



# Review of existing and potential Ramsar sites in UK Overseas Territories and Crown Dependencies

April 2005

Edited by:

**Dr M W Pienkowski**

**UK Overseas Territories Conservation Forum**

102 Broadway, Peterborough PE1 4DG, UK

Email: [pienkowski@cix.co.uk](mailto:pienkowski@cix.co.uk) Web: [www.ukotcf.org](http://www.ukotcf.org)

**Final Report on Contract CR0294 to the  
UK Department of Environment, Food and Rural Affairs**  
(Ms Louise Vall, European Wildlife Division, Defra, Zone 1/06b, Temple Quay House, 2 The  
Square, Temple Quay, Bristol BS1 6EB, UK)



The views expressed in this report do not necessarily represent those of the UK Government.

The Forum is a non-profit organisation, registered as a limited company in England and Wales No. 3216892 and a Registered Charity No. 1058483. Registered Office: 12 High Street, Wendover, Buckinghamshire HP22 6EA, United Kingdom. Information and advice given on behalf of the Forum is given on the basis that no liability attaches to the Forum, its Directors, Officers or representatives in respect thereof.

**Current UK members of the Forum are:**

British Microbial Biodiversity Association  
British Ecological Society  
British Ornithologists' Union  
CAB International  
Fauna & Flora International  
Herpetological Conservation Trust

Marine Turtle Research Group  
The National Trust  
Royal Botanic Gardens, Kew  
Royal Society for the Protection of Birds  
World Wide Fund for Nature UK  
Zoological Society of London

**Current Members of the Forum  
in the UK Overseas Territories  
and Crown Dependencies are:**

Alderney Wildlife Trust  
Anguilla National Trust  
Ascension Conservation Centre  
Ascension Heritage Society  
Bermuda Audubon Society

Bermuda National Trust  
Bermuda Zoological Society  
Chagos Conservation Trust  
British Virgin Islands National Parks Trust  
National Trust for the Cayman Islands  
Falklands Conservation  
Gibraltar Ornithological & Natural History Society

La Société Guernesiaise  
National Trust for Jersey  
Société Jersiaise  
Manx Chough Project  
Montserrat National Trust  
St Helena National Trust  
National Trust of the Turks & Caicos Islands

# **Review of existing and potential Ramsar sites in UK Overseas Territories and Crown Dependencies**

## **Final Report from the UK Overseas Territories Conservation Forum**

### **Summary**

There are 21 entities amongst the UK Overseas Territories and Crown Dependencies, with separate governments. These Governments are responsible for domestic matters (with some exceptions in some cases), while the UK Government is responsible for foreign relations. Because UK enters some international conventions on nature conservation, there are shared responsibilities for some aspects. All but one (British Antarctic Territory) of these 21 entities are included in UK's ratification of the Convention on Wetlands of International Importance especially as Waterfowl Habitat, originally signed in 1971 in the Iranian city of Ramsar. Hence, in line with most such multilateral environmental agreements (MEAs), it is normally referred to as the "Ramsar" Convention on Wetlands.

In order to fulfil its commitments under the Ramsar Convention, UK arranged to review its suite of existing and potential Wetlands of International Importance, in the context of the priority ecosystems identified by the Conferences of the Parties. This review is particularly relevant for UK Overseas Territories (UKOTs), because:

- In global biodiversity terms, these are the most important parts of UK sovereign territory;
- In the last few years (partly as a result of UKOTCF encouragement and advice) those UK territories not previously included in UK's ratification have joined (except British Antarctic Territory, for which the Antarctic Treaty covers many relevant aspects);
- More of the priority ecosystem types (amongst mangrove, coral, sea-grass beds, peatlands, caves etc) occur in the UKOTs than in metropolitan UK;
- For historical reasons there is under-coverage of Ramsar sites in the UKOTs and Crown Dependencies;
- Because of very poor coverage in studies in the past and recent progress in some aspects, the existing list of proposed sites (depending mainly on information about 20 years old) is out of date.

The review includes the Crown Dependencies. Although their constitutions and situations are somewhat different from those of the UKOTs, there are some similarities in respect of their relationships to UK.

The review in Great Britain and Northern Ireland was conducted by a separate, but related, process.

The UK Overseas Territories Conservation Forum was contracted by Defra to undertake the review in the UK Overseas Territories and Crown Dependencies, using its experience of the diverse situations in UKOTs so that the sensitivities of local workers, governments and other organisations are respected and their knowledge made available and integrated. UKOTCF is a charitable company, bringing together as member organisations conservation and science bodies in UK and the UK

Territories, as well as a wide network of voluntary collaborators and governmental bodies. On a voluntary basis, the Forum has led for several years on promoting Ramsar issues in the Territories.

Approaches used included the following elements.

1. Utilise the Forum's network of contacts to collate information in a cost-effective way, and to reinforce consultation procedures with governmental and non-governmental bodies in the Territories.
2. Establish the presence of priority and other important wetland habitats and species in each territory.
3. Establish the degree to which this interest is covered by already designated sites.
4. Collate information on other potential sites and consider which of these should be added to the list of proposed sites.
5. Identify which existing Ramsar Information Sheets need updating, collate available information and update RISs.
6. Assemble initial draft information in RIS format where available for proposed sites.
7. Where practicable, identify the management status of designated sites, to identify any additional major needs.
8. Note any major gaps in information relevant to this exercise, so as to assemble an approach to encourage and direct future work.
9. Use existing and additional contacts with UKOT and CD governments, including where appropriate facilitation of the Environment Charter process, to encourage programmes of designation in the UKOTs and CDs.

For each Territory, consultations were held with local interests and others with knowledge and interest in the Territory. In most cases (Isle of Man, Bailiwicks of Guernsey and Jersey, Cyprus Sovereign Base Areas, Bermuda, Cayman Islands, Turks & Caicos Islands, British Virgin Islands, Anguilla, Montserrat, Ascension Island, St Helena, Tristan da Cunha, Falkland Islands), this involved governmental officers of the Territories concerned. In most cases these took a leading role in consultations. In a few Territories which do not have governmental natural environmental specialists (Gibraltar, South Georgia & the South Sandwich Islands, British Indian Ocean Territory, Pitcairn Islands), consultations included those who normally advise the governments on these matters.

The main text of the report gives the background and the approach used. It then addresses some general issues, before considering each territory in turn. The coverage by designated and proposed Ramsar sites is reviewed. This part includes also the additional information needed to review the factors reported previously as

adverse factors in relation to designated sites. This information is needed in relation to UK's report to the Ramsar Conference of the Parties (CoP) in 2005. The Annexes update Ramsar Information Sheets and (will provide to a later deadline) maps for existing sites, and provide drafts for proposed sites identified (as complete as possible in relation to the differences in actual status of proposed sites).

Prior to the project, 15 Ramsar sites had been designated in the UK Overseas Territories. The previously existing list of proposed Wetlands of International Importance in the UK Overseas Territories and Crown Dependencies included about 20 areas. This was known to give very inadequate coverage to the wetland types and globally important wildlife populations dependant on the UKOTs and CDs. As a result of this review, the number of proposed Ramsar sites has risen to 76 (in addition to the 15 already designated). Also, there are proposals to extend certain sites, and a few cases in which the need for additional sites has been recognised but present survey information does not allow definition even in a preliminary way. The report demonstrates also a move to a pattern reflecting better the wetland nature of the various areas and their global biodiversity importance.

The term 'proposed' when used in this report means proposed by this Review (or an earlier proposal confirmed by this Review). Whilst in most cases individuals or organisations in the territories concerned have been consulted on the list of proposed sites, it does not mean that these sites have been formally proposed to Government for designation. Thus whilst many of these sites have the potential to be proposed by the relevant authorities, 'proposed' is taken to mean 'potential sites that have been identified as meriting Ramsar designation by the *Review of Existing and potential Ramsar sites in the UK Overseas Territories and Crown Dependencies*'.

<b>Contents</b>	<b>page</b>
Summary	2
Contents	5
Explanation of structure of this report	6
General Aspects	8
Territory-specific material	23
Introduction	23
Isle of Man	25
Bailiwick of Guernsey	29
Bailiwick of Jersey	34
Gibraltar	37
Cyprus Sovereign Base Areas	40
Bermuda	43
Cayman Islands	55
Turks and Caicos Islands	58
British Virgin Islands	65
Anguilla	69
Montserrat	72
Ascension	75
St Helena	78
Tristan da Cunha	81
Falkland Islands	84
South Georgia and the South Sandwich Islands	89
British Antarctic Territory (not in Ramsar)	94
British Indian Ocean Territory	96
Pitcairn Islands	100
Appendix 1: UKOTCF, Contract, and Overview of project work against proposed plan	Not included in this version
Annex 1: Updated Ramsar Information Sheets for existing sites, organised by Territory	Not included in this version
Annex 2: Draft Ramsar Information Sheets for proposed sites identified (as complete as possible in relation to any variations in the actual status of proposed sites), organised by Territory	Not included in this version
Annex 3: Maps for existing Ramsar sites, improved where appropriate and practicable, in the same sequence as in Annex 1	Not included in this version
Annex 4: Maps for proposed Ramsar sites identified (as complete as possible in relation to any variations in the actual status of proposed sites), in the same sequence as in Annex 2	Not included in this version

## **Explanation of structure of this report**

This document is the final report required under contract CR0294 of December 2003. The contract was amended in October 2004. This amendment recognised that some work additional to contract had already been requested and undertaken without charge, but provided resourcing for further additions to contract. It was recognised that, to operate most efficiently and cost-effectively, this would require some rescheduling so that some elements originally planned for inclusion in this report would now appear later, while others not originally included would appear in this report. The consequent contents of this report and their status are outlined below.

- A. The main text of the report (the only part published at this stage; this is an edited version; the fuller report is available at [www.ukotcf.org](http://www.ukotcf.org)). This gives the background and the approach used. It then considers some general issues, before reviewing each territory in turn. The coverage by designated and proposed Ramsar sites is reviewed. This part includes also the additional information needed to review the factors reported previously as adverse factors in relation to designated sites. This information is needed in relation to UK's report to the Ramsar Conference of the Parties (CoP) in 2005. Literature references are found in Annexes 1 & 2.
- B. Annex 1: Updated Ramsar Information Sheets for existing sites. This is an original contract requirement, and is also needed for UK's report to CoP.
- C. Annex 2: Draft Ramsar Information Sheets for proposed sites identified (as complete as possible in relation to the differences in actual status of potential sites). This is additional to the original contract. Its inclusion in the contract addition reflects the fact that preparation of such draft RISs integrated with the review is a cost-effective way of aiding work towards eventual designation of sites. The contractor agreed to bring forward the inclusion of a draft of this section at the same time as the main report. The opportunity may be taken to make some further changes to this section when maps are submitted, in May 2005 (see below). It should be noted, however, that all the RISs in this section will, albeit revised in due course, remain as drafts until the sites to which they refer are designated as Ramsar sites. Because the state of progress towards designation differs greatly between sites, the degree of completion of various RISs will differ from very incomplete (and in some cases including notes on further queries) to virtually final in some cases where the authorities concerned have decided to ask HMG to progress with designation.
- D. Annex 3: Maps for existing Ramsar sites, improved where appropriate and practicable. This section will be produced in May 2005. This was agreed at the time of contract amendment. It reflects the fact that the maps will not be needed until that time, and that it is more efficient for all concerned, including those helping on a voluntary basis that all mapping work is done around the same time.
- E. Annex 4: Draft maps for proposed Ramsar sites identified (as complete as possible in relation to any variations in the actual status of potential sites).

Similar comments apply to this part as for Part C, which addresses the same sites. The inclusion, completeness and nature of maps will reflect the state of decision making in relation to each site. This part will be produced in May 2005.

This document includes an edited version of part A. The fuller version is available at [www.ukotcf.org](http://www.ukotcf.org). It is anticipated that parts B and D will be available on this web-site later in 2005. Anyone needing access to parts C and E (when available) should contact the editor of this report by email.

During the course of this project, a new numbering system was introduced for UK Ramsar sites (proposed, designated or earlier proposals no longer current). The opportunity was taken to provide distinctive numbering for each UK Overseas Territory and Crown Dependency, and to group these geographically:

Crown Dependencies

UKOTs in Europe

UKOTs in the Wider Caribbean

UKOTs in the South Atlantic

UKOTs in the Indian and Pacific Oceans.

Except where there is a particular reason to do differently, territories are addressed in this sequence throughout this report.

## General Aspects

### *Introduction*

In order to fulfil its commitments under the Ramsar Convention on Wetlands, UK is reviewing its suite of existing and potential Wetlands of International Importance, in the context of the priority ecosystems identified by the Conferences of the Parties.

Local capacity in the UKOTs to rectify this situation is severely limited, so that outside help is needed. However, this must be done by those with experience of the diverse situations in UKOTs so that the sensitivities of local workers, governments and other organisations are respected and their knowledge made available and integrated.

The review includes the Crown Dependencies. Although their constitutions and situations are somewhat different from those of the UKOTs, there are some similarities in respect of their relationships to UK.

In the light of this background and following a competitive tendering procedure, Defra contracted the UK Overseas Territories Conservation Forum to undertake this review. A background to the Forum, and the way the work was conducted are summarised in Appendix 1 of the fuller version of this report (available at [www.ukotcf.org](http://www.ukotcf.org)).

The agreed approach to this project was set out in UKOTCF's response to the tender invitation, and included the following elements:

1. Utilise the Forum's network of contacts in UKOTs, CDs and elsewhere (including its regional working groups which provide a unique means of gathering information) to collate information in a cost-effective way, and to reinforce consultation procedures with governmental and non-governmental bodies in the Territories.
2. Establish the presence of priority and other important wetland habitats and species in each territory, and
3. Establish the degree to which this interest is covered by already designated sites.
4. Collate information on other potential sites and consider which of these should be added to the list of proposed sites.
5. Identify which existing Ramsar Information Sheets need updating, collate available information and update RISs.
6. Assemble initial draft information in RIS format where available for proposed sites. (This was additional to specification, but was added later by the contract amendment.)



7. Where practicable, identify the management status of designated sites, to identify any additional major needs. (This was additional to specification.)

8. Note any major gaps in information relevant to this exercise, so as to assemble an approach to encourage and direct future work. (This was additional to specification.)

9. Use existing and additional contacts with UKOT and CD governments, including where appropriate facilitation of the Environment Charter process, to encourage programmes of designation in the UKOTs and CDs. (This was additional to specification.)

These items are used as headings below to review the position. This general section is based on the detailed analyses for each territory, which follow.

**1. *Utilise the Forum's network of contacts in UKOTs, CDs and elsewhere (including its regional working groups which provide a unique means of gathering information) to collate information in a cost-effective way, and to reinforce consultation procedures with governmental and non-governmental bodies in the Territories.***

This was fundamental to the approach used, as was summarised in the following table from the original plan (updated and re-ordered to the standard used in this report).

Territory	Previously visited by senior consultant and Ramsar issues discussed	Visited by senior consultant (for other reasons) during the course of this contract	Territory included in the work of a Forum Working Group	Active collaborators based in Territory and able to advise	Active collaborators based in UK and able to advise	Active collaborators based elsewhere and able to advise	Recent/ current project in Territory (joint) managed by Forum or member organisation	Proposed visit within contract
EUROPE								
Isle of Man	Y			Y				Y
Bailiwick of Guernsey				Y				Y
Bailiwick of Jersey	Y	Y		Y				
Gibraltar	Y			Y			Y	
Cyprus Sovereign Base Areas					Y			
WIDER CARIBBEAN								
Bermuda	Y [plus recent conf]		Y	Y			Y	
Cayman Islands	Y		Y	Y			Y	
Turks & Caicos Islands	Y	Y	Y	Y	Y		Y	
British Virgin Islands	Y		Y	Y	Y		Y	
Anguilla			Y	Y	Y		Y	
Montserrat	Y		Y	Y	Y		Y	
SOUTH ATLANTIC								
Ascension		Y	Y	Y	Y		Y	
St Helena		Y	Y	Y	Y		Y	
Tristan da Cunha			Y	Y		Y (S Africa)	Y	

Territory	Previously visited by senior consultant and Ramsar issues discussed	Visited by senior consultant (for other reasons) during the course of this contract	Territory included in the work of a Forum Working Group	Active collaborators based in Territory and able to advise	Active collaborators based in UK and able to advise	Active collaborators based elsewhere and able to advise	Recent/ current project in Territory (joint) managed by Forum or member organisation	Proposed visit within contract
Falkland Islands		Y	Y	Y	Y		Y	
South Georgia & South Sandwich Islands		Y (Government based in Stanley, not Territory)	Y		Y	Y		
British Antarctic Territory [Not in Ramsar]								
INDIAN & PACIFIC OCEANS								
British Indian Ocean Territory			Y		Y		Y	
Pitcairn			Y		Y		Y	

This approach proved essential but, even so, it was stretched to the limit. Without the Forum's unique network of contacts and member organisations in the Territories, this project would not have been achieved to anything like its present level of success. Even with this infrastructure, the project has relied heavily on visits to some UKOTs funded by other projects (when even the add-on costs of undertaking work for the project could not be charged to the project). The inability to pay even for small pieces of work by colleagues in Territories, on whom the project depended, also placed a severe strain on the project and relationship with colleagues. Often these are volunteers or staff of voluntary organisations; whether these or territory governmental personnel, the persons concerned are generally heavily pressed already.

**2. Establish the presence of priority and other important wetland habitats and species in each territory, and**

**3. Establish the degree to which this interest is covered by already designated sites.**

In line with earlier discussions between the Forum and Defra, it was considered preferable to undertake the review for UKOTs/CDs working directly from the Ramsar guidance criteria, rather than developing some intermediate criteria. The reasons for this were as follows:

- A. Most of the UKOTs are distinct island systems, with a high degree of endemism, so that the general Ramsar Criteria work well directly.
- B. The UKOTs/CDs are geographically scattered, so that it would be difficult to use a regionally based approach to selection, which is an important element for GB&NI. Whilst one could develop an international regional approach, this would take time and resources, and be unnecessary, because of (A).

- C. Generally, Ramsar's own priorities on threatened species and globally under-represented wetlands feature strongly in the UKOTs, and provide guidance to supplement the general Ramsar selection Criteria.
- D. The suite of Ramsar sites in the UKOTs/CDs do not have to overcome the bird-bias which is present in the suite of GB/NI sites (for perfectly sound historical reasons).
- E. To create lists of threatened species etc for each UKOT would be a very large task, disproportionate to the effort of separately justifying each proposed site in relation to the Ramsar Criteria. (This is a consequence of the high biodiversity and small area of most UKOTs, but with limited survey information, and this differing in taxa covered so far in each area.)
- F. On a pragmatic approach, for those UKOTs about which we have thought in preliminary terms, much Ramsar site selection is fairly obvious in the context of specialist UKOT/CD knowledge of the areas and in terms of the standard Criteria, although a good deal of checking is required. The field exercise at the UKOTCF Bermuda conference also, as a side-benefit, tended to support this view.

The above certainly applies to the UKOTs. Several points relate also to the Crown Dependencies. In contrast, metropolitan UK (i.e. GB & NI) have different current needs:

- 1. In particular, they are wisely trying to link up the site-selection criteria for Ramsar, SPA and SAC, together with an elaborate domestic (SSSI etc) procedure. This full suite of overlapping designations does not apply to the UKOTs/CDs (except to some extent to Gibraltar, the only one in the EU, but where the situation is reasonably clear anyway).
- 2. Also, GB & NI constitute a reasonably large geographic unit, within which there may be several potential sites for a particular interest from which one has to select sites for designation. This is rarely the case for UKOTs/CDs, which combine high endemism with generally limited geographical extents - leading to more straightforward site-selection.

None of the above should be read as an argument against clearly set out reasons for designation of each proposed UKOT/CD Ramsar site in the framework of the Criteria. Rather, the very different situations of the UKOTs from GB&NI (and from each other) mean that the assessment is more efficiently done as part of the territory-by-territory and site-by-site analysis, rather than by an intermediate hierarchy of selection criteria below the standard Ramsar Criteria.

These differences have some implications also in the extent of application of the Ramsar guidelines as between GB & NI and the UKOTs & CDs. For example, in GB & NI, it has been the general practice (although there are exceptions) not to designate Ramsar sites on the basis of their importance to seabirds. This is related in part to the under-representation (for historical reasons) of non-bird sites in the GB & NI Ramsar series. It relates also to the fact that another international designation

(Natura 2000 Special Protection Areas under the European Union Birds Directive) is available, and is used for these sites. Neither of these two considerations applies in UKOTs and CDs; none of them (except Gibraltar) is within the European Union, so that neither the Habitats Directive nor the Birds Directive applies. For this reason (and in common with many other countries), the full potential of the Ramsar selection guidelines are used and, in respect of this example, seabirds are included where appropriate. However, it must be stressed that this does not imply that there is any suggestion that the general practice in GB & NI should be changed. There, appropriate status can be achieved via the Natura 2000 series, and we are aware of no suggestions from any source that additional Ramsar designations are needed in these cases. The situations are different as between UKOTs & CDs on one hand, and GB & NI on the other.

The table on the following page summarises the coverage achieved for Ramsar selection criteria and global priority wetland types in the territories. More detail can be found in the territory-specific chapters above.

