and approved a revised set of rules and conditions for access to data submitted to ACAP on breeding sites (Annex 4). These data primarily relate to breeding site management and threats. The same document indicates the rules and conditions for access to status and trends data, which was approved at the Status and Trends Working Group (STWG) on 17 August, 2008. With respect to breeding

sites information, this includes the option to Parties of making all data available, or of restricting public access. If the latter, data would remain in the database but viewing, reviewing and updating would be limited to a password-protected area of the ACAP website.

5. MISSING DATA, CORRECTIONS AND UPDATES

5.1 Missing data and addition of new fields

Management and threats data from breeding sites in Chile, Ecuador and Tristan da Cunha have been added to the database. Breeding site data are now outstanding only for some Southern giant petrel *Macronectes giganteus* sites in Antarctica. It is the intention to collect and incorporate the following additional data in the ACAP database by AC5:

- (i) The presence or otherwise of alien mammals at all ACAP breeding sites, their 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 (see Items 6 and 7 below).
- (ii) 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.

5.2 Definition of breeding site

For consistency and to ensure compatibility with the status and trends data, the data have been reorganised to try and ensure that wherever possible, a hierarchical approach is used to identify each site listed (Island Group, Breeding Island, Breeding Site). This was necessary because although in most cases the Breeding Site is the Breeding Island (sometimes with associated rock stacks and small islets), some Breeding Sites are smaller than an island and have their own attributes, and a small number refer to two or more islands or islets. This was a time-consuming process that also requires the aggregation of data at the Breeding Island level from multiple sites. The development of a definitive site list is also important so that each Status and Trends dataset can be linked at either the Breeding Site, or Breeding Island level, as appropriate, using a field that will indicate clearly if the data were collected from the whole island, the (sub-island) breeding site, or part of the sub-island site (e.g. a single colony). This flexibility is essential given that often one or a few colonies, or a small area, are monitored annually, and a whole island counted only once, every few years or not at all.

5.3 Revised threat criteria

Discussion at AC3 highlighted the need to better standardise the assessment of threats to breeding sites, given how important this is for the development of meaningful analyses of relative threats at the species or regional level, and to prioritise sites and species for management. Threats at all listed sites were therefore revised using more objective criteria, based on a draft document from an ongoing collaboration between IUCN and the Conservation Measures Partnership, tabled by BirdLife International at AC3. The revised criteria also reflect guidelines provided with the original request for data submission (in 2006), and in subsequent BSWG Reports, including that (1) threats under consideration should be restricted to those affecting birds at their breeding sites (i.e. not those occurring in the marine ecosystem e.g. plastic pollution, oil spills, fishing mortality, oceanographic changes etc.), (2) potential threats should not be listed because of the difficulty in ensuring consistency and therefore that there should be evidence of an impact on the breeding population, (3) if a threat is recognised, but effective management is in place that effectively eliminates this threat, then it should be listed as a 'past' threat (and note that these threats would not therefore meet the revised criteria which only considers current threats), (4) predation by native predators (such as skuas and sheathbills) should not be considered a threat unless there is anthropogenic perturbation in the system leading to increased pressure, and (5) non-native species should not be considered a threat except where there is direct evidence of impact on ACAP species.

The revised criteria therefore requested that threats only be included if: (1) documented in some way (either in a scientific paper, report or in litt. (if necessary, personal observation) at the site in question, with the source provided, and (2) likely to cause an impact (i.e. a population decline) in the next decade. As such, WG members were requested to exclude threats that were very unlikely to result in a population decline, even if they cause the loss of a small proportion of eggs or chicks, or even the occasional adult, in a large population. This dispenses with the "Suspected but unconfirmed" categorisation used in the original data submissions. Although this new approach could be viewed as insufficiently precautionary, it was considered to be the most effective means of reducing the considerable degree of subjectivity in the interpretation of the previous criteria. Moreover, if in the future there is evidence that the risk from a particular factor has increased, then the database can be updated readily.

WG members were asked that each threat be assessed according to the Scope (proportion of population affected) and Severity (intensity), that when combined will provide an indication of the magnitude of the threat. These should consider not only current impact, but also the anticipated impact over the next decade, assuming the continuation of current conditions and trends. The scope and severity of the threat were rated as follows.

SCOPE

The proportion of the population at the site that can reasonably be expected to be affected by the threat within ten years, given the continuation of current circumstances and trends. This should be considered equivalent to the annual mean proportion of breeding pairs affected.

Very High: The threat is likely to be pervasive in its scope, affecting 70-100% of the population at the site.

High: The threat is likely to be widespread in its scope, affecting 31-70% of the population at the site.

Medium: The threat is likely to be restricted in its scope, affecting 11-30% of the population at the site.

