# 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:

- 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.
   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: FOR OFFICE USE ONLY. **UK Overseas Territories Conservation Forum** DD MM YY 102 Broadway Peterborough PE1 4DG UK Designation date Site Reference Number Email: pienkowski@cix.co.uk Date this sheet was completed/updated: 2. 11 November 2004 3. **Country: UK (Guernsey)** 4. Name of the Ramsar site: Lihou Island & L'Eree Headland 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  $\checkmark$  -or- no **b) digital (electronic) format** (optional): Yes. Final boundaries of land portion not yet fixed 6. Geographical coordinates (latitude/longitude): 049 27 34 N 002 39 43 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 site lies on the west coast of Guernsey, 8 km W of St Peter Port. It includes La Claire Mare, La Rousse Mare (the Colin Best Nature Reserve), the shingle bank Les Anguillieres, the western end of L'Eree Headland, Lihou Island and the area of coast between the northern end of L'Eree and Le Catioroc. Administrative region: Bailiwick of Guernsey 8. **Elevation** (average and/or max. & min.) (metres): Area (hectares): 390 No information available Min.

# Mean 1 10. Overview:

Max.

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

Within the site's relatively small area there is an amazing variety of interesting habitat types including rocky, gravely and sandy shoreline, the sub-littoral zone, coastal grassland, salt marsh, reed bed and saline lagoon. The site includes also vegetated shingle banks, sea grass beds and wet grassland which

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25m

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Lihou Island & L`Eree Headland, Guernsey

No information available

are internationally threatened habitat types. These habitats support a rich diversity of animals and plants. For example, 214 different species of seaweed have been recorded on the shore around Lihou Island - an exceptionally large number for such a small area.

The area also has a rich cultural heritage, many important archaeological and historical remains and L'Eree Headland has been identified as one of eleven "Areas of Geological Importance" in Guernsey.

# 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, 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 Areas of global-priority habitats, sea-grass beds (at and below low-water mark) and species-rich wet grassland occur, plus other wetland features including reed-beds, saline lagoons, wet coastal grazing, salt marsh
- 2 Several Red-Data Book species occur, including the fern allies *Ophioglossum azoricum*, found in Lihou and *Isoetes histrix* which occurs in Lihou and L'Erée headland. *Ophiglossum azoricum* is a RDB species in both France & the U.K. and the Isoetes is known from only one site in England.
- 3 Species rich wet-grassland at the Claire Mare including *Orchis laxiflora* not present further N in UK; many other wetland plants and insects not found elsewhere in region. Has an area of saltmarsh, which is very rare in Channel Islands. Foreshore has 136 ha of intertidal rocky shore supporting many rare species <u>in</u>cluding the ormer *Haliotis tuberculata*, of great local cultural significance.
- 4 Good stepping stone for critically endangered Aquatic Warbler at Claire Mare. L'Eree good roost for gulls, Curlews etc especially in storm/high tide.
- 7 Many rare species, and a representative sample of NW European fish fauna are found in the marine area of the proposed site
- **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:

Atlantic

# **b) biogeographic regionalisation scheme** (include reference citation): [Council Directive 92/43/EEC]

# 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	
Geomorphology and landscape	
Nutrient status	
pH	
Salinity	
Soil	
Water permanence	
Summary of main climatic features	No information available.

Lihou Island & L`Eree Headland, Guernsey

# **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).

The site consists of an area on the west coast of Guernsey delimited to seaward by the highest points of various reefs. Beacause of the high tidal range (10m at springs) and the low slope of the shore, there are extensive rocky intertidal areas interspersed with small areas of sand and gravel. It includes: Lihou, the largest island joined to Guernsey at low tide; L'Erée headland in Guernsey; and an extensive area of low lying marshy land in Guernsey lying between L'Erée headland and the hills in Guernsey inland from the coast , the Claire and Rousse Mares (the Rousse Mare forms a large part of the Colin Best Nature reserve).

#### Lihou Island.

This forms a low ridge about 20m high sloping down to the sea to N and S where there are shingle beaches. A double shingle ridge joins the small island of Lissroy to Lihou to the SE. In between these ridges is an artificial brackish pond. Lihou is joined to the L'Erée headland of Guernsey by a tidal causeway, N & S of this, and all around Lihou Island, are extensive areas of gravel and rocky shore with lagoons at low tide.

#### L'Erée Headland.

This is a hill rising to 25m, sloping steeply to the N and more gently to the E,S, and W. On the S side is a sandy bay backed by soft cliffs which continue round the point to the W. On the W side, north of the causeway to Lihou island is a pebble beach. The N side has cliffs. The coastline has extensive rocky shore.

# Claire and Rousse Mares.

To the N of the headland is a large pebble bank which joins the headland to the corner of the Ramsar site opposite the small island of Chapelle Dom Hue. To the S the headland is an old sand dune, mostly now dug away and with a sea wall. Behind these two features is an extensive area of marshland and wet grazing, the Claire and Rousse Mares. The seaward edge of these behind the pebble bank and sand dune barriers lie below the high water mark of spring tides and ais liable to flooding by the sea. In times of heavy rain these barriers mean that the drainage is poor and much of these areas is flooded by fresh water. This area was extensively drained by ditches dug in the 18<sup>th</sup> Century leading to two main sea outfalls. There is one small hill in these marshes.

#### Geology

The rock types consist mainly of L'Erée Granite with various intrusions, and an area of Perelle Gneiss at the W end of Lihou island. The soft cliffs are formed of raised beach material from the interglacial period with overlying loess and head from the glacial period.

#### General land Use.

Lihou Island was farmed to the 19<sup>th</sup> Century. The fields on the SW end of L'Erée headland were grazed until 2000, but are now abandoned and are cut annually. The rest of the headland in the Ramsar area is either scrub or coastal grassland. The Rousse Mare is largely grazed by cattle but an area is reed bed that is cut on rotation for reed straw, and the inland parts are cut for hay. The Claire Mare has an artifical pond and reed beds and some important marshy fields. These fields are cut annually for hay and occasionally grazed subsequently by cattle.

The Claire Mare is an important bird-watching site with two hides. The marshy fields have a path cut round them in spring so that the orchids and other flowers can be admired. Some of the fields at the Rousse Mare are used by an agricultural show in August and occasionally for other events. Lihou island is a popular destination for walkers, there is a large rock pool used for bathing at the NW corner.

The coast at La Chapelle Dom Hue is used by surfers. Around the S side of L'Erée headland are popular bathing beaches. All the rocky areas are harvested by shore-gatherers and the areas below tide mark are fished by potters.

