



Ramsar Information Sheet

Published on 22 December 2023

Update version, previously published on : 9 January 2017

United Kingdom of Great Britain and Northern Ireland (Crown dependencies)

Gouliot Caves and Headland, Sark



| | |
|------------------|-----------------------|
| Designation date | 9 April 2007 |
| Site number | 2276 |
| Coordinates | 49°25'53"N 02°22'40"W |
| Area | 4,00 ha |

<https://rsis.ramsar.org/ris/2276>

Created by RSIS V.1.6 on - 22 December 2023

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

The Gouliot Caves and Headland Ramsar Site is located on the west coast of Sark. The headland includes the famous Gouliot Caves, an internationally important littoral and sublittoral fringe cave system, which crosses the headland three times and is submerged by strong surging tidal currents at high tide. The caves have long been noted for their exceptionally rich invertebrate fauna. Around 200 species have been recorded, including Purse sponge *Grantia compressa*, Breadcrumb sponge *Halichondria panicea* the Northern cowrie *Trivia arctica*, Jewel anemone *Corynactis viridis*, Beadlet anemone *Actinia equina*, Elegant anemone *Sagartia elegans*, Devonshire cup coral *Caryophyllia smithii*, Dead men's fingers *Alcyonium digitatum*, Boring sponge *Cliona celata* and Elephant hide sponge *Pachymatisma johnstonia*. The sheer density of hydroids and anemones, made possible by tidal flows which bring copious amounts of food, is extremely unusual in the European Atlantic biogeographic region, if not unique. The tidal exposure of the faunal assemblage at Gouliot Caves is of scientific significance, as this normally occurs only sub-tidally and allowed access to pioneer zoologists who first described and studied many of the invertebrate species present in the 19th and early 20th centuries.

The rocky headland supports a range of typical coastal habitat types. These include semi-natural coastal grassland/heath/bracken, soft rock and hard rock, and rocky shore, which support scarce species of terrestrial plants, insects and lichens.

The caves are visited by locals and tourists and used for leisure diving; the headland is also a popular walking site with attractive coastal views. The site is promoted in tourist brochures, web-sites and through a booklet guide prepared in 2018. Exhibitions, talks and films on the caves are shown at the Sark Visitor Centre. The headland is also included in Sark's Wildflower walks.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

| | |
|--------------------|---|
| Institution/agency | Hon Sec, La Societe Serquaise |
| Postal address | Petit Moie, Sark, The Channel Islands, GY10 1SE, UK |

National Ramsar Administrative Authority

| | |
|--------------------|--|
| Institution/agency | Department for Environment, Food and Rural Affairs |
| Postal address | 2 Marsham Street, London, SW1P 4DF |

2.1.2 - Period of collection of data and information used to compile the RIS

| | |
|-----------|------|
| From year | 2007 |
| To year | 2023 |

2.1.3 - Name of the Ramsar Site

| | |
|---|----------------------------------|
| Official name (in English, French or Spanish) | Gouliot Caves and Headland, Sark |
|---|----------------------------------|

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

| | |
|--|---|
| (Update) A. Changes to Site boundary | Yes <input type="radio"/> No <input checked="" type="radio"/> |
| (Update) B. Changes to Site area | No change to area |
| (Update) For secretariat only: This update is an extension | <input type="checkbox"/> |

2.1.5 - Changes to the ecological character of the Site

| | |
|--|----|
| (Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS? | No |
|--|----|

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<2 file(s) uploaded>

| | |
|-------------|---|
| Former maps | 0 |
|-------------|---|

Boundaries description

The geographical coordinates for the site are 49°25'54"N, 2°22'41"W. It lies in the mid-part of the west coast of the island of Sark, approximately 11.5 km ESE by sea from St Peter Port, Guernsey.