<b>Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]</b> For each territory: n = not present in territory A = already adequately represented in designated sites Y = would be well represented by designation of proposed sites * = present but further site identification and designation would be needed ? = further information needed	Isle of Man	Bailiwick of Guernsey	Bailiwick of Jersey	Gibraltar	Cyprus Sovereign Base Areas	Bermuda	Cayman Islands	Turks & Caicos Islands	British Virgin Islands	Anguilla	Montserrat	Ascension	St Helena	Tristan da Cunha	Falkland Islands	South Georgia & South Sandwich Islands	British Indian Ocean Territory	Pitcairn
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Y	Y	Y	Y	A	Y	Y	Y	*	Y	Y	Y	Y	Y	Y	Y	Y	Y
Priority type: coral reefs	n	n	n	n	n	Y	Y	*	*	Y	Y	n	n	n	n	n	Y	Y
Priority type: mangroves	n	n	n	n	n	Y	Y	Y	*	Y	Y	n	n	n	n	n	Y	n
Priority type: sea-grass beds	Y	Y	Y	Y	n	Y	Y	Y	*	Y	Y	n	?	n	?	?	Y	n
Priority type: wet grass-lands	Y	Y	*	n	A	Y	Y	Y	n	n	n	n	Y	Y	Y	Y	n	n
Priority type: peatlands	Y	n	?	n	n	Y	n	n	n	n	n	n	n	Y	Y	Y	Y	n
Priority type: caves & karst	Y	Y	n	Y	n	Y	n	Y	Y	*	n	n	n	n	n	n	n	n
Other type (if under-represented)								*							*			
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Y	Y	Y	Y	A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Y	Y	Y	Y	A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Y	Y	Y	Y	Y	Y	Y	Y	Y	?	Y	Y	?	?	Y	Y	Y	Y
5: Regularly supports 20,000 or more waterbirds.	n	n	n	n	?	n	Y	Y	n	n	n	Y	n	Y	Y	Y	Y	Y
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	n	Y	n	n	A	Y	Y	Y	n	Y	n	Y	n	Y	Y	Y	Y	Y
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Y	Y	Y	Y	n	Y	Y	*	Y	?	?	Y	Y	?	*	?	Y	Y
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Y	?	Y	?	n	Y	Y	*	Y	?	Y	Y	Y	Y	*	?	Y	n

**4. Collate information on other potential sites and consider which of these should be added to the list of proposed sites.**

Prior to the project, 15 Ramsar sites had been designated in the UK Overseas Territories. The two earliest designated sites date from 1990 and 1994. The others date from 1999 onwards, in many cases partly the result of work done on a voluntary basis by UKOTCF to raise awareness in UKOT governments and others of the purpose and implications of the Ramsar Convention. The list of previously designated sites is given below.

Ramsar code	Site name	Country	Area (ha)	Date designated
UK23001	South East Coast of Jersey, Channel Islands	Jersey	3210.50	25/09/2000
UK32001	Akrotiri	Western Sovereign Base Area of Cyprus	2171.00	20/03/2003
UK41002	Hungry Bay Mangrove Swamp	Bermuda	2.01	10/05/1999
UK41003	Lover's Lake Nature Reserve	Bermuda	2.10	10/05/1999
UK41004	Paget Marsh	Bermuda	11.35	10/05/1999
UK41005	Pembroke Marsh East	Bermuda	7.82	10/05/1999
UK41006	Somerset Long Bay Pond	Bermuda	1.10	10/05/1999
UK41007	Spittal Pond	Bermuda	9.53	10/05/1999
UK41010	Warwick Pond	Bermuda	2.30	10/05/1999
UK42001	Booby Pond and Rookery	Cayman Islands	82.00	21/09/1994
UK43001	North, Middle and East Caicos Islands	Turks and Caicos	58617.00	27/06/1990
UK44003	Western Salt Ponds of Anegada	British Virgin Islands	1071.00	10/05/1999
UK54001	Bertha's Beach	Falkland Islands	3191.00	24/09/2001
UK54005	Sea Lion Island	Falkland Islands	1556.00	24/09/2001
UK61002	Diego Garcia	British Indian Ocean Territory	35424.05	04/07/2001

The previously existing list of proposed Wetlands of International Importance in the UK Overseas Territories and Crown Dependencies included about 20 areas. This was known to give very inadequate coverage to the wetland types and globally important wildlife populations dependant on the UKOTs and CDs. However, whilst ad-hoc attempts had been made to incorporate some recent information, effectively this list was based mainly on data from over a decade ago, which was then very incomplete. This was one reason for the present review. As a result of this review, the number of proposed Ramsar sites has risen to 76 (in addition to the 15 already designated), as outlined in the following table.

It should be noted that this summary gives no indication of site size, nor that similar numbers of sites in the last two columns for some territories do not necessarily indicate a lack of substantial change. In addition, it does not take account of proposals to extend certain sites, detailed in the relevant sections above, and a few cases in which the need for additional sites has been recognised but present survey information does not allow definition even in a preliminary way. However, the table does indicate a move to a pattern reflecting better the wetland nature of the various areas and their global biodiversity importance.

Territory	Ramsar sites already designated	Proposed Ramsar sites identified in previous listing	Proposed Ramsar sites now identified
Isle of Man	0	0	6
Bailiwick of Guernsey (including 1 proposed site in each of Alderney and Sark)	0	1	5
Bailiwick of Jersey	1	0	4*
Gibraltar	0	1	1
Cyprus Sovereign Base Areas	1	0	0
Bermuda	7	3	6
Cayman Islands	1	2	4
Turks and Caicos Islands	1	0	7
British Virgin Islands	1	2	2
Anguilla	0	5	5
Montserrat	0	0	2
Ascension	0	0	1
St Helena	0	0	3
Tristan da Cunha	0	0	4
Falkland Islands	2	2	18
South Georgia and the South Sandwich Islands	0	0	2
British Antarctic Territory (not in Ramsar)	0	0	0
British Indian Ocean Territory	1	1	1
Pitcairn Islands	0	3	5
Total	15	20	76

\* 3 of these 4 sites were designated while this report was undergoing final editing.

The term 'proposed' when used in this report means proposed by this Review (or an earlier proposal confirmed by this Review). Whilst in most cases individuals or organisations in the territories concerned have been consulted on the list of proposed sites, it does not mean that these sites have been formally proposed to Government for designation. Thus whilst many of these sites have the potential to be proposed by the relevant authorities, 'proposed' is taken to mean 'potential sites that have been identified as meriting Ramsar designation by the *Review of Existing and potential Ramsar sites in the UK Overseas Territories and Crown Dependencies*'.

The following table lists presently designated sites as well as all the currently proposed sites resulting from this review.

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK21001	The Ballaugh Curragh	Isle of Man	227		Proposed
UK21002	The Ayres	Isle of Man	680		Proposed
UK21003	Southern Coasts & Calf of Man	Isle of Man	2326		Proposed
UK21004	Central Valley Curragh	Isle of Man	164		Proposed
UK21005	Gob ny rona, Maughold Head & Port Cornaa	Isle of Man	209		Proposed
UK21006	Dalby Peatlands	Isle of Man	58		Proposed

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
UK22001	Lihou Island & L'Eree Headland	Guernsey	390		Proposed; consultation in progress
UK22002	Alderney West Coast & the Burhou Islands	Guernsey (Alderney)	15629		Alderney has asked UK to designate
UK22003	North Herm and Les Amfrocques	Guernsey	685		Proposed
UK22004	Gouliot Caves	Guernsey (Sark)	1		Proposed
UK22005	Vicheries Orchid Fields at Rocquaine Bay	Guernsey	4		Proposed
UK23001	South East Coast of Jersey, Channel Islands	Jersey	3210.50	25/09/2000	Designated
UK23002	Les Minquiers	Jersey	9575		Designation in preparation
UK23003	Les Écréhous & Les Dirouilles	Jersey	5459		Designation in preparation
UK23004	Les Pierres de Lecq (the Paternosters)	Jersey	512		Designation in preparation
UK23005	St Ouen's Bay and Les Mielles	Jersey	1280		Proposed
UK31001	Bay of Gibraltar	Gibraltar			Proposed
UK32001	Akrotiri	Western Sovereign Base Area of Cyprus	2171.00	20/03/2003	Designated
UK41001	Devonshire Marsh East and West Basins	Bermuda	30.14		Proposed
UK41002	Hungry Bay Mangrove Swamp	Bermuda	2.01	10/05/1999	Designated
UK41003	Lover's Lake Nature Reserve	Bermuda	2.10	10/05/1999	Designated
UK41004	Paget Marsh	Bermuda	11.35	10/05/1999	Designated
UK41005	Pembroke Marsh East	Bermuda	7.82	10/05/1999	Designated
UK41006	Somerset Long Bay Pond	Bermuda	1.10	10/05/1999	Designated
UK41007	Spittal Pond	Bermuda	9.53	10/05/1999	Designated
UK41008	Trott's Pond and Mangrove Lake	Bermuda	ca 16		Proposed
UK41010	Warwick Pond	Bermuda	2.30	10/05/1999	Designated
UK41012	Walsingham Formation – Karst and Caves	Bermuda			Proposed
UK41013	Harrington Sound and Notch	Bermuda	488		Proposed
UK41014	Reef areas	Bermuda			Proposed
UK41015	Castle Bay Islands and reef	Bermuda	374		Proposed
UK42001	Booby Pond and Rookery	Cayman Islands	82.00	21/09/1994	Designated
UK42004	Central Mangrove Wetland, Little Sound, Ponds and associated Marine Zones	Cayman Islands	8039		Proposed
UK42005	Little Cayman Crown Wetlands and Marine Parks	Cayman Islands	901		Proposed
UK42006	Salina Reserve	Cayman Islands	252		Proposed
UK42007	Barker's Wetland	Cayman Islands	460		Proposed
UK43001	North, Middle and East Caicos Islands	Turks and Caicos Islands	58617.00	27/06/1990	Designated
UK43002	Grand Turk salinas, ponds and shores	Turks and Caicos Islands	ca 200		Proposed
UK43003	Salt Cay creeks and salinas	Turks and Caicos Islands	ca 150		Proposed
UK43004	Turks Bank Seabird Cays	Turks and Caicos Islands	ca 120		Proposed
UK43005	Caicos Bank Southern Cays	Turks and Caicos Islands	ca 364		Proposed
UK43006	West Providenciales Wetlands	Turks and Caicos Islands	5613.0		Proposed



<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
UK43007	West Caicos saline lake and coral reef system	Turks and Caicos Islands	1527.1		Proposed
UK43008	Leeward-Going-Through Cays	Turks and Caicos Islands	ca 182		Proposed
UK44003	Western Salt Ponds of Anegada	British Virgin Islands	1071.00	10/05/1999	Designated
UK44004	Anegada Eastern Ponds and The Horseshoe Reef	British Virgin Islands	30009.11		Proposed
UK44005	Fat Hogs and Bar Bays	British Virgin Islands	ca 20		Proposed
UK45006	Sombrero Island	Anguilla	ca 600		Proposed
UK45007	Dog Island & Middle Cay	Anguilla	ca 1800		Proposed
UK45008	Prickly Pear Cays	Anguilla	ca 1800		Proposed
UK45009	Scrub & Little Scrub Islands	Anguilla	342.9		Proposed
UK45010	Anguilla mainland wetlands	Anguilla			Proposed
UK46001	Montserrat NW coasts and marine shallows	Montserrat			Proposed
UK46002	Centre Hills and forested ghauts	Montserrat			Proposed
UK51001	Ascension Island	Ascension Island			Proposed
UK52001	St Helena Central Peaks	St Helena			Proposed
UK52002	St Helena inshore waters, stacks and cliffs	St Helena			Proposed
UK52003	Fisher's Valley	St Helena			Proposed
UK53001	Gough Island	Tristan da Cunha	6500+		Proposed
UK53002	Inaccessible Island	Tristan da Cunha	1400+		Proposed
UK53003	Nightingale Group	Tristan da Cunha	390+		Proposed
UK53004	Tristan Island	Tristan da Cunha	9600+		Proposed
UK54001	Bertha's Beach	Falkland Islands	3191.00	24/09/2001	Designated
UK54002	East Bay, Lake Sullivan and River Doyle	Falkland Islands	31902.00		Proposed
UK54004	Pebble Island East	Falkland Islands	7053.00		Proposed
UK54005	Sea Lion Island	Falkland Islands	1556.00	24/09/2001	Designated
UK54006	Cape Dolphin	Falkland Islands	4700		Proposed
UK54007	Concordia Beach & Ponds, Limpet Creek and Cape Bougainville	Falkland Islands			Proposed
UK54008	Seal Bay	Falkland Islands	2700		Proposed
UK54009	Volunteer Point	Falkland Islands	230		Proposed
UK54010	Kidney Island and Kidney Cove	Falkland Islands			Proposed
UK54011	Cape Peninsula, Stanley Common and Port Harriet	Falkland Islands			Proposed
UK54012	Swan Inlet and Ponds	Falkland Islands	ca 12000		Proposed
UK54013	Flats Brook and Bombilla Flats	Falkland Islands			Proposed
UK54014	Lafonia ponds and streams catchment	Falkland Islands			Proposed
UK54015	Bull Point	Falkland Islands	ca 300		Proposed
UK54016	Beauchêne Island	Falkland Islands	187		Proposed
UK54017	Jason Islands Group	Falkland Islands	3328		Proposed
UK54018	Keppel Island	Falkland Islands	3626		Proposed
UK54019	Hawks Nest Ponds	Falkland Islands			Proposed
UK54020	Bird Island	Falkland Islands	120		Proposed
UK54021	New Island Group	Falkland Islands	2544+		Proposed
UK55001	South Georgia	South Georgia and the South Sandwich Islands	375,500		Proposed
UK55002	South Sandwich Islands	South Georgia and the South Sandwich Islands	27,760		Proposed
UK61002	Diego Garcia	British Indian Ocean Territory	35424.05	04/07/2001	Designated

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
UK61004	Chagos Banks	British Indian Ocean Territory			Proposed
UK62001	Ducie Island	Pitcairn Islands	600.00	01/12/1998	Proposed
UK62002	Henderson Island	Pitcairn Islands	3700.00	01/12/1998	Proposed
UK62003	Oeno Island	Pitcairn Islands	2000.00	01/12/1998	Proposed
UK62004	Browns Water, Pitcairn	Pitcairn Islands			Proposed
UK62005	Coastal waters, Pitcairn	Pitcairn Islands			Proposed

**5. Identify which existing Ramsar Information Sheets need updating, collate available information and update RISs.**

As part of this project, the Ramsar Information Sheets for all designated sites were examined, and revised in conjunction with local workers. The extent of revisions necessary for each site varied greatly, generally with those recently designated or recently revised generally needing fewest changes.

As part of HMG's additional requirements in preparation for CoP, special work was undertaken to gather information for those sites which, at the previous CoP had current "factors (past, present or potential) adversely affecting the site's ecological character..." (section 24 of the RIS). These are reported in the territory sections above.

Coverage of these two elements by the project is summarised in the final two columns of the following table.

<b>Name</b>	<b>Territory</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Previous Updated RIS</b>	<b>Updated RIS by project</b>	<b>Section 24 analysis needed and done</b>
South East Coast of Jersey, Channel Islands	Jersey	3210.50	25/09/2000		✓2004	Not needed
Akrotiri	Cyprus SBA	2142.00	21/03/2003		✓2004	Done
Hungry Bay Mangrove Swamp	Bermuda	2.01	10/05/1999		✓2004	Done
Lover's Lake Nature Reserve	Bermuda	2.10	10/05/1999		✓2004	Done
Paget Marsh	Bermuda	11.35	10/05/1999		✓2004	Done
Pembroke Marsh East	Bermuda	7.82	10/05/1999		✓2004	Done
Somerset Long Bay Pond	Bermuda	1.10	10/05/1999		✓2004	Done
Spittal Pond	Bermuda	9.53	10/05/1999		✓2004	Done
Warwick Pond	Bermuda	2.30	10/05/1999		✓2004	Done
Booby Pond and Rookery	Cayman Islands	82.00	21/09/1994		✓2004	Not needed
North, Middle and East Caicos Islands	Turks & Caicos	58617.00	27/06/1990	✓2002	✓2004	Not needed
Western Salt Ponds of Anegada	British Virgin Islands	1071.00	10/05/1999		✓2004	Not needed
Sea Lion Island	Falkland Islands	1000.00	24/09/2001		✓2004	Done
Bertha's Beach	Falkland Islands	4000.00	24/09/2001		✓2004	Done
Diego Garcia	British Indian Ocean Territory	35424.05	28/02/2001		✓2004	Done

**6. Assemble initial draft information in RIS format where available for proposed sites. (This was additional to specification, but was added later by the contract amendment.)**

This is presented in Annex 2.

**7. Where practicable, identify the management status of designated sites, to identify any additional major needs. (This was additional to specification.)**

The main aspects of this element have been addressed in the territory sections above, and summary points are drawn out below.

Management of the South East Coast of Jersey Ramsar site in the Channel Islands is generally satisfactory, although there is a need to extend the site (see above).

At Akrotiri Ramsar site in the Cyprus Sovereign Base Areas, there is understood to be a management plan in place, and improvements in the management of the area are noted above in the territory section.

The seven designated Bermuda Ramsar sites are discussed in some depth in the territory section. These sites suffer the general problem of being small sites in a densely populated territory, which has large numbers of alien invasive species in the surrounding areas. The Bermuda governmental and voluntary organisations have had remarkable success, through huge efforts, in keeping most of these in check. In addition, some of the coastal Ramsar sites in Bermuda, including Hungry Bay and Spittal Pond, appear to be suffering from the effects of climate change, as well as other external pollution problems. Pembroke Marsh East appears to have been designated as a Ramsar site after much of its earlier interest had been severely damaged; it does not appear to be the case that this loss occurred after designation. (This seems to have resulted in part from a remarkable series of delays and confusions in both Bermuda and UK between the identification of potential sites in 1986 and their designation in 1999 – see Pritchard 1992.) In addition to their current considerable local expertise and experience, Bermuda colleagues received considerable input from participants in the field workshops during the UKOT conference in March 2003. The Bermuda organisations need to consider whether they would benefit from further joint local/external input, such as a Ramsar Advisory Mission, as has been suggested, in respect of restoration of Pembroke Marsh East and some of the other challenges.

Booby Pond and Rookery Ramsar site, Little Cayman, has a management plan in place, and this appears to be working well. As noted in the detailed information, there is a need for continued vigilance in respect of various built development pressures. It is possible that there are further needs following the impact of Hurricane Ivan, but these were centred on Grand Cayman, rather than Little Cayman.

North, Middle and East Caicos Islands Ramsar site, Turks and Caicos Islands, now has a strategic management plan. Work is progressing within this structure insofar as resources are available. Because of the large size of this site, full implementation of

this plan will need substantial resources for some time in addition to the income that can be generated, and there are limited potential sources for these.

Western Salt Ponds of Anegada Ramsar site, British Virgin Islands, developed a management plan under an earlier project and this is being further refined by current research. Although the land is Government-owned, implementation of the plan is partly impeded pending the area's designation as a National Park, which would invest the BVI National Parks Trust with formal management authority.

In the Falkland Islands, a management plan has been prepared and agreed for Bertha's Beach Ramsar site, but implementation and its funding are still required. It is understood that this is not at present leading to serious damage, but there are many positive steps which could be implemented. Sea Lion Island Ramsar site is at a similar status. Implementation is urgently needed in view of increasing visitor numbers. Steps are needed to implement the management plans for these Ramsar sites.

Diego Garcia Ramsar site, British Indian Ocean Territory, does not have a separate management plan but is addressed in the Chagos Conservation Management Plan, which has been accepted in principle but not yet implemented. The situation is further complicated in that the major user of Diego Garcia is the United States military. Although they have their own environmental plan, it may prove necessary to engage more substantively with them to ensure better coordinated management of the area.

**8. *Note any major gaps in information relevant to this exercise, so as to assemble an approach to encourage and direct future work. (This was additional to specification.)***

This matter is addressed for each territory in the territory-specific sections above.

In addition, two general points are worth noting. First, it is generally accepted that more should be done to raise the profile of the Ramsar Convention and the accolade of designation as a Wetland of international Importance. There are few readily available models here because, on average, there is probably even less local emphasis and information at Ramsar sites in GB & NI than there is in the UKOTs and Crown Dependencies.

Second, during the course of this review, UK was collating its 3-yearly report to the Ramsar Convention Conference of the Parties. In the previous round, UKOTCF (on a voluntary basis) coordinated input from the UKOTs. In previous rounds, there had been some criticism that the format of national reports to Ramsar CoP had been too unstructured. In an attempt to overcome this, there has been a tendency in recent rounds to produce formats for the reports involving many nested and parallel boxes. By the current round, this had reached a stage that made completion of the form almost impossible, and indeed reading of the form impracticable also. It was certainly impracticable to consult UKOTs on the basis of this form. The pendulum has swung too far in the other direction, and the Ramsar Convention needs urgently to simplify the format. One possibility might be to combine a set of yes/no questions with areas

for optional readable free-form text on main areas, rather than try the impossible task of combining these in the same questions.

**9. *Use existing and additional contacts with UKOT and CD governments, including where appropriate facilitation of the Environment Charter process, to encourage programmes of designation in the UKOTs and CDs. (This was additional to specification.)***

Additional to the project work, UKOTCF has assisted colleagues in Alderney and Jersey in moving sites to the stage of requesting HMG to designate, and has also advised Guernsey in this regard. Discussions have been held also with colleagues in several UKOTs so that, for several of these, some of the proposed sites now have timetables or other definite plans towards designation requests. In other areas, the review appears to have helped stimulate a reawakening of interest in progressing the designation of sites, as well as widening public awareness.

It is also worth reflecting on the how the momentum to designations can be maintained, and learning from past experience. It is notable that there were several reviews of potential Ramsar sites in the UK Overseas Territories and Crown Dependencies from the late 1970s to the early 1990s, some covering one or a few Territories and at least one addressing all. Although designation of a few sites (and eventually rather more in the case of one UKOT) resulted from these reviews, most sites identified have not been designated in the intervening years. It is the case that levels of mutual awareness of Ramsar, UK and UTOT/CD were lower in previous decades, something UKOTCF and others have worked to overcome (and, in the process facilitating some of the designations). However, another factor appears to be loss of continuity and awareness. These are perennial problems, in that Ramsar designations for UK Overseas Territories and Crown Dependencies need collaboration between a long chain of Departments in UK Government as well as in the Governments of the Territory concerned – and often the NGOs in these which may be the holders of the key information or expertise. There is a tendency in all these bodies for high staff turnover. Filing systems are rarely perfect, and often cannot substitute for loss of key staff. In undertaking this review, it was apparent that, in many cases, there was a lack of corporate memory (in both UK and Territories) of why sites had been identified and proposed in the past. It appears that usually proper assessments had been done, but the details had tended to become detached from the reports themselves – and, in consequence, effectively lost. This is a main reason why this report has used the standard Ramsar Information Sheet format as a means of collating material on potential sites (so that it can readily be edited into final RISs), as well as appending these RISs to the report in the form of Annexes.

## ***Acknowledgements***

UKOTCF and the editor are grateful to the many colleagues working currently or previously on UK Overseas Territories or Crown Dependencies for their help in many ways. These are acknowledged in the territory-specific sections below.

The editor would like to thank colleagues in UKOTCF for many helpful discussions.

