

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the Official Respondent:

Joint Nature Conservation Committee

Monkstone House
City Road
Peterborough
Cambridgeshire PE1 1JY
UK
Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948
Email: RIS@JNCC.gov.uk

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Designation date

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Site Reference Number

Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway, Peterborough, PE1 4DG, UK
(with assistance from Cayman Islands Dept. Environment)

2. Date this sheet was completed/updated:

Designated: 21 September 1994

3. Country:

UK (Cayman Islands)

4. Name of the Ramsar site:

Booby Pond and Rookery

5. Designation of new Ramsar site or update of existing site:

This RIS is for: Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area:

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

Criterion 2

The endangered endemic Lesser Cayman Islands Iguana *Cyclura nubila caymanensis* is found on site, also vulnerable West Indian Whistling duck *Dendrocygna arborea*.

Criterion 3

Floristic diversity: Lagoon fringe vegetation, transition through to diverse dry evergreen thicket on rock pavement, including several species endemic to Cayman.

Faunal diversity: Supports significant populations of breeding water birds, and endemic birds and reptiles.

Criterion 4

An important feeding area for resident and migratory herons, and passage and wintering Nearctic shorebirds.

Criterion 6

This site contains a breeding colony of Red-footed Boobies *Sula sula*, ca.10-15,000 individuals, probably accounting for at least 30% of the total Caribbean population (estimated 35,000 individuals.)

See Sections 21/22 for details of noteworthy species

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Caribbean

b) biogeographic regionalisation scheme (include reference citation):

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	limestone
Geomorphology and landscape	coastal, enclosed coast (including embayment), lagoon
Nutrient status	eutrophic
pH	circumneutral
Salinity	brackish / mixosaline, hypersaline / hyperhaline
Soil	mainly organic
Water permanence	usually seasonal / intermittent
Summary of main climatic features	Sub-humid tropical marine: warm summer wet season (May–Nov.), when tropical storms or hurricanes may develop; cool, relatively dry winters (Nov.–April). Average annual rainfall: 1174 mm Mean annual temperature: 23–30° C, range 11.2–36.5° C

General description of the Physical Features:

No information available

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

A low-use asphalt-topped road runs along southern border, separated from the site by a narrow fridge of vegetation, with moderate, mostly residential, development on the land to the south of the road. Dry evergreen thicket and agricultural land border to the north.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Sediment trapping

19. Wetland types:

Marine/coastal wetland

Code	Name	% Area
Q	Saline / brackish lakes: permanent	57
I	Mangrove / tidal forest	23
W	Shrub-dominated wetlands	20

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

A shallow, eutrophic, brackish-hypersaline mangrove-fringed lagoon system. Anecdotal evidence suggests some alteration of drainage at the eastern extent, possibly as a result of hurricane action land-locking the lagoon. Nutrient rich run-off from the expanding bird colony may contribute to the nutrient loading of the water.

Fringing vegetation is predominately mangrove swamp, with evergreen thicket / mixed woodland along the northern boundary.

Dominant terrestrial features are the breeding colonies of Red-footed Boobies and Magnificent Frigatebird *Fregata magnificens* – the only such aggregations in the Cayman Islands. Significant reptiles include the endemic Lesser Cayman Islands Rock Iguana *Cyclura nubila caymanensis* and Green Anole *Anolis maynardi*.

Ecosystem services

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

The lagoon fringe vegetation is dominated by Black mangrove *Avicennia germinans* and White mangrove *Laguncularia racemosa* with some Red mangrove *Rhizophora mangle*, with a transition through Buttonwood *Conocarpus erectus* and Portia tree (plopnut) *Thespesia populnea* to dry evergreen thicket on rock pavement at the northern margin of the site. The thicket is floristically diverse. Major components include the Cayman Islands endemics *Cordia sebestena caymanensis* and *Coccothrinax protorii*. Also prominent are *Bursera simaruba*, *Guapira discolor*, *Ficus aurea*, *Myrcianthes fragrans*, *Pilosacerens* sp., *Plumeria obtusa*, *Canella winterana*, *Guapira discolor* and *Cephalocereus swartzii*.

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds

Species Information

Breeding bird assemblages include (numbers of individuals):

Sula sula (10-15,000)

Bubulcus ibis (28)

Egretta caerulea (16)

Egretta thula (500)

Egretta tricolor (85)

Fregata magnificens (400)

Sterna antillarum (83)

Dendrocygna arborea

Nyctanassa violacea

Breeding endemic birds include Caribbean Elaenia *Elaenia martinica caymanensis* and Greater Antillean Grackle *Quiscalus niger bangsi*. This site is also an important feeding area for resident and migratory herons, and passage and wintering Nearctic shorebirds

The Lesser Cayman Islands Iguana *Cyclura nubila caymanensis* is found on site and is endemic to Little Cayman and Cayman Brac. The Little Cayman population appears to be stable (est. 200 ind.), in comparison with Brac counterparts (est. 60 ind.), the latter declining due to predation by feral cats and dogs, and expansion of the Brac road system.

The Little Cayman Green Anole *Anolis maynardi* is endemic to Little Cayman and is to be found on site. This arboreal lizard's most distinguishing feature is its long pincer-shaped snout (which accounts for approximately 40% of SVL).