### 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
D	Rocky marine shores	
G	Intertidal mud, sand or salt flats	
В	Marine subtidal aquatic beds	
Α	Permanent shallow marine waters	
Е	Sand, shingle or pebble shores	
Η	Intertidal marshes	
Ts	Seasonal/intermittent freshwater marshes/pools on inorganic soils	

# **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 following habitats/vegetation types can be identified in the Ramsar Site

# **Terrestrial Habitats**

Pebble Banks Dune Grassland Coastal Grassland Scrub Salt Marsh Brackish pond Reed Bed Wet Meadow Improved Grassland Walls Soft Cliff Hard Cliff

The characteristic vegetation of these habitats is decribed in Ozanne, Gilmour & David 2002, (attached)

Marine Habitats

Rocky shore Sandy Shore Shell Gravel Eel Grass

Ramsar Information Sheet: UK22001

# **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.* 

Rare and noteworthy plant communities

Coastal Grassland. This is a common habitat round the coast of the Channel Islands. That in the Ramsar site is important for the rare species found there including the fern allies *Ophioglossum azoricum*, found in Lihou and *Isoetes histrix* which occurs in Lihou and L'Erée headland. *Ophiglossum azoricum* is a RDB species in both France & the U.K. and the *Isoetes* is known from only one site in England. Several other species occur that do not occur in England such as *Romulea columnae* which is frequent here

Shingle Bank. Vegetated Shingle Bank is an internationally threatened habitat. The examples in the Ramsar site include such noteworthy species as *Crambe maritima* and *Glaucium flavum*.

Salt Marsh. This habitat is extremely scarce in the Channel Islands. Two patches occur in the Ramsar site. On Lihou is a brackish pool between two pebble banks. This has *Chenopodium chenopioides*, not found elsewhere in the C.I. In the Rousse Mare is a larger of marsh with a temporary brackish pond. This has extensive areas of *Salicornia* spp. and *Suaeda maritima* both very rare elsewhere in the islands.

Marshy grassland. There are three very important, species-rich, marshy fields at the E side of the Claire Mare and an area of reed bed. The flora includes *Ophioglossum vulgatum*, only two other sites at present known in Guernsey, and several species of orchid, including *Orchis laxiflora* which does not occur in the UK., as well as many other typical marshland plants

Intertidal areas. These are extremely rich in seaweed species, over 200 have been recorded. There are also beds of Zostera (Eelgrass) at and below low tide mark.

Lists of plants recorded from the area attached as supplementary information.

# 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 main invertebrate communities are those associated with these habitats, including many rare species as some of these habitats are threatened in the island. In addition the site is very important for birds. Here are the bird notes for various areas in the Ramsar site extracted from David C.T. & Gilmour 2003 (attached).

Lihou

Breeding birds: largest Great Black Backed Gull colonies in Bailiwick. Shelduck; Oystercatchers; Ringed Plover (1-2pairs); Stonechat Good for migrants (many species), important Gull roost, non-breeding Meadow Pipits

Rousse and Claire Mares

Now arguably Guernsey's premier birding site – only Pleinmont can challenge. Breeding birds : Reed Warbler; Shelduck; Stonechat; Moorhen; Coot; (feral geese) Migrants: extensive; warblers incl. Aquatic Warbler (top site) Non-breeding/Wintering: ducks; Snipe; Water Rail; Bearded Tit; waders; roosting gulls

# L'Erée Headland Breeding birds: Short-toed Treecreeper; Blackcap; Bullfinch; Sparrowhawk; Goldcrest; Chiffchaff Used by migrants

Lists of birds and invertebrates recorded from the area attached as supplementary information.

# 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 land and shore area from Le Catioroc to Lihou Island includes not only significant wetlands but also a large diversity of habitats, as well as historic and prehistoric remains, and the existence of a Ramsar will bring special notice to the environmental, cultural and heritage aspects of the area. This recognition will provide a positive focal point for new education, tourism and environmental initiatives which will contribute to the long-term conservation and wise use of this site and other wetland areas in the Bailiwick.

# 22. Land tenure/ownership:

Ownership category	On-site	Off-site

# 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
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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
Some of land area is Site of Nature Conservation		
Interest; remainder will probably be listed as SNCI after		
public inquiry		

# 26. Conservation measures proposed but not yet implemented:

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

Management plans exist for Lihou Island, and the Société Guernesiaise reserves of La Claire Mare and La Rousse Mare. A management plan is in preparation for the shingle bank area.

# 27. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc. Survey information on various taxa being collected by La Société Guernesiaise.

#### 28. Current conservation education:

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

There are two bird hides at Reserve at La Claire Mare, together with display boards indicating the species likely to be seen. There is a large display board at Lihou Island giving details of the natural history and history of the island. Many leaflets are available giving information for Lihou and the causeway, together with web sites. Guided walks around Lihou Island take place in the summer. School visits take place each year to Lihou and the causeway area. Imperial College, London use the area for part of their Marine Biology Field Course.

# **29.** Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity. No information available

#### **30.** Jurisdiction:

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

States of Guernsey Board of Administration,

Sir Charles Frossard House, PO Box 43, La Charroterie, St Peter Port, Guernsey

# 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.

Chief Executive, States of Guernsey Environment Department, Sir Charles Frossard House, PO Box 43, La Charroterie, St Peter Port, Guernsey

La Société Guernesiaise, Candie Gardens, St Peter Port, Guernsey.

# 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

Brehaut, R. N. 1989. Description of the proposed marine conservation area at Rue de la Rocque, St Pierre du Bois, Guernsey. *Rep. Trans. Soc. guernes.* 22. (1988), 385-392

De Pomeroi. M & Robinson, A. 1994, The rocks and scenery of Guernsey. La Société Guernesiaise. St Peter Port.

David, C.T. & Gilmour K.J. 2003. A review of sites of nature conservation importance in the revised rural area plans. A report to the I.D.C by La Société Guernesiaise.

Ozanne, B.J., Gilmour, K.J. & David, C.T. 2002. Common and threatened indicator plant species of various habitats in Guernsey & Herm. A report to the Biodiversity Working Group, Advisory & Finance Committee by La Société Guernesiaise.

 Pritchard, DE, Housden, SD, Mudge, GP, Galbraith, CA & Pienkowski, MW (eds.) (1992) *Important Bird Areas in the* United Kingdom including the Channel Islands and the Isle of Man. Royal Society for the Protection of Birds, Sandy
 Veron, P.K (Ed). 1997. *Important Sites for Birds in the Channel Islands*. La Société Guernesiaise, St Peter Port.

