



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

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**Final Report on Contract CR0294 to the  
UK Department of Environment, Food and Rural Affairs**  
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# **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progress in some aspects, the existing list of proposed sites (depending mainly on information about 20 years old) is out of date.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*'.

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## 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 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 part A. 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.

Also during the course of this project, JNCC changed (in fairly small ways) the standard format that they used for Ramsar Information Sheets. At an early stage in the project, it had been agreed that RIS format would be used to collate information on individual sites. This would both ensure that appropriate information was gathered and maximise efficiency, because it would minimise the additional work needed to move any site on to eventual designation. It had further been decided not to change the format used during the project, because of the unproductive time that this would take. Accordingly, the older format has been retained in Annexes 1 and 3. (The only exceptions are a few cases where new site descriptions had been prepared using the newer form; these have not been changed back to the old format.) It has been agreed with JNCC that retention of the older format presents no problems, because the older format holds slightly more information than the newer one, so that the latter can be derived from the former, but not *vice versa*. The older format also has an advantage in this report in that it includes explanations in words of some coding systems used, thereby aiding understanding by non-specialists in Ramsar matters.

## 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.

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	
Falkland Islands		Y	Y	Y	Y		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
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. In discussions over the past few years (including the period that Defra and its predecessors had indicated that it would invite a single-tender approach from the Forum), Defra had indicated that it would not be able to resource work by collaborators in the UKOTs nor visits to the UKOTs. This has now been tested, and it is now clear that this was a quite impracticable approach. 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. The Forum feels strongly that this basic approach needs revision in any future exercise. UK commitments should not have to be subsidised by volunteers etc.

**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	Iste 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.

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>
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
<b>Total</b>	<b>15</b>	<b>20</b>	<b>76</b>

\* 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

Ramsar code	Site name	Country	Area (ha)	Date designated	Status
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.

Name	Territory	Area (ha)	Date designated	Previous Updated RIS	Updated RIS by project	Section 24 analysis needed and done
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. A problem remains in communication. Cyprus SBA has a very different governmental structure to the other UKOTs, and relates to a different UK Government ministry. In addition, there appears to be a very high staff turnover. This means that it tends to be difficult to maintain a continuity of contact on environmental matters, and this was true also during this review.

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, this apparently gives little attention to the natural environment, rather than the environment of US personnel. BIOT personnel also report some difficulties in engaging US colleagues in discussions on environmental matters (especially given the highly transient nature even of management personnel in the US military). Attempts are in progress to improve this situation, but a higher level clarification that UK environmental requirements need to be met, and serious communications developed, may prove necessary if adequate management is to be achieved.

**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.

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## **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 is given. Wherever possible, this 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.

***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.

The Island is a self-governing Crown Dependency. Within its governance system, it retains *Tynwald*, the longest established parliament in the British Isles, and dating from its Norse origins as the Lordship of the Isles.

The 2001 Census recorded a resident human population of 76,315 (37,372 males, 38,943 females) which represented an increase of almost 9.4% since the 1991 Census. This increase occurred mainly within the working age range through the immigration of economically active persons, which reflected the expansion in the Manx economy over the previous 5 years.

The major settlements in the Isle of Man are Douglas 54.08 N 4.27 W (population 23,487) in the east, neighbouring Onchan (8,656), Ramsey (6,874) in the north, Peel (3,819) in the west and Castletown (2,958), Port Erin (3,218) and Port St Mary (1,874) all in the south. Douglas accounts for over one third of the Island's resident population and over 32% of Island households.

Due to the influence of the surrounding Irish Sea and the effects of the Gulf Stream/North Atlantic Drift, the Island's climate is temperate and lacking in extremes. In winter, snowfall and frost are infrequent. Even when snow does occur, it rarely lies on the ground for more than a day or two. February is normally the coldest month, with an average daily temperature of 4.9 C (41 F), but it is often relatively dry. The prevailing wind direction for most of the Island is from the southwest, although the rugged topography means that local effects of shelter and exposure are very variable. In summer, April, May and June are the driest months whilst May, June and July are the sunniest. July and August are the warmest months, with an average daily maximum temperature around 17.6 C (63 F). The highest temperature recorded at the Island's weather centre at Ronaldsway Airport is 28.9 C or 84 F. Thunderstorms are rare. Although geographically small, there is climatic variation around the Island. Sea fog affects the south and east coasts at times, especially in spring, but is less frequent on the west coast. Rainfall and the frequency of hill fog both increase with altitude. The highest point of the Island (Snaefell) receives some two and a quarter times more rainfall than Ronaldsway on the southeast coast, where the annual average is 863 mm (34 inches).

The Wildlife and Conservation Division is the government body leading on conservation matters. It aims to ensure the effective conservation of the Island's most scarce and important species of wild plants and animals and important habitats. The Division contracts research to provide information on specific areas of interest. This has included an ecological survey of vegetation and habitats across the Island and

work on protected species. Working in the conservation sector, projects often involve collaboration between organisations to achieve results that are acceptable to all parties and by cooperation can provide a more significant gain for wildlife. The Division considers advice from and asks advice of the Wildlife Committee, a group with members from within and outside of Government who meet to discuss wildlife and conservation issues, including the import and export of endangered species. Manx National Heritage also has a statutory role to promote the preservation of the natural aspect, features and animal and plant life of the land.

The Division values the specialist knowledge that other people have and therefore works towards liaising with such people where this can be of benefit to wildlife. An example is the relationship between the Division and the Manx Bat Group. The Division can provide advice on bat issues on a statutory basis, but the Bat Group, as a local society, has volunteers that can respond to queries from home owners and others, using their detailed local knowledge of bats and advising from an independent view point. The two organisations benefit by liaising closely where coordinated action can achieve the best results. The Division is involved in a major collaborative project *Wildflowers of Mann*, to propagate Manx wildflowers and introduce them into appropriate areas by working with local people who are interested in their environment. The project is steered by a committee with representatives from a range of different organisations both within and outside of the Government. Chough research and regular surveys are undertaken by the Manx Chough Project and the Manx Bird Atlas. The Atlas is a 5-year project to map the Island's birds. The coastline is rich in marine life which attracts visiting scuba divers.

Some sites have a special interest and are therefore designated to protect them. At the end of 2004 there were two Areas of Special Scientific Interest on the Isle of Man, one of which is also a National Nature Reserve. There were also five Bird Sanctuaries and an Area of Special Protection for Birds. Marine Nature Reserves can also be designated, and other areas of interest are noted in the Local Plans and Island Plans for planning purposes. Other organisations also protect sites for wildlife, such as Manx National Heritage and the Manx Wildlife Trust.

**Areas of Special Scientific Interest.** Areas with a special fauna, flora, or geological or physiographical features, may be designated as Areas of Special Scientific Interest. This sets up a procedure by which land owners or occupiers consult the department before taking actions that could affect the special interest of a site. The division can then advise and if the action could be detrimental, come to an agreement with the land owner or occupier.

**National Nature Reserve.** Where a nature reserve is of national importance, it may be declared a National Nature Reserve. Byelaws can then be made, controlling certain uses of the site. At the end of 2001 there was one NNR, the Ayres.

**Bird Sanctuaries.** These are areas designated under the Wild Birds Protection Act 1932. They can, by order, be designated as Areas of Special Protection under the Wildlife Act 1990 (as amended).

**Areas of Special Protection.** Areas of Special Protection can be designated for birds, other animals or plants.

**Marine Nature Reserves.** The division may designate an area as a Marine Nature Reserve to conserve the marine flora, fauna, or geological or physiographic features, or to provide special opportunities for the study of matters relating to these interests.

Such areas can then be managed for those purposes and certain byelaws introduced.

### ***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 orchards 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***

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[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. The inhabited islands are as follows:

	<i>Population</i> <i>(2001 census)</i>	<i>Area</i>	
		<i>(sq. miles)</i>	<i>(km<sup>2</sup>)</i>
Guernsey, Herm and Jethou	59,807	25.11	65
Alderney	2,294	3.07	8
Sark (including Brecqhou)	591	2.11	5.5
<b>Entire Bailiwick</b>	<b>62,692</b>	<b>30.29</b>	<b>78.5</b>

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>). Uninhabited Lihou lies approximately 400m off the west coast of Guernsey and is the most westerly of the Channel Islands. Lihou is accessible by foot from Guernsey over a causeway at spring low tides. The terrestrial area of the island is 36 acres (15 ha) at high water and this increases to around 200 acres (81 ha) on spring low tides when a substantial area of intertidal zone is exposed.

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.

In AD 911, Charles the Simple of France, tried to buy peace from Rollo, chief of the most feared band of Norman raiders, by giving him land that was later to become the

Duchy of Normandy. In AD 933 Rollo's son, William Longsword, took more territory from the Breton Lords, probably including the Channel Islands. His successor, William the Conqueror, captured the English Crown in 1066, thus bringing England within the same jurisdiction as the Channel Islands. This sequence of events has not been forgotten and, because England was added relatively late to the Duke of Normandy's possessions, islanders today can jokingly refer to England as a "possession" of Les Isles Anglo-Normandes, making it in effect a Norman overseas territory. The enlarged kingdom however, lacked stability and, when Richard the Lionheart died in 1199, his brother, John, succeeded him. Brittany preferred the claim of his cousin, Arthur. Fighting broke out and Arthur disappeared, presumed murdered on the orders of King John. In 1204, Normandy was conquered and became part of the kingdom of France. The islands were torn between allegiance to England or France. King John astutely promised the islands "the continuance of their ancient laws and privileges" and thus laid the foundation for the self-government they still enjoy.

The Islands are dependencies of the Crown (being neither part of the United Kingdom nor the colonies) and enjoy full independence, except for international relations and defence which are the responsibility of the United Kingdom Government. Guernsey, Alderney and Sark are each governed by separate elected Legislative Assemblies. The actual day to day administration, however, is conducted through various Departments/Committees with specific portfolios of responsibilities formed predominantly by members elected from the Legislatures.

In Guernsey, the Environment Department is responsible for managing the majority of public amenity land including parks and gardens, cliff paths, beaches, coastal headlands and nature conservation areas including Lihou Island. As a result, the Department has taken the lead role in progressing the designation of the Island's first Ramsar Site. In addition, the Department is responsible for environmental policy, land use policy and plans, control of development including conservation and heritage conservation, waste policy, recycling, public transport, traffic management, road safety, road networks and co-ordination of road works, driving licenses and vehicle taxation.

La Société Guernesiaise ([www.societe.org.gg](http://www.societe.org.gg)) was founded in 1882 to encourage the study of the history, natural history, geography and geology of the Bailiwick of Guernsey, the conservation of the Bailiwick's natural environment and the preservation of its historic buildings and monuments. La Société:

- publishes an annual Report and Transactions and regular newsletters;
- holds meetings, lectures, excursions and events;
- manages nature reserves;
- carries out research, gathers environmental data and maintains a research library and collections;
- publishes books and other literature;
- provides advice on conservation issues.

La Société owns, leases or manages some 30 separate areas of land. These include the four major reed beds on the island and some superb orchid fields which are considered to be some of the best in the British Isles. La Société has supported and assisted the Environment Department in progressing proposals for the designation of



a Ramsar Site in Guernsey.

The Alderney Wildlife Trust ([www.alderneywildlife.org](http://www.alderneywildlife.org)) aims to promote the conservation and protection of Alderney's terrestrial and marine wildlife and associated habitats, and the conservation and protection of places of scientific interest, amenity value or natural beauty. The Trust also seeks to educate the public about the importance of sustainable development, biodiversity conservation and Alderney's wildlife, and to promote research in all branches of natural history. The Alderney Wildlife Trust has taken a leading role in defining and progressing Alderney's proposed Ramsar Site.

In Sark, the non-governmental organisation concerned with nature conservation is La Société Serquaise.

### ***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		

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
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.

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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. This Bailiwick shares much of its history, notably the Norman connection, with the neighbouring Bailiwick of Guernsey (see above). The Island has a similarly special relationship with the UK, which has been continuing for the last 900 years. While the UK remains responsible for the Island's defence, Jersey is self-governing. The queen has a representative in Jersey, the Lieutenant Governor, who along with the Dean of Jersey, the Bailiff and the Attorney General are Crown appointed. The governing body of the Island is the States of Jersey, presided over by the Bailiff, who is also President of the Royal Court. The States of Jersey is made up of: 12 senators, 12 Connétables (one from each parish), and 29 Deputies. The Dean of Jersey, the Attorney General, and the Solicitor General have a seat in the Assembly and a right to speak but no vote. The Senators, Connétables and Deputies are all elected by the people of Jersey. The population of Jersey is 87,186 (2001 census). The main industries are Finance, Tourism and Agriculture.

Points to note are the high density of population (88,000 residents and approximately 600,000 visitors per year, with 20% of the area urban); the area of farmland, 54% of the Island; and the still considerable area (26% of the land) of semi-natural habitats. Jersey is extremely well connected to the outside world, because of the needs of the finance industry and tourism. However, there is a strong attachment to the separate nature of the island. There is resistance to the responsibility to preserve biodiversity by some, but strong work in this area by others. A biodiversity strategy is being developed which includes habitat and species action plans.

The governmental contribution to conservation is led by the Environmental Department ([www.env.gov.je](http://www.env.gov.je)), a department within the States of Jersey Environment and Public Services Committee. It exists to implement the mandate of the Committee as the organisation with strategic and co-ordinating responsibility for environmental policy in Jersey. NGOs include the National Trust for Jersey ([www.nationaltrustjersey.org.je](http://www.nationaltrustjersey.org.je)) and La Société Jersiaise ([www.societe-jersiaise.org](http://www.societe-jersiaise.org)). The National Trust for Jersey was founded in 1936 and is an independent and charitable organisation dedicated to preserving and safeguarding sites of historic, aesthetic and natural interest for the benefit of the island. The Société Jersiaise was founded in 1873, and promotes and encourages:

- The study of the history, the archaeology, the natural history, the language and many other subjects of interest in the Island of Jersey
- The works of the Jersey Heritage Trust, and the provision of information and voluntary helpers
- The conservation of the Island's natural environment
- The preservation of Jersey's historical buildings and monuments
- The publication of books and articles on topics of local interest
- Exhibitions and displays of work
- The collection of artefacts, books, paintings, photographs and maps of the Island
- Through a range of scholarships the encouragement of the above by young Islanders

### ***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:

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
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
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	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:				
		South East Coast of Jersey	Les Minquiers	Les Écréhous & Les Dirouilles	Les Pierres de Lecq (the Paternosters)	St Ouen's Bay and Les Mielles
population of one species or subspecies of waterbird.						
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.

