

CITATION

LOCHS OF HARRAY AND STENNESS SITE OF SPECIAL SCIENTIFIC INTEREST

Orkney Islands

Site code:1083

NATIONAL GRID REFERENCE: HY 295160
HY 283130

OS 1:50,000 SHEET NO: Landranger Series 6
1:25,000 SHEET NO: Explorer Series 463

AREA: 1787.41 hectares

NOTIFIED NATURAL FEATURES

Biological:

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| Freshwater habitats: | Eutrophic loch |
| Intertidal marine habitats and saline lagoons: | Saline lagoon |
| Birds: | Goldeneye (<i>Bucephala clangula</i>), non-breeding |
| Birds: | Pochard (<i>Aythya ferina</i>), non-breeding |
| Birds: | Scaup (<i>Aythya marila</i>), non-breeding |
| Birds: | Tufted duck (<i>Aythya fuligula</i>), non-breeding |
| Invertebrates: | Caddis fly (<i>Ylodes reuteri</i>) Freshwater nerite snail (<i>Theodoxus fluviatilis</i>) |

DESCRIPTION:

Lochs of Harray and Stenness Site of Special Scientific Interest (SSSI) is located on west Mainland, a few kilometres north east of Stromness. The site comprises the two largest inland lochs in Orkney, which are adjoined at the Bridge of Brodgar in the south-east of the site. The lochs are shallow and exhibit a range of salinities from close to seawater in parts of the Loch of Stenness, to freshwater across most of Loch of Harray. The site is also notified for its nationally important bird and invertebrate species.

Loch of Stenness is the second largest saline lagoon in Britain and is important due to its size, stability, northern location and seasonally fluctuating salinity, which is generally highest in summer. The extent of saltwater influx also varies with the cycle of neap and spring tides and salinity levels in the vicinity of the Bridge of Waithe can at times approach those of seawater. Consequently the associated flora and fauna species supported by the Loch are predominantly brackish and marine. A transition zone is evident in the vicinity of the Bridge of Brodgar, the junction with the largely freshwater environment of the Loch of Harray.

Loch of Harray is naturally nutrient rich (eutrophic) and supports a diverse range of flora and fauna. However, nutrient levels in the loch vary both with location and between seasons and years; this is reflected in an unusual mix of plant species. These include nine species of pondweed, two of which, *Potamogeton filiformis*, and

P. friesii are nationally scarce. Other nationally scarce species present include lesser bearded stonewort *Chara curta* and tassel stonewort *Tolypella glomerata*.

Both lochs provide habitat for a diverse range of wintering wildfowl, including populations which contribute significantly to the British totals as follows; pochard 2.8%, tufted duck 1.2%, scaup 48.4% and goldeneye 5.4%.

The site is also notified for its nationally important invertebrates, namely the caddis fly *Ylodes reuteri* and the freshwater nerite snail *Theodoxus fluviatilis*. The caddis fly is very rare in the UK and has only previously been recorded in a few coastal marsh sites in England. The snail is commonly found in chalky (calcareous) rivers in England but the only extant record for Scotland is in the Loch of Harray.

NOTIFICATION HISTORY

First notified under the 1949 Act: 1962, 1973

Re-notified under the 1981 Act: 15 July 1985

Notification reviewed under the 2004 Act: 20 December 2011

REMARKS

Measured area of site corrected (from 1930 ha).

Part of Lochs of Harray and Stenness SSSI is designated as Loch of Stenness Special Area of Conservation (SAC) for the European habitat listed below.

Habitat : Lagoons