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)

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   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:
 For o

 UK Overseas Territories Conservation Forum
 DD M

 102 Broadway
 DD M

 Peterborough PE1 4DG
 DD M

 UK
 Design

 Email:
 pienkowski@cix.co.uk

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With information from the Alderney Wildlife Trust

- 2. Date this sheet was completed/updated: 31 October 2004
- 3. Country: UK (Bailiwick of Guernsey)
- 4. Name of the Ramsar site:

# Alderney West Coast & the Burhou Islands

# 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  $\checkmark$  -or- no  $\Box$ 

b) digital (electronic) fe	ormat (optional):	Yes
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6.		coordinates (latitude/longitude):
	49 <sup>0</sup> 43' N	$2^{0}15' W$

# 7. General location:

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

Alderney, The Channel Islands. Nearest large town: St. Anne.

Administrative region: States of Alderney, Bailiwick of Guernsey.

8. Elevation (average and/or max. & min.) (metres):
9. Area (hectares): 15,629 hectares
Min. 0 metres.
Max. 50 metres (Les Etacs).
Mean Mainly sea level.

# 10. Overview:

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

The site comprises the western coast of Alderney and adjacent shallow waters and islets in the strongly tidal, high-energy system of the northern Channel Islands. It includes diverse and inter-related ecosystems:

- Sandy beach with shingle banks Platte Saline (west end)
- Marine sub-tidal aquatic beds, rock pools, sand bars and pebble beach Clonque Bay and Hannaine Bay

# - Rocky marine shores, including sea cliff and rocky offshore islands - Alderney west coast, the Burhou Islands and Ortac.

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# 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 Among global priority habitats, sea-grass beds occur at and below low-water mark. These form part of a rich complex of habitats, including vegetated shingle banks, sand dunes, dune & coastal grassland, soft cliffs, sandy, gravelly and rocky shores (including the offshore islands of Burhou, Les Etacs & Ortac)
- 3 Burhou island has a flora and fauna relatively little modified by man. Large nesting seabird populations, which include the only Storm Petrel colony in the Channel Islands, Puffins, and Lesser & Greater Black-backed Gulls. Les Etacs and Ortac support the only Gannet colonies in the Channel Islands. The intertidal rocky shore supports many rare species of fauna including ormers, which, within the UK, are found only in the Channel Islands.
- 6 A large nesting population of Gannets are established on the Garden Rocks (Les Etacs) and Ortac. Here there are 11,000 breeding birds, about 1,000 non-breeding birds, and perhaps 5000 immature birds. This constitutes 2% of the world population.
- 7 Many rare species, which include a representative sample of north-west European fish fauna, are found in the marine area of the site. Although ormers are the most significant, there is also a high diversity of fish and shellfish.
- **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: North-east Atlantic

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	See Section 15, below
Geomorphology and landscape	See Section 15, below
Nutrient status	Rich
PH	7
Salinity	37 per thousand
Soil	See Section 15, below
Water permanence	Tidal system
Summary of main climatic features	See Section 15, below

# 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).

The rocks of Alderney belong to the great Armorican Province of northwest France rather than the southwest province of England. Although many different rock types occur on the Island, the 'hard' rocks have been divided into three major units – the Western Granodiorite, the Central Diorite complex and the Alderney Sandstone; these in turn overlain by the superficial sands and gravels deposited during the latter part of the Great Ice Age.

The western part of Alderney, which includes Platte Saline, Clonque Bay and Hannaine Bay, is composed mainly of an ancient greenish-grey granodiorite that has been radiometrically dated at 2220 millions years. In Telegraph Bay, to the south of Clonque Bay, The rock is granitic in composition and, although less foliated tan the granodiorite, is probably of similar age.

Numerous pinkish and light-coloured dykes of aplite and porphyritic microgranite have intruded both the granite and granodiorite: these dykes seam the cliffs of Telegraph and Hannaine Bays. Of a later date numerous dolerite and lamprophyre dykes also intrude the granodiorite.

The islands of Burhou and Ortac are composed of Alderney Sandstone and are separated from the granodiorite by a significant fault along The Swinge. The Alderney Sandstone, deposited rapidly in shallow waters by fast flowing streams, is several hundreds metres in thickness and comprises grits, arkoses, sandstone and conglomerates. The outcrop extends from Corblets Bay around the east and southeast coasts. Many lamprophyre and dolerite dykes have intruded the sandstones as well as older rocks on the island; this indicates that the majority of these dykes are post-sandstone in age.

**The Pleistocene Deposits**: Superficial sands and gravels of the Great Ice age, which have been deposited during the last 100,000 years, cover most of Alderney. Several changes in sea level have occurred during the waxing and waning of the great sheets to the north and have given rise to distinct layers of either beach pebbles or wind-blown sand and dust (loess) as well as raised beaches which can be recognised in the Clonque Bay area. The beach pebbles were lain down during periods of high sea level during the interglacial periods, while the loess were deposited when the sea level fell after the ice sheets advanced. During the maximum extension of the ice sheets, coarse solifluction breccias known as 'head' were formed. These deposits are well exposed in the quarries and cliffs around the island particularly in Hannaine Bay.

**Soils:** In the sloping cliffs of Clonque and Hannaine Bays, soils are very thin, of brownish grey colour and have stony subsoil. In contrast, at Plate Saline in the east, blown sand of considerable thickness has been deposited up to 100m inland; this has given rise to a low-lying coastal area with no wave-cut platforms and a steeply sloping shingle beach.

