

Ramsar Information Sheet

Published on 10 April 2024 Update version, previously published on : 2 February 2005

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

Les Minquiers, Jersey



Designation date 2 February 2005 Site number 1456

Coordinates 48°58'23"N 02°07'19"W

Area 9 575,00 ha

RIS for Site no. 1456, Les Minquiers, Jersey, United Kingdom of Great Britain and Northern Ireland (Crown dependencies)

https://rsis.ramsar.org/ris/1456 Created by RSIS V.1.6 on - 10 April 2024

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 Les Minquiers Ramsar Site consists of an extensive near-natural reef system. It is fed by clean, well-oxygenated water from the western English Channel and has a tidal range that can exceed 13 m. At high tide only a group of rocky heads and an islet remain uncovered. At low tide a complex network of intertidal habitats is exposed, including reefs, boulder fields, sandy shores and shingle banks.

The site is rich in biodiversity. It supports over 40 different biotope types and around 600 marine species have been recorded. There are extensive areas of Kelp forest and subtidal Seagrass beds. Shallow waters and intertidal pools provide habitat and act as a nursery area to a wide range of fish and invertebrate species, including commercial species such as crabs and lobsters. The cold-water reef is characterised by limit-of-range species that are scarce or not present on shores further north or south. Some species are regionally scarce and/or listed as vulnerable by the IUCN, including the Green ormer Haliotis tuberculata and Pink sea-fan Eunicella verrucosa. The site supports a small breeding population of Grey seal Halichoerus grypus and one of the largest breeding populations of Bottlenose dolphin Tursiops truncatus in the British Isles. It also provides feeding and roosting locations for passage and wintering waders and wildfowl, and there are several notable nesting bird colonies.

The area provides multiple ecosystem services. It is frequently used for recreational fishing, especially potting, low water fishing and angling, and supports an important commercial fishery for various mixed shellfish and wetfish. General recreational boating is popular and tours and commercial wildlife watching trips are provided. Habitats and topographical features provide many aspects of environmental resilience and multiple ecosystem services, including erosion control and the provision of shelter banks; storage, recycling, processing and acquisition of nutrients and carbon; biochemical and pollution regulation; and the provision of nursery and fisheries functions. The main threats are posed by dredging; over-fishing and harvesting of other aquatic resources; erosion and disturbance of breeding bird species from recreation and tourism; invasive non-native species; and climate change.

2 - Data & location

2.1 - Formal data

| 2.1.1 - Name and address of the compiler of this | s RIS |
|--|-------|
|--|-------|

Responsible compiler

Postal address Department of the Environment, Government of Jersey

Howard Davis Farm
Trinity
Jersey
JE3 5JP

National Ramsar Administrative Authority

Institution/agency

Department for Environment, Food and Rural Affairs

2 Marsham Street
London
SW1P 4DF

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

From year 2010

To year 2023

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)
Les Minquiers, Jersey

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 O No

(Update) B. Changes to Site area No change to area

(Update) For secretariat only. This update is an extension □

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?

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps 0

Boundaries description

The geographic coordinates for the centre point of the site are 48°58.23"N 2°07.20"W. It is located about 25 km south of the island of Jersey and 15 km west of the coast of France.

2.2.2 - General location

a) In which large administrative region does the site lie?

Bailiwick of Jersey, Channel Islands

b) What is the nearest town or population centre?

St Helier, Jersey

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 9575

Area, in hectares (ha) as calculated from 9581.724 GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

| Regionalisation scheme(s) | Biogeographic region |
|---------------------------------------|-------------------------------|
| Marine Ecoregions of the World (MEOW) | South European Atlantic Shelf |
| Other scheme (provide name below) | Atlantic Ocean |

Other biogeographic regionalisation scheme

The site falls within the Atlantic Ocean 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

Les Minquiers is an internationally important example of a large, near-natural, coastal ecosystem. It is representative of the European Atlantic marine ecoregion and has one of the largest tidal ranges in the Other reasons | world. In addition to the cold-water reefs and extensive areas of Kelp forest, the site includes areas of subtidal Seagrass, boulder fields, sandy shores, shingle banks, and a group of rocky outcrops. It supports over 40 different biotopes according to regional classifications (JNCC/EUNIS).

Criterion 3 : Biological diversity

The site is rich in biodiversity. It supports a wide range of subtidal, tidal and coastal habitats (see Criterion 1), and has 613 recorded marine species (including 171 marine macro algae), 92 recorded bird species, and around 102 species of terrestrial plants, lichens, algae and invertebrates (some of which are transitory).