2.2.2 - General location

| | |
|--|-----------------------------|
| a) In which large administrative region does the site lie? | Sark, Bailiwick of Guernsey |
| b) What is the nearest town or population centre? | Sark |

2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries? Yes No
- b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

Area, in hectares (ha) as calculated from GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

| Regionalisation scheme(s) | Biogeographic region |
|----------------------------------|----------------------|
| EU biogeographic regionalization | Atlantic |
| WWF Terrestrial Ecoregions | Palaearctic |

Other biogeographic regionalisation scheme

The site falls within the Atlantic biogeographic region of Europe as defined by the European Environment Agency.

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided

See section 4.5.

Other ecosystem services provided

See section 4.5.

Other reasons

The Gouliot Caves form an internationally important littoral and sublittoral fringe cave system with strong tidal currents. The cave network extends from above high-water mark to below low-water and contains an exceptionally rich fauna. Whilst the species present are widely distributed and none are rare, the sheer density of hydroids and anemones, made possible by tidal flows which bring copious amounts of food, is extremely unusual in the European Atlantic biogeographic region, if not unique. This is a consequence of Sark's cliffs and geology interacting with a huge tidal range of 10 m at spring tides. The tidal exposure of the faunal assemblage at Gouliot Caves is of scientific significance, as elsewhere it normally occurs only sub-tidally. It is the largest such cave system in Europe that can be visited on foot.

- Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information

The species-rich inter-tidal communities found at Gouliot Caves are extremely restricted elsewhere in the European Atlantic biogeographic region. Such assemblages and their habitat are threatened elsewhere in Europe. This community is described under Section 3.4.

- Criterion 3 : Biological diversity

Justification

The site is rich in biodiversity. It supports rocky littoral and sub-littoral habitats with an exceptional inter-tidal invertebrate assemblage; 190 species have been recorded; particularly noteworthy are the sponges, sea anemones and other hydroids (see Criterion 1 and 2). It is also a site where the exceptionally large tidal range coupled with the constancy of the cave situation mean that these animals, many of which can only otherwise be found by diving or dredging, can be viewed on foot at low-water. Because of this, these caves were where many of these animals were first described and studied in the 19th and early 20th centuries, before readily available sub-aqua equipment. The site thus has importance in the history of the development of marine zoology. The rocky headland also supports a range of typical coastal habitat types. These include semi-natural coastal grassland/heath/bracken, soft rock and hard rock, and rocky shore, which support scarce species of terrestrial plants, insects and lichens.

3.2 - Plant species whose presence relates to the international importance of the site

<no data available>

3.3 - Animal species whose presence relates to the international importance of the site

| Phylum | Scientific name | Species qualifies under criterion | | | | Species contributes under criterion | | | | Pop. Size | Period of pop. Est. | % occurrence 1) | IUCN Red List | CITES Appendix I | CMS Appendix I | Other Status | Justification |
|------------------------------------|---------------------------------|-----------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|-----------|---------------------|-----------------|---------------|--------------------------|--------------------------|--------------|---|
| | | 2 | 4 | 6 | 9 | 3 | 5 | 7 | 8 | | | | | | | | |
| Others | | | | | | | | | | | | | | | | | |
| CNIDARIA/ ANTHOZOA | <i>Actinia equina</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| CNIDARIA/ ANTHOZOA | <i>Alcyonium digitatum</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| CNIDARIA/ ANTHOZOA | <i>Caryophyllia smithii</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| PORIFERA/ DEMOSPONGIAE | <i>Cliona celata</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| CNIDARIA/ ANTHOZOA | <i>Corynactis viridis</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| PORIFERA/ CALCAREA | <i>Grantia compressa</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| PORIFERA/ DEMOSPONGIAE | <i>Halichondria panicea</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| CNIDARIA/ ANTHOZOA | <i>Metridium senile</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| PORIFERA/ DEMOSPONGIAE | <i>Pachymatisma johnstonia</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| CNIDARIA/ ANTHOZOA | <i>Sagartia elegans</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| PORIFERA/ DEMOSPONGIAE | <i>Tethya citrina</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| CNIDARIA/ HYDROZOA | <i>Tubularia indivisa</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| Fish, Mollusc and Crustacea | | | | | | | | | | | | | | | | | |
| CHORDATA/ ACTINOPTERYGII | <i>Lipophrys pholis</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | LC | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| CHORDATA/ ACTINOPTERYGII | <i>Parablennius gattorugine</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | LC | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| MOLLUSCA/ GASTROPODA | <i>Trivia arctica</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |
| MOLLUSCA/ GASTROPODA | <i>Trivia monacha</i> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | | Key species of the sea cave invertebrate assemblage |

