

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

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

Updated by:

UK Overseas Territories Conservation Forum

102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

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DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

01 September 2001 / 11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

East Bay, Lake Sullivan and River Doyle

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

51 52 00 S 60 10 00 W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

10 km north-north-west of the small settlement of Fox Bay, West Falkland, and about 140 km west-south-west of Stanley (population 1600).

Administrative region: Falkland Islands

8. **Elevation** (average and/or max. & min.) (metres): 9. **Area** (hectares): 31902

Min. 0
Max. 500
Mean 125

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

A very large area encompassing the two Lakes Sullivan (the largest lakes in the Falkland Islands), East Bay and the River Doyle catchment, the whole constituting a good example of typical Falkland Island peat moorland with numerous scattered pools, farmed extensively for sheep. The area includes: the whole of the catchment and estuary of the River Doyle, an unaltered river system; large sandflats backed by dunes, the rocky shores of East Bay, and several small uninhabited tussock grass islands offshore. East Bay, the River Doyle catchment and Lake Sullivan north are one of the few remaining areas in the Falklands where the native zebra trout *Aplochiton zebra* may be found.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 7

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 East Bay, Lakes Sullivan and the River Doyle Ramsar site qualifies under Criterion 1 because it is a good example of a typical West Falkland wetland system in near pristine condition. It includes: areas of oceanic heath (Ramsar wetland type U) with scattered pools (type Tp); large freshwater lakes (type O); river systems following their natural courses (type M); extensive sandflats (type G) backed by dune systems (type E); pebble beaches in bays backed, in places, by coastal grasslands ('greens') and pools (type K); and rocky shores, in places backed by low cliffs (type D). There are also a number of offshore tussac islands, extensive kelp beds (type B), and shallow marine waters (type A).
- 2 The site qualifies under Criterion 2 since it supports Vulnerable, endangered or critically endangered species of ruddy-headed goose *Chloephaga rubidiceps*.
- 3 The site qualifies under Criterion 3 because it supports breeding populations of the endemic Falkland steamer duck *Tachyeres brachydactyla* and black-necked swan *Cygnus melancoryphus*, and of the endemic Falkland sub-species of the upland goose *Chloephaga picta leucoptera*, kelp goose *Chloephaga hybrida malvinarum*, white-tufted grebe *Podiceps rolland rolland* and black-crowned night heron *Nycticorax n. falklandicus*. One of the twelve endemic plants of the Falklands (Moore 1973), Falkland lilaopsis *Lilaeopsis macloviana*, occurs. Populations of endemic species and subspecies may be of international importance on this site.
- 7 The site qualifies under Criterion 7 because this area is one of the few remaining strongholds in the Falklands for the native zebra trout *Aplochiton zebra*. A migratory population is found in a number of watercourses particularly the River Doyle and tributaries to Lake Sullivan around East Bay settlement, and a possible non-migratory population is found in the northern Lake Sullivan. *A. zebra* is also found along the Pacific coast of Chile (Simpson, 1991). The more widespread Falkland minnow *Galaxius maculatus* (also a native species) occurs in catchments within the area. *G. maculatus* is also found in Chile and New Zealand.

13. 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:**

b) **biogeographic regionalisation scheme** (include reference citation):

14. 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	peat, quartzite, sand. The site is mainly overlaying Devonian sand and mudstone of the Fox Bay formation, with an intrusion of older Port Stephens sandstones.
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

Recharge and discharge of groundwater

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	5
B	Marine beds (e.g. sea grass beds)	10
D	Rocky shores	5
E	Sand / shingle shores (including dune systems)	5
G	Tidal flats	4
Tp	Freshwater marshes / pools: permanent	1
U	Peatlands (including peat bogs swamps, fens)	58
K	Coastal fresh lagoons	2
N	Rivers / streams / creeks: seasonal / intermittent	5
O	Freshwater lakes: permanent	5

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

The main wetland types are as follows, beginning from the seaward side: permanent shallow marine waters (Ramsar type A); marine sub-tidal aquatic beds (type B); rocky marine shores (including tussac

islands), in places backed by low cliffs (type D); sandy/pebble shores (type E) backed, in places, by coastal grassland ('greens'); coastal freshwater lagoons (type K); extensive sandflats (type G), backed by dune systems (type E); large freshwater lakes (type O); natural river systems (type M); and finally oceanic heaths or peatlands (type U), with scattered pools and marshes (type Tp).

Shallow marine waters and aquatic beds: Inshore boulder and bedrock reefs are characterised by extensive stands of giant kelp *Macrocystis pyrifera*, important for many marine life forms, and providing feeding areas for seals, and a number of bird species including the Falkland steamer duck *Tachyeres brachydactyla*, brown-hooded gull *Larus maculipennis* and South American tern *Sterna hirundinacea*. The shallow sandy-bottomed waters of Whitesand Bay probably support sand-dwelling crustaceans similar to those found at Elephant Bay, Pebble Island (Tingley *et al.* 1996), such as *Serolis* spp. and *Peltarion spinulosum* and infaunal polychaetes.

Rocky marine shores, in places backed by low cliffs: The rocky shorelines support invertebrates such as mussels and limpets, and marine algae. Rockpools trap fish and small marine creatures. The rocky shores provide rich feeding areas for black-crowned night heron *Nycticorax n. falklandicus*, kelp goose *Cholephaga hybrida malvinarum*, crested duck *Anas specularioides*, Magellanic oystercatcher *Haematopus leucopodus* and blackish oystercatcher *H. ater*. Rock shag *Phalacrocorax magellanicus* nest on the cliff faces, on some of which remnant stands of tussock grass *Poa flabellata* occur out of the reach of livestock.

Tussock grass association: This association is confined to coastal areas (here virtually restricted to five small offshore islets), rarely extending more than 300 m inland (Strange *et al.* 1988) or 200 m in altitude (Moore 1968). It will form pure stands at maximum development with each tussock attaining a height of 2-3 m, with a fibrous stock of 1.5-2.0 m high and a diameter of 1.0-1.5 m and a crown of leaves (Moore 1968), which can form a closed canopy. Tolerance to salt-laden winds and spray play an important role in its distribution (Strange *et al.* 1988). Tussock grass does not fit easily into the Ramsar wetland classification, though it is a major wetland habitat type in sub-Antarctic islands, possibly playing an important role in conserving water in the soil and thus maintaining the hydrological and ecological balance of islands. It is an important habitat for birds (Woods 1970) and seals (Strange 1992). Tussock grass is probably also important in conserving and adding to the fertility (nitrogen and phosphate) of the soil by uptake of the droppings of nesting seabirds (Simpson *in litt.*). The tussock islands off Conservation Point support a breeding colony of black-crowned night heron *Nycticorax n. falklandicus*, and seals haul up there. Kelp goose *Cholephaga hybrida malvinarum*, crested duck *Anas specularioides*, South American tern, brown-headed and kelp gull *Larus dominicanus* have all been recorded there.

Pebble shores and sandflats: Pebble shores are less diverse in marine life but still provide feeding areas for kelp goose *Cholephaga hybrida malvinarum* and Magellanic oystercatcher *Haematopus leucopodus*. Whitesand Bay is an extensive area of sandflats with sandy shores backed by dune systems. The littoral vegetation here is composed of associations of sea cabbage *Senecio candidans*, and non-native marram-lyme grass *Ammophila-Elymus* (introduced to stabilise dunes). The sandflats and beach are used as a feeding and a loafing site by a variety of water birds including concentrations of Falkland steamer ducks, crested duck, Magellanic and blackish oystercatchers, snowy sheathbill *Chionis alba*, South American tern, kelp gull, two-banded plover *Charadrius falklandicus* and the austral migrant white-rumped sandpiper *Calidris fuscicollis*. Ruddy-headed goose *Cholephaga rubidiceps*, upland goose, Magellanic oystercatcher and two-banded plover breed in the dune system.

Coastal freshwater lagoons and grasslands ('greens'): The deeper coastal pools have little emergent or submerged vegetation and support few bird species although invertebrate feeders such as speckled teal

Anas flavirostris and flying steamer duck *Tachyeres patachonicus* have been recorded. At The Rosebowl, south-west of Strawberry Hill, the shallow seasonal pond is well vegetated with *Lilaeopsis macloviana* and wildfowl are numerous. The grasslands surrounding the pools and marshes are created in part by nutrient enrichment derived from run-off, or from grazing livestock and geese. The associations in these short-cropped grasslands ('greens') are dominated by *Agrostis* and *Festuca* species with pigvine *Gunnera magellanica* in the damper areas. These areas support breeding and wintering populations of ruddy-headed and upland goose.

Large freshwater lakes: Lake Sullivan, north and south, is the largest area of freshwater in the Falkland Islands. Lake Sullivan south shows high seasonal variation, the bottom is sandy and the pools and shores on the west side support fen communities; giant rush *Schoenoplectus riparius* grows in a number of bays, especially along the west shore of Lake Sullivan south and in a pond situated between Lake Sullivan north, and examination of the lake bed suggests it was previously even more extensive. Few water birds are recorded, but they include white-tufted grebe, yellow-billed pintail *Anas georgica*, and black-necked swan *Cygnus melanocoryphus*, the latter breeding. The introduced brown trout *Salmo trutta* occurs in the southern lake. Lake Sullivan north lies in another catchment separated by a sandbar only 30 metres wide. The lake has little edge vegetation. The permanent islands in the middle support a colony of 400 pairs of South American tern. This lake supports an apparently sedentary population of the endemic zebra trout. No brown trout occur in this lake.

Natural river systems: The River Doyle is an unaltered river system following a natural course and supporting a migratory population of zebra trout. Other small rivers and streams draining into Port Philomel, including the outlet from Lake Sullivan north, also support native zebra trout and Falkland minnow, and have thriving communities of freshwater invertebrates and aquatic plants (N. Simpson pers comm). Water-milfoil occurs in streams entering Lake Sullivan south and in the outlet from Lake Sullivan north.

Peatlands and scattered pools: The whole of the area is on peaty soils, a rolling landscape covered with oceanic heath vegetation. The thinner soils on sand deposits and rocky ridges are typified by stands of diddle-dee *Empetrum rubrum*, supporting breeding ruddy-headed goose and rufous-chested dotterel *Charadrius modestus*. Whitegrass *Cortaderia pilosa* dominates on deeper soils and gives way to bog and fen communities in waterlogged locations where Magellanic snipe *Gallinago magellanica* breeds. There are numerous scattered pools, many have steep peat sides with little vegetation, and few support birds. A few pools lying in shallow bowls have gently sloping sides and are vegetated around the fringes by prostrate plants, probably *Lilaeopsis macloviana*; these support concentrations of duck. The scattered pools are extremely variable; some seem to be devoid of any living organism, while an adjoining pool, which appears superficially similar to the 'sterile' pool may be teeming with invertebrate organisms; special attention should be given to ponds formed from spring (upwelling) water (N. Simpson pers com).

19. 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.

Species occurring at levels of national importance:

Higher Plants

Tussac Grass

Giant Rush

Lilaeopsis macloviana

Chilotrimum diffusum

Coral Fern - *Gleichenia cryptocarpa*

Lower Plants

*Hydrocotyle chamaemorus**Potamogeton linguatus**Cotula scariosa**Ranunculus trullifolius**R. pseudotrullifolius**R. hydrophilus**Littorella australis**Callitriche antarctica**Caltha sagittata**Myriophyllum elatinoides***20. 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.*

Species occurring at levels of international importance:

Zebra Trout

Species occurring at levels of national importance:

Southern Sea Lion

Zebra Trout

Brown Trout

Falkland Minnow

21. Social and 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.

Livestock grazing

Other

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Livestock watering hole/pond	+		Large-scale
Grazing (unspecified)		+	Large-scale
Oil/gas exploration		+	Small-scale
Military activities	+	+	Small-scale

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

Activity	On-site	Off-site	Scale
Overgrazing by domestic livestock	+	+	Small-scale
Habitat burning	+	+	Small-scale
Erosion	+	+	Small-scale

Introduction/invasion of exotic animal species		+	Large-scale
Introduction/invasion of exotic plant species	+		Small-scale
Fishing in the East Bay tributaries of A zebra – at times of year this is the only fish that can be caught in these streams and therefore there is an issue to be resolved with regard to management of fishery data and use of this species	+		Small-scale
General disturbance from human activities	+		Small-scale
Military activities	+		Small-scale

25. 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
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A management plan is in draft format but has not been open to public or landowner consultation. The site is also pending designation as a NNR.

The A zebra is protected fully under Falklands law, however the issue with fishing in the streams needs to be addressed. The farmer here relies on fish at certain times of year for food for the settlement and the absence of other types of fish in these streams means that, irrespective of the legislation, they are taking A zebra. This needs to be investigated and resolved in a agreeable conclusion.

26. Conservation measures proposed but not yet implemented:

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

No information provided.

27. Current scientific research and facilities:

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

Very limited. There are no roads and access is difficult. Future road-building plans will increase the potential for more visitors to the area.

28. Current conservation education:

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

No activities at present

29. Current recreation and tourism:

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

Very limited. There are no roads and access is difficult. Future road-building plans will increase the potential for more visitors to the area.

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Private owners

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

- Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International
- Clark, R & Wilson, P (1992) Occurrence and significance of ventifacts in the Falkland Islands, South Atlantic. *Geografiska Annaler*, **74A**, 35-46
- Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, **7**, 57-78
- Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press
- Greenway, ME (1972) *Geology of the Falkland Islands*. British Antarctic Survey (Scientific Report, No. 76)
- Hamilton, JE (1934) The southern sea lion *Otaria byronia* (de Blainville). *Discovery Reports*, **19**, 269–318
- Hamilton, JE (1939) A second report on the southern sea lion *Otaria byronia* (de Blainville). *Discovery Reports*, **19**(?), 121-164
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- Jones, AG (2004) *A guide to the Insects of the Falklands*. Falklands Conservation
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- Strange, IJ (1992) *A field guide to the wildlife of the Falkland Islands and South Georgia*. HarperCollins, London
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- Wilson, P, Clark, R, McAdam, JH & Copper, EA (1993) Soil erosion in the Falkland Islands: an assessment. *Applied Geography*, **13**, 329-352
- Woods, RW (1970) The avian ecology of a tussock island in the Falkland Islands. *Ibis*, **112**, 15-24
- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry

Woods, R, Stevenson, J, Ingham, R, Huin, N, Clausen, A & Brown, A (2005, in prep) Important Bird Areas in The Falkland Islands. In Sanders, S.M. et al (eds) *Important Bird Areas in the United Kingdom Overseas Territories*. RSPB, Sandy, UK.

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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

01 September 2001, by JNCC / 11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Pebble Island East

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

51 19 00 S 59 30 00 W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Pebble Island is situated off the northern coast of West Falkland, about 120 km north-west of Stanley (population 1600)

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): 7053

Min. 0
Max. 400
Mean No information available

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The site incorporates the eastern half of Pebble Island, off the northern shores of West Falkland. Pebble Island is a rocky island, with extensive moorland and peatland. The eastern part includes an area of low-lying ponds, marsh and peatlands, which supports one of the richest concentrations of breeding waterfowl in the whole of the Falklands, as well as beaches, and rocky shores supporting sea lions and colonies of penguins and other seabirds.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 4, 6

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 Pebble Island East qualifies under Criterion 1 (a) because it includes some of the largest and most natural examples of freshwater marshes and pools (Ramsar type Tp) in the whole of the Falklands. Some of these are permanent whilst others dry out in summer. It also includes other characteristic Falkland wetland types, such as peatlands (type U), sandy shores (type E), shallow waters offshore (type A), rocky marine shore (type D), kelp beds (type B) and coastal freshwater lagoons (type K).
- 2 It qualifies under Criterion 2 because it supports appreciable breeding populations of Vulnerable species Rockhopper penguin, and supports silver-leafed ranunculus *Hamadryas argentea* is one of the six Falklands plants listed by IUCN (Walter & Gillett 1998) as 'globally endangered'.
- 3 The site qualifies under Criterion 3 since it is of special value for maintaining the genetic and ecological diversity of the region. The site supports breeding populations of the Near Threatened gentoo penguin and Magellanic penguin, the endemic Falklands steamer duck *Tachyeres brachydactyla* and black-necked swan *Cygnus melancoryphus* and the endemic Falklands sub-species of black-crowned night heron *Nycticorax nycticorax falklandicus*, the ruddy-headed goose *Chloephaga rubidiceps* (listed by IUCN as Near Threatened), upland goose *Chloephaga picta leucoptera*, kelp goose *Chloephaga hybrida malvinarum* and white-tufted grebe *Podiceps rolland rolland*. Populations of endemic species and sub-species may be of international importance on this site. Two of the twelve Falkland endemic plants (Moore 1973), silver-leafed ranunculus *Hamadryas argenteas* and Falkland cudweed *Gnaphalium affine*, are recorded. The fritillary butterfly *Issoria c. cytheris*, an endemic subspecies, occurs (Carstairs 1990).

Freshwater marshes, pools and peatlands support what is probably the richest assemblage in the Falkland Islands of breeding waterfowl (23 of the 25 species which regularly breed in the Falklands). These include the near threatened species mentioned under Criterion 2, the endemic species and sub-species mentioned under Criterion 3, as well as good numbers of practically all the other regular breeding species (see section 18 for details). In addition, there are major colonies of rockhopper penguin *Eudyptes chrysocome*, gentoo penguin *Pygoscelis papua* and Magellanic penguin *Spheniscus magellanicus* around the coasts.

- 4 The site qualifies under Criterion 4 since it supports a number of colonies of seabirds and water birds in their breeding period, a critical stage in their biological cycle. It also supports moulting southern sea lion *Otaria flavescens*.
- 6 The site qualifies under Criterion 6 as it regularly supports 1% of the individuals in the Falkland population of black-necked swan *Cygnus melanocoryphus*.

13. 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:**

b) **biogeographic regionalisation scheme** (include reference citation):

14. 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	clay, neutral, peat, quartzite, sand, overlaying sandstone of the Port Stephens formation
Geomorphology and landscape	cliffs, islands, pools and marshes
Nutrient status	
pH	acidic, circumneutral
Salinity	brackish / mixosaline
Soil	mainly organic, peat to a depth of 35-40 cms overlaying a bleached horizon with iron pan.
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

Other, Recharge and discharge of groundwater

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	12
B	Marine beds (e.g. sea grass beds)	8
D	Rocky shores	5
E	Sand / shingle shores (including dune systems)	20
K	Coastal fresh lagoons	5
Tp	Freshwater marshes / pools: permanent	5
U	Peatlands (including peat bogs swamps, fens)	45

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

The main wetland types are as follows, beginning from the sea and moving inland: permanent shallow marine waters (Ramsar type A); marine sub-tidal aquatic beds (type B); rocky marine shores (type D) or sandy/pebbly shores (type E); coastal freshwater lagoons (type K); inland freshwater marshes and pools (Type Tp); and finally peatlands (type U).

Shallow marine waters and aquatic beds. Inshore boulder and bedrock reefs are characterised by extensive stands of giant kelp *Macrocystis pyrifera*, important for many marine life forms, and provide feeding areas for seals, southern sea lion *Otaria flavescens*, Falkland steamer duck, brown-hooded gull *Larus maculipennis* and South American tern *Sterna hirundinacea*. The sublittoral stepped bedrock, affected by wave surges, supports a relatively diverse marine fauna. The shallow sandy-bottomed waters of Elephant Bay support sand dwelling crustaceans *Serolis* spp. and *Peltarion spinulosum* and infaunal polychaetes (Tingley *et al.* 1996); Commerson's dolphin *Cephalorhynchus comersonii* is resident in the bay.