23. Social and cultural values:

Describe if the site has any general social and/or cultural values e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic

Tourism

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	
National/Crown Estate		+
Private		+

25. Current land (including water) use:

Activity	On-site	Off-site
Tourism	+	+
Fishing: recreational/sport		+
Hunting: recreational/sport		+
Transport route		+
Urban development	+	+

26. Factors (past, present or potential) adversely affecting the site’s ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
General disturbance from human activities	1	Pond odour leads to pressure from residents for control measures (e.g. dredging/ booming/ drainage modification of site)	+		+
Transport infrastructure development	1	Disturbance of breeding birds through disruption of aeroplane flight path may result in conflict situation of bird-strike. 1998 study indicates that risk may be reduced by adoption of sympathetic flight schedule.		+	+
Unspecified development: urban use	1	Pressure for residential/commercial development of southern margins. Increased potential for inputs into water system.		+	

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Is the site subject to adverse ecological change? NO
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27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure	On-site	Off-site
Land owned by a non-governmental organisation for nature conservation	+	
Site management statement/plan implemented	+	
Other	+	

b) Describe any other current management practices:

Site management statement/plan implemented - 1996 - Management plan was developed and adopted by the National Trust Council.

Other - The entire site is protected under local legislation, through the Animals Law, and the Animal (Sanctuaries) Regulation 1982 as amended by Gazette No. 24 of 1993. However, the modest penalties and effectiveness of enforcement enacted under this legislation has long been regarded as inadequate and have failed to adequately protect sites in the past. The Animals Law is due to undergo significant upgrading as part of the National Conservation Law (pending 2004).

Other relevant legislation includes:

Animals Law No. 8 (1976): this protected iguanas and all non-domestic birds, except those listed as game birds, from hunting, collection and egg taking

Animals (Protection) Regulations (1989): this legislation significantly amended the above, reducing the list of game (unprotected) birds to three species.

National Trust for the Cayman Islands Law (1987): established the National Trust.

National Conservation Law (pending 2004).

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

Other - Proposed - Conservation of remaining privately owned land within the Ramsar site.

2004 - Site features in Cayman Islands Important Bird Areas (in press).

Site management statement/plan implemented - Updating of Management Plan.

General disturbance from human activities - Research into site management towards reducing seasonally offensive odours.

29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Studies have been conducted on the breeding seabirds. The red-footed booby colony was censused in 1997.

1998 - National Trust study of Booby flight patterns and feeding range with respect to implications for the development of the new airport.

1996 - Hydrological study. National Trust, Cayman Islands Water Authority. FCO funded.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

A visitor centre which carries interpretation of the site was built by the National Trust (1997). The Trust has also published a poster of the Red-footed Boobies with a conservation message.

Supporting information is available through the National Trust website: www.nationaltrust.org.ky

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

This is a visually impressive site with good access, making the Booby Ponds Little Cayman's primary terrestrial nature tourism attraction. The high-quality visitor centre run by National Trust volunteers provides fixed telescopes and site interpretation.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Cayman Islands Government, Ministry of Tourism, Env. Dev & Commerce (Administration Building
TEL: 345 244 2401 FAX: 345 945 4131

The Department of the Environment (Marco Giglioli Building TEL: 345 949 8469 FAX: 345 949
4020

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

National Trust for the Cayman Islands

PO BOX 31116 SMB, Grand Cayman, Cayman Islands

TEL: (345) 949-8469 FAX: (345) 949-7020 WEB: www.nationaltrust.org.ky

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Site-relevant references

Bradley, PE (1986) The Cayman Islands. *In: A directory of Neotropical wetlands*, ed. by DA Scott & M Carbonnell, 469-482. IUCN, Gland & Cambridge

Bradley, PE (2000) *The birds of the Cayman Islands. An annotated checklist*. British Ornithologists' Union, Tring (BOU Checklist, No. 19)

Bradley, PE (2002) *Management plan to conserve and sustain the brown booby colony on Cayman Brac, 2002-06* Cayman Islands Government, Department of the Environment

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Burton FJ (1998) *Survey of flight lines and foraging range of red-footed boobies Sula sula, from Little Cayman*. Unpublished report to the American Bird Conservancy (Project P-DEC02196)

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Cayman Islands Government (1993) The Animals (Sanctuaries) (Amendment) Regulations, 1993. *Cayman Gazette* No. **24** of 1993.

Clapp, RB (1987) Status of the red-footed booby colony on Little Cayman Island. *Atoll Research Bulletin*, **304**, 1-15

Clench, WJ (1964) Land and freshwater Mollusca of the Cayman Islands, West Indies. *Occasional Papers on Mollusks*, **2**, 345-380

Diamond, AW (1975) The red-footed booby colony on Little Cayman. *Atoll Research Bulletin* **241**, 165-170

Hepburn, I, Oldfield, S & Thompson, K (1992) *UK Dependent Territories Ramsar study: Stage 1*. Unpublished report to Department of the Environment, European and International Habitat Protection Branch, Bristol, from International Waterfowl and Wetlands Research Bureau/ NGO Forum for Nature Conservation in UK Dependent Territories, Slimbridge/ Sandy (Research contract, No. 7/2/126)

Pienkowski, MW (ed.) (2005) *Review of existing and potential Ramsar sites in UK Overseas Territories and Crown Dependencies*. (Contractor: UK Overseas Territories Conservation Forum, Peterborough.) Final report on Contract CR0294 to the UK Department for Environment, Food and Rural Affairs, Bristol. www.ukotcf.org

Proctor, D & Fleming, LV (eds.) (1999) *Biodiversity: the UK Overseas Territories*. Joint Nature Conservation Committee, Peterborough

Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone: **+41 22 999 0170** • Fax: **+41 22 999 0169** • email: **ramsar@ramsar.org**