# **ALDERNEY WEATHER SUMMARIES**

Readings taken at Platte Saline: Monthly figures for 2003 and 20-year averages 1984-2003

Year 2003	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTAL
Temp. highest °C	13.40	13.60	15.90	19.10	23.04	24.40	24.80	29.10	23.50	19.10	17.70	13.20	
Temp. lowest °C	-0.40	0.80	2.40	4.00	6.40	11.40	14.10	10.91	9.60	5.20	6.00	2.80	
Average daily Max.	7.50	7.60	9.90	11.50	13.10	17.30	18.70	19.90	17.70	13.10	11.80	8.80	
Average daily Min.	7.00	6.80	8.30	9.80	11.40	15.00	16.90	18.00	16.00	12.70	11.20	8.50	
Monthly mean °C	7.20	7.20	9.10	10.90	12.30	16.10	17.80	19.00	17.10	12.90	11.60	8.60	
Rain mm.	75.80	35.95	32.87	26.33	44.61	51.35	52.48	22.89	20.23	107.39	118.59	94.89	683.38
Sun hrs.	80.18	98.61	172.85	228.79	231.9	249.99	256.72	244.62	213.38	101.57	75.91	68.21	2022.81
					8								
Barometer highest mb	1040	1037	1038	1034	1029	1027	1025	1025	1033	1026	1028	1035	
Barometer lowest mb	975	994	1005	992	1000	999	996	1002	1001	968	986	981	
Barometer mean mb	1017	1018	1022	1015	1017	1016	1016	1019	1021	1012	1012	1017	
Humidity max. %	100	100	100	100	100	100	100	100	100	100	100	100	
Humidity min. %	65	78	75	80	76	82	82	78	82	80	79	79	
Humidity average %	88.6	91.9	92.1	92.9	92.4	93.5	90.6	93.9	93.3	92.6	92.3	91.9	
Wind direction mean°	201	180	154	144	222	216	231	174	187	160	204	185	

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Wind speed max kts. Wind speed mean kts.		40 11.4	44 10.6	40 10.0	50 9.6	38 7.5	32 7.6	30 7.2	32 7.3	40 12.6	50 12.3	54 13.2	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	TOTAL
Summary for the 20 years 1984-2003	)												
Temp. monthly max	12.74	12.29	14.07	16.39	20.06	521.94	21.82	23.74	21.80	18.91	16.23	14.37	
Temp. monthly min	0.57	0.71	2.26	3.36	6.26	8.49	10.40	11.20	10.21	7.87	4.44	1.66	
(Max	9.15	8.84	10.22	11.69	14.31	16.65	17.58	19.23	17.86	15.21	12.28	10.28	
Average daily (Min	6.25	5.91	6.75	7.53	9.88	12.07	13.59	14.88	14.01	12.14	9.26	7.43	
(Mean	7.65	7.38	8.50	9.62	12.12	2 14.36	15.62	17.06	16.02	13.69	10.75	8.85	
Rain mm.	84.89	56.92	51.73	52.28	40.12	241.08	35.47	41.99	52.10	85.24	80.40	98.67	720.89
Sun hrs.	60.45	79.99	125.34	185.90	240.3 9	236.92	243.73	230.20	177.48	111.37	74.05	53.57	1819.38

Figures in red are highest in year; figures in blue are lowest in year. © Brian Bonnard 6/01/2004

#### 16. Hydrological values:

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

17. We	etland types							
Code	Code Name							
Α	Permanent shallow marine waters	20						
В	Marine sub-tidal aquatic beds	45						
D	Rocky marine shores	30						
E	Sand, shingle and pebble shores	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.

Vegetated shingle banks.

Rocky shores, including rock pools, kelp beds, and sand bars.

Rocky islets, which are very important for some birds for breeding (gannets, puffins, storm petrel). There is also a seal colony to the north of Burhou Island.

Some fish and shell-fish are locally important, such as ormers, crabs, lobsters, bass, plaice, etc, for both recreational and commercial fishing.

#### 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.* 

There is a need to differentiate between terrestrial plants and marine flora (seaweeds).

Seaweeds have been studied in the site for many years. Initially the marine officer has classified about a hundred species, with at least 50 more expecting to be classified by the end of the year. *Ascophyllum nodosum* has special importance because there is more than 75% of the world population in UK. Also there has been about 25-49% decline in numbers/range in GB in the last 25 years of *Halimenia latifolia*. The seaweeds also play a very important role in supporting all the marine fauna in the area and these fauna support the large nesting bird population.

# Algae recorded in the site CHLOROPHYTA

Blidingia minimun

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Enteromorpha intestinalis Enteromorpha linza Spongomorpha aeruginosa Ulva lactuca Chaetomorpha aerea Chaetomorpha linum Chaetomorpha tetragonal Cladophora sp Cladophora rupestris Codium fragile Codium tomentosum

# РНАЕОРНУТА

Laurencia pinnatifida Halidrys siliquosa Petalonia fascia Alaria esculenta Desmarestia aculeate Cystoseira baccata Cystoseira tamariscifolia Fucus vesiculosus Ascophyllum nodosum Ectocarpus sp Ralfsia verrucosa Laminaria digitata Saccorhiza (polyschides) bulbosus Cladostephus verticillatus Fucus serratus Fucus spiralis Pelvetia canaliculata Himanthalia elongata Bifurcaria bifurcata Cystoseira nodicaulis Cystoseira placata Sargassum muticum

# RHODOPHYTA

Calliblepharis jubata Phycodrys rubens Halymenia latifolia Palmaria palmate Heterosiphonia plumose Delesseria sanguinea Gracilaria verrucosa Plumaria elegans Porphyria leucosticta Calliblepharis ciliata Callophyllis laciniata Sphaerococus coronipifolius Polisiphonia simulans Hildebrandia Ceramium ciliatum Cystoclonium purpureum

Blank form produced by JNCC: Version 3.0; content collated by UKOTCF, 13/11/2004

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Gastroclonium ovatum Halurus equisetifolius Plocamium coccineum Dilsea carnosa Gelidium latifolium Gelidium pusillum Furcellaria lumbricalis Catenella caespitosa Plocamium cartilagineum Audoinellia floridula Ahnfeltia plicata Chondrus crispus Mastocarpus pistillata Mastocarpus stellata Corallina elongata Corallina officinalis Mesophyllum lichenoides Lithothamnion sp Asparagopsis armata Lomentaria articulata Ceramium sp Ceramium rubrum Cryptopleura ramosa Halopithys incurvus Osmundea pinnatifida Porphyria umbilicalis Gracilaria gracilis

# **LICHENS**

Lichina pygmaea Verrucaria maura Verrucaria mucosa Xanthoria parietina Xanthoria ectaneoides Pertusaria pseudocorallina Pertusaria sp Rhizocarpon richardii Buellia subdisciformis Rinodina luridescens Tephromela atra Lecanora actophila Caloplaca marina Caloplaca thallincola Ramalina siliquosa

# Other plants recorded in the site

# 1. Burhou

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Updated 1987, 1991, 1993 and 1999. All species present 1987-93 unless noted. On 15/7/1999 visit, many were past flowering and not recorded.