There are extensive areas of shallow water habitat and intertidal pools, which provide habitat and act as a nursery area to a wide range of fish and invertebrate species, including commercial species such as crabs and lobsters. The cold-water reefs host a high diversity of life and provide an edge of range habitat, where many southern and northern European marine species are at the limits of their thermal tolerance. Thus, species such as the Green ormer Haliotis tuberculata, which are associated with warmer southern European waters and are rare or absent from British coasts, coexist with those normally associated with colder northern waters, such as the Beadlet anenome Actinia equina. A small number of species are listed as vulnerable under IUCN criteria or are regionally scarce, including the Pink sea-fan Eunicella verrucosa, Five shilling shell Mactra glauca and Sunset cup-coral Leptopsammia pruvoti.

The site and surrounding area also support a breeding small population of Grey seal Halichoerus grypus and one of the largest breeding populations of Bottlenose dolphin Tursiops truncatus in the British Isles. Other cetaceans frequenting the site include Common dolphin Delphinus delphis and Harbour porpoise Phocoena phocoena.

The site is also important for various bird species. It provides feeding and roosting locations for various passage and wintering wader and wildfowl species. Birds that contribute to nationally significant populations of birds on the island of Jersey include Common tern Sterna hirundo, European Shag Phalacrocorax aristotelis, Great black-backed gull Larus marinus and Great cormorant Phalocrocorax carbo. Seabirds have been in decline across western Europe in recent decades and this pattern is also seen on the reefs around Jersey. The need to safeguard these communities before they merit listing as vulnerable on the IUCN Red List is as important as protecting the few species already in this state.

Criterion 4 : Support during critical life cycle stage or in adverse conditions

The site provides support for the critical life stages of many organisms. It is situated in the Normano Breton Gulf, which experiences huge diurnal movements of relatively warm, closed waters moved by a residual inshore anti-clockwise current around Jersey. This enhances local recruitment of many species of planktonic larvae, especially Crustacea.

The large rocky platforms within the site are important to many invertebrate and vertebrate organisms, providing shelter, protection and food for both larval and adult stages. Likewise, the rich infaunal communities of the mud and sand flats are important for their range of mollusc and worm species. In turn, Optional text box to provide further these areas form important nursery zones for shore birds and shallow sublittoral fish communities. Wide information shallow gullies dividing the rocky platforms also provide critical habitat for many other forms and stages of marine life, as do the extensive and diverse algal assemblages.

> Different locations within the site support many species of wintering and migratory waders and wildfowl with important feeding and roosting locations. There are also several notable nesting bird colonies, including Common tern Sterna hirundo. European shag Phalacrocorax aristotelis. Great black-backed gull Larus marinus and Great cormorant Phalocrocorax carbo, together with a small breeding Grey seal Halichoerus grypus population, and one of the largest breeding Bottlenose dolphin Tursiops truncatus populations in the British Isles.

| End year | 0 | | |
|----------|---|--|--|

Criterion 8 : Fish spawning grounds, etc.

The site contains large areas of key habitat associated with the life stages of many species of fish and shellfish. Notable subtidal habitats include kelp forests, seagrass beds, Sandmason worm beds and vegetated shallow marine areas. The species that is most frequently cited as breeding within the reef is the Green ormer Haliotis tuberculata. In addition, European seabass Dicentrarchus labrax use the site during the spawning and nursery stages of their life cycle; Black seabream Spondyliosoma cantharus juveniles also use it as a nursery, particularly the seagrass habitat, and adults of this species are likely to spawn on the north-west of the reef edge; Porbeagle shark Lamna nasus is believed to breed on western edge of reef; and it is likely that many other species typical of the regional waters utilize the site, such as Allis shad Allosa alosa, Twaite shad Alosa fallax, Giant goby Gobius cobitis, Short-snouted seahorse Hippocampus hippocampus, Common goby Pomatoschistus microps, and Sand goby Pomatoschistus minutus. Commercial invertebrates, such as King scallop, lobster, cuttlefish and various crab species, are also known to breed in the area.

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

| Phylum | Scientific name | Criterion 2 | Criterion 3 | Criterion 4 | IUCN Red List | CITES Appendix I | Other status | Justification | |
|-----------------------------|-----------------|-------------|-------------|-------------|---------------------|------------------|--|--|--|
| Plantae | Plantae | | | | | | | | |
| TRACHEOPHYTA/ LILIOPSIDA | Zostera marina | | Ø | Ø | LC | | OSPAR list of threatened and/or declining habitats | Limited areas of seagrass Zostera marina occur within the reefs at the site; such beds are important as nursery areas for marine life and are internationally regarded as key habitats associated with biological diversity and environmental resilience | |