Low: The threat is likely to be very narrow in its scope, affecting 1-10% of the population at the site.

SEVERITY

Within the scope (i.e. the proportion of the population considered to be affected), the level of damage that can be expected given the continuation of current circumstances and trends.

Very High: Within the scope, the threat is likely to reduce the population at the site by 71-100% within ten years.

High: Within the scope, the threat is likely to reduce the population at the site by 31-70% within ten years.

Medium: Within the scope, the threat is likely to reduce the population at the site by 11-30% within ten years.

Low: Within the scope, the threat is likely to reduce the population at the site by 1-10% within ten years.

The Scope and Severity were then combined according to the matrix in Table 1 to provide the overall threat magnitude.

Table 1. Threat magnitude matrix – overall magnitude from Scope and Severity.

| | | Scope | | | |
|----------|-----------|-----------|--------|--------|-----|
| | | Very High | High | Medium | Low |
| Severity | Very High | Very High | High | Medium | Low |
| | High | High | High | Medium | Low |
| | Medium | Medium | Medium | Medium | Low |
| | Low | Low | Low | Low | Low |

WG members were also provided with the following guidelines based on published literature and consideration of previous submissions. (1) Introduced mammals: Although house mice are clearly a major problem on Gough Island, there is apparently no study that has documented a population decline of any surface-nesting albatross or petrel in the Southern Ocean because of predation from rats (Jones et al. 2008. *Conservation Biology* 22, 16-26). So, unless there is information to the contrary, rats should not be included as a threat for these species (but note that there is evidence that burrowing petrels are highly likely to be impacted). The intention at a later date is to compile a list of breeding sites with introduced vertebrates, so the presence of aliens will be highlighted in a different way. Similarly, WG members were asked to consider carefully whether grazing mammals met the Severity criteria at the site in question, as with notable exceptions (e.g. rabbits at Macquarie Island and elsewhere), sheep and rabbits may have minimal impact on ACAP species. (2) Disease: Unless there has been a documented outbreak in an ACAP species at the site in question or a nearby site, this should not be included as a threat. Also note that the occurrence of a vector at a site is in itself not a threat. (3) Fire: Not to be included as a threat unless there is some reason to believe that a fire outbreak is highly likely to cause a population decline within the next 10 years. (4) Climate change: All species and sites are subject to the effects of climate change. In general, effects of climate change at breeding sites will relate to increased frequency of inclement weather, exposure, heat-stroke etc., in which case it may be more appropriate (and informative) to list these specifically under "Natural disaster". (5) Human disturbance: Do not list any aspect of human disturbance (e.g. tourism, research, fire, risk of introducing non-natives etc.) as a threat unless there is clear evidence that it meets the Severity criteria (i.e. is likely to result in a population decline within a decade). Properly managed research or tourist visits should not constitute a threat under normal circumstances, except for very sensitive species or populations.

Threats were reviewed at all breeding sites listed in the ACAP database according to these revised criteria. The only exceptions were those for Southern giant petrel in Antarctica, for which the site list is incomplete.

Discussion at the BSWG meeting highlighted several issues:

- (i) That the new criteria do not necessarily capture all threats. These may include those that have caused historical declines but now impact so few birds that they do not qualify for current listing. These and other threats may nonetheless be suppressing stable populations that would otherwise be expanding, or expanding populations that would otherwise be increasing even more rapidly. In light of these comments, the criteria will be revised slightly to allow listing of documented threats that are known, or highly likely, to be substantially limiting expansion in numbers or distribution (on occupied islands), even in stable or slightly increasing populations.

- (ii) That with a few notable exceptions, there have been relatively few studies of the effects of introduced vertebrates on ACAP species, and that more information is required.
- (iii) That in the light of known and potential impacts from introduced vertebrates, ACAP should highlight the importance, and conduct a review of quarantine and biosecurity issues i.e. policies for preventing future introductions or re-introductions of non-native species to breeding sites.

Structuring of the threat categories and subcategories was also revised to comprise more intuitive groupings (Table 2). Some further minor revision may be necessary as more species are listed.