The Preamble of the Gibraltar Constitution Order 1969 reads:-

"Whereas Gibraltar is part of Her Majesty's dominions and Her Majesty's Government have given assurances to the people of Gibraltar that Gibraltar will remain part of Her Majesty's dominions unless and until an Act of Parliament otherwise provides and furthermore that Her Majesty's Government will never enter into arrangements under which the people of Gibraltar would pass under the sovereignty of another state against their freely and democratically expressed wishes".

The House of Assembly is the heart of democracy in Gibraltar. Gibraltarians, that is, "Gibraltarians" in its widest sense since not only the indigenous but all British inhabitants over the age of 18 years with six months residence are enfranchised. The House of Assembly consists of the Speaker and 15 elected members, the Attorney General and the Financial and Development Secretary, who are under contract of employment with the Gibraltar Government and are appointed by the Governor. The Speaker is not an elected member and is appointed by the Governor after consultation with the Chief Minister and the Leader of the Opposition. He has no original or casting vote. Normally, because the voting system allows for each elector to exercise a maximum of eight votes, there are usually 8 elected Members on the Government side and seven elected Members in Opposition.

The Gibraltar Ornithological & Natural History Society, a Partner of BirdLife International and of the Forum, is the membership-based voluntary organisation working to study, protect and manage the fauna and flora. It also undertakes a good deal of work for the Government of Gibraltar. Great efforts are made to ensure that the Rock's natural environment is kept as unspoilt and beautiful for future visitors as it is today. A large area of the upper rock has been designated as a nature reserve - and work is well underway to transform Gibraltar's famous public park, the Alameda gardens, into a new botanical garden to rival the best in the world.

### ***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							
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](http://www.gibraltar.gov.gi)  
[www.gibnet.gi/~gobnhs](http://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 Eleanora'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	No	

stocks, either within the wetland or elsewhere, depend.		
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### ***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***

The present situation in relation to information previously reported under Section 24 of the RIS is reviewed below.

#### **Akrotiri**

PREVIOUS INFORMATION						NEW INFORMATION REVIEWED			
Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
Introduction/ invasion of exotic plant species	No	No	No			Yes	No		There is increasing evidence and concern for the impact of <i>Acacia saligna</i> invasion on the autochthonous communities of the Akrotiri salt marshes. Re eucalyptas trees, no recent invasion noticed, and this can fairly easily be dealt with.
Salination of groundwater	No	No	No			Yes	Yes	?	Salination will remain a problem. A recharge scheme to supply Akrotiri aquifer with treated effluent from the Limassol sewage plant is under consideration. Also, storm sewer projects covering urban areas north of the site are considered as possible sources of water to the aquifer and wetlands.
Erosion	Yes	Yes	No			Yes	No		There is evidence of erosion at the western and southern coasts of Akrotiri Peninsula. The times involved

Adverse Factor	Major	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
									seem to be quite short in relation to geological timeframes - as much as 24 metres in 30 years. Possible causes involve the construction of Kouris-River Dam, heavy coastal quarrying in the past and longer-term factors such as tectonic plate movements and mean sea level rise. Coastal erosion is likely to be contributing to salination as well.
Drainage/reclamation for urban development	Yes	Yes	No			Yes	Yes	Yes	There are constant attempts and plans to reclaim land at Zakaki Pool for various purposes, including parking of trailers and relocation of the Limassol zoo. Such attempts/plans are discouraged/stopped. A small part of Zakaki Pool (2 metres x 25) had to be reclaimed early this year for the construction of 'Miltonos Storm Sewer'. Original plans, which proponents were forced to modify, included much more reclamation (10 metres x 25). In addition to urban development, the disposal of rubbish in the site is a serious problem but the SBAA confirm that rubbish will be removed and anyone caught will be prosecuted – more likely now that a Conservation Officer has been appointed.
Mining exploitation/exploration	No	Yes	No			No			Not aware of where any mining is taking place. The old gravel pits are not being used. This can easily



<b>Adverse Factor</b>	<b>Maj or</b>	<b>On Site</b>	<b>Off Site</b>	<b>Measures Taken</b>	<b>Measures Proposed</b>	<b>Has the factor had an adverse impact since the start of 2002? Y/N</b>	<b>Is this factor being managed and/or regulated? Y/N</b>	<b>Is the management / regulatory regime expected to be effective? Y/N</b>	<b>Further information if 'No' in previous column</b>
									be monitored.
Recreational/ tourism disturbance (unspecified)	No	No	No			No			The model aircraft club fly their 'planes over the site but their activities are being monitored. Not a problem. Car and motorcycle racing activities close to the Salt Lake have been discouraged recently but further effort is required to stop completely. Also, recreational activities at Lady's Mile Beach have been intensifying during recent years.
Habitat burning	No	No	No			No	Yes	Yes	Less burning than in the past but Phassouri Reedbed is always in danger of fire.
General disturbance from human activities	No	No	No			No			Not a problem; few people enter the site (except to illegally dump rubbish – see appropriate entries), a few to collect wild asparagus and a few bird-watchers.
Persistent drought	Yes	No	No			No			There has been no winter drought in recent years but it is always a potential problem in the region.
Vegetation succession	No	No	No			No			There are concerns for vegetation succession at Fassouri Marsh. Controlled fires could be an option for controlling succession at Fassouri Reedbed.
Reservoir/ barrage/ dam impact: loss of wetland due to restriction	No	No	No			Yes	No		The taking off of water before it enters Phassouri reedbed needs to be closely monitored.
Pollution - unspecified	Yes	No	No			Yes	Yes	Yes	Pollution by fly-tipping is being dealt with: the disposal of rubbish in the site is a serious problem but the SBAA confirm that rubbish will be removed and anyone caught will be

<b>Adverse Factor</b>	<b>Maj or</b>	<b>On Site</b>	<b>Off Site</b>	<b>Measures Taken</b>	<b>Measures Proposed</b>	<b>Has the factor had an adverse impact since the start of 2002? Y/N</b>	<b>Is this factor being managed and/or regulated? Y/N</b>	<b>Is the management / regulatory regime expected to be effective? Y/N</b>	<b>Further information if 'No' in previous column</b>
									prosecuted – more likely now that a Conservation Officer has been appointed.
Drainage/ reclamation: (unspecified)	Yes	No	No			No			Not a serious problem
Military activities	No	No	No			Yes	Yes	Yes	The construction of a new, huge aerial on the lake was controversial with arguments that it could have been constructed on the other side of the road. A monitoring programme for bird strikes has been maintained. monitoring, Mitigation measures have included that aircraft flying patterns have been modified, to avoid, as far as possible, flights over the Salt Lake and other sensitive areas such as nesting cliffs for Eleonora' s Falcons and Griffon Vultures.
Disturbance from transport/roads	No	No	No			No			Roads into the site can be blocked off - whether this is necessary can easily be monitored.
Water diversion for irrigation/ domestic/ industrial use	No	Yes	No			Yes	No	No	Water is diverted from Phassouri reedbed for agriculture and this needs to be addressed.
Unspecified development: agriculture	No	Yes	No			No			The plantations adjoining the site do not appear to have been extended in recent years. However, there are concerns about plans to apply further land consolidation - and possible further agricultural intensification - north of Fassouri Marsh.
Unspecified development: urban use	Yes	Yes	No	No information provided.	No information provided.	Yes	Yes	Yes	The extension of the harbour truck parking area adjoining Zakaki

Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
									pool needs to be monitored; the SBA Police have moved trucks off the road adjoining the pool and will continue to ensure that the truck park does not extend nearer the site. There are concerns about plans to allow golf course development north of the Salt Lake within the RoC.
Drainage/ reclamation for agriculture	Yes	Yes	No			No			Not a serious problem.
Pollution - pesticides/ agricultural runoff	No	No	No			No			There are concerns about the quality of runoff from intensified agricultural activities north of the Salt Lake and urban storm water from Limassol.
Direct loss of fauna through hunting or capture	No	No	No			Yes	Yes	Yes	Hunting is much better controlled today than it was a few years ago. A Conservation Officer has been appointed and has already made arrests; the SBA Police are much more active against hunters and when called by the Conservation Officer who had caught some illegal hunters were on the scene in a few minutes.

### **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.

Organisations such as the Bermuda Audubon Society and Bermuda National Trust have focused on the acquisition, restoration and management of critical habitats, most notably wetlands, as well as conservation advocacy. The Bermuda Zoological Society meanwhile has concentrated on promoting environmental education and community participation in *in-situ* research and conservation activities. All work closely with the Bermuda Government's conservation efforts.

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

(The remaining part of this Introduction is drawn from the helpful article – worth looking at in the original, with its numerous illustrations:

Outerbridge, A., Dobson, A., Carey, W. & Ward, J. 2003. Introduction to Bermuda's environment and conservation issues. pp 19-31 in *A Sense of Direction: a conference on conservation in UK Overseas Territories and other small island communities* (ed. M. Pienkowski). UK Overseas Territories Conservation Forum, [www.ukotcf.org](http://www.ukotcf.org))

Bermuda is located at 32° North, the same latitude as Savannah (Georgia), Dallas (Texas) and San Diego (California) in North America and Baghdad (Iraq) in the Middle East. At 64° West, Bermuda has the same longitude as Halifax, Nova Scotia to the north, and Puerto Rico and the Virgin Islands to the south. The closest landfall to Bermuda is Cape Hatteras, North Carolina, some 570 miles (917 km) to the west. Many people think that Bermuda is part of the West Indies, but the Caribbean Sea is about 1000 miles (1600 km) to the south.

The name 'Bermuda' comes from the Spanish explorer Juan de Bermudez, who is credited with discovering the islands in about 1505. 'Las Bermudas' appeared on a

chart of 1511, but although some mariners may have set foot on land during the next 100 years, most feared the islands and its reefs. In 1609, the British ship *Sea Venture* ran aground on the reefs (an incident which is thought to be the inspiration of Shakespeare's *The Tempest*. All 150 on board got ashore and remained on the island for some 10 months before continuing their journey to Virginia. Only three people stayed and were joined by settlers who arrived in 1612 to form a permanent settlement, claiming the islands for Britain. Bermuda has the distinction of being the second most isolated inhabited island in the world. The resident population of Bermuda is now well over 62,000. The suburban nature of Bermuda is hardly surprising, as it is one of the most densely populated countries in the world, with over 3,000 people per sq. mile (over 1,000 people per sq. km). About 14.0% of the island is covered in concrete. Bermuda's economy is centred on International Business and Tourism. About 500,000 tourists visit Bermuda annually.

Bermuda's climate is considered sub-tropical, thanks to the moderating influence of the Gulf Stream, which helps to produce mild winters and less hot summers than would be the case at similar latitudes in North America. The Gulf Stream actually flows north much nearer the East Coast of the United States but numerous eddies branch off and reach Bermuda.

A volcanic eruption on the Mid-Atlantic Ridge formed Bermuda about 110 million years ago. Further volcanic activity took place as the seamount moved westwards, passing over a volcanic 'hot spot' about 35 million years ago. Today, Bermuda sits on the edge of the largest of three volcanic seamounts. Challenger Bank and Argus Bank are submerged seamounts that lie 12 and 20 miles (19 and 32 km) to the southwest. The Bermuda seamount has experienced several rises and falls in sea level, caused by alternating ice ages and interglacial periods during the Pleistocene era. During low sea stands, exposed coral died and was eroded into sand, which built up into dunes that eventually cemented into hard limestone rock (up to 300 ft [about 100m] thick). As Bermuda's exposed rock is porous limestone, there are no streams or rivers but there are some marshes and brackish ponds. The soil is strongly alkaline and very shallow, varying from a few inches to two or three feet [1 m] in the inland valleys. The landscape is undulating with elevations only rising to a maximum of 260 ft (79 m). Approximately 150 islands comprise Bermuda for a total land area of about 21 sq. miles (55 sq. km). The seven largest islands are joined together by causeways or bridges. The fishhook-shaped group of islands is about 20 miles (32 km) long, averaging about one mile (1.6 km) wide.

Prior to man's permanent arrival in the 17<sup>th</sup> century, Bermuda's vegetation was dominated by the endemic Bermuda Cedar, Palmetto and Olivewood Bark. The endemic Bermudiana is abundant – Bermuda's national flower. Few examples of the pre-colonial landscape remain: Paget Marsh – a nature reserve owned jointly by the BAS and BNT provides a glimpse of the past, but even here, the centuries old cedars are dying due to saltwater inundation, the probable effects of global warming. In the 1940s and 50s most of Bermuda's cedars died as the result of a scale insect accidentally brought into Bermuda. Many skeletal cedars still remain. Nonsuch Island has been restored to illustrate the flora of pre-Colonial Bermuda. However, today, about 95 percent of Bermuda's flora has been introduced, much of it now naturalised. Many of the plants, such as *Ficus* are invasive and a threat to native flora. Others,

such as the naturalized casuarinas, do enormous damage to the limestone coastline as they are easily uprooted in storms, eroding the rocks in the process.

Invasive species are not confined to plants. There are a number of feral animal populations causing considerable problems. An estimated 10,000 feral cats are not only tolerated but actively fed by the Feline Association. Feral chickens are also numbered in their thousands. Feral pigeons are a growing menace. Red-eared Terrapins, absent about 15 years ago, are now found in every pond in Bermuda. The effect of these species on Bermuda's biodiversity must be enormous.

The variety of native fauna is quite limited, something that is not unexpected for an isolated oceanic island. Although some 365 birds species have been recorded in Bermuda, only 20 species are permanent residents with a further three species visiting to breed. Bermuda is best known for its Cahow (Bermuda Petrel), a species thought to be extinct for 300 years until its rediscovery in 1951. The national bird is the Longtail (White-tailed Tropicbird). Native bluebirds, introduced night-herons and kiskadees are likely to be seen. There are few native land animals – but there is every chance of seeing a humpbacked whale as they move along South Shore outside the reef line during their spring migration. The two species of naturalised amphibians – the fist-sized giant toad and the whistling frog – can be heard at night. The endemic Skink is Bermuda's only native reptile, but there are three introduced species of *Anolis* lizards. The major threats to all these species of fauna are loss of habitat and invasive species.

Bermuda has a magnificent limestone cave system – the 150 known caves makes it one of the highest concentrations of caves in the world. Once again, in a small island community, the threats are very real. 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.

Bermuda's natural coastline, picture postcard perfect in many parts of the island, is under threat from development: an affluent society that demands docks and marinas for water craft; sea walls that protect coastal properties. The greatest threat to beaches comes from the erosion caused by tropical storms and storm surge. Rural Bermuda is now characterised by small-scale market gardening in isolated fields. Locally produced crops include potatoes, carrots onions, tomatoes and strawberries. These fields are being increasingly eaten into by further urban development. A large area of Bermuda is covered by golf courses – satisfying the demands of tourists and residents alike. They do pose a potential threat to the water lenses that are found below Bermuda's surface – the threat of pollution by fertilisers and pesticides used on the courses.