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

| Phylum | Scientific name | Species qualifies contribute under criterion criterion 2 4 6 9 3 5 7 | Pop. Size | Period of pop. Est. occurrence | IUCN Red List | CITES Appendix I | CMS Appendix I | Other Status | Justification |
|------------------------------|----------------------------|--|--------------|--------------------------------|---------------------|---------------------|-------------------|---|--|
| Others | | | | | | | | | |
| CHORDATA/ MAMMALIA | Delphinus delphis | | 30 | 2021 | LC | | | Protected under the Wildlife (Jersey) Law 2021 | Important component of biodiversity, protected species on Jersey |
| CNIDARIA / ANTHOZOA | Eunicella verrucosa | | 300 | 2018 | VU | | | Protected under the Wildlife (Jersey) Law 2021 | Important component of biodiversity, regionally scarce species, listed as Vulnerable on the IUCN Red list, protected species on Jersey |
| CHORDATA/ MAMMALIA | Halichoerus grypus | | 15 | 2021 | LC | | | Protected under the Wildlife (Jersey) Law 2021 | Important component of biodiversity, notable breeding species, protected species on Jersey |
| CNIDARIA / ANTHOZOA | Leptopsammia pruvoti | | | | | | | Protected under the Wildlife (Jersey) Law 2021 | Important component of biodiversity, regionally scarce species, protected species on Jersey |
| CHORDATA/ MAMMALIA | Phocoena phocoena | | | | LC | | | Protected under the Wildlife (Jersey) Law 2021 | Important component of biodiversity, protected species on Jersey |
| CHORDATA/ MAMMALIA | Tursiops truncatus | | 225 | 2021 | LC | | | Protected under the Wildlife (Jersey) Law 2021 | Important component of biodiversity, notable breeding species, protected species on Jersey |
| Fish, Mollusc ar | nd Crustacea | | | | | | | | |
| CHORDATA / ACTINOPTERYGII | Alosa alosa | | 1 | | LC | | | Protected under the Wildlife (Jersey) Law 2021 | Notable breeding fish species, protected species on Jersey |
| CHORDATA / ACTINOPTERYGII | Alosa fallax | | J | | LC | | | Protected under the Wildlife (Jersey) Law 2021 | Notable breeding fish species, protected species on Jersey |
| CHORDATA / ACTINOPTERYGII | Dicentrarchus Iabrax | | 1 | | LC | | | | Notable breeding fish species |
| CHORDATA / ACTINOPTERYGII | Gobius cobitis | | J | | | | | | Notable breeding fish species |
| MOLLUSCA/ GASTROPODA | Haliotis tuberculata | | 30000 | 2022 | VU | | | Protected under the (Jersey) Ormer fishing and possession regulations | Important component of biodiversity, listed as Vulnerable on the IUCN Red list, notable breeding shellfish species |
| CHORDATA / ACTINOPTERYGII | Hippocampus hippocampus | | J | | DD | | | Protected under the Wildlife (Jersey) Law 2021 | Notable breeding fish species, protected species on Jersey |
| ARTHROPODA/ MALACOSTRACA | Homarus gammarus | | J | | LC | | | | Notable breeding crustacean species |
| CHORDATA/ ELASMOBRANCHII | Lamna nasus | | J) | | | | | Protected under the Wildlife (Jersey) Law 2021 | Notable breeding fish species, protected species on Jersey |
| MOLLUSCA/ BIVALVIA | Mactra glauca | | 300 | 2016 | | | | Protected under the Wildlife (Jersey) Law 2021 | Important component of biodiversity, regionally scarce species, protected species on Jersey |
| MOLLUSCA/ BIVALVIA | Pecten maximus | | J | | | | | | Notable breeding shellfish species |
| CHORDATA / ACTINOPTERYGII | Pomatoschistus microps | | J | | LC | | | | Notable breeding fish species |
| CHORDATA / ACTINOPTERYGII | Pomatoschistus minutus | | J | | LC | | | | Notable breeding fish species |
| MOLLUSCA/ CEPHALOPODA | Sepia officinalis | | J | | LC | | | | Notable breeding fish species |
| CHORDATA / ACTINOPTERYGII | Spondyliosoma cantharus | | Z) | | LC | | | | Notable breeding fish species |
| Birds | | | | | | | | | |