1) Percentage of the total biogeographic population at the site

3.4 - Ecological communities whose presence relates to the international importance of the site

| Name of ecological community | Community qualifies under Criterion 2? | Description | Justification |
|---|--|---------------------|---|
| Soft Cliff | <input type="checkbox"/> | See section 4.1. | |
| Hard Cliff | <input type="checkbox"/> | See section 4.1. | |
| Sea cave invertebrate assemblage: Anemones, crustose sponges and colonial ascidians on vertical infralittoral rock faces | <input checked="" type="checkbox"/> | See text box below. | An extremely unusual, if not unique, example of this biotope in the European Atlantic biogeographic region, with high species-richness and an exceptional density of hydroids and anemones. |
| Rocky Shore | <input type="checkbox"/> | See section 4.1. | |
| Coastal grassland | <input type="checkbox"/> | See section 4.1. | |

[Optional text box to provide further information](#)

The Gouliot Caves form a spectacular littoral and sublittoral fringe cave system running through the headland, where the sea has eroded away fault lines in the western section of gneiss. The caves are open to the sea and cross the headland three times from north to south with other openings to the west. At high tide they are submerged by strong surging tidal currents. The upper parts are regularly exposed. Whilst some light enters from cracks above, much of the cave system is enclosed and some parts remain submerged on all but the very lowest spring tides when they can be accessed on foot. The walls and cave roof are rock; the cave floor is cobbles and pebbles, with some larger boulders.

The low light levels mean the marine life is animal-based with no seaweeds. A remarkable total of 190 individual species has been recorded (for details see Allen 2007, Wood 2008, Crouch 2012). The highest numbers of species are arthropods, including crabs, barnacles and isopods, with a good spread of species except for fish, hydroids and echinoderms. The high species-richness is a consequence of the caves having several entrances with inter-connecting passageways, leading to strong currents developing through the caves at high water and bringing plenty of food to the mainly filter-feeding organisms on the cave walls.

An inter-tidal survey undertaken in 2012 (Crouch 2012) recorded the Flat top shell *Gibbula umbilicalis*, Small periwinkle *Melarhapa neritoides* and species of Limpet *Patella* near the top of the entry boulder slope; notable species further down the slope included Dog whelk *Nucella lapillus*, Perforated barnacle *Balanus perforatus*, Common rock barnacle *Semibalanus balanoides* and Beadlet anemone *Actinia equina*. Within a small alcove along the passage, Frilled anemone *Metridium senile* occurs; a species associated with strong water movement. Prominent sponges found in the 'Sponge Cave' include Purse sponge *Grantia compressa*, Breadcrumb sponge *Halichondria panicea* and Orange puffball sponge *Tethya citrina*. The 'Jewel Cave' is lit through an opening in the ceiling. This cave is characterised by a distinctive band of the large 10-15 cm tall Oaten pipe hydroid *Tubularia indivisa*. A variety of bryozoans, molluscs, and the delicate Northern cowrie *Trivia arctica* and Spotted cowrie *Trivia monacha* occur below, along with the eponymous Jewel anemone *Corynactis viridis*. Further up, the walls are dominated by Beadlet anemone *Actinia equina*, which uniquely occur in a range of coloured morphs. Other species of cnidaria within this area are a variety of Elegant anemone *Sagartia elegans*, Devonshire cup coral *Caryophyllia smithii* and Dead men's fingers *Alcyonium digitatum*. The Jewel Cave also supports large specimen sponges of Boring sponge *Cliona celata* and Elephant hide sponge *Pachymatisma johnstonia*.