Rocky marine shores, in places backed by low cliffs: The rocky shorelines support invertebrates such as mussels and limpets, and marine algae. Rockpools trap fish and small marine creatures. The rocky shores provide rich feeding areas for black-crowned night heron, kelp goose, crested duck *Anas specularioides*, Magellanic oystercatcher *Haematopus leucopodus*, and blackish oystercatcher *H. ater*. The shores provide loafing sites for moulting and immature southern sea lions, and nesting areas for a number of bird species including kelp goose, Falkland steamer duck, crested duck and South American tern. Colonies of imperial shag (1080 pairs) and rockhopper penguin (four colonies totalling 2300 pairs) (RAFOS 1996) occur on the cliff tops; the colonies enrich the areas around them, producing short-cropped grassland. Rock shag *Phalacrocorax magellanicus* also nests on the cliff faces.

Pebble shores are less diverse in marine life but still provide feeding areas for kelp goose and Magellanic oystercatcher. Sandy shores around Elephant Bay are backed by extensive dune systems. The littoral vegetation here is composed of associations of sea cabbage *Senecio candidans*, and non-native marram-lyme grass *Ammophila-Elymus* (introduced to stabilise dunes). The beach is used as a feeding and loafing site by a variety of water birds including congregations of Falkland steamer ducks (one group of nearly 500 non-breeding individuals in November 1997), Magellanic and blackish oystercatchers, snowy sheathbill *Chionis alba* and the austral migrant white-rumped sandpiper *Calidris fuscicollis*.

Coastal freshwater lagoons and inland freshwater marshes/pools: The deeper barrier ponds immediately behind the dunes (including Big Pond, Long Pond and Barossa Pond) have little emergent or submerged vegetation other than occasional small stands of rushes, although in some areas they overflow quite extensively onto surrounding grasslands at wetter periods, maintaining bog and fen associations. Water-milfoil *Myriophyllum elatinoides* in ditches and some ponds (notable Green and Ship Harbour Ponds) provides important food resources for water birds and tussocky cinnamon grass *Hierochloa redolens* and tall rush *Marsippospermum grandiflorum* are important in furnishing nest sites (the latter notably for swans). Dune slacks (e.g. Quark Pond) and shallower inland marshes and pools (and in particular Green Pond, Betts Pond, Ship Harbour Pond and Barossa Rock Pond) provide even richer feeding and nesting areas for water birds. The grasslands surrounding the pools and marshes are created by nutrient enrichment derived from runoff, or from grazing livestock and geese; as the water level drops in summer, these edges attract considerable numbers of feeding geese, ducks and shorebirds. *Agrostis* and *Festuca* species dominate the associations in these short-cropped grasslands ('greens') with pigvine *Gunnera magellanica* in the damper areas.

Peatlands: The whole of the area is situated on peat soils, including the rolling moorland with oceanic heath vegetation. The latter are typified by stands of diddle-dee *Empetrum rubrum* and whitegrass *Cortaderia pilosa*, and provide feeding areas for upland goose, and for white-rumped sandpiper, and nesting areas for rufous-chested dotterel *Charadrius modestus*.

19. 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.*

Species occurring at levels of international importance:

Higher Plants

Codonorchis lessonii

20. 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.*

The waterfowl and wading birds are of most interest in this site, however there are also congregations of rockhopper and gentoo penguins. The gentoo population doubled in the five years between 1995 and 2000, while the rockhopper population remained more or less stable. The exact status of some of the birds thought to be breeding needs clarification and the entire site requires further study since the last one took place in 1998. The site was particularly well visited by birders during the summer of 2000-2001 when the presence of a breeding pair of Coscoroba swans gave the Falklands it's first record of this species breeding since the 1860's. The pair raised four cygnets and has been recorded since in the same area.

The western half of the island (outside the site) is home to a few breeding macaroni penguins which nest amongst the rockhoppers in the large colony to the western tip; there are also gentoo colonies.

Gentoo penguin	Near Threatened	3,338 breeding adults at three separate sites. (Clausen and Huin 2002)
Rockhopper penguin	Vulnerable (> 1% global) subsp	C13,550 breeding adults (Clausen and Huin 2002)
Macaroni penguin	Vulnerable	Few (5 to 10) pairs breeding amongst rockhopper penguins
Magellanic penguin	Near Threatened	Numerous around all coasts, but uncounted.
White-tufted grebe	(Range-restricted) subsp	Presence confirmed but uncounted.
Southern giant-petrel	Vulnerable	20 pairs breeding
Rock shag	> 1% global	Presence confirmed but numbers unknown
King shag	> 1% global	Presence confirmed but numbers unknown
Black-crowned night-heron	(Range-restricted) subsp	Recorded breeding in 1997 (Smith <i>et al</i> 1998)
Upland goose	(Range-restricted)	Numerous across island

	subsp (> 1% pop)	
Kelp goose	subsp (Range-restricted)	Present around coasts, uncounted
	subsp (> 1% pop)	
Ruddy-headed goose	subsp Data-deficient Range-restricted > 1% pop	Present and numerous, uncounted.
Falkland steamer duck	subsp Range-restricted > 1% pop	Present, uncounted but numerous.
Two-banded plover	subsp?? (Range-restricted)	
Magellanic snipe	subsp?? (Range-restricted)	
Dark-faced ground-tyrant	subsp?? (Range-restricted)	
Falkland pipit	subsp (Range-restricted)	
Grass wren	subsp (Range-restricted)	
Falkland thrush	subsp (Range-restricted)	
Black-throated finch	subsp Data-deficient Range-restricted	Present in low numbers, uncounted.
Long-tailed meadowlark	subsp (Range-restricted)	

The erect-crested penguin has been a non-breeding visitor for the last 6 years to Pebble Island East. Numerous silvery grebe have been recorded and the occasional breeding presence of coscoroba swans, red shoveler and cinnamon teal make the site a favourite haunt for ornithologists. Brown-hooded gull and dolphin gull also breed here. The site also holds large numbers of black-neck swan and other common species of ducks.

21. Social and 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.

Pebble Island is one of the most well visited tourist sites in the Falklands, having a well-known Lodge as part of the main settlement. The eastern half of the island is of greatest conservation value due to the presence of large lakes and wetlands, which comprise important waterfowl and wader habitat. The island does have introduced rats and cats present and a population of goats, which are farmed but also run wild in certain parts and are thought to be causing some damage to the vegetation. The landowner

is confident that the feral cats are not causing a problem and that the population is minimal. The settlement is located in the thin neck of the island, approximately half way along and effectively splitting the two sections. The western end of the island is of lower interest, but notable due to the large rockhopper colony present at the western tip.

Livestock grazing
Non-consumptive recreation
Other
Tourism

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	
Other	+	

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Recreation	+	+	Small-scale
Livestock watering hole/pond	+		Large-scale
Grazing (unspecified)	+	+	Large-scale

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

Activity	On-site	Off-site	Scale
Population of wild goats	+		Large-scale

25. 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
National Nature Reserve	+	
Management plan in progress but not yet completed		

26. Conservation measures proposed but not yet implemented:

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

The tourist industry on Pebble Island poses a potential threat to the wildlife in terms of disturbance and the risk of fire. Whilst currently well managed, the increasing tourist numbers to the Falklands could well lead to an increase in the numbers of visitors to Pebble Island. Management issues need to be agreed and finalised with the landowners and manager. The issue of the population of domestic goats needs to be addressed and a form of control undertaken if this is not to lead to overgrazing and erosion of certain more fragile parts of the habitat. It is worth mentioning to you at least, that the Ramsar designation on Pebble is unlikely to be agreed in the near future. The farmer / manager is very concerned about potential restrictions on grazing and pasture improvement within the site and has stated very clearly to us that he does not wish to pursue it. Just to keep you abreast of issues.

27. Current scientific research and facilities:

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

Area covered in Breeding Bird Survey of the Falkland Islands (Woods & Woods 1997)

Mentioned in a number of scientific papers on fauna and flora of the Falklands
Covered in the penguin censuses undertaken by Falklands Conservation in 1995-6 and 2000-1.

28. Current conservation education:

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

Tourist literature is produced for people visiting the Lodge and copies of the Countryside code are available for all visitors.

Area has considerable potential for conservation education. The current Lodge manager Allan White is an ex-cruise ship expedition leader and has great experience in wildlife tourism and education through the environment.

The site is also short-listed for inclusion in the second edition of the 'Visitors Guide to the Falklands'.

29. Current recreation and tourism:

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

This is limited principally by the number of beds available in the lodge for visitors, though accommodation can also be found through the farm. Day visits are not at present possible by plane. A very limited number of visitors arrive by boat.

Tourism is controlled carefully by the Lodge managers, with supervised Land-Rover trips or walking only allowed in the Ramsar area.

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Private Owner

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

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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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		
Designation date		

Site Reference Number							

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Cape Dolphin

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

dd mm ss S dd mm ss W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Extreme NW peninsula of East Falkland, 80 km NW of Stanley (population 1600).

Administrative region: Falkland Islands

8. **Elevation** (average and/or max. & min.) (metres): 9. **Area** (hectares): 4700

Min. 0
Max. ?
Mean ?

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Cape Dolphin is a peninsula of land approximately 15km long and extending from the extreme northwest of East Falkland, towards Eddystone Rock off the coast. It comprises diverse habitats, with large areas of upland heath and whitegrass formation in the centre of the peninsula and dunes and sand grass formations along the coast, interspersed with areas of cliffs and boulder beach. The far end of the peninsula has an area of tussac of approximately 5 ha which is fenced to protect it from overgrazing and forms an excellent wildlife spot, attracting sea lions and giant petrels. This tussac point also has cliffs and steeply sloping rocky shorelines. The centre of the peninsula contains some fine examples of

near-pristine dwarf shrub and heathland with balsam bogs and stands of vanilla daisies. Thetis Bay to the north is a large white sand beach, backed on the landward side by an area of greens and large ponds, notably Swan Pond which is excellent for breeding waterfowl.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 3, 4, 6, ?+

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 Diverse habitats, with large areas of upland heath and whitegrass formation in the centre of the peninsula and dunes and sand grass formations along the coast, interspersed with areas of cliffs and boulder beach. The far end of the peninsula has an area of tussac of approximately 5 ha which is fenced to protect it from overgrazing and forms an excellent wildlife spot, attracting sea lions and giant petrels. This tussac point also has cliffs and steeply sloping rocky shorelines. The centre of the peninsula contains some of the Falklands' finest examples of near-pristine dwarf shrub and heathland with balsam bogs and stands of vanilla daisies. Thetis Bay to the north is a large white sand beach, backed on the landward side by an area of wet-grassland greens and large ponds, notably Swan Pond which is excellent for breeding waterfowl.

- 3 Numerous congregations of black-necked swan, geese and ducks (speckled teal, silver teal, Chiloe wigeon, crested duck, yellow-billed teal and flying steamer duck) also visiting silvery grebe are common around the coasts of the northern tip, especially the area around Swan Pond.

- 4 There is a small breeding colony of seal on the north-eastern coast, numbering up to 40 pups and a smaller colony on the west side of the peninsula of about 20 pups. The northern tip of the peninsula is a major haul out station for non-breeding sea lion and the occasional fur seal can also be seen (coming from nearby Eddystone Rock).

- 6 Upland goose (> 1% pop)
 Kelp goose (> 1% pop)
 Ruddy-headed goose (> 1% pop)
 Dolphin gull (> 1% global)

[? 7 Or 8 if kelp beds included?]

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sand. The south of the peninsula is of one of the oldest formation, Port Stephens sand and mudstones, whilst the northern tip comprises the Albemarle member, notable for abundant fossils.
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Cape Dolphin is a peninsula of land approximately 15km long and extending from the extreme northwest of East Falkland, towards Eddystone Rock off the coast. It comprises diverse habitats, with large areas of upland heath and whitegrass formation in the centre of the peninsula and dunes and sand grass formations along the coast, interspersed with areas of cliffs and boulder beach. The far end of the peninsula has an area of tussac of approximately 5 ha which is fenced to protect it from overgrazing and forms an excellent wildlife spot, attracting sea lions and giant petrels. This tussac point also has cliffs and steeply sloping rocky shorelines. The centre of the peninsula contains some fine examples of near-pristine dwarf shrub and heathland with balsam bogs and stands of vanilla daisies. Thetis Bay to the north is a large white sand beach, backed on the landward side by an area of greens and large ponds, notably Swan Pond which is excellent for breeding waterfowl.

19. 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.*

Species occurring at levels of national importance:

Higher Plants

[There are endemics present – details to add]

Lower Plants

20. 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.*

The area known as Swan Pond to the south west of the peninsula tip is excellent for waterfowl and provides breeding habitat for the black-necked swan. Gentoo penguins have increased at the site, where they breed in three small colonies, from 2,296 breeding adults in 1995, mirroring the trend seen elsewhere in the islands. The presence of night heron and Magellanic snipe needs confirming. The areas of dwarf shrub are rich in black-throated finches and provide hunting grounds for red-backed hawks which are frequently seen at the site, although the breeding locations and numbers need to be quantified.

Gentoo penguin	Near Threatened	2,894 breeding adults (Clausen and Huin 2002).
Magellanic penguin	Near Threatened	Numbers unknown, but widespread and numerous.
White-tufted grebe	(Range-restricted)	Several breeding pairs, numbers unknown.
Upland goose	subsp (Range-restricted)	
	subsp (> 1% pop)	
Kelp goose	subsp (Range-restricted)	Presence confirmed, numbers unknown.
	subsp (> 1% pop)	
Ruddy-headed goose	Data-deficient Range-restricted > 1% pop	Widespread and numerous around greens. Numbers unknown.
Falkland steamer duck	Range-restricted	Widespread and numerous around coast. Numbers unknown.
Two-banded plover	(Range-restricted)	
	subsp ??	
Dolphin gull	> 1% global	

Dark-faced ground-tyrant	(Range-restricted) subsp	
Falkland pipit	(Range-restricted) subsp	
Falkland thrush	(Range-restricted) subsp	
Black-throated finch	Data-deficient Range-restricted	Presence confirmed. Numbers unknown.
Long-tailed meadowlark	(Range-restricted) subsp	

There is a small breeding colony of seal on the north-eastern coast, numbering up to 40 pups and a smaller colony on the west side of the peninsula of about 20 pups. The northern tip of the peninsula is a major haul out station for non-breeding sea lion and the occasional fur seal can also be seen (coming from nearby Eddystone Rock). Giant petrel used to breed on a spit north west of Swan Pond, but not in recent years. The site has potential for this species to commence breeding here again, especially if tussac areas are protected and extended where possible, and disturbance kept to a minimum. Numerous congregations of black-necked swan, geese and ducks (speckled teal, silver teal, Chiloe wigeon, crested duck, yellow-billed teal and flying steamer duck) also visiting silvery grebe are common around the coasts of the northern tip, especially the area around Swan Pond. Site of special interest for sea-watching seabirds passing by the coast and large feeding flocks of brown-hooded gull feeding offshore in kelp beds.

21. Social and 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.

Livestock grazing

Tourism, the site receives around 500 land-based tourists each year.

There is a helipad close to the settlement which was built in 1998 as a response to oil exploration in the northern tranches. In the event of future development, this could become a significant use.

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	
Government (marine areas)	?	+

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Livestock watering hole/pond			
Grazing (unspecified)			
Helipad use	+	+	Future possibility

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

Activity	On-site	Off-site	Scale

Tourism	+		Small-scale
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25. 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

26. Conservation measures proposed but not yet implemented:

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

Cape Dolphin is well visited by tourists and is becoming more popular. Several tour guides sell specific tours to the Cape and with increasing numbers of land-based tourists visiting the north of East Falkland, this is likely to continue increasing over the next few years. Most visitors want to visit the seal colony at the far end of the peninsula, and development of this is proposed in terms of providing a hide and some shelter. The terrain is such that seals on the beach can be easily disturbed by people above them on the cliffs, a hide would reduce this accidental disturbance. As with all sites on the mainland, cats and rats are present, reflected in the low numbers of passerine birds. Control of these populations could be considered at the tip of the peninsula to at least control pests level to a minimum. Tussac planting where giant petrels used to breed, and limited access would promote the return of this species to the area as a breeding site, and many of the larger ponds would lend themselves to the erection of breeding platforms, encouraging higher breeding numbers of waterfowl and potentially increasing their success.

27. Current scientific research and facilities:

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

All seabird sites are monitored each year and the site receives many researchers who carry out baseline monitoring in terms of species numbers and distribution.

A recent thorough survey for the IBA programme was undertaken by Falklands Conservation.

28. Current conservation education:

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

All visitors are given wildlife watching guidelines and tour guides are fully briefed on correct procedures and behaviours.

29. Current recreation and tourism:

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

Site visited by c500 tourists per year, all guided by local drivers and controlled by the landowner.

Intensity is well spread throughout the summer and whilst most visit the tussac grass plantation at the far end of the peninsula, there is a good distribution of visitors in other areas.

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Private Owners

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

- Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International
- Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78
- Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press
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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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Concordia Beach & Ponds, Limpet Creek and Cape Bougainville

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

51 20 S 58 40 W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

On the north coast of East Falkland, about 70 km NW of Stanley (population 1600).

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): ?????

Min. 0
Max. 150
Mean unknown

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Limpet Creek adjoins the very large sandy beach, Concordia Beach, an excellent beach for large groups of waders and breeding gentoo penguins. Behind the beach there is a shallow pool, used by terns and waders, as well as returning penguins. Inland, the area is largely oceanic heath and dwarf shrub associations, with some of the higher areas consisting of feldmark. The area is extensively grazed and the primary significance is the immediate coastal areas. Cape Bougainville encompasses some of the most scenic coastline of East Falkland. It is well visited by tourists and includes areas of recovering tussac and a rockhopper penguin colony, intermixed with few macaroni penguins.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 4, 6

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 Complex of low coastal habitats, including creek system, very large sandy beach, backed by shallow permanent pool.
- 2

Gentoo penguin	Near Threatened	1,200 breeding adults at Limpet Coast(Clausen and Huin 2002).
Rockhopper penguin	Vulnerable	3,446 breeding adults in a colony at Cape Bougainville (Clausen 2001)
Macaroni penguin	Vulnerable	Few pairs mixed with rockhopper penguin colony
Magellanic penguin	Near Threatened	Numbers unknown, but widespread and numerous.
- 3 Wide range of wetland bird species (see below). Incorporate info from 20
- 4 Incorporate info from 20
- 6
 - Upland goose (> 1% pop)
 - Kelp goose (> 1% pop)
 - Ruddy-headed goose (> 1% pop)
 - Dolphin gull (> 1% global)

13. 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:**b) biogeographic regionalisation scheme** (include reference citation):**14. 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	peat, quartzite, sandstones of the old Port Stephens formation
Geomorphology and landscape	cliffs, estuary, lowland, pools

Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Limpet Creek adjoins the very large sandy beach, Concordia Beach, an excellent beach for large groups of waders and breeding gentoo penguins. Behind the beach there is a shallow pool, used by terns and waders, as well as returning penguins. Cape Bougainville encompasses some of the most scenic coastline of East Falkland. It is well visited by tourists and includes areas of recovering tussac and a rockhopper penguin colony, intermixed with few macaroni penguins.