Bermuda also has a number of marshes, mainly in the central parishes. These vital eco-systems were where Bermudians traditionally disposed of their garbage. Many of these areas are now protected nature reserves, but the marshes are still under threat from illegal dumping and industrial development. Waste disposal is a problem for Bermuda as it is in most islands of the world. Until the opening of the incinerator in the 1990s the Pembroke Dump landfill not only filled half of Pembroke Marsh, but

had created a sizable hill. Today, there are still problems of disposing of glass, paper, metals and hazardous waste.

On a positive note, new reserves are still being acquired – one, just to the west of Coral Beach, was opened in 2003.

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.

The south shore of the Island is occasionally exposed to extremely high energy, hurricane conditions, most recently in 2003. The northern coastline is usually far more protected. The tidal range is limited to approximately 1m, creating a very small intertidal zone. In keeping with Bermuda's limited intertidal zone, the species assemblage supported by this habitat is similarly limited. One notable creature is the West Indian Top Shell which was successfully re-introduced to Bermuda in the 1980s.

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.

Used somewhat as a flagship species for marine conservation, Green Turtles are common and fully protected locally.

Despite protective legislation there are regular negative interactions between the numerous humans living on Bermuda and the protected species. Once the mainstay of the local fishery, the larger grouper species have declined in abundance and many species such as this Nassau Grouper are now economically extinct. With the decline of the large groupers, fishermen shifted effort to other species such as the coney (a small grouper species). Once relatively rare locally, the Bermuda Chub has become much more abundant in recent years, possibly as a direct result of the declining abundance of the larger predatory grouper species.

Cruise ships stir up huge plumes of silt as they move from the dock. Ship traffic in Bermuda's harbours cause regular impacts through re-suspension of bottom sediments. The industrialisation of Bermuda's harbours has caused significant declines in environmental quality. The tanker Tifoso ran aground on Bermuda's northern reef. Marine traffic poses an ongoing threat to Bermuda's marine resources. After a spate of ship groundings in the 1980s, the International Maritime Organisation established a 30-mile (48 km) radius around Bermuda as an "area to be avoided" by ships not bound for Bermuda and Bermuda erected large beacons with active radar transponders to alert mariners to the threat of shipwreck.

In 1620 an Act was passed by the Bermuda Assembly "against the killing of over young tortoises (turtles)." This is thought to be one of the earliest pieces of conservation legislation in the New World. Other Acts addressed conservation pertaining to the waste and exportation of cedar. Notably, in 1791 an Act was passed against the use of fish pots (traps). These examples serve to highlight the early recognition of a requirement to conserve natural resources.

The environmental legislative record reflects a shift from legislation targeting single species to legislation addressing broader aspects of conservation such as the Coral Reef Preserves Act and the National Parks Act. It is also evident that legislation has addressed not only exploitation of natural resources (Fisheries Act) but biodiversity as well (Protection of Birds Act and the Endangered Animals and Plants Act). History repeated itself in 1990 when a fish pot ban was again introduced to stem the overexploitation of fish.

One of the important features of environmental legislation in Bermuda is the use of private acts to foster conservation of privately held land "in trust" for use by future Bermudians. The primary examples of this form of legislative instrument are the



Walsingham Trust Act, the Bermuda Audubon Society Act, the Heydon Trust Act, and the Bermuda National Trust Act. A testament to the value and success of this conservation mechanism is the fact that apart from the Bermuda Government, the Bermuda National Trust is the largest owner of land and open spaces on the island. Between them, the Bermuda Government, the Bermuda National Trust and the Bermuda Audubon Society are the principal nature reserve owners on the island. This is a good example of collaboration between Government and environmental NGOs.

Not surprisingly, the regulation of development has received considerable attention in Bermuda. As early as 1947, an Act was passed that limited the number of private cars to one per dwelling unit. However, as pioneering as that piece of legislation was, it has all but succumbed to the pace of development in modern Bermuda, where the number of private cars has more than doubled in the last 30 years. The main statutory instrument to control development is the Development and Planning Act 1974. This legislation is supported by the Bermuda Plan, a key document which contains specific zoning regulations that provide direction to land development and the protection of natural amenities. Despite the existence of this legislation, it has been estimated that Bermuda has lost open space at an average rate of about 90 acres per year over the last 30 years. This highlights the strong development incentive that exists and the obvious threat to biodiversity. Bumper-to-bumper vehicular traffic, e.g. in the City of Hamilton, persists for significant portions of the day, and contributes to airborne pollution as well.

Bermuda, like other countries, has also enacted pollution control legislation that promotes the protection of habitat quality. Examples are the Prevention of Oil Pollution Act 1971, the Water Resources Act 1975, the Waste and Litter Control Act 1987 and the Clean Air Act 1991. The policy directives on hazardous waste have been somewhat successful in controlling waste, but there is a need for stronger legislation to embrace the polluter pays principle so that a higher level of protection is afforded to habitat conservation. Perhaps the recent restructuring of the Ministry of the Environment that has resulted in the creation of separate Departments of Conservation Services and Environmental Protection heralds a new focus on strengthening environmental policy and legislation.

The protection and conservation of biodiversity is increasingly coming under the auspices of international treaties and conventions. Some of the more important international agreements that are relevant to the Bermuda situation are:

- 1966 International Convention for the Conservation of Atlantic Tunas (ICCAT)
- 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- 1971 Ramsar Convention on Protection of Wetlands
- 1973-8 Convention on the Prevention of Marine Pollution from Ships (MARPOL)
- 1982 Convention on the Law of the Sea (UNCLOS)
- 1987 Montreal Protocol on Substances that Deplete the Ozone Layer
- 1992 United Nations Framework Convention on Climate Change
- 1992 Convention on Biological Diversity
- 1997 Kyoto Protocol on Greenhouse Gases
- 2001 Environmental Charter (UK Overseas Territories)

Some of these require local enabling legislation and/or policy measures in order to have full force and effect.

There exists a plethora of environmental non-governmental organizations in Bermuda. The more prominent of these are listed here:

- Bermuda Audubon Society
- Bermuda Biological Station for Research
- Bermuda Botanical Society
- Bermuda Zoological Society
- Bermuda National Trust
- Keep Bermuda Beautiful
- Save Open Spaces
- Friends of Fish
- Bermuda Underwater Exploration Institute
- Bermuda Eden Project

An increasing state of overdevelopment lies at the heart of threats to biodiversity conservation. At nearly 3,000 residents per square mile (over 1000 per km<sup>2</sup>), Bermuda has one of the highest levels of population density in the world. Other threats are inextricably linked to overdevelopment: e.g. waste proliferation; recreational and commercial over-fishing; pesticide bioaccumulation, and commercial shipping. One of the key threats to biodiversity in Bermuda is climate change. It is also clear that lack of awareness of the need for biodiversity conservation is still a threat.

Is the present legislative infrastructure sufficient to address future threats to biodiversity? There is a strong sense that the aspect of legislative infrastructure that needs most attention is enforcement. However, there are several areas where new and strengthened legislation is required. Some of these include:

- seagrass protection;
- pesticide use;
- bottle bill;
- environmental impact assessments;
- waste dumping, and
- recreational fishing.

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

See the information integrated in the above section.

The designated and proposed Ramsar sites, identified and reviewed in consultation with Bermuda colleagues, 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>
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.

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:												
		Devonshire Marsh East and West Basins	Hungry Bay Mangrove Swamp	Lover's Lake Nature Reserve	Paget Marsh	Pembroke Marsh East	Somerset Long Bay Pond	Spittal Pond	Trott's Pond and Mangrove Lake	Warwick Pond	Walsingham Formation – Karst and Caves	Harrington Sound and Notch	Reef areas	Castle Harbour Islands and reef
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	
Priority type: coral reefs	Yes											Y	Y	
Priority type: mangroves	Yes		Y	Y	Y		Y	Y	Y					
Priority type: sea-grass beds	Yes										Y		Y	
Priority type: wet grass-lands	Yes	Y						Y		Y				
Priority type: peatlands	Yes	Y	Y		Y	Y				Y				
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	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	
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.	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**

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**

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

PREVIOUS INFORMATION						NEW INFORMATION REVIEWED			
Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
Erosion	No	No	Yes	Still suffering erosion, no action taken.	No further conservation measures are currently proposed.	Y – now a major factor and on-site	Y – but impact extends beyond practicable management	N	Factor is partly a natural process, but exacerbated by global warming, the control of which is outwith the powers of the site managers. See notes below.
Pollution – unspecified [new]	Y	Y	N			Y	N	N	Source is oceanic pollution, outwith control of site managers. See notes below.

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.

#### Lover's Lake Nature Reserve

PREVIOUS INFORMATION						NEW INFORMATION REVIEWED			
Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
No factors reported	No	No	No			N			

**Paget Marsh**

PREVIOUS INFORMATION						NEW INFORMATION REVIEWED			
Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
Introduction /invasion of exotic plant species	Yes	Yes	Yes	Cleared of most invasive non-native plant species.	Monitoring of invasive non-native plant species is required.	Y	Y	Y	
Introduction /invasion of exotic animal species	Yes	No	No	No information provided.	No information provided.	N			
Pollution – unspecified [new]	Yes	Yes	Yes			Y	N		(1) Amphibian mortality apparently caused by wash-off of diesel fuels. (2) Sea-level rise, exacerbated by global warming, resulting in (a) failure of peat-development to keep pace and (b) major tree death. See below

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*, Ardisea or Marlberry *Ardisea 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

PREVIOUS INFORMATION						NEW INFORMATION REVIEWED			
Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
No factors reported	No	No	No						
Pollution – unspecified	No	No	No	Windblown refuse and leachate from the former landfill site have		Y	N		See below



				polluted the remaining marsh.					
Drainage/reclamation: (unspecified)	No	No	No	The landfill site was closed in 1992.	The landfill site is under restoration as parkland.	N			
Introduction /invasion of exotic plant species	Yes	No	No	No information provided.	No information provided.	N			

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

PREVIOUS INFORMATION						NEW INFORMATION REVIEWED			
Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
No factors reported	No	No	No						
Drainage/reclamation: (unspecified)	No	No	No	Previously had been infilled as garbage dump site.	No information provided.	N			
Introduction /invasion of exotic animal species	No	No	No	Domestic mallard <i>Anas</i> sp. Are fed by the public and overpopulate.	No information provided.	N			
General disturbance from human activities [new]	No	Yes				Y	N		
Pollution –	No	Yes	Yes			Y	N		

unspecified [new]									
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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

PREVIOUS INFORMATION						NEW INFORMATION REVIEWED			
Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
General disturbance from human activities	Yes	No	Yes			N			
Eutrophication	No	No	No	No information provided.	No information provided.	Y	Y	Y in part	See below: management appears to be effective for farming-related problem but eutrophication related to hurricane action less manageable.
Introduction /invasion of exotic animal	Yes	No	No			N			

species									
Pollution – unspecified	Yes	No	No			N			

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

PREVIOUS INFORMATION						NEW INFORMATION REVIEWED			
Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
Eutrophication	Yes	Yes	Yes	Eutrophication has been tackled to some extent but site is still suffering seasonal eutrophication.	No further conservation measures are currently proposed.	N			
Pollution – domestic sewage	No	No	No	No information provided.	No information provided.	N			
Pollution – unspecified [new]	Yes	Yes	Yes			Y	N		See below
Vegetation succession [new]	Yes	Yes	No			Y	N		See below

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.

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## 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.

In 1503 Christopher Columbus passing by the islands noted the great abundance of giant green turtles. The Islands appeared to be uninhabited. For the next 200 years they were visited by many ships for revictualling, and small groups of pirates and shipwrecked sailors formed temporary settlements. No country attempted to colonise the islands before 1670, when Spain ceded the Cayman Islands and Jamaica to Britain by the Treaty of Madrid. After 1863 the Caymans formally became a dependency of Jamaica and the legislature of Jamaica had the final say over the locally passed laws of the islands. Cayman Brac and Little Cayman were not settled until 1833, and it was not until 1887 that a formal administrative connection between them and Grand Cayman was achieved. In 1959 the islands ceased to be a dependency of Jamaica and became a unit territory within the Federation of the West Indies. When the Federation was dissolved, in 1962, the Cayman Islands chose to remain under the British Crown, thereupon received a revised constitution, which in 1972 was modified to allow for directly responsible government. This was further modified in March 1994. A wider constitutional review, started in 2001, was put on hold early in 2004 pending elections in November.

The Cayman Islands form a British Overseas Territory with a large measure of self-government. The Governor retains responsibility for the civil service, defence, external affairs and internal security. The present constitution, which came into effect in 1972, provides for a system of government headed by a Governor, a Cabinet and a Legislative Assembly. Unlike other Caribbean Overseas Territories, there is no Chief Minister, but a Leader of Government Business. The Legislative Assembly comprises the Speaker, who acts as President, three official members (the Chief Secretary, the Financial Secretary and the Attorney General) and fifteen elected members. The Cabinet consists of the Governor as Chairman, three official members and five members drawn from the elected members of the Assembly. As Minister, the five elected members of the Cabinet have direct responsibility for government portfolios.



The three low-lying Cayman Islands are strung along a submarine mountain ridge south of Cuba, west of Jamaica. The rapidly increasing human population is concentrated in Grand Cayman. Environmental conservation is shared between the National Trust for the Cayman Islands, and the local Department of Environment.

This review was in progress when Category 5 Hurricane Ivan struck Grand Cayman in September 2004. The island suffered major damage, with structural damage to almost all houses, extensive flooding, and the loss of power supplies and telecommunications throughout the Island. It is anticipated that it may be many months before infrastructure is fully restored.

### ***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.

As noted above, 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 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
4: Supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during	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:				
		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
adverse conditions.						
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***

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## 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.

The climate is warm throughout the year but tempered by constant trade winds. The average annual temperature is 27C and the rainfall ranges from 21 inches in the eastern islands to 40 inches in the west. Over 30 protected areas have been designated to conserve the delicate ecosystems and wildlife habitats of the creeks, sand flats, lagoons, and marshy wetlands. There are 200 miles (320 km) of white beaches.

Juan Ponce De Leon discovered these islands in 1512. Locals claim that the islands were the first landfall of Christopher Columbus in 1492. Whoever made the first discovery by Europeans, the local population was wiped out within a generation. For several centuries the islands changed hands between the French, Spanish and British. They remained virtually uninhabited until 1678 when they were settled by a group of Bermudians who started to extract salt and timber. Loyalists established cotton plantations after the American Revolution. But this was short lived. By 1820 the cotton crop had failed and the majority of planters moved on. Their former slaves worked out how to sustain themselves from the natural resources.