Whilst some fish species, such as the Small mouthed wrasse *Centrolabrus exoletus*, come and go with the tide, Tompot blenny *Parablennius gattorugine* and Shanny Lipophrys *pholis* are resident, retreating into damp crevices and surviving long periods out of the water by retaining water in their gill cavities.

The faunal assemblage found within the 'Jewel Cave' is indicative of the 'Anemones, including *Corynactis viridis*, crustose sponges and colonial ascidians on very exposed or wave surged vertical infralittoral rock' biotope type (Connor et al. 2004). It is apparent that this biotope has remained relatively stable since it was first surveyed in 1885.

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

The Gouliot Caves and Headland Ramsar Site is located on the west coast of Sark. It is divided into two distinct areas; the undersea caves and the associated headland. The caves are approached by a steep path, grassy to start with then bare rock. They form a spectacular littoral and sublittoral fringe cave system running through the headland, where the sea has eroded away fault lines in the western section of gneiss. The caves are open to the sea and cross the headland three times from north to south with other openings to the west. The site has an exceptionally large tidal range. At high tide the caves are submerged by strong surging tidal currents. The upper parts are regularly exposed twice a day, with each tide cycle. Whilst some light enters from cracks above, much of the cave system is enclosed and some parts remain submerged on all but the very lowest spring tides when they can be accessed on foot. The walls and cave roof are rock; the cave floor is cobbles and pebbles with some larger boulders.

The headland rises to about 80 m and is surrounded by steep cliffs and sloping ground. It consists predominantly of westerly-dipping biotite-gneiss containing varying, but generally small, amounts of hornblende material. The biotite-gneiss is streaked with dark green hornblende pods best seen on the southern cliffside. The caves occupy faults in the gneiss and contain dolerite and lamprophyre dykes exposed at low tide. A distinctive felsite dyke cuts east-west across the Gouliot Headland and curves around northward to cut a deep gully where it appears faulted to the north-west.

The headland is partly vegetated. The vegetation is influenced by the distribution and depth of soil and occurrence of ground-water flushing, together with variations in the environmental conditions related to aspect. The soils are very thin or completely absent on the cliffs and steeper slopes; some deeper, acidic, free-draining sandy/loamy soil occurs on the north side of the headland. The boundary to the north-east is formed by a steep valley that descends to the sea, which contains a flushed area and other areas of wet ground. Patches of soft, eroding cliff are found at the bottom of the coastal grassland, above a band of hard rocky cliffs with run down to a strip of rocky shoreline found at the base of the cliffs.

Parts of the headland are covered with coastal grassland. Plant species are typical of cliffs in the Channel Islands. There is some variation in the vascular plant species found on the south versus north sides of the headland. The vegetation to the south is more Mediterranean in character, with mostly low growing plants and many spring or autumn flowering species. That on the north side is lush with areas of grass and scrub. The boundary to the north-east is formed by a steep valley with a flushed area and other areas of wet ground, which support a wetland flora with Marsh pennywort *Hydrocotyle vulgaris*, a scarce species on the island. Patches of soft cliff occur at the bottom of the coastal grassland. They provide an important nesting site for solitary bees and wasps and the Tiger beetle *Cicindela campestris*. Outcrops of harder rock occur are covered in a variety of lichen species; particularly noteworthy are two species of *Roccella* and *Teloschistes flavicans*, which is found at only one other place (Jerbourg Point) in the Bailiwick of Guernsey. The rocky shoreline is typical of other rocky shores in the Channel Islands. Particularly noteworthy is the Celtic sea slug *Onchidella celtica*, which is a pulmonate mollusc that occurs around the cave entrances to the north and is recorded at only two other places in the Channel Islands.

4.2 - What wetland type(s) are in the site?