19. 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.*

Species occurring at levels of national importance:

Higher Plants

Lower Plants

20. 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.*

Gentoo penguin	Near Threatened	1,200 breeding adults at Limpet Coast(Clausen and Huin 2002).
Rockhopper penguin	Vulnerable	3,446 breeding adults in a colony at Cape Bougainville (Clausen 2001)
Macaroni penguin	Vulnerable	Few pairs mixed with rockhopper penguin colony
Magellanic penguin	Near Threatened	Numbers unknown, but widespread and numerous.
Rock shag		
King shag		Numbers unknown but presence confirmed
Black-crowned night-heron	(Range-restricted) subsp	
Upland goose	(Range-restricted) subsp	Might add (> 1% pop) subsp
Kelp goose	(Range-restricted) subsp	Might add (> 1% pop) subsp
Ruddy-headed goose	Data-deficient Range-restricted > 1% pop	Several breeding pairs, numbers unknown.
Falkland steamer duck	Range-restricted	Widespread and numerous around coast. Numbers unknown.
Two-banded plover	(Range-restricted) subsp ??	
Magellanic snipe	(Range-restricted) subsp ??	
Dolphin gull	> 1% global	Numbers may not be big enough to qualify – needs survey
Dark-faced ground-tyrant	(Range-restricted) subsp	
Falkland pipit	(Range-restricted) subsp	
Falkland thrush	(Range-restricted) subsp	
Black-throated finch	Data-deficient Range-	Presence confirmed. Numbers unknown.

restricted

Long-tailed
meadowlark (Range-
restricted)
subsp

The site contains over 100 sea lions regularly hauled out although at present this is not a breeding site. There are reports of white-tufted grebe and frequent sightings of black-necked swans, although it is not known whether or not this species breed. Occasionally king penguins can also be seen at this site and there are also records of this species incubating eggs here, although as yet they have never successfully reared chicks here.

Cape Bougainville IBA survey [information for incorporation with earlier material]

The coastal section of the proposed IBA was surveyed between Jan 21 and 24 2004. Weather generally sunny with often strong northerly wind.

SITE DESCRIPTION

This area encompasses some of the most scenic coastline of East Falkland. Cape Bougainville is well visited by tourists and includes areas of recovering tussock and a rockhopper penguin colony, intermixed with king shags. The coastline westward from here to Rincon de Los Indios is varied with rocky headlands, cliffs, sandy and boulder beaches and extensive kelp beds offshore. Inland, the land rises to grass/heath – largely heavily grazed but with some areas of white grass tussocks and bushy dwarf shrub heath, particularly inland of Lion Point – and supports three gentoo penguin colonies in the Concordia/Limpet Creek area. Heavily grazed coastal greens support abundant upland geese with red headed geese. The brackish (?) lagoon at Concordia supports a good selection of wildfowl and the beach has large numbers of waders and penguins.

SPECIES RECORDED

IBA Qualifying species.

Gentoo Penguin – 3 colonies.

Colony 1 – Concordia Lake - 1227 chicks. (note : cat seen walking around colony)

Colony 2 – Lion Point (inland) – 700 chicks (note : 2 king penguin pair present)

Colony 3 – Limpet Creek Pens – 700 chicks

Total 2627 chicks. Numbers slightly up on results from last survey (Clausen 2001)

Rockhopper Penguin – colony at Cape Bougainville with 559 chicks. 1200 adults at dusk count.

Significant decline from 3446 breeding adults (Clausen 2001).

Macaroni Penguin – 3 – 4 pairs in Rockhopper colony. 1 adult with 2 large chicks, 1 pair (no chicks) and 1 single. 1 other single also reported by owner.

Magellanic Penguin – large numbers across extensive colony. Colony extends from just west of CB westwards to Rincon de Los Indios and consistently up to 1 km inland (see map). Density of burrows variable but in some areas very dense.

Rock Shag – 174 occupied nests counted in 8 colonies from CB to RdLI.

King Shag – Colony at CB with 476 occupied nests (with Rockhoppers).

Black Crowned Night Heron – Small colonies at CB (4 – 5 nests) and Lion Point (1 +nests).

Upland Goose – Widespread and abundant in coastal areas – 520 males 493 females recorded.

Kelp Goose – Widespread along coast in small numbers – 14 pairs recorded.

Ruddy headed Goose – Main concentrations around Concordia Lake (20 birds) and small pond between CB and LP (60 birds). Elsewhere only 10 birds seen.

Falkland Steamer duck – Widespread along coast – 78 pairs recorded.

Two banded Plover – Only recorded from Concordia Beach where 5 breeding pairs + 20 (non reeding/post breeding ?) birds.

Magellenic Snipe – not recorded.

Dolphin Gull – Present along coast, particularly around seabird colonies but no evidence of breeding.

Dark faced Ground Tyrant – Common on rocky coastline around and inland tors around CB but scarce elsewhere along coast and inland.

Falkland Pipit – Locally common along coast where tussocky white grass/heath or fenced exclosures eg BP, but scarce /absent over much of area.

Falkland Thrush – Locally common along coast, scarce inland.

Black throated Finch – Only 2 pairs recorded from less/heavily grazed/heathland around Limpet Creek pens.

Long tailed Meadow Lark – Scattered records – generally scarce.

OTHER BREEDING SPECIES

King Penguin – 2 breeding pairs in Lion Point Gentoo colony. Also moulting adults on beaches at Concordia and between CP and LP.

White tufted Grebe – 1 pair + 1 single on small pond between CB and LP. No young seen.

Silvery Grebe – 20 pairs, Concordia Lake. No young seen.

Southern Giant Petrel – Present but no sign of breeding.

Black necked Swan – 2 pairs Concordia Lake. No young seen.

Chiloe Wigeon – 5 pairs (with young) Concordia Lake.

Speckled Teal – 320 individuals, Concordia Lake. Breeding status unknown.

Crested Duck – 10 pairs scattered along coast and 82 birds Concordia Lake.

Red Shoveller – 1 pair Concordia Lake.

Turkey Vulture – widespread. Breeding pairs scattered along coast.

Red backed Hawk – several sightings – probable breeding site on headland between BC and LP.

Crested caracara – several sightings – possible breeding site on headland between CB and LP.

Peregrine – Eyrie with young 1 km east of LP. Possibly another pair around CB.

Magellanic \oystercatcher – Scattered along coast concentrated on sandy beaches. 10 pairs recorded.

Blackish oystercatcher – scattered along coast. 10 pairs recorded.

Rufous chested Dotterel – Flock of 20 on inland heath at Limpet Creek (post breeding birds ?)

Falkland Grass\Wren – Scarce but noted in ungrazed coastal grassland at CB and in inland tussocky white grass/heth at Limpet Creek.

OTHER SPECIES

Ashy headed goose – 1 with RHG between CB and LP.

Wilson's Phalarope – 2 Concordia Lake

Pectoral Sandpiper – 1 Concordia Lake

White rumped Sandpiper – 50 Concordia Beach

MAMMALS

Southern Sea Lion – 110 inc pups on headland between CB and LP (presumed breeding site). Also up to 10 individuals regularly hauling out at CB. Numbers are\apparently increasing at this site where breeding could be established soon. See also below.

South American Fur Seal – 20 animals (presumed to be this species but possibly sea lion) on Concordia Rock (viewed distantly from land).

Orca – adult male catching penguins off CB.

Hare – 7 widespread sightings.

CONCLUSIONS

The area surveyed represents only part of the putative IBA but includes the main colonies of principle IBA\qualifying species and includes a contiguous section of coastal habitats supporting a good assemblage of species. Inland areas did not appear to support good quality heathland/grassland habitats and were generally very heavily grazed.

It is therefore suggested that a revised IBA\boundary is drawn up reflecting the key area of interest and that large inland areas are excluded unless their importance for key species is clarified.

Cath Jeffs/Leigh Lock FC Volunteers. Feb 04.

21. Social and 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.

Livestock grazing

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Grazing (unspecified)	+		

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

Activity	On-site	Off-site	Scale
Tourism	+		Small-scale This has now stopped as the landowners have restricted access, partly due to fears regarding insurance.

25. 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

The area is currently not undergoing any management planning or implementation. It is proposed as a potential future IBA, but will not be recommended as one of the full IBA's at this stage.

26. Conservation measures proposed but not yet implemented:

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

The site was formerly visited by tourists throughout the summer, however because of the difficult overland access most of these are accompanied by experienced guides and drivers. There is not considered to be any negative impacts from the low numbers of people visiting. Both rats and cats are present although little is known as to their numbers or effects. The entire site requires further survey to ascertain numbers and status of several key species.

27. Current scientific research and facilities:

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

Penguin colonies are assessed every five years as part of the full Falklands Penguin Census
A recent survey of the area for the IBA process was carried out in January 2004.

28. Current conservation education:

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

The only information available is via the landowners, who restrict access closely at the present time. They provide all visitors allowed onto the site, with species lists, guidelines and maps of the area. There are no other facilities either present or planned.

29. Current recreation and tourism:

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

The area is no longer visited by tourists, however this was always at a low level (c 200 people per year) and is unlikely to ever reach higher levels than this, even should the site be opened up again in the future.

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Private Owners

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

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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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Seal Bay

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

51 24 S 58 02 W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

On the north coast of East Falkland mainland, about 30 km N of Stanley (population 1600).

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): 2700

Min. 0
Max. 300
Mean unknown

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The area comprises typical whitegrass plains and heathland, backed to the sea by rugged cliffs up to 250 m high facing north. The coastline is exposed and has very little shelter other than a few indented bays. Inland, deep sheltered valleys in Seal Bay once contained an estuary, but now hold land-locked pond Swan Pond, a long shallow pond with wet greens where geese aggregate, separated from the beach by a sand and grass bar of only a few feet high. There is a tussac plantation at Rabbit Rincon which is protected from grazing and forms a habitat for breeding rockhopper penguins and a haul out site for sea lions. Offshore, tall rocky stacks dot the coastline. These stacks are often crowned with

tussac and, due to currents and exposure of these north cliffs, are free of predators and constitute relics of previous habitats of the mainland.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 5, 6 ?+

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 Important wet grassland and tussac-grass habitats, associated with a complex of related coastal habitats. The area comprises typical whitegrass plains and heathland, backed to the sea by rugged cliffs facing north. The coastline is exposed and has very little shelter other than a few indented bays. Inland, deep sheltered valleys in Seal Bay once contained an estuary, but now hold land-locked pond Swan Pond, a long shallow pond with wet greens where geese aggregate, separated from the beach by a sand and grass bar of only a few feet high. There is a tussac plantation at Rabbit Rincon which is protected from grazing and forms a habitat for breeding rockhopper penguins and a haul out site for sea lions. Offshore, tall rocky stacks dot the coastline. These stacks are often crowned with tussac and, due to currents and exposure of these north cliffs, are free of predators and constitute relics of previous habitats of the mainland.
- 2 Breeding populations of Rockhopper penguins and Macaroni penguins (both Vulnerable). This site is notably the only population of Rockhopper penguins breeding on mainland East Falkland.
- 3 Supports important range and number of endemic and range-restricted birds (see below)
- 5 30,562 breeding adult Rockhopper penguins (> 2% global population) over several extensive colonies (Clausen and Huin 2002)
- 6 Supports more than 20,000 waterfowl

[? 7/8 if marine included?]

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sand overlaying sand and mudstones of the Port Stephens formation.
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

19. 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.*

Species occurring at levels of national importance:

Higher Plants

Lower Plants

20. 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.*

The area is notable for the population of sooty shearwater located close to Wineglass and it is almost certain that a further substantial colony exists on the offshore tussac-covered stack nearby, where other burrowing petrels might also breed. Gentoo penguins have increased from 1,750 breeding adults in 1995, as have the population of rockhopper penguins, which has increased since the last census of 26,000 breeding adults in 1995. White-tufted grebe have been sighted on Swan Pond, however this requires confirmation, as does the presence at the site of grass wren, Falkland pipit, two-banded plover and snipe.

Gentoo penguin	Near Threatened	3,000 breeding adults (Clausen 2001).
Rockhopper penguin	Vulnerable (> 1% global) subsp > 10,000 pairs	30,562 breeding adults over several extensive colonies (Clausen 2001).
Macaroni penguin	Vulnerable	3 to 4 pairs, including hybrids with Rockhopper penguins.
Magellanic penguin	Near Threatened	Numbers unknown, but widespread and numerous.
Sooty shearwater	> 1% global	Presence confirmed, numbers unknown. Needs 10000 to qualify. But fit with congregation of seabirds.
Rock shag	> 1% global	
King shag	> 1% global	
Upland goose	(Range-restricted) subsp (> 1% pop)	
Kelp goose	(Range-restricted) subsp (> 1% pop)	
Ruddy-headed goose	Data-deficient Range-restricted > 1% pop	Widespread and numerous around greens. Numbers unknown.
Falkland steamer duck	Range-restricted	Widespread and numerous around coast. Numbers unknown.
Dolphin gull	> 1% global	
Falkland thrush	(Range-restricted) subsp	

Black-throated finch Data-deficient Presence confirmed. Numbers unknown.
Range-restricted

One of the few pairs of Barn Owl present in the Falklands breed here and are frequently seen around the old house at Seal Bay itself. Sea lion breed at Rabbit Rincon (35 pups) and can haul out all along the coast, with McBride Head being a favourite site.

21. Social and 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.

Livestock grazing

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Livestock watering hole/pond			
Grazing (unspecified)	+		Large-scale

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

Activity	On-site	Off-site	Scale
Feral cats	+		Large scale

25. 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

The area is under slight grazing pressure, although sensitive sites are protected where possible by fencing. The site is now closed to tourists.

26. Conservation measures proposed but not yet implemented:

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

Cats are often seen around the rockhopper colonies and is thought that a level of predation may be having an impact, so some control over the cat population may prove beneficial. The status of many species, especially the sooty shearwater population, requires clarification and confirmation.

27. Current scientific research and facilities:

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

Following the complete closure of the site, it is doubtful that any data can be gathered in the future under present ownership. Annual monitoring ceased in 2002 and it is hoped but not confirmed that the site will be able to be visited for the census.

28. Current conservation education:

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

None needed as no visitors allowed

29. Current recreation and tourism:

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

None present

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Private Owners

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

- Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International
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- Reijnders, P, Brasseur, S, van der Toorn, J, van der Wolf, P, Boyd, I, Harwood, J, Lavigne, D & Lowry, L (1993) *Seals, fur seals, sea lions and walrus*. IUCN/SSC Specialist Group, Gland
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- Tingley, G, Saunders, G, Harries, D & King, J (1996): *The first shallow marine survey around the Falkland Islands*. Report to Falkland Islands Government, Port Stanley, from IC Consultants, London
- Wilson, P, Clark, R, McAdam, JH & Copper, EA (1993) Soil erosion in the Falkland Islands: an assessment. *Applied Geography*, **13**, 329-352
- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
- Woods, R, Stevenson, J, Ingham, R, Huin, N, Clausen, A & Brown, A (2005, in prep) Important Bird Areas in The Falkland Islands. In Sanders, S.M. et al (eds) *Important Bird Areas in the United Kingdom Overseas Territories*. RSPB, Sandy, UK.

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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Volunteer Point

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

51 28 S 57 50 W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Volunteer Green is the isthmus connecting the Volunteer Point peninsula to the north east of mainland east Falkland, about 25 km N of Stanley (population 1600).

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): 230

Min.	0
Max.	50
Mean	unknown

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Volunteer Point is an impressive peninsula to the north east of mainland East Falkland. The whole area is important for its diverse coastline and ecosystems, fur seals and penguins. Volunteer Green is one of the most popular sites within this peninsula for tourists in the Falklands and notably home to the largest king penguin colony within the archipelago. The 2 km long white sand beach rises up to provide an undulating system of greens and valleys, interspersed with shallow seasonal ponds and ditches. The entire area is dominated by the presence of penguin colonies, who have created vivid

green patches from old colonies, whilst more recent ones have left bare turf circles. Beyond the penguin colonies on the green, Volunteer Lagoon is home to a variety of waterfowl.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 3, 4, 6 +?

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 An important wet grassland, dune, pool, beach and coastal wetland complex
- 3 The site supports the Falklands well-established and largest population of king penguins. It is important also in supporting a range of endemic, range-restricted and near threatened species detailed below.
- 4 Supports the species noted in 3 at a critical stage of their life-cycles, as well as fur seals.
- 6 Upland goose (> 1% pop)
Kelp goose (> 1% pop)
Ruddy-headed goose (> 1% pop)
- [? Any 7 or 8 interest if marine added?]

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sandstone of the Port Stanley Formation
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic

Water permanence	Both permanent and seasonal ponds and pools are present
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Volunteer Point is an impressive peninsula to the north east of mainland east Falkland. The whole area is important for its diverse coastline and ecosystems, fur seals and penguins. Volunteer Green is one of the most popular sites within this peninsula for tourists in the Falklands and notably home to the largest king penguin colony within the archipelago. The 2 km long white sand beach rises up to provide an undulating system of greens and valleys, interspersed with shallow seasonal ponds and ditches. The entire area is dominated by the presence of penguin colonies, who have created vivid green patches from old colonies, whilst more recent ones have left bare turf circles. Beyond the penguin colonies on the green, Volunteer Lagoon is home to a variety of waterfowl.

19. 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.*

Species occurring at levels of national importance:

Higher Plants

Lower Plants

20. 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.*

The site is notable because it supports the Falklands largest population of king penguins and is probably the most important tourist destination within the archipelago. Many rare visitors to the Falklands are spotted here, including in recent years whimbrel, fork-tailed flycatcher and buff-necked ibis.

Gentoo penguin	Near Threatened	1,532 breeding adults (Clausen and Huin 2002).
Magellanic penguin	Near Threatened	Numbers unknown, but widespread and numerous.
Upland goose	(Range- restricted) subsp (> 1% pop)	
Kelp goose	(Range- restricted) subsp (> 1% pop) subsp	Presence confirmed, numbers unknown.
Ruddy-headed goose	Data-deficient Range- restricted > 1% pop	Widespread and numerous around greens. Numbers unknown.
Falkland steamer duck	Range- restricted > 1% pop	Widespread and numerous around coast. Numbers unknown.
Two-banded plover	(Range- restricted) subsp ??	
Magellanic snipe	(Range- restricted) subsp ??	
Dark-faced ground- tyrant	(Range- restricted) subsp	
Falkland pipit	(Range- restricted) subsp	
Falkland thrush	(Range- restricted) subsp	
Black-throated finch	Data-deficient Range- restricted	Presence confirmed. Numbers unknown.
Long-tailed meadowlark	(Range- restricted) subsp	

Sea lions can often be seen hauled out or chasing penguins just offshore along the sand beach. There was 1 pup born during the summer of 2002-3 in the north-west corner of the area.

VOLUNTEER POINT IBA SURVEY [for incorporation with earlier material]

Survey work was carried out between 1 and 6 Feb 2004.

SITE DESCRIPTION

The current proposed IBA area includes just 230 Ha around Volunteer Green, which supports the largest king penguin colony on the archipelago, along with gentoo and magellanic penguins. The 2 km long white sand beach rises up to provide a undulating system of greens and valleys interspersed with shallow seasonal ponds and ditches. Because of the accessibility of the king penguin colony, this is one of the most important tourist destinations within the archipelago.

Extending eastwards from Volunteer Green, the scenic northern coast of the peninsular includes a range of low cliffs, sandy and boulder beaches, with extensive kelp beds offshore. The land rises to cliffs at Volunteer Point with a series of offshore rocks, with seabird and mammal colonies. The southern side of the peninsular borders Volunteer lagoon and includes extensive sand flats and dunes of Lagoon Bar with further gentoo and king penguin colonies. The Lagoon supports good numbers of wildfowl particularly steamer duck and kelp goose.

West from Volunteer Green, the north coast supports a similar range of habitats to that on Volunteer Point with sandy beaches set within rocky headlands. Cow Bay supports another gentoo penguin colony.

Given the bird interest across this wider area for key IBA species and in supporting an assemblage of species, there is a case for including this wider area within an extended IBA boundary.

Within the species accounts below distinction is made numbers of birds recorded within the current Volunteer Green IBA (VG) and those recorded in an extended Volunteer Point IBA area on Volunteer Point (VP) and Cow Bay (CB).