UKOTCF is grateful to colleagues at JNCC, particularly Colin McLeod, Elizabeth Moore, David Stroud and Dr Vin Fleming for discussions and information.

UKOTCF acknowledges useful discussions with Rob Bowman and Denise Dudgeon at the Foreign & Commonwealth Office.

UKOTCF and the editor are grateful to the Defra project manager, Louise Vall, for her help and advice, as well as her colleagues in the European Wildlife Division of Defra, particularly Trevor Salmon, Gail Bryant, Christopher Lewis, Huw Thomas and other Defra personnel including Richard Chapman, as well as the members of the UK Ramsar Review Steering Group.

## **Territory-specific material**

### **Introduction**

In the following sections, each UK Overseas Territory and Crown Dependency is treated in turn, under the following headings:

#### ***Introduction***

Background information can be seen in the fuller version of this report, available at [www.ukotcf.org](http://www.ukotcf.org). In this version, it is limited to about one paragraph. Wherever possible, the information is drawn from information supplied by the Government of the territory concerned, supplemented largely by material from the Foreign & Commonwealth Office and by material from UKOTCF partner organisations.

#### ***Overview of wetland interest and sites identified***

This lists the designated and identified proposed Ramsar sites in the context of the wildlife interest of the territory. It notes also cases in which it is proposed that designated sites be extended. The extent of coverage that would be achieved, in terms of Ramsar site selection criteria and global priorities present in the territory is reviewed.

Please note that, in the tables listing sites, the status “Proposed” means proposed by this review (or an earlier proposal confirmed by this review). Whilst this usually means also that individuals or organisations in the territory concerned have also proposed the site for Ramsar designation, it does not necessarily mean that the authorities in the territory have done so (although in most cases they have been party to the recommendation). Thus, while in some cases, such sites have indeed been so proposed by the authorities, “proposed” generally can be taken to mean “a site identified as qualifying as a Wetland of International Importance and proposed for Ramsar designation by the *Review of existing and potential Ramsar sites in UK Overseas Territories and Crown Dependencies, January 2005* [this report]”. Designation would help provide coverage of priority features.

#### ***Identification of principal further information needs***

Further priority information needs are noted, especially as these relate to aspects not yet covered by proposed sites, as noted in the previous section.

#### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

In the case of territories with sites already designated, a note of revisions or reports in relation to adverse factors reported previously. Tabular material reviewing management issues previously identified has been removed from this version. It may

be viewed in the fuller version (available at [www.ukotcf.org](http://www.ukotcf.org)) and is being incorporated into UK's report to the Ramsar Conference of the Parties 2005.

### ***Acknowledgements***

A note of thanks to the many helpers, as well as a recording of any main sources additional to these and to the literature cited in the RISs.

The lengths and contents of the various sections differ considerably between the territories, in relation to many relevant factors, including the amount of background information considered necessary for the various sites.



## **Isle of Man**

### ***Introduction***

The Isle of Man is situated in the centre of the northern part of the Irish Sea, nearly equidistant from England, Wales, Scotland and Ireland. It is 52 kilometres (33 miles) long from north to south and 22 km (13 miles) wide from east to west at the widest point. The total area is 572 km<sup>2</sup>, and the coastline extends over 160 km (100 miles). More than 40% of the Island is uninhabited hill land. Snaefell is the highest point, at 621 metres. Off the southern tip is the islet known as the Calf of Man.

### ***Overview of wetland interest and sites identified***

Despite its comparatively small size, the Island contains a wide variety of ecosystems. The Isle sits within a rich marine ecosystem. Terrestrial ecosystems range from hill-land to coastal heath. Much of these and the intervening agricultural land retains elements of traditional farming methods, important for orchids and used by chough, a bird now restricted to certain uplands and coastal fringes of Europe. A range of hills stretches across the Island, the highest being Snaefell, at 621 metres (2,036 feet). Between these hills lie well defined valleys. Around the Island's flat northern plain are long sandy beaches which contrast markedly with the rocky cliffs and sheltered bays around the rest of the coastline. Over two thirds of the land mass is cultivated, principally the fertile northern and southern plains. The Isle of Man is not a member of the European Union and hence not directly subject to the provisions of the EU Common Agricultural Policy. Although some aspects of agriculture have been intensified, other aspects have been less so, giving rise to the survival of some important wetland types (see below).

The surrounding seas are rich. This may be related to strong tidal mixing of the waters, in part due to strong tidal currents travelling along either side of the Island. There are important seabird feeding areas. Basking sharks are regular visitors to island waters, where they are protected by law. The waters around the British Isles appear to hold one of the largest populations of basking sharks in the world; fortunately these close relatives of the great white shark are entirely harmless plankton feeders. Very little is known about the basking shark - except that they are possibly under threat of extinction as hunting continues elsewhere in the world. Previously killed for their oil-rich liver, they are now harpooned for their fins; once the tail and fins are cut-off (for shark fin soup) the shark, sometimes still alive, is thrown back into the sea. The basking shark is gradually disappearing from areas where they were previously common. The Basking Shark Society ([www.isle-of-man.com/interests/shark/](http://www.isle-of-man.com/interests/shark/)) undertakes research and local recreational boats take visitors out to see sharks and cetaceans. Sightings of basking sharks are also reported to the Marine Conservation Society Basking Shark Watch and in a recent report they identified the Isle of Man as one of three hotspots for basking sharks around the British Isles. The Island has a wide variety of intertidal and marine habitats of high conservation importance, including maerl beds, eelgrass meadows and horse mussel beds.

The Island's many unspoilt habitats support a great diversity of wildlife, from grey seals and basking sharks to the lesser mottled grasshopper of Langness. The island is also home to many different bird species, including chough, peregrine, long-eared and short-eared owls, puffin and Manx shearwater. The Ballaugh Curragh, a large marshland in the north of the Island, has the biggest hen harrier roost in Western Europe. This reserve and the Calf of Man (on which there is a bird observatory) are among the sites managed by Manx National Heritage ([www.gov.im/mnh](http://www.gov.im/mnh)). The Government ([www.gov.im](http://www.gov.im)) manage many of the hills and glens, and have designated the Ayres as a National Nature Reserve for its extensive coastal heath, dunes and shoreline with breeding little terns. The other statutory protected site currently is Langness. The Manx Wildlife Trust ([www.wildlifetrust.org.uk/manxwt](http://www.wildlifetrust.org.uk/manxwt)) has 20 reserves across the Island, including the famous orchid meadows at Close Sartfield. The Trust has taken a lead in the production of Biodiversity Action Plans and has commissioned various surveys: coastal, verges and river corridors.

In consultation with local personnel, this review has identified the following proposed Ramsar sites:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK21001	The Ballaugh Curragh	Isle of Man	227		Proposed
UK21002	The Ayres	Isle of Man	600		Proposed
UK21003	Southern Coasts & Calf of Man	Isle of Man	2326		Proposed
UK21004	Central Valley Curragh	Isle of Man	164		Proposed
UK21005	Gob ny rona, Maughold Head & Port Cornaa	Isle of Man	209		Proposed
UK21006	Dalby Peatlands	Isle of Man	58		Proposed

The Ballaugh Curragh has a huge hen harrier winter roost, a very high diversity of breeding birds and good peatland habitat, mainly shrub covered, much of it willows. Curraghs (essentially willow carr at the core) are representative of a wetland type once widespread across western Europe but now severely depleted by agricultural intensification and other human impacts. This is complemented by a rather contrasting river valley curragh site, the Central Valley Curraghs. Although fragmented by development, this is still in a more intact state than many other river carr systems throughout western Europe. These give a good representation of lowland systems within the global priority peatland wetland types. In the uplands there are areas of rushy pastures, wet heath and bog, such as at Glen Roy. Despite considerable peaty habitat, blanket bog is more restricted in the Isle of Man, although further survey may reveal more. Dalby Peatlands provides the best Manx example.

The Ayres provides a particularly good example of a diverse and inter-related shingle and dune coastal area, including priority wet-grasslands, as well as continuing into the adjacent sea areas, where the high-energy tidal streams passing either side of the Island meet, with much mixing. The resulting rich waters are important, close to the shore outwards, for feeding seabirds and other animals.

The two remaining coastal sites are aimed also at maintaining in an integrated state the linked ecosystems either side of the shore boundary. The two sites include one each of the two main global priority sea-grass areas, Langness & Gob ny Rona. These are combined with coastal grassland areas and important seabird colonies, as

well as the lower valleys and estuaries of small river systems. Included in one of these sites is the Calf, which has a good diversity of underwater fauna and flora and is important regionally. Also within these areas are maerl beds, kelp and knotted wrack, rocky marine shores, coastal grassland and heath, migratory waterbirds, saltmarsh and mudflat. Both are important sites for grey seals. The Calf of Man is a breeding colony and there is a haul-out site between Maughold Head and Port Mooar which may be also be important for breeding.

The six sites represent good examples of priority wetland sites and important species populations; this coverage of each site is summarised below.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:					
		The Ballaugh Curragh	The Ayres	Southern Coasts & Calf of Man	Central Valley Curragh	Gob ny rona, Maughold Head & Port Cornaa	Dalby Peatlands
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y	Y	Y	Y
Priority type: coral reefs	No						
Priority type: mangroves	No						
Priority type: sea-grass beds	Yes			Y		Y	
Priority type: wet grass-lands	Yes	Y	Y	Y	Y		
Priority type: peatlands	Yes	Y			Y		Y
Priority type: caves & karst	Yes			Y		Y	
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y			Y	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y			
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y	Y	Y		Y	
5: Regularly supports 20,000 or more waterbirds.	No						
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	No						
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes		Y	Y			
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes		Y	Y		Y	

### ***Identification of principal further information needs***

More research is needed into the hydrology of the Ballaugh Curragh area, and the effects of drainage works on land adjacent to it, or inside it. Some further study is required of the area of farmland in the vicinity of the Ballaugh Curragh to identify the importance of field pools and other small water bodies. Amongst the farm pools/dubs, a group at Ballaugh has the most diverse plantlife, with more than 40 wetland plant species. Also rushy pastures may contain orchids and nesting shorebirds in these areas. There are also a few small swamps, such as Laggagh Mooar, with *Carex riparia* at Lough Cranstal. There are also a few flooded marl pits and a flooded limestone quarry where bee orchids were previously recorded.

Further work is required on researching salmonid runs and other features of rivers. The Sulby River has a record of an RDB beetle in shingle though this has not been recorded recently.

Some aspects of the marine environment also require further survey, including fish-spawning in sea bays, as well as other features.

Examination of aerial photography suggests that there may be other high-quality upland peatlands, and exploration may be valuable.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

### ***Acknowledgements***

Thanks are due particularly to the Isle of Man Government's Wildlife and Conservation Division, especially its Head and Senior Wildlife & Conservation Officer, Elizabeth Charter, as well as Dr Richard Selman, Dr Fiona Gell and Linda Moore.

[www.gov.im/countryside](http://www.gov.im/countryside)

## **Bailiwick of Guernsey**

### ***Introduction***

The Channel Islands are a group of islands, islets and offshore rocks located in the English Channel within the Gulf of St Malo off the north-west coast of France. Although the Islands form part of the British Isles, they do not form part of the United Kingdom. They are divided into the Bailiwicks of Guernsey and Jersey. The Bailiwick of Jersey comprises the largest and most southerly island of the group, also with several reefs of islets and rocks. The Bailiwick of Guernsey comprises the islands of Guernsey, Alderney, Sark, Herm, Jethou, Brecqhou and Lihou, together with their associated islets and offshore rocks. Guernsey is the largest island within the Bailiwick of Guernsey and the second largest island in the Channel Islands, with an area of 25.11 miles<sup>2</sup> (65 km<sup>2</sup>). Alderney, the third largest island in the Channel Islands and the second largest island in the Bailiwick of Guernsey, lies approximately 19 miles (30 km) to the north-east of Guernsey and 8 miles (13 km) off the Normandy coast of France. At approximately 3.5 miles (5.6 km) in length by 1.5 miles (2.4 km) at its widest point, the island's land area is approximately 2000 acres (ca 800 ha). Alderney is sparsely populated with less than a third of the number of people per acre than Guernsey. Sark, the third largest island in the Bailiwick, stands high and is surrounded by abrupt cliffs from 100 to 320 feet (30 to 100 m) in height. Sark is about 3 miles (5 km) in length, 1 mile (1.6 km) wide and 9 miles (14.5 km) in circumference, and contains 1,400 English acres (566 ha). It is located 8 miles (13 km) east of Guernsey, 18 miles (29 km) south-west of Alderney and 24 miles (39 km) from the French coast. Brecqhou is a small privately owned island lying off the west coast of Sark. Herm Island is located 3 miles (5 km) east of Guernsey and is the smallest of the Channel Islands open to the public measuring just 1.5 miles (2.4 km) long by 0.5 miles (0.8 km) wide. To the south-east of Herm lies the small island of Jethou which is leased by the States of Guernsey on behalf of the Crown as a private estate.

### ***Overview of wetland interest and sites identified***

The Channel Islands have an extremely rich flora and fauna. This is largely due to the wide variety of habitats, both natural and man-made, contained within a small area. Other factors that contribute to the diversity of life in the islands are the mild Atlantic climate, the extremely wide tidal range, and the islands' position on the migration routes of birds and insects up and down the western fringe of Europe.

Guernsey boasts nearly 2000 species of plants, which in turn support a diverse range of invertebrates, many absent from the UK. Guernsey features dramatic cliffs with nesting seabirds, steep wooded valleys running down to the sea, and quiet, rural lanes with characteristic hedgebanks enclosing fields.

The island's 10-metre tides provide a large littoral zone, supporting a wide range of marine species and many species of waders (shorebirds). Migrating land-birds such as wheatears and pipits rest in the dune grassland, whilst inland fragments of threatened wet meadow habitat are managed for their summer display of orchids and other rare plants. In the fragmented woodland, warblers, long-eared owl and short-

toed treecreeper breed. On the cliff-land, the maritime grassland supports the rare Glanville fritillary butterfly and cliff-top scrub hosts resident Dartford warbler, Stonechat and many species of migrant bird, which use Guernsey as a vital 'refuelling' stop in spring and autumn.

In an attempt to improve the Island's biodiversity further, local authorities have implemented a new system of farm subsidy. This programme aims to make farming less intensive and encourages farmers to undertake various conservation measures.

Windswept Alderney, with its central settlement surrounded by open fields, has a very different, relatively rural landscape as a result of the strip agriculture and communal rough grazing system used well into the 20th century. Over 900 species of vascular plant are currently recorded on the island, including rarities such as the spotted rockrose. The Island's bird list contains almost 300 species, and includes 2% of the world's gannet population as well as Fan-tailed and Dartford warblers, making Alderney a favourite among the British bird watching community. However, owing to the decline in agriculture since World War II and the increasing pressures of development, many of the island's diverse terrestrial habitats are under threat. There are rich surrounding waters, important in their own right and for feeding sea-birds and cetaceans etc.

Sark, though closer in size to Alderney, takes its landscape from Jersey, from where it was colonised in the 16<sup>th</sup> century, with scattered settlements and fields enclosed by high hedgebanks. The island is very productive, due to the nature of both the soil and climate. In the winter, woodcock and snipe are to be found on the Island. The most common marine species are lobsters, crabs, mackerel, whiting, rock-fish, silver bream, cod, sole, and conger; in summer the latter are taken in great abundance.

In consultation with local personnel, this review has identified the following proposed Ramsar sites:

Ramsar code	Site name	Country	Area (ha)	Date	Status
UK22001	Lihou Island & L'Eree Headland	Guernsey	390		Proposed; consultation in progress
UK22002	Alderney West Coast & the Burhou Islands	Guernsey (Alderney)	15629		Alderney has asked UK to designate
UK22003	North Herm and Les Amfrocques	Guernsey	685		Proposed
UK22004	Gouliot Caves	Guernsey (Sark)	1		Proposed
UK22005	Les Vicheries Orchid Fields	Guernsey	4		Proposed

The above proposed Ramsar sites in Guernsey, Alderney and Sark have been selected to address those wetland features of international importance for which the Bailiwick makes a significant contribution. The important continuum from coastal terrestrial habitats of various types, from cliffs to low wet grasslands, through to the shore habitats ranging from the high-range tidal to the near sub-littoral, is particularly well represented in these islands. Some years ago, it was suggested that the whole of Guernsey's east and west coasts should be designated as a Ramsar Site, but instead, consideration is now being given to separate sections.

The first of these, Lihou Island & L'Eree Headland, has been the subject of intensive public consultation. This has been generally favourable, and a request for designation is expected shortly. Within this relatively small area is a wide variety of habitat types including rocky, gravelly and sandy shoreline, the sub-littoral zone, coastal grassland, salt marsh, reed bed and saline lagoon. The proposed site also includes vegetated shingle banks, sea grass beds and wet grassland areas which are internationally threatened habitat types. These habitats support a rich diversity of animals and plants. For example, 214 different species of seaweed have been recorded on the shore around Lihou Island. The area also has a rich cultural heritage, many important archaeological and historical remains and L'Eree Headland has been identified as one of eleven "Areas of Geological Importance" in Guernsey.

There are no immediate plans to progress other Ramsar designations in Guernsey itself while this site designation is pending. However, one other proposed coastal site that has been identified as appropriate for Ramsar designation in the future is North Herm and Les Amfrocques.

The proposed Alderney site includes some features of the coastal continuum in common with these, but in addition is extremely important for sea-birds, as well as sub-littoral wildlife.

Les Vicheries Orchid Fields represent an important freshwater habitat, at the landward end of the continuum noted above, and demonstrate the successful restoration of a wise-use system which maintained this wetland-type for many human generations. It is likely that the area of this proposed site will increase as restoration progresses. In May each year, a stunning display of orchids may be seen including Heath Spotted, Common Spotted, Loose-Flowered (which does not occur in the UK), and Southern Marsh orchids. The fields also contain a profusion of other wild flowers such as Ragged Robin, Lady's Smock, Lesser Spearwort, Yellow Flag Iris, and Bugle.

The Gouliot Caves in Sark are a unique site, important for sponges, anemones and other inter-tidal and normally sub-littoral marine invertebrates. Not only does this site provide a habitat for a remarkable diversity of these animals, but it is also noteworthy as a site where the exceptionally large tidal range, combined with the constancy of a cave situation, mean that these animals can be viewed at low-water. As a result, the Gouliot Caves are where many of these animals were first described and studied in the 19<sup>th</sup> and early 20<sup>th</sup> centuries, before sub-aqua equipment became readily available.

Coverage is summarised below.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:				
		Lihou Island & L'Eree Headland	Alderney West Coast & the Burhou Islands	North Herm and Les Amfrocques	Gouliot Caves	Le Vicheries Orchid Fields
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y	Y	Y
Priority type: coral reefs	No					
Priority type: mangroves	No					
Priority type: sea-grass beds	Yes	Y	Y	Y		
Priority type: wet grasslands	Yes	Y	Y	Y		Y
Priority type: peatlands	No					
Priority type: caves & karst	Yes				Y	
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y				Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y	Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y		Y		
5: Regularly supports 20,000 or more waterbirds.	No					
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes		Y	?		
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes	Y	Y	Y	Y	
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	?Yes					

### ***Identification of principal further information needs***

Further information on the wide biodiversity of the identified sites would be useful, as well as further investigation of other parts of the Guernsey coast.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.



***Acknowledgements***

Thanks are due to:

States of Guernsey Environment Department: particularly Ellen Pragnell, Steve Smith, Martin Gavet

States of Guernsey Commerce and Employment Department: Dr Andrew Casebow and farmers, particularly Ray Watts

La Société Guernesiaise: Dr Charles David, David Le Conte, Jane Gilmour, Bridget Ozanne, Nancy Ogier

Alderney Wildlife Trust: Roland Gauvain, Juan Salado Tuero

La Société Serquaise: Jo Birch

Additional sources:

[www.biologicalrecordscentre.gov.gg](http://www.biologicalrecordscentre.gov.gg)

[www.societe.org.gg](http://www.societe.org.gg)

[www.alderneywildlife.org](http://www.alderneywildlife.org)

## Bailiwick of Jersey

### *Introduction*

The largest of the Channel Islands, Jersey (117 km<sup>2</sup>) situated in the Bay of Mont St Michel, is little more than 20 km from the northwest coast of Normandy, France. The underlying geology is largely granite and shale. The overlying soils vary from areas of clay, sandy loess and alluvium with acid soils, particularly over the granite. The climate is milder than that of the British Isles with mean temperatures of 7°C in January and 18°C in August. Summers are generally warm and dry, yet with the occasional drought. Winters are usually mild but with frosts in some years. The island slopes from a height of 153 m on the north coast to 60 m above mean sea level in the south. It has one of the world's greatest tidal ranges of up to 12 metres, leading to a vastly larger land area at low-water than at high-water. The Bailiwick of Jersey consists of the island of Jersey and several nearby reefs.

### *Overview of wetland interest and sites identified*

In consultation with local personnel, this review has identified the following proposed Ramsar sites, in addition to the already designated one, also noted:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK23001	South East Coast of Jersey, Channel Islands	Jersey	3210.50	25/09/2000	Designated
UK23002	Les Minquiers	Jersey	9575		Designation in preparation*
UK23003	Les Écréhous & Les Dirouilles	Jersey	5459		Designation in preparation*
UK23004	Les Pierres de Lecq (the Paternosters)	Jersey	512		Designation in preparation*
UK23005	St Ouen's Bay and Les Mielles	Jersey	1280		Proposed

\* These 3 sites were designated while this report was undergoing final editing.

Much of Jersey's biodiversity is linked to the large tidal range (up to 12 m), the land area increasing by 40% from 116 to 300 km<sup>2</sup> at low tide. The previously designated Ramsar site on the southeast coast, together with the three separate tidal reef areas now being prepared for designation, are good examples of these intertidal area rich in bird-life and other marine fauna and flora. There have been suggestions from Jersey that it might be appropriate, at some time in the future, to explore the possibility of linking UK (Jersey) and nearby French sites to develop a cross-boundary Ramsar complex in the globally exceptional environment of the Baie du Mont St Michel.

Further extension of the first SE Coast Ramsar site is considered a priority. To the SW and NE respectively, St Aubin's and St Catherine's Bays are sheltered, shallow tidal embayments. They support extensive eelgrass beds, play significant roles as nursery areas for fish, and provide valuable habitat for important populations of wintering shorebirds. Both areas have also been proposed as site for large scale coastal development.