The islands became a formal part of the Bahamas in 1799. In 1848 the islanders petitioned for and were granted separate colonial status with an elected Legislative Board and an administrative President. In 1872 the islands were annexed by Jamaica and remained tied to them until Jamaica became independent in 1962. The TCI then became a Crown Colony with an Administrator rather than a Governor. In 1965 the Governor of the Bahamas also became the Governor of TCI. When the Bahamas became independent in 1973, TCI finally got their own Governor.

The Turks and Caicos Islands are an internal self-governing British Overseas Territory with a ministerial system of government. The 1988 Constitution provides for a Governor appointed by HM the Queen, an Executive Council (Exco) and an elected Legislative Council (Legco). The Governor is responsible for external affairs, defence, internal security, offshore finance and certain other matters but is otherwise normally required to act on the advice of Exco. There is a ministerial system including

the Chief Minister and five Ministers with the responsibility for the business of government exercised in accordance with policies decided by Exco.

The Governor is President of Exco, which comprises of nine members: 3 ex officio (The Governor, Chief Secretary and the Attorney General) and six appointed by the Governor from among the elected members of Legco (The Chief Minister and his five Ministers). Legco is comprised of 19 members, 3 nominated members, the 3 ex officio members of Exco and 13 elected members.

The Turks and Caicos National Trust, established by ordinance, is the membership-based voluntary organisation working to protect the natural historical and cultural heritage of the Islands.

### ***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:

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
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 or 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 it 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 system	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 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	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:									
		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 system	Leeward-Going-Through Cays	
wetland or elsewhere, depend.											

### ***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.

Discovered by Columbus in 1493, the islands came into British possession in 1666 when planters took control from the original Dutch settlers. The islands were annexed by the British in 1672. In 1872 they were incorporated into the British colony of the Leeward Islands. These islands were administered under a federal system until 1956 when the Federation was dissolved. The Governor of the Leeward Islands continued to run BVI until 1960 when an appointed Administrator (later a Governor) assumed direct responsibility.

The present Constitution came into force in 1977, and was amended in 2000. The BVI is a British Overseas Territory with a large measure of internal self-government. The Governor has direct responsibility for external affairs, defence and internal security (including the Police), the Public Service and the administration of the courts. The Constitution provides for a ministerial system of government headed by the Chief Minister, an Executive Council (ExCo) chaired by the Governor, and Legislative Council (LegCo).

The Legislative Council comprises 13 elected members plus the Attorney General and the Speaker. Nine members are elected to represent one district each, and the remaining four by territory-wide vote. The Chief Minister and the four other Ministers must be elected members of LegCo. Elections are held at least every 4 years. The next election should take place in 2007.

Established in 1961, the British Virgin Islands National Parks Trust ([www.bvinationalparkstrust.org](http://www.bvinationalparkstrust.org)) is a non-profit, statutory body, which manages national parks and designated marine and terrestrial protected areas. The Trust also administers several environmental programmes including marine conservation and biodiversity conservation programmes. It works closely with the Conservation and Fisheries Department of the Ministry of Natural Resources and Labour, British Virgin Islands Government.

BVI has environmental legislation for the protection of the territory's natural resources, the most recent of which is the Fisheries Act of 1997 which regulates fisheries activities throughout the islands. The Territory is a signatory to several

international environmental agreements such as the Convention of Biological Diversity, the Convention of International Trade of Endangered Species (CITES) and the Ramsar Convention on Wetlands among others.

Full enforcement of legislation is hindered by the lack of adequate facilities and manpower. Development of marinas along the coastal areas has been an on-going issue in the territory. Mangroves and sea grass beds are destroyed and reefs are smothered to make way for the tourism-related infrastructure as development continues to compete with the environment on which it is based.

The Trust has managed several internationally funded biodiversity programmes. Recent ones include Darwin Initiative funded programmes, which includes training in the management of terrestrial and marine biodiversity.

### ***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 flamingos 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			
Priority type: sea-grass beds	Yes		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: 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.

Colonised by British and Irish settlers in 1650, Anguilla was administered as a single federation with St Kitts and Nevis from 1958 to 1962. The islanders, believing their interests were being ignored and wishing to retain their direct links with Britain, sought separation from the federation in the 1960s. This disquiet culminated in the revolution of 1967. Anguilla came under direct British rule in the 1970s and eventually became a separate British Dependent Territory in 1980.

Anguilla is an internally self-governing UK Overseas Territory with a ministerial system of government. The 1982 Constitution (amended in 1990) provides for a Governor, an Executive Council and a House of Assembly. The Governor, appointed by HM The Queen, has reserved powers in respect of legislation, and is responsible for external affairs, offshore finance, defence and internal security (including the police force).

The Executive Council comprises the elected government plus two Ex-Officio Members (Attorney General and Deputy Governor). The House of Assembly comprises twelve members: Speaker, seven elected Members, two Nominated and the two ex-officio Members. Elections are held at least every five years. The next election is due by March 2005.

The Anguilla National Trust ([www.ant.ai](http://www.ant.ai)) is charged with ensuring that the natural resources of the island are protected as well as the preservation of the historical and cultural heritage of the island. The Anguilla National Trust, through its conservation programme, is collaborating with its regional and international partners, with the major goal of developing a system of parks and protected areas. Inventories of the island's bird life are in progress.

### ***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 populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.	Yes?					
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

Additional 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.

Named after a monastery in Spain by Christopher Columbus during his second great voyage in 1493, the island became a British Colony in 1632, although the first settlers were largely Irish. Montserrat was captured by the French twice for short periods but was finally restored to Britain in 1783. Montserrat is known as the Emerald Isle of the Caribbean due to a combination of historical Irish influences and the lush greenness of the landscape.

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. The largest pyroclastic flow so far occurred on Boxing Day 1997, destroying several villages in the Exclusion Zone. A further eruption occurred on 12/13 July 2003. A major collapse of the dome lasted 18 hours following heavy rainfall. There were no casualties. Close monitoring of the volcano continues. The Southern part of the island remains an Exclusion Zone. The former Day Time Entry Zone (DTEZ) has been re-opened to 24 hour access.

Since volcanic activity began, the population on the island has declined from approximately 11,000 to about 4,500. Some 3,500 Montserradians have relocated to the UK. Of the rest, the majority has resettled in the Caribbean region, principally Antigua.

By 1995 Montserrat was on the road to recovery from Hurricane Hugo and was in budgetary surplus. With the commencement of volcanic activity the Government has relied on UK budgetary aid to meet its recurrent costs. Economic activity has begun to recover from a low point in early 1998.

Montserrat is an internally self-governing Overseas Territory. This provides for the execution of government through a Governor appointed by the Crown, an Executive Council (ExCo) which has the general control and direction of government, and a

Legislative Council (LegCo). The Governor retains responsibility for internal security (including police), external affairs, defence, the public service (of which he is the head) and offshore finance. In December 1989, Montserrat's Constitution was consolidated into one document. The new Constitution came into force on 13 February 1990.

Volcanic activity has resulted in four and a half of the original seven constituencies in Montserrat being unoccupied. As a result, the pre-1995 electoral arrangements became unworkable. In February 1999, the Governor appointed a commission to suggest reforms. The Commission reported in May 1999. Their main recommendations were that:

- the single-member, multi-constituency, first-past-the-post electoral system be replaced by a single-constituency system under a modified first-past-the-post arrangement;
- the nominated membership to the Legislative Council be abolished and the elected membership be increased from seven to nine accordingly.

The main recommendations were accepted by HMG and the new system was used in the 2 April election. Elections are held every five years on the basis of universal adult suffrage. The next election is due by early 2006.

### ***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	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
waterbirds.			
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 Portuguese discovered the island in 1501. It had no indigenous population. In 1815, a small British garrison was stationed on Ascension. It remained under Admiralty supervision until 1922, when it was made a dependency of St Helena. During the Second World War, the US Government established an airstrip and the US Space Command still use Ascension, primarily for the down-range tracking of missile launches. Ascension was also a staging post for the transport of troops and equipment to and from the Falklands during the conflict in 1982, and the RAF continues to have a base there to support its regular flights to the Falklands. The BBC World Service broadcasts radio programmes to Africa from Ascension and Cable and Wireless are also represented on the island.

In 1998 Ministers considered the constitutional future for Ascension Island and its link with St Helena. They concluded that UK should advance the constitutional rights of residents of Ascension Island and promote its economic development. The island had been governed and financed by the main commercial organisations (the BBC and Cable and Wireless), known as the “Users” and the military. Ascension Island was like a company town where residents had no effective input into local decision making. The Users had informed HMG that they wanted, from April 2001, to opt out of service provision and concentrate on their commercial interests. This decision coincided with the Ministerial view that fundamental changes were necessary in the way Ascension was run. The Governor, Administrator, and the FCO consulted widely with residents on Ascension Island about the form of democratic government to be introduced. A plebiscite was held on 22 and 23 August 2002 with the options of forming an Island Council or an Inter Island Council with St Helena. 95% of those who voted chose the Island Council option. The general election to appoint elected members to the Island Council took place on 1 November 2002.

The Island Council consists of seven elected members plus the Director of Financial Services and the Attorney General. It is chaired by the Governor (based in St Helena), who is represented locally by the Island Administrator. The elected members all have full time jobs and participation in the Island Council is not remunerated. The Island Council advises the Governor on matters of law and policy, however the Governor retains special responsibility (eg defence, external affairs, internal security and the public service) to protect the UK Government’s overall responsibility for good governance. This is the first time in the island’s 500 year history that there is a modern system of democratic government.

The Island Council is heavily involved in developing a strategic plan to guide development of Ascension Island. Key amongst the issues involved in this is the establishment of a permanent population on Ascension, and making recommendations on the criteria for Right of Abode legislation, land ownership and inward investment.

In the absence of a conventional government with revenue raising powers, public and common services were funded and provided by the Users and the military, who each contributed an agreed sum annually. A fiscal and economic report on Ascension Island, conducted in March 2000, proposed that future revenue for the Ascension Island Government should come from the introduction of taxation. As a result of this, and in close collaboration with the Users and the military, a concept paper was produced, which stated that from April 2001 the Ascension Island Government would take over responsibility for those public services normally provided by government. The commercial services not appropriate to government were sold to the private sector.

The introduction of the new fiscal regime took place in April 2002. Revenue is now raised from Personal Income Tax, Property Tax and Customs Duty, although the customs regime is limited, covering only tobacco, alcohol and fuel. Recognising that the fiscal regime was put in place before the people of Ascension Island had elected representation, the Ascension Island Government had lengthy and detailed negotiations with the commercial organisations and the military to ensure that no individual saw a reduction in take-home pay after the introduction of income tax. The commercial organisations and the military pay the property tax. Customs duty is an indirect tax and as such its impact on the individual is dependent on the quantity of the products purchased.

Ascension has a balanced fiscal budget, although with minimal reserves at this early stage in its development. The revenue budget for 2003/04 amounts to £4.3 million whilst fiscal expenditure amounts to £3.3 million for recurrent and £0.7 million for capital expenses, leaving a transfer to reserves of £0.3 million (7% of revenue). Government expenditure funds one school, one hospital (offering limited services but including basic operations), police and judicial services, all of which are provided free to local tax payers.

Ascension has a small but developing private sector. The former state-owned shop in the capital, Georgetown, is now owned and managed in the private sector by Solomons, as is the former Guest House, which now operates successfully as the Obsidian Hotel. The last year has seen the development of a sports fishing industry on the island, with two sports fishing operators operating four fishing boats. They are targeting mainly marlin. Several "granders" have also been caught (most of which have been tagged and released).

Ascension was pleased to host HRH The Princess Royal to the Island in November 2002. HRH had the opportunity to meet newly elected Island Councillors at a reception hosted by the Administrator and was able to visit heritage sites and view environmental projects on the Island.

Wideawake airfield on Ascension, a US Military Base providing regular flights to and

from Britain, is St Helena's gateway to the world. Negotiations with the US authorities, concluded in October 2003 with the signing of an agreement, allowing air-charter access to the airfield. Better links with the rest of the world will improve prospects for economic development on both Ascension and St Helena

The local voluntary conservation organisation is the Ascension Heritage Society. Associated with the seabird restoration project (see below), a Conservation Department was established by Ascension Island Government, and this rapidly developed a strong programme of work.

### ***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 indigenous fish subspecies, species or families, life-history stages, species interactions and/or	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
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.

St Helena was discovered on St Helena day (21 May) 1502 by the Portuguese navigator Joan da Nova. In 1658 Richard, Lord Protector, authorised the British East India Company to colonise and fortify the island, and it long served as the principal staging and watering point for British ships returning from the East Indies. Napoleon Bonaparte was exiled to St Helena in 1815 and remained there until his death in 1821. St Helena became a Crown Colony in 1834. The Zulu Chief, Dinizulu, was exiled to the island in 1890 and up to 6000 Boer prisoners were held there between 1900 and 1903. Other notable (voluntary) visitors have included Edmund Halley (1677), William Dampier (1691) Captain Cook (1775) and Charles Darwin (1836).

St Helena's constitution came into force in 1989. The Governor exercises executive authority. The Governor is advised by an Executive Council and an elected Legislative Council. The Executive Council consists of the Governor, three ex officio officers, and five elected members of the Legislative Council. There is a Unicameral Legislative assembly (15 seats, including the speaker, 3 ex officio and 12 elected members; members are elected by popular vote to serve four-year terms). The constitution is currently being reviewed with the aim of a new constitution coming into force on or before 2 July 2005, the date of the next dissolution of the Legislative Council

The territory has few natural resources. Agriculture, the sale of fishing licenses (currently few, because of the lack of enforcement) and tourism are the main economic activities. A company is setting up a fish freezing facility on St Helena. About 1000 St Helenians work offshore, mainly in Ascension, the Falklands and the UK.

St Helena and Montserrat are the only UK Overseas Territories in receipt of UK budgetary aid. In 1999 the St Helena Government drew up a Strategic Review. This formed the basis for an agreement with the Department for International Development over the following three years under the terms of a Country Policy Plan (CPP). The CPP, which sets out the UK aid commitment to St Helena, was agreed in January 2000. It is worth £29million over three years, an increase of £3million over the previous three year plan. The island also receives Command Programme Budget and Good Government Fund money from the FCO for specific projects.

There is no airport on St Helena. The Islanders voted in January and February 2002 to pursue air access. Regular access to St Helena is provided by the Royal Mail Ship (RMS) *St Helena*, a cargo and passenger vessel, operated by Andrew Weir Shipping,

that offers a scheduled service between St Helena, Ascension, the UK, Cape Town and Tristan da Cunha.