SPECIES |RECORDED

IBA QUALIFYING SPECIES

Gentoo Penguin - VG colony with 1532 adults (Clausen 2001). 1000 chicks in feb 04. Also colony of x pairs on Lagoon Bar (VP) and x pairs Cow Bay (CB).

Magellanic penguin – Large numbers in extensive colony across much of coastal area. High densities around Volunteer Green and extending along north coast in both directions. Only absent from inland heathland on Volunteer Point and along southern coast of VP along shore of Lagoon between Lagoon Bar and Volunteer Beach.

Rock shag – VG not breeding, VP 200 pairs scattered along coast including 150 pairs at Volunteer Point, CB 85 pairs including 50 pairs Cape Caryfort.

King Shag – VG not breeding, VP 600 pairs including 100 pairs Sixtus Rocks and 500 pairs Volunteer Point.

Upland Goose – VG 80 pairs, VP 130 pairs, CG 70 pairs- widespread across coastal areas, scarce inland.

Kelp Goose – VG 1 pair, VP 50 pairs scattered along north shore and high concentration of birds along shore of Volunteer Lagoon.

Ruddy headed Goose – VG 20 birds, VP 12 birds Lagoon Bar, CB 6 birds. Breeding status unknown but presumed breeder.

Falkland Steamer Duck – VG 3 pairs, VP 60 pairs scattered along north shore but high concentration of birds along shore of Volunteer Lagoon, CB 10 pairs.

Two banded Plover – VG 3 pair + 20 birds (post breeders/non breeders ?), VP 5 pairs concentrated around Lagoon Bar, CG 2 pairs.

Magellanic Snipe – No birds recorded (post breeders dispersed from area ?)

Striated Caracara – VP 1 adult seen at Volunteer Point (breeding bird ?)

Dark faced Ground Tyrant – VG 1 pair, VP scattered along coast rare inland, CB scattered along coast.

Falkland Pipit – VG not breeding, VP widespread on heathland and in longer coastal vegetation eg abundant in tussocky white grass at Volunteer Point, CG scattered.

Falkland Thrush – VG 3 pairs, VP frequent along coastal vegetation, scattered on inland heath.

Black throated Finch – VG not breeding, VP frequent on heathland and in longer coastal vegetation.

Long tailed Meadow Lark VG – 2- 4 pairs breeding, VP scattered throughout, CB scattered throughout.

OTHER SPECIES

King Penguin -VP largest colony on Falkland with over 600 pairs, VP 32 pairs (2 with young) along with non breeders on Lagoon Bar.

Crested Duck – VG 3 pairs, VP 6 pairs, CG 2 pairs

Speckled Teal – VG 35 individuals – breeding status unknown, CG 20 individuals.

Rufous – chested dotterel – VP scattered in inland heathland area 10 pairs.

Blackish oystercatcher- VG 1 pair, VP 10 pairs, CG 2 pairs

Magellanic Oystercatcher – VG 1 pair, VP 15 pairs, CG 5 pairs.

Snowy Sheathbill – VP at least 6 individuals with seabird/mammals on Volunteer Rocks.

Falkland Skua – VG 1 pair (?), VP 10 pairs in tussocky white grass Volunteer Point.

Dolphin Gull – No breeding recorded but present around large seabird and mammal colonies.

Kelp Gull – VP 50 pairs Lagoon Bar.

Falkland Grass Wren – VP Present in tall heath on Volunteer Point.

MAMMALS

Fur Seal – 150 animals present on Volunteer Rocks, breeding colony. Also a few individuals on Sixtus Rocks

Sea Lion – a few animals scattered around the coast – no large congregations.

Peales Dolphin- Small pod off Volunteer Rocks.

CONCLUSIONS

Whilst the current proposed IBA area centred on Volunteer Green supports the largest gentoo colony, other key IBA qualifying species are scattered elsewhere along this varied section of coastline or occur in numbers on good quality inland heathland on Volunteer Point. It is therefore suggested that the whole of the Volunteer Point peninsular is included within the IBA area and potentially the coastal strip extending westwards from Volunteer Green to Cow Bay. Together, the habitats represented within this area support a rich assemblage of key Falkland species along with some important seabird colonies.

Cath Jeffs/Leigh Lock FC Volunteers Feb 04

21. Social and 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.

Livestock grazing

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Livestock watering hole/pond	+		
Grazing (unspecified)	+	+	Large-scale
Tourism	+	+	Large-scale

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

Activity	On-site	Off-site	Scale
Tourism	+	+	Large-scale The site regularly has visits by over 2000 visitors each year. Access can only be gained by off-road access and this has severe impacts on the ground leading to the site itself.

25. 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

A full-time warden lives here throughout the summer since November 2001.	+	
--	---	--

26. Conservation measures proposed but not yet implemented:

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

The most pressing conservation issue at the site is currently the high level of tourism pressure throughout the summer. The voluntary warden post has undoubtedly eased this, by restricting the distances that people can approach the colonies, and reducing events of accidental disturbance. This post is funded by Falklands Conservation and does not receive income from the site itself, so is not guaranteed from year to year and depends on external grants to function. Since the inception of the warden programme, breeding success of birds at the site has been high for the Falklands. From November 2004, the landowner is funding the warden post, which will be the same person from year to year, leading to greater protection and continuity.

The beach is frequently littered with marine debris, presumably derived from the fishing industry for *Loligo gahi* squid, which occurs just 3 miles offshore and this has been reported as causing problems of entanglement.

There is a high population of feral cats around the area and the owners are currently reluctant to embark on a programme of control. This could well prove beneficial to breeding bird populations in the future.

27. Current scientific research and facilities:

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

The site is regularly visited by a seabird monitoring team. The site has been thoroughly surveyed as part of the IBA programme and continues to be a popular site for researchers carrying out baseline counts and monitoring.

28. Current conservation education:

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

Leaflets are produced by Falklands Conservation, detailing the area and specific guidelines for King Penguins and other species present in the area. There are several information points around the informal 'car-park' area, including interpretative boards and a caravan that acts as a shelter and an information centre, displaying all relevant scientific data on the area as well as tourist guidelines and penguin information.

29. Current recreation and tourism:

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

Yes, high level of use, approximately 2000 tourists per season, including overseas tourists, military personnel and a high number of repeat local visitors.

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Private Owner

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

- Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International
- Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78
- Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press
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- Jones, AG (2004) *A guide to the Insects of the Falklands*. Falklands Conservation
- Moore, DM (1968) *The vascular flora of the Falkland Islands*. British Antarctic Survey, Cambridge (Scientific Reports, No. 60)
- Moore, DM (1973) Additions and amendments to the vascular flora of the Falkland Islands. *British Antarctic Survey Bulletin*, 85-88
- Otley, H. (in press)
- Otley, H. (in press)
- Reijnders, P, Brasseur, S, van der Toorn, J, van der Wolf, P, Boyd, I, Harwood, J, Lavigne, D & Lowry, L (1993) *Seals, fur seals, sea lions and walrus*. IUCN/SSC Specialist Group, Gland
- Robinson, GS (1984) *Insects of the Falkland Islands: A checklist and bibliography*. British Museum (Natural History), London
- Scott, DA & Carbonell, M (eds.) (1986) *A directory of neotropical wetlands*. IUCN/IWRB, Cambridge/Slimbridge
- Simpson, N (1991) Aspects of Falklands freshwater ecology. *The Warrah, Newsletter of Falklands Conservation*, 1, **
- Strange, IJ (1992) *A field guide to the wildlife of the Falkland Islands and South Georgia*. HarperCollins, London
- Strange, IJ, Parry, CJ, Parry, MC & Woods, RW (1988) *Tussac grass in the Falklands*. Falkland Island Foundation Project Report
- Summers, RW & McAdam, JH (1993) *The upland goose*. Bluntisham Books, Bluntisham
- Thompson, D (2003) *Southern Sea Lions of the Falkland Islands*. Falklands Conservation report to the Foreign and Commonwealth Office
- Thompson, D & Duck, CD (1995) *Southern sea lions Otaria flavescens in the Falkland Islands: population size, foraging behaviour and diet*. Falklands Conservation Report
- Tingley, G, Saunders, G, Harries, D & King, J (1996): *The first shallow marine survey around the Falkland Islands*. Report to Falkland Islands Government, Port Stanley, from IC Consultants, London
- Wilson, P, Clark, R, McAdam, JH & Copper, EA (1993) Soil erosion in the Falkland Islands: an assessment. *Applied Geography*, 13, 329-352
- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
- Woods, R, Stevenson, J, Ingham, R, Huin, N, Clausen, A & Brown, A (2005, in prep) Important Bird Areas in The Falkland Islands. In Sanders, S.M. et al (eds) *Important Bird Areas in the United Kingdom Overseas Territories*. RSPB, Sandy, UK.

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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		
Designation date		

Site Reference Number							

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Kidney Island and Kidney Cove

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

51 40 S 57 10 W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Kidney Island is an irregularly shaped island lying approximately 0.5 km off the Kidney Cove coast of east Falkland, at the southern entrance to Berkeley Sound, about 10 km NE Stanley (population 1600). Cochon Island lies about 2 km W of Kidney Island at a similar distance off the mainland shore.

Administrative region: Falkland Islands

8. **Elevation** (average and/or max. & min.) (metres): **9. Area** (hectares): Kidney Island 32 ha, Cochon Island 8 ha. + Kidney Cove shore ?? ha

Min.	0
Max.	?
Mean	?

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Kidney Island is largely low lying, with the highest point being 18-20m above sea level and is covered with dense tall tussock grass. The coast comprises a mixture of boulder and sandy shores, with some steeper cliffs and vertical rock strata to the north. The island is ungrazed, with no alien predators. It has a high potential value for tourism and can be reached in half an hour from Stanley for both day

trips and overnight stays. In the centre of the island there is a small wooden shanty, which is available to stay in. In the past, the tussac has been cut as fodder for domestic animals from at least 1930-1950's. There is also evidence that the island has been burnt at least once in the past 50 years.

Cochon Island is a small island lying adjacent to Kidney Island, formed from steeply dipping rocks, which rise to over 30m at the island's highest point. The soil is generally thin and vegetation is limited to tussac grass, wild celery and stonecrop, which varies in density throughout the rocky ridges. The island is rodent free and there is no evidence of it ever being burnt in the past. It is unlikely that the island will ever have been stocked.

Kidney Cove is also an important site for visiting cruise ship passengers and last year over 2000 people visited this site. The area extends from a wide sandy beach over which penguins gain access, areas of heath and dune systems behind the shoreline, extending to Mount Low at c300m. Several streams and ditches intersect the site, leading into Port William on the south side. Little is written about the vegetation. However the area is largely oceanic heath, with a high level of both tall and short ferns, and dominated by Diddle-dee. There are several gentoo colonies throughout the area, a Rockhopper colony to the northern coast of Berkeley Sound. Historical interest in the area is provided by the former resting place of the SS Great Britain in the mined area at Sparrow Cove.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 Tussac grass island
- 2 c. 1040 breeding adult (Clausen 2001) Rockhopper penguins (Vulnerable); c. 1-3 breeding adult Macaroni penguins (Woods and Woods 1997) (Vulnerable); At least 2,000 breeding adults, one of only two known breeding sites, of White-chinned petrel (Vulnerable); numerous Cobb's wrens (Vulnerable)
- 3 Uncounted, probably numerous Magellanic penguins (Near Threatened); very large colony of Sooty shearwaters, which has increased since 1960s to numbers may be in excess of 20,000 breeding adults; range of other bird species detailed below.

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sandstone, Port Stanley formation
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

19. 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.*

Species occurring at levels of national importance:

Higher Plants

Tussac grass

Lower Plants

20. 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.*

Rockhopper penguin	Vulnerable	c. 1040 breeding adults (Clausen and Huin 2002)
Macaroni penguin	Vulnerable	c. 1-3 breeding adults, with rockhoppers (Woods and Woods 1997)
Magellanic penguin	Near Threatened	Uncounted, probably numerous
White-chinned petrel	Vulnerable	At least 2,000 breeding adults, one of only three known breeding sites.
Sooty shearwater	> 10,000 pairs	Very large colony, which has increased since 1960's. Numbers may be in excess of 20,000 breeding adults.
Grey-backed storm petrel	> 1% global	At least a few hundred breeding adults
Common diving petrel	(> 1% global) subsp	Presence confirmed – numbers unknown
Rock shag	> 1% global	Confirmed presence (FC databases)
King shag	> 1% global	
Black-crowned night-heron	(Range-restricted) subsp	
Upland goose	(Range-restricted) subsp	
Kelp goose	(Range-restricted) subsp	
Ruddy-headed goose	Data-deficient Range-restricted	4 breeding adults in 2001
Falkland steamer duck	Range-restricted	At least 30 breeding adults
Short-eared owl	(Range-restricted) subsp	
Tussacbird	Range-restricted	Very numerous
Dark-faced ground-tyrant	(Range-restricted) subsp	
Falkland pipit	(Range-restricted) subsp	
Grass wren	(Range-restricted) subsp	
Cobb's wren	Vulnerable Range-restricted	Numerous
Falkland thrush	(Range-	

	restricted)
	subsp
Black-throated finch	Data-deficient
	Range-
	restricted
Long-tailed meadowlark	(Range-restricted)
	subsp

Both islands are popular with sea lions for hauling out and often sea lions will be lying around in the tussac on the islands. It is not a breeding site. The islands have a potential for interesting invertebrate fauna and this would warrant further research.

21. Social and 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.

The site at Kidney Cove is important due to its increasing and developing cruise ship industry links and also the historical value of the former resting place of the SS Great Britain in Sparrow Cove.

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Falkland Island Government (Kidney and Cochon)		+
Kidney Cove	Private	

(Kidney Island & Cochon Island: National Nature Reserve owned by Falkland Island Government; Kidney Cove coast ?)

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Tourism	+	+	Large-scale

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

Activity	On-site	Off-site	Scale
Increasing tourism	+		Large-scale

25. 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
National Nature Reserve	+	

26. Conservation measures proposed but not yet implemented:

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

Kidney Island is an excellent example of an offshore tussac island and is near enough to Stanley to have potential for tourist activities. This brings with it certain threats to the island, including fire and the introduction of rats or mice. Guidelines are in place to prevent both of these occurring accidentally. The level of use of the island also poses a potential disturbance risk to some species, especially those burrowing petrels whose nests could easily be trampled by walking tourists. Being at the entrance of Berkeley Sound where many boats come for transhipping and a safe anchorage, risk of fire and introducing ship pests on these islands is extremely high.

Kidney Cove also experiences high numbers of tourists each year, mainly visiting the two penguin colonies within the site. This is carefully controlled by the landowners and advice has been sought to ensure that this is not detrimental. Signs are in the process of being produced, as well as literature funded by Falklands Conservation, to increase awareness and the standard of environmental practices at the site.

27. Current scientific research and facilities:

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

Penguin colonies are all monitored as part of the Penguin Census on a five-yearly basis. The site formed the basis for a on-going study into the winter diet of Gentoo penguins (Clausen and Putz 2003). There are no facilities on site for research, although many researchers do make use of the shanty on Kidney Island itself.

28. Current conservation education:

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

Leaflets outlining the site, sensitivities and guidelines will be available from the summer of 2004 and signs are to be erected in the Kidney Cove area informing visitors of penguin walkways and correct behaviour. All tourists are accompanied overland by qualified tour guides and during this 20 minute drive they are informed of potential disturbance issues and made aware of the basic guidelines to do with visiting penguins. All visitors currently receive a copy of the Country side Code. Kidney Cove is listed as one of the sites in the 'Visitors Guide to the Falklands', which is available for most cruise ship passengers to purchase before visiting the site.

29. Current recreation and tourism:

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

Yes, as above

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

and Private Owners

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

- Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International
- Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press
- Clausen A, and Putz, K P (2003) Winter diet and foraging range of gentoo penguins *Pygoscelis papua* from Kidney Cove, Falkland Islands. *Polar Biology* (2003) 26: 32-40
- Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78
- Greenway, ME (1972) *Geology of the Falkland Islands*. British Antarctic Survey (Scientific Report, No. 76)
- 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)
- Jones, AG (2004) *A guide to the Insects of the Falklands*. Falklands Conservation
- Moore, DM (1968) *The vascular flora of the Falkland Islands*. British Antarctic Survey, Cambridge (Scientific Reports, No. 60)
- Moore, DM (1973) Additions and amendments to the vascular flora of the Falkland Islands. *British Antarctic Survey Bulletin*, 85-88
- Reijnders, P, Brasseur, S, van der Toorn, J, van der Wolf, P, Boyd, I, Harwood, J, Lavigne, D & Lowry, L (1993) *Seals, fur seals, sea lions and walrus*. IUCN/SSC Specialist Group, Gland
- Robinson, GS (1984) *Insects of the Falkland Islands: A checklist and bibliography*. British Museum (Natural History), London
- Scott, DA & Carbonell, M (eds.) (1986) *A directory of neotropical wetlands*. IUCN/IWRB, Cambridge/Slimbridge
- Simpson, N (1991) Aspects of Falklands freshwater ecology. *The Warrah, Newsletter of Falklands Conservation*, 1, **
- Strange, IJ (1992) *A field guide to the wildlife of the Falkland Islands and South Georgia*. HarperCollins, London
- Strange, IJ, Parry, CJ, Parry, MC & Woods, RW (1988) *Tussac grass in the Falklands*. Falkland Island Foundation Project Report
- Summers, RW & McAdam, JH (1993) *The upland goose*. Bluntisham Books, Bluntisham
- Thompson, D (2003) *Southern Sea Lions of the Falkland Islands*. Falklands Conservation report to the Foreign and Commonwealth Office
- Thompson, D & Duck, CD (1995) *Southern sea lions Otaria flavescens in the Falkland Islands: population size, foraging behaviour and diet*. Falklands Conservation Report
- Tingley, G, Saunders, G, Harries, D & King, J (1996): *The first shallow marine survey around the Falkland Islands*. Report to Falkland Islands Government, Port Stanley, from IC Consultants, London
- Wilson, P, Clark, R, McAdam, JH & Copper, EA (1993) Soil erosion in the Falkland Islands: an assessment. *Applied Geography*, 13, 329-352
- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
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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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Cape Peninsula, Stanley Common and Port Harriet

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

S W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

This area comprises other parts of the peninsula on which Stanley is situated, to the east and south of the capital and within 1 km of it at the nearest point.

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): ?

Min. 0
Max. ?
Mean unknown

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Cape Peninsula includes a remarkably diverse coastline and ecosystems, in close proximity to Stanley, and an important area for public use. Adjoining this is the important peatland area of Stanley Common and the coastal system of Port Harriet. Off the peninsula are several important tussac islands. Large parts of all the areas hold unexploded mines placed by Argentinian forces. Therefore, in those areas, public usage and monitoring are impracticable.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, +?

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 An important wet grassland, peatland, dune, pool, beach and coastal wetland complex
- 2 Vulnerable spp to add
- 3 Endemics and other important diversity

[? Any 7 or 8 interest if marine added?]

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sandstone of the Port Stanley Formation
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	marine
Soil	mainly organic
Water permanence	Both permanent and seasonal ponds and pools are present, as well as the sea
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
TP	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Cape Peninsula includes a remarkably diverse coastline and ecosystems, in close proximity to Stanley, and an important area for public use. Adjoining this is the important peatland area of Stanley Common and the coastal system of Port Harriet. Off the peninsula are several important tussac islands. Large parts of all the areas hold unexploded mines provided by Argentinian forces. Therefore, in those areas, public usage and monitoring are impracticable.