Table 2. Nature of threat and threat subcategories used in the ACAP breeding sites database.

| Nature of threat | Threat subcategory |
|-----------------------------|---|
| Human disturbance | Recreation/tourism |
| Human disturbance | Military action |
| Human disturbance | Science |
| Human take | Hunting of adults or chicks |
| Human take | Egg collection |
| Natural disaster | Fire |
| Natural disaster | Flood |
| Natural disaster | Landslide |
| Natural disaster | Toxins – natural |
| Natural disaster | Tsunami |
| Natural disaster | Volcanic activity |
| Natural disaster | Sea-level rise |
| Parasite or pathogen | Pathogen |
| Parasite or pathogen | Parasite |
| Predation by alien species | Predation by alien species |
| Contamination | Plastics |
| Contamination | Toxins - man made |
| Contamination | Onshore oil |
| Habitat loss or destruction | Increased competition with native species |
| Habitat loss or destruction | Habitat destruction by native species |
| Habitat loss or destruction | Habitat destruction by alien species |
| Habitat loss or destruction | Agriculture |
| Habitat loss or destruction | Infrastructure development |
| Habitat loss or destruction | Vegetation encroachment |
| Habitat loss or destruction | Aquaculture |
| Habitat loss or destruction | Extraction |

5.4 Outstanding issues

There remain several attributes of breeding sites where there was inconsistency in the original data submissions, which makes it impossible to carry out quantitative comparisons. Clearer definitions are required, and subsequent review and revision of existing data from WG members. These are as follows: (1) breeding site size has been interpreted as referring to the area of the entire island, to the area of suitable habitat, or to the area occupied by breeding birds (with no indication of how this was derived); (2) some or all of year round (human) population, seasonal population and day visitor numbers may refer to the entire island, or just to the number of visitors likely to interact with the relevant species of breeding bird. Given these difficulties with standardisation, and following discussion at the BSWG meeting, it was agreed that the database would include information on the area of each island rather than that occupied by breeding birds, and that the presence of a permanent human population on the breeding island, and of visitors (researchers or tourists) to breeding sites would be captured without the need for an accurate estimate of their numbers.

6. ANALYSIS OF THREATS TO BREEDING SITES

In total, 70 threats were identified at breeding sites, summarised in Table 3. The Southern giant petrel sites in Antarctica were not included in this analysis as the site list is incomplete and existing threats have not yet been reviewed. Threats affecting the most breeding sites (site-species combinations) were Predation by alien species, particularly cat *Felis catus* and ship rat *Rattus rattus*, and Habitat destruction by alien species (reindeer *Rangifer tarandus*), which affected 26, 16 and 8 breeding sites, respectively. All other threats affected four or fewer breeding sites. Most threats were of a Low magnitude. Those of a Medium magnitude that affected at least one breeding site were Habitat destruction by alien species (rabbit *Oryctolagus cuniculus*), Pathogen (Avian cholera), Predation by alien species (house mouse *Mus musculus*), Predation by alien species (ship rat), and Volcanic activity, those of High magnitude were Increased competition with native species (Australasian gannet *Morus serrator*), Predation by alien species (cat), and Flood. No threat was of a Very High magnitude according to the IUCN criteria. Breeding sites affected by threats of Medium and High magnitude are listed in Table 4. Where the threat is Predation by alien species or Habitat destruction by alien species, according to the database, eradication is already under consideration at Tristan, Gough and Macquarie Islands, but not at Amsterdam Island where it would be very expensive and logistically difficult. No action is currently being considered for the remaining threats, which may in any case be difficult or impossible to manage for practical, logistical or ethical reasons.

The number of threats to sites of each species is indicated in Table 5. There was at least one threat to breeding sites of 12 of the 26 albatrosses and petrels listed by ACAP. By far the most threatened were the burrow-nesting grey petrel *Procellaria cinerea* and white-chinned petrel *P. aequinoctialis*, mainly because of Predation or Habitat destruction by introduced mammals. Of the surface-nesting species, although the most threatened appeared to be the wandering albatross *Diomedea exulans*, this was because the main island of Kerguelen is represented in the database as a number of separate breeding sites.

The following issues should be taken into consideration: (1) these threats only include those that are documented and are known or likely to cause a population decline within the next 10 years, (2) the figures are the number of breeding sites, which in the database is equivalent to each species-site combination i.e. two species breeding in the same area constitute two breeding sites, (3) although most islands are listed as one site, a small number (notably Grande Terre at Kerguelen, and Amsterdam Island) have been subdivided into separate breeding sites, (4) no attempt has been made to consider the number of birds or the percentage of the global population at each site. All these factors should be taken into consideration in any prioritisation exercise (see Task 3.4 in the 2008-09 BSWG Work Plan).