Pteridium aquilinum	a	Noted on Leyland's map of 1540. Still 'a' 1999, spread has been controlled somewhat by 1991/93 spraying
Asplenium marinum	r	TSG 1964
Dryopteris filix-mas		EDM 1899 only
Ranunculus repens	r	HP list 1974, '1972'
Ranunculus bulbosus	r	First record; One plant TSG 1964
Ranunculus ficaria	0	TSG 1964
Urtica dioica	0	EDM 1902. Spreading somewhat 1999
Urtica urens	0	TSG 1964. Still 'o' 1999
Atriplex prostrata	f	EDM 1901. Still 'f' 1999
Atriplex glabriuscula	0	BB 1987. Still 'o' 1999
Beta vulgaris ssp. maritima	r	DdeV 1927. A few plants seen 1999
Honkenya peploides	0	TSG 1964
Stellaria media	f	TSG 1964
Cerastium fontanum	r	EDM 1901, HP 1971
Sagina maritima	0	TSG 1964
Sagina procumbens	f	TSG 1964, AS 1966, BB 1987
Spergularia rupicola	a	DdeV1927. The dominant species to 1987. Areas being reduced by spread of S. unifora 1999
Silene uniflora	vlf	EDM 1901, TSG1964, BB 1993, greatly increased since the 1987 hurricane. Now f. Very large patches 1999, one c. 100 x 80m.
Rumex acetosella	с	EDM 1902 ('o' in TSG 1964). 'f' 1999
Rumex acetosa	0	BB 1993. 'lf' 1999
Rumex crispus	lf	BB ('1899 only' in TSG 1964). Still 'lf' 1999
Rumex obtusifolius	0	BB 1991. Increasing to 'f' 1999
Armeria maritima	r	BB 1987
Matthiola incana	1	BB 1987
Cochlearia danica	с	TSG 1964. Appears 'r' 199, but probably over for year
Anagalis arvensis	f	TSG 1964. Seems 'a' 1999
Glaux maritima	1 site	('r' in TSG 1964). Same 1999
Umbilicus rupestris	f	TSG 1964. Spreading slightly 1999
Sedum anglicum	0	('r' in TSG 1964)
Rubus caesius	r	BB 1987

Erodium maritimum	lc	('f' in TSG 1964)
Crithmum maritimum	lf	('o' in TSG 1964)
Solanum nigrum	0	EDM 1902
Solanum tuberosum	r	TSG 1964
Anchusa arvensis	0	TSG 1964. 1999, now frequent in landing area and in front of hut
Myosotis arvensis	0	TSG 1964
Plantago coronopus	vlf	('r' in TSG 1964)
Sambucus nigra	vr	BB 1 bush 1991, 2 in 1993, 1999
Cirsium vulgare	r	AS 1966. Increasing to 'o' 1999
Hypochoeris radicata	0	BB 1993
Sonchus oleraceus	0	BB 1991, 1999
Sonchus asper	0	TSG 1964, AS 1966. 'r' 1999
Crepis capillaris	r	TSG 1964. not seen by BB
Crepis vesicaria	r	3 plants BB 1993
Taraxacum officinale	r	TSG 1964
Tanacetum vulgare		HP list 1974 only, '1971'
Hyacinthoides non- scripta	la	TSG 1964, 1999
Juncus bufonius	f	TSG 1964
Bolboschoenus maritimus	vr	('r' in TSG 1964). Patch 3x1m by water trough on W side
Festuca rubra	r	TSG 1964. Large area of grass NW side, none flowering ?spp. 1999
Festuca ovina	f	TSG 1964
Poa infirma	c	('r' in TSG 1964)
Poa annua	1	EDM 1902 5 plants, BB 1989
Poa annua var. reptans	r	MH2 1977
Poa trivialis	r	TSG 1964
Dactylis glomerata	r	TSG 1964
Holcus lanatus	0	HP list 1974, '1971'
Holcus mollis	?	AS 1966
Aira praecox	r	MH2 1977
Agrostis capillaris	r	MH2 1977
Agrostis stolonifera	r	TSG 1964
Agrostis canina	r	HP list 1974, '1971'

Hordeum distichon

# 1956 only

# 2. Little Burhou

Frequency updated 1991. All species seen. Not visited 1999, tides wrong for access.

Atriplex prostrata	r	EDM 1901
Sagina maritima	0	TSG 1964
Spergularia rupicola	0	DdeV 1927
Silene uniflora	a	EDM 1901. The dominant species
Rumex crispus	r	TSG 1964
Cochlearia danica	0	TSG 1964
Erodium maritimum	0	TSG 1964
Sedum anglicum	r	TSG 1964
Poa annua	0	TSG 1964

# 4. Cocque Lihou

Beta vulgaris ssp. maritima	DdeV 1927
Cerastium glomeratum	HP list 1974, '1973'
Spergularia rupicola	DdeV 1927
Silene uniflora	HP list 1974
Armeria maritima	HP list 1974
Lavatera arborea	HP list 1974
Cochlearia danica	HP list 1974
Umbilicus rupestris	HP list 1974
Plantago coronopus	HP list 1974
Dactylis glomerata	HP list 1974
Catapodium marinum	HP list 1974
Bromus mollis	HP list 1974

# 5. Garden Rocks (Les Etacs)

Beta vulgaris ssp. maritima

DdeV 1927

# 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 main communities in the area are obviously the bird colonies. The Gannet colony has about 5,900 pairs, which are based on just two islets; the colony is important, as it is the only colony in the Channel Islands. The Storm Petrel, which breeds on Burhou, is also very important, as it is the only colony in the Channel Islands. The Puffin colony, which breeds on Burhou, is one of the more southern sites.

Ormers are also important, as they are part of the heritage of the Channel Islands On the reefs off Burhou, there is a seal colony with about 7 individuals, which makes for a high biodiversity in the area.

		Population		
Species	Locations	(prs)	Status*	Source**
Storm petrel	Burhou	100	SPEC, BL	JNCC
Gannet	Ortac, Les Atac Etacs	5900	SPEC,BL, BI	LSG
Cormorant	Little Burhou	1	BL, WL	LSG
Shag	Burhou, Little B., Les Etacs	44	BL, BI	LSG
Kittiwake	Les Etacs, Ortac	16	BR	LSG
LBB Gull	Burhou, Little B.	273	BL, BI	LSG
Herring Gull	Les Etacs, Burhou, Little B.	105	BDMp, BL	LSG
GBB Gull	Burhou, Little Burhou	32		LSG
Guillemot	Les Etacs, Ortac	105	BI	LSG
Razor Bill	Les Etacs, Ortac	17	BL, BI	LSG
Puffin	Burhou, Little Burhou	180	SPEC,BL	LSG

# Birds population in the site

\*\*LSG, Le Societe Guernsiaise.