19. 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.*

Species occurring at levels of national importance:

Higher Plants

Lower Plants

20. 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.*

Magellanic penguin Near Threatened

Upland goose (Range-restricted)
subsp

(> 1% pop) subsp

Kelp goose (Range-restricted)
subsp

(> 1% pop) subsp

Patagonian Crested
Duck

Falkland steamer
duck Range-restricted
 > 1% pop

Two-banded plover (Range-restricted)
 subsp ??

Magellanic
Oystercatcher

Blackish
Oystercatcher

Magellanic snipe (Range-restricted)
 subsp ??

Rock Cormorant

Dolphin Gull

Kelp Gull

South American
Terns

Falkland Skua

Dark-faced ground-
tyrant (Range-restricted)
 subsp

Grass Wren

Falkland thrush (Range-restricted)
 subsp

Black-throated finch Data-deficient
 Range-restricted

Black-crowned
Night Heron

Sea lions can be seen hauled out or chasing penguins just offshore.

21. Social and 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.

Livestock grazing

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	?	
Crown	+	+

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Grazing (unspecified)	+	+	Large-scale
Tourism	+	+	Large-scale
Recreation	+	+	

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

Activity	On-site	Off-site	Scale

25. 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

26. Conservation measures proposed but not yet implemented:

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

27. Current scientific research and facilities:

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

28. Current conservation education:

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

29. Current recreation and tourism:

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

High level of use.

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International

- Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78
- Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press
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- Reijnders, P, Brasseur, S, van der Toorn, J, van der Wolf, P, Boyd, I, Harwood, J, Lavigne, D & Lowry, L (1993) *Seals, fur seals, sea lions and walrus*. IUCN/SSC Specialist Group, Gland
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- Summers, RW & McAdam, JH (1993) *The upland goose*. Bluntisham Books, Bluntisham
- Thompson, D (2003) *Southern Sea Lions of the Falkland Islands*. Falklands Conservation report to the Foreign and Commonwealth Office
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- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
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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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Swan Inlet and Ponds

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

51d 52m S 58d 32m W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.
On the coast of East Falkland, about 5 km SW of Mount Pleasant and about 50 km SW of Stanley (population 1600).

Administrative region: Falkland Islands

8. **Elevation** (average and/or max. & min.) (metres): 9. **Area** (hectares): about 12,000

Min. 0
Max. 75
Mean ???

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Estuary of Swan Inlet River and l' Antioja Stream at head of drowned river valley with tidal mudflats. Catchment area of undulating peatland with stone-runs, numerous small lakes, pools and subsurface streams overlying sedimentary rock. Wet grassland, marsh and pond surroundings are of great importance to moulting waterfowl, including black-necked swans.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 3, 4, 6

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 Marine inlet with wet grassland, marsh and pond surroundings
- 3 Endemic plant including *Lilaeopsis macloviana*, and invertebrates
- 4 Of great importance to moulting waterfowl, including black-necked swans
- 6 The site qualifies under Criterion 6 as it regularly supports 1% of the individuals in the Falkland population of black-necked swan *Cygnus melanocoryphus*.

13. 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:**b) biogeographic regionalisation scheme** (include reference citation):**14. 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	Peat overlying sedimentary rock (Lafonian group)
Geomorphology and landscape	Catchment area of undulating peatland with stone-runs, numerous small lakes, pools and subsurface streams overlying sedimentary rock.
Nutrient status	no information
pH	6.5
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

Catchment area of undulating peatland with stone-runs, numerous small lakes, pools and subsurface streams overlying sedimentary rock.

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
F	Estuarine waters	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
M	Permanent rivers / streams / creeks	
O	Freshwater lakes: permanent	
S	Permanent freshwater marshes/ pools	
U	Peatlands	
Y	Freshwater springs	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Marine inlet with wet grassland, marsh and pond surroundings of great importance to moulting waterfowl, including black-necked swans

19. 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.*

20. 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.*

In March/April 1981 the Inlet supported over 120 black-necked swans. A Douse and other observers counted the Inlet in the mid 1980s when there was regular occurrence of up to 100. In 2004, only about 45 maximum seen in the Inlet itself, but then a few weeks later there were 85 black-necked swans on the un-named pond to the west of Gull Island Pond (this is close to Swan Inlet). Emma Philip also mentioned good numbers here. There is a post breeding aggregation that centres on this area (i.e. between Swan Inlet/Swan Pond and Bertha's Beach environs). In Swan Inlet, they feed on dense beds of tassel weed *Ruppia filifolia*.

21. Social and 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.

Livestock grazing
Sport angling

22. Land tenure/ownership:

Ownership category	On-site	Off-site

Private	+	
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23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Grazing (unspecified)	+	+	
Recreational fishing	+		

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

Activity	On-site	Off-site	Scale

25. 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

26. Conservation measures proposed but not yet implemented:

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

27. Current scientific research and facilities:

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

28. Current conservation education:

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

29. Current recreation and tourism:

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

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

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Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78

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Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note for compilers:

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2. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

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DD MM YY		
Designation date		

Site Reference Number							

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Flats Brook and Bombilla Flats

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

dd mm ss S dd mm ss W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

In the hills of East Falkland, about 65 km W of Stanley (population 1600).

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): ?

Min. ?
Max. ?
Mean ?

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Good representative of a range of upland peatland and other wetland habitats widespread over the island. Flats Brook valley is a hill-surrounded catchment, emptying through a narrow gap to join the San Carlos River system. The wetlands in this upper catchment range from ridge pools, and the corrie Black Tarn on the NE slope of Mount Osborne (Falklands' highest point) to the complex blanket bog pool system and stream in the basin of the valley. Bombilla Flats represent the lower level blanket bog systems of middle altitudes.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 Good representative of a range of upland peatland and other wetland habitats widespread over the island. Flats Brook valley is a hill-surrounded catchment, emptying through a narrow gap to join the San Carlos River system. The wetlands in this upper catchment range from ridge pools, and the corrie Black Tarn on the NE slope of Mount Usborne (Falklands' highest point) to the complex blanket bog pool system and stream in the basin of the valley. Bombilla Flats represent the lower level blanket bog systems of middle altitudes.

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sand
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

As above

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
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A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
TP	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Good representative of a range of upland peatland and other wetland habitats widespread over the island. Flats Brook valley is a hill-surrounded catchment, emptying through a narrow gap to join the San Carlos River system. The wetlands in this upper catchment range from ridge pools, and the corrie Black Tarn on the NE slope of Mount Usborne (Falklands' highest point) to the complex blanket bog pool system and stream in the basin of the valley. Bombilla Flats represent the lower level blanket bog systems of middle altitudes.

19. 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.*

20. 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.*

21. Social and 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.

Livestock grazing

Other

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private		

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Livestock watering hole/pond			
Grazing (unspecified)			

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

Activity	On-site	Off-site	Scale

25. 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

26. Conservation measures proposed but not yet implemented:

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

27. Current scientific research and facilities:

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

28. Current conservation education:

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

29. Current recreation and tourism:

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

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

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- Thompson, D & Duck, CD (1995) *Southern sea lions Otaria flavescens in the Falkland Islands: population size, foraging behaviour and diet*. Falklands Conservation Report
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- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
- Woods, R, Stevenson, J, Ingham, R, Huin, N, Clausen, A & Brown, A (2005, in prep) Important Bird Areas in The Falkland Islands. In Sanders, S.M. et al (eds) *Important Bird Areas in the United Kingdom Overseas Territories*. RSPB, Sandy, UK.

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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Lafonia ponds and streams catchment

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

dd mm ss S dd mm ss W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

In the central part of Lafonia, about 100 km SW of Stanley (population 1600).

[Provisionally, this site comprises the Deep Arroyo and Halfway House Arroyo catchments.]

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): ?

Min. ?

Max. ?

Mean ?

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

[to do]

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 3

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 Representative fresh water bodies.
3 zebra trout

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sand
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
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A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
TP	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

19. 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.*

20. 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.*

21. Social and 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.

Livestock grazing

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private		

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Livestock watering hole/pond			
Grazing (unspecified)			

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

Activity	On-site	Off-site	Scale

25. 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
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26. Conservation measures proposed but not yet implemented:

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

27. Current scientific research and facilities:

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

28. Current conservation education:

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

29. Current recreation and tourism:

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

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

- Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International
- Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78
- Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press
- Greenway, ME (1972) *Geology of the Falkland Islands*. British Antarctic Survey (Scientific Report, No. 76)
- 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)
- Jones, AG (2004) *A guide to the Insects of the Falklands*. Falklands Conservation
- Moore, DM (1968) *The vascular flora of the Falkland Islands*. British Antarctic Survey, Cambridge (Scientific Reports, No. 60)
- Moore, DM (1973) Additions and amendments to the vascular flora of the Falkland Islands. *British Antarctic Survey Bulletin*, 85-88
- Reijnders, P, Brasseur, S, van der Toorn, J, van der Wolf, P, Boyd, I, Harwood, J, Lavigne, D & Lowry, L (1993) *Seals, fur seals, sea lions and walrus*. IUCN/SSC Specialist Group, Gland
- Robinson, GS (1984) *Insects of the Falkland Islands: A checklist and bibliography*. British Museum (Natural History), London

- Scott, DA & Carbonell, M (eds.) (1986) *A directory of neotropical wetlands*. IUCN/IWRB, Cambridge/Slimbridge
- Simpson, N (1991) Aspects of Falklands freshwater ecology. *The Warrah, Newsletter of Falklands Conservation*, **1**, **
- Strange, IJ (1992) *A field guide to the wildlife of the Falkland Islands and South Georgia*. HarperCollins, London
- Strange, IJ, Parry, CJ, Parry, MC & Woods, RW (1988) *Tussac grass in the Falklands*. Falkland Island Foundation Project Report
- Summers, RW & McAdam, JH (1993) *The upland goose*. Bluntisham Books, Bluntisham
- Thompson, D (2003) *Southern Sea Lions of the Falkland Islands*. Falklands Conservation report to the Foreign and Commonwealth Office
- Thompson, D & Duck, CD (1995) *Southern sea lions Otaria flavescens in the Falkland Islands: population size, foraging behaviour and diet*. Falklands Conservation Report
- Tingley, G, Saunders, G, Harries, D & King, J (1996): *The first shallow marine survey around the Falkland Islands*. Report to Falkland Islands Government, Port Stanley, from IC Consultants, London
- Wilson, P, Clark, R, McAdam, JH & Copper, EA (1993) Soil erosion in the Falkland Islands: an assessment. *Applied Geography*, **13**, 329-352
- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
- Woods, R, Stevenson, J, Ingham, R, Huin, N, Clausen, A & Brown, A (2005, in prep) Important Bird Areas in The Falkland Islands. In Sanders, S.M. et al (eds) *Important Bird Areas in the United Kingdom Overseas Territories*. RSPB, Sandy, UK.

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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Bull Point

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

52 22 S 59 20 W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Bull Point is at the southernmost tip of mainland East Falkland, about 120 km SW of Stanley (population 1600).]

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): ?ca 3000?

Min. 0
Max. 200
Mean 50-100

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Bull Point is a low lying point at the southernmost tip of East Falkland. The habitat is varied, comprising upland heath in the highest areas, with a wide variety of rocky, boulder and sandy beaches around the coast. There are extensive dune systems covering much of the end and southern side of the point. Wide areas of grasslands and coastal greens interspersed with both permanent and seasonal pools provide habitat for wading birds and waterfowl. There is scattered tussac present at Porpoise Point and also on small islands immediately offshore.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 3, 6

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 The habitat is varied, comprising upland heath in the highest areas, with a wide variety of rocky and sandy beaches around the coast. There are extensive dune systems covering much of the end and southern side of the point. Wide areas of coastal greens interspersed with both permanent and seasonal pools provide habitat for wading birds and waterfowl. There is scattered tussac present at Porpoise Point and also on small islands immediately offshore. Inland, grasslands and some large pools provide habitat for both terrestrial and waterbirds.

- 3 The area often contains big congregations of several geese species, black-necked swan, speckled teal, Chiloe wigeon, flying steamer-duck, crested duck, yellow-billed pintail, silver teal, and visiting coscoroba swan, ashy-headed goose and big numbers of waders (mainly white-rumped sandpiper) mixing with local two-banded plovers, dotterels and the two species of oystercatchers.

- 6 9,500 breeding adult (Clausen and Huin 2002) gentoo penguins (> 1% global population); [possibly others under this criterion?]

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sand and mudstone of the Bay of Harbours formation
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent

Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.
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15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Bull Point is a low lying point at the southernmost tip of East Falkland. The habitat is varied, comprising upland heath in the highest areas, with a wide variety of rocky and sandy beaches around the coast. There are extensive dune systems covering much of the end and southern side of the point. Wide areas of coastal greens interspersed with both permanent and seasonal pools provide habitat for wading birds and waterfowl. There is scattered tussac present at Porpoise Point and also on small islands immediately offshore.

The area is well studied, with bi-annual visits by Falklands Conservation to conduct seabird monitoring. The two-hour overland journey from the nearest settlement at North Arm protects the site from large numbers of visitors, however the development of roads through East Falkland has made North Arm more accessible, and increasing development of tourism in the area may lead to higher visitor numbers.

The site is managed as part of a working farm and grazing has taken place for several years, however the tip of the point has now been completely cleared and fencing improved to prevent accidental access by stock. This has undoubtedly led to an improvement in the quality and diversity of the flora.

19. 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.*

Higher Plants [- several that will be of importance to detail]

Lower Plants

20. 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.*

The pool areas are particular favourites with birdwatchers and many rare and visiting species can be seen. Ashy-headed geese have been seen here as well as breeding black-necked swans. At the very southernmost tip, where a ring of dunes surrounds the central green areas, the density of penguins and geese during the summer months is extremely high. This can also be a good place to see juvenile striated caracara, and cinnamon teal. Chiloe wigeon are frequently recorded on the ponds. As with other sites on the Falklands, the gentoo penguin population has increased from 5,588 adults in 1995 to 9,500 adults in 2001. The area has extensive beach and dune areas which are known to be important for concentrations of white-rumped sandpipers, which may congregate here in numbers sufficient to qualify, however this needs to be quantified. Also in need of clarification are the presence of snipe and breeding brown-hooded gull. Short-eared owls have been recorded here, as have grass wren however again their status needs checking. Juvenile Striated Caracara have also been recorded at the tip of the peninsula, but there is no breeding presence of the species here.

Gentoo penguin	Near Threatened > 1% global	9,500 breeding adults (Clausen and Huin 2002).
Magellanic penguin	Near Threatened	Numbers unknown, but widespread and numerous.
White-tufted grebe	(Range-restricted) subsp	Several breeding pairs, numbers unknown.
Rock shag	> 1% global	
King shag	> 1% global	
Upland goose	(Range-restricted) subsp (> 1% pop) subsp	
Kelp goose	(Range-restricted) subsp (> 1% pop) subsp	
Ruddy-headed goose	Data-deficient Range-restricted > 1% pop	Widespread and numerous around greens. Numbers unknown.
Falkland steamer duck	Range-restricted > 1% pop	Widespread and numerous around coast. Numbers unknown.
Two-banded plover	(Range-restricted) subsp ??	
White-rumped sandpiper	> 1% pop	Lots
Tussacbird	Range-restricted	Presence confirmed. Numbers unknown.
Dark-faced ground-tyrant	(Range-restricted) subsp	
Falkland pipit	(Range-restricted) subsp	

Falkland thrush	(Range-restricted) subsp	
Black-throated finch	Data-deficient Range-restricted	Presence confirmed. Numbers unknown.
Long-tailed meadowlark	(Range-restricted) subsp	

There is a small breeding colony of seal on the far east point which produces less than 5 pups per year and the area is also a major haul out site. Elephant seals are regularly hauled out there too, but do not breed. The area often contains big congregations of several geese species, black-necked swan, speckled teal, Chiloe wigeon, flying steamer-duck, crested duck, yellow-billed pintail, silver teal, and visiting coscoroba swan, ashy-headed goose and big numbers of waders (mainly white-rumped sandpiper) mixing with local two-banded plovers, dotterels and the two species of oystercatchers. It is also a site of special interest for seawatching seabirds passing by the point.

21. Social and 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.

Livestock grazing

Other

Egging – the site forms one of the most heavily egged penguin colonies on East Falkland. Licences can be collected to obtain gentoo eggs and currently this is leading to a potential problem as numbers are decreasing, while demand stays the same, or even increases.

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	

23. Current land (including water) use:

Activity	On-site	Off-site	Scale

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

Activity	On-site	Off-site	Scale
Egging – see above			

25. 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
Nature Reserve	+	

26. Conservation measures proposed but not yet implemented:

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

Because of the remoteness of the site, access is at best difficult and therefore the numbers of visitors to this sensitive site are limited. With an increasing move toward developing and restoring 'outside'

houses as holiday homes, there is a risk that there may be increasing numbers of tourists to Bull Point. Particularly in the lower point area, it is extremely easy to cause disturbance, simply due to the volume of birds passing from one side of the point to the other and the open nature of the terrain. Guidelines should be in place to ensure that this is kept to a minimum. As with all sites on mainland East Falkland, Bull Point has feral cats and rats present, but it is not known to what extent they affect the bird populations. It could be possible to set some controls in place to try and reduce these populations.

As with all sites, the risk of fire is ever-present and again, there should be strict visitor guidelines to prevent this occurring accidentally. Deliberate grass fires are set in the southern half of East Falkland as part of traditional farming practise, however strict guidelines are in place to control this and limit the season when this is legal. It is unlikely that a practice such as this would lead to accidental burning at Bull Point.

Egging is an increasing problem at the site, as it is one of the few large gentoo colonies on east Falkland and has dropped in numbers since 2001-2. This has led to higher percentages of eggs being allowed to be taken than recommended. FIG are currently investigating this and it is hoped that improvements in the legislation / licensing system can be implemented to reduce / control the numbers of eggs taken per colony per year. (You may well have something off Andy for this – I just thought it needed to be in here as a site issue, but things may have moved on even in the last few weeks)

27. Current scientific research and facilities:

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

The site is monitored by Falklands Conservation twice a year for breeding species and numbers of penguins.

28. Current conservation education:

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

None at present

29. Current recreation and tourism:

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

Limited, although with the closure of other sites around the islands, tour guides are looking for other sites to visit and it is expected that this will increase significantly in the next few years.

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Private Owners

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International

- Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, **7**, 57-78
- Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press
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- Reijnders, P, Brasseur, S, van der Toorn, J, van der Wolf, P, Boyd, I, Harwood, J, Lavigne, D & Lowry, L (1993) *Seals, fur seals, sea lions and walrus*. IUCN/SSC Specialist Group, Gland
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- Scott, DA & Carbonell, M (eds.) (1986) *A directory of neotropical wetlands*. IUCN/IWRB, Cambridge/Slimbridge
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- Strange, IJ (1992) *A field guide to the wildlife of the Falkland Islands and South Georgia*. HarperCollins, London
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- Thompson, D (2003) *Southern Sea Lions of the Falkland Islands*. Falklands Conservation report to the Foreign and Commonwealth Office
- Thompson, D & Duck, CD (1995) *Southern sea lions Otaria flavescens in the Falkland Islands: population size, foraging behaviour and diet*. Falklands Conservation Report
- Tingley, G, Saunders, G, Harries, D & King, J (1996): *The first shallow marine survey around the Falkland Islands*. Report to Falkland Islands Government, Port Stanley, from IC Consultants, London
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- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
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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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Beauchêne Island

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

52 54' S 59 09' W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.
About 80 km south of the main Falklands archipelago. Nearest town is the Falkland Islands capital, Stanley (population 1600), about 200 km distant.