Jersey's biodiversity interest is not limited to the intertidal regime. Its geographical position partly explains the large number (33) of UK Red Data Book species supported. Species include the four reptiles (two lizards, the green and wall, not found in the UK), two amphibians (including the agile frog, which is not found in the UK, the red squirrel, several invertebrates rare or not recorded in UK, and a rich lichen flora, not to mention the rich marine life. In addition to the inter-tidal, important habitats include dunes in the west and coastal heath-land on the southwest and north coasts. Additional planning protection is provided for the large, relatively undeveloped western coastal plain and scarp slopes. As well as the dunes and dune grassland, the area contains the largest natural fresh-water body in the island: St Ouen's Pond, which is 4.5 ha, surrounded by 9.0 ha of reed beds. The associated wet meadows, with a rich orchid flora and the dune and machair-like grassland make this an exceptionally rich area. St Ouen's Bay, Pond and grasslands is a clear example of an area qualifying for Ramsar designation, although there are no immediate plans to progress this.

In addition, the wet meadows situated in the inland valleys of Jersey are potentially of great value locally and are identified as of local value in the Jersey Biodiversity Strategy (2001). Also, Ouaisné Common is a potential SSI site because it is the last breeding site for agile frog *Rana dalmatina*. The breeding site complex is a series of temporary pools where this species, which is not found elsewhere in the British Isles, spawns. Research into the preservation of this rare species continues and management and awareness raising continues.

Coverage by these sites is reviewed below.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:				
		South East Coast of Jersey	Les Minquiers	Les Écréhous & Les Dirouilles	Les Pierres de Lecq (the Paternosters)	St Ouen's Bay and Les Mielles
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y	Y	Y
Priority type: coral reefs	No					
Priority type: mangroves	No					
Priority type: sea-grass beds	Yes	Y	Y	Y	Y	Y
Priority type: wet grass-lands	Yes					Y
Priority type: peatlands	Yes					Y
Priority type: caves & karst	No					
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y	Y	Y	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y	Y	Y

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:				
		South East Coast of Jersey	Les Minquiers	Les Écréhous & Les Dirouilles	Les Pierres de Lecq (the Paternosters)	St Ouen's Bay and Les Mielles
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y	Y	Y	Y	Y
5: Regularly supports 20,000 or more waterbirds.	No					
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	No					
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes	Y	Y	Y	Y	Y
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes	Y	Y	Y	Y	Y

### ***Identification of principal further information needs***

Further survey information on the St Ouen's Bay area would be useful, as would additional information on the wide diversity of the other sites designation. Exploration is needed as to whether other terrestrial wetland areas may qualify. In particular the wet meadows situated in the inland valleys of Jersey are potentially of great value locally and are identified as of local value in the Jersey Biodiversity Strategy (2001)

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

The RIS for South East Coast of Jersey (UK23001) has been updated in Appendix 1, but the need for updates was limited to minor administrative information.

### ***Acknowledgements***

Thanks are due to the Environmental Services Unit, particularly Mike Freeman and David Tipping, as well as Andrew Syvret, Société Jersiaise, National Trust for Jersey. Additional sources:  
[www.jersey.co.uk](http://www.jersey.co.uk)  
[www.gov.je](http://www.gov.je)  
[www.esu.gov.je](http://www.esu.gov.je)

## **Gibraltar**

### ***Introduction***

Gibraltar is a narrow peninsula 7 km long attached to Iberia by a low, sandy isthmus. In the ancient times, right through the age of empires and global conflicts, Gibraltar has stood guard over the western Mediterranean, its unique position making it the focus of a continuous struggle for power. This spectacular rock monolith, covering a land area of about six square kilometres, is situated at the southern tip of Spain overlooking the strait to Africa.

### ***Overview of wetland interest and sites identified***

Gibraltar is home to a wealth of plant life, including two species, Gibraltar Candytuft and Gibraltar Sea Lavender, named after the Rock itself. Species confined to Gibraltar include sea-slugs, snails and plants (e.g. Gibraltar candytuft). Within Europe, Barbary macaques (the famous “apes”) are unique to Gibraltar, and are the only wild primates in all Europe (although it remains unresolved as to whether these are native or long-established introductions).

A Mediterranean wildlife community survives on the impressive limestone cliffs and slopes with their scrub, patches of woodland, caves and rocky shoreline. A steep cliff rises from the Mediterranean on the east to 398 metres. On the west the Rock slopes more gradually through scrubland, with the city (where most of the 28,000 people live) nestled at the foot, partly on land claimed from the sea. To the south are a series of stony terraces.

Each Spring and Autumn, the Rock becomes a staging post for hundreds of thousands of migrating birds flying between their breeding grounds in Northern Europe and their wintering areas in tropical Africa. Resident species such as Peregrine Falcons, Blue Rock Thrush and Barbary Partridge are joined by owls and eagles, harriers and hoopoes, buzzards and black kites. It is particularly important for soaring birds, which are restricted to the short crossings at Gibraltar, the eastern end of the Mediterranean and, in some cases Sicily-Tunisia.

In the seas around Gibraltar the diversity of life is great, flying fish and schools of leaping dolphin being particularly noticeable. Gibraltar's waters are home to dolphins and many other animals; many traverse the Straits between the Mediterranean Sea and the Atlantic Ocean.

Urban development has been dramatic since the early 1900s. This continues, with loss of natural habitat. Important plant and animal species are protected, and much of the Mediterranean scrub and cliffs are within a nature reserve. There is a continuing need to extend protection to other sites including the sea.

Environmental impacts that need management include intense use of land and sea for tourism, and sea and air pollution from industrial activities in the region. Exotic invasive plant species present problems; there is potential for work in habitat

restoration and re-introduction of plants and animals to restored or newly protected areas.

A longstanding problem is commercial net-fishing and seabed-raking by fishermen, with an adverse effect on marine life.

This review has identified the following proposed Ramsar site:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK31001	Bay of Gibraltar	Gibraltar			Proposed

In terms of wetlands, the shallow waters of the Bay of Gibraltar, together with coastal features, are of prime importance. Boundaries of any Ramsar site within the Bay of Gibraltar and the timing of such a designation would be for the Government of Gibraltar to consider in consultation with interested parties, as it is for all UK Overseas Territories and Crown Dependencies.

Gibraltar – and, since 2004, the Cyprus Sovereign Base Areas – are the only UK Overseas Territories or Crown Dependencies within the European Union. Gibraltar has two proposed Special Areas of Conservation (SACs) that are expected to be submitted around the time of production of this report to the European Commission, as candidate SACs. These are: Rock of Gibraltar (which includes the Upper Rock Nature Reserve, mentioned below); and Southern Waters of Gibraltar (which has an overlap with Bay of Gibraltar proposed Ramsar site). There are also two EU Special Protection Areas (SPAs) proposed to coincide with the SACs, pending development of criteria for passage bird species.

In view of the under-representation of cave systems in the global Ramsar sites list, consideration was given also to another potential Ramsar site including some of the extensive cave systems, particularly underlying the Upper Rock Nature Reserve. However, despite their great geological, scenic and historic interest, current opinion is that the wetland biological interest as presently known is not adequate for Ramsar listing.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:							
		Bay of Gibraltar							
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y							
Priority type: coral reefs	No								
Priority type: mangroves	No								
Priority type: sea-grass beds	Yes	Y							
Priority type: wet grass-lands	No								
Priority type: peatlands	No								
Priority type: caves & karst		Y							

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:							
		Bay of Gibraltar							
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y							
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y							
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y							
5: Regularly supports 20,000 or more waterbirds.	No								
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	No								
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes	Y							
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	?	?							

### ***Identification of principal further information needs***

Additional information on different aspects of both the proposed site and other areas would be useful, and GONHS is currently developing further biodiversity study to address some aspects.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

### ***Acknowledgements***

Thanks are due to Gibraltar Ornithological & Natural History Society, especially Dr John Cortes, for general discussions.

For reasons outside the control of the Contractor, most of the information which details this proposed site is not available for inclusion in this report.

www.gibraltar.gov.gi  
www.gibnet.gi/~gobnhs

## **Cyprus Sovereign Base Areas**

### ***Introduction***

The British Sovereign Base Areas of Akrotiri and Dhekelia comprise those parts of Cyprus which stayed under British jurisdiction and remained British sovereign territory when the 1960 Treaty of Establishment created the independent Republic of Cyprus. They cover 98 square miles (254 km<sup>2</sup>), 47.5 (123 km<sup>2</sup>) around Akrotiri, the Western Sovereign Base Area (WSBA) and 50.5 (131 km<sup>2</sup>) around Dhekelia, the Eastern Sovereign Base Area (ESBA). Because they are run as military bases, the Sovereign Base Area Administration (SBAA) reports to the British Ministry of Defence in London, rather than the Foreign and Commonwealth Office. Nevertheless they are a British Overseas Territory, with a civilian administration working under an Administrator who is Commander, British Forces Cyprus. The Chief Officer, Administrative Secretary, Resident Judge, Chief Constable and other senior officials are recruited from, or seconded from, UK departments. The administration of the Bases is driven by three main policy objectives: effective use as a military base; full co-operation with the Republic of Cyprus; and protection of those resident or working in the Bases.

### ***Overview of wetland interest and sites identified***

The SBAA is responsible for protection of the environment in the bases and works closely with the relevant Cypriot Republic departments. A joint exercise protects breeding loggerhead and green turtles on the beaches within the WSBA. The only remaining colony of griffon vultures on Cyprus is on the cliffs at Episkopi in the WSBA, and there is a large colony of Eleanor's falcons both here and on the cliffs bordering the Royal Air Force station at Akrotiri. The most important wetland on the island of Cyprus, Akrotiri salt lake, lies within the WSBA and was designated as a Ramsar wetland site of international importance, in consultation with the Republic, shortly after the latter joined the Ramsar Convention.

Two major problems are being faced by the SBAA: shooting in both the ESBA and WSBA, particularly around Akrotiri salt lake, and netting and trapping of small migrant song-birds on migration in the ESBA in spring and autumn. These practices are illegal in both the Republic of Cyprus and the SBAs (whose laws mirror those of the Republic) and enforcement activity has been stepped up in recent times with some success. These tiny birds of about 16 species are cooked and sold as a delicacy in Cypriot restaurants and exported to Cypriot communities overseas. An estimated 8 million European songbirds are killed each year, and this is of considerable economic importance to the Cypriot villagers involved.

Akrotiri salt lake provides a wintering area for Greater Flamingos, typically 7000 with up to 30,000 reported. It is an important migration staging area for migrant waders, birds of prey cranes, in particular a significant part of the Demoiselle Crane population passing through in autumn and winter. Rare endemic orchids and various reptiles and amphibians are also found within the Bases, as well as many migrant songbirds.



The following Ramsar site is already designated:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK32001	Akrotiri	Western Sovereign Base Area of Cyprus	2171.00	20/03/2003	Designated

There are no other areas in the SBA which are known to be potential Ramsar sites, except in the vicinity of the existing site. Consideration should be given to the benefits of extending the site to include the nesting beaches of vulnerable turtles (mainly Green, with some Loggerhead). This should present no problem as the area concerned is reported as a candidate Special Area of Conservation for which a management plan is in preparation. As for many European sites, there should be no difficulty in listing as both Ramsar and SAC. There are also some marshes near the site which should be considered for inclusion.

The coverage of priority features is reviewed below:

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:
		Akrotiri
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y
Priority type: coral reefs	No	
Priority type: mangroves	No	
Priority type: sea-grass beds	No	
Priority type: wet grass-lands	Yes	Y
Priority type: peatlands	No	
Priority type: caves & karst	No	
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	No	
5: Regularly supports 20,000 or more waterbirds.		
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	No	
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	No	

### ***Identification of principal further information needs***

Additional information needs relate mainly to monitoring.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

#### **Akrotiri:**

The present situation in relation to information previously reported under Section 24 of the RIS is reviewed in the detailed table which can be seen in the fuller version of this report (available at [www.ukotcf.org](http://www.ukotcf.org)).

### ***Acknowledgements***

Thanks are due for information particularly to Michael Gore, UKOTCF, and, at the Ministry of Defence, to: Julia Pinnington, Senior Sustainability Policy Advisor; Dominic Ash, Environmental Advisor (Nature Conservation), DE Environmental Support Team; Jane Hallett, Environmental Manager – Plans, DE Environmental Support Team; and Pantelis Charilaou, Environment and Conservation Officer, HQ SBAA Episkopi.

## **Bermuda**

### ***Introduction***

The isolated island chain of Bermuda is located in the western North Atlantic, 965 km east of Cape Hatteras, USA. With a total land area of just 55 km<sup>2</sup>, the UK's oldest Overseas Territory comprises over 150 limestone islands that sit on the largest of three volcanic seamounts formed about 110 million years ago. Influenced by the warm waters of the Gulf Stream, Bermuda's shallow-water platform covers an area of about 1000 km<sup>2</sup>, and supports the northernmost coral reef system in the world. Despite a long history of conservation, the Island's conservation agencies are faced with a challenge. Bermuda's low-rolling hills are largely suburban in character, supporting a resident human population of over 60,000 concentrated on the 7 largest islands. Economic growth, based on tourism and international business, attracts 500,000 visitors each year. The pressure for development, coupled with the ever-increasing problem of introduced species, pose an escalating threat to the fragile ecology of the Island.

### ***Overview of wetland interest and sites identified***

About 250 of over 8,000 plant and animal species known from Bermuda are unique. Many of these are found in the extensive network of submerged caves and, like the fabled cahow and Bermuda skink, are critically endangered. Others, such as the Bermuda cedar, nearly wiped out in the 1940s by an introduced scale insect, are more common, due to island-wide planting schemes. Bermuda is well known for its Cahow (Bermuda Petrel), a species thought to be extinct for 300 years until its rediscovery in 1951.

Bermuda has a magnificent limestone cave system – the 150 known caves makes it one of the highest concentrations of caves in the world. Over the centuries, caves have been used as garbage dumps or destroyed by quarrying and urban development. Remaining caves hold a high proportion of Bermuda's endemic species – but they are still at the risk of pollution and collapse from the proximity of quarrying and construction activity.

The flattened top of an extinct volcano, the Bermuda Platform supports approximately 1,000 square kilometres of fringe reefs and shallow water habitat. A ring of protective reefs follows closely to the south shore of the Island and extends offshore approximately 15 km to the north, enclosing a shallow sandy lagoon.

The Gulf Stream which passes to the West and North of the Island moderates the Bermuda's weather and brings warm tropical waters to the area thereby allowing Bermuda to support the northernmost coral reef system in the world.

Bermuda supports a depauperate Caribbean coral reef species assemblage with only approximately 50% of the coral and fish species of the Caribbean having successfully colonised this northern outpost. An oasis of life in the oceanic desert known as the Sargasso Sea, Bermuda's reef system is dependent upon the efficient capture and recycling of scarce nutrients. Whilst the fringing reefs are dominated by sturdy

dome-forming corals, the protected inshore reefs support many more of the more delicate branching growth forms. Very hard reefs formed from the shell of vermetid snails cemented together with calcareous algae break the surface marking the outer perimeter of the rim reefs. With the surge crashing over these reefs they are said to “boil”, hence their name.

Bermuda supports the northernmost mangrove stands in the world. However these stands are quite limited and threatened by sea level rise and increased hurricane activity. Bermuda’s sandy beaches once supported large colonies of nesting sea turtles. These were lost to over-harvesting.

Formed as a depression between dunes, Harrington Sound once supported a large fresh-water marsh before being inundated with sea water approximately 6,000 years ago. A unique habitat rings Harrington Sound in the form of a sub-tidal notch, which cuts back into the rock several metres. Created by the boring action of sponges and bivalves, this notch supports one of the most diverse sponge communities in the west-central Atlantic.

Whilst there is only one surface connection between Harrington Sound and the surrounding ocean, numerous caves form submarine connections and support a unique fauna including many of Bermuda’s endemic species. Hundreds of thousands of years ago, when the sea level was much lower, huge dissolution caves formed in the area of Harrington Sound, particularly in the Walsingham formation. Spectacular calcareous formations decorate these caves. A large sink hole in the Walsingham area, Walsingham Pond forms a protected marine habitat where endemic species including the killifish and a rooted *Sargassum* can be found.

One of the Island’s largest nature reserves, Walsingham, borders Castle Harbour the site of the massive land reclamation project that created the airport. Corals in this area were decimated during this project and heavy siltation continues to limit recovery.

The designated and proposed Ramsar sites, identified and reviewed in consultation with Bermuda colleagues, are listed below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK41001	Devonshire Marsh East and West Basins	Bermuda	30.14		Proposed
UK41002	Hungry Bay Mangrove Swamp	Bermuda	2.01	10/05/1999	Designated
UK41003	Lover’s Lake Nature Reserve	Bermuda	2.10	10/05/1999	Designated
UK41004	Paget Marsh	Bermuda	11.35	10/05/1999	Designated
UK41005	Pembroke Marsh East	Bermuda	7.82	10/05/1999	Designated
UK41006	Somerset Long Bay Pond	Bermuda	1.10	10/05/1999	Designated
UK41007	Spittal Pond	Bermuda	9.53	10/05/1999	Designated
UK41008	Trott’s Pond and Mangrove Lake	Bermuda	ca 16		Proposed
UK41009	Walsingham Pond	Bermuda			Subsumed in UK41012
UK41010	Warwick Pond	Bermuda	2.30	10/05/1999	Designated
UK41011	West End Salt Pond	Bermuda			Subsumed in UK41012

UK41012	Walsingham Formation – Karst and Caves	Bermuda			Proposed
UK41013	Harrington Sound and Notch	Bermuda	488		Proposed
UK41014	Reef areas	Bermuda			Proposed
UK41015	Castle Harbour Islands and reef	Bermuda	374		Proposed

Despite its small size, Bermuda meets a wide range of Ramsar criteria and holds the full range of globally under-represented wetland types. The coverage of priority features is reviewed on the following page. This demonstrates that the combination of designated and proposed sites gives good coverage of the range of global priority wetland types and other features represented.

[illegible]

### ***Identification of principal further information needs***

A range of supplementary information needs are detailed in the RISs and draft RISs appended.

The main further information need relates to the management of sites with current difficulties, most notably Pembroke Marsh East. One possibility raised at the UK Overseas Territories Conference in Bermuda in 2003 would be the use of a Ramsar Advisory Mission.

Another priority information need in another sense, identified by local colleagues, is the promotion of the understanding of the Ramsar Convention and its purpose in the population of Bermuda (as for elsewhere also).

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

The present situation in relation to information previously reported under Section 24 of the RIS for the following sites is reviewed in the detailed tables which can be seen in the fuller version of this report (available at [www.ukotcf.org](http://www.ukotcf.org)). Textual material is retained below.

#### **Hungry Bay Mangrove Swamp**

This area has suffered significant degradation of the Mangrove Swamp over the last 3 decades, culminating in the almost total destruction of the outer (western) third of the swamp, representing 25% to 30% of the total area of Mangroves, during hurricane 'Fabian' in Sept. 2003. There is considerable evidence, in the form of layers of Mangrove peat and stumps underlying the outer portion of Hungry Bay, that this Mangrove swamp has been in retreat for hundreds if not thousands of years. This is largely due to natural causes, in particular the continuing rise in sea levels. Much of the recent damage is being caused by the eroding of the protective peninsula which separates the Mangrove swamp from the open ocean and the formation of a new tidal channel/over wash area which enables huge waves and storm surge from hurricanes to break directly into the outer third of the swamp. In this area, more than 75% of the Red Mangroves *Rhizophora Mangle* were completely washed out by the roots and destroyed. Although most of the large, mature Black Mangroves *Avicenia nitida* were not uprooted, more than 50% have subsequently died after being smothered by a deep layer of sand and rubble swept into this area by the ocean surge during Fabian.

In addition to the catastrophic damage resulting from hurricanes and storms, there is also evidence of long-term erosion of the organic peat/sediment substrate that underlies the present swamp and that the living Mangroves actually grow in. Although this may be caused in part by sea level rise, it appears to have been greatly accelerated by the cutting of a boat channel through the Mangroves approximately 40 to 50 years ago. This has had the effect of concentrating and increasing the speed of tidal flow through the Mangroves, sweeping away leaf fall from the

Mangroves and other vegetation as well as fine sediment that otherwise would be trapped and deposited around the prop root complexes. As a result, peat and substrate build-up has not been able to keep up with sea level rise and their continuing erosion, especially along the margins of the boat channels, has resulted in undermining and exposure of the Mangrove root systems, making them less able to survive catastrophic storm events.

The Management and protection of the Mangrove swamp would be greatly enhanced by the extension of the boundaries of the Reserve to include the peninsula that separates the swamp from the ocean. This area is however at present privately owned and would require either government purchase or the consent of the landowner. (Note: there was an attempt in the early 1990s to purchase this land for addition to the Nature Reserve, but this was unsuccessful as the government was unwilling to pay the price asked by the property owners).

An additional factor adversely affecting the Mangrove swamp is the large amount of floating debris that comes in off the ocean and is swept into, and becomes trapped within the Mangroves. The majority of this debris consists of a variety of plastic containers and products, some of them, like fuel containers and ice chests, quite large in size. There are also heavier items such as car and motorcycle wheels, refrigerators and heavy lumber that are also swept into the Mangroves, especially during storms, and can cause significant damage to the supporting prop roots of the trees. The majority of the plastic debris is not of local origin but comes in from the open ocean, although some of the heavier items such as household appliances, car and motorcycle parts, have their origin at the solid waste dump at the Bermuda International Airport in Castle Harbour.

### **Paget Marsh**

Paget Marsh has remained the least affected of all large peat marsh basins on Bermuda by the wholesale rubble and trash dumping or clearing of vegetation that destroyed or severely damaged all other similar sites. Nevertheless, there have been both human-related and natural events which have adversely affected this area, which are summarized as follows:

- 1) although large-scale trash dumping never occurred on most of Paget Marsh, there was some localized dumping in the 1920's and 1930's at the southeast corner of the marsh, where a small open water pond was filled in as a private dumpsite by the nearby Elbow Beach Hotel and area residents. This area was dredged out and restored in 2000 as an open pond habitat with boardwalk.
- 2) The close proximity of the Middle Road, one of Bermuda's busiest, to the south edge of the marsh poses risks from oils/fuels contained in road rainwater run-off flowing almost directly into the marsh. Evidence supporting this concern was collected through the Bermuda amphibian project, which has been attempting to document and find causes for high percentages of tadpole mortality and adult deformities of the introduced Marine Toad *Bufo marinus* which breeds in many wetlands on Bermuda. The research seems to indicate that there are sharp increases in tadpole/juvenile mortality and deformities after heavy rainfall events, with one of the main causative agents being heavy,



diesel-family fuels which are washed into the pond from road run-off at these times. Efforts to reduce this problem have so far been confined to the installation of settling out reservoirs under the main drainage pipes to reduce direct flow of run-off into the marsh.