Marine or coastal wetlands

| Wetland types (code and name) | Local name | Ranking of extent (1: greatest - 4: least) | Area (ha) of wetland type | Justification of Criterion 1 |
|-----------------------------------|---|--|---------------------------|------------------------------|
| D: Rocky marine shores | Includes areas of rocky marine shore, steep sea cliffs around the headland and parts with sparse, cliff-type vegetation | 0 | 3.7 | Representative |
| E: Sand, shingle or pebble shores | Inter-tidal shingle and pebble areas, mostly at northern entrances to caves | 0 | 0.1 | Representative |

Inland wetlands

| Wetland types (code and name) | Local name | Ranking of extent (1: greatest - 4: least) | Area (ha) of wetland type | Justification of Criterion 1 |
|---|---------------------------------------|--|---------------------------|------------------------------|
| Fresh water > Marshes on inorganic soils >> Ts: Seasonal/intermittent freshwater marshes/pools on inorganic soils | Flushed/marshy ground on the headland | 0 | 0.01 | Representative |

Other non-wetland habitat

| Other non-wetland habitats within the site | Area (ha) if known |
|---|--------------------|
| Coastal grassland/heath/bracken on headland | 0.2 |

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

| Phylum | Scientific name | Position in range / endemism / other |
|----------------------------|-------------------------------|--|
| TRACHEOPHYTAMAGNOLIOPSIDA | <i>Hydrocotyle vulgaris</i> | Scarce species on the island of Guernsey |
| ASCOMYCOTA/LECANOROMYCETES | <i>Teloschistes flavicans</i> | Scarce species on the island of Guernsey, listed as Vulnerable in Woods & Coppins (2012) |

4.3.2 - Animal species

Other noteworthy animal species

| Phylum | Scientific name | Pop. size | Period of pop. est. | % occurrence | Position in range /endemism/other |
|--------------------|-----------------------------|-----------|---------------------|--------------|---|
| ARTHROPODA/INSECTA | <i>Cicindela campestris</i> | | | | Notable species on Sark that nests in areas of soft cliff |

Invasive alien animal species

| Phylum | Scientific name | Impacts | Changes at RIS update |
|----------------------|--------------------------------|------------------------|-----------------------|
| BRYOZOA/GYMNOLAEMATA | <i>Watersipora subtorquata</i> | Actual (minor impacts) | increase |

Optional text box to provide further information

The alien invasive Red ripple bryozoan *Watersipora subtorquata* was first seen at the site in 2014 and has since increased notably.

4.4 - Physical components

4.4.1 - Climate

| Climatic region | Subregion |
|---|---|
| C: Moist Mid-Latitude climate with mild winters | Cfb: Marine west coast (Mild with no dry season, warm summer) |

The site has an oceanic temperate climate. It typically receives around 824 mm of rainfall and 1820 hours of sunshine. The average mean temperature is 11.1°C (minimum and maximum averages are 8.7°C and 13.4°C), and the prevailing wind direction is SW-W with a mean wind speed of 12.1 knots.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

The site is located within the Greater North Sea regional area.

4.4.3 - Soil

Mineral

(Update) Changes at RIS update No change Increase Decrease Unknown

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes No

Please provide further information on the soil (optional)

See section 4.1.

4.4.4 - Water regime

Water permanence

| Presence? | Changes at RIS update |
|---|-----------------------|
| Usually seasonal, ephemeral or intermittent water present | No change |

Source of water that maintains character of the site

| Presence? | Predominant water source | Changes at RIS update |
|---------------------------------|-------------------------------------|-----------------------|
| Water inputs from groundwater | <input type="checkbox"/> | No change |
| Marine water | <input checked="" type="checkbox"/> | No change |
| Water inputs from precipitation | <input type="checkbox"/> | No change |

Water destination

| Presence? | Changes at RIS update |
|-----------|-----------------------|
| Marine | No change |

Stability of water regime

| Presence? | Changes at RIS update |
|--|-----------------------|
| Water levels fluctuating (including tidal) | No change |

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology:

See section 4.1.

4.4.5 - Sediment regime

Sediment regime unknown

Please provide further information on sediment (optional):

The caves, shoreline and headland are subject to gradual erosion.