Table 3. Number of breeding sites of ACAP species affected by threats of different magnitude (Low to Very high).

| Nature of Threat | Threat subcategory | Threat Species | Number of breeding sites affected: | | | | All |
|-----------------------------|---|---------------------|------------------------------------|--------|------|---------|-----|
| | | | Low | Medium | High | V. high | |
| Natural disaster | Flood | | | | 1 | | 1 |
| Natural disaster | Volcanic activity | | | 3 | | | 3 |
| Habitat loss or destruction | Habitat destruction by alien species | Rabbit | 3 | 1 | | | 4 |
| Habitat loss or destruction | Habitat destruction by alien species | Moufflon | 3 | | | | 3 |
| Habitat loss or destruction | Habitat destruction by alien species | Reindeer | 8 | | | | 8 |
| Habitat loss or destruction | Increased competition with native species | Australasian gannet | | | 1 | | 1 |
| Parasite or pathogen | Pathogen | Unknown | 1 | | | | 1 |
| Parasite or pathogen | Pathogen | Avian cholera | 2 | 1 | 1 | | 4 |
| Predation by alien species | Predation by alien species | Cat | 25 | | 1 | | 26 |
| Predation by alien species | Predation by alien species | House mouse | | 2 | | | 2 |
| Predation by alien species | Predation by alien species | Norwegian rat | 1 | | | | 1 |
| Predation by alien species | Predation by alien species | Ship rat | 14 | 2 | | | 16 |
| All | | | 57 | 9 | 4 | 0 | 70 |

Table 4. Breeding sites of ACAP species affected by threats of Medium or High magnitude

| Nature of Threat | Threat subcategory | Threat Species | Breeding sites affected: | |
|-----------------------------|---|---------------------|--|---|
| | | | Medium | High |
| Natural disaster | Flood | | | Pedra Branca - Shy albatross |
| Natural disaster | Volcanic activity | | McDonald Island - Black-browed albatross | |
| | | | McDonald Island - Southern giant petrel | |
| | | | McDonald Island - Light-mantled albatross | |
| Habitat loss or destruction | Habitat destruction by alien species | Rabbit | Macquarie Island - Grey petrel | |
| Habitat loss or destruction | Increased competition with native species | Australasian gannet | | Pedra Branca - Shy albatross |
| Parasite or pathogen | Pathogen | Avian cholera | Falaise d'Entrecasteaux (Amsterdam) - Indian yellow-nosed albatross | Plateau des tourbières (Amsterdam) - Amsterdam albatross |
| Predation by alien species | Predation by alien species | Cat | | Plateau des tourbières (Amsterdam) - Amsterdam albatross |
| Predation by alien species | Predation by alien species | House mouse | Gough Island – Tristan albatross Gough Island - Grey petrel | |
| Predation by alien species | Predation by alien species | Ship rat | Tristan Island – Grey petrel Macquarie Island - Grey petrel | |

Table 5. Number of threats to (breeding sites of) ACAP species. Species for which there are no threats are not listed.

| Species affected | Total threats | Natural disaster: | | Habitat loss or destruction: | | | | Parasite or pathogen | | | Predation by alien species: | | | |
|-------------------------------|---------------|-------------------|-------------------|--------------------------------------|---------|----------|---|----------------------|---------|---------------|-----------------------------|-------------|---------------|----------|
| | | Flood | Volcanic activity | Habitat destruction by alien species | | | Increased competition with native species | Pathogen | | | Cat | House mouse | Norwegian rat | Ship rat |
| | | | | Rabbit | Mouflon | Reindeer | | Australasian gannet | Unknown | Avian cholera | | | | |
| Amsterdam albatross | 3 | | | | | | | | 1 | 1 | | | | 1 |
| Tristan albatross | 1 | | | | | | | | | | | 1 | | |
| Wandering albatross | 7 | | | | | | | | | | 7 | | | |
| Light-mantled albatross | 4 | | 1 | 1 | | | | | | | 2 | | | |
| Sooty albatross | 3 | | | | | | | | 1 | 1 | | | | 1 |
| Shy albatross | 3 | 1 | | | | | 1 | 1 | | | | | | |
| Indian yellow-nosed albatross | 3 | | | | | | | | | 1 | 1 | | | 1 |
| Black-browed albatross | 4 | | 1 | 1 | | | | | | | 2 | | | |
| Grey-headed albatross | 2 | | | 1 | | | | | | | 1 | | | |
| Southern giant petrel | 1 | | 1 | | | | | | | | | | | |
| Grey petrel | 18 | | | 1 | 2 | 3 | | | 1 | 4 | 1 | | | 6 |
| White-chinned petrel | 21 | | | | 1 | 5 | | | | 7 | | | 1 | 7 |

7. ASSESSMENT OF FUNDING APPLICATIONS

The BSWG graded three funding applications as Low, Medium or High priority according to criteria in AC4 Doc 53. This assessment was forwarded to the ACAP secretariat for further consideration by ACAP officials and the Advisory Committee.

