

## CITATION

### SUNART SITE OF SPECIAL SCIENTIFIC INTEREST Highland (Lochaber)

Site code: 8174

NATIONAL GRID REFERENCES: NM 541627, NM 757618, NM 840645,  
NM 865600, NM 696618, NM 590575,  
NM 609600, NM 686650, NM 740620,  
NM 737621, NM 761594, NM 743604,  
NM 619589

OS 1:50,000 SHEET NO: Landranger Series: 40, 47, 49  
1:25,000 SHEET NO: Explorer Series: 374, 383, 390, 391

AREA: 5540.16 hectares

#### NOTIFIED NATURAL FEATURES:

<b>Geological</b>	<b>:</b>	<b>Igneous petrology:</b>	<b>Caledonian igneous</b>	
		<b>:</b>	<b>Igneous petrology:</b>	<b>Tertiary igneous</b>
		<b>:</b>	<b>Structural and</b>	<b>Moine</b>
		<b>Metamorphic Geology:</b>		
<b>Biological</b>	<b>:</b>	<b>Coastlands:</b>	<b>Eel grass bed</b>	
		<b>:</b>	<b>Coastlands:</b>	<b>Egg wrack (<i>Ascophyllum</i> <i>nodosum ecad mackaii</i>)</b>
		<b>:</b>	<b>Coastlands:</b>	<b>Rocky shore</b>
		<b>:</b>	<b>Coastlands:</b>	<b>Saltmarsh</b>
		<b>:</b>	<b>Woodlands:</b>	<b>Upland oak woodland</b>
		<b>:</b>	<b>Non-vascular plants:</b>	<b>Bryophyte assemblage</b>
		<b>:</b>	<b>Non-vascular plants:</b>	<b>Lichen assemblage</b>
		<b>:</b>	<b>Upland habitats:</b>	<b>Upland assemblage</b>
		<b>:</b>	<b>Vascular plants:</b>	<b>Vascular plant assemblage</b>
		<b>:</b>	<b>Mammals:</b>	<b>Otter (<i>Lutra lutra</i>)</b>
		<b>:</b>	<b>Dragonflies:</b>	<b>Dragonfly assemblage</b>
		<b>:</b>	<b>Butterflies:</b>	<b>Chequered Skipper</b> <b>(<i>Carterocephalus palaemon</i>)</b>
		<b>:</b>	<b>Invertebrates:</b>	<b>Moths</b>

#### DESCRIPTION:

Sunart Site of Special Scientific Interest (SSSI) is an extensive area centred on Loch Sunart, to the south of the Ardnamurchan peninsula. It stretches for over 20 miles along both the northern and southern shores of the loch and includes the Isles of Risga, Carna and Oronsay, as well as adjoining land at Ariundle and Glen Tarbert.

The site is characterised by one of the most extensive areas of ancient semi-natural woodland in Britain. It encompasses a range of upland habitats and assemblages of both vascular and non-vascular plants and three invertebrate groups. The site also

illustrates the varied coastline characteristic of west coast sea lochs, including rock shores interspersed with small saltmarshes and other inter-tidal marine habitats, and is an important habitat for otters. Several elements of the site's geology are of national significance.

On the south side of Glen Tarbert, above the head of Loch Sunart, the SSSI includes a section through the Caledonian igneous rocks of the Strontian pluton. This is one of the finest examples worldwide of a pluton emplaced at mid-crustal levels (around 14 km depth). The pluton, which is now exposed due to millions of years of erosion, is composed predominantly of acid plutonic igneous rock known as 'granodiorite' injected from deeper levels into the Earth's crust around 435 million years ago, when north-west Scotland was part of an ancient continent into which another continent was colliding. Small amounts of basic rock are also found in the pluton, and the site is important for demonstrating the interaction of basic and granodiorite magmas during pluton emplacement. Another important feature of the pluton is the alignment of crystals in the rock, which clearly demonstrate the effects of shearing during intrusion and crystallization of the magma. Shearing was probably related to contemporaneous movement on the Great Glen Fault system.

In the far west of the SSSI, at Ben Hiant, the 'Tertiary Igneous' interest of the site, is represented by the eroded remains of a small, 60 million year old volcano. Dating from the Palaeogene geological period this volcanic complex provides an excellent cross-section through two volcanic vents, filled with agglomerates, ash and pitchstone lavas. Two major dolerite intrusions form most of the highest ground. The contact between the porphyritic dolerite of the smaller intrusion and the existing andesitic pitchstone lavas is of particular interest as it helps reveal that the intrusion of the dolerite occurred at the same time as the vents were infilled. The larger intrusion is likely to be formed largely by a mass of coalesced cone sheets. Several episodes of minor intrusions, including an early cone-sheet swarm are also represented.

The Moine rocks of Ardnamurchan form part of the most westerly exposure of the Moine Supergroup on the Scottish mainland. These Upper Morar Psammite Formation (Morar Group) rocks have retained much of their original structure and character and exhibit abundant sedimentary features, in particular cross-bedding, and convolute and disturbed bedding structures. The site is of national importance as it provides reference sections that enable the sedimentation conditions that prevailed during deposition of the Upper Morar Psammite Formation to be deduced. Excellent exposures revealing a variety of sedimentary structures are displayed in coastal sections at Camas Choire Mhuilinn and from Camas Fearnna to Glenmore Bay.