JNCC, Millennium Bird Survey

\* Status:

SPEC, Species with unfavourable conservation status in Europe

BL,  $\geq$  50% of UK breeding population in 10 or fewer sites, but not rare breeders.

BI,  $\geq 20\%$  of European breeding population in UK.

BR, Five year mean of 1-300 breeding pairs in UK.

BDMp, Moderate (25-49%) decline in UK breeding population over last 25 years.

# Invertebrates recorded in the site

# Porifera

Halichondriidae Halichondria panicea

# Cnidaria

Actiniidae	
Actinia equina	Beadlet Anemone
Actinia fragacea	Strawberry Anemone
Actinia prasina	Perhaps just green form of equina
Anemonia viridis	Snakelocks Anemone
Aulactinia verrucosa	Gem Anemone
Sagartiidae	
Cereus pedunculatus	Daisy Anemone

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Actinothoe sphyrodetathe small white oneCaryophyllidaeCaryyophyllea smithiDevonshire Cup Coral

# Bryozoa

Bugulidae Bugula turbinata

# Annelida

Arenicolidae Arenicola marina Terebellidae Lanice conchilega

# Crustacea

Cirripedia	
Chthalamus stellatus	
Semibalanus balanoides	5
Balanus crenatus	
Isopoda	
Halophiloscia couchi	In shingle at top of beach, new record
Porcellio scaber	
Ligia oceanica	
Idotea granulosa	
Amphipoda	
Caprella acanthifera	
Palaemonidae	
Palaeomon serratus	Prawn
Hippolytidae	
Hyppolyte varians	red or green prawn
Galatheidae	
Galathea squamifera	Squat Lobster
Porcellanidae	
Pisidia longicornis	Smooth Porcelain Crab
Porcellana platycheles	Hairy Porcelain Crab
Cancridae	
Cancer pagurus	Chancre
Portunidae	
Necora puber	Lady Crab
Carcinus maenas	Shore Crab
Xanthidae	
Pilumnus hirtellus	Hairy Crab

# Chilopoda

Geophilidae Strigamia maritima

### Mollusca

Trochidae Gibbula magus Gibbula cineraria

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Gibbula pennanti	
Gibbula umbilicalis	Thick torshall
Monodonta lineata Osilinus lineatus	Thick topshell Unusually large specimens compared with rest of Bailiwick
Calliostoma ziziphinum	Unusually large specifiens compared with lest of Bantwick
Patellidae	
Patella sp	the three species are probably present
Helcion pellucida	Blue-rayed Limpet
Littorinidae	Blue-layed Emper
Littorina littorea	Edible periwinkle
Littorina litoralis	Flat periwinkle
Littorina obtusata	
Littorina saxatilis agg	
Melarhaphe neritoides	
Muricidae	
Ocenebra erinacea	
Nucella lapillus	Dog Whelk
Buccinidae	
Buccinum undatum	Whelk (dead shell only)
Onchidiidae	
Onchidella celtica	
Pectinidae	
Chlamys varia	
Galeommatidae	
Lasaea adansoni	
Insecta	
Chironomidae	
Clunio marinus	
Dolichopodidae	
Aphrosylus celtica	
Aphrosylus ferox	new record to Alderney
Aphrosylus raptor	new record to Alderney
Sepsidae	
Orygma luctuosum	
Echinodermata	
Asterinidae	
Asterina gibbosa	Cushion Star
Chordata	
Botryllinae	
Botryllus schlosseri	

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 is locally important for walking, bird-watching, rock-pooling, recreational fishing, crabbing, and as an educational resource. Consequently the social relations with the wetland are remarkable. The Refuge Hut on Burhou Island has a historical significance.

The whole coastline around Alderney has historical importance from the point of view of both the major fortification works of the Victorian period and Second World War when the Germans occupied the island. One fort lies within the area, though is not part of the designation, and several more are in the immediate vicinity. There are also numerous shipwrecks within the area.

# 22. Land tenure/ownership:

Ownership category	<b>On-site</b>	Off-site
States of Alderney	Х	х

# 23. Current land (including water) use:

Activity	<b>On-site</b>	Off-site	Scale
Recreational & commercial	Х	х	
fishing			
Rock pooling	х		
Educational resource	х		
Crabbing	Х		
Recreational walks/tourism	Х	х	
Bird watching	Х	Х	

# 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
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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	<b>On-site</b>	Off-site
Visiting restrictions are applied to Burhou Island; no	Х	
access is allowed between March and the end of July		
during the breeding season for puffins and storm petrels.		

# 26. Conservation measures proposed but not yet implemented:

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

The Alderney Wildlife Trust is working on a management plan for the coastal grassland. The Trust is also working with the States of Alderney to formulate a plan to manage the bird colonies and excursions around the area to avoid people disturbing the birds (gannets, puffins and storm petrel colonies mainly) with the help of the RSPB south-west.

# 27. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc. The Alderney Wildlife Trust Marine Officer Juan Salado was working last year on research into seaweeds and invertebrates in Clonque and Hannaine Bays. He has also had the support of the Guernsey Biological Centre; Bridget Ozanne (Conservation Officer) and Charles David (Manager) have been helping with this research.

The Trust also has the seabird data from La Société Guernesiaise, which has carried out research in the area on several occasions.

### 28. Current conservation education:

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

The Trust has produced booklets on the area, and visitor's guides are available for the few footpaths that have been opened up in the area.

The Marine Officer carries out seasonal events with children.

There is a visitor centre in town with considerable information on the flora and fauna in the area.

# **29.** Current recreation and tourism:

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

Tourists use the wetland mainly in summertime, with bird watching, walking and rock pooling being the most common activities.

#### **30.** Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc. States of Alderney, Queen Elizabeth II Street, Alderney GY93AA.