8. CRITERIA FOR PRIORITISATION OF IMPORTANT AREAS FOR ACAP SPECIES

John Croxall presented AC4 Doc 19 which describes the results of a query of BirdLife's World Bird Database (WBDB). This identified 57 Important Bird Areas (IBAs) already designated or proposed by BirdLife's regional partners that would have been triggered by the presence of greater than threshold numbers (1% of global population) of any ACAP species (122 triggering events in total). These held 16 of the 26 ACAP species, and excluded breeding sites in (and therefore ACAP species endemic to) New Zealand and Australia, where the regional partners have yet to complete definitive IBA lists, and Antarctica (Southern giant petrel sites only). There are some inconsistencies in the scale at which breeding sites have been defined within the WBDB; for ACAP purposes this mainly relates to the treatment of South Georgia (Islas Georgias del Sur) as a single IBA, compared with the Crozet and Kerguelen archipelagos which each include several IBAs. The difference reflects the tendency of regional partners to lump or split sites.

The convenor thanked BirdLife for their very useful paper, and for the offer to extend the analyses described above to the regions where IBAs have yet to be identified (New Zealand, Australia and Antarctica), and potentially, to apply the criteria at the level of breeding island rather than breeding site (see 5.2).

9. REVIEW OF PROPOSED PRIORITISATION PROCESS FOR ACAP ACTIONS WITH RESPECT TO BREEDING SITES

At the BSWG meeting, Spencer Clubb (New Zealand) outlined progress since the STWG meeting (on 16 August, 2008), by a small group in developing a prioritisation process for ACAP actions. Alternative approaches to prioritisation are described in AC4 Docs. 15 and 48, to be applied to threats at sea and on land. It was agreed that this prioritisation process should as far as possible have a (semi) quantitative basis and take into account factors such as the level of threat, the importance of the breeding site or population in regional or global terms, vulnerability of the species, resources and time required, anticipated benefit and likelihood of success, and should highlight research gaps. The BSWG agreed that prioritisation of actions with respect to breeding sites could be progressed by this small group, and asked that they be kept informed of progress. The Secretariat emphasised that: (i) it would be very useful to produce a document outlining the prioritisation process, and potentially included a preliminary analysis, for consideration by the MoP in 2009, (ii) that categorisations determined for the prioritisation

exercise should be included as fields in the ACAP database so that the process could be repeated at a later date, and (iii) that they could make resources available to assist with the process.

10. REVIEW OF GUIDELINES FOR ERADICATION OF ALIEN MAMMALS FROM BREEDING SITES

A document outlining background, guidelines, useful further reading and a list of online resources relating to the eradication of alien mammals from breeding sites was drafted by the BSWG convenor (AC4 Doc52). The intention was to highlight the key issues to consider before and during the design of a mammal eradication programme and to provide a means of obtaining further information. The BSWG agreed that this was an extremely valuable document that should be made available from the ACAP website in a similar accessible format as the Species Assessments, that it would be helpful if Parties and Range States could provide feedback on its usefulness, and that it should be readily updateable with links to other websites and reports. A list of past and present introductions of alien mammals and attempts at eradication at all ACAP breeding sites will also be compiled and made available via the ACAP web portal (see 5.1).

11. BSWG TERMS OF REFERENCE (ToR)

Included in the report of AC3 was a request that the previous ToR of the BSWG (Annex 5) be reviewed. Revised ToR were agreed by the BSWG (Annex 6) and put forward for consideration by the AC.

12. BSWG WORK PROGRAMME (2008)

All recommendations in the BSWG report to AC3 have been carried out, and all items in the agreed BSWG Work Programme at AC3 have been completed or are in progress (Annex 1 and 2).

A draft BSWG Work Programme for 2008 is provided in Annex 7. This includes the following items:

- 3.1. Revise the database lists and structures, ensure compatibility with other databases and enable update of Species Assessments
- 3.2. Complete, review and update data submission from Parties
- 3.3. Compile and maintain list of introduced mammals and eradications from ACAP breeding sites
- 3.4. Compile and maintain list of former breeding sites of ACAP species and their characteristics
- 3.5. Assess the revised threats to breeding sites and identify gaps in knowledge

- 3.6. Work with other groups in identifying those threats to breeding sites that are priorities for management. Contribute to synthesis report identifying and prioritising conservation measure required for each species and by each Party to the Agreement
- 3.7. Contribute to the development, harmonisation and implementation of conservation strategies for particular species or groups of ACAP species
- 3.8. Develop, review and update best-practice guidelines to mitigate selected threats to breeding sites (including quarantine and biosecurity)
- 3.9. Consider criteria for prioritisation of important breeding sites
- 3.10. Provide and consider annual reports to AC on BSWG activities

Comments on these items will be gratefully received. These represent a considerable volume of work, and require integration of data from other sources and expertise from other ACAP Working Groups, ACAP Officials and the Secretariat. Bearing in mind the level of effort and coordination required, particularly for items 3.5-3.8, a joint application for funding of an additional post at the ACAP Secretariat is being proposed by the Convenors of all ACAP Working Groups.