The Environmental Conservation Section of the St Helena Government Agriculture and Natural Resources Department has been the lead agency in environmental conservation, now also with the Environmental Co-ordinator in the Economic Planning Department and the Marine Scientific Officer. NGOs, The St Helena Nature Conservation Group and the Sandy Bay Environmental Centre, are increasingly active in the development of environmental conservation and education, and these and other NGOs have recently come together as the St Helena National Trust.

### ***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 three 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
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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

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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 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.

Tristan da Cunha was discovered in 1506 by the Portuguese navigator Tristao da Cunha. Britain garrisoned it in 1816 to prevent it being used as a base to rescue Napoleon from St Helena. The settlement that has developed lives mostly by farming, fishing, the selling of fishing licences and stamp sales.

An Administrator who is advised by an Island Council represents the Governor (who is based on St Helena). The Council consists of eight elected and three nominated members. At least one member of the Council must be a woman. The member with the most votes becomes Chief Islander. Elections are held every three years. The last elections took place in November 2003.

The island is mostly self-sufficient, with an average income per capita of about \$3000. There is no unemployment. The economy is based on crayfishing carried out by two ocean-going vessels owned by a South African company, Eurex Ltd, and by small powerboats run by Tristanians. Eurex Limited holds the exclusive concession to fish for crayfish around the other islands in the Tristan group. The company has a shore-based processing plant on Tristan, which is supplied by small powerboats which catch crayfish in the waters around the Island. Octopus is a useful by-catch. Ad hoc licenses are issued from time to time for finfish fishing trips. The maintenance of a long-term sustainable fishing resource is of primary importance.

There is no airport. Fishing vessels, currently operated by Ovenstone Agencies in Cape Town, carry passengers, cargo and mail to and from the Island. The South African Antarctic Research Vessel SA Agulhas visits in September each year. All passengers have to be landed by boat and weather conditions can make this impossible. Visits to the Gough Island World Heritage Site and other islands in the group require the express permission of the Administrator. Gough and Inaccessible Islands constitute a World Heritage Site.

### **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:

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
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 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	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.

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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. There are Anglican, Roman Catholic and Nonconformist churches in the Islands. 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.

Navigators of several countries have been credited with first sighting the Falklands, and there is a tantalising case that this was by a Chinese fleet in the early 15<sup>th</sup> century, but the earliest sighting that has been conclusively authenticated was by the Dutch sailor Sebald van Weert in 1600. The first known landing was made in 1690 by a British naval captain, John Strong. He named the Islands after Viscount Falkland, First Lord of the Admiralty at the time. French seal hunters, who were frequent visitors to the area in the eighteenth century, called the Islands ‘les Iles Malouines’ after the port of St Malo, and it was from this that the Spanish designation, las Islas Malvinas, originated.

British occupation was resumed in 1833, and the Islands were administered by a naval officer. In 1841, a civil Lieutenant Governor was appointed and, in 1843, the civil administration was put on a permanent footing by an Act of the British Parliament. The Lieutenant Governor's title was changed to Governor and, in 1845, the first Executive and Legislative Councils were set up. Although there was a majority of official members in the Legislative Council until 1951, nominated members played an increasingly important part, and in 1949 members elected by universal adult suffrage were introduced into the Council. The Falklands were invaded and illegally occupied by Argentine military forces on 2 April 1982. A British task force was despatched immediately and, following a conflict in which over 1,000 British and Argentine lives were lost, the Argentine forces surrendered on 14 June 1982. Since then, the pace of development in the Islands has accelerated with the construction of a new hospital, a new senior school, port facilities and an international airport.

In the light of the improved relations between Britain and Argentina, in May 1999 the elected Legislative Councillors of the Falklands Islands asked Britain to arrange talks with Argentina on South Atlantic issues of mutual interest. The British Government, which had consistently encouraged the Islanders to broaden their contacts with Argentina while reassuring them that this would have no implications for sovereignty,

welcomed their decision. Following meetings in London and New York, the Foreign Secretary and the Argentine Foreign Minister signed a Joint Statement and exchanged letters on 14 July to record the understandings reached. As a result:

- The Falkland Islands Government lifted their ban on Argentine visitors introduced in 1982;
- Argentina secured the consent of Chile to the immediate resumption of the weekly Chilean airline flight between Chile and the Falklands (suspended by Chile since April in connection with the detention of General Pinochet in Britain). Since 16 October 1999 the flights have made one stop per month in each direction at Rio Gallegos in Argentina;
- The parties enhanced co-operation on conservation of fish stocks and implemented practical measures against poaching of fish stocks by unlicensed vessels from third countries;
- A memorial to members of the Argentine armed services killed in action in 1982 will be constructed at the Argentine cemetery in the Islands;
- The Argentine Government will review the Spanish names by which it refers to some places in the Falklands, for example 'Puerto Argentino' for Stanley (changed from the previous name of 'Port Stanley' in September 1991).

Falklands Councillors participated actively in the talks, and some of them were included in the UK delegation.

The Falkland Islands are a United Kingdom Overseas Territory by choice. Supreme authority is vested in HM The Queen and exercised by a Governor on her behalf, with the advice and assistance of the Executive and Legislative Councils, and in accordance with the Falkland Islands Constitution. The present constitution dates from October 1985, amended by the Falkland Islands Constitution (Amendment) Order of 1997 and the Falkland Islands Constitution (Amendment) Order of 1998. The Constitution includes the Islanders' right of self-determination. The Governor presides over an Executive Council composed of five members: three elected and two ex-officio (the Chief Executive and the Financial Secretary). In addition, the Attorney General and the Commander of the British Forces in the Falkland Islands attend by invitation. The Legislative Council has eight members elected by universal adult suffrage as well as the two ex-officio members of the Executive Council. It is chaired by a speaker. As is usual in British Overseas Territories, the elected Councillors have a substantial measure of responsibility for the conduct of their Territory's affairs. The Governor is obliged to consult the Executive Council in the exercise of his functions (except in specified circumstances, for example on defence and security issues, where he must consult and follow the advice of the Commander of the British Forces in the Islands). Although he has the constitutional power to act against the advice of the Executive Council, he would be required without delay to report such a matter to the British Government with the reasons for his action. The governor retains responsibility for external affairs and the public service. A Constitutional review of the Falkland Islands Constitution is currently underway. The most recent elections, to the eight-person legislative Council took place on 22 November 2001.

In the past, economic development was hindered by the lack of natural resources, the small size of the population and the remoteness of external markets. Wool was the traditional mainstay of the economy but the price of wool fell dramatically in real



terms during the twentieth century. Since 1982 the economy has grown rapidly, initially as a result of UK aid but more recently from the development of fisheries. The Falkland Islands Government is working hard to ensure a diverse and sustainable economy for the future.

Since 1 February 1987 all fishing within 150 nautical miles (278 km) of the Falklands has been subject to licensing by the Falkland Islands Government. (This limit was extended to 200 nautical miles (370 km) in 1990.) The fishery now generates over £20 million per annum in licence fees, roughly half of government revenue. The Islands have received no aid from Britain since 1992 and are now self-sufficient in all areas except defence. Since 1990 Britain and Argentina have worked together to conserve fish stocks under the auspices of a UK/Argentine South Atlantic Fisheries Commission.

A growing number of tourists are visiting the Falkland Islands, many of them attracted by the wildlife. Besides land-based tourism, over 30,000 passengers land in Stanley each year from cruise ships. A visitor and heritage centre has just been built at the jetty in Stanley and there are plans to develop a visitors' centre on West Falkland. The Falkland Islands Government and the Falkland Islands Development Corporation are working to improve hotel accommodation, access and have developed their marketing techniques by participation at international travel and tourism fairs.

Agriculture remains important, despite its poor economic performance in recent years, as the largest source of employment. The Falkland Islands Government has built a modern abattoir designed to meet EU standards and hopes to capitalise on the Falklands' certification as an organic country. Exploratory drilling for oil in the continental shelf to the north of the Falklands began in 1998. The initial phase, which ended in November 1998, encountered traces of hydrocarbons and gave some cause for optimism, but there is no evidence yet of oil deposits in recoverable quantities. Most recently, in March 2002 licences were awarded to the Falklands Hydrocarbon Consortium to conduct oil exploration surveying work in the South Falklands Basin, a previously under-explored area. In 1995 the UK and Argentina signed a Hydrocarbons Agreement committing both sides to co-operation in hydrocarbons exploration in a region known as the Special Co-operation Area (SCA) to the South-West of the Islands. A South-West Atlantic Hydrocarbons Commission was created under the Agreement which met until 2000, when the Argentine side announced it needed time for reflection before holding new talks. The UK stands ready to resume co-operation in the SCA with Argentina. The Falkland Island Government has introduced 'The Islands Plan 2002/05' laying out plans to take the Islands forward over that period in sectors such as financial management, sustainable economy, quality of life and communications. Part of the plan also focuses on relations with Latin America, including co-operation with Argentina on practical matters of common interest such as oil exploration and fisheries

The Argentine Armed Forces laid 127 minefields on the Falklands in 1982. The British Ministry of Defence have estimated that 18,000 mines of all types were laid, including 14,000 anti-personnel mines. British forces carried out some clearance immediately after the conflict, lifting about 1400 mines, but stopped after several injuries to those involved. Such work is particularly difficult in the Falklands for

several reasons including the shifting nature of the peat soil and sand dunes where many of the mines were laid. The remaining 101 minefields are marked and fenced, and therefore not an immediate hazard. The garrison conduct a public campaign to warn of the dangers. They make regular patrols and destroy mines which become exposed on the surface of the ground. Falklands Councillors have expressed the view that clearance should not resume unless it can be guaranteed to be 100 per cent effective. However the United Kingdom is committed to the 1999 Ottawa Convention, which requires all landmines to be removed within ten years unless an extension is granted. As a first step the British and Argentine Governments announced during Former President Menem's visit to the UK in October 1998 that they would work together to evaluate the feasibility and cost of mine clearance. This was included in the UK/Argentina 1999 Joint Statement as a confidence building measure and Officials are currently discussing how this study will be carried out.

The principal air link between the Falkland Islands and the UK is maintained by the Royal Air Force and operates on an approximately 5-day cycle. Both civilian and military passengers are carried. The journey takes about 18 hours, with a refuelling stop at Ascension Island. LAN Chile also operate a weekly service between the Falkland Islands and Chile, stopping at Rio Gallegos in southern Argentina once a month. External telecommunications are operated by Cable and Wireless. Telephone and fax links via satellite mean that the Islands have first class contact with the rest of the world. Almost half of all households have internet access. The Falkland Islands now have their own postcode FIQQ 1ZZ that was issued to help cut down on the number of redirected letters and parcels, mainly from the UK, that were being delayed en-route.

The British Government's Strategic Defence Review stated that the security of the Overseas Territories was a fundamental governmental responsibility. The Falklands are defended by a garrison comprising air, sea and land assets, backed up by the capability to reinforce if necessary. The Strategic Defence Review concluded that the composition of the land force in the Falklands was appropriate to ensure the security of the Islands. Adjustments are made from time to time, for example to reflect increased efficiency or new technology, but such adjustments will not affect Britain's ability to defend the Islands. Nor has there been any change in the air assets deployed. A Castle Class offshore patrol vessel will remain stationed in the Falklands and there will continue to be a Falkland Islands Guardship (either a destroyer or frigate) visiting the Falkland Islands throughout the year. The Ice Patrol Vessel HMS Endurance will continue to deploy to the South Atlantic each austral Summer and occasional deployments by nuclear submarines will continue. Total expenditure against the budget of the Commander of British Forces in the Falkland Islands in the financial year 1999/2000 was £71.1 million. This does not include the cost of operating the RAF airbridge, which also provides a lifeline to St Helena (and Ascension Island), nor the cost of naval deployments in the South Atlantic. It does not follow that £71.1 million would be saved by withdrawing the garrison, because in that case many of the same military assets would be deployed elsewhere. In 1991 Britain and Argentina agreed several measures for co-operation between military authorities in the Falklands and Argentina: The Interim Reciprocal Information and Consultation System (IRICS) whereby a direct radio link was set up and the parties undertook to provide advance notice of certain military movements; maritime and air

search and rescue co-operation; exchange of information for safety of navigation; and certain arrangements concerning air traffic control.

Falklands Conservation is the only conservation charity based in the Islands devoted to protecting their unique wildlife. Its work is supported by the Falkland Islands Government.

### ***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:

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
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
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
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
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
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
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 is reviewed below.

#### **Bertha's Beach**

<b>PREVIOUS INFORMATION</b>						<b>NEW INFORMATION REVIEWED</b>			
<b>Adverse Factor</b>	<b>Maj or</b>	<b>On Site</b>	<b>Off Site</b>	<b>Measures Taken</b>	<b>Measures Proposed</b>	<b>Has the factor had an adverse impact since the start of 2002? Y/N</b>	<b>Is this factor being managed and/or regulated? Y/N</b>	<b>Is the management / regulatory regime expected to be effective? Y/N</b>	<b>Further information if 'No' in previous column</b>
Military activities	Yes	Yes	Yes	No information provided.	Military activities are addressed in the draft management scheme.	No	No	N/A	Sand extraction has ceased but the site is heavily used by the military for recreation (mainly walking & penguin watching). Some regulation of visits is achieved through limiting boats trips to Fox point and by locking the gate to the site (which restricts vehicle numbers). Guidelines for visiting penguins have been produced by FC for the military and civilian population.
Introduction /invasion of exotic plant species	Yes	No	No			No	No	N/A	Non-native species are not a major problem at Bertha's Beach, though problems with invasive thistles off-site could become a problem. No management works are therefore in progress. Thistle

									control at MPC is being planned for 2004/05 and beyond.
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### Sea Lion Island

PREVIOUS INFORMATION						NEW INFORMATION REVIEWED			
Adverse Factor	Maj or	On Site	Off Site	Measures Taken	Measures Proposed	Has the factor had an adverse impact since the start of 2002? Y/N	Is this factor being managed and/or regulated? Y/N	Is the management / regulatory regime expected to be effective? Y/N	Further information if 'No' in previous column
Erosion	Yes	Yes	Yes	No information provided.	No further conservation measures are currently proposed.	No	No	N/A	While erosion may still be occurring is not regarded as a serious problem at present. There are no plans to address this, and as there are no stock on the islands, the likely prime cause of past erosion has been addressed.
Introduction /invasion of exotic plant species	Yes	No	No			No	No	N/A	There are no known serious invasive non-native species on Sea Lion Island, and hence there are no proposals to address issues associated with non-natives a Sea Lion.