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): 187

Min. 0
Max. 82
Mean

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Forming the southernmost land in the Falklands archipelago, Beauchêne Island is located approximately 50 miles south of the Falkland Islands. It is a very important seabird site, holding the second largest colony of black-browed albatross and rockhopper penguin in the region. It has never been grazed or permanently settled and free of any introduced mammalian predators. The remote location and access difficulties have protected it from disturbance in recent years. The northern end of the island is covered in dense tussock and the coastline is gently sloping, up to around 30m high. The

southern end comprises higher cliffs, boulder beaches and elevation of around 80m, with fissured steep slopes. The last southern quarter of the island is almost bare of vegetation.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 5, 6

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 The island has never been grazed or permanently settled and free of any introduced mammalian predators. The remote location has protected it from disturbance in recent years. The northern end of the island is covered in dense tussock and the coastline is gently sloping, up to around 30m high. The southern end comprises higher cliffs, boulder beaches and elevation of around 70m, with fissured steep slopes. The last southern quarter of the island is almost bare of vegetation. It represents a fine example of Falklands tussac island habitat and representative fauna, in a nearly pristine condition.
- 2 Cobb's Wren has been recorded as breeding and appears to be fairly numerous, although numbers are unknown. The site is significant for the second largest Black-browed Albatross population and the second largest Rockhopper Penguin population in the world.
- 3 The site is significant for the second largest breeding population of Striated Caracara in the world. Given the location and the rodent free status, the site is also important for a range of petrels and prions, where huge numbers of Wilson's Storm-Petrel and Fairy Prion can be seen at night (only confirmed breeding site for these two species in the Falkland Islands).
- 5 Total congregation of waterbirds greatly exceeds 10,000 breeding pairs.
- 6 123,300 breeding adults (Clausen 2001) of Rockhopper penguin (> 10% of world population).

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sand, overlying sandstones of the West Falkland group
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
PH	circumneutral
Salinity	no information
Soil	mainly organic, some of the deepest peat soils in the Falklands have been found on Beauchene (Smith and Clymo 1984)
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	0
G	Tidal flats	0
Tp	Freshwater marshes / pools: permanent	0
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	0
N	Rivers / streams / creeks: seasonal / intermittent	0
O	Freshwater lakes: permanent	0

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Beauchene Island is the most southerly and isolated island of the Falklands group. It covers 187 hectares, rises to 82 m altitude above sea level and is 60% covered by continuous closed tussock grassland. The remainder of the land area is covered by dense mixed colonies of seabirds, including the second largest Rockhopper penguin and black-browed albatross colony in the Falklands. Several geological fault lines cross the island, resulting in a steeply fissured coast and cliffs.

19. 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.*

Species occurring at levels of national importance:

Higher Plants

Tussock grass

Lower Plants

20. 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.*

Cobb's Wren has been recorded as breeding and appears to be fairly numerous, although numbers are unknown. The site is significant for the second largest Black-browed Albatross population and the second largest Rockhopper Penguin population in the world and the second largest breeding population of Striated Caracara. Given the location and the rodent free status, the site is also important for a range of petrels and prions, where huge numbers of Wilson's Storm-Petrel and Fairy Prion can be seen at night (only confirmed breeding site for these two species in the Falkland Islands). Further work is required in quantifying these populations.

Gentoo penguin	Near Threatened	1,500 breeding adults (Clausen 2001)
Rockhopper penguin	Vulnerable (> 1% global) subsp > 10,000 pairs	123,300 breeding adults. (Clausen 2001)
Macaroni penguin	Vulnerable	5 to 25 birds (LS & P 1985)
Magellanic penguin	Near Threatened	50 pairs (LS & P 1985, FC unpub.)
Black-browed albatross	Endangered > 1% global > 10,000 pairs	206,100 breeding adults (Huin 2001)
Southern giant-petrel	Vulnerable	1 to 15 pairs (LS & P 1985, FC unpubl.)
Fairy prion	> 10,000 pairs	20,000 breeding adults (LS & P 1985, FC unpubl.)
Grey-backed storm petrel		Population unknown, but numerous and dispersed throughout tussac
Common diving-petrel	(> 1% global) subsp	Population numerous, at least in the hundreds
Rock shag	> 1% global	Dispersed on all major cliff faces
King shag	> 1% global	'100 to 500 breeding adults' (LS & P 1985, FC unpub.datasourc)
Striated caracara	Near Threatened Range-restricted > 1% global	130 breeding adults (Strange FC unpublished datasourc)
Tussacbird	Range-restricted	Population unknown, but numerous throughout the island
Cobb's wren	Vulnerable Range-restricted	Population unknown, but numerous on tussac fringe
Black-throated finch	Data-deficient Range-restricted	Up to 10 pairs in 2000

The island is also host to a few breeding Sea Lion and a major haul-out station for non-breeding animals, which can congregate in numbers up to a hundred individuals on the northern part of the island.

21. Social and 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.

22. Land tenure/ownership:

Ownership category	On-site	Off-site
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Falkland Islands Government	+	+
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23. Current land (including water) use:

Activity	On-site	Off-site	Scale
none			

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

Activity	On-site	Off-site	Scale
Sealers wiped out South American fur seal population of the island.			

25. 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
National Nature Reserve	+	

Because of its remote location, access is difficult to this island and protects it from accidental disturbance or visitor pressure. In recent years, there has been discussion of giving Beauchêne Island World Heritage Site status. This was decided against locally as it would draw attention and perhaps increased visitor numbers to the site. The introduction of rats/mice should be guarded against with all access restricted and strict guidelines followed to prevent this. Fire is a risk and all visitors should guard against this.

Access to the site is strictly controlled by the Environmental Planning Department of the Falkland Islands Government and unless specific reasons exist to visit the island that cannot be met elsewhere, generally access is prevented.

26. Conservation measures proposed but not yet implemented:

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

27. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.
Census of penguins and albatross every five years.

28. Current conservation education:

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

29. Current recreation and tourism:

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

None – cruise ships pass by the islands and some smaller ships will actively be involved in birdwatching close to shore, but none currently land. It is not expected that this will increase in the future.

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Stanley, Falkland Islands

31. 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.

Falkland Islands Government,
Government House, Stanley, Falkland Islands

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

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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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Jason Islands Group

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

dd mm ss S dd mm ss W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

The Jason Island Group stretch for about 50 km NW from about 20 km off the NW point of the main West Falkland archipelago.

Administrative region: Falkland Islands

8. **Elevation** (average and/or max. & min.) (metres): 9. **Area** (hectares): 3328

Min. 0
Max. 400
Mean

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The Jason Island group could arguable be considered the biodiversity hot-spot within the Falkland Islands archipelago. There are a wide range of habitats spread across a chain of 11 islands. Amongst the islands there are excellent examples of tussac island habitat, a range of coastal habitats including sand beaches, boulder beaches and cliffs, as well as inland grasslands and coastal greens. Much of the group is free of introduced predators and the principal ecological claim is the Falkland Islands largest

black-browed albatross and Rockhopper penguin colony located on Steeple Jason. This site is also thought to be the most important breeding site for the rare Striated Caracara within the Falklands.

The landscape ranges from coastal to upland feldmark formation, comprising balsam bog and rocky formations, with oceanic heath and scree slopes in between. Some islands have a history of grazing and accidental burning in the past, the most recent being Steeple Jason in 2002, however others are in a relatively pristine condition.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 6

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 A range of wetland types include tussock grass in a range of formations, higher altitude cushion plants and other low grasses, boulder beaches and low cliffs, some sheltered coves, where a variety of vegetation exists such as native woodrush *Luzula alopecurus*, celery *Apium australe* and swordgrass *Carex trifida*, grass and heath areas, dry upland heath, with balsam bogs and exposed rock layers. Some of the islands have dense tussock grass and have apparently never been grazed, including Flat Jason which is possibly the largest island in the Falklands archipelago never to have been grazed, partly due to the difficulties of access.
- 2 284,000 breeding adults (Clausen 2001) of Rockhopper penguins (Vulnerable); breeding Macaroni penguin (Vulnerable); 427,600 breeding adult Black-browed albatross (Endangered); 3,000 breeding adults on Grand and Steeple Jason and a small colony on the Fridays of Southern giant petrel (Vulnerable); breeding White-chinned petrel (Vulnerable); Cobb's wren (Vulnerable)
- 3 Supports populations of a range of bird species (see xx below) important for maintaining biological diversity. Largest breeding site for Striated Caracara in the world. New colony of Wilson Storm Petrel discovered on Steeple Jason, and may possibly breed on Grand Jason too.
- 6 24,600 breeding adults (Clausen 2001) of Gentoo penguins (4% world population); 284,000 breeding adults (Clausen 2001) of Rockhopper penguins (Vulnerable) (23% of world population)

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sand
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

Marine island group (see above)

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

All of the islands in the group are thought to be free of introduced predators, with the exception of Steeple Jason, which has a population of feral house mice. Many of the islands are in a natural state with much dense tussac and natural vegetation assemblages.

Steeple Jason is a large island of 8km length, running south-east to north west with an average width of around 1km. The island is divided into two main sections banded by a narrow waist, which marks the only break in a ridge of hills with steep slopes on both sides. The island peaks at 263m to the northern end and again at 290m to the southern end. To the north, the island forms an important area for breeding colonial seabirds, which also extend in more scattered colonies along the southern steep coastlines. The main stands of tussac are along the southern shorelines and extend from around 30m to the highest points of the island. Scattered patches of tussac also exist in the waist of the island and in one big patch in north of the middle of the northern half. The island has been stocked in the past with cattle and approximately 700 sheep between the 1920's and 1960's, however these were cleared in

1968 and since then some regeneration of the vegetation has occurred. In 2002 a fire broke out as a result of dry weather and a lightning strike, which has been contained to a narrow gully in the southern slopes of the north half of the island. This continued to burn, although control measures have been taken to ensure that this does not spread to sensitive areas. The fire is now totally extinguished (May 2003). A research station has been constructed on the northern half of the island and provides a potential site for much long-term research into Falklands ecology.

Grand Jason is the largest of the group and also has a history similar to that of Steeple Jason in terms of stocking. It comprises mixed terrain and habitat, ranging from steep cliffs and high plateau, gullies to dense tussac on the on west and south facing slopes. There are eroded areas and degradation, particularly at north, south-east and western extremes. The islands peak is at 361m and tussac is sparse above 60-90m, where the habitat changes to smaller cushion plants and other low grasses.

Steeple Islet is a small island, generally low-lying, with boulder beaches and low cliffs, sloping towards a rocky north-western point. Much of the island is covered in dense tussac grass and has apparently never been grazed.

Flat Jason is a low lying tussac island and possible the largest island in the Falklands archipelago never to have been grazed, partly due to the difficulties of access. The islands runs along a north-west to south-east axis, with an average width of some 600m. The centre of the island is thinner, forming a narrow waist, which may sometimes be tidally inundated. The northern coasts are mainly boulder beaches with rocky outcrops, whilst the southern shores are more formidable, consisting of steep-sided mini stacks and cliffs (Strange 1988). Much of the island is covered by dense tussac, however there are bare patches central to the southern region and along some sheltered coves, where a variety of vegetation exists such as native woodrush *Luzula alopecurus*, celery *Apium australe* and swordgrass *Carex trifida*.

Elephant Jason contains varied habitat, with the north, north east and south eastern coasts forming low lying plateaus thickly covered with dense tussac grass. This fringe of coastal tussac extends around the entire coast, giving way at the northern most end to grass and heath areas. The slopes inland are botanically rich, containing several endemic plants including smooth ragwort *Senecio vaginatus*, woolly ragwort *Senecio littoralis*, vanilla daisy *Leucheria suaveolens* and rock cress *Phlebotobium maclovianum*. There is evidence that in 1949 a severe fire affected the island and traces of this were still visible in the 1980's, having left much of the north west of the island devoid of vegetation and prone to erosion. The island was stocked briefly, when in 1967 the Falklands Government leased it for grazing of several hundred sheep. They were removed in 1971 and the island has not been grazed since. Around this time the island was also used for a base for sealing inspectors, who constructed a shanty on the island. The remains of the cast iron stove can still be seen. Despite it's history of use, the island is free of introduced mammalian pests.

South Jason is a long, narrow island, running almost due east-west and reaching over 7km in length and only 1 km wide at it's widest point. The entire island has a central ridge reaching around 300m in height, flattening out only at the eastern and western ends. The east end has a dense cover of tussac grass, whilst the west end is drier and consists of thin grassland. Much of the southern slopes are densely covered with tussac, while the northern slopes are rocky and have vegetation comprising of dry upland heath, with balsam bogs and exposed rock layers. The island has a history of fires. In 1960 the island was accidentally burnt and is reported to have continued burning for several months. In 2001, a further fire was caused by the detonation of unexploded ordnance on the northern coast, from a military plane that crashed there in 1982, with the fire burning through most of the southern slope tussac plantation. The level of damage caused by these incidents is not known, as the numbers of burrowing species and small passerines has never been estimated. The island is free of introduced predators.

South Fur is a small island lying around 5km off the south coast of Steeple Jason. Just 1 km long and 300m wide, it is composed mainly of large blue-grey dolerite boulders, interspersed with tussac, all

fairly low but quite dense. The island's highest point is only 18m. It is free from introduced predators and there is no history of stocking.

North Fur lies north east of Flat Jason and is extremely difficult to access due to steep cliffs formed from vertically bedded rocks. Vegetation is limited to tussac where a sufficient depth of peat lies and native stonecrop *Crassula maschata* and swordgrass. It has never been stocked and is free of introduced predators.

There is little information available on Clarke's Islet.

Finally, the Fridays are two small islands situated around 5kms from the north west coast of Flat Jason. Both are low lying, and consist of large coastal rocky strike ridges with tussac between. On the larger of the two, this area gives way in the centre to an area of open peaty ground which is the site of a giant petrel colony.

19. 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.*

Elephant Jason contains varied habitat, with the north, north east and south eastern coasts forming low lying plateaus thickly covered with dense tussac grass. This fringe of coastal tussac extends around the entire coast, giving way at the northern most end to. The slopes inland are botanically rich, containing several endemic plants including smooth ragwort *Senecio vaginatus*, woolly ragwort *Senecio littoralis*, vanilla daisy *Leucheria suaveolens* and rock cress *Phlebotobium maclovianum*.

20. 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.*

Gentoo penguin	Near Threatened > 1% global > 10,000 pairs	24,600 breeding adults (Clausen 2001)
Rockhopper penguin	Vulnerable (> 1% global) subsp > 10,000 pairs	c. 284,000 breeding adults (Clausen 2001)
Macaroni penguin	Vulnerable	10 pairs maximum
Magellanic penguin	Near Threatened	Confirmed presence on Steeple, Grand and Elephant Jason – numbers unknown
Black-browed albatross	Endangered > 1% global > 10,000 pairs	427,600 breeding adults
Southern giant petrel	Vulnerable > 1% global	3,000 breeding adults on Grand and Steeple Jason. Small colony on the Fridays
White-chinned petrel	Vulnerable	Needs to be confirmed and numbers
Grey backed storm petrel	> 1% global	Uncounted, probably numerous. Presence confirmed on South Fur, the Fridays and Elephant Jason.
Common diving	(> 1% global) subsp	Presence likely – needs confirmation

petrel		
Rock shag	> 1% global	Presence confirmed – numbers unknown
King shag	> 1% global	Presence confirmed – numbers unknown
Black-crowned night heron	(Range-restricted) subsp	Presence confirmed – numbers unknown
Upland goose	(Range-restricted) subsp	
	(> 1% pop) subsp	
Kelp goose	(Range-restricted) subsp	
	(> 1% pop) subsp	
Ruddy-headed goose	Data-deficient	
	Range-restricted	
	> 1% pop	
Falkland steamer duck	Range-restricted	Numbers unknown
	> 1% pop	
Striated caracara	Near Threatened	c. 500 breeding pairs (Woods and Smith 1998) on all islands (half the world's population)
	Range-restricted	
	> 1% global	
Two-banded plover	(Range-restricted) subsp ??	
Magellanic snipe	(Range-restricted) subsp ??	
Dolphin gull	> 1% global	
Short-eared owl	(Range-restricted) subsp	Presence confirmed – numbers unknown
Tussacbird	Range-restricted	Presence confirmed – numbers unknown, very numerous
Dark-faced ground-tyrant	(Range-restricted) subsp	
Falkland pipit	(Range-restricted) subsp	
Grass wren	(Range-restricted) subsp	
Cobb's wren	Vulnerable	Presence confirmed on Steeple, Grand, South and Elephant Jason – numbers unknown
	Range-restricted	
Falkland thrush	(Range-restricted) subsp	
Black-throated finch	Data-deficient	Presence confirmed – numbers unknown
	Range-restricted	
Long-tailed meadowlark	(Range-restricted) subsp	

The presence of breeding elephant seal(?), southern sea lion and fur seal has been confirmed on most of the islands in the group. There are 200 sealion pups in the archipelago, plus lots of non-breeding adults and sub adults. Islands where breeding occurs are Steeple Jason (61 pups), Fridays (25), Flat Jason (23), Elephant Jason (23), South Jason (4), South Fur (7). Fur seals breed on Jason West (2000) and East (2000) Cays, Seal Rocks (200), Elephant Jason (200) and North Fur (100 pups). Elephant seals may breed on these islands from time to time, but not in any significant numbers.

21. Social and 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.

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Falkland Islands Government	+	+
Private (Conservation foundation)	+	

Steeple 790 ha, Grand Jason 1380 ha & Clarke's 5ha Islands are privately owned by the Wildlife Conservation Society

Steeple Islet 22 ha, Flat Jason 375ha, Elephant Jason 260ha, South Jason 375ha, North Fur 75ha, South Fur 25ha, The Fridays (2) 21ha are owned by Falkland Islands Government.

23. Current land (including water) use:

Activity	On-site	Off-site	Scale

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

Activity	On-site	Off-site	Scale

25. 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

No information provided.

26. Conservation measures proposed but not yet implemented:

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

The archipelago is being developed into a tourism destination for cruise ships. With it this brings an inherent risk of fire and related disturbance and erosion issues. There is potential for this to be carefully managed at present and, along with the research centre the islands, could provide a good example of sustainable tourism in the Falklands. Fire guidelines and introduction of pests should be issues addressed as part of a tourism management strategy.

The presence of mice on Steeple Jason poses a potential threat to ground nesting species and smaller passerines, which would benefit from eradication of this introduced species.

There is currently much information not known about the true importance of this island group within the Falklands and it would benefit from further survey to assess true population figures. In addition, past fires and grazing has left certain areas badly eroded, which could be improved by re-planting programmes.

27. Current scientific research and facilities:

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

28. Current conservation education:

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

29. Current recreation and tourism:

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

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Stanley, Falkland Islands

31. 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.

Falkland Islands Government, Government House, Stanley, Falkland Islands
Wildlife Conservation Society, Bronx Zoo, New York, USA

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International

Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78

Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press

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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)

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Moore, DM (1973) Additions and amendments to the vascular flora of the Falkland Islands. *British Antarctic Survey Bulletin*, 85-88

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Scott, DA & Carbonell, M (eds.) (1986) *A directory of neotropical wetlands*. IUCN/IWRB, Cambridge/Slimbridge

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Strange, IJ, Parry, CJ, Parry, MC & Woods, RW (1988) *Tussac grass in the Falklands*. Falkland Island Foundation Project Report

Summers, RW & McAdam, JH (1993) *The upland goose*. Bluntisham Books, Bluntisham

Thompson, D (2003) *Southern Sea Lions of the Falkland Islands*. Falklands Conservation report to the Foreign and Commonwealth Office

- Thompson, D & Duck, CD (1995) *Southern sea lions* *Otaria flavescens in the Falkland Islands: population size, foraging behaviour and diet*. Falklands Conservation Report
- Tingley, G, Saunders, G, Harries, D & King, J (1996): *The first shallow marine survey around the Falkland Islands*. Report to Falkland Islands Government, Port Stanley, from IC Consultants, London
- Wilson, P, Clark, R, McAdam, JH & Copper, EA (1993) Soil erosion in the Falkland Islands: an assessment. *Applied Geography*, **13**, 329-352
- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
- Woods, R, Stevenson, J, Ingham, R, Huin, N, Clausen, A & Brown, A (2005, in prep) Important Bird Areas in The Falkland Islands. In Sanders, S.M. et al (eds) *Important Bird Areas in the United Kingdom Overseas Territories*. RSPB, Sandy, UK.