#### **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.

On behalf of the General Services Committee of the States of Alderney: The Alderney Wildlife Trust, Wildlife/Tourism Information Centre, Victoria Street, St. Anne, Alderney, Channel Islands GY9 3AA

#### 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

Pritchard, DE, Housden, SD, Mudge, GP, Galbraith, CA & Pienkowski, MW (eds.) (1992) Important Bird Areas in the United Kingdom including the Channel Islands and the Isle of Man. Royal Society for the Protection of Birds, Sandy Alderney Wildlife Trust

Guernsey Biological Records Centre La Société Guernesiaise States of Guernsey, Board of administration

> 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:

- 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.
   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.
- Name and address of the compiler of this form: 1. FOR OFFICE USE ONLY. **UK Overseas Territories Conservation Forum** DD MM YY 102 Broadway Peterborough PE1 4DG UK Designation date Site Reference Number Email: pienkowski@cix.co.uk Date this sheet was completed/updated: 2. 11 November 2004 3. **Country: UK (Guernsey)** 4. Name of the Ramsar site: North Herm and Les Amfrocques 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  $\checkmark$  -or- no **b) digital (electronic) format** (optional): Yes. Final boundaries not yet fixed 6. Geographical coordinates (latitude/longitude): 049 29 30 N 002 26 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. The site covers an area stretching NE from the N coast of Herm, 6 km NNE from St Peter Port in Guernsey Administrative region: Bailiwick of Guernsey Elevation (average and/or max. & min.) (metres): . 8. Area (hectares): 685 Min. 0mMax. 10m No information available Mean 10. Overview: Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The site consists of the sandy common forming the Northern part of Herm. It extends 1 km E to the small islets of Fondu and Traife and 5km to the NE including the islets of Godin, Galeu, Longue Pierre, and Grande Amfrocque and the shallow sea, sand banks and tidal lagoons around these islets.

# 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 Areas of global-priority habitats, sea-grass beds (at and below low-water mark) and species-rich wet grassland occur, plus other wetland features including reed-beds, saline lagoons, wet coastal grazing, salt marsh
- 2 Several Red-Data Book species occur, including the fern allies Ophioglossum azoricum, found in Lihou and Isoetes histrix which occurs in Lihou and L'Erée headland. Ophiglossum azoricum is a RDB species in both France & the U.K. and the Isoetes is known from only one site in England.
- 3 Species rich wet-grassland on Herm including Orchis laxiflora not present further N in UK; many other wetland plants and insects not found elsewhere in region. Has an area of saltmarsh, which is very rare in Channel Islands. Foreshore has 136 ha of intertidal rocky shore supporting many rare species including the ormer Haliotis tuberculata, of great local cultural significance.
- 7 Many rare species, and a representative sample of NW European fish fauna are found in the marine area of the proposed site.
- **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:

Atlantic

**b) biogeographic regionalisation scheme** (include reference citation): [Council Directive 92/43/EEC]

# 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	
Geomorphology and landscape	
Nutrient status	
pH	
Salinity	
Soil	
Water permanence	
Summary of main climatic features	No information available.

# 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
D	Rocky marine shores	
G	Intertidal mud, sand or salt flats	
В	Marine subtidal aquatic beds	
А	Permanent shallow marine waters	
Е	Sand, shingle or pebble shores	
Ts	Seasonal/intermittent freshwater marshes/pools on inorganic soils	

#### **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 following habitats/vegetation types can be identified in the Ramsar Site

# Terrestrial Habitats

Sand dune Coastal Grassland Scrub Dune slack

The characteristic vegetation of these habitats is decribed in Ozanne, Gilmour & David 2002, (attached)

# **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.* 

# Rare and noteworthy plant communities

Sand dune grassland including the lichen *Fulgensia fulgens* and many sand dune plant species Eelgrass (*Zostera* spp) beds. Intertidal and subtidal algal assemblages

# 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*.

Shallow sea marine species. Extensive intertidal and shallow sub littoral reefs, sandbanks and eelgrass beds occur with their associated invertebrate and vertebrate faunas. Some sea-birds nest on the islets. The main invertebrate communities are those associated with these habitats, including many rare species as some of these habitats are threatened in 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

# 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

#### 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.

States of Guernsey Board of Administration,

### Sir Charles Frossard House, PO Box 43, La Charroterie, St Peter Port, Guernsey

#### **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.

# States of Guernsey Board of Administration,

Sir Charles Frossard House, PO Box 43, La Charroterie, St Peter Port, Guernsey

#### 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

Bishop, A.C. and Mourant, A.E. 1964 The petrography of some reefs off Herm and Jethou - a memorial to Dudley Attenborough *Rep. Trans. Soc. Guernes 17, (1963),* 501-506

Gardiner, V. 1990. The geomorphology of Herm. Rep. Trans. Soc. Guernes 22, (1989), 619-627

Gilham, M.E. 1971. Ecological notes on the vegetation of six islets near Herm. *Rep. Trans. Soc. guernes.* 18. (1970), 503-513 Gilham, M.E. 1971. Shell sand community in the North of Herm. *Rep. Trans. Soc. guernes.* 18. (1970), 514-519

Le Huquet, J., Rabey, R. & Ryan, P.A 1994. A flora of Herm and its off-islets. *Rep. Trans. Soc. guernes.* 23. (1993), 493-559 Ozanne, B.J., Gilmour, K.J. & David, C.T. 2002. *Common and threatened indicator plant species of various habitats in Guernsey & Herm. A report to the Biodiversity Working Group, Advisory & Finance Committee by La Société* 

Guernesiaise.

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)

359

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

Note for compilers:

- 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.
   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:
   FOR OFFICE USE ONLY.
- **UK Overseas Territories Conservation Forum** DD MM YY 102 Broadway Peterborough PE1 4DG UK Designation date Site Reference Number Email: pienkowski@cix.co.uk Date this sheet was completed/updated: 2. 11 November 2004 3. **Country: UK (Guernsey)** 4. Name of the Ramsar site: **Gouliot Caves, Sark** 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  $\checkmark$  -or- no **b) digital (electronic) format** (optional): Yes. Final boundaries not yet fixed 6. Geographical coordinates (latitude/longitude): 049 26 00 N 002 23 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. The site lies on the west coast of Sark, approximately 11.5 km ESE of St Peter Port in Guernsey. Administrative region: Sark, Bailiwick of Guernsey 8. Elevation (average and/or max. & min.) (metres): Area (hectares): <1 Min. 0mMax. 180m 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 consists of a headland in Sark with a series of large caves penetrating it. These extend from above high-water mark to below low-water with a very rich fauna . Much of this fauna is of otherwise submarine species, particularly noteworthy are sponges (Porifera) and sea anemones and hydroids (Cnidaria).

