
RAMSAR INFORMATION SHEET

FOR WETLANDS OF INTERNATIONAL IMPORTANCE

Site reference number 7UK118
1 Compilation date October 2000
2 Country UK (Scotland)
3 Name of wetland Caithness Lochs
4 Site centre location: Latitude: 58 29 30 N Longitude: 03 20 00 W
5 Altitude 15.0 – 70.0 m
6 Area (ha) 1378.45

7 Overview

The Caithness Lochs Ramsar Site consists of a suite of six lochs and a mire in the extreme north of mainland Scotland. The lochs cover a range of types from oligotrophic to eutrophic, and support a wide diversity of aquatic and wetland vegetation including submerged and floating aquatic communities and species rich marginal, fen and swamp communities. In winter these lochs support internationally important wintering populations of whooper swan (Icelandic), Greenland white-fronted goose and greylag goose (Icelandic).

8 Wetland type Inland wetland

Code	Name	% Area
M	Rivers / streams / creeks: permanent	0.04
O	Freshwater lakes: permanent	74.05
Tp	Freshwater marshes / pools: permanent	0.85
U	Peatlands (including peat bogs swamps, fens)	20.70
X	Tree-dominated wetlands	0.04
Other	Other	4.32

9 Ramsar Criteria 6
10 Map of the site ✓
11 Compiler Joint Nature Conservation Committee
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12 Justification of criteria

Ramsar Criterion 6

The site regularly supports internationally important wintering populations of *Anser albifrons flavirostris*, *Cygnus cygnus* and *Anser anser*.

13 General location

The Caithness Lochs Ramsar site lies in the extreme northeast of mainland Britain.

Administrative Region: Highland

14 Physical Features

Soil & Geology	acidic, alluvium, cobble, gravel, neutral, nutrient-poor, peat, sand, sandstone, sedimentary
Geomorphology and Landscape	floodplain, lowland, valley
Nutrient status	oligotrophic
pH	acidic, circumneutral
Salinity	fresh
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Rainy, temperate climate with a mild winter and periodic frost. Mean minimum temperature approximately 6.6°C. Mean maximum temperature approximately 12.2°C. Mean annual precipitation approximately 946.5mm, with a winter maximum.

15 Hydrological values

Sediment trapping, Flood water storage / desynchronisation of flood peaks, Maintenance of water quality (removal of nutrients)

16 Ecological features

The site consists of six fresh water lochs and a mire (Broubster Leans) A range of loch types from oligotrophic to eutrophic are represented. Among the aquatic communities, pondweed associations are well represented including *Potamogeton perfoliatus-Myriophyllum alterniflorum* (*P. filiformis* subcommunity) on mesotrophic to eutrophic lochs such as Lochs Watten, Scarmclate, Heilen and Mey and *Potamogeton pectinatus-Myriophyllum spicatum* community (A11) on the more eutrophic Loch of Wester. The nationally scarce *Potamogeton filiformis* is particularly well represented on a number of the lochs.

Swamp communities are present, especially on wetter sites such as Broubster Leans, these include *Equisetum fluviatile* swamp (S10) and *Carex rostrata* swamp (S9). These provide habitat for the nationally scarce narrow small-reed *Calamagrostis stricta* and the uncommon water sedge *Carex aquatilis*. All the lochs apart from Loch Calder include some areas of associated wetlands where other habitats represented include *Carex rostrata-Potentilla palustris* tall-herb fen (S27), *Filipendula ulmaria-Angelica sylvestris* mire (M27) and other mire communities such as *Scirpus cespitosus-Eriophorum vaginatum* blanket mire (M17), *Eriophorum vaginatum-Sphagnum papillosum* mire (M18) and *Scirpus cespitosus-Eriophorum* wet heath (M15). Drier areas grazed by cattle or sheep tend to be dominated by *Juncus effusus/acuteiflorus-Galium palustre* rush-pasture (M23).

17 Noteworthy flora

Nationally important species occurring on the site.

Higher Plants.

Calamagrostis stricta

Lower Plants.

Bryum neodamense.