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## 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 Allardyce 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.

The first landing on South Georgia was that of Captain James Cook in 1775. Thereafter, South Georgia was much visited by sealers of many nationalities who reaped a rich harvest from the immense number of fur seals and elephant seals that frequented the shores. Britain annexed South Georgia and the South Sandwich Islands (SGSSI) by Letters Patent in 1908. Since then, the Islands have been under continuous British occupation, apart from a short period of illegal Argentine occupation in 1982. Throughout much of the last century South Georgia was the centre of land-based whaling in the Southern Hemisphere and whaling stations operated under a licence from the British administration.

The Commissioner for South Georgia and the South Sandwich Islands is at the same time Governor of the Falkland Islands. Under the SGSSI Constitution, he consults the Falkland Islands Executive Council on matters which he considers might affect the Falkland Islands. The Commissioner is assisted by the First Secretary at Government House in Stanley who is concurrently Assistant Commissioner and Director of Fisheries, and by an Operations Manager. The Attorney General and Financial Secretary from the Falkland Islands fulfil parallel roles in SGSSI. The Commissioner depends on the advice of the Commander, British Forces (Falkland Islands) on matters concerning defence or internal security of the Islands. Following the end of the Argentine occupation of 1982, a small garrison was maintained at King Edward Point on South Georgia but this was withdrawn in March 2001. At the same time, a new scientific research facility was opened. The British Antarctic Survey's (BAS) scientific and support team who occupy and run it augment the existing civilian presence on the Island. The BAS are undertaking a programme of scientific research under contract to the Government of South Georgia and the South Sandwich Islands, with the aim of supporting the Government in its environmental management and

sustainable development of the Territory. Argentina asserts a claim to sovereignty over SGSSI, but Britain has no doubt about its sovereignty and does not regard it as negotiable.

The estimates for financial year 2002 are a Government Revenue of £3.923 million and a Government Expenditure of £3.116 million. The main sources of revenue are from the sale of fishing licences, sale of stamps and commemorative coins, customs and harbour dues, and landing and trans-shipment fees. Main items of expenditure are fisheries administration costs and research, fisheries protection, conservation projects, production stamps and support for the South Georgia Museum.

The Government of South Georgia and the South Sandwich Islands (GSGSSI) recognises the Islands' significance for global conservation and is committed to providing a sustainable policy framework which conserves, manages and protects the Islands' rich natural environment, whilst at the same time allowing for human activities and for the generation of revenue which allows this to be achieved. This framework was set out in the 2000 South Georgia Environmental Management Plan. The South Sandwich Islands represent a maritime ecosystem scarcely modified by human activities, their only inhabitants being millions of breeding penguins and other seabirds.

In 1993, concerns about illegal, unregulated and unreported fishing led the Government/ SGSSI to extend its maritime jurisdiction to 200 nautical miles (370 km) around the Territory and to implement a fisheries conservation and management regime to control access to the fishery. Management of the fishery is conducted under SGSSI law and follows procedures and regulations laid down by the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). All vessels wishing to fish within the Territory's Maritime Zone must be licensed by the Director of Fisheries. The number of licences and amount of quota available each year is based on the Total Allowable Catch set by the CCAMLR Commission. A range of vessels of various flags are licensed annually, including a number from the UK's Overseas Territories of the Falkland Islands and St Helena. Main target species include Patagonian Toothfish, Icefish, Krill and Crab. Illegal, Unregulated and Unreported fishing in SGSSI waters, as elsewhere, has posed a serious threat to the conservation of fish stocks, and to populations of sea birds which may be caught inadvertently in such operations. The Government of SGSSI takes this threat seriously and devotes a significant proportion of annual revenue towards scientific research and fisheries surveillance. This helps to ensure that the Director of Fisheries has the best advice on which to base his management decisions, that only licensed vessels operate in the fishery, and that they comply fully with their licence conditions and applicable CCAMLR Conservation Measures. This commitment to the sustainable management of the fishery was a key factor in the GSGSSI's 2001 application for certification of the Patagonian Toothfish fishery under the Marine Stewardship Council's standard. A report by the MSC-approved certifier, Moody Marine Limited, recommending certification, has been published on the MSC website ([www.msc.org](http://www.msc.org)). The FCO warmly welcomed this development and is cautiously optimistic that certification will be confirmed following the MSC's currently ongoing objections procedure process. If successful, the South Georgia fishery will be the first commercial fishery in the Southern Ocean to be MSC-certified and may encourage

other administrations in the region to adopt similar management policies and practices for the conservation of fish stocks and other wildlife.

The SGSSI authorities welcome visitors to the territory. Prospective visitors should note that the only available travel services to South Georgia are those provided by cruise ship, yacht and expedition companies (and that there are no road links on any of the Islands). The prevalent westerly storms and lack of sheltered anchorages making landing on any of the South Sandwich Islands difficult. Visas are not required but visitors must carry a passport valid for a minimum of six months. On arrival in South Georgia waters, visitors must report to the Marine Officer at King Edward Point, Cumberland Bay East. All visitors, irrespective of their nationality and mode of transport, must apply to the Commissioner at least 60 days in advance of their journey for permission to land on the Islands. Application forms can be obtained from the Commissioner's Office, or online from the official South Georgia government website at [www.sgisland.org](http://www.sgisland.org). Individual tourists or visitors on cruise ships, yachts or expeditions need not complete personal applications providing their tour operator/visit organiser has done so. Changeable weather conditions and other factors may affect plans.

Prospective visitors to SGSSI must be aware that there are no available medical or search and rescue facilities in the Territory. Medical facilities are not available and visitors are therefore strongly advised to take out comprehensive medical insurance (where this is not covered by their tour operator/visit organiser). Operators of cruise vessels must make fully adequate insurance arrangements to cover any liability of their own or of the SGSSI Government against any claim for liability in respect of anything occurring in SGSSI or their waters to any of their passengers or any member of their crew. Permission for visits by a cruise vessel is given on that basis. Weather conditions and terrain are harsh and unpredictable, the interior is not fully mapped and nearby waters are not always accurately or completely charted. Visitors are advised to take precautions against sunburn, which can be a problem in this sub-Polar region.

All of the historic buildings of the former whaling stations at Grytviken, Prince Olav Harbour, Leith Harbour, Stromness and Husvik are in a dangerous state of disrepair and wind-blown debris including asbestos dust presents a significant health risk. Visitors are prohibited from entering or approaching within two hundred metres of the former whaling stations, unless directed otherwise by the Commissioner's Office or the Marine Officer at King Edward Point.

Licensed commercial fishing for fin-fish, squid and krill takes places in the surrounding seas. Two British Antarctic Survey research stations at Bird Island and King Edward Point undertake marine research to understand the biology of the Southern Ocean and support a sustainable fishery. Much remains to be discovered about the sea-bed communities. The Environmental Management Plan for South Georgia provides a framework for waste management, protected areas and control of alien species. Rats threaten seabird and pipit populations so it is important the eradication programmes are implemented. It is important that the UK Government provides modern conservation legislation to support the Plan. Visitors from cruise ships are increasing but regulations are in place to ensure minimum disturbance.

### **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:

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
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 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. All consultees agreed that this would be appropriate; the reasons for not progressing this were political, not relating to its qualification. 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 was considered that a state which disputes the sovereignty of SGSSI would block the WH nomination.

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 tussac, 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 SGSSI.

Accordingly, the coverage of wetland interest by the proposed Ramsar sites in SGSSI 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			

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			
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.

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## **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).

The British explorer Captain James Cook first circumnavigated the Antarctic continent in 1773-1775. British interest continued during the 19th and 20th centuries, through the voyages and expeditions of notable explorers, including Sir Ernest Shackleton and Sir Vivian Fuchs.

The United Kingdom made the first territorial claim to part of Antarctica in 1908, by Letters Patent. It has maintained a permanent presence in the British Antarctic Territory since 1943, when Operation Tabarin was established to provide reconnaissance and meteorological information in the South Atlantic Ocean. This 'secret' wartime project, which became the civilian Falkland Islands Dependencies Survey in 1945, became in 1962 the British Antarctic Survey (BAS). The BAS is responsible for most of Britain's scientific research in Antarctica. It maintains active links with scientists world wide and is involved in international programmes devised through the Scientific Committee on Antarctic Research (SCAR). SCAR provides

independent technical and scientific advice to the Treaty System's Consultative meetings. Its permanent Secretariat is based at the Scott Polar Research Institute (SPRI) in Cambridge.

Originally administered as a Dependency of the Falkland Islands, BAT became an Overseas Territory of the United Kingdom in its own right by Order in Council on 3 March 1962. It is administered by the Foreign and Commonwealth Office (FCO), and the Commissioner for BAT is the Head of the FCO's Overseas Territories Department. BAT has a full suite of laws, and legal and postal administrations. BAT is self-financing through revenue from income tax and the sale of postage stamps.

In addition to the four research stations maintained by Britain, several other nations (Argentina, Brazil, Bulgaria, Chile, Ecuador, Germany, Republic of Korea, Peru, Poland, Russia, Spain, Ukraine, United States, Uruguay) maintain stations and bases in BAT, many on the South Shetland Islands.

By the 1950s, five-sixths of the Antarctic continent was claimed by seven States (Britain, Argentina, Australia, Chile, France, New Zealand and Norway). Most of the British Antarctic Territory itself is counter-claimed by either Chile or Argentina. None of the territorial claims was recognised by non-Claimant States; and, to establish a mechanism that would defuse escalating disputes over sovereignty, Claimant and non-Claimant States negotiated the Antarctic Treaty. This was adopted in 1959 and entered into force in 1961. Its objectives are:

- to keep Antarctica demilitarised, to establish it as a nuclear-free zone, and to ensure that it is used for peaceful purposes only;
- to promote international scientific cooperation in Antarctica; and
- to set aside disputes over territorial sovereignty.

Five separate international agreements have been negotiated which, together with the original Treaty and the suite of Measures, Decisions and Resolutions, provide the framework governing all activities in Antarctica. Collectively known as the Antarctic Treaty System, the five agreements are:

- Agreed Measures for the Conservation of Antarctic Fauna and Flora (adopted June 1964)
- Convention for the Conservation of Antarctic Seals (adopted December 1972, entered into force March 1978)
- Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) (adopted May 1980, entered into force April 1982)
- Convention on the Regulation of Antarctic Mineral Resource Activities (CRAMRA) (adopted June 1988, but superseded by the Environmental Protocol (see below) and unlikely to enter into force) and
- Protocol on Environmental Protection to the Antarctic Treaty (adopted October 1991, entered into force January 1998).

By October 2002, 45 States had become Members of the Antarctic Treaty System.

Nationals of the United Kingdom and of the other Antarctic Treaty States require authorisation to visit Antarctica. Briefing on travelling (as a tourist) to this harsh environment can be obtained through: International Association of Antarctica Tour Operators (IAATO) ([www.iaato.org](http://www.iaato.org)).

BAT has a number of historical sites and monuments and sites of special scientific

interest. More than half of the sites designated as Protected Areas in Antarctica are located within the Territory – around the main landmass, on and around Anvers Island, and in the South Shetland 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 2300 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.

The Chagos Islands were first discovered, uninhabited, in the 16th century. The French assumed sovereignty in the late 18th century and began to exploit them for copra, originally employing slave, and later contract, labour. By then, the Indian Ocean and its African, Arabian and Indian coasts had become a centre of rivalry between the Dutch, French and British East India companies for dominance over the spice trade and over the routes to India and the Far East. France, which had already colonised Réunion in the middle of the seventeenth century, claimed Mauritius in 1775, having sent its first settlers there in 1772; it subsequently took possession of the Seychelles group and the islands of the Chagos Archipelago. (Although the latter were not commercially important, they had strategic value because of their position astride the trade routes.)

During the Napoleonic wars, Britain captured Mauritius and Réunion from the French. Under the treaty of Paris in 1814, Britain restored Réunion to France, and France ceded to Britain Mauritius and its dependencies, which comprised Seychelles and various other islands, including the Chagos Archipelago. All these dependencies continued to be administered from Mauritius until 1903, when the Seychelles group was detached to form a separate Crown Colony. The Chagos Islands were administered as a dependency of Mauritius until, under the negotiations concerning the independence of Mauritius, they were detached to become the British Indian Ocean Territory in 1965. At the same time Britain paid a grant of £3 million to Mauritius in consideration of the detachment of the Chagos islands.

At the time the British Indian Ocean Territory was created the UK Government gave Mauritius an undertaking to cede the Chagos islands to Mauritius when they were no longer required for defence purposes. However, since the 1970s, successive Mauritian governments have asserted a sovereignty claim to the islands, arguing that they were detached illegally.

To give effect to the decision that the islands should be set aside for the defence purposes of the UK and the USA, they were detached in 1965 from Mauritius and Seychelles and the settled inhabitants, some 1200 persons, were subsequently relocated to those two countries. The manner of this resettlement has given rise to much controversy and legal action. Since then, the only inhabitants have been UK and US military personnel and civilian contract employees, all living on Diego Garcia. In September 2003, these numbered approximately 3000 persons. The Commissioner and the Administrator of the Territory are based in London. The Commissioner's Representative is the officer commanding the British Forces complement on Diego Garcia.

The constitutional arrangements for BIOT are set out in the British Indian Ocean Territory Order in Council 1976 and various related instruments, and its replacement in 2004. The Orders give the Commissioner full power to make laws for the Territory. A series of UK/US Agreements regulate matters relating to the use of the Territory for defence purposes, such as jurisdiction over US military and other personnel.

There are now no economic, industrial or agricultural activities on the islands. Construction projects and other services in support of the US defence facility in Diego Garcia are carried out by UK and US military personnel and civilian contract employees, mostly recruited from Mauritius and the Philippines.

Through control of commercial fishing, legislation to protect the environment and the application of International Conventions, the Government sets a protective framework, treating the area with all the strictness applicable to World Heritage Sites. The Chagos Conservation Trust, a charity formed to promote conservation of the Territory's diverse and delicate ecology, helps establish conservation priorities. Its main challenges are to assist the regeneration of indigenous flora and fauna and to minimise human damage.

### ***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
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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.

Although a range of options for defining boundaries rapidly became available, in the interim, a legal action was started against HMG by some of the Chagossians who had been displaced from the islands in the 1960s. HMG decided not to progress the designation while the issue was pending. This view was not shared by all interested parties, because the designation of a Ramsar site in no way influenced, or would be influenced by, any resettlement of the islands were this to occur. Nevertheless, the position of HMG and the BIOT Government remained that they retained the intention to designate substantially the whole of the Territory, but would not do so while the resettlement issue remained to be resolved. One exception related to Diego Garcia. It was deemed by HMG and the Court that the treaty between UK and USA relating to this area took precedence over any claim relating to resettlement. Accordingly, HMG proceeded with a designation of the Diego Garcia part of the originally intended site. Although Diego Garcia is a good Ramsar site, it is not adequate to cover the overall Ramsar interest of the Territory.