4.4.6 - Water pH

Unknown

4.4.7 - Water salinity

Euhaline/Eusaline (30-40 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Oligotrophic

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ii) significantly different

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

Inland areas to the east of the site are used as agricultural pasture.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|-------------------|--|--------------------------------|
| Food for humans | Sustenance for humans (e.g., fish, molluscs, grains) | Low |

Regulating Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|--------------------|---|--------------------------------|
| Erosion protection | Soil, sediment and nutrient retention | Low |
| Hazard reduction | Coastal shoreline and river bank stabilization and storm protection | Low |

Cultural Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|-----------------------------|--|--------------------------------|
| Recreation and tourism | Picnics, outings, touring | Medium |
| Recreation and tourism | Nature observation and nature-based tourism | Medium |
| Spiritual and inspirational | Aesthetic and sense of place values | Medium |
| Spiritual and inspirational | Cultural heritage (historical and archaeological) | Medium |
| Scientific and educational | Educational activities and opportunities | Medium |
| Scientific and educational | Important knowledge systems, importance for research (scientific reference area or site) | Medium |

Supporting Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|-------------------|---|--------------------------------|
| Biodiversity | Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part | High |

Optional text box to provide further information

The site provides benefits through the rich diversity of lifeforms and ecosystems that it supports. It also provides food as it is lightly grazed by sheep and forms part of a protective coastal shoreline. The caves are visited by locals and tourists and used for leisure diving; the headland is also a popular walking site with attractive coastal views. The site is promoted in tourist brochures and web-sites; exhibitions, talks and films on Gouliot Caves shown at the Sark Visitor Centre; and an information booklet on the species found in the Caves and a leaflet on the flora have been produced. The headland is also included in Sark’s Wildflower walks which takes place annually.

Gouliot Caves have long been noted for the amazing variety of invertebrate life, which can be viewed at low-water. Before the invention of the aqualung, this was one of the few places where sub-marine life could be examined in situ and thus has importance in the history of the development of marine zoology. Many of the species described in the monographs of Alder & Hancock (1845-1855) and Bowerbank (1864-1882) came from these caves. The site thus has importance in the history of the development of marine zoology.

A general guide to the caves was written by Ann Allen (2007). More recently, scuba divers from the Marine Conservation Society’s Seasearch project carried out a general survey of Sark’s marine life in 2008, which included the Gouliot Caves; and the Porcupine Marine Natural History Society conducted a follow-on intertidal survey of Gouliot Caves in 2012. Sue Daly produced a booklet guide to The Gouliot Caves & Headland Ramsar Site in 2018. A short archaeological excavation undertaken in 2019 showed only relatively recent (probably WW II) traces of activity.

Outside the site:

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

- i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland
- ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland
- iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples
- iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

| Category | Within the Ramsar Site | In the surrounding area |
|-----------------------------|-------------------------------------|--------------------------|
| National/Federal government | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Private ownership

| Category | Within the Ramsar Site | In the surrounding area |
|--|--------------------------|-------------------------------------|
| Other types of private/individual owner(s) | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Sark Chief Pleas Agriculture, Environment & Sea Fisheries Committee

Provide the name and/or title of the person or people with responsibility for the wetland:

The Committee Chairman

Postal address:

Chief Pleas, La Chasse Murette, Sark, SGY10 1SF, UK

E-mail address:

agr.env.sea@sarkgov.co.uk

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Invasive and other problematic species and genes

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|------------------------------------|---------------|------------------|-------------------------------------|----------|--------------------------|-----------|
| Invasive non-native/ alien species | Medium impact | | <input checked="" type="checkbox"/> | increase | <input type="checkbox"/> | No change |

Please describe any other threats (optional):

The site is not subject to any significant threats, apart from the alien invasive Red ripple bryozoan Watersipora subtorquata, which was first seen at the site in 2014 and has since increased notably.