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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Keppel Island

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

dd mm ss S dd mm ss W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Keppel Island lies approximately 5 km off the north west coast of West Falkland mainland.

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): (Island is 3626 ha)

Min. 0
Max. ?
Mean ?

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Keppel Island peaks at around 400 metres on Mount Keppel. The landscape rises steeply from a central valley, forming a ridge around the south west of the island. There is a large flat valley containing several freshwater lakes and large populations of waterfowl. The coast comprises several sandy beaches and bays and cover of tussac is limited. There is a large area of sand dunes on the north-eastern coast. The majority of the islands is covered by heathland and whitegrass associations, with the north east coast having large green areas interspersed with Magellanic penguin burrows and frequented by flocks of assorted geese.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 5, 6

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

1 Priority wetlands including dunes and other wet grasslands

2

Gentoo penguin	Near Threatened > 1% global > 10,000 pairs	2,500 breeding adults (Clausen 2001)
Rockhopper penguin	Vulnerable	1,564 breeding adults (Clausen 2001)
Magellanic penguin	Near Threatened	Widespread and numerous, numbers unknown
Black-browed albatross	Endangered	3,378 breeding adults
Ruddy-headed goose	Data-deficient > 1% pop	Widespread and numerous
Black-throated finch	Data-deficient	Presence confirmed – numbers unknown

3

Gentoo penguin	Near Threatened > 1% global > 10,000 pairs	2,500 breeding adults (Clausen 2001)
Rockhopper penguin	Vulnerable	1,564 breeding adults (Clausen 2001)
Magellanic penguin	Near Threatened	Widespread and numerous, numbers unknown
White-tufted grebe	(Range- restricted) subsp	
Black-browed albatross	Endangered	3,378 breeding adults
Rock shag	> 1% global	
King shag	> 1% global	
Black-crowned night heron	(Range- restricted) subsp	
Upland goose	(Range- restricted)	Widespread and numerous

	subsp (> 1% pop)	
Kelp goose	subsp (Range-restricted)	Widespread and numerous
	subsp (> 1% pop)	
Ruddy-headed goose	subsp Data-deficient Range-restricted > 1% pop	Widespread and numerous
Falkland steamer duck	subsp Range-restricted > 1% pop	Numerous around coasts - numbers unknown
Two-banded plover	subsp (Range-restricted)	Present
Magellanic snipe	subsp ?? (Range-restricted)	Present
Dolphin gull	subsp ?? > 1% global	
Dark-faced ground-tyrant	(Range-restricted)	Presence confirmed
Falkland pipit	subsp (Range-restricted)	
Grass wren	subsp (Range-restricted)	
Falkland thrush	subsp (Range-restricted)	
Black-throated finch	subsp Data-deficient Range-restricted	Presence confirmed – numbers unknown
Long-tailed meadowlark	(Range-restricted) subsp	

Robinson's Point on the northern coast is a popular haul out site for elephant seals and in past years there have occasionally been pups born here, although not regularly. Fuegian otters have been seen here within the last ten years, although as with all sightings of this species, it is largely unsubstantiated and no breeding sites have been found.

5 Exceeds 20,000 water-birds (see other criteria and section 20)

6

Gentoo penguin	Near Threatened > 1% global > 10,000 pairs	2,500 breeding adults (Clausen 2001)
Rock shag	> 1% global	

King shag	> 1% global	
Upland goose	(Range-restricted) subsp (> 1% pop)	Widespread and numerous
Kelp goose	(Range-restricted) subsp (> 1% pop)	Widespread and numerous
Ruddy-headed goose	Data-deficient Range-restricted > 1% pop	Widespread and numerous
Falkland steamer duck	Range-restricted > 1% pop	Numerous around coasts - numbers unknown
Dolphin gull	> 1% global	

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sandstones of both the Port Stephens and Fox Bay formations underlay.
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Keppel Island peaks at around 400 metres on Mount Keppel. The landscape rises steeply from a central valley, forming a ridge around the south west of the island. There is a large flat valley containing several freshwater lakes and large populations of waterfowl. The coast comprises several sandy beaches and bays and cover of tussac is limited. There is a large area of sand dunes on the north-eastern coast. The majority of the islands is covered by heathland and whitegrass associations, with the north east coast having large green areas interspersed with Magellanic penguin burrows and frequented by flocks of assorted geese.

19. 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.*

20. 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.*

Grass wren, white-tufted grebe and black-necked swans are often seen, especially on the ponds in the central valley.

Gentoo penguin	Near Threatened > 1% global > 10,000 pairs	2,500 breeding adults (Clausen 2001)
Rockhopper penguin	Vulnerable	1,564 breeding adults (Clausen 2001)

Magellanic penguin	Near Threatened	Widespread and numerous, numbers unknown
White-tufted grebe	(Range-restricted) subsp	

Black-browed albatross	EN	3,378 breeding adults
Rock shag	> 1% global	Presence confirmed – numbers unknown
King shag	> 1% global	Presence confirmed – numbers unknown
Black-crowned night heron	(Range-restricted) subsp	Presence confirmed – numbers unknown
Upland goose	(Range-restricted) subsp	Widespread and numerous
Kelp goose	(> 1% pop) subsp (Range-restricted) subsp	Widespread and numerous
Ruddy-headed goose	(> 1% pop) subsp Data-deficient Range-restricted	Widespread and numerous
Falkland steamer duck	> 1% pop Range-restricted	Numerous around coasts - numbers unknown
Two-banded plover	> 1% pop (Range-restricted) subsp ??	Present
Magellanic snipe	(Range-restricted) subsp ??	Present
Dolphin gull	> 1% global	
Dark-faced ground-tyrant	(Range-restricted) subsp	Presence confirmed
Falkland pipit	(Range-restricted) subsp	
Grass wren	(Range-restricted) subsp	
Falkland thrush	(Range-restricted) subsp	
Black-throated finch	Data-deficient Range-restricted	Presence confirmed – numbers unknown
Long-tailed meadowlark	(Range-restricted) subsp	

Robinson's Point on the northern coast is a popular haul out site for elephant seals and in past years there have occasionally been pups born here, although not regularly. Fuegian otters have been seen here within the last ten years, although as with all sightings of this species, it is largely unsubstantiated and no breeding sites have been found.

21. Social and 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.

The island has been uninhabited year-round now since 1992, however the settlement at Keppel is considered one of the most historic sites in the Falklands, the first permanent settlement in the archipelago and home to the Patagonian missionary society until 1911, who ran the island as a farm and a religious mission from the mid 19th century with a population of native South American Indians.

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	+

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Limited tourism	+		Small-scale
Preservation of buildings	+		Small scale

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

Activity	On-site	Off-site	Scale
The introduced gorse around the settlement has increased dramatically in the last few years and despite control undertaken each year, continues to pose a significant fire risk to both building and peatlands around the settlement.	+		Large-scale

25. 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
Control of gorse by both manual and chemical means is undertaken each year.	+	+
Visitors to the island are well-informed of the risk of fire and are well guided by expedition staff on board cruise ships.	+	+

26. Conservation measures proposed but not yet implemented:

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

Keppel Island has a high incidence of introduced rats and the population is both obvious and having a clear negative impact. Eradication of the island is a possibility but this would entail the use of helicopters and is beyond the scale of this operation in the Falklands at the present time.

The island has high levels of introduced gorse around the settlement and this is an issue, which needs to be addressed and managed to prevent a fire risk, both to the entire island and the buildings of importance that it surrounds. Control takes place as above....

Cruise ships will begin visiting the island in late 2003 and this could lead to disturbance of the breeding bird populations. There should be consideration given to year-round occupancy of the island as this would afford a level of protection to the site and also facilitate the management of introduced species.

The presence of burrowing petrels is suspected, from the presence of burrows and traces of petrels, however this would be severely impacted by the very high rat population. The status of these birds on the island requires clarification.

27. Current scientific research and facilities:

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

None – other than penguin census

28. Current conservation education:

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

A leaflet on the site, the sensitivity of both the island and the buildings, as well as the wildlife is available for all visitors and the site is also listed in the 'Visitors Guide to the Falklands'.

29. Current recreation and tourism:

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

Approximately 150 people per year visit the site, mostly for either management of the settlement, or on cruise ships

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Private Owners

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

- Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International
- Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78
- Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press
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- Moore, DM (1968) *The vascular flora of the Falkland Islands*. British Antarctic Survey, Cambridge (Scientific Reports, No. 60)
- Moore, DM (1973) Additions and amendments to the vascular flora of the Falkland Islands. *British Antarctic Survey Bulletin*, 85-88
- Reijnders, P, Brasseur, S, van der Toorn, J, van der Wolf, P, Boyd, I, Harwood, J, Lavigne, D & Lowry, L (1993) *Seals, fur seals, sea lions and walrus*. IUCN/SSC Specialist Group, Gland
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- Summers, RW & McAdam, JH (1993) *The upland goose*. Bluntisham Books, Bluntisham
- Thompson, D (2003) *Southern Sea Lions of the Falkland Islands*. Falklands Conservation report to the Foreign and Commonwealth Office
- Thompson, D & Duck, CD (1995) *Southern sea lions Otaria flavescens in the Falkland Islands: population size, foraging behaviour and diet*. Falklands Conservation Report
- Tingley, G, Saunders, G, Harries, D & King, J (1996): *The first shallow marine survey around the Falkland Islands*. Report to Falkland Islands Government, Port Stanley, from IC Consultants, London
- Wilson, P, Clark, R, McAdam, JH & Copper, EA (1993) Soil erosion in the Falkland Islands: an assessment. *Applied Geography*, **13**, 329-352
- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
- Woods, R, Stevenson, J, Ingham, R, Huin, N, Clausen, A & Brown, A (2005, in prep) Important Bird Areas in The Falkland Islands. In Sanders, S.M. et al (eds) *Important Bird Areas in the United Kingdom Overseas Territories*. RSPB, Sandy, UK.

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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Hawks Nest Ponds

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

dd mm ss S dd mm ss W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

10 km north-east of the small settlement of Fox Bay, West Falkland, and about 130 km west of Stanley (population 1600).

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): ?

Min. ?
Max. ?
Mean ?

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Area of grazed grassland, with many standing seasonal pools and several large permanent lakes. Important for waterfowl. The area contains a wide diversity of wetland sites, from pools and marsh to wet peatland and including the headwaters of the Hawk's Nest Arroyo. The area has been lightly grazed, but the majority of the site remains untouched by man's influence.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 3, 6, 7

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 Area of grazed grassland, with many standing seasonal pools and several large permanent lakes. The area contains a wide diversity of wetland sites, from pools and marsh to wet peatland and including the headwaters of the Hawk's Nest Arroyo. The area has been lightly grazed, but the majority of the site remains untouched by man's influence.
- 3 The site is considered to be of particular importance for the black-crowned night heron and there are reports of silvery grebe breeding there as well as Black-necked swans, flying steamer-duck, Chiloe wigeon, speckled teal, crested duck and yellow-billed pintail.
- 6
- | | |
|--------------------|------------------|
| Upland goose | (> 1% pop) subsp |
| Ruddy-headed goose | > 1% pop |
- [possibly some of the other waterfowl species?]
- 7 The site is of particular interest as many of the pools and streams still contain the native zebra trout, *Aplochiton zebra*, rare across most of the Falkland Islands since the introduction of the brown trout *Salmo trutta*, which has reduced the native fish by both predation and competition.

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sand
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent

Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.
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15. 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).

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Area of grazed grassland, with many standing seasonal pools and several large permanent lakes. Important for waterfowl. The area contains a wide diversity of wetland sites, from pools and marsh to wet peatland and including the headwaters of the Hawk's Nest Arroyo. The area has been lightly grazed, but the majority of the site remains untouched by man's influence.

19. 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.*

20. 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.*

The site is considered to be of particular importance for the black-crowned night heron and there are reports of silvery grebe breeding there as well as Black-necked swans, flying steamer-duck, Chiloe wigeon, speckled teal, crested duck and yellow-billed pintail.

White-tufted grebe (Range-restricted) subsp Several breeding pairs, numbers unknown.

Black-crowned night-heron	(Range-restricted) subsp	
Upland goose	(Range-restricted) subsp (> 1% pop) subsp	
Ruddy-headed goose	Data-deficient Range-restricted > 1% pop	Widespread and numerous. Numbers unknown.
Falkland steamer duck	Range-restricted	Widespread and numerous around coast. Numbers unknown.
Magellanic snipe	(Range-restricted) subsp ??	
Falkland pipit	(Range-restricted) subsp	
Black-throated finch	Data-deficient Range-restricted	
Long-tailed meadowlark	(Range-restricted) subsp	

The site is of particular interest as many of the pools and streams still contain the native zebra trout, *Aplochiton zebra*, rare across most of the Falkland Islands since the introduction of the brown trout *Salmo trutta*, which has reduced the native fish by both predation and competition.

21. Social and 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.

Livestock grazing

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
Livestock watering hole/pond			
Grazing (unspecified)			

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

Activity	On-site	Off-site	Scale

25. 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

26. Conservation measures proposed but not yet implemented:

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

Large scale burning of open grassland areas still takes place within the Falkland Islands as part of traditional farming practices. In recent years, this has posed a threat to areas of Hawk's Nest Ponds. New legislation brought into force in the last year has now regulated this practice further, which should prevent accidental cases of burning.

There is little tourism at the site and the scale of impact from introduced cats and rats is not known. This is worthy of study and the entire site is in need of recent and thorough assessment.

Little is known of the distribution of the zebra trout at this site and is worthy of further study.

27. Current scientific research and facilities:

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

28. Current conservation education:

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

29. Current recreation and tourism:

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

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Private Owner

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International

Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78

Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press

Greenway, ME (1972) *Geology of the Falkland Islands*. British Antarctic Survey (Scientific Report, No. 76)

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)

Jones, AG (2004) *A guide to the Insects of the Falklands*. Falklands Conservation

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- Reijnders, P, Brasseur, S, van der Toorn, J, van der Wolf, P, Boyd, I, Harwood, J, Lavigne, D & Lowry, L (1993) *Seals, fur seals, sea lions and walrus*. IUCN/SSC Specialist Group, Gland
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- Scott, DA & Carbonell, M (eds.) (1986) *A directory of neotropical wetlands*. IUCN/IWRB, Cambridge/Slimbridge
- Simpson, N (1991) Aspects of Falklands freshwater ecology. *The Warrah, Newsletter of Falklands Conservation*, **1**, **
- Strange, IJ (1992) *A field guide to the wildlife of the Falkland Islands and South Georgia*. HarperCollins, London
- Strange, IJ, Parry, CJ, Parry, MC & Woods, RW (1988) *Tussac grass in the Falklands*. Falkland Island Foundation Project Report
- Summers, RW & McAdam, JH (1993) *The upland goose*. Bluntisham Books, Bluntisham
- Thompson, D (2003) *Southern Sea Lions of the Falkland Islands*. Falklands Conservation report to the Foreign and Commonwealth Office
- Thompson, D & Duck, CD (1995) *Southern sea lions Otaria flavescens in the Falkland Islands: population size, foraging behaviour and diet*. Falklands Conservation Report
- Tingley, G, Saunders, G, Harries, D & King, J (1996): *The first shallow marine survey around the Falkland Islands*. Report to Falkland Islands Government, Port Stanley, from IC Consultants, London
- Wilson, P, Clark, R, McAdam, JH & Copper, EA (1993) Soil erosion in the Falkland Islands: an assessment. *Applied Geography*, **13**, 329-352
- Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry
- Woods, R, Stevenson, J, Ingham, R, Huin, N, Clausen, A & Brown, A (2005, in prep) Important Bird Areas in The Falkland Islands. In Sanders, S.M. et al (eds) *Important Bird Areas in the United Kingdom Overseas Territories*. RSPB, Sandy, UK.

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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

Bird Island

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

52 10 S 60 55 W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Bird Island is located 4.5 km off the south west coast of West Falkland

Administrative region: Falkland Islands

8. Elevation (average and/or max. & min.) (metres): 9. Area (hectares): 120

Min.	0
Max.	150
Mean	50

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The island comprises three promontories up and away from a very low centre, the middle of which is marked by a seasonal pool (Strange 1988). Each promontory has tall stands of mature tussac, showing no traces of burning in the past, interspersed with bedrock at the coastal fringes. The island has no introduced pests and is one of the most important breeding sites for striated caracara and the fur seal, which numbers nearly 10,000 on the island. It is thought that the population here is as dense as on any offshore island around the Falklands, possibly due to the density of the population of thin-billed prion,

an important prey species (Woods 2001). There is no history of stocking this island, although early records do show that early sealers collected fur seal here, as well as penguin and albatross eggs.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 4, 6

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 The islands comprises three promontories up and away from a very low centre, the middle of which is marked by a seasonal pool (Strange 1988). Each promontory has tall stands of mature tussac, showing no traces of burning in the past, interspersed with bedrock at the coastal fringes. The island has no introduced pests and there is no history of stocking this island.
- 2 15,000 breeding adults (Clausen and Huin 2002) of Rockhopper penguins (Vulnerable); breeding Macaroni penguin (Vulnerable); 19,000 breeding adults (Huin 2001) of Black-browed Albatross (Engangered); uncounted, but probably a large population of Cobb's Wren.
- 3 The total congregation of seabirds on this island exceeds 10,000 breeding pairs. This island is also the third biggest place for breeding Striated Caracaras. Deep tussac cover throughout the island makes it comparable to Beauchêne Island for the density of burrowing night petrels.
- 4 There are two colonies of fur seal *Arctocephalus australis* present on Bird Island, one of approximately 100 individuals on the northern coast, the second much larger on the south western coast comprising approximately 10,000 individuals. This makes this island the largest fur seal colony within the Falklands archipelago. The island also provides a haul out for Sea Lion, although none actually breed here.
- 6 15,000 breeding adults (Clausen and Huin 2002) of Rockhopper penguins (> 1% of world population)

13. 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:

b) biogeographic regionalisation scheme (include reference citation):

14. 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	peat, quartzite, sandstone of the Albemarle member of the Port Stephens formation.
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Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

The islands comprises three promontories up and away from a very low centre, the middle of which is marked by a seasonal pool (Strange 1988). Each promontory has tall stands of mature tussac, showing no traces of burning in the past, interspersed with bedrock at the coastal fringes. The island has no introduced pests and is one of the most important breeding sites for striated caracara. It is thought that the population here is as dense as on any offshore island around the Falklands, possibly due to the density of the population of thin-billed prion, an important prey species (Woods 2001). There is no history of stocking this island, although early records do show that early sealers collected fur seal here, as well and penguin and albatross eggs.

19. 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.*

20. 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.*

The total congregation of seabirds on this island exceeds 10,000 breeding pairs. This island is also the third biggest place for breeding Striated Caracaras. Deep tussac cover throughout the island makes it comparable to Beauchêne Island for the density of burrowing night petrels.