The rocky shore exhibits varying degrees of exposure and a variety of shore substrates, with bedrock, boulders and cobbles predominating. Tide-swept communities, several of which are noteworthy, are present at a number of locations and there are particularly extensive representations of sheltered shore communities dominated by brown algae, typically lush growths of knotted wrack *Ascophyllum nodosum*. Beds of the internationally important egg wrack variety *Ascophyllum nodosum ecad mackaii* have developed at a number of extremely sheltered locations with freshwater influence. Under-boulder communities and rock pools are present and, notably, the nationally scarce eelgrass *Zostera marina*. An extensive

sedimentary shore to the north and west of Eilean Mor (Laudale Narrows) supports the nationally scarce dwarf eelgrass *Zostera noltii*.

Fringing the shore of Loch Sunart are scattered areas of saltmarsh. The majority of this habitat is dominated by sea plantain, red fescue, saltmarsh rush, and sea milkwort. Where there is freshwater seepage saltmarsh flat-sedge *Blysmus rufus* and slender spike-rush *Eleocharis uniglumis* are locally abundant. In numerous places there are uninterrupted transitions from the intertidal through the saltmarsh and iris beds into woodland and heath.

Mature deciduous woodland dominated by oak, birch and ash covers much of the SSSI. Typically, oak dominated woodland on lower slopes gives way to birch woodland at higher altitudes. Much of the woodland is on Moine rocks and the acidic soils that result support a grass or heath dominated ground flora with heather, blaeberry, wavy hair grass and bracken- filled glades. Nutrient rich areas, overlying basalt or in gorges, support a rich ground flora, with dog's mercury, enchanter's nightshade and sanicle. An understorey of rowan, holly and hazel has a patchy distribution.

The ancient and oceanic nature of the woods has enabled a rich diversity of non-vascular plants to develop. Of particular significance in the lichen and bryophyte assemblages is the range of 'Atlantic' species present. The bryophyte flora includes several notable species including the nationally rare moss *Hymenostylium insigne*, the nationally rare liverwort *Lejeunea mandonii* and nationally scarce liverwort *Radula voluta*. The lichen flora includes numerous notable species including nationally rare *Dictyonema interruptum* and nationally scarce *Leptogium brebissonii*. The woods at Laudale are amongst the best in the country for lichens and woods at Glencripesdale support all four British species of *Lobaria* (lungwort).

Between and beyond the woodlands the assemblage of upland habitats comprises a mix of wet heathland and blanket bog, and drier acidic grasslands and moorlands. Dry heath habitats are patchily distributed, typically being associated with rocky outcrops and knolls. Acidic and calcicolous grasslands are found throughout much of the site and often form mosaics with dry heath. Wet heath and blanket bog are widely distributed and base rich and acidic flushes are numerous.

In addition to its habitats, Sunart SSSI supports a nationally important vascular plant assemblage which includes eight nationally scarce species such as northern rock cress *Arabis petraea*, bog orchid *Hammarbya paludosa*, narrow-leaved helleborine *Cephalanthera longifolia* and rock whitebeam *Sorbus rupicola*, along with two Red Data Book species Lapland marsh-orchid *Dactylorhiza lapponica* and Irish lady's tresses *Spiranthes romanzoffiana*.

The SSSI also contains a diversity of invertebrates, components of which are nationally important. In particular, there is a notable dragonfly and damselfly assemblage which includes the nationally rare northern emerald dragonfly *Somatochlora arctica*. The woodlands are inhabited by strong populations of the nationally scarce chequered skipper butterfly *Carterocephalus palaemon* and the juxtaposition of grassland, heathland and scrub habitats on warm south-facing slopes supports nationally important populations of four species of moth, the ringed carpet

moth *Cleora cinctaria bowesi*, Pretty Pinion *Perizoma blandiata* and the atlantic groundling *Scrobipalpa clintoni* are nationally scarce. The New Forest burnet moth *Zygaena viciae argyllensis* is a red data book species at its only known location in Great Britain.

The SSSI is used by a healthy population of otters which is representative of coastal otter populations on the west coast of Scotland. High densities of otter holts occur in terrestrial areas bordering the edge of Loch Sunart and on the main islands. Intertidal areas form part of the otters' feeding habitat.

#### **NOTIFICATION HISTORY:**

First notified under the 1981 Act: 21 May 2001 as a new site encompassing the following previously notified SSSIs: Poll Luachrain and Druimbuidhe SSSI; Rahoy Woodlands SSSI; Glencripesdale SSSI; Laudale Woods SSSI; Ariundle SSSI; Salen to Woodend SSSI; and Ben Hiant and Ardnamurchan Coast SSSI.

Notification reviewed under the 2004 Act: 28 May 2010

#### **REMARKS:**

Measured area of site corrected (from 5515.83 ha)

Sunart SSSI is part of Sunart Special Area of Conservation (SAC) which is designated for the European habitats and species listed below:

Habitats:       Western acidic oak woodland  
                  Mixed woodland on base rich soils associated with rocky slopes  
                  Dry heaths  
                  Wet heathland with cross-leaved heath  
                  Reefs

Species:        Otter *Lutra lutra*