5.2.2 - Legal conservation status

<no data available>

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Habitat

| Measures | Status |
|----------------------------------|-------------|
| Habitat manipulation/enhancement | Implemented |

Human Activities

| Measures | Status |
|--|-------------|
| Communication, education, and participation and awareness activities | Implemented |

Other:

The island Sark is very small and has no 'nature reserve' legislation. However, development is very strictly controlled and would not be allowed on this site. The headland is lightly grazed by sheep to conserve the coastal grassland and areas of flushed/marshy habitat. Occasional cutting back of bracken takes place to reduce competition with bluebells. In 2020, Sark joined the other Channel Island Ramsar sites in approving a Code of Conduct, which is available to visitors through the Sark Visitor Centre and <http://www.ci-ramsar.com/code-of-conduct/>. It describes the site and gives advice on how best to preserve the environment when visiting Gouliot Headland and Caves, including access to the caves and headland, protection of wildflowers and sensitive marine life, seabird disturbance, diving, littering, and use of drones.

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

The Sark Visitor Centre and the Société Sercquaise present exhibitions, talks and films on the Gouliot Caves. A leaflet on the flora of the headland, an information booklet on the species found in the Caves (Allen 2007), and a photographic booklet guide to The Gouliot Caves & Headland Ramsar Site (Daly 2018) are available. The headland is also included in programme of guided walks on Sark's Wildflower walks.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring is informal based on visitor observations.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

- Alder, J. & Hancock, A. (1845-1855) A Monograph of the British Nudibranchiate Mollusca: with figures of all the species. Parts I-VII. Ray Society, London.
- Allen, A. (1989) Sark invertebrates of the rocky shore. Ann Allen.
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- Allen, A. (2007) Gouliot Caves. La Société Guernesiaise.
- Allen, A. & Hilton, B. (1988) Distribution & zonation of marine lichens in Sark. Report & Transactions La Société Guernesiaise 22(1987), 234-257.
- Ansted, D.T. & Latham, R.G. (1862) The Channel Islands. W. H. Allen & Co., London.
- Bowerbank, J.S. (1864-1882) A Monograph of the British Spongiadae in 4 vols. The Ray Society, London.
- Cheney, C.S. (2004) A preliminary hydrogeological study of the Island of Sark 2004. British Geological Survey, NERC.
- Connor, D.W., Allen, J.H., Golding, N., Howell, K.L., Lieberknecht, L.M., Northen, K.O., & Reker, J.B. (2004) The Marine Habitat Classification for Britain and Ireland Version 04.05. JNCC, Peterborough.
- Crouch, F. (2012) Porcupine Marine Natural History Society Intertidal Survey of the Gouliot Caves, 8th April 2012. For the La Société Sercquais, Sark. <https://www.socsercq.org/marine-biology>
- Daly, S. (2018) The Gouliot Caves and Headland – A Guide to Sark's Ramsar Site. The Société Sercquaise, Sark.
- Gibbons, W. (1975) Sark Rocks. An Introduction to the Geology of the Island. Manche Technical Supplies, Jersey.
- IUCN (2022) The IUCN Red List of Threatened Species. <https://www.iucnredlist.org/>
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- McClintock, D. (1975) The Wildflowers of Guernsey. Collins, London.
- Pienkowski, M.W. (ed.) (2005) Review of existing and potential Ramsar sites in UK Overseas Territories and Crown Dependencies. Contractor: UK Overseas Territories Conservation Forum, Peterborough. Final report on Contract CR0294 to the UK Department for Environment, Food and Rural Affairs, Bristol. www.ukotcf.org
- Wood, C. (2008) Seasearch Survey of Sark June 2008. A report to La Société Sercquaise, Sark. <https://www.socsercq.org/marine-biology>
- Woods, R.G. & Coppins, B.J. (2012) A Conservation Evaluation of British Lichens and Lichenicolous Fungi, Species Status No.13, JNCC, Peterborough.

Previous version of RIS: Gouliot Caves and Headland Ramsar Information Sheet, RIS for Site no. 2276, published on 9 January 2017.

Related webpages

Channel Island Ramsar Code of Conduct webpage: <http://www.ci-ramsar.com/code-of-conduct/>

La Société Sercquaise (The Sark Society) Marine Biology webpage: <https://www.socsercq.org/marine-biology>

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<3 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



View of Gouliot Headland from the western end (Sue Daly, 2018)



View of the spectacular 'Jewel Cave' at low tide (Sue Daly, 2018)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2007-04-09