- 3) The threat of rising sea level flooding the low-lying peat basins was not seriously considered until recently, when it was realized that sea levels may now be rising faster than the marshes can keep up with at normal levels of peat formation and deposition. This can cause salt water to invade what is mainly a fresh-water wetland and inundate the root systems of trees comprising the hammock forest which covers much of the surface of this marsh. This is what occurred for several months during 2002, when high tides combined with the effects of a strong gyre or ocean current circulation to produce unusually high sea levels in the western Atlantic, centred on the Bermuda area. This caused water levels in the marsh to remain 12 or more inches higher than normal for over 4 months, coupled with an influx of salt water into the marsh. This resulted in the death within 6 months of over 90% of all Bermuda Cedars in the hammock forest, many of them mature trees 200 or more years of age, and the weakening of others. Cedar death from inundation was also recorded in Devonshire Marsh and Shelly Bay Marsh. It is noteworthy that this was the longest duration and highest sea levels recorded for any such event since records have been kept, and points to the potential of further sea level rise having further detrimental effects on these wetlands in the future
- 4) One adverse effect has been the increased invasion of Paget Marsh by introduced invasive species of vines trees and shrubs. Although many of the invasive species affecting the upland areas of Bermuda are optimized for alkaline soils and do not do well in the acidic peat soils of Paget Marsh, there are some exceptions. These include Guava *Psidium guajava*, Ardisia or Marlberry *Ardisia polyponoacea*, Chinese Fan Palm *Livistonia chinensis* and Shefflera *Shefflera umbellatum*. This has resulted in a need for regular culling of the entire marsh to selectively remove all aggressive invasive introduced plant species.

### **Pembroke Marsh East**

Pembroke Marsh East used to be one of the richest wetland areas in Bermuda up until the early 1900s, being a good example of a deep peat-filled basin covered with a mature peat hammock forest dominated by Bermuda Cedar, Bermuda Palmetto Palm *Sabal bermudana*, Wax-myrtle *Myrica cerifera* and Cinnamon Fern *Osmunda cinnamomoea*. There were also some wetter parts of this marsh dominated by Cattail *Typha sp.* Much of this marsh began to be used as a site for dumping garbage and rubble from construction and excavation projects, initially from the City of Hamilton and Pembroke Parish but eventually from the whole island as other marsh dumpsites were either protected from dumping or filled in completely. The eastern two-thirds of this marsh basin was completely destroyed and buried under the main solid waste dumpsite for the entire island, a situation that continued until the early 1990s when this dumpsite was closed down and turned into a horticultural waste processing centre. The western third of this marsh basin, comprising 19.33 acres and making up the present Nature Reserve area, was never used for large-scale garbage dumping

but was the site of a reclamation project in the 1920's and 1930's to make into horse-racing tracks. Thousands of tons of rubble fill were dumped into this area but as the depth of peat was so great at up to 90' (almost 30m) the weight of rubble caused the peat to compress and the whole area sunk below water level again. As this area is underlain by a large fresh water lens or layer, this eventually created Bermuda's largest fresh pond, surrounded by large areas of Cattail and Saw grass *Cladium jamaicense*.

This area has suffered greatly from toxic leachate and run off from the dump which, although it has probably decreased since the closing of the solid waste dump, still continues to some extent from the thousands of tons of waste already present on site and entombed beneath rubble. The extent of pollution still occurring in the pond and marsh is unknown, although testing is planned for the near future. The last sampling carried out in the late 1990's confirmed that there was very little life in the pond at that time.

In addition, there has been continued sporadic small, incremental dumping and infilling of the remaining marsh, particularly on the eastern side bordering the dump, but in 2003 on the west side bordering Dutton Avenue. Most of this illegal infilling was carried out by the Government Department of Works & Engineering, often because of poor communication between equipment operators and supervisors, and other communication problems between the relevant bodies. There has also been a small amount of illegal dumping by private trucking operators.

The area around Pembroke Marsh East is now the most heavily populated and developed on Bermuda, resulting in a large amount of rain water run off directly into the marsh from surrounding roads, car parks and industrial areas. This in all likelihood carries pollutants such as oils and fuels from normal sump drippings, fuel spills, incorrectly disposed of oil changes etc.

The Pembroke Canal was built in the early 1930s to help maintain drainage and water flow from the Pembroke Marsh East basin to the ocean at Mill's Creek. This canal was neglected and choked with trash and vegetation for many years, resulting in almost no water flow or drainage function, but is now undergoing extensive clearing and removal of pollutants (including fuel oil from the Bermuda Electric Light Company B.E.L.C.O.). This will hopefully help to restore some of its drainage function and be beneficial to the water quality in the marsh.

There has also been some restoration of canals, open water ponds and marsh vegetation on the south and east sides of the former dump area. In July 2004, following recommendations for years from the Govt. Conservation Division and solid waste managers, an amphibious ditch digging machine was purchased by the Dept. of W&E to enable proper management of open water ditches in wetlands around Bermuda, in particular at Pembroke Marsh East. At this location it is intended to increase the amount of open water habitat and dig more ditches that will direct water flow through the areas of Cattail and Saw grass to enable them to help filter out remaining pollutants.

### **Somerset Long Bay Pond**

There is a potential threat of pollution from rain runoff, from Long Bay Lane, for pollutants such as diesel, transmission oil, etc. Also because of former use of pond area as a garbage dump, metal pollutants such as lead and iron may be present as leachate in pond.

Increased residential and tourism development in area poses potential for cesspit seepage of nutrients into the pond, although there is no significant evidence for this at this time.

This pond is separated from the ocean only by low sand dunes therefore the storm or tidal surge experienced during hurricanes, such as that experienced during hurricane “Emily” in 1987, can flood it with sea water, destroying or disrupting the freshwater ecosystem of the pond for many months. The sea flooding experienced during Emily disrupted the breeding of water birds such as gallinules and American coots. It was many months before the salt water seeped out of the pond.

Recently, illegal activities such as long-term camping and motor cycle/ motor-cross “scrambling” have taken place on the reserve in close proximity to the pond. Trash has occasionally been blown or dumped into the pond in small quantities from the camping while the motor-cross usage carries the potential for fuel or oil leaks or spill that could pollute the pond. Stolen motorcycles have also been occasionally dumped in the pond resulting in small spills of gasoline; however these normally disperse quickly.

### **Spittal Pond**

Spittal Pond has been adversely affected by nutrient enrichment in the past, most of which can be traced back to the presence of a dairy cattle farm just uphill of the north and northwest edges of the pond. Poor husbandry practices and overgrazing on this farm from the 1950s until the 1990s resulted in the total loss of grass and vegetation cover on large fields directly uphill from the pond, resulting in erosion of soil and cattle manure from the fields directly into the pond. In addition, the cattle themselves were poorly enclosed, and often escaped or were allowed to graze (and defecate) right around the pond edge itself. The result was severe nutrient enrichment of the pond, resulting in eutrophication, algal blooms and anaerobic conditions which killed most life in the pond and led to numerous complaints about strong smells emanating from the pond. There were documented blooms of blue-green and red algae toxic to most pond life every year during the summer season, and confirmed outbreaks of botulism which caused the deaths of numerous waterfowl, including Mallards, other wild ducks and possibly Herons and Egrets. This problem was largely addressed through recommendations set down in the management plan for Spittal Pond, which included the following management actions:

- 1) reduction in the number of cattle kept at the dairy farm;
- 2) moving the cattle off the bottom fields closest to the pond and only allowing these to be used for growing fodder crops; this provides a vegetative barrier that water run-off has to filter through before reaching the pond;
- 3) the digging of 3 sump or overspill ditches that intercept rain run-off from the farm before it reaches the pond;

- 4) the construction of a drainage channel through the east basin of the pond, leading to a drainage pipe with a sluice-gate valve which connected directly to the ocean through an outcrop of rock. If water quality in the pond decreased to dangerous levels, then the valve could be opened at low tide to allow the anaerobic water to flush out to sea; the valve would be opened again at high tide to allow the pond to be recharged with unpolluted salt water. This process, if repeated, could flush much of the excess nutrient load out of the pond;
- 5) All cattle to be properly enclosed with fencing, to prevent access by the animals to areas near or around the edge of the pond.

These actions actually were somewhat effective in reducing the nutrient load in the pond, provided that the dairy farmer followed the terms that were laid down in the management plan. The most effective actions proved to be the reduction of the number of animals allowed to be kept on the farm (thus reducing the amount of manure produced, and the amount of erosion and rain run-off), and confining the cattle to areas as far away from the pond as the site allowed. The result has been that Spittal Pond has actually exhibited generally greater health in recent years, with only the growth of mainly green algae and widgeon-grass which are a normal component of a healthy brackish/salt lagoon, and which provide food for waterfowl and pond life. There has been some infringement of the lower fields since the late 1990s by the dairy farmer for grazing, raising once again the risk of manure run-off reaching the pond and pointing to a need for greater enforcement, but the pond still seems to be in generally better health than was the case in the 1960s to 1980s. Blooms of the more toxic blue-green and red algae, once common and long-lasting, are now rare and brief, except following major catastrophic events such as hurricanes.

The greatest natural factor affecting the ecological character of Spittal Pond is the impact of strong hurricanes. The pond is located on the exposed South Coastline of Bermuda, where the protective reef line is located only 100-200m offshore, offering little protection from the impact of hurricane waves and tides. In addition, the pond is only separated from the ocean by a thin line of small hills, with 3 low-lying overwash areas between them where waves can break through directly into the pond during hurricanes. The waves breaking into the pond during hurricane Fabian in 2003 reached over 36' (12m) in height, sweeping boulders, sediment and scores of large trees, up to 70' in height, into the pond. Hurricanes appear to affect the pond in 3 main ways:

- 1) The huge input of sea water (which raised pond levels 12 to 15' (4-5m) above normal in Fabian, caused huge disruption to the pond's ecology. Many species of ocean life, including Parrot Fish, Blue Tangs and even a Green Turtle, were swept into the pond and survived for several months, but eventually died as the water slowly returned to the normal brackish state. It appears to take at least 6 to 12 months for the pond to return to its normal state following a major hurricane flooding event.
- 2) During a hurricane a huge amount of vegetation and organic matter is either swept into the pond by wave and tidal surge action, or is blown into the pond by the extreme winds. This material can vary from tons of *Sargassum* seaweed, to foliage from the surrounding vegetation, to whole trees complete with root mass. This huge input of organic material causes nutrient enrichment

and anaerobic conditions for 6 months or more following hurricane events, as already described.

- 3) The waves and surge of a hurricane can sweep large boulders and tons of sand, soil and sediment into the pond, which can reduce its depth, especially near the overwash areas. The massive amount of erosion that occurs has literally reshaped the landform between the pond and the ocean. For example, the east overwash area (the lowest of the 3 overwash areas), appears to be developing a permanent tidal channel, while at the western overwash area near the checkerboard, the entire western hillside (and the *Casuarina* forest that covered it) was washed away, doubling the width of the low-lying area here that is subject to overwash.

The other main factor that has affected the ecology of the pond and its drainage basin is the change in forest/vegetation cover surrounding the pond. Originally comprising a pure endemic/native forest dominated by Bermuda Cedar *Juniperus bermudiana*, which suffered almost 100% mortality following the accidental introduction of scale insects to Bermuda in the late 1940s, this area was extensively replanted with the Australian Whistling-pine of *Casuarina C. equisetifolia* in the early 1950s. These trees grow rapidly to a much greater height than the original native forest, and also drop a dense carpet of highly acidic needles or foliage, cutting down species diversity on the forest floor and possibly affecting the pond itself through acidic run-off. The greater height of the *Casuarina* trees make them much more prone to uprooting or snapping off during hurricanes, with up to 50% blowdown of some parts of the forest at Spittal Pond during 1987's hurricane Emily and over 80% blowdown of *Casuarinas* during hurricane Fabian in 2003. The present and future management strategy will involve the removal of felled trees and replanting with mainly hardy native and endemic species, and the gradual phasing out of remaining areas of *Casuarina* forest and reforestation with Native, endemic and selected non-invasive ornamentals where appropriate.

### **Warwick Pond**

Possibly the most detrimental factor affecting the water quality at Warwick Pond is extensive run-off of rain water from the closely adjacent Middle Road into the pond. Middle Road is one of the most heavily used roads on Bermuda and is located approximately 17-20 m from the edge of the pond. As other ponds subject to rain run-off have been found to have high levels of hydrocarbon pollutants (especially of the heavy, diesel-family hydrocarbons from vehicular fuel spillage, sump drippings, etc.), it can be assumed that Warwick Pond is no different. The heavy hydrocarbons have been directly implicated in high mortality and deformity rates among toads of Marine toads *Bufo marinus*.

In addition there are agricultural and arable fields located just north and east of the pond which are used for growing bananas and crops such as potatoes and carrots. There is some potential for fertilizer or pesticides applied on these fields to wash or seep into the pond.

There has been some encroachment by the cattail *Typha angustifolia* upon the rich mudflats surrounding the pond, especially at the north end. This increased growth

has started to reduce the size of the mudflats (an important feeding ground for the passage of migrants, in particular waders or shorebirds). Area covered by *Typha* increased 300% in 15 years. It is unknown whether this increased growth is due to natural selection, increased nutrient intake and/or a rising water table caused by increasing sea levels.

### ***Acknowledgements***

Thanks are due, for much information, discussion and help, to:

Jack Ward, Sarah Manuel, Jeremy Madeiros, Joe Furbert, Department of Conservation Services

Dr Annie Glasspool, Bermuda Zoological Society

Andrew Dobson, Bermuda Audubon Society

Bermuda National Trust

David Stroud, JNCC

Participants in the field workshops and other discussions at the *A Sense of Direction* Conference in Bermuda 2003.

## **Cayman Islands**

### ***Introduction***

The three Cayman Islands are situated 268 km (180 miles) northwest of Jamaica in the Caribbean Sea and 240 km (150 miles) south of Cuba. The total area is about 260 sq km (100 sq miles). Grand Cayman, which is much larger than the others, lies 128 km (80 miles) to the west of Cayman Brac and Little Cayman, which are separated from each other by a channel 8 km (5 miles) wide. Grand Cayman is approximately 22 miles (35 km) long with an average width of 4 miles (6 km). About half of Grand Cayman's area is wetland. Cayman Brac is about 12 miles (19 km) long with an average width of one and a quarter miles (2 km). A huge central limestone outcrop called The Bluff rises along the length of the island up to 140 feet (40 m). Little Cayman, a low-lying island, is approximately 10 miles (16 km) long with an average width of little more than a mile (1.6 km). 94% of the population of about 42,000 live on Grand Cayman, with around 1,822 people residing on Cayman Brac and some 115 on Little Cayman. Offshore reefs and a mangrove fringe surround most of the islands' coasts.

### ***Overview of wetland interest and sites identified***

The Cayman Islands are clothed in subtropical dry forests and mangrove wetlands, supporting diverse life typical of the Greater Antillean region.

Economic success and exponential population growth are taking a toll on the Cayman Islands, with ongoing deforestation threatening areas such as mangrove wetlands and ancient dry forests on all three islands. The National Trust for the Cayman Islands is working to establish a protected area system, giving priority to areas rich in biodiversity. Land owned by the Trust is protected in perpetuity. Trust nature reserves include the Booby Pond Nature Reserve on Little Cayman, a Ramsar Convention Wetland of International Importance, home to 20,000 Red-footed Boobies. The Brac Parrot Reserve protects forest important for nesting of Cayman Brac's critically endangered parrots. The Salina Reserve, Mastic Reserve and Central Mangrove Wetland on Grand Cayman protect a wide range of pristine forest environments. The Trust works also to preserve species like the endangered Blue Iguana, which is making a comeback from the brink of extinction thanks to captive breeding and restocking of protected habitat. In the marine environment, the government's Department of Environment manages an extensive system of Marine Parks, monitors coral reefs and works on sustainable harvest policies.

Some 17 plant species, 7 reptiles (e.g. Grand Cayman Blue Iguana) and 30 land snails are among those listed as unique to Cayman, along with many unique subspecies of forest birds (such as Grand Cayman Parrot) and spectacular coral reefs.

This review was in progress when Category 5 Hurricane Ivan struck Grand Cayman in September 2004. Clearly, matters not concerning immediate practicalities cannot be the concern of Cayman personnel at this time. Fortunately, much of the consultation had been completed by that time. The following analysis is therefore

largely the result of that consultation, although some minor details have been completed after further consultations became impracticable.

The designated and proposed Ramsar sites, identified and reviewed in consultation with Cayman Island colleagues, before Hurricane Ivan, are listed below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK42001	Booby Pond and Rookery	Cayman Islands	82.00	21/09/1994	Designated
UK42002	Little Sound Environmental Zone	Cayman Islands			Subsumed in UK41004
UK42003	Meagre Bay Pond Animal Sanctuary	Cayman Islands			Subsumed in UK41004
UK42004	Central Mangrove Wetland, Little Sound, Ponds and associated Marine Zones	Cayman Islands	8039		Proposed
UK42005	Little Cayman Crown Wetlands and Marine Parks	Cayman Islands	901		Proposed
UK42006	Salina Reserve	Cayman Islands	252		Proposed
UK42007	Barker's Wetland	Cayman Islands	460		Proposed

The Cayman Islands meets a wide range of Ramsar criteria. The Territory includes a wide range of globally under-represented wetland types as well as endemic and threatened species. The coverage of priority features is reviewed below. This demonstrates that the combination of designated and proposed sites gives coverage of the range of global priority wetland types and other features represented. Increasing information from turtle surveys indicate that Cayman Brac may be more important in this respect than previously thought, and this island may require further consideration.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:				
		Booby Pond and Rookery	Central Mangrove Wetland, Little Sound, Ponds and associated Marine Zones	Little Cayman Crown Wetlands and Marine Parks	Salina Reserve	Barker's Wetland
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y	Y	Y
Priority type: coral reefs	Yes		Y	Y		Y
Priority type: mangroves	Yes	Y	Y	Y		Y
Priority type: sea-grass beds	Yes		Y			Y
Priority type: wet grass-lands	Yes			Y	Y	
Priority type: peatlands	No?					
Priority type: caves & karst	No?					
2: Supports vulnerable, endangered, or critically	Yes	Y	Y	Y	Y	Y



Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:				
		Booby Pond and Rookery	Central Mangrove Wetland, Little Sound, Ponds and associated Marine Zones	Little Cayman Crown Wetlands and Marine Parks	Salina Reserve	Barker's Wetland
endangered species or threatened ecological communities.						
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y	Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y	Y	Y		
5: Regularly supports 20,000 or more waterbirds.	Yes		Y			
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y	Y	Y		
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes		Y	Y		Y
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes		Y			Y

### ***Identification of principal further information needs***

Additional information both on currently proposed sites and other areas would be useful. This may indicate other areas warranting investigation. Post-Hurricane Ivan information on any changes will also be required in due course.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

No major factors were reported as adversely affecting the designated Ramsar site in the existing documentation, and none were identified in this review.

### ***Acknowledgements***

Thanks are due to the Cayman Islands Department of the Environment, the National Trust of the Cayman Islands and particularly Dr Matt Cottam, Gina Ebanks-Petrie, Patricia Bradley, Fred Burton, Dace McCoy Ground and Michael Gore.

## **Turks and Caicos Islands**

### ***Introduction***

The Turks & Caicos Islands (TCI) lie to the south east of the Bahamas chain, 145 km (90 miles) north of Hispaniola (Haiti and the Dominican Republic) and 925 km (575 miles) SE of Miami (a 75 minute flight from Miami). The territory comprises some 120 low islands and cays (pronounced keys) situated on shallow banks, with a total land area of 193 square miles (430 sq km). The easterly occurring Turks Islands are separated from the Caicos Islands by a deep water channel. Only six of the islands are permanently inhabited: Grand Turk (where the capital Cockburn Town is situated); Salt Cay; South Caicos; Middle Caicos; North Caicos and Providenciales (known as Provo, where the majority of the tourism development is). The 2001 census estimated the human population as 20,014. There are a number of exclusive hotel developments and holiday homes on smaller cays. Limited rainfall plus poor soil and a limestone base restrict the possibilities for agricultural development.

### ***Overview of wetland interest and sites identified***

The East Caicos, Middle Caicos and North Caicos wetland complex forms probably the best example of its type in the Caribbean. It was arguably the most natural wetland amongst about 125 wetlands of international importance listed under the Ramsar Convention by the UK Government at the time of its designation. The natural wetlands formerly extended to the neighbouring islands of Providenciales and South Caicos. On Providenciales, many of the wetlands have suffered severe environmental degradation, as a result of rapid development for real estate and tourism, although areas of value remain through the protected area and National Parks system. An even greater threat to the natural environment is posed by the proposals for large-scale developments on the uninhabited islands, currently prime habitats for endemic species such as rock iguana and the remaining breeding sites for turtles.

Some investigative work is underway by the Turks & Caicos National Trust and the TCI Government to explore the potential for environmentally sustainable development, but further help is needed. The adoption of an eco-tourism approach would help to prevent the destruction of the natural habitat and retain the biodiversity, cultural heritage and natural beauty of the Islands for present and future generations.

The Islands are a superb complex of natural coral reefs, tidal flats, mangroves and marshlands which provide a haven for wildlife, as well as the natural basis of the fisheries and tourism industries. The islands provide a home for at least 14 endemic plants and reptiles and an unknown number of invertebrates.