# 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, 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 The Gouliot Caves are a unique site, a consequence of Sark's cliffs and geology interacting with the huge tidal range. The site consists of a headland in Sark with a series of large caves penetrating it. These extend from above high-water mark to below low-water with a very rich fauna . Much of this fauna occurs only sub-tidally in other places.
- 3 Particularly noteworthy are sponges (Porifera) and sea anemones and hydroids (Cnidaria). The site is important for these and other inter-tidal and normally sub-littoral invertebrates. The main invertebrate communities are those associated with rocky littoral and sub-littoral habitats, including many rare species.
- 7 Not only does this site hold a remarkable diversity of these animals, but it is also a site where the exceptionally large tidal range, combined with the constancy of a cave situation, mean that these animals can be viewed at low-water. Because of this, these caves are also the site where many of these animals were first described and studied, in the 19<sup>th</sup> and early 20<sup>th</sup> centuries, before readily available sub-aqua equipment.
- **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:

Atlantic

b) biogeographic regionalisation scheme (include reference citation): [Council Directive 92/43/EEC]

# 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	
Geomorphology and landscape	
Nutrient status	
pH	
Salinity	
Soil	
Water permanence	
Summary of main climatic features	No information available.

# 16. 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
Zk(a)	Karst and other subterranean hydrological systems, marine/coasta/	
D	Rocky marine shores	
А	Permanent shallow marine waters	

#### **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 invertebrate communities are those associated with rocky littoral and sub-littoral habitats, including many rare 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*.

# 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 caves , though difficult of access, are at tourist attraction in Sark. In the days before diving, this was one of the most important sites in the British Isles for seeing sublittoral invertebrate species. Many species were described from these caves in the 19<sup>th</sup> Century

# 22. Land tenure/ownership:

Ownership category	On-site	Off-site

# 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
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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.

#### 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. Seigneur of Sark, Sark, Channel 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

Allen, A. & Hilton, B. 1988. Distribution & Zonation of Marine Lichens in Sark. *Rep. Trans. Soc. guernes.* 22(1987), 234-257

Allen, A. 1988. Gouliot Caves. Ann Allen

Allen, A. 1989. Sark Invertebrates of the Rocky Shore. Ann Allen

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:

- 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.
   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.
- Name and address of the compiler of this form: UK Overseas Territories Conservation Forum 102 Broadway Peterborough PE1 4DG UK Email: pienkowski@cix.co.uk

   Date this sheet was completed/updated: 11 November 2004
  - 3. Country: UK (Guernsey)
  - 4. Name of the Ramsar site: Vicheries Orchid Fields at Rocquaine 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. Final boundaries not yet fixed

6. Geographical coordinates (latitude/longitude):<br/>049 27 34 N002 39 43 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 site lies on the west coast of Guernsey, 8 km W of St Peter Port. It includes traditionally managed wet meadows and small areas of sallow woodland at Rue Rocheuse, Rue des Vicheries and Rue de la Rocque. There is a possibility that the boundaries may be extended to include much other farmland in the area.

Administrative region: Bailiwick of Guernsey

8.	Elevation	(average and/or max. & min.) (metres):	•	Area (hectares): 4
	Min.	0m		
	Max.	10m		
	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 consists of a selection of small, traditionally managed marshy fields owned by or leased to La Société Guernesiase. They have a very rich flora, including several species of orchids and other wet land plants. The habitat as a whole is threatened in the island due to drainage and modern farming methods.

# 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 Areas of species-rich wet grassland occur
- 2 Several Red-data book species occur. [details to add]
- 3 Species rich wet-grassland includes *Orchis laxiflora* not present further N in UK; many other wetland plants and insects not found elsewhere in region.
- **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: Atlantic

**b) biogeographic regionalisation scheme** (include reference citation): [Council Directive 92/43/EEC]

# 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	
Geomorphology and landscape	
Nutrient status	
pH	
Salinity	
Soil	
Water permanence	
Summary of main climatic features	No information available.

# 17. Physical features of the catchment area:

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

The site consists of an area on the west coast of Guernsey overlying an area of raised beach between the modern coast and a fossil cluiff-line to the east. Water draining from the high land to the east passes over this area and is to some extent trapped by a line of pebble banks along the modern coast. Consequently the fields in this area area are mostly too damp for arable crops, and in winter are often flooded. The traditional management was to take a late hay crop, in July or August, and to graze the fields in autumn when they were still green with fresh growth when most of the other fields in the island were stil ltoo dry for much grass growth. The fields developed an interesting and rich flora due to the long period of traditional management, the late hay cut allowing many early species to survive and set seed. They are very rich and diverse with species such as orchids, sedges, adder's tongue fern etc..

**Ramsar Information Sheet: UK22005** 

# 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
Ts	Species-rich wet grassland	90
W	Sallow woodland	5
4	Hedgebanks	1
Тр	Reed bed	4

#### **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 following habitats/vegetation types can be identified in the Ramsar Site

Terrestrial Habitats

Pebble Banks Coastal Grassland Scrub Reed Bed Wet MeadowWalls

The characteristic vegetation of these habitats is decribed in Ozanne, Gilmour & David 2002, (attached)

The main invertebrate communities are those associated with these habitats, including many rare species as some of these habitats are threatened in the island

# **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.* 

Rare and noteworthy plant communities

Marshy grassland. The flora includes *Ophioglossum vulgatum*, only two other sites at present known in Guernsey, and several species of orchid, including *Orchis laxiflora* which does not occur in the UK., as well as many other typical marshland plants

Lists of plants recorded from the area attached as supplementary information.

# **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*.

Lists of birds and invertebrates recorded from the area attached as supplementary information

**Ramsar Information Sheet: UK22005** 

# 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.

Marshy grassland is an extremely threatened habitat in Guernsey. The fields in this site are an important attraction for visotrs and locals in spring because of the display of wild flowers

### 22. Land tenure/ownership:

Ownership category	On-site	Off-site

#### 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
Most of land area is Site of Nature Conservation Interest, remainder will probably be listed as SNCI after public inquiry		

#### 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. Guided walks take place each spring around the orchid fields. A path is cut and is open to the public round severa lof the fields for self-guided tours.

# 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. States of Guernsey Board of Administration,

Sir Charles Frossard House, PO Box 43, La Charroterie, St Peter Port, Guernsey

Page 4 of 5

#### **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.

La Société Guernesiaise, Candie Gardens, St Peter Port, Guernsey.

#### 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

David, C.T. & Gilmour K.J. 2003. A review of sites of nature conservation importance in the revised rural area plans. A report to the I.D.C by La Société Guernesiaise.

Ozanne, B.J., Gilmour, K.J. & David, C.T. 2002. Common and threatened indicator plant species of various habitats in Guernsey & Herm. A report to the Biodiversity Working Group, Advisory & Finance Committee by La Société Guernesiaise.

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