13. RECOMMENDATIONS

That the above tasks be considered for incorporation into the AC Work Programme.

That the AC support the continued maintenance and update of the breeding sites and , status and trends databases, and ACAP web portal.

That the AC approve the revised rules for access and use of status and trends, and breeding sites data submitted to, and maintained by, ACAP.

That the AC encourage further research on the potential impacts of introduced vertebrates at breeding sites of ACAP species where the effect is unknown.

14. ACKNOWLEDGEMENTS

I am very grateful to the BSWG members, contacts and many others outside the group including the other WG convenors and Wieslawa Misiak for help and advice. The BSWG expressed their gratitude to the Convenor for undertaking the substantial intersessional work and recognised the considerable progress that has been achieved by the BSWG.

**ANNEX 1: BREEDING SITE WORKING GROUP WORK PROGRAMME
2007-08.**

[These are due for revision at AC4]

| | Topic/Task | Responsible group | Timeframe | Action Taken |
|----------|---|----------------------|--------------------------|--|
| 3 | Protection of Breeding Sites and Status of Non-Native Species | | | |
| 3.1 | Identify national coordinators | BSWG Convenor | Ongoing | Completed |
| 3.2 | Revise the database lists and structures following the recommendations made at AC3 | BSWG | By Dec. 2007 | Completed. WG Convenor has consulted with developer of web portal to ensure appropriate structure of online database. |
| 3.3 | Complete, review and update data submission from Parties | BSWG | By Dec. 2007 and ongoing | Management and threats data from breeding sites in Chile, Ecuador and Tristan da Cunha added to database. Threats updated at all listed sites according to revised criteria. Data now outstanding only for some Southern Giant Petrel sites in Antarctica. |
| 3.4 | Develop analyses of threats to breeding sites | BSWG | By AC4 and ongoing | In progress |
| 3.5 | Review analyses and identify data gaps | BSWG and AC | By AC4 and ongoing | In progress |
| 3.6 | Work with other ACAP WGs to report on analyses of threats | BSWG | By AC4 and ongoing | WG Convenor has contributed to work being undertaken on ACAP species assessments, including reviewing of drafts |
| 3.7 | Transfer breeding sites database to Secretariat and link with population status and trends data | BSWG and Secretariat | By AC4 | A copy of the breeding sites database has been provided to the Secretariat and work is underway to incorporate this into the new database |
| 3.8 | Develop or review best-practice guidelines to mitigate selected threats to breeding sites | BSWG and AC | AC4 | Completed document providing guidelines for eradication of introduced mammals from breeding sites. |
| 3.9 | Consider criteria for prioritisation of important bird areas | BSWG | AC4 | BirdLife has provided a document listing existing IBAs for all ACAP species with suggestions on potential approaches to prioritization |
| 3.10 | Provide and consider annual reports to AC on BSWG activities | BSWG and AC | AC4 | In progress |

ANNEX 2: PROGRESS IN THE 2007-08 INTER-SESSIONAL PERIOD AGAINST RECOMMENDATIONS FROM THE BSWG TO AC3.

Actions in bold.

[In 2007] The BSWG recommend that the Advisory Committee:

- *The WG should consider how to support the existing database and any future data needs, including possible amalgamation of databases across WGs, as appropriate. **Completed – ACAP web portal established.***
- *The WG requests that resources are allocated for ongoing maintenance, error checking and standardisation, future data input, analyses, and provision of extracts from the database. **In progress – ACAP web portal established, but ongoing resources for management not guaranteed.***
- *The WG recommend an update the list of threats to include an additional categories or sub-categories as required. **Completed.***
- *The WG accept the slightly revised definitions of threat levels. **Threat levels further revised to conform to IUCN guidelines.***
- *The WG put forward revised definitions and / or lists of threats to the AC, and require provision of published information to support the listing of threats in the database. **Completed.***
- *The WG revise the list of required analyses in section 9 of the BSWG report. **Completed.***
- *The WG recommend that the AC accept the report of the Breeding Sites Working Group, revised work programme. And analyses presented in Annex 2. **N/A.***
- *The BSWG consider which data should be accessible publicly, to Parties, and recommend that the Secretariat arrange for publication of these on the ACAP website. **For consideration at BSWG meeting at AC4.***
- *The working group recommend that the proposal on indicators be put to the AC3, with due consideration of the items 1 – 6 noted in s11 above. **N/A***
- *The BSWG should work with Parties with outstanding data to fill gaps (particularly Ecuador and Chile). Note that for Chilean sites, work by Graham Robertson, Carlos Moreno, and others has provided the basis for the population information, but threats and management data are still unavailable. **Entries completed for Tristan da Cunha, Ecuador and Chile. Outstanding data required for some Southern giant petrel sites.***
- *The BSWG considers the current WG structures with the AC, and*
 - *Either: recommends that a new Chair be elected by the Advisory Committee for the BSWG. **Completed.***