The designated and proposed Ramsar sites, identified and reviewed in consultation with colleagues in the Turks & Caicos Islands are listed below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK43001	North, Middle and East Caicos Islands	Turks & Caicos Islands	58617.00	27/06/1990	Designated
UK43002	Grand Turk salinas, ponds and shores	Turks & Caicos Islands	ca 200		Proposed
UK43003	Salt Cay creeks and salinas	Turks & Caicos Islands	ca 150		Proposed
UK43004	Turks Bank Seabird Cays	Turks & Caicos Islands	ca 120		Proposed
UK43005	Caicos Bank Southern Cays	Turks & Caicos Islands	ca 364		Proposed
UK43006	West Providenciales Wetlands	Turks & Caicos Islands	5613.0		Proposed
UK43007	West Caicos saline lake and coral reef system	Turks & Caicos Islands	1310.1		Proposed
UK43008	Leeward-Going-Through Cays	Turks & Caicos Islands	ca 182		Proposed

Several additional areas are needed to provide effective coverage for the remarkably important wetland types found in the Turks and Caicos Islands. These include:

- A. Two extensions to the existing Ramsar site at **North, Middle and East Caicos Islands**;
- B. Certain coral reef areas;
- C. Possibly the reef platform area to the south-east, Mouchoir Bank.

Information on each of these is outlined below.

#### A. **North, Middle and East Caicos Islands**

##### (i) **Incorporation of other Middle & North Caicos sites**

The proposed extension includes the proposed Fish Ponds and Crossing Place Trail Nature Reserve, the proposed Middle Caicos Forest Nature Reserve, the East Bay Islands National Park and the Conch Bar Caves National Park (proposed Nature Reserve).

In more detail, this comprises:

- (1) the western part of the northern coast of Middle Caicos, including Fish Ponds, Crossing Place Trail, Indian Cave and Blowing & Juniper Holes. Limestone cliffs, with small offshore cays, slope inland to ponds, which are connected to the sea under the cliffs. There are several sea-caves, and a dry inland cave within the site, Indian Cave.
- (2) the area of forest, between the settlements of Lorimers & Bambarra, Middle Caicos, at various stages of recovery after clearance in the Plantation period, from scrub to higher forest and including various types of permanent and temporary wetlands.
- (3) the Conch Bar Caves National Park (proposed Nature Reserve), Middle Caicos, including the important pond and forest scrub area on the surface within the protected area.
- (4) the East Bay Islands National Park, North Caicos, which consist of two large low cays protecting the shallow Bottle Creek sandflat and algae habitat, with smaller cays, and coastal lagoon habitat.

The main impacts on the qualification criteria would be:

- 1 The extension adds globally important ecosystems missing from the existing sites, including marine cliffs, sea-caves, cave-surface linked systems, pond systems with underground links to tidal seas, coastal marine-influenced heath, inland deep freshwater ponds, seasonal freshwater ponds and periodically flooded forest on porous limestone. These karst systems are priority wetlands.
- 2 The Middle Caicos Forest area supports the most consistently recorded breeding and the largest and most consistently recorded roost for the Globally Vulnerable West Indian Whistling Duck *Dendrocygna arborea* (throughout the year). It is also the area in TCI of the most sightings of the Globally Vulnerable Kirtland's Warbler *Dendroica kirtlandii* (non-breeding season). This is one of the most threatened bird species of the region, the world population consisting of only about 3000 individuals, which breed only in a restricted habitat in one part of Michigan, USA and spend the non-breeding season in largely unknown locations in the Bahamas and TCI.

East Bay Islands is an important hawksbill and green turtle foraging site and possibly nationally important turtle nesting site. Bay Cays hold the second largest population of the endemic Rock Iguana Rock Iguanas *Cyclura carinata* (7500 individuals) after Big Ambergris Cay, which is currently undergoing conversion to a resort. It is also a nesting area of the West Indian Whistling Duck *Dendrocygna arborea*.

Village Pond, in the Conch Bar Caves protected area, is an established breeding site for the West Indian Whistling Duck *Dendrocygna arborea*.

- 3 Crossing Place Trail holds important sites for wildlife, including specialist plants and an endemic butterfly. Fish Ponds comprise some of the most important wetlands in the area not already included within the Ramsar site. The area is rich in fish and invertebrate life.

The Middle Caicos Forest area is important too for restricted-range bird species: Bahama Woodstar *Calliphlox evelynae*, Bahama Mockingbird *Mimus gundlachii*, Thick-billed Vireo *Vireo crassirostris* (endemic subspecies subspecies restricted to the Caicos Islands; for which it is probably the most important area); and other biome-restricted species: Antillean Nighthawk *Chordeiles gundlachii*, Greater Antillean Bullfinch *Loxigilla violacea ofella* (an endemic subspecies restricted to Middle and East Caicos), Cuban Crow *Corvus nasicus* (which occurs only in Cuba and in the Caicos Islands. This is probably the most important area in the country for the last two. The Forest is also important habitat for certain bats, and one of the most important habitats for the following Turks & Caicos Islands endemic species of lizard: Curly Tail *Leiocephalus psammodromus*, Caicos Islands Reef Gecko *Sphaerodactylus caicosensis*; and the one endemic species of snake: the Caicos Islands Trope Boa *Tropidophis greenwayi*. In addition there are further lizards that are endemic at the subspecific level: Turks & Caicos Bark Anole *Anolis scriptus scriptus*, Mabuya Skink (or slippery back or snake-doctor) *Mabuya mabouya sloanei*; and one snake: Bahaman Rainbow Boa *Epicrates chrysogaster chrysogaster*. This is also one of the areas in which re-establishment of woodland towards forest has moved furthest in places, so that: there is a good range of scrub and woodland types represented, with a correspondingly wide range of invertebrate and plant species

Conch Bar Caves support important endemic and characteristic invertebrates, as well as the most important bat roost in the island. Village Pond, in the Conch Bar Caves protected area, is one of the most consistent shallow ponds, and supports a wide range of wildlife.

- 4 The offshore cays are one of the few sites in TCI where there are reports of breeding Audubon's Shearwaters *Puffinus lherminieri* and numbers are probably of global importance. Numbers of several other species are of international importance in relation to the Caribbean population: breeding White-tailed Tropic-birds *Phaethon lepturus*, feeding and roosting Flamingos, roosting Laughing Gulls and small numbers of migrant Sandhill Cranes *Grus canadensis*.
- 6 The extension would increase the international importance for a range of waterfowl species.
- 7 Area between Juniper Hole and Bay Cays is used as a snorkelling destination because of the vast areas of high reef there.
- 8 Fish Ponds were sometimes used for fishing for "shadbar" and other baitfish.

Crossing Place Trail is the traditional route along the Caicos Islands, in particular the Middle Caicos section. As such, it is of great cultural importance. The trail is also of great scenic value, and along its route are important sites for wildlife, and is the subject of major interpretative trails.

The Middle Caicos Forest is an important area for plants still used for traditional purposes - this is important both for local people using these resources and for the potential interest to visitors; and additionally the most important plantation ruins in the island in this area.

Despite its protected area status, there are potential built development on Bay Cays.

#### **A. North, Middle and East Caicos Islands**

##### **(ii) Incorporation of East Caicos extension**

East Caicos is a complex of inter-related dry-land, pond, cave, marshes, flats and other wetlands, adjoining existing Ramsar site which covers only a small part of East Caicos. The intervening area at the eastern end of Middle Caicos and around Joe Grant Cay is a complex of cays, creeks and marshes, around to Windward Going Through, and adjoining the existing Ramsar site. Varied scrub ecosystems occur on small cays. The area is thought to represent the main remaining nesting area for threatened turtles in the Turks and Caicos Islands, and is home to several other internationally important species.

The main impacts on the qualification criteria would be:

- 1 The extension adds to the site important beach ecosystems lacking at present, together with global priority cave ecosystems, also lacking from the present site. The extension includes also an area of creek complex linking the bank to the open sea, another ecosystem under-represented in the present site. The extension includes also ecosystems which have not been subject to human intervention for many decades. The extension would also add to the areas of some of the global priority ecosystems included in the existing site.
- 2 The extension adds to the site area probably the most important surviving nesting area for endangered Green *Chelonia midas*, Hawksbill *Eretmochelys imbricata* Turtles. It includes an

area used by the endangered migrant Piping Plover *Charadrius melodus* in the non-breeding season. It also extends the protected area to a more viable level for endangered West Indian Whistling-Ducks *Dendrocygna arborea*, a breeding resident, and migrant Kirtland's Warblers *Dendroica kirtlandii* in the non-breeding season. The extension has the best resource of silvertop palmetto *Coccothrinax inaguensis*, a rare species occurring in scrub in coastal areas and included in the World List of Threatened Trees as Data Deficient; the species is confined to TCI and the Bahamas.

- 3 The extension includes a major undisturbed cave system which is probably internationally important for endemic cave invertebrates and for bats. The extension includes also the only recorded location in the country of the Cuban Emerald Hummingbird *Chlorostilbon ricordii*, a Cuban endemic.
- 4 As noted in other sections.
- 6 The extension would increase the international importance for a range of waterfowl species, including breeding Common Terns *Sterna hirundo*, comprising about 20% of the Americas summer population.
- 7 Possible additions
- 8 Possible additions

The area is also important in historic and cultural terms, including the cave systems, the wreck of a ship, the survivors of which were the ancestors to many TCI citizens, and other historic buildings and railway.

## **B. Certain coral reef areas**

The suite of designated and proposed areas does not give adequate representation to coral reef areas. Although some are included in the proposed sites, other areas should be included eventually. These should include some of the designated marine national parks in the Grand Turk and South Caicos area; these have not been detailed in the present review because boundaries are under review, partly in association with cruise-liner dock development within one park, and anticipated further survey. In addition, there should be inclusion of reefs off Middle and East Caicos.

## **C. Possibly the reef platform area to the south-east, Mouchoir Bank.**

Mouchoir Bank is situated SE of Turks Bank. The Turks and Caicos Islands lie between the Bahamas, Cuba and Hispaniola. Together with southern Florida, the Bahamas and northern Cuba, they are part of a platform of rocks formed as limestone depositing in shallow seas as the crust slowly subsided. Virtually all these rocks of the area, to a depth of several thousand metres, are directly of marine origin, except some fossil soils and sand-dune rock (aeolian limestone). The region has always had a marine environment from the time of its formation until the present. The Turks and Caicos Islands are on two shallow banks (Turks Bank and the larger Caicos Bank), with deep ocean between them. The maximum altitude is about 50 m

asl. There are further shallow banks (Mouchoir, Silver and Navidad) to the south-east but without islands; some of these banks are within TCI territory. They are important for whales and probably for feeding seabirds. Further information is needed on this area as to its possible qualification.

The Turks and Caicos Islands meet a wide range of Ramsar criteria. The Territory includes a wide range of globally under-represented wetland types as well as endemic and threatened species. The coverage of priority features is reviewed below. This demonstrates that, subject to the provisos noted above, the combination of designated and proposed sites gives coverage of the range of global priority wetland types and other features represented.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:								
		North, Middle and East Caicos Islands	Extensions to this site	Grand Turk salinas, ponds and shores	Salt Cay creeks and salinas	Turks Bank Seabird Cays	Caicos Bank Southern Cays	West Providenciales Wetlands	West Caicos saline lake and coral reef sytem	Leeward-Going-Through Cays
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y
Priority type: coral reefs	Yes	Y	Y			Y	Y	Y	Y	Y
Priority type: mangroves	Yes	Y	Y		Y		Y	Y		Y
Priority type: sea-grass beds	Yes	Y	Y					Y	Y	Y
Priority type: wet grass-lands	Yes		Y							
Priority type: peatlands	No?									
Priority type: caves & karst	Yes		Y							
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y			Y	Y	Y	Y	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y	?	Y	Y	Y	Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y	Y			Y	Y	Y	Y	
5: Regularly supports 20,000 or more waterbirds.	Yes					Y	Y			
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y	Y	Y	Y	Y	Y			
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or	Yes		Y					Y	Y	

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:								
		North, Middle and East Caicos Islands	Extensions to this site	Grand Turk salinas, ponds and shores	Salt Cay creeks and salinas	Turks Bank Seabird Cays	Caicos Bank Southern Cays	West Providenciales Wetlands	West Caicos saline lake and coral reef sytem	Leeward-Going-Through Cays
populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.										
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere. depend.	Yes	?	Y							

### ***Identification of principal further information needs***

Further information is required on the coral reef systems and the Mouchoir Bank, as noted above, as well as further survey information on many taxa in certain areas.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

No major factors were reported as adversely affecting the designated Ramsar site in the existing documentation, and none were identified in this review.

### ***Acknowledgements***

Thanks for information and discussions are due to Michelle Fulford Gardiner, Rob Wild, Judith Campbell and Tatum Fisher (TCI Department of Environmental & Coastal Resources), Kingsley Been and Gloyd Lewis (successive Permanent Secretaries at the Ministry of Natural Resources/ Chief Minister's Office), Ethlyn Gibbs-Williams and Bryan Naqqi Manco (Turks & Caicos National Trust), David Peate, David Brett and H.E. Jim Poston (Governor's Office), Richard and Dace Ground, as well as many others.



## British Virgin Islands

### *Introduction*

The British Virgin Islands are adjacent to the US Virgin Islands (USVI) and 60 miles (100 km) east of Puerto Rico. BVI comprises over 60 islands, islets and cays (some little more than rocks) with a total land area of 153 sq km (59 sq miles) scattered over some 1,330 sq miles (3450 km<sup>2</sup>) of sea. Sixteen of the islands are inhabited, the largest being Tortola (54 km<sup>2</sup>, 21 sq miles, including the capital, Road Town), Anegada (39 km<sup>2</sup>, 15 sq miles), Virgin Gorda (21 km<sup>2</sup>, 8 sq miles) and Jost van Dyke (9 km<sup>2</sup>, 3.4 sq miles). The human population is 21,300 (estimate for 2003). Lush vegetation, sandy beaches, numerous yachting marinas and fine coral reefs make the islands a natural tourist destination. The maximum elevation is 585m, on Tortola. Most of the islands are hilly, but the northernmost, Anegada is geologically different, a low-lying limestone island.

### *Overview of wetland interest and sites identified*

The islands support a number of endemic and threatened species of international importance, such as the critically endangered endemic Anegada rock iguana. Eighteen roseate West Indies flamingoes were reintroduced to Anegada in 1992 where a colony of 51 flourished by 2000. BVI also possesses a number of globally significant plant species, some of which occur only on one or two islands, such as Pokemeboy and *Calypttranthes kiaerskovii*.

The previous review of potential Ramsar sites in UK Overseas Territories for UK Government (Hepburn *et al* 1992) identified the following sites for potential Ramsar designation:

Anegada and Horseshoe Reef;  
Beef Island Wetlands;  
Wreck of the Rhone Marine Park;  
Little Jost van Dijk;  
The Baths, Virgin Gorda;  
The Dogs;

as well as the following where further research was needed:

Biras Creek Pond, Virgin Gorda;  
Diamond Cay National Park;  
Fat Hogs Bay Pond, Tortola;  
Guana Island Salt Pond;  
Lee Bay Pond;  
Necker Island Bird Sanctuary;  
Tortola Salt Pond;  
Cane Garden Pond, Tortola;  
Norman Island, Pelican Island and the Indians, Tortola;  
North Sound, Virgin Gorda;

as well as a need to survey offshore reefs and other marine areas for potential Ramsar status.

The first two of these sites entered the JNCC database of proposed sites and were allocated reference numbers.

Other reports also identified some of these sites as potential Ramsar sites, as well as well as the small mangrove areas remaining after the destruction of many of these.

BVI colleagues preferred to return to a basic position, listing as proposed sites only those which had been thoroughly reviewed for potential, and this is the approach adopted below. However, that further sites will be needed to achieve full coverage. The designated and proposed Ramsar sites, identified and reviewed in consultation with colleagues in the British Virgin Islands, are listed below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK44001	Anegada and Horseshoe Reef	British Virgin Islands			Proposal replaced by UK44003 & UK44004
UK44002	Beef Island Wetlands	British Virgin Islands			Earlier proposal no longer current, without implication as to whether this may be reinstated
UK44003	Western Salt Ponds of Anegada	British Virgin Islands	1071.00	10/05/1999	Designated
UK44004	Anegada Eastern Ponds and The Horseshoe Reef	British Virgin Islands	300019.11		Proposed
UK44005	Fat Hogs and Bar Bays	British Virgin Islands	ca 20		Proposed

The coverage achieved by the designated and proposed sites is summarised below. Further survey work, including some currently in progress, will be needed to identify the full suite of Ramsar sites needed, especially for sea-grass, mangrove and coral reef wetland types, as well as to identify whether sites, such as the Tobagos and the Dogs, are appropriate for designation in respect of seabirds and other interest.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:					
		Western Salt Ponds of Anegada	Anegada Eastern Ponds and The Horseshoe Reef	Fat Hogs and Bar Bays			
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y			
Priority type: coral reefs	Yes		Y	Y			
Priority type: mangroves	Yes	Y	Y	Y			

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:					
		Western Salt Ponds of Anegada	Anegada Eastern Ponds and The Horseshoe Reef	Fat Hogs and Bar Bays			
Priority type: sea-grass beds	Yes		Y	Y			
Priority type: wet grass-lands	No						
Priority type: peatlands	No						
Priority type: caves & karst	Yes		Y				
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y	?			
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y			
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes		Y	Y			
5: Regularly supports 20,000 or more waterbirds.	No						
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	No						
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes		Y				
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes	Y	Y	Y			

### ***Identification of principal further information needs***

As noted above, further survey work, including some currently in progress, will be needed to identify the full suite of Ramsar sites needed, especially for sea-grass, mangrove and coral reef wetland types. In addition, further work is addressing management needs.

***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

No major factors were reported as adversely affecting the designated Ramsar site in the existing documentation, and none were identified in this review.

***Acknowledgements***

Thanks are due especially to BVI National Parks Trust, particularly Executive Director Joseph Smith Abbott, and Nancy Woodfield.

## Anguilla

### Introduction

Anguilla is the most northerly of the Leeward Islands in the eastern Caribbean, located 18.3° N 63° W. Its name derived from its eel-shape. The coral limestone island's area is 91 km<sup>2</sup>, together with several offshore islands and cays. The main island is sixteen miles (26 km) long and a maximum of three miles (5 km) wide. It enjoys clear seas and some of the best beaches in the region. The island itself is predominantly flat and covered with low scrub. Anguilla's capital and administrative centre is the Valley (population 1,400). Its primary ports of entry are Wallblake Airport and Blowing Point Ferry Terminal. The nearest neighbouring islands are St Martin/Sint Maarten 5 miles (8 km) to the south and the British Virgin Islands 25 miles (40 km) to the west. Anguilla is home to 12,200 (2003 estimate). Tourism and off-shore finance are the major contributors to the island's economy.

### Overview of wetland interest and sites identified

Of great importance are Anguilla's salt ponds. These wetlands are habitat for various bird species, which include the endangered roseate terns, least terns and red-billed tropic birds, a species of special concern. During hurricanes and periods of heavy rains, they act as flood control areas.

The unique ecosystems of Anguilla and its offshore cays are home to several species of birds and reptiles. These include the endemic black lizard on Sombrero Island, the harmless Anguillan racer snake and the lesser Antillean iguana. About 129 bird species and 520 plant species have been recorded with *Rondeletia anguillensis* classified as an endemic.

The proposed Ramsar sites, identified and reviewed for Anguilla in consultation with those working in the Territory, are listed below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK45001	Cauls Pond	Anguilla			Subsumed in UK45010
UK45002	Cove Ponds	Anguilla			Subsumed in UK45010
UK45003	Road Salt Pond	Anguilla			Subsumed in UK45010
UK45004	Savannah Pond	Anguilla			Subsumed in UK45010
UK45005	Wetlands on Dog Island	Anguilla			Subsumed in UK45007
UK45006	Sombrero Island	Anguilla	ca 60		Proposed
UK45007	Dog Island & Middle Cay	Anguilla	ca 1800		Proposed
UK45008	Prickly Pear Cays	Anguilla	ca 1800		Proposed
UK45009	Scrub & Little Scrub Islands	Anguilla	342.9		Proposed
UK45010	Anguilla mainland wetlands	Anguilla			Proposed

Pritchard (1990) reviewed the potential for Ramsar sites in Anguilla, and this has provided an invaluable basis for this review. We have incorporated too recent information gathered, for example, for the Important Bird Area review and the Turtle in Caribbean Overseas Territories project.

The coverage of priority features is reviewed below. The sites identified represent coverage of the interest so far identified. Incorporation of other information not available to the review (and which may not yet exist – see below) may identify further sites, and will almost certainly identify other features of major interest within the sites identified.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:				
		Sombrero Island	Dog Island & Middle Cay	Prickly Pear Cays	Scrub & Little Scrub Islands	Anguilla mainland wetlands
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y		Y
Priority type: coral reefs	Yes	Y	Y	Y		Y
Priority type: mangroves	Yes					
Priority type: sea-grass beds	Yes	Y	Y	Y		Y
Priority type: wet grass-lands	No					
Priority type: peatlands	No					
Priority type: caves & karst	Yes					
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y	Y	Y	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y			Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes					
5: Regularly supports 20,000 or more waterbirds.	No					
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y	Y	Y	Y	Y
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or	Yes?					

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:					
		Sombbrero Island	Dog Island & Middle Cay	Prickly Pear Cays	Scrub & Little Scrub Islands	Anguilla mainland wetlands	
populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.							
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes?						

### ***Identification of principal further information needs***

Further information on turtle populations and usage.  
Incorporation of marine information.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

### ***Acknowledgements***

Particularly Steve Holliday and also Sarah Sanders and Ian Fisher, RSPB;  
Karim V.D. Hodge, Director of Environment, Government of Anguilla  
Damien E. Hughes, Executive Director, Anguilla National Trust  
Marine Turtle Research Group

Additonal sources:

Pritchard, D. 1990. *The Ramsar Convention in the Caribbean with special reference on Anguilla. Report of an RSPB sabbatical project, June- July 1990.* RSPB, Sandy.