This is not the place to review the legal dispute between HMG and the Chagossians. The essential point is that the court case was determined, HMG completed the feasibility study of resettlement to its satisfaction, and HMG amended the constitution and laws of BIOT in ways it considered appropriate. At some point, therefore, HMG needs to return to the designation of the major part of the archipelago.

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.

A further complication has arisen in that FCO legal advice has suggested that Ramsar sites cannot be designated beyond the limit of territorial waters in their restricted sense. The FCO lawyers' view appears to be based on their interpretation of the words "Each Contracting Party shall designate suitable wetlands within its territory ...". This is an unusual view and is not shared by the Ramsar Secretariat nor by other countries – nor indeed by HMG in other situations. There are examples in several other countries of Ramsar sites designated well beyond the limits of their territorial waters but within their exclusive economic zones. HMG has also made other international conservation designations beyond its territorial waters and within its economic zone. Some of the numerous examples of such protected areas declared under national legal frameworks and several more under international conventions and agreements:

- a) Heard and McDonald – declared in 2002 this is the world's largest strict marine reserve, covering some 65,000sq km and extending right out to 200 nm from these remote oceanic islands.
- b) Seaflower Biosphere Reserve. A reserve of some 300,000sq km established under UNESCO's Man and the Biosphere Programme by Colombia around its Archipelago of San Andres, Old Providence, and Santa Catalina. This reserve is the largest in the Caribbean, and its area is some 10% of the entire Caribbean Sea.
- c) Parque Estadual Marinho do Parcel Manoel Luís Ramsar Site. The most direct legal precedent for the present issue. The site lies entirely beyond Brazil's Territorial Waters and encompasses three separate coral banks and their surrounding marine waters.
- d) Also directly relevant in respect of HMG's own practice is that the UK Government is currently taking steps to implement the European Union Habitats Directive by designating international sites in its offshore waters in response to a 1999 High Court judgement, and has also agreed to take parallel steps to apply the requirements of the Birds Directive. UK offshore waters comprise the waters between the limit of the territorial sea and the limit of the UK Continental Shelf designations (where the UK exercises her sovereign rights of exploration and exploitation of natural resources of the seabed and subsoil). If UK/BIOT is not able to take such actions under its Environmental Conservation and Management Zone, it is difficult to see why it was declared.

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, 22km) 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	Yes	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:	
		Diego Garcia	Chagos Banks
a population of one species or subspecies of waterbird.			
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.

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## 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.

Pitcairn Island is a rugged island of formidable cliffs of reddish-brown and black volcanic rock. It is an irregular shape, with nowhere giving easy access to the sea. From the ridge above the landing at Bounty Bay, round the southeast corner to Christian Point at the western extremity, the cliffs are sheer and inhospitable, capped by nothing more than volcanic ash and scrub. Many of the land shapes on the western side are also very steep. The highest point, only a few hundred metres from the coast, rises 347 metres above sea level. In the north the land rises a little less precipitously, from 60 metres to 270 metres and the central slopes of Flatland run almost gently downwards to the northeast and the settlement of Adamstown.

Pitcairn was first settled in 1790 by some of the HMS Bounty mutineers and their Tahitian companions. The island was left uninhabited between 1856 and 1859 when the entire population was resettled on Norfolk Island. The present community are descended from two parties who, not wishing to remain on Norfolk, returned to Pitcairn in 1859 and 1864 respectively.

Pitcairn is a British settlement under the British Settlements Act of 1887, although the Islanders usually date their recognition as a British territory to a constitution of 1838 devised with the help of a visiting Royal Navy officer. In 1893, 1898 and 1940, further changes were made in the Islands' Government. In 1952 responsibility for Pitcairn was transferred from the High Commissioner for the Western Pacific to the Governor of Fiji. When Fiji became independent, the Pitcairn Royal Instructions, both of 1970, were the instruments that embodied the modern constitution of Pitcairn, establishing the office of the Governor and regulating his powers and duties. In practice, the British High Commissioner to New Zealand is appointed concurrently as Governor (Non-Resident) of Pitcairn and is assisted by the Pitcairn Island Administration Office in Auckland. The major part of the general administration of Pitcairn is conducted from the Pitcairn Islands Administration Office (PIAO) in Auckland, NZ. The PIAO is run by a Commissioner appointed by the Governor. Pitcairn Islanders manage their internal affairs through the Island Council, for which elections are held annually. The human population is 47. The administrative centre on Pitcairn is Adamstown.

The Law of Pitcairn is covered by the Pitcairn Order 1970 together with the Pitcairn Royal Instructions 1970. Under these the Governor is the legislature for Pitcairn and is empowered to make laws on any subject. Prior approval of the Foreign Secretary must be sought for the enactment of certain classes of law.

The economy of Pitcairn is based largely in subsistence fishing and gardening and the sale of handicrafts. Pitcairn's primary source of income is through the sale of postage stamps and interest on the proceeds which is invested to help defray the costs of administration. The value of the Pitcairn Islands Fund has declined in recent years, reflecting the drawdown of funds and the current state of the stamp market. The Administration is exploring ways of increasing revenue and containing costs.

The population of the territory is self-employed. Although there is no formal taxation, every person between the age of 15 and 65 is required to perform public work each month, in lieu of taxation. Allowances and wages are paid to members of the community, who participate in local government activities and who perform communal services.

Handicrafts, fruit and vegetables are traded with visiting ships. Pitcairn's handicrafts are also marketed by mail order through the internet.

Many Pitcairn Islanders live in New Zealand. There are also increasing links with French Polynesia, Pitcairn's nearest neighbour.

Pitcairn is crucially dependent upon certain key items of infrastructure (including the jetty, long boats and boat shed, and the road from the jetty up to the main settlement). The Islanders routinely maintain these items but major refurbishment or replacement has been carried out with the help of the Department for International Development (DfID) funding. The FCO Overseas Territories Department's £3.2 million Good Government Fund has been used to support a cross section of good governance-related projects throughout the UK's Overseas Territories. The only access to the island is by cruise and container ships which travel irregularly between New Zealand and the Americas via the Panama Canal. If there is space available they may stop at Pitcairn en route. Visitors to the island are then met by the Islanders in their longboats for the last mile (1.6 km) into the harbour. It is also possible to charter a yacht from Mangareva in French Polynesia but as this can be enormously expensive, it is beyond the means of the Islanders.

All visitors to Pitcairn are required to obtain 'permission to land' on the Island from the PIAO in Auckland unless they are departing on the same vessel as the one they arrived on. In this case permission to land can be obtained from the Mayor on arrival.

The dwindling population and the ever-decreasing number of ships stopping at Pitcairn is a concern. There is no airfield. Ways of overcoming the isolation are being investigated.

The conservation of Henderson Island, the best example in the Pacific of a large raised coral atoll, as a World Heritage Site, and the control of the environmental impact on all of the islands are being monitored and strengthened.

Darwin Initiative, FCO Environment Fund for Overseas Territories and other UK funds have helped develop local conservation skills and support a successful rat eradication programme on Oeno and Ducie.

### ***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 ailiihow) 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:

<b>Ramsar code</b>	<b>Site name</b>	<b>Country</b>	<b>Area (ha)</b>	<b>Date designated</b>	<b>Status</b>
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 path on which fish stocks, either within the wetland or elsewhere, depend.	No					

### ***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.

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## Appendix 1

### UK Overseas Territories Conservation Forum

The UK Overseas Territories Conservation Forum works to help people in the UKOTs to conserve their diverse and unique species and ecosystems. It was founded in 1987 and, in 1996, became a charitable company. Its member organisations are conservation and science bodies in UK and the UK Territories, and it has a wide network of voluntary collaborators. It works closely with Governments in UK and the UK Territories, and jointly chairs and organises a twice yearly meeting of NGOs and government departments and agencies on conservation issues in the Territories, as well as frequent informal meetings.

Its main activities are centred on increasing the capacity of NGO and governmental bodies in the UKOTs to undertake conservation. This has been done by various means, ranging from individual projects, to a series of international working conferences for environmental managers and others in the UK Overseas Territories and other small states, most recently held in Gibraltar in 2000 and Bermuda in 2003. The Forum developed the concept of Environment Charters and has worked with HMG and UKOT partners to facilitate this concept, currently running the pilot implementation project.

On a voluntary basis, the Forum has led for several years on promoting Ramsar issues in the Territories, including: facilitating the inclusion of remaining Territories in UK's ratification; promoting the first designations in several territories; providing the map and first full RIS for the large Ramsar site in Turks & Caicos Islands; helping to develop and implement a management plan for that site; and collating most of the UKOT information for HMG's national Ramsar report to 2002 Conference of the Parties.

The Forum's web-site and its embedded database are widely regarded as the definitive source of information on environmental matters in the UKOTs, and the details of designated (and, if desired, proposed) sites could be included there. (A few already have been, as a trial; and the management plan for the TCI site noted above is also on the site.) It would also be possible to publish this review itself on the web-site if Defra agrees, in addition or as an alternative to any publication on Defra web-sites.

The organisation's newsletter *Forum News* is widely read both in print and online, and will carry reports and follow-up on the review, as it does already for Ramsar issues in the UKOTs and Crown Dependencies. The Forum also convenes meetings and conferences, and attends relevant ones of other organisations; at all of these the information can be disseminated.

A key audience consists of the governments of UK Overseas Territories and Crown Dependencies, because it is these who will determine the rate of designation of the sites identified. The Forum has good contacts with these through: contacts with officials in the Territories; its member organisations in the Territories; the Forum's regional Working Groups in which UKOT Government representatives in UK participate; the joint government/NGO meetings chaired by the Forum; the UKOT Environment Charter process many aspects of which are being facilitated by the Forum; the web-site, conferences, newsletters etc of the Forum, as well as informal contacts.

### Contract

Following a competitive tendering procedure, Defra contracted the UK Overseas Territories Conservation Forum to undertake this review.

The Forum's proposed programme of work was set out as follows (some illustrative material in the tender bid has been edited out of this extract):

The UKOTs are widely dispersed across the world. It would be extremely expensive to visit all or most of these to complete this review. Therefore, to be cost-effective, the project will need to make use of existing knowledge of the contractor, and networks of local and other contacts. Because of the very limited capacity in the UKOTs, establishing this network and building up confidence takes time. Given Defra's previous public statements of their intention to issue a single-tender contract to the Forum and because of the need to be cost-effective in using opportunities which did not require additional funding, preliminary work in this area has already been undertaken (on a voluntary basis), including at the Forum's recent conference in Bermuda on environmental conservation in the UKOTs. Clearly, as soon as the Forum received news of the change in Defra's position to a multiple-tender approach, such preparations were suspended, but it would be possible to reactivate these again.

As the emphasis, for value-for-money reasons, will be on remote working (but utilising any opportunities of visits for other purposes), time will be needed to allow for responses from busy people (both governmental and NGO) in the Territories. It is envisaged that the process can be effected most efficiently by using initially the Forum's existing knowledge (substantial because the Forum has been acting in a voluntary capacity as the lead co-ordinator of UK's implementation of Ramsar commitments in the UKOTs). This initial review can then be used to tailor individually targeted enquiries to members of the Forum's network (both governmental and NGO) in the Territories. Time for interaction over the following months will precede completion of the review within a year from the start point.

It is envisaged that most territories will not be visited as a part of this review, because of financial constraints. It would be wise to leave the potential for utilising visits planned for other purposes (and using non-project funding) to some territories, as well as visits to some of the Crown Dependencies, for which travel costs will be minimal and for which the Forum has had a shorter term involvement than for the UKOTs.

The situation of each Territory is very different from every other, and this individuality must be borne in mind. In addition to general and cultural differences, there are differences in extent, in the proportion of the terrain that is wetland, and in the state of knowledge of these wetlands. This means that a good deal more work is involved in respect, for example, of the Falkland Islands (12,000 km<sup>2</sup>, with substantial wetlands) or the Turks & Caicos Islands (500 km<sup>2</sup>, almost all wetland) than for Gibraltar (6 km<sup>2</sup>, with wetlands mainly in the surrounding coastal areas). Most other UKOTs and the Crown Dependencies lie between these extremes.

The envisaged approaches will include 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.

This work will also take into account the current process in interpreting the Ramsar criteria for use in Great Britain and Northern Ireland. However, in line with earlier discussions between the Forum and Defra, it is considered possible and preferable to undertake the review for UKOTs/CDs working directly from the Ramsar guidance Criteria. The reasons for this are 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 is unnecessary, because of (1).

- (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:

- (i) 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).
- (ii) 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.

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

The existing list of proposed Wetlands of International Importance in the UK Overseas Territories and Crown Dependencies includes about 20 areas. However, whilst ad-hoc attempts have been made to incorporate some recent information, this list is based mainly on data from over a decade ago, which was then very incomplete.

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. (Additional to original specification)

7. Where practicable, identify the management status of designated sites, to identify any additional major needs. (Additional to specification not charged for.)

8. Note any major gaps in information relevant to this exercise, so as to assemble an approach to encourage and direct future work. (Additional to specification and not charged for.)

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. (Additional to specification and not charged for.)

In developing a timetable to fulfil the tender requirements, particular attention was given to the fact that the work depends on the co-operation of many busy people throughout the Territories and UK. For both budgetary and practical reasons, these people will not be paid for their work. This makes it particularly important to allow ample time for their responses. Securing these responses depends strongly on the long history of mutual respect built up between the Forum and its partners in the Territories.

The consequent proposed timetable agreed in the contract is outlined in below. Because the start to the contract was one month later than envisaged when the bid was assembled, all rows have been shifted by one month from the bid document, as subsequently agreed.