| Phylum | Scientific name | qı cı | pecies ualifies under riterion 4 6 | 1 | contr un crit | cies ributes der erion | Pop. Size | Period of pop. Est. | IUCN Red List | CITES Appendix I | CMS Appendix | Other Status | Justification |
|-------------------|------------------------------|----------|--|---|---------------------|---------------------------------|--------------|---------------------|-------------------------|---------------------|-----------------|--|--|
| CHORDATA/ AVES | Larus marinus | | 2 0 | | 2 C | | 25 | 2022 | LC | | | Protected under the Wildlife (Jersey) Law 2021 | Important component of biodiversity, notable breeding species, protected species (including breeding and resting sites) on Jersey |
| CHORDATA/ AVES | Phalacrocorax aristotelis | | 2 🗆 | | 2 C | | 25 | 2022 | | | | Protected under the Wildlife (Jersey) Law 2021, listed on Jersey Birds of Conservation Concern (2011), listed as Species of European Concern | Important component of biodiversity, notable breeding species, protected species (including breeding and resting sites) and Red Listed on Jersey |
| CHORDATA/ AVES | Phalacrocorax carbo | | Z 🗆 | | 2 C | | 25 | 2022 | LC | | | Protected under the Wildlife (Jersey) Law 2021, listed on Jersey Birds of Conservation Concern (2011), listed as Species of European Concern | Important component of biodiversity, notable breeding species, protected species (including breeding and resting sites) and Red Listed on Jersey |
| CHORDATA/ AVES | Sterna hirundo | | 2 0 | | 2 C | | 150 | 2022 | LC | | | Protected under the Wildlife (Jersey) Law 2021, listed on Jersey Birds of Conservation Concern (2011) | Important component of biodiversity, notable breeding species, protected species (including breeding and resting sites) and Red Listed on Jersey |

¹⁾ Percentage of the total biogeographic population at the site

The population size for Bottlenose dolphin Tursiops truncatus and Grey Seal Halichoerus grypus are approximate. Sunset cup-coral Leptopsammia pruvoti and Five shilling shell Mactra glauca are known only from single locations within the site; Pink Sea-fan Eunicella verrucosa is common on rocky surfaces below 20 m depth. Green ormer Haliotis tuberculata is at the northern end of its range on Jersey, has been heavily exploited across southern Europe and in past decades has also suffered from significant disease episodes. The population sizes for breeding birds are approximate and highly vulnerable to disturbance from rising tourist numbers during the breeding season.

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 |
|------------------------------|---|-------------|---------------|
| Seagrass/Zostera beds | | See below | See below |
| Kelp forests | | See below | See below |
| Coastal vegetation | | See below | See below |

Optional text box to provide further information

The site includes at least 1050 ha of Kelp forests (EUNIS habitat type A3.211/A3.1151) and several beds of Seagrass Zostera marina (EUNIS habitat type A5.5331) covering 30 ha. These are important as nursery areas for marine life, associated biodiversity and environmental resilience. The terrestrial part of the site supports a restricted coastal flora and also provides an area for nesting seabirds.

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

4.1 - Ecological character

The site is predominantly formed of intertidal and shallow marine habitats, with only a small supralittoral component (0.01 ha) located on the reef islets. It includes a large reef system, within an extensive shoal area 21 km2 in size. These are geographically isolated and do not suffer from issues associated with pollution, overdevelopment or overfishing. They are fed by clean and well-oxygenated water from the western English Channel, which are relatively warm waters due to the influence of the Gulf Stream and surrounding oceanographic conditions. The flora and fauna are characterised by limit-of-range species at the northern and southern margins of their distributions, which are not present on shores either to the north or south respectively.

The tidal range can exceed 13 m. At high tide, only small groups of rocky heads and an islet (Maître Île) are exposed. At low tide a complex network of intertidal habitats is exposed, including rocky reefs, sandy shores and shingle banks, together with boulders of all sizes and sedimentary mud, sand and gravel. Exposed and sheltered rocky shores, rockpools, intertidal overhangs and caves are all present. Intertidal rocky platforms bear luxuriant growth of fucoid algae. Stands of Kelp are extensive and intertidal channels support sponge and ascidian communities. Intertidal rockpools contain dense colonies of the non-native alga Sargassum muticum, which were first recorded in Jersey in 1980.

The marine habitats are in good or very good health and support a wide range of ecosystem services and functions. This includes a fishing industry that is based on static gear; mobile fishing gear has been excluded from 47.56 km2 of the reef since 2017. Les Minquiers is regarded as a biodiversity hotspot and probable nursery area for a range of species; it is also thought to play an important role in offering biological resilience to the wider Normano-Breton Gulf.

See Chambers, Binney and Jeffreys (2016) for further information.