## **Montserrat**

### ***Introduction***

Montserrat, one of the Leeward Islands in the Eastern Caribbean, lies 43 km (27 miles) SW of Antigua and 64 km (40 miles) NW of Guadeloupe. The volcanic island, 17 km (11 miles) long and 11 km (7 miles) wide, is mountainous, with streams and waterfalls amongst dense tropical vegetation. Total area is 102 km<sup>2</sup> (39 square miles). The rugged coastline offers no all-weather harbour, although several anchorages are sheltered by the island from the prevailing trade winds. Port facilities exist at Little Bay where there is also a regular ferry service to Antigua. A helicopter service operates from a purpose-built facility at Gerald's to V.C. Bird International Airport in Antigua. A fixed-wing airport facility in Montserrat (to replace that destroyed by the volcano – see below) is due to be completed by late 2004. On 18 July 1995, the Soufriere Hills volcano in the south of the island became active for the first time in 350 years. By April 1996, increased pyroclastic activity had forced the evacuation of the capital, Plymouth, and most of the south of the island. Eruptions increased in vigour until a large explosion on 17 September 1996 destroyed a village to the east of the volcano; the village had been evacuated. The situation changed dramatically for the worse on 25 June 1997, when a large pyroclastic flow led to the deaths of 19 people in an area long designated as unsafe. In the following months, the centre of Plymouth, the capital, was destroyed by pyroclastic flows.

### ***Overview of wetland interest and sites identified***

The Montserrat National Trust, founded by ordinance in 1970, has been involved in activities aimed at conserving the natural and cultural heritage of Montserrat. About half of the island has been evacuated and much of it will probably remain uninhabitable for the next decade or more. The effects of the eruptions on the island's plants and animals are being studied where circumstances allow. Extensive monitoring of the Montserrat oriole - the National Bird - the mountain chicken and other important key indicator species, is ongoing. The Montserrat galliwasp has been sighted for the first time in over 30 years and more scientific research into habitat is necessary. A sustainable development plan has been developed for Montserrat and it will be important to integrate environmental aspects into the island's redevelopment.

Despite its small size, Montserrat supports at least 132 tree species, 59 species of birds and 13 mammals. The Montserrat oriole is found nowhere else. Also restricted to Montserrat are the galliwasp and another (unnamed) lizard. The endangered and edible 'mountain chicken' (a frog) is found only on Montserrat and Dominica. Several other species are restricted to Montserrat and some nearby islands.

The proposed Ramsar sites, identified and reviewed in consultation with colleagues working in Montserrat, are listed below. Because of the major changes consequent on the volcanic eruptions, the list of sites differs considerably from those discussed in earlier considerations.



Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK46001	Montserrat NW coasts and marine shallows	Montserrat			Proposed
UK46002	Centre Hills and forested ghauts	Montserrat			Proposed

Anon. (1993) reviewed the environmental issues in Montserrat, and this has provided an invaluable basis for this review, despite the changes caused by volcanic activity since then. We have incorporated too recent information gathered, for example, for the Important Bird Area review and the Turtle in Caribbean Overseas Territories project, as well as other sources.

The coverage of priority features is reviewed below. The sites identified represent coverage of the interest so far identified. Further survey work will almost certainly identify other features of major interest within the sites identified.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:	
		Montserrat NW coasts and marine shallows	Centre Hills and forested ghauts
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y
Priority type: coral reefs	Yes	Y	
Priority type: mangroves	Yes	Y	
Priority type: sea-grass beds	Yes	Y	
Priority type: wet grass-lands	No		
Priority type: peatlands	No		
Priority type: caves & karst	No		
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y	
5: Regularly supports 20,000 or more waterbirds.	No		

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:	
		Montserrat NW coasts and marine shallows	Centre Hills and forested ghauts
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	No		
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	?No		
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes	Y	

### ***Identification of principal further information needs***

New survey information is needed on many aspects, to update the situation following volcanic activity.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

### ***Acknowledgements***

Thanks for information and discussion are due to:

Janice Panton, Montserrat Government Representative in UK

Lady Eudora Fergus, Executive Director, Montserrat National Trust

Sarah Sanders, Ian Fisher and colleagues, RSPB

Marine Turtle Research Group (2004 draft: Status and exploitation of marine turtles in Montserrat)

Further information:

Anon. 1993. *Montserrat Environmental Profile: An Assessment of the Critical Environmental Issues Facing Montserrat With An Action Agenda For the Future*. UNDP, Barbados.

## **Ascension**

### ***Introduction***

Ascension Island lies in splendid isolation, just south of the equator, in the middle of the Atlantic, and 1,300 km (700 miles) to the north west of St Helena. The area is 90 km<sup>2</sup>, and the human population about 1000. It is a rocky peak of volcanic origin with 44 distinct craters. The last eruption took place about 600 years ago. It has spectacular volcanic scenery. Because of its remoteness, it was not settled until the 19th century when Napoleon was held captive on the neighbouring island of St Helena. The RAF continues to have a base there to support its regular flights to the Falklands.

### ***Overview of wetland interest and sites identified***

At the time of its discovery and later settlement, the main island, though very barren, held huge populations of seabirds. However, rats soon arrived by ship, and donkeys and cats were deliberately introduced. In an effort to beautify the island, many tropical flowers were planted. The result of all these introductions was the rapid decline in seabird numbers so that, today, most can only nest on smaller islets off-shore. Ascension is an important breeding site for the green turtle and various species of sea bird, notably the Sooty Tern or Wideawake and the endemic Frigate Bird. It has a fragile environment, which the Administrator is seeking to protect. As an example of this, the British Government gave (in March 2001) the Royal Society for the Protection of Birds (RSPB) £500,000, to rid Ascension Island of feral cats that have destroyed the once huge seabird population, one of the world's most important breeding colonies. By early 2003, four species of seabird had already re-colonised the mainland as breeding species and predation on the sooty tern population had been reduced to nil. There has been a perceived increase in the number of rats on Ascension. An eradication plan is not feasible and the authorities are actively seeking assistance in introducing an effective rat management plan.

The main threats to the island's conservation interests are twofold: public ignorance or disinterest in the value of the island's biodiversity; and the spread of introduced animals and plants. The current work on restoration is invaluable, both as a wider example and to Ascension's birds, including two globally endangered species, Ascension Island Frigatebird and Red-footed Booby. The relatively recently introduced Mexican Thorn bush threatens the island's Green Turtle population, the surviving unique desert flora and fauna and some of the geological features.

Much of Ascension's global conservation importance comes from the island's remoteness, which has produced one of the most remarkable island floras and faunas in the world. It is of world significance for its 11 species of breeding seabird, especially the unique Ascension Island Frigate Bird. It has also one of the most important breeding Green Turtle populations in the world. There are 6 unique species of land plants, 9 of marine fish and shellfish, and at least 20 of land invertebrates.

The proposed Ramsar site, identified and reviewed in consultation with colleagues in Ascension Island is noted below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK51001	Ascension Island	Ascension Island			Proposed

The proposed Ramsar site brings together several of the local protected areas being established. Because of the relatively undisturbed state of much of the island and its surrounding waters, it is possible to include within one Ramsar site (which effectively includes much of Ascension – excluding the settlements, airstrip and most built-up areas – and its inshore waters) a continuum of the wetland interests. This site meets the wide range of Ramsar criteria for which Ascension qualifies. This includes an important range of globally under-represented wetland types including oceanic island cloud forest, coastal features with endemic invertebrates, inshore waters with endemic fish, and breeding colonies of seabirds feeding over wide oceanic areas. The latter includes some of the areas now rapidly being re-colonised following eradication programmes for introduced alien invasive predators.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:
		Ascension Island
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y
Priority type: coral reefs	No	
Priority type: mangroves	No	
Priority type: sea-grass beds	No?	
Priority type: wet grass-lands	No	
Priority type: peatlands	No	
Priority type: caves & karst	No	
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y
5: Regularly supports 20,000 or more waterbirds.	Yes	Y
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y
7: Supports a significant proportion of	Yes	Y

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:
		Ascension Island
indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.		
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes	Y

### ***Identification of principal further information needs***

Further information will usefully address taxa for which data are limited at present.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

### ***Acknowledgements***

Thanks are due particularly to the personnel of the Ascension Island Government Conservation Department, Tara George, Stedson Stroud, Caren George, Darren Roberts and Raymond Benjamin, Ian Fisher (RSPB) for assistance with maps, as well as the Councillors, Administrator and other personnel of Ascension Island Government.

## St Helena

### *Introduction*

This remote island in the South Atlantic lies 1,960 km (about 1200 miles) from the nearest point on the SW coast of Africa and 2,900 km east of South America. The nearest land is Ascension Island, 1300 km to the north. St Helena, 122 sq km<sup>2</sup>, has a resident population of about 4000. The capital is Jamestown. The island is of volcanic origin and was uninhabited when it was discovered by the Portuguese in the early sixteenth century.

### *Overview of wetland interest and sites identified*

The islands have distinctive flora and fauna with many rare or endangered species. St Helena's isolated position in the South Atlantic Ocean has given rise to an unusual and remarkable land and marine flora and fauna. Of the 60 known native species of plant, 45 occur nowhere else (including the white ebony flower). Of 1100 land invertebrates species, 400 are unique to St Helena. At least six unique land birds once occurred on St Helena, but only one (the wirebird) survives today. Ten shore fishes occur only at the island, and sixteen more are found only here and at Ascension.

Massive destruction of the native plants and animals followed the Island's discovery in 1502. The deliberate introductions of alien plants and animals have caused further decline of habitats and species. The remaining small, scattered patches of native vegetation are too small to have preserved all the plants of the varied habitats. Six species have become extinct, and several species survive only in cultivation. Small population sizes, often reproductively isolated, and alien species are the greatest threats the survival of St Helena's land plants and animals. The reasons for the decline of wirebirds are being studied.

The activity most affecting the marine environment is fishing. St Helena's unique fishes do not form an important part of the commercial fishery. However, fishing effort directed at lobsters, glasseyes and groupers has impacted the inshore food and nutrient cycling systems. Quotas are now set for the grouper fishery after recognition of a danger of over-fishing.

The proposed Ramsar sites, identified and reviewed in consultation with colleagues in St Helena, are listed below. A fourth possible Ramsar site, at Spring Gut, has been identified. This is to current investigation as to its possible addition to the list of Ramsar sites for possible future designation.

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
UK52001	St Helena Central Peaks	St Helena			Proposed
UK52002	St Helena inshore waters, stacks and cliffs	St Helena			Proposed
UK52003	Fisher's Valley	St Helena			Proposed

UK52004	Spring Gut	St Helena			Under investigation
---------	------------	-----------	--	--	---------------------

St Helena meets a wide range of Ramsar criteria, especially in relation to endemic and threatened species. The small island is remarkable too in holding cloud forest within sight of desert conditions crossed by oasis-like valleys. Despite the impacts of long settlement with many alien invasives, natural value remains high. The coverage of priority features is reviewed below. The three proposed sites cover the key wetland types centred on cloud forest, coasts and inshore waters, and an oasis-like river valley through desert.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:		
		St Helena Central Peaks	St Helena inshore waters, stacks and cliffs	Fisher's Valley
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y
Priority type: coral reefs	No			
Priority type: mangroves	No			
Priority type: sea-grass beds	Yes		?	
Priority type: wet grass-lands	Yes	Y		Y
Priority type: peatlands	No			
Priority type: caves & karst	No			
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes?			
5: Regularly supports 20,000 or more waterbirds.	No			
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	No			
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes		Y	

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:		
		St Helena Central Peaks	St Helena inshore waters, stacks and cliffs	Fisher's Valley
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes		Y	

### ***Identification of principal further information needs***

Current survey work on both marine and terrestrial sites will add information on other taxa. Work is in hand also on management planning.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

### ***Acknowledgements***

Thanks are due particularly to:

Rebecca Cairns-Wicks and colleagues at St Helena National Trust

Emma Bennett, Marine Scientific Officer

Isabel Peters, Environmental Co-ordinator and colleagues at the Development and Economic Planning Department

Vince Williams, Senior Forestry Assistant (Conservation) and colleagues at the Agriculture & Natural Resources Department

Hon. Cathy Hopkins, Chair, and colleagues at the Environmental Advisory Consultative Forum

Kedel Warboys, St Helena Government UK Representative

Councillors, Heads of Department and their staff, the Governor's Office and participants in meetings and workshops.



## Tristan da Cunha

### *Introduction*

Tristan da Cunha, rising to over 2000m above sea level, is miles from anywhere in the South Atlantic Ocean. With its neighbouring islands of Nightingale and Inaccessible, and Gough Island, 300 km to the SE, it warrants a mention in the Guinness Book of Records as the most isolated inhabited island in the world, being over 1,900 km from St Helena and 2778 kilometres west of Cape Town. It is almost circular in shape and has an area of 98 km<sup>2</sup>. The settlement (and capital) of Edinburgh of the Seven Seas in the northwest is its only inhabited area. At the start of the new millennium, the population (which had never exceeded 300 throughout the previous 184 years of occupation) totalled 284. Tristan da Cunha and the neighbouring islands of Nightingale, Inaccessible and Gough comprise the Tristan da Cunha group.

### *Overview of wetland interest and sites identified*

Being isolated and devoid of all living organisms at its volcanic origin, the evolving flora and fauna of the island hold a special interest for scientists and visitors. The Tristan Government is keenly aware of the need to live in balance with its environment because the economy of the community is dependent on sustainable harvests of lobster and fish. The Department of Natural Resources is responsible for administering the Island's strict environmental policies. Over 40% of Tristan's territory is declared nature reserve.

There are no indigenous terrestrial mammals. Man has left his mark on the main island; the introduction of rats and mice in the 1880s destroyed much of Tristan Island's indigenous bird life. Fortunately the islands of Nightingale and Inaccessible remained rodent-free and are home to several unique indigenous land birds, including the Tristan bunting and the rare Inaccessible rail, the smallest flightless bird in the world. Millions of seabirds, such as yellow-nosed albatross and greater shearwaters, breed – as do fur seal and elephant seals, now recovering from the hunting of the 19<sup>th</sup> century. Continual education of new generations of Tristanians is required to safeguard their special environment.

The proposed Ramsar sites, identified and reviewed in consultation with colleagues working in Tristan da Cunha, are listed below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK53001	Gough Island	Tristan da Cunha	6500+		Proposed
UK53002	Inaccessible Island	Tristan da Cunha	1400+		Proposed
UK53003	Nightingale Group	Tristan da Cunha	390+		Proposed
UK53004	Tristan Island	Tristan da Cunha	9600+		Proposed

Because of the relatively undisturbed state of much of the islands and their surrounding waters, it is possible to include within the proposed Ramsar sites (which effectively include much of Tristan da Cunha and its inshore waters, but excluding the area of most human use around the settlement) a continuum of the wetland interests. These sites meet the wide range of Ramsar criteria for which Tristan da Cunha qualifies. This includes breeding colonies of seabirds feeding over wide oceanic areas, as well as inshore waters, natural wet grasslands and peatlands.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:			
		Gough Island	Inaccessible Island	Nightingale Group	Tristan Island
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y	Y
Priority type: coral reefs	No				
Priority type: mangroves	No				
Priority type: sea-grass beds	No				
Priority type: wet grass-lands	Yes	Y	Y	Y	Y
Priority type: peatlands	Yes	Y	Y	Y	Y
Priority type: caves & karst	No				
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y	Y	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes				
5: Regularly supports 20,000 or more waterbirds.	Yes	Y	Y	Y	Y
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y	Y	Y	Y
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes	?No				

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:			
		Gough Island	Inaccessible Island	Nightingale Group	Tristan Island
to global biological diversity.					
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes	Y	Y	Y	Y

### ***Identification of principal further information needs***

Several studies are in progress to address information on further taxa and, particularly, management needs.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

### ***Acknowledgements***

Thanks are due to:

Particularly Alison Rothwell and also Geoff Hilton and Ian Fisher, RSPB

Peter Ryan and John Cooper, University of Cape Town

James Glass and colleagues, Tristan da Cunha Natural Resources Department

## Falkland Islands

### *Introduction*

The Falkland Islands are an archipelago of around 700 islands in the South Atlantic, on the equivalent latitude to London. The largest islands are East Falkland and West Falkland. They are situated about 770 km (480 miles) north-east of Cape Horn and 480 km (300 miles) from the nearest point on the South American mainland. The Islands have a total land area of 12,173 sq km (4,700 sq miles) – more than half the size of Wales – and a permanent population of 2,913 (2001 census). Stanley, the capital (population 1981 in 2001), is the only town. Elsewhere in Camp (the local term for the countryside), there are a number of smaller settlements. The population is almost exclusively of British birth or descent, and many families can trace their origins in the Islands back to the early post-1833 settlers. English is the national language and 99 per cent of the population speak English as their mother tongue. The climate is characterised by a narrow temperature range (–5° C to 24°C), strong winds, fairly low rainfall evenly distributed throughout the year, and higher sunshine hours than most parts of Britain.

### *Overview of wetland interest and sites identified*

The Islands are generally hilly – the highest points are Mount Usborne (705m) on East Falkland and Mount Adam (700m) on West Falkland. There are few trees, the natural vegetation being grassland with some species of heath and dwarf shrubs. Sheep farming has led to considerable reductions in the abundance of native plants such as the giant tussac grass, a very important habitat for birds and insects in a treeless landscape. Felton's Flower, which grows nowhere else in the world, has become almost extinct in the wild through over grazing. Efforts to replant tussac grass and Felton's Flower have begun.

The Falkland Islands are exceptionally rich in marine life. They contain vast colonies of seabirds - 85% of the world population of Black-browed albatrosses, and the largest concentration of Rockhopper Penguins. They are the breeding grounds for sea lions, elephant seals and fur seals, and fifteen species of whales and dolphins occur in the surrounding seas. In the surrounding seas large scale commercial fisheries compete with seabirds for fish and squid. Penguins take other prey in addition to commercial species but a recent survey has revealed declines in four of the five breeding Species. Off the South American coast, long line fisheries are a threat to Falkland Black-browed Albatrosses. Exploration for oil in waters around the Islands is a recent issue of conservation concern. It could have a serious impact on an area of exceptional marine life. Penguins, which cannot fly, are especially vulnerable to oil pollution.

The designated and proposed Ramsar sites, identified and reviewed in consultation with colleagues in the Falkland Islands, are listed below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK54001	Bertha's Beach	Falkland Islands	3191.00	24/09/2001	Designated

UK54002	East Bay, Lake Sullivan and River Doyle	Falkland Islands	31902.00		Proposed
UK54004	Pebble Island East	Falkland Islands	7053.00		Proposed
UK54005	Sea Lion Island	Falkland Islands	1556.00	24/09/2001	Designated
UK54006	Cape Dolphin	Falkland Islands	4700		Proposed
UK54007	Concordia Beach & Ponds, Limpet Creek and Cape Bougainville	Falkland Islands			Proposed
UK54008	Seal Bay	Falkland Islands	2700		Proposed
UK54009	Volunteer Point	Falkland Islands	230		Proposed
UK54010	Kidney Island and Kidney Cove	Falkland Islands			Proposed
UK54011	Cape Peninsula, Stanley Common and Port Harriet	Falkland Islands			Proposed
UK54012	Swan Inlet and Ponds	Falkland Islands	ca 12000		Proposed
UK54013	Flats Brook and Bombilla Flats	Falkland Islands			Proposed
UK54014	Lafonia ponds and streams catchment	Falkland Islands			Proposed
UK54015	Bull Point	Falkland Islands	ca 3000		Proposed
UK54016	Beauchêne Island	Falkland Islands	187		Proposed
UK54017	Jason Islands Group	Falkland Islands	3328		Proposed
UK54018	Keppel Island	Falkland Islands	3626		Proposed
UK54019	Hawks Nest Ponds	Falkland Islands			Proposed
UK54020	Bird Island	Falkland Islands	120		Proposed
UK54021	New Island Group	Falkland Islands	2544+		Proposed

In addition to the identification of the new (or revised) proposed sites, several other priorities were identified.

1. The need to extend the existing Bertha's Beach site eastwards to Kelp Point or Pleasant Point, to achieve more natural boundaries and include much more coverage of the important wintering shorebird population.
2. The need to include representation of the Loligo and kelp beds (see Criterion 8; note that "fish" here includes fished invertebrates) as well as for other reasons. This is important both for its intrinsic interest and because of the role of nursery areas for the crucially important squid fishery. Further information and consultation with the fishery authorities are required before specific recommendations can be made. Three basic approaches have been suggested by various persons, and these are not mutually exclusive:
  - a) adding such areas to any of the appropriate coastal areas already identified; this would have the advantage of an integrated approach;
  - b) adding a large marine site, one suggestion being Queen Charlotte Bay, to include the shallow margins and the enclosed deeper area;
  - c) separate areas if necessary.

It might be advantageous to investigate options as part of a strategic approach to inshore marine management and conservation (through something like a coastal management strategy).
3. Because of the large extent of the islands and the high proportion of wetlands, there is still a need for further survey information. In some cases

(such as the Lafonia wetlands and Swan Inlet areas) this is needed to refine the tentative areas indicated. In other cases (e.g. West Lagoon area, West Falkland), the uncertainty has prevented recommendation of some sites which had originally been put forward as candidates, even though it is strongly suspected that they qualify. Similarly, some sites put forward (e.g. Saunders Island; the Lively Island Group) are undoubtedly of great wildlife importance, but it is not yet possible to confirm this in a Ramsar context. Further work will clarify this. Finally, in this category, there are probably important sites not yet found or suspected; West Falkland in particular needs more investigation in this respect.

4. Work is needed on developing and implementing management on the designated sites as well as those proposed for designation.

Not surprisingly, in view of its large area, the high proportion of wetlands, and the great importance to globally threatened or restricted populations, a fairly large number of Ramsar sites have been proposed, Subject to the provisos noted above, these provide reasonable coverage of priority features. The following page reviews coverage by the designated and proposed sites.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territ?	Represented in:																			
		Bertha’s Beach	East Bay, Lake Sullivan and River Doyle	Pebble Island East	Sea Lion Island	Cape Dolphin	Concordia Beach & Ponds, Limpet Creek	Seal Bay	Volunteer Point	Kidney Island & Cove	Cape Peninsula, Stanley Common and Port	Swan Inlet and Ponds	Flats Brook & Bombilla	Lafonia ponds & streams	Bull Point	Beauchêne Island	Jason Islands Group	Keppel Island	Hawks Nest Ponds	Bird Island	New Island Group
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Priority type: coral reefs	No																				
Priority type: mangroves	No																				
Priority type: sea-grass beds	?																				
Priority type: wet grass-lands	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Priority type: peatlands	Yes	Y	Y	Y	Y	Y					Y	Y	Y				Y		Y		Y
Priority type: caves & karst	No																				
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y	Y	Y		Y	Y		Y	Y			Y	Y	Y	Y	Y		Y	Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y		Y	Y	Y	Y		Y			Y								Y	Y
5: Regularly supports 20,000 or more waterbirds.	Yes							Y								Y		Y			Y
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y		Y		Y	Y	Y	Y			Y			Y	Y	Y	Y	Y	Y	Y
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes	?	Y	?	?	?	?	?	?	?	?				?	?	?	?	Y	?	?
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes	?		?	?	?	?	?	?	?	?				?	?	?	?		?	?