Rockhopper penguin	Vulnerable (> 1% global) subsp	15,000 breeding adults (Clausen 2001)
Macaroni penguin	Vulnerable	Few pairs
White-tufted grebe	(Range-restricted) subsp	
Black-browed albatross	Endangered > 1% global	19,000 breeding adults (Huin 2001)
Thin-billed prion	> 1% global > 10,000 pairs	Very large population (thousands).
Grey-backed storm petrel	> 1% global	Probable large population, uncounted at present.
Common diving petrel	(> 1% global) subsp	Uncounted, but probably a large population
Rock shag	> 1% global	Recorded 2001 (FC databases)
King shag	> 1% global	Recorded 2001 (FC databases)
Black-crowned night-heron	(Range-restricted) subsp	Recorded 2001 (FC databases)
Upland goose	(Range-restricted) subsp	Recorded 2001 (FC databases)
Kelp goose	(Range-restricted) subsp	Recorded 2001 (FC databases)
Ruddy-headed goose	Data-deficient Range-restricted	Recorded 2001 (FC databases)
Falkland steamer duck	Range-restricted	Recorded 2001 (FC databases)
Striated caracara	Near Threatened Range-restricted > 1% global	100 breeding adults (Woods and Smith 1998)
Dolphin gull	> 1% global	
Tussacbird	Range-restricted	
Dark-faced ground-tyrant	(Range-restricted) subsp	
Cobb's wren	Vulnerable Range-restricted	Uncounted, but probably a large population
Falkland thrush	(Range-restricted) subsp	
Black-throated finch	Data-deficient Range-restricted	
Long-tailed meadowlark	(Range-restricted) subsp	

There are two colonies of fur seal *Arctocephalus australis* present on Bird Island, one of approximately 100 individuals on the northern coast, the second much larger on the south western coast comprising approximately 10,000 individuals. This makes this island the largest fur seal colony

within the Falklands archipelago. The island also provides a haul out for Sea Lion, although none actually breed here.

21. Social and 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.

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Falkland Islands Government	+	+

23. Current land (including water) use:

Activity	On-site	Off-site	Scale
None aware of			

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

Activity	On-site	Off-site	Scale
None aware of			

25. 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
National Nature Reserve	+	

26. Conservation measures proposed but not yet implemented:

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

Fire and introduction of pests is a threat and all parties who visit should take reasonable precautions to guard against this. Appropriate guidelines are in place to prevent damage of this kind, as all visitors have to first get a licence to visit from the Environmental Planning Department and this contains specific guidelines for the site.

27. Current scientific research and facilities:

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

One of the main priorities for this island is to quantify the populations of burrowing petrels and passerines of interest, to determine the true importance of this site. The population of striated caracara raise an issue of public safety, conservation and methods of control, as the young birds from this site cause a problem at farms on neighbouring West Falkland, which have requested permission to cull these animals in the past. Work to establish the cause and effects of this could be extremely beneficial to understanding both the ecology of the striated caracara and the reason for the problem on certain farms. This should be seen a priority in the future.

28. Current conservation education:

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

None

29. Current recreation and tourism:

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

None, apart from the very occasional local visit – perhaps 2-5 people per year.

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Site-relevant references

- Butchart, S and Stattersfield A (2004) *State of the Worlds Birds* (check ref – may be more authors). BirdLife International
- Clark R, McFadyen, A, Simpson, N & Wilson, P (1997) Aspects of Falklands earth science and ecology. *Falkland Islands Journal*, 7, 57-78
- Clausen, A and Huin, N (2004) *Falkland Islands Penguin Census 2000/01*. Waterbirds. In press
- Greenway, ME (1972) *Geology of the Falkland Islands*. British Antarctic Survey (Scientific Report, No. 76)
- 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)
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- Moore, DM (1968) *The vascular flora of the Falkland Islands*. British Antarctic Survey, Cambridge (Scientific Reports, No. 60)
- Moore, DM (1973) Additions and amendments to the vascular flora of the Falkland Islands. *British Antarctic Survey Bulletin*, 85-88
- Reijnders, P, Brasseur, S, van der Toorn, J, van der Wolf, P, Boyd, I, Harwood, J, Lavigne, D & Lowry, L (1993) *Seals, fur seals, sea lions and walrus*. IUCN/SSC Specialist Group, Gland
- Robinson, GS (1984) *Insects of the Falkland Islands: A checklist and bibliography*. British Museum (Natural History), London
- Scott, DA & Carbonell, M (eds.) (1986) *A directory of neotropical wetlands*. IUCN/IWRB, Cambridge/Slimbridge
- Simpson, N (1991) Aspects of Falklands freshwater ecology. *The Warrah, Newsletter of Falklands Conservation*, 1, **
- Strange, IJ (1992) *A field guide to the wildlife of the Falkland Islands and South Georgia*. HarperCollins, London
- Strange, IJ, Parry, CJ, Parry, MC & Woods, RW (1988) *Tussac grass in the Falklands*. Falkland Island Foundation Project Report
- Summers, RW & McAdam, JH (1993) *The upland goose*. Bluntisham Books, Bluntisham
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- Tingley, G, Saunders, G, Harries, D & King, J (1996): *The first shallow marine survey around the Falkland Islands*. Report to Falkland Islands Government, Port Stanley, from IC Consultants, London
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Woods, RW & Woods, A (1997) *Atlas of the breeding birds of the Falkland Islands*. Nelson, Oswestry

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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

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

UK Overseas Territories Conservation Forum
102 Broadway
Peterborough PE1 1JY
UK
Email: pienkowski@cix.co.uk

FOR OFFICE USE ONLY.

DD MM YY		

Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

11 November 2004

3. Country:

UK (Falkland Islands)

4. Name of the Ramsar site:

New Island Group

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) **hard copy** (required for inclusion of site in the Ramsar List): yes -or- no

b) **digital (electronic) format** (optional): Yes

6. Geographical coordinates (latitude/longitude):

dd mm ss S dd mm ss W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Furthest west group of islands in the central and southern parts of the archipelago, and lying about 240 km west of Stanley (population 1600).

Administrative region: Falkland Islands

8. **Elevation** (average and/or max. & min.) (metres): 9. **Area** (hectares): 2544 [+ any marine addition]

Min. 0
Max. ?
Mean ?

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

New Island is considered to be one of the finest wildlife areas in the Falklands. This is largely because of the variety and density of bird life which lives there. In particular, the colonies of gentoo, rockhopper penguin and black-browed albatross, the later numbering 24,000 breeding adults (Strange 2000). New Island is perhaps the worlds most important breeding ground for Thin-billed prions, with a breeding population of 4 million breeding adults (Catry, Campos, Segurado, Silva & Strange 2003).

Some smaller islands off New Island are in need of further survey, but the presence of striated caracara on North Island, Beef Island and Ship Island was confirmed by Strange (1983). It is probable the species is also breeding on Seal Rocks and Cliff Knob Is.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 4, 5, 6, ?7, ?8

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1 A range of habitats and complex juxtapositions, including a formidable coastline of cliffs which peak at some 240m, rocky islets, lower lying and gently sloped coasts with rocky shores and sandy bays, tussac grass areas, coastal heath, grassland, balsam bog and bluegrass.
- 2 Breeding Rockhopper penguins (Vulnerable), occasionally Macaroni penguin (Vulnerable), 60,000 breeding adult Black-browed albatross (Endangered) (> 5% global population), one of only 2 sites in the Falklands for breeding White-chinned petrels, Cobb's wren (Vulnerable).
- 3 Breeding Gentoo penguins (Near Threatened), Magellanic penguin (Near Threatened), over 4 million adult breeding Thin-billed prions (Vulnerable), endemic Falkland steamer duck, 5% global population of Striated caracara (Near Threatened), and endemic and/or range-restricted passerines: Tussac Bird, Falkland pipit, Grass wren, Falkland thrush, Black-throated finch, Long-tailed meadowlark.
- 4 One of the Falklands important breeding sites for fur seals.
- 5 More than 20,000 breeding waterfowl
- 6 approximately 27,000 breeding adult Rockhopper penguin (> 2% global population); > 1% of population of Upland goose moult and many breed; 1% of population of Kelp goose breed.
- 7 ? ADD
- 8 ? ADD

13. 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:

b) biogeographic regionalisation scheme (include reference citation):**14. 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	peat, quartzite, sand
Geomorphology and landscape	cliffs, estuary, lowland, pools
Nutrient status	no information
pH	circumneutral
Salinity	no information
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Cool temperate oceanic climate, with average temperatures between 2 – 6° C. Rainfall averages 610 mm per annum.

15. 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).

No information available

16. Hydrological values:

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

17. Wetland types

Code	Name	% Area
A	Shallow marine waters	
B	Marine beds (e.g. sea grass beds)	
D	Rocky shores	
E	Sand / shingle shores (including dune systems)	
G	Tidal flats	
Tp	Freshwater marshes / pools: permanent	
U	Peatlands (including peat bogs swamps, fens)	
K	Coastal fresh lagoons	
N	Rivers / streams / creeks: seasonal / intermittent	
O	Freshwater lakes: permanent	

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

New Island has a length of 13km and an average width of 0.75km. In section, the island is wedge shaped, the western and northern coasts rising dramatically to form a formidable coastline of cliffs which peak at some 240m. In contrast, the east coasts are lower lying and gently sloped, comprising rocky shores and sandy bays. The Island had been formerly heavily grazed and had suffered considerable erosion in parts. It has a history of human use over a period of some 220 years, first as an anchorage for American whalers from about 1775, through settlement and sheep farming which commenced in 1860. Today both halves of New Island are run as nature reserves but under different management. The management of New Island South as a wildlife reserve was started in 1972 with all sheep being removed in 1975. Only a very small number of sheep are retained on the New Island North property as a meat supply for the owner. New Island does have some alien species, Black rat *Rattus rattus*, House mice *Mus musculus*, a Cottontail rabbit *Sylvilagus* sp and a small number of feral

cats. As a result of management and studies made of these alien introductions, none are considered to be a serious threat to native species. New Island South which is operated as a field research centre, employing a number of researchers, has clearly demonstrated that the removal of sheep and careful management of its environment has resulted in large increases of native plant and bird species. Ground nesting passerines are now common breeders. Falkland Pipit, Tussac Bird, Black throated finch and the rare Striated Caracara, have become annual breeders since the establishment of the reserve. As a direct result of protection large increases in the population of species such as Gentoo penguin and Upland Geese have been recorded. Other species, now annual breeders include, Ruddy headed Geese, Yellow billed Teal, Two banded Plover and Black chinned Siskin. The island receives a number of tourist vessels throughout the austral summer. These are permitted to land in restricted areas to view the wildlife and some of the most dramatic coastal scenery to be found in the Islands. Both properties have strict management policies limiting the number and size of vessels visiting.

Landsend Bluff comprise two large bluffs lying off the NW point of New Island, both of which have an elevation of around 100m. The bluffs are deeply fissured and provide cliff nesting habitat for colonial seabirds.

Beef Island is a small island off the coast of New Island South, with an elevation of about 50m. Most of the island is thickly covered with tussac, with the exception of a small area on the north east end which consists of heath and grassland. The island was stocked in the past, being used for sheep and cattle. All stock was removed in 1972 by the New Island Preservation Company, fore runner to the New Island South Conservation Trust . This and the other below mentioned islands were placed aside as reserves under the protection of the RSPNC (Royal Society for the Promotion of Nature Conservation) as part of a long term conservation initiative. The island is believed to be free of rodents.

Coffin Island lies about 1 km away from the southern end of New Island. This island is largely dome shaped, with very steep sides falling away to cliffs which rise to around 50m. The higher elevations of the island are dominated by heath and grassland while tussac grass forms a coastal fringe around the island. Sheep were also removed by NIPCO in 1972.

North Island lies 2.5 km offshore from the north end of New Island and is just under 2.75 km in length and 0.5 km in width. The western coast is severe and has cliffs which peak at 70 m, often undercut at sea level. Most of the island is covered with tussac grass, with the exception of a central interior plateau, which comprises upland heath, with balsam bog and bluegrass. Access to the island is extremely difficult, thus it has remained free of stock. The island is free of introduced predators. This island was burnt in 1985 as a result of a lightning strike.

Saddle Island is located roughly equidistant between New Island and North Island. It has a severe coastline on the west side with a lower lying aspect to the east. Much of the island is covered with tussac grass. There are two shallow ponds in the centre of the saddle. The island was stocked with cattle, but removed by the New Island Preservation Company in 1972 as part of their conservation plan. There is no evidence or records that indicate it has been burnt in the past. It is believed to be free of introduced predators.

Seal Rocks lie off the southern tip of New Island and comprise two small tussac covered islands and two rocky islets. They have not been stocked and are not known to hold any alien species.

19. 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.*

20. 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.*

Gentoo penguin	Near Threatened > 1% global	Counts in November 2003 indicate 1,000 adult breeding birds on New Island South (from a previous total of 12000, the reduction thought to be due to off-island factors). There are probably twice this number on New Island North
Rockhopper penguin	Vulnerable (> 1% global) subsp	Counts in December 2003 indicate that there are approximately 20,000 breeding adults on New Island South. (P.Catry. NISCT 2003) On New Island North 6,900 (Clausen 2001)
Macaroni penguin	Vulnerable	Few pairs seen amongst the Rockhopper penguins. Probably no longer breeding.
Magellanic penguin	Near Threatened	Breeding on all coasts, figures unknown, but numerous. Survey carried out on New Island South in 2001 gave figure of 7448 breeding adults (Van Buren & Sigman NISCT 2001) Figures are not known for New Island North.
Black-browed albatross	Endangered > 1% global > 10,000 pairs	24,000 breeding adults on New Island, (Strange 2000) 34,000 breeding adults on North Island (Huin 2001)
Thin-billed prion	> 1% global > 10,000 pairs	Extremely numerous on New Island. Good populations on North Island, Beef Island. A figure of 4 million adult breeding birds is given for New Island. (Catry, Campos, Segurado, Silva & Strange 2003)
White-chinned petrel	Vulnerable	Presence confirmed in early 1970's, one of only 2 sites in the Falklands. Small colony on New Island South of approximately 50 adult breeding birds in 2000-2001.
Sooty shearwater	> 10,000 pairs	Perhaps present in very small numbers on New Island or Seal Rocks. Birds in flight heard calling at night, but no breeding confirmed.
Common diving-petrel	(> 1% global) subsp	Common offshore, but no breeding confirmed.
Rock shag	> 1% global	Present and breeding but numbers unknown.
King shag	> 1% global	Counts in December 2003 give approximate number for breeding adults on New Island South as 9,000. Large numbers also nest on New Island North but numbers not known.
Black-crowned night-heron	(Range-restricted) subsp	A small number nest on New Island South.
Upland goose	(Range-restricted)	Large breeding population. Counts in December 2003 showed that 2000 adults moulted on New Island South.

	subsp (> 1% pop) subsp	Hundreds of adults breed on New Island South. A census of breeding birds with territories within a 0.5 k square around the Settlement give an average of 15.75 pairs over nine years.
Kelp goose	(Range-restricted) subsp (> 1% pop) subsp	Approximately 100 adults, some nesting on New Island South in summer of 2003/04. Similar numbers on New Island North but not counted.
Ruddy headed goose	Data-deficient Range-restricted > 1% pop	Some 70 adult birds moulted and 3 pairs nested on New Island South in summer of 2003/04.
Falkland steamer duck	Range-restricted > 1% pop	Approximately 60 adult birds on New Island South, some nesting. Similar number on New Island North but not counted.
Striated caracara	Near Threatened Range-restricted > 1% global	Recorded from New Island, North Island, Beef Island, Ship Island, and Seal Rocks. Probably c 40-50 breeding pairs. A census of part of North Island recorded 34 breeding adults. (Strange & Lamey 1999)
Dolphin gull	> 1% global	150 breeding adults on New Island South in summer of 2003/04.
Tussac Bird	Range-restricted	Recorded from Beef and Coffin Islands, but numbers unknown. A small number (probably ca 20 breeding adults) nest on New Island South.
Falkland pipit	(Range-restricted) subsp	Widespread and common breeder on New Island South.
Grass wren	(Range-restricted) subsp	Very scarce but regular breeder in tussac and sand grass areas on New Island South.
Falkland thrush	(Range-restricted) subsp	Widespread and common breeder.
Black-throated finch	Data-deficient Range-restricted	On New Island South is a regular breeder in two areas. Probably breeds also on New Island North.
Long-tailed meadowlark	(Range-restricted) subsp	Widespread and common breeder.
Cobb's wren	(Vulnerable)	Saddle, Coffin and Beef Islands. Recorded on New Island South but not known to breed.

New Island has a breeding population of the Falkland Skua numbering several hundred breeding adults. Dark faced Ground Tyrants are widespread and common breeders. Breeding birds of prey include Cassin's Falcon, Crested Caracara, Red-backed buzzard, Turkey Vulture and Short eared owl. The island is one of the Falklands important breeding sites for fur seals. There are two main breeding sites with an estimated total population of about 2500 animals. The islands in this group are also breeding grounds for a small number of Sea Lion. New Island North has one or two pairs of King Penguin, it has also been the site for breeding pairs of Southern Giant Petrel, although present numbers are not known.

21. Social and 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.

New Island has a history of human use over a period of some 220 years, first as an anchorage for American whalers from about 1775, through settlement and sheep farming which commenced in 1860. Today both halves of New Island are run as nature reserves but under different management.

The island receives a number of tourist vessels throughout the austral summer. These are permitted to land in restricted areas to view the wildlife and some of the most dramatic coastal scenery to be found in the Islands. Both properties have strict management policies limiting the number and size of vessels visiting.

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Falkland Islands Government	+	+
Private (Conservation institutions)	+	

New Island North (1181 ha) and New Island South (1181 ha) are privately owned reserves (Owners: New Island South Conservation Trust (South) and T Chater (North)). Seal Rocks (10 ha); Owner: New Island South Conservation Trust. Landsend Bluff (7 ha), Beef Island (10 ha), Coffin Island (45 ha), North Island (75 ha) and Saddle Island (35 ha) are privately owned reserves; Owner: Falklands Conservation

23. Current land (including water) use:

Activity	On-site	Off-site	Scale

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

Activity	On-site	Off-site	Scale

25. 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
Nature Reserves	+	

In the 2003-04 season, early November to late March, New Island may receive a total of some 21 tourist vessels. An average of 98 passengers every eight days for visits of 3 to 4 hours duration. Although perhaps a potential conservation issue in the future for some islands, by adhering to present management policies, New Island would not expect to see its environment under any threat from this industry. Believing every site to have its own special characteristics, both parts of New Island has adopted specific guidelines for its tourists. Smoking is prohibited on the whole island to reduce fire risks.

The eradication of rodents from New Island would be a major undertaking and an issue which remains questionable as to the ecological value of what would also be a costly eradication program. Intensive studies over the last four years by the New Island South Conservation Trust on the Black rat (*Ratus ratus*) which is the only species of rat found on New Island, show that populations are restricted to certain areas and are quite small. The species has been found to feed largely on vegetation with so far limited evidence to show it is greatly effecting ground nesting bird species. However the NISCT are aware of the potential dangers that alien species pose to such an important bird breeding site. Monitoring and management methods employed over the last 33 years will continue. Similar studies will also be carried out on the small population of feral cats and cottontail rabbit to evaluate their position in the general ecology of New Island.

26. Conservation measures proposed but not yet implemented:

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

27. Current scientific research and facilities:

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

28. Current conservation education:

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

29. Current recreation and tourism:

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

30. Jurisdiction:

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

Falkland Islands Government,
Government House, Port Stanley, Falkland Islands

31. 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.

New Island North: T Chater

New Island South: New Island South Conservation Trust

Seal Rocks: New Island South Conservation Trust.

Landsend Bluff, Beef Island, Coffin Island, North Island and Saddle Island: Falklands Conservation

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

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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