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

| larine | | | |
|--------|--|--|--|
| | | | |
| | | | |

| Wetland types (code and name) | Local name | Ranking of extent (1: greatest - 4: least) | Area (ha) of wetland type | Justification of Criterion 1 |
|---|---|--|------------------------------|------------------------------|
| A: Permanent shallow marine waters | Includes EUNIS types A5.133/137/231 | 2 | 1900 | Representative |
| B: Marine subtidal aquatic beds (Underwater vegetation) | Includes EUNIS types A3.12/125/211/214/222/223/2231/315/7 A4.13, A5.52/5331 | 113, ₁ | 5700 | Representative |
| D: Rocky marine shores | Includes EUNIS types A1.1131/1133/125/212/214/215/313/31 B3.111 B3.113 | 32/3142/3152/4121/4 <u>\$</u> 1, | 500 | Representative |
| E: Sand, shingle or pebble shores | Includes EUNIS types A1.413/4131, A2.111/211/224/225/226/421 | 4 | 400 | Representative |
| Ga: Bivalve (shell-fish) reefs | Includes EUNIS type A5.433 | 3 | 1000 | Representative |

Other non-wetland habitat

| Other non-wetland habitats within the site | Area (ha) if known |
|---|--------------------|
| Concrete/sea walls/fisherman's huts | 0.2 |
| Marine waters >6m deep (includes EUNIS type A5.141) | 100 |

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

| Outer flotoworthly plant apocies | | | |
|----------------------------------|-----------------|--------------------------------------|--|
| Phylum | Scientific name | Position in range / endemism / other | |
| TRACHEOPHYTA/MAGNOLIOPSIDA | Malva arborea | See below | |

Invasive alien plant species

| Phylum | Scientific name | Impacts | Changes at RIS update |
|----------------------------|--------------------------|------------------------|-----------------------|
| RHODOPHYTA/FLORIDEOPHYCEAE | Asparagopsis armata | Actual (minor impacts) | increase |
| RHODOPHYTA/FLORIDEOPHYCEAE | Grateloupia subpectinata | Actual (minor impacts) | increase |
| RHODOPHYTA/FLORIDEOPHYCEAE | Grateloupia turuturu | Actual (major impacts) | No change |
| OCHROPHYTA/PHAEOPHYCEAE | Sargassum muticum | Actual (major impacts) | No change |

Optional text box to provide further information

Tree mallow Malva arborea dominates the area on one of the islets that is covered by soil, providing protection against erosion and food/shelter for animals. Sargassum muticum has taken extensive hold of much of the lower intertidal pools and shallow subtidal areas regionally; growing up to 5m long with a significant mass of small brown leaves and pods its positive buoyancy can cause both shading and heating of the waters below it.

4.3.2 - Animal species

Invasive alien animal species

| Phylum | Scientific name | Impacts | Changes at RIS update |
|------------------------|-----------------------|------------------------|-----------------------|
| ARTHROPODA/MAXILLOPODA | Austrominius modestus | Actual (minor impacts) | No change |
| MOLLUSCA/GASTROPODA | Crepidula fornicata | Actual (major impacts) | increase |
| MOLLUSCA/BIVALVIA | Magallana gigas | Potential | increase |
| CHORDATA/ASCIDIACEA | Styela clava | Actual (minor impacts) | increase |

Optional text box to provide further information

Crepidula fornicata is a gastropod mollusc that colonises areas of broken ground and competes with benthic habitats. It is an ecological dead end in that little preys upon it and it creates a mass of shell and faecal material that can smother areas of seabed.

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) |

4.4.2 - Geomorphic setting

| 2 |
|--|
| a) Minimum elevation above sea level (in metres) -30 |
| 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 \Box |
| Not in river basin \square |
| 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 an offshore reef system located in the English Channel, in the NE Atlantic Ocean.

4.4.3 - Soil



Please provide further information on the soil (optional)

The terrestrial part of the site includes a small area that is covered by soil, mostly on Maître IIe. Recent monitoring suggests that the area covered by soil is stable.

4.4.4 - Water regime

Water permanence

| Trator pormanones | | |
|-------------------|------------------------------------|-----------------------|
| | Presence? | Changes at RIS update |
| | Usually permanent water present | No change |

Source of water that maintains character of the site

| Course of water that manifeme oriended of the offe | | |
|--|--------------------------|-----------------------|
| Presence? | Predominant water source | Changes at RIS update |
| Marine water | ✓ | No change |

Water destination

| Water accumater. | | |
|------------------|-----------|-----------------------|
| | 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.

| The tidal range is 13m. | |
|---|--|
| 4.4.5 - Sediment regime | |
| Significant transportation of sediments occurs on or through the site $\ensuremath{\sigma}$ | |
| ^(Update) Changes at RIS update No change (Increase (Decrease (Unknown () | |
| Sediment regime unknown □ | |
| Please provide further information on sediment (optional): | |

The marine part of the site has a mobile sediment regime, with some stable seagrass and clam beds. It contains areas of subtidal and tidal

| 4.4.6 - Water pH | |
|---|--|
| Circumneutral (pH: 5.5-7.4) ✓ | |
| ^(Update) Changes at RIS update No change () Increase O Decrease O Unknown O | |
| Unknown □ | |
| | |
| 4.4.7 - Water salinity | |
| Euhaline/Eusaline (30-40 g/l) ☑ | |
| ^(Update) Changes at RIS update No change (Opdate) Increase O Decrease O Unknown O | |
| Unknown | |
| 4.4.8 - Dissolved or suspended nutrients in water | |
| Unknown ☑ | |
| Place a provide further information on discounted as a uppended putrious (extinuel). | |

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

mud, sand, shingle and gravel, with some underlying beds of peat and clay.