### ***Identification of principal further information needs***

The priority information needs are identified in the text above, immediately preceding the table.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

The present situation in relation to information previously reported under Section 24 of the RIS for the two designated sites is reviewed the detailed tables which can be seen in the fuller version of this report (available at [www.ukotcf.org](http://www.ukotcf.org)).

**Bertha`s Beach**

**Sea Lion Island**

### ***Acknowledgements***

Thanks are due to:

Dr Andy Douse, Conservation Strategy Officer, Environmental Planning Department; Falklands Conservation, especially Becky Ingham and Nic Huin, as well as the authors of the draft of *Important Bird Areas in the Falkland Islands*, Robin Woods, Jim Stevenson, Rebecca Ingham, Nic Huin, Andrea Clausen and Ann Brown; Ian Strange and colleagues at New Island South Conservation Trust, especially researchers Paulo Catry, Ana Campos, Petra Quillfeldt, Juan Masello and Ian Strange, for conversations as well as the area description and breeding bird status for the New Island South Conservation Trusts reserve.

Tony Chater, New Island North;

Tom Chater, FIGAS;

and the many people in the Falkland Islands who showed or discussed the many areas.



## **South Georgia and the South Sandwich Islands**

### ***Introduction***

South Georgia lies 1300 km SE of the Falkland Islands, and the South Sandwich Islands (SSI) a further 760 km SE. South Georgia is mountainous with many glaciers, permanent ice covering almost half of its total land area of 3755 km<sup>2</sup>. Part of the old whaling station at Grytviken has been converted into the South Georgia Museum. The South Sandwich Islands consist of an uninhabited 350 km chain of active volcanic islands. The Administrative Centre is at King Edward Point, but much of the administration is conducted from Stanley in the Falkland Islands. There is no indigenous population. South Georgia is an isolated, mountainous sub-Antarctic island about 1390 km south east of the Falkland Islands and about 2,150 km east of Tierra del Fuego. It is some 170 km long, varying in width from 2 to 40 km. Surrounded by cold waters originating from the Antarctic, South Georgia has a harsher climate than expected from its latitude. More than 50% of the island is covered by permanent ice with many large glaciers reaching the sea at the head of fjords. The main mountain range, the Allardye Range, has its highest point at Mount Paget (2960m). The South Sandwich Islands consist of a chain of 11 volcanic islands some 350 km long. Some of these islands are still active volcanoes. The climate is wholly Antarctic. In the late winter the Islands may be surrounded by pack ice.

### ***Overview of wetland interest and sites identified***

South Georgia has a rich heritage stemming from its past prominence as a staging post for Antarctic discovery and the sealing and whaling industries it supported. As a result, South Georgia is increasingly becoming a popular tourist destination and important for scientific research. The Territory is of great importance for sub-Antarctic flora and fauna. South Georgia is the breeding ground for some 85% of the world's Southern Fur Seal population as well as globally significant populations of elephant seals, albatrosses, petrels and penguins. Reindeer were introduced in about 1910 by Norwegian whaling companies. Only the coastal fringes of South Georgia support vegetation, mainly in the form of tussock grass.

There are estimated to be 53 million birds on South Georgia. The most numerous bird is the macaroni penguin with more than two million breeding pairs. It is an important nesting site for the largest seabird in the world, the wandering albatross. There are further large seabird colonies in SSI, with chinstrap penguin in vast numbers.

The South Georgia pipit is unique to the island. Several seal species breed on the two island groups, and whales are frequently seen offshore. Despite a very limited number of flowering plants, there is great diversity in the mosses and lichens, many found nowhere else in the world.

The proposed Ramsar sites, identified and reviewed in consultation with persons studying South Georgia and the South Sandwich Islands are listed below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK55001	South Georgia	South Georgia and the South Sandwich Islands	375,500		Proposed
UK55002	South Sandwich Islands	South Georgia and the South Sandwich Islands	27,760		Proposed

It has proven difficult to secure information on the distribution of interest on South Georgia and the South Sandwich Islands. At first sight, this is surprising because, of all the Territories within this review, SGSSI has had most UK public research funds spent on it, through British Antarctic Survey and its predecessors. However, much of this has addressed process studies, with outstanding results of both basic and applied value – rather than survey. Furthermore, the terrain is extensive and difficult, and basically natural. As a consequence, many wetland types (including priority categories of tussock wet grassland and peatland) are distributed at a landscape scale. This applies to many species too. For example, it has been noted that the distribution of the endemic South Georgia Pintail duck is almost continuous around the island in a coastal strip extending about 3 km inland; there are no substantial concentrations that would justify protecting one area over another for this reason alone. Inland, there are huge areas of ice-covered or melt-dominated wetlands.

This allows several approaches. For any of them, it is desirable to achieve a listing of potential Ramsar sites by a method of very low cost, because the limited resources available from SGSSI's small economy need to be used primarily on direct conservation. The approaches put forward by various persons include:

1. Confining attention initially to existing protected areas and candidate protected areas and environmentally sensitive areas, including, (but not restricted to) those identified by Mackintosh and Walton - and to the extent that these have been amended and extended in the review by Poncet (2003).
2. The approach at (1), giving initial priority to diverse areas with wide interest and rat-free, like Bird Island.
3. In view of the widespread nature of the interests and the sustainable management policies for the Territory, designate the whole area as Ramsar sites.

After initial consultations with interested parties, including those holding information, the intention of the review had been to attempt an approach close to (1) or (2) above. It was agreed that, if the review could readily be provided with, or directed to, brief summaries of existing data adequate for assessment of most potential sites in relation to Ramsar criteria, then the project would undertake to prepare the first draft of such an assessment for circulation to all stakeholders for further discussion and consideration. Over the following months, it became apparent that no such summaries could readily be made available to the project within the ten months available to it within the duration of work allowed for the project. The listing in the first South Georgia Management Plan (Mackintosh and Walton) was the only one

available to the project. However, major stakeholders had difficulty with this when the project attempted to use this as a first approach. Furthermore, it became increasingly clear that the interest was continuous, albeit progressively varying, over the island.

It is recognised that Ramsar designation does not, in itself, address all conservation needs. By the same token, however, it is recognised that Ramsar designation might enhance the protection of sites. Indeed, it is recognised that a UKOT with so much wetland interest must address strongly its Ramsar Convention commitments.

Further consideration was therefore given to the alternative approach (3). There is no doubt of the conservation importance of the whole island group. Indeed, there have been repeated calls over many years to promote World Heritage Site status for South Georgia. Under the World Heritage Convention (unlike under the Ramsar Convention), the final decision as to whether a site is designated depends not on the sovereign state in which the site exists, but on an international committee.

It is clear, however, that the pervading wetland nature of South Georgia, its immense wildlife interest, and its present – and intended continuing – sustainable management would make it suitable to designate the whole land area a Ramsar site. Almost all vegetation on South Georgia could be defined as wet grassland and as peatlands, given that this underlies almost all such grassland and especially tussock, and the non-vegetated areas are water-dominated. GSGSSI might prefer to exclude small areas of buildings, docks etc used by people, although in view of the nature of the activities even such small exclusions might not be necessary.

Although the discussion above has referred mainly to South Georgia, much the same points apply to the South Sandwich Islands. Indeed, the situation applies even more in some senses, because there are no settlements on these Islands and landing is rare and difficult.

Accordingly, the proposal is that there be two Ramsar sites in this Territory, these comprising the land areas of (a) South Georgia and (b) the South Sandwich Islands. Noting that this is a major proposal, the Council of UKOTCF, as contractor of this review, discussed and concurred with this recommendation.

The question arises as to what to do in respect of marine areas. In some circumstances, it would be appropriate to include inshore waters in the designation. However, other considerations apply. A view has been expressed that attempts at South Georgia and the South Sandwich Islands to designate under Ramsar any area of marine habitat (e.g. spawning/nursery grounds of fish or inshore parts of the foraging ranges of penguins) would create immediate conflict of interest or competence with CCAMLR. Others have questioned the basis on which any conflict would occur. Nevertheless, given the clear priority to address the terrestrial areas in the first instance, there seems little benefit in considering within the present review extensions of Ramsar designation into the marine areas of GSGSSI.

Accordingly, the coverage of wetland interest by the proposed Ramsar sites in GSGSSI is reviewed below.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:				
		South Georgia	South Sandwich Islands			
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y			
Priority type: coral reefs	No					
Priority type: mangroves	No					
Priority type: sea-grass beds	?					
Priority type: wet grass-lands	Yes	Y	Y			
Priority type: peatlands	Yes	Y	Y			
Priority type: caves & karst	No					
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes	Y	Y			
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y			
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y	Y			
5: Regularly supports 20,000 or more waterbirds.	Yes	Y	Y			
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y	Y			
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	?					
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	?					

### ***Identification of principal further information needs***

As noted above, substantial survey information on many taxa is still required to specify distributions, although consideration of management needs is at least as important.

***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

***Acknowledgements***

Thanks are due to:

Sally Poncet

British Antarctic Survey personnel, including John Croxall, David Walton. Tony Martin and others

Pat & Sarah Lurcock

Ann Brown

The Government of South Georgia and the South Sandwich Islands, including Howard Pearce, Harriet Hall, Gordon Liddle, Dr Mike Richardson

The South Georgia Association, including Bob Burton, David Rootes and participants in the SGA conference in 2003.

## **British Antarctic Territory**

### ***Introduction***

The BAT consists of all the land, including the Antarctic Peninsula, and the Southern Ocean, south of 60° S between 20° and 80° west, an area of 1,709,400 km<sup>2</sup>. Although the UK claim overlaps with those of Argentina and Chile, the Antarctic Treaty provides an internationally agreed regime for the area, recognising its importance as an area for peace and science. There is no permanent population but the British Antarctic Survey have two year-round and one summer-only research stations here. Many other countries also have research stations in this region. The Southern Ocean offers unique opportunities for understanding evolution in marine systems.

The Protocol for the Protection of the Antarctic Environment, enacted as the Antarctic Act 1994, provides a licensing regime for all activities in the Territory by British nationals. This legislation also covers environmental monitoring and impact assessment, waste management, oil spills and protected areas and species. Management of commercial fishing is by international agreement through the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR). Annual meetings of the Treaty and CCAMLR provide a forum for monitoring environmental activities and fishing. Major current issues include management of increasing tourism, proposals for the southern ocean whale sanctuary and climate change.

The Territory is located in the coldest, driest and windiest continent in the world. The average annual temperature at the South Pole is minus 49 degrees Celsius. Only 0.7 per cent of the BAT's surface is ice-free. The remainder is covered by a permanent ice sheet of up to five kilometres thick. The highest mountain in BAT, Mount Jackson, is 3,184 metres high. Total area is 1,709,400 sq. km<sup>2</sup> (666,000 sq. miles)

There is no indigenous population. The United Kingdom's presence in the Territory is provided by the British Antarctic Survey (BAS), which maintains two permanently manned scientific stations (at Halley and Rothera) and two summer-only stations (at Fossil Bluff on Alexander Island and Signy in the South Orkney Islands).

### ***Overview of wetland interest and sites identified***

On land, although vegetation is sparse, there are many types of lichen, moss and algae. In the surrounding seas, vast amounts of krill provide the basis for rich marine life. This includes whales, seals and very large numbers of birds especially petrels and penguins, inhabiting the islands and coastal areas of the Peninsula. Adélie and emperor penguins both breed on the continent itself.

No prospective sites were identified, because BAT is not included in UK's ratification.

***Identification of principal further information needs***

None in respect of Ramsar, because BAT is not included in UK's ratification.

***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

## British Indian Ocean Territory

### *Introduction*

British Indian Ocean Territory (BIOT) lies about 1770 km east of Mahe (the main island of the Seychelles). The territory, an archipelago of many islands, covers some 54,400 km<sup>2</sup> of ocean. The islands have a land area of only 60 km<sup>2</sup> and 698 km of coastline. Diego Garcia, the largest and most southerly island, is 44 km<sup>2</sup>. The climate is hot, humid and moderated by trade winds. The terrain is flat and low and most areas do not exceed four metres in elevation.

### *Overview of wetland interest and sites identified*

The British Indian Ocean Territory (BIOT) comprises the 55 islands of the Chagos Archipelago. The land area is only 44 km<sup>2</sup>. But, below the territorial seas lie over 20,000 km<sup>2</sup> of coral reefs - a pristine treasure store of marine life. The Archipelago lies at the centre of the Indian Ocean, its only human inhabitants now being military personnel on the southernmost island, Diego Garcia.

The biological importance of the Chagos Archipelago is several-fold. First, its isolation and low level of human impact make it ideal for the study of tropical marine ecology, undistorted by pollution. Second, ocean currents bring larvae from the Indo-Pacific basin which then develop into adulthood and release progeny to regenerate the depleted stocks further west.

The islands are home to large colonies of sea birds, as well as to the unusual coconut crab and provide nesting sites for green turtles and the more endangered hawksbill.

The designated and proposed Ramsar sites, identified and reviewed in consultation with researchers on British Indian Ocean Territory are listed below:

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
UK61001	Chagos Archipelago	British Indian Ocean Territory		12/05/1999	Superseded by UK61002 & UK61004
UK61002	Diego Garcia	British Indian Ocean Territory	35424.05	04/07/2001	Designated
UK61003	Great Chagos Bank	British Indian Ocean Territory		13/03/2003	Incorporated in UK61004
UK61004	Chagos Banks	British Indian Ocean Territory			Proposed

In view of the outstanding nature of the coral systems of the Chagos Archipelago and their sustainable management, HMG announced at the Conference of the Parties of the Ramsar Convention in 1999 that it intended within the next few weeks to designate substantially the whole of the Territory as a Ramsar site. The only factor which had prevented the designation before the 1999 CoP, as had been planned,



was uncertainty as to how to define boundaries in the sea in order to include the reef walls within the site.

Several approaches have been suggested by various persons. These include:

1. Extending the Diego Garcia site to include the whole of the Environmental Protection and Conservation Zone recently declared around the archipelago, at 200 nautical miles (370 km) from the coast. Essentially, this is the proposal promoted by the Chagos Conservation Trust (as the “Chagos Archipelago Ramsar Site”). This coincides also with the longer established Fisheries Conservation and Management Zone. This has the merit of reducing the number of different boundaries in use simultaneously. It would also lend itself well to an integrated approach to environmental management. There are some reservations in that a very large area of deep ocean would be included. There is no reason why deep ocean should not be included within a Ramsar site, if it is closely related to the shallower areas – and the most recent Conference of the Parties (2002) explicitly proposed that coral reef sites should include sufficient deep water areas to ensure the integrity of reef walls. However, this option would include much more extensive deep water areas.
2. An interim option (“Chagos Islands Ramsar Site”) also has been put forward by Chagos Conservation Trust. This involves the initial designation of include all of the remaining land areas and their adjacent territorial seas, preferably taking the opportunity to increase the limit of territorial waters to 12 nautical miles (22 km), as is now the norm in most countries CCT stress that this should be only an interim measure, en route to implementation of option (1). The advantages of this approach is merely to establish some progress while longer term issues are resolved. The disadvantages are that all would agree that it could be only an interim solution and, by increasing the number of interim stages and separate management units, a great deal of extra work would result.
3. A further option was to leave the Diego Garcia Ramsar site as it stands, and address the outstanding commitment by an additional Chagos Banks site. Rather than include the whole Environmental Protection and Conservation Zone, this would be limited to a single area drawn to include the Chagos reef areas, except for Diego Garcia. Included would be the Great Chagos Bank and the smaller banks, with boundaries drawn to include a reasonable margin (perhaps 12 nm, 22 km) around the reef walls. To aid identification as to whether one was within the area or not, the boundaries would be constrained to straight lines, wherever practicable running N-S or E-W.

Whilst drawn in some ways to option (1), which we would not argue against, the recommendation of this review is option (3) because this would provide an outstanding Ramsar site, while fulfilling HMG’s existing commitments, but not extending the Ramsar guideline definitions into novel areas. We understand that the proponents on the other options would be prepared to accept option (3).

The coverage of priority features is reviewed below. This demonstrates that the combination of designated and proposed sites gives coverage of the range of global priority wetland types and other features represented.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:	
		Diego Garcia	Chagos Banks
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y
Priority type: coral reefs	Yes	Y	Y
Priority type: mangroves	Yes		Y
Priority type: sea-grass beds	Yes	Y	Y
Priority type: wet grass-lands	No		
Priority type: peatlands	Yes		Y
Priority type: caves & karst	No		
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes		Y
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y	Y
5: Regularly supports 20,000 or more waterbirds.	Yes		Y
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y	Y
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes	Y	Y
8: Is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.	Yes	Y	Y

### ***Identification of principal further information needs***

A good deal of additional information, particularly relating to less studied taxa and management needs, will be provided by the scientific expedition planned for 2006.

However, no additional information is needed to confirm the outstanding importance of the area.

***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

No major factors were reported as adversely affecting the designated Ramsar site in the existing documentation, and none were identified in this review.

***Acknowledgements***

Chagos Conservation Trust, especially Mark Spalding, William Marsden, Nigel Wenban-Smith,  
BIOT Administration and their present and former conservation advisers, especially John Topp, Dr Charles Sheppard, Karen Maddocks, Charles Hamilton  
JNCC, especially David Stroud, Elizabeth Moore, Colin McLeod

## Pitcairn Islands

### *Introduction*

Pitcairn Island is best known as the haven for the mutineers from HMS Bounty over 200 years ago. This group of four small, varied South Pacific islands range from Pitcairn itself (4.5 km<sup>2</sup>) to Henderson Island - a 37 km<sup>2</sup> raised coral atoll and the largest island - and low-lying coral atolls of Oeno and Ducie. The nearest land masses are over 4,500 km away, New Zealand to WSW and South America to the east. Only Pitcairn is inhabited; the small community of less than 50 lives at Adamstown, isolated by more than a day's sail from its nearest neighbours in French Polynesia, around 500 km NW. Pitcairn Island is a small volcanic island situated in the South Pacific Ocean at latitude 25 04 south and longitude 130 06 west. It is roughly 2170 km (1350 miles) east south-east of Tahiti; 5310 km (3300 miles) east north-east of its administrative headquarters in Auckland, New Zealand and just over 6600 km (4100 miles) from Panama.

### *Overview of wetland interest and sites identified*

Pitcairn biodiversity and conservation needs have become better known in recent years following a major scientific expedition in 1991-92. The indigenous vegetation of Pitcairn Island is confined to small, isolated patches. Now that a small nursery has been established on Pitcairn, sustained restoration effort is needed to safeguard these remnants and the endemic plants they support.

The other islands support a range of endemic plants and animals. The 'chicken bird' (a jet black, flightless rail confined to Henderson Island - a World Heritage Site) seems to be less vulnerable to predation by rats than are the petrels. Of special concern is the recently described Henderson petrel.

Despite isolation, the unique wildlife of the Pitcairn Islands needs a helping hand. Some endemic plants (e.g. the tree fern and aillhow) survive in remnants of indigenous vegetation on Pitcairn Island. Globally important seabird populations (including Murphy's petrel) on the other islands are threatened by Pacific rats.

The proposed Ramsar sites, identified and reviewed in consultation with colleagues studying the Pitcairn group are listed below:

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
UK62001	Ducie Island	Pitcairn Islands	600.00		Proposed
UK62002	Henderson Island	Pitcairn Islands	3700.00		Proposed
UK62003	Oeno Island	Pitcairn Islands	2000.00		Proposed
UK62004	Browns Water, Pitcairn	Pitcairn Islands			Proposed
UK62005	Coastal waters, Pitcairn	Pitcairn Islands			Proposed

The qualification of Ducie, Henderson and Oeno Islands for Ramsar designation has long been recognised. This is confirmed by this review, which notes also the need to include the coastal waters within the sites. The report has also reviewed the potential

qualification of Pitcairn Island itself. Although there are some arguments for designating all or most of this island too, it is recognised that it is obviously less natural than the three other islands in the Territory and that there are also practical aspects. Accordingly, recommendations for this island are limited to two sections, the sole freshwater source and the coastal waters.

The coverage of priority features is reviewed below. This demonstrates that, subject to the provisos noted above, the combination of designated and proposed sites gives coverage of the range of global priority wetland types and other features represented.

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory?	Represented in:				
		Ducie Island	Henderson Island	Oeno Island	Browns Water, Pitcairn	Coastal waters, Pitcairn
1: Contains a representative, rare, or unique example of a natural or near-natural wetland type	Yes	Y	Y	Y	Y	
Priority type: coral reefs	Yes	Y	Y	Y		
Priority type: mangroves	No					
Priority type: sea-grass beds	No					
Priority type: wet grass-lands	No					
Priority type: peatlands	No					
Priority type: caves & karst	No					
2: Supports vulnerable, endangered, or critically endangered species or threatened ecological communities.	Yes		Y	Y	Y	
3: Supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.	Yes	Y	Y	Y	Y	
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.	Yes	Y	Y	Y		
5: Regularly supports 20,000 or more waterbirds.	Yes	Y	Y			
6: Regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.	Yes	Y	Y	Y		
7: Supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes	Y	Y	Y		Y
8: Is an important source of food for fishes, spawning ground, nursery and/or migration	No					

Criteria or priority wetland or species [please note that the formal texts have been abbreviated for clarity]	Is this feature present in this Territory ?	Represented in:				
		Ducie Island	Henderson Island	Oeno Island	Browns Water, Pitcairn	Coastal waters, Pitcairn
path on which fish stocks, either within the wetland or elsewhere, depend.						

### ***Identification of principal further information needs***

These relate mainly to survey information on other taxa, updating information on vulnerable species, and information to inform management.

### ***Comments on any sites already designated, especially in the context of report needs for CoP 2005***

There are no sites already designated.

### ***Acknowledgements***

Thanks are due to:

UKOTCF Pitcairn Working Group, particularly Dr Mike Brooke, Robert Irving (Seascope), Dr Steve Waldren, Dr Ian Hepburn  
Pitcairn Administration, particularly Karen Maddocks, Ann Furey