*OR: recommends an alternative structure and revised Terms of Reference and appropriate representation. **N/A***

ANNEX 3: LIST OF BREEDING SITE WORKING GROUP MEMBERS

Italics – still to confirm membership

| Breeding Range States | Working Group members (*National Coordinators)(# convenor) |
|---|--|
| Argentina | Flavio Quintana* <quintana@cenpat.edu.ar> Nestor Coria <ncoria@dna.gov.ar> |
| Australia | Ian Hay* <Ian.Hay@aad.gov.au> Rosemary Gales <Rosemary.Gales@dpiw.tas.gov.au> |
| Chile | Marcelo Garcia Alvarado* <garcia@subpesca.cl> |
| Ecuador (National Coordinator TBC) | Augusto Corriere <dgderhum@mrrree.gov.ec> Gabrielle Montoya <gmontoya@ambiente.gov.ec> |
| France | Henri Weimerskirch* <henriw@cebc.cnrs.fr> Martine Bigan <martine.bigand@ecologie.gouv.fr> |
| New Zealand | Simon Banks* <sbanks@doc.govt.nz> |
| Norway | <i>Oystein Storkersen <Oystein.Storkersen@dirnat.no></i> |
| South Africa | John Cooper* <John.Cooper@uct.ac.za> Robert Crawford <Crawford@deat.gov.za> |
| United Kingdom | Richard Phillips*# <raphil@bas.ac.uk> Mark Tasker <Mark.Tasker@jncc.gov.uk> |
| Signatories that are not Breeding Range States and Interested Non-Signatories | |
| Spain | María S. Moset Martínez <smosetma@mapya.es> |
| Brazil | <i>Onildo Marini-Filho <marinif@ig.com.br></i> |
| Peru | Vladimiro Beteta <vbeteta@rree.gob.pe> |
| Scientific Committee on Antarctic Research | John Cooper <John.Cooper@uct.ac.za> |
| United States of America | Kim Rivera <Kim.Rivera@noaa.gov> |
| BirdLife International | John Croxall <John.Croxall@rspb.org.uk> |

ANNEX 4: RULES FOR ACCESS AND USE OF STATUS AND TRENDS, AND BREEDING SITES DATA SUBMITTED TO, AND MAINTAINED BY, ACAP

The following revised Rules for Access and Use of data submitted to, and maintained by, ACAP pertaining to population status and trends, and breeding sites management and threats, were adopted by the fourth meeting of the Advisory Committee in August 2008 (**ADD ref. to relevant bullets in AC4 report).

It is recognised that:

1. All status and trends, and breeding sites data submitted to, and maintained by, the ACAP Secretariat, shall be available to ACAP officials (Secretariat, Advisory Committee Chair, Advisory Committee Vice-chair, Working Group convenors and vice-convenors) for analysis and preparation of documents for the Agreement.
2. Inclusion of data, analyses or results from data held by the ACAP Secretariat into working papers, information papers, reports and any other documents tabled at meetings of the Advisory Committee or Working Groups, or circulated inter-sessionally to members of the Secretariat, ACAP officials, Working Group members or invited experts does not constitute publication.
3. Data included in any published reports or scientific papers outside ACAP will be considered to be in the public domain and so may be included in databases maintained by the ACAP Secretariat, and may be released by the ACAP Secretariat to third parties on request without the need to obtain permission from the data holders (owners/originators). Release to third parties will include making the data available through the ACAP web portal.
4. Unless indicated otherwise by the relevant member of the Breeding Sites Working Group, all data, analyses or results concerning breeding site threats and management may be released by the ACAP Secretariat to third parties on request without the need to obtain permission from the data holders. Release to third parties will include making the data available through the ACAP web portal. Third parties will be advised of the source of the original data and will be asked to consult the original dataholder (including on assignment of authorship) before proceeding with publication of documents describing analyses and interpretation of these data.
5. Unless indicated otherwise by the relevant member of the Status and Trends Working Group, the most recent count from each breeding site, summary statistics (mean, statistical errors, range) of population trend, productivity, survival rates and breeding frequency, and trend graphs generated for ACAP Species Assessments may be released by the ACAP Secretariat to third parties on request without the need to obtain permission from the data holders. Release to third parties will include making the data available through the ACAP web portal. Third parties will be advised of the source of the original data and will be asked to cite the data contributor and, if required, to consult the original data contributor for further information before proceeding with publication of documents describing analyses and interpretation of these data.
6. No data user shall hold ACAP or the original data provider(s) liable for errors in the data. While every effort has been made to ensure the integrity and quality of the database, ACAP (or whomever maintains the database) cannot guarantee the accuracy of the datasets contained herein.
7. The following statement shall be placed on the cover page of working papers, information papers, reports and any other documents tabled at meetings of the Advisory Committee or Working Groups, or circulated inter-sessionally to members of the Secretariat, ACAP officials, Working Group members or invited experts:

‘This paper is presented for consideration by ACAP and may contain unpublished data, analyses, and/or conclusions subject to change. Data in this paper shall not be cited or used for purposes other than the work of the ACAP Secretariat, ACAP Advisory Committee or their subsidiary Working Groups without the permission of the original data holders.’