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar O ii) significantly different o site itself: Surrounding area has greater urbanisation or development \square Surrounding area has higher human population density \square Surrounding area has more intensive agricultural use Surrounding area has significantly different land cover or habitat types

The site is offshore with little or no terrestrial influence; nutrient levels have not been measured.

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

The site is surrounded by open sea, beyond which it is bordered to the east by France, to the south by Jersey, and to the north by the other Channel Islands.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

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

| Regulating Services | | | |
|---------------------|--------------------|--|--------------------------------|
| | Ecosystem service | Examples | Importance/Extent/Significance |
| | Erosion protection | Soil, sediment and nutrient retention | Medium |
| | Climate regulation | Regulation of greenhouse gases, temperature, precipitation and other climactic processes | Medium |

Cultural Services

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

Supporting Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|-------------------|---|--------------------------------|
| Biodiversity | Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part | High |
| Nutrient cycling | Storage, recycling, processing and acquisition of nutrients | High |

Optional text box to provide further information

Fishing within the site is of great cultural, social and traditional importance to the population of Jersey. It has been used as an offshore fishing base for several thousand years and continues to support an important commercial fishery for various mixed shellfish and wetfish, including lobster, brown crab, bass, whelk and scallop. Local and visiting fishers frequently use the site for recreational fishing. Potting, low water fishing and angling are the main métiers employed by the recreational fishing sector. There is also some recreational scallop diving and spear fishing.

General recreational boating is also popular with many visitors coming to the site, particularly on summer weekends. The site is frequently used by sailboats, power boats, kayaks and eco-tourists. Water tours (at low tide) and tourist outings are provided. Commercial wildlife watching trips visit the site hoping to see the resident seal population, any of the dolphin species, and the diverse seabird community.

Habitats and topographical features within the site provide for many aspects of environmental resilience and multiple ecosystem services, including:

- sediment and nutrient retention, erosion control and the provision of shelter banks the reef system with its extensive shingle and sand banks provides shelter to important subtidal habitats and adjacent coastal areas;
- storage, recycling, processing and acquisition of nutrients and carbon;
- regulation of greenhouse gases, temperature, precipitation, carbon and other climactic processes marine habitats are understood to be vital in the balance of CO2 levels and healthy seagrass and clam beds are increasingly being recognized as key carbon sinks;
- storage, recycling, processing and acquisition of nutrients;
- biochemical and pollution regulation; and
- biological productivity and the provision of nursery and fisheries functions.

The site is regarded as a biodiversity hotspot and probable nursery area for a range of species. It also plays an important role in offering biological resilience to the wider Bay of Granville region.

The site supports historic buildings and archaeological sites exist at the reef. The marine sediments are underlain by peat and clay beds that are of likely archaeological significance. It also forms an important natural laboratory for the study of intertidal and shallow subtidal species and processes; and is used for monitoring of regional bird populations.

| ee p.469-473 in Chambers, Binney and Jeffreys (2016) Les Minquiers: A Natural History. Charonia Press | | | | | | |
|--|-------|--|--|--|--|--|
| ay be located (e.g. website links, citation of published literature): | | | | | | |
| here economic studies or assessments of economic valuation have been undertaken at the site, it would be helpful to provide information on where the results of such studies | | | | | | |
| ave studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? | | | | | | |
| Outside the site: | 10000 | | | | | |
| | | | | | | |
| Within the site: | Zero | | | | | |
| | | | | | | |

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

Description if applicable

The site has been used as an offshore fishing base for several thousand years. Evidence of this is preserved in the soil on the main island and through historical records. See Chambers, Binney and Jeffreys (2016) for further information.

| RIS for Site no. 1456, Les Minquiers, Jersey, United Kir | gdom of Great Britain and Northern Ireland (Crown dependencies) |
|---|---|
| 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 | |

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

| Dii | ы | i٠ | OVA | /ne | re | hir | |
|-----|---|----|-----|-----|----|-----|--|
| | | | | | | | |

| Category | Within the Ramsar Site | In the surrounding area |
|-----------------------------|------------------------|-------------------------|
| National/Federal government | ✓ | / |

Private ownership

| Category | Within the Ramsar Site | In the surrounding area |
|--|------------------------|-------------------------|
| Other types of private/individual owner(s) | ₽ | |

Provide further information on the land tenure / ownership regime (optional):

The site is British Crown Land. Only the fishing huts within the site are privately owned. Below chart datum the seabed was gifted to the States of Jersey in 2015 by the crown and is retained in public ownership by the island of Jersey.