18 Noteworthy fauna

Birds

Species occurring at levels of international importance (as identified at designation):

Over winter the area regularly supports:

Whooper swan, <i>Cygnus cygnus</i> (Iceland/UK/Ireland)	240 individuals, representing an average of 1% of the population (5 year peak mean for 1993/94 to 1997/98)
Greylag Goose, <i>Anser anser</i> (Iceland/UK/Ireland)	7190 individuals, representing an average of 7% of the population (5 year mean for 1993/94 to 1997/98)
Greenland white-fronted goose, <i>Anser albifrons flavirostris</i> (Greenland/ Ireland/UK)	440 individuals, representing an average of 1% of the population (5 year peak mean for 1993/94 to 1997/98)

Nationally important species occurring on the site.

Invertebrates.

Oreodytes alpinus.

19 Social and Cultural Values

Aesthetic
Conservation education
Livestock grazing
Non-consumptive recreation
Sport fishing
Sport hunting
Tourism

20 Land tenure/ownership

Ownership category	On-Site	Off-Site
Private	+	+
Public/communal	+	+

21 Current land use

Activity	On-Site	Off-Site	Scale
Nature conservation	+		Large-Scale
Tourism		+	Small-Scale
Recreation		+	Small-Scale
Commercial forestry		+	Large-Scale
Fishing: recreational/sport	+	+	Small-Scale
Arable agriculture (unspecified)		+	Large-Scale
Permanent pastoral agriculture	+	+	Small-Scale
Hunting: recreational/sport	+	+	Large-Scale
Sewage treatment/disposal		+	Small-Scale
Transport route		+	Small-Scale
Domestic water supply	+	+	Small-Scale
Non-urbanised settlements		+	Small-Scale

22 Adverse factors affecting the ecological character of the site

Activity	On-Site	Off-Site	Scale
Habitat change through new afforestation of open habitats		+	Large-Scale
Drainage/reclamation for agriculture		+	Large-Scale
Recreational/tourism disturbance (unspecified)	+	+	Large-Scale

23 Conservation measures taken

Conservation measure	On-site	Off-site
SSSI	+	
SPA	+	
Candidate SAC		+

24 Conservation measures proposed but not yet implemented

see below

Site vulnerability and management statement

Angling occurs on several of the lochs but is mainly outside the wintering period and is not thought to have any impact. Liaison with local wildfowling and shooting guides is encouraging adherence to the BASC guide for inland goose shooting. There is some potential for disturbance to be caused but it is not thought to be significant. SNH plan to monitor the situation.

Feeding areas at some constituent sites are threatened by field drainage, rough grazing and afforestation. SNH is monitoring these activities and will encourage sympathetic land management, using wider countryside measures where appropriate.

25 Current scientific research/survey/monitoring and facilities

Anser albifrons flavirostris: The Greenland White-fronted Goose Study co-ordinate three national counts per winter. In Caithness these are carried out by a network of volunteer counters co-ordinated by Mr Stan Laybourne, a local school teacher. Since 1972, Mr Laybourne has carried out a long-term study of Greenland white-fronted goose roosting and feeding behaviour in Caithness.

Other water-fowl: Numbers of wildfowl and wading birds wintering on the Ramsar site are monitored annually as part of the national Wetland Birds Survey. (Waters and Cranswick, 1993).

Undertaken and completed

Anser albifrons flavirostris: The following intensive studies of Greenland white-fronted geese in Caithness have been made:

- spring 1985 (Laybourne & Fox, 1985),
- winter 1993/94 (Laybourne & Legg, 1994)
- winter 1994/95 (Harding and Laybourne, 1995)
- winter 1996/7 (Laybourne, 1997)

Other waterfowl: The following surveys of wintering & breeding water-fowl have been made:

- winter 1987/8 (Talbot, 1989)
- winter 1988/9 (Talbot, 1989)
- summer 1993 (O'Brien, 1994)
- winter 1996/7 (Laybourne, 1997)
- summer 1997 (SNH, in prep.)

Fresh-water:

- Invertebrates (MacCan & Moran, 1986)
- Macrophytes (Bell, 1986 & 1989).
- Site evaluation (Bell, 1989).

Habitat Survey:

- Broubster Leans (Mitchell, 1983).

26 Current conservation education

None

27 Current recreation and tourism

Hunting: Traditional wildfowling for duck continues at low levels on the site with consent from SNH.
Bird watching: The Scottish Ornithologists Club plan to build a hide overlooking the Loch of Mey.

28 Functional jurisdiction

Scottish Executive, Rural Affairs Department

29 Management authority

Scottish Natural Heritage, Main Street, Golspie, Sutherland KW10 6TG

30 Bibliography

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