ANNEX 5: TERMS OF REFERENCE FOR THE BSWG ENDORSED AT AC2

[These are due for review and revision prior to AC4]

The ACAP Advisory Committee established a Working Group on Breeding Sites at its first meeting.

The aim of this Working Group is to oversee the collection and collation of the most up to date relevant information on breeding sites of each species of albatross and petrel listed on Annex 1 of the ACAP Agreement, and to produce an assessment of the threats to species from factors associated with the sites.

The data for this review will be sought from Parties and Signatories to ACAP who are Breeding Range States (ie are home to breeding populations) of ACAP listed species.

Work Programme for Breeding Sites Working Group

The terms of reference for the group are:

- 1 Recommend data submission proforma
- 2 Identify suitable database structure
- 3 Collate and submit data and populate database
- 4 Conduct gap analyses to identify requirements for additional data for sites
- 5 Collect additional data to fill gaps and complete review
- 6 Coordinate with the ACAP Status and Trends Working Group, especially with respect to database structure.

Note that significant work towards achieving these items has already been carried out by the formation of an ad hoc working group coordinated by the Secretariat prior to the first Advisory Committee meeting.

Membership of Working Group

The group will be chaired by Susan Waugh of New Zealand with a membership comprised of representatives from Breeding Range States for ACAP albatrosses and petrels which are Parties or Signatories to ACAP and invited experts from ACAP observer organisations.

ANNEX 6: REVISED TERMS OF REFERENCE FOR THE BREEDING SITES WORKING GROUP

The ACAP Advisory Committee established a Working Group on Breeding Sites at its first meeting.

The aims of this group are:

- to oversee the collection, collation and maintenance of the most up to date information on management of, and threats to, the breeding sites of albatrosses and petrels listed on Annex 1 of the ACAP Agreement
- to assess the threats to breeding sites of the listed species and identify gaps in knowledge
- to consider and apply criteria for the identification of internationally important breeding sites
- to work with other groups in identifying those threats to breeding sites that are priorities for management
- to develop, review and maintain best-practice guidelines to mitigate selected threats to breeding sites

**ANNEX 7: DRAFT BREEDING SITE WORKING GROUP WORK
 PROGRAMME 2008.**

| | Topic/Task | Responsible group | Timeframe | Action Taken |
|----------|---|---|---------------------|---------------------|
| 3 | Protection of Breeding Sites and Status of Non-Native Species | | | |
| 3.1 | Revise the database lists and structures, ensure compatibility with other databases and enable update of Species Assessments | BSWG | Ongoing | |
| 3.2 | Complete, review and update data submission from Parties | BSWG | Ongoing | |
| 3.3 | Compile and maintain list of introduced mammals and eradications from ACAP breeding sites | BSWG | By AC5 and ongoing | |
| 3.4 | Compile and maintain list of former breeding sites of ACAP species and their characteristics | BSWG | By AC5 and ongoing | |
| 3.5 | Assess the threats to breeding sites and identify gaps in knowledge | BSWG | By AC5 and ongoing | |
| 3.6 | Work with other groups in identifying those threats to breeding sites that are priorities for management. Contribute to synthesis report identifying and prioritising conservation measure required for each species and by each Party to the Agreement | Species Assessment Coordinator, WG Convenors, AC Chair and Vice Chair | By MoP3 and ongoing | |
| 3.7 | Contribute to the development, harmonisation and implementation of conservation strategies for particular species or groups of ACAP species | Secretariat and Species Assessment Coordinator, WG convenors, AC Chair and Vice Chair | 2009 ongoing | |
| 3.8 | Develop, review and update best-practice guidelines to mitigate selected threats to breeding sites, including biosecurity | BSWG, Secretariat | By AC5 and ongoing | |

| | Topic/Task | Responsible group | Timeframe | Action Taken |
|------|--|--------------------------|--------------------|---|
| 3.9 | Consider criteria for prioritisation of important breeding sites | BSWG | By AC5 and ongoing | BirdLife to progress analysis of IBAs for later consideration by WG |
| 3.10 | Provide and consider annual reports to AC on BSWG activities | BSWG and AC | AC5 | N/A |