5.1.2 - Management authority

| agency or organization responsible for | Department of the Environment, Government of Jersey |
|--|---|
| managing the site: | |
| Provide the name and/or title of the person or people with responsibility for the wetland: | Paul Chambers, Assistant Director, Marine Resources & Dr T du Feu, Head of Land Resource Management |
| | |
| Postal address: | Howard Davis Farm, La Route de la Trinité, Jersey JE3 5JP, Channel Islands |
| | |
| E-mail address: | f.binney@gov.je |

5.2 - Ecological character threats and responses (Management)

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

Water regulation

| affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|----------------|---------------|------------------|-----------------|----------|-------------------------|-----------|
| Dredging | Medium impact | Medium impact | ✓ | decrease | ✓ | No change |
| | | | | | | |

Transportation and service corridors

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|----------------------------------|---------------|------------------|-----------------|-----------|-------------------------|-----------|
| Shipping lanes | | Low impact | | No change | ✓ | No change |
| Aircraft flight paths | | Low impact | ✓ | No change | | No change |

Biological resource use

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|--|---------------|------------------|-----------------|-----------|-------------------------|-----------|
| Fishing and harvesting aquatic resources | Medium impact | Medium impact | ✓ | No change | ✓ | No change |

Human intrusions and disturbance

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes | |
|-------------------------------------|---------------|------------------|-----------------|-----------|-------------------------|-----------|--|
| Recreational and tourism activities | High impact | Medium impact | / | No change | | No change | |

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 | Medium impact | / | increase | / | increase |

Climate change and severe weather

| Offinate change and severe weather | | | | | | |
|------------------------------------|---------------|------------------|-----------------|-----------|-------------------------|-----------|
| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
| Habitat shifting and alteration | Medium impact | Medium impact | ✓ | No change | | No change |
| Storms and flooding | Medium impact | Medium impact | ✓ | No change | | No change |

Please describe any other threats (optional):

The main threats are posed by dredging leading to disturbance of marine habitats; pollution (noting that The English Channel is one of the busiest shipping lanes in the world, with ships carrying all types of cargoes); over-fishing and harvesting of other aquatic resources; erosion and disturbance of breeding bird species from recreation and tourism; invasive non-native species; and climate change resulting in increased storms and habitat and species loss.

5.2.2 - Legal conservation status

Regional (international) legal designations

| Designation type | Name of area | Online information url | Overlap with Ramsar Site |
|---------------------------------|--|---|--------------------------|
| Other international designation | Les Minquiers Marine Protected Area (OSPAR) | https://mpa.ospar.org/home-ospar /mpa-datasheets | whole |

National legal designations

| Designation type | Name of area | Online information url | Overlap with Ramsar Site |
|-----------------------------|---|---|--------------------------|
| Areas of Special Protection | Area of Special Protection: breeding area on Maîtr'Île and the surrounding area | https://www.jerseylaw.je/laws/en acted/Pages/RO-047-2022.asp | partly |

Non-statutory designations

| Designation type | Name of area | Online information url | Overlap with Ramsar Site |
|---------------------------------|---|--|--------------------------|
| Other non-statutory designation | Les Minquiers No Mobile Fishing Gear Zone | | whole |
| Other non-statutory designation | Les Minquiers Parlour Pot Restriction Zone | https://www.jerseylaw.je/laws/cu rrent/Pages/14.825.48.aspx | partly |

5.2.3 - IUCN protected areas categories (2008)

| re Reserve \square | la Strict Na |
|-----------------------|--|
| wilderness protection | lb Wilderness Area: protected area managed mainly fo |
| | II National Park: protected area managed mainly for protection a |
| | III Natural Monument: protected area managed mainly for of specific na |
| | IV Habitat/Species Management Area: protected area mar for conservation through management |
| | V Protected Landscape/Seascape: protected area manage landscape/seascape conservation a |

VI Managed Resource Protected Area: protected area managed mainly

for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

| == 9 F | | |
|------------------|-----------------------|--|
| Measures | Status | |
| Legal protection | Partially implemented | |

Species

| Measures | Status |
|---|-------------|
| Control of invasive alien animals | Implemented |
| Control of invasive alien plants | Implemented |
| Threatened/rare species management programmes | Implemented |

Human Activities

| Measures | Status |
|--|-----------------------|
| Research | Partially implemented |
| Harvest controls/poaching enforcement | Implemented |
| Fisheries management/regulation | Implemented |
| Regulation/management of recreational activities | Implemented |

Other:

The site was designated as an OSPAR Marine Protected Area in 2018. In addition, part of the site was designated as an Area of Special Protection (ASP) in 2023 under the Wildlife (Areas of Special Protection) (Jersey) Order 2022; this provides protection to breeding activities, nesting and young of wild birds, including Common tern, European shag, Great cormorant and Great black-backed gull. Access to defined breeding areas is restricted and certain activities are banned to avoid disturbing nesting birds during the breeding season (1 February to 31 August).