<b>Month</b>	<b>Planned activity</b>
January 2004	Start of contract. Discussions with Defra/JNCC on those areas left open in the specification as requiring discussion, including interaction with consultative groups and format of information. Preparation of introductory note on the review indicating its purpose, the Convention, the global priorities and the importance of UK territories for these, the existing Ramsar sites and some questions for each Territory on possible additions in the light of the Ramsar Guidelines and priorities. Despatch personalised and Territory-specific versions to selected target collaborators in each Territory, to engage/re-engage involvement. Meeting with St Helena consultee visiting UK.
February 2004	Time for consultees to consider and respond. Lead consultant uses visit (for other purposes) to Ascension Island, Falkland Islands, and the Government of South Georgia & South Sandwich Islands, to engage them directly in discussions on the information on those Territories.
March 2004	Chase and collate initial responses. Pursue any complementary literature and internet surveys. Update cross-tabulation between priority categories, areas of these present, and representation in designated and proposed sites. Draft enquiry details for update information for RIS update and for proposed new sites.
April 2004	Meetings with key UK-based consultees in cases in which they hold most relevant information for certain UKOTs (Pitcairn, BIOT, SGSSI, Cyprus SBA). Lead consultant uses visit (for other purposes) to Turks & Caicos Islands to engage them directly in discussions on the information on those Territories. Draft interim report.
May 2004	Deliver interim report . Continue email correspondence with consultees in Territory to secure detailed information to update RIS and describe new sites. Meetings with key UK-based consultees in cases in which they hold key information supplemental to that held locally for certain UKOTs (Anguilla, BVI, Montserrat, St Helena, Falkland Islands).
June 2004	Possible visit to Guernsey and related islands, and possibly Isle of Man. Reminders on unanswered queries.
July 2004	Analysis and review of information; collation into final report format; identification of key gaps requiring either follow-up consultations or listing as information gap requiring research. Despatch of further queries to consultees.

	Discussion of any key emerging issues with JNCC/Defra/Ramsar groups.
August 2004	Invite consultees to check material relating to their own Territories.
September 2004	Address any outstanding issues.
October 2004	Edit final report in the light of final round of queries and consultations.
November 2004	Submit final report, and discuss any alterations requested by Defra.
December 2004	Incorporate any modifications and produce final report.
Throughout	Meetings with Steering Group

## Overview of project work against proposed plan

The contract was issued by Defra to the Forum on 23 December 2003, with a nominal start on 1 January 2004, to run for one year. The following text reports progress in blocks of time corresponding to the meetings of the project steering committee, and is based on the project's progress reports to each of these.

### *Month 1*

The Forum was anxious to make use of a window of opportunity to set the first round of consultations moving. Therefore, during the remaining 8 days of December, a background note was prepared to introduce the project. To accompany this, a separate first consultation document was prepared for each of the 18 UK Overseas Territories and Crown Dependencies involved. (This was later effectively modified to 19 to allow for the high degree of independence of Alderney within the Bailiwick of Guernsey.) Each document summarised existing information on priority wetland types and other principal features of interest in the relevant territory, as well as the coverage of these insofar as known, in the designated sites and others which have been proposed at various times. Consultation lists (including governmental, NGO and other personnel) were compiled from the Forum network, and consultees invited to comment on the initial draft documents, by the end of January. The draft documents were checked with colleagues in Defra and FCO. The latter requested that the consultation be used also to advise Governors, Administrators or Commissioners, as appropriate. The consultations were despatched by email on 31 December 2003.

By the time of the Steering Group meeting on 27 January, some responses had already been received from at least half of the territories, even though the deadline had not been passed. In some cases, these were multiple responses from different consultees re that territory, and several responses were very full indeed.

Although the funding for the project did not include visits to the UKOTs, the Forum had indicated that it would take the opportunity of visits for other reasons to these to enhance work on the present project. This was done during January during a visit to the Falkland Islands by the senior consultant. Here, he took the opportunity to bring together several of the key governmental and NGO personnel for a half-day meeting to discuss the range of sites and information on them, leading to an agreed

working list. In addition, opportunities were taken to visit other local experts, and see some of the sites, especially where local personnel had queries, and even overfly some en route on local air services (some of which chose favourable routes for this purpose!). This proved invaluable in making rapid progress, and in moving towards a very high quality result, with maximum local ownership. Other opportunities are being taken to pursue such an approach during the year, even though additional costs in doing so were not recoverable under the arrangements.

It was envisaged that there would be two main rounds of consultation, the second concentrating on checking and assembling material for the Ramsar Information Sheets. The responses to the initial round and other discussions suggested that the timing of the detailed second round should be varied greatly for different territories, bearing in mind the nature of initial responses, opportunities for visits for other reasons (see above), the degree of novelty in some of the issues raised and needs to investigate approaches to these in other parts of the world, amongst others. At the initial rate of progress, it was assessed that using such a flexible approach to the later consultations would not delay the overall timing of the conclusion of the project. The Steering Group concurred.

One of the issues emerging from the early consultations, and one for which discussions were held with JNCC and other colleagues, concerned dealing with small oceanic islands. Two main approaches seemed possible: either isolating even smaller wetlands within them, or treating them as integrated systems. There were arguments for either approach. This was considered further in the light of more information and analysis of the particular examples, taken in the context of wider review, although it was noted early that the latter approach is more in line with current conservation science thinking and Ramsar practice.

### ***Months 2 & 3***

Progress made in various areas in the second and third months of the project included: detailed discussions with stakeholders for some Territories; collation of material; moving to the second phase of consultations for some Territories; scheduling further discussions on others; first examination of the files in JNCC; and several other aspects. These are indicated more fully below.

As foreseen in the previous period and approved by the steering group meeting, flexibility in scheduling continued to be used to fit in with the availability of volunteers and others. The visit (funded by other work) to Turks & Caicos Islands planned for March had to be brought forward to February, but the opportunity was taken to hold a meeting on Ramsar for local stakeholders, both NGO and governmental. This was well represented at a senior level, including the Permanent Secretary of the Chief Minister's Office (which is also the Natural Resources Ministry). Good progress was made at this.

During the period reported, a day was spent also at the offices of JNCC to examine available information. JNCC also provided electronic copies of existing RIS and of the few maps available in electronic format. Examination of the files at JNCC revealed that very few existing sites (and none of those already proposed before the review) had maps of suitable quality. This meant that rather more work in this area was required than originally envisaged. With the agreement of the Steering Group, priority was given to other aspects, because the maps were not required until later for the time-critical elements relating to the Conference of the Parties and UK's report to it. In addition, for proposed sites, it was more sensible to move towards agreement on the sites before detailed mapping.

The visits to the Falkland Islands and Turks & Caicos Islands, as well as the Forum's 2003 conference in Bermuda and follow-on contacts from there, allowed analysis to move to the second stage for these. This was particularly useful because these Territories have perhaps the most wetlands. Therefore, maximum time was being allowed for the later stages. In addition, an attempt was made to progress the three Crown Dependencies (Isle of Man and the Bailiwicks of Jersey and Guernsey, the latter including also Alderney and Sark) on a similar time scale. This was intended to help any necessary comparability (including at the Steering Group meetings, which also addressed the GB&NI aspects of

the review) with nearby Great Britain and Northern Ireland, the review of which has earlier deadlines, having started much earlier.

The second and later stages of the review used the Ramsar Information Sheet (RIS) format, as an efficient way of collating information. The first few of the second stage consultations had already been assembled for the group of territories noted in the previous paragraph and circulated for comment. The others followed in the next few days.

For only one Territory did there seem to be some resistance to the identification of potential Ramsar sites, and that came from an unexpected UK quarter. Approaches to overcome this were addressed, in consultation with Defra and UKOTCF colleagues.

As noted for the previous period, the dealing with small oceanic islands raised some interesting questions. It was reported to the steering group that it was likely that the senior consultant would need to visit in August, for other reasons, two of the Territories concerned, St Helena and Ascension. It was considered probable that this issue would be progressed more readily with that experience and with local discussions, so it was proposed to leave that group until last. The steering group agreed that this would be a good opportunity which should be used.

Meetings had been scheduled for discussions on some of the other Territories, and these would be progressed in the gaps between other activities noted above.

#### ***Months 4 & 5***

In the fourth and fifth months of the project, attention was turned initially to a group of Territories for which the basic information received was rather too limited. Alternative sources and contacts were identified, and these explored. Linkage was achieved with the Important Bird Areas exercise (for which the senior consultant was a voluntary author for one Territory), and information was being exchanged for several territories. In addition, a meeting was held to resolve the difficulties of perception in respect of the one Territory where a blockage had appeared (see above), and a way forward identified.

Help was provided also to those few territories which are actually in the process at present of preparing site designations.

Meetings and discussions were held also with JNCC and FCO in respect of detailed formatting of the blank RIS forms and database to accommodate the needs in respect of UKOTs and CDs and the review, with fewest changes from the format designed for GB & NI. The project also undertook, in consultation with FCO, to secure the additional information from UKOTs needed for UK's report to CoP including the reporting on existing Ramsar sites.

The major activity during this period was to collate, analyse and edit the material from the various sources into RIS format for the majority of the potential sites and the updates for existing sites, to identify gaps in information and to consult partners especially in territories. By late May, draft RISs had been assembled (with many gaps for further information to be collated) for all presently identified sites (which was considered likely to constitute almost all the sites in the eventual list), with the exception of the one territory noted above, where discussions were progressing.

In most cases, these draft RIS had been supplied to the territories concerned, for comment. The few exceptions were territories with small numbers of sites with some complex issues; it was envisaged that these would be best progressed by face-to-face discussions, which had been planned. In some cases, usefully including some of the territories with most sites, a first round of detailed comments had already been received from territories and a supplementary round of consultations has started, well ahead of schedule. This was expected to prove useful, especially in allowing more time at later stages in respect of those aspects of work which were larger than the contractor had been led to believe.

### ***Months 6 & 7***

In the sixth and seventh months of the project, the interim report on the project became due, and was submitted and accepted. A video conference was held on 22 June 2004, to discuss the interim report. The meeting involved the Contractor, Defra and JNCC.

Several key points were noted. These included:

1. The Contractor was doing work additional to specification in trying to resolve information for CoP relating to previous entries in RIS forms and reports to CoPs in respect of “factors (past, present or potential) adversely affecting sites’ ecological characters” for the UK Overseas Territories.
2. Defra noted that the production of full RISs and maps for proposed sites was desirable (and would eventually be required) but was, at least in part, additional to specification.
3. JNCC noted that revised site maps, even any necessary for already designated sites, would not be required until about May 2005, to fit into commitments re CoP.
4. The Contractor noted that the handling of maps was most efficiently (for personnel both in UKOTs and Contractor) done at one time for each UKOT, rather than separating existing and potential sites.
5. Accordingly, the deadlines for maps would be moved into the new year (although the main report would be kept on schedule), and a supplementary bid would be entertained in respect of the additional work.
6. It was noted that it may not be appropriate to publish full details (as opposed to lists and summary information) for potential sites. The Contractor noted that there would be no difficulty in producing full and edited versions of the final report. For example, an edited version without maps and citations of potential sites could be produced, as well as the full version. It was noted also that different Territories might have different expectations as to whether or not to publish the details on potential sites. Again, it would not be difficult to produce Territory-specific versions.

The Contractor had liaised closely with JNCC on the development of a new numbering system for actual and potential Ramsar sites, so that opportunities were taken to use this change to aid handling of sites in Crown Dependencies and UK Overseas Territories.

During the period reported, visits were made to the Bailiwick of Guernsey, including to the independently governed islands of Alderney and Sark within this Bailiwick. Advice was given both on potential Ramsar sites and, at the request of local personnel, on progressing some of these to designation. It was expected that Guernsey itself and Alderney would each have a site ready for designation later that year, and additional potential sites had been identified on Guernsey (including Herm) and Sark. Contact had been maintained with Jersey (which had been visited for other reasons the previous year, when the opportunity was taken to discuss Ramsar matters). Recently, further advice had been given to Jersey, which now hoped to have ready for designation later that year three further Ramsar sites. A visit to the Isle of Man was made, to consult and advise colleagues there.

The UK Overseas Territories Conservation Forum’s current issue of *Forum News* included a further article on the review, encouraging further participation, in case others in the Forum’s wide network have relevant information.

The other main activities during the period were drafting and interacting with contacts in Territory or elsewhere to fill out detail on the various Territories’ potential or designated sites. These included meetings in territory in Turks & Caicos (when there for other projects), in UK for British Indian Ocean Territory, St Helena and Tristan da Cunha, and by telecommunications for Anguilla, Bermuda, Cayman Islands, Montserrat, British Virgin Islands, Gibraltar, Cyprus Sovereign Base Areas, Falkland Islands, South Georgia & South Sandwich Islands and Pitcairn.

### ***Months 8 & 9***

A major element of progress was the visit, for – and funded by – other work, to St Helena and Ascension Island, in the South Atlantic Ocean. As anticipated, this proved invaluable in direct discussions with local colleagues and inspections of the area, in order to resolve the particular challenges of determining appropriate potential Ramsar sites in oceanic islands. Consequently, potential Ramsar sites were identified for both these UKOTs, and approaches for some other UKOTs underpinned.

A second area given priority in this period was the gathering of updating information on Section 24 of the RIS (factors adversely affecting the site's ecological character), for existing Ramsar sites, so that this could be addressed properly in UK's report to the Ramsar CoP. Although gathering this information proved to be unexpectedly time-consuming, most had now been collated, with responses from only one UKOT outstanding, and this promised soon (indeed arriving shortly afterwards).

The third major area of work during this period concerned the chasing of responses, checking information, gathering of more material, and pursuing follow-up queries for the UKOTs and Crown Dependencies. This generally progressed well, with the work largely at the gap-filling stage for 15 territories. Major input was expected from two others in the near future. Only one territory remained problematical, South Georgia and the South Sandwich Islands. In the case of the South Sandwich Islands, this was for the obvious reason that they are very difficult to approach and rarely visited – with consequent limited information. For South Georgia, the situation was more surprising in that it is probably the territory of all those in this project which has most UK Government research money spent on it, via British Antarctic Survey. However, BAS had advised that the key information is held by a private contractor, who happened to have been working in a country away from her home and all her records throughout the year. She was due back home in October, and attempts would be made to obtain key information from her and analyse rapidly in order to fit the report deadline. There were, however, some fall-back options should this prove impracticable.

Although not part of the contract, UKOTCF undertook to continue the work that it had done for several years in promoting and helping UKOTs and Crown Dependencies move to deciding on the designation of Ramsar sites. This had been assisted by the work within the contract. During the period reported, the States of Alderney, assisted by the Alderney Wildlife Trust and UKOTCF, had decided to request that HMG designate on their behalf a site on the Channel Island of Alderney. UKOTCF was exploring with Defra the simplest mechanism to use for progressing the designation of this self-governing territory within the Bailiwick (but not the government) of Guernsey. The proposed designation of Guernsey's own first site had progressed well through a major public consultation exercise but the process had been slightly delayed by a major re-organisation of Guernsey's government. In the other Channel Island Bailiwick of Jersey, three new designations had been prepared and were close to submission. Some new designations in certain UKOTs were thought to be close, but it was not possible to estimate precise timing at present.

### ***Months 10 and 11***

Work continued on assembling and editing the draft final report, while in parallel continuing the gap-filling noted above. A visit to Jersey, for other purposes, was used to clarify some points there.