Other species protected under the Wildlife (Jersey) Law 2021 are listed in Table 3.3. This Law prohibits the deliberate or reckless killing, capture or disturbance of most protected wild birds, and damage or destruction of their nests and eggs or their breeding or resting sites. It also prohibits the release into the wild of any wild animal, wild bird or wild plant, including non-native species, save for a few exceptions and unless in accordance with a licence to do so.

A code of conduct has been prepared for the site (see http://www.ci-ramsar.com/code-of-conduct/), which gives advice to visitors on how best to preserve the wildlife and environment when visiting the area.

Species specific regulations are in place to control the harvesting of marine fauna and flora including bag limits for seaweed, fish and shellfish. There are also species specific regulations and permit schemes to control the size of animals that can be taken and the seasons in which they can be harvested.

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site?

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

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, the site has already been restored

5.2.7 - Monitoring implemented or proposed

| Monitoring | Status |
|---------------------------------|-------------|
| Birds | Implemented |
| Animal species (please specify) | Implemented |
| Animal community | Implemented |
| Water quality | Implemented |
| Plant community | Proposed |
| Plant species | Proposed |

Animal monitoring includes lobsters, crabs and birds.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Anon. (1997) Anthropogenic radionucleides in the region of Jersey. Southampton Oceanography Centre, Geosciences Division, unpublished report to States of Jersey.

Bishop, A.C. & Bisson, G. (eds.) (1989) Jersey: description of 1:25,000 Channel Islands sheet 2. HMSO, London, for British Geological Survey (Classical areas of British geology).

Chambers, P., Binney, F. and Jeffreys, G. (2016) Les Minquiers – A Natural History. Charonia Press.

Critchley, A.T., Farnham, W.F. & Morrell, S.L. (1983) A chronology of new European sites of attachment for the invasive brown alga, Sargassum muticum, 1973–1981. Journal of the Marine Biological Association, 63, 799-811.

Crutchley, S. (1997) Designation of a Marine Protected Area in Jersey: Recommendations with special reference to molluscs. Unpublished MSc dissertation, University College London.

Culley, M., Farnham, W., Fletcher, R. and Thorp, C. (1996) The marine ecology of Maitresse lle, Les Minquiers. University of Portsmouth, Marine Laboratory, unpublished report to States of Jersey.

Culley, M.B. (1979) An investigation into some aspects of the fisheries of Jersey. University of Portsmouth, Marine Laboratory, unpublished report to States of Jersey.

Farnham, W.F. (1991) Marine fauna of Jersey. University of Portsmouth, Marine Laboratory, unpublished report to States of Jersey.

Hiscock, K. (ed.) (1996) Marine Nature Conservation Review: rationale and methods. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom. MNCR series).

IUCN (2022) The IUCN Red List of Threatened Species. https://www.iucnredlist.org/

Jewell, S. (1995) An identification and analysis of key criteria for the sustainable development of Jersey's coastal zone. Unpublished MSc dissertation, Heriot-Watt University, Institute of Offshore Engineering, Edinburgh.

Kindleysides, D. (1995) Conserving the intertidal biodiversity of Jersey: a strategy. Unpublished MSc dissertation, University College London. Les Minquiers, Jersey, Ramsar Information Sheet UK23002. Version 3.0, 13/06/2008, produced by JNCC.

Orbi, A. and Salomon, J-C. (1988) Dynamique de maree dans le Golfe Normand-Breton. Oceanologica Acta, 11(1), 55-64.

States of Jersey Department of the Environment (2012) Les Minquiers Ramsar Management Plan. Dated February 2012.

Taylor, P.D. and Cook, P.L. (1981) Hippoporidra edax (Busk, 1859) and a revision of some fossil and living Hippoporidra (Bryozoa). Bulletin of the British Museum (Natural History) (Geology), 35, 243-251.

Young, H.G., Dryden, M. & Pinel, J. (2011) Conservation Status of Jersey's Birds: Jersey's bird populations in the 21st Century. Durrell Wildlife Conservation Trust, Jersey.

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

Jersey Government fish and shellfish regulations and monitoring webpage:

https://www.gov.je/Environment/LandMarineWildlife/FishShellfish/Pages/index.aspx

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

<1 file(s) uploaded>

vi. other published literature

<1 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



View of Maîtresse Île, Les Minquiers Ramsar Site (Department of the Environment, Government of Jersey, 2012)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2005-02-02