Ramsar Information Sheet for Wetlands of International Importance

Site reference number 7UK093

1. Compilation date: March 1998

2. Country: UK, Scotland

3. Name of wetland: Loch of Strathbeg

4. Geographical coordinates: 57°37'24"N 01°53'00"W

5. Altitude (m): 0-15

6. Area (ha): 615.94

7. Overview:

- Loch of Strathbeg comprises a shallow, eutrophic freshwater pool fed by streams from surrounding farmland, with surrounding wetland, dune and grassland habitats.
- The loch constitutes the largest dune slack pool (200 ha) in Britain and the largest water body in the northeast Scottish lowlands. It is separated from the sea by a sand dune system of 0.5 1 km wide.
- It provides a wintering area for a number of wetland birds, particularly wildfowl, and is also an important staging area for migratory wildfowl from Scandinavia, Iceland, and Greenland.

8. Wetland type: O (219 ha), U (158 ha), E (152 ha), improved grassland (87 ha)

9. Ramsar criteria: 1a, 3a, 3c

10. Map of the site: Yes

11. Compiler: Joint Nature Conservation Committee

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12. Justification of criteria:

1a. The loch constitutes the largest dune slack pool in Britain and the largest water body in the northeast Scottish lowlands.

3a. The site regularly supports 20,000 waterfowl in winter

3c. Over winter, the site regularly supports internationally important numbers of *Cygnus cygnus*, Svalbard *Branta leucopsis*, *Anser brachyrhynchus* and *Anser anser*.

13. General location:

Situated inland from Rattray Head, the northeastern point of the Buchan coast, 13 km south of Fraserburgh. Administrative region: Aberdeenshire

14. Physical features:

Soil & Geology Sand

Geomorphology & Landscape Lowland

Coastal

Aquatic features eutrophic

pH circumneutral

Fresh water Soil mainly mineral Water usually permanent

Summary main climatic features Humid temperature with a cold season. Maximum rainfall in the

latter half of the year

Probability of >0.3 of < 750 mm rain in a year

15. Hydrological values:

Aquatic refuge for roosting waterfowl

16. Ecological features:

General site account

The loch is extremely shallow for its size with a mean depth of 1.5 m, and in periods of strong winds the sand which forms the bottom over much of the loch is brought into suspension, making the water turbid. The shores consist of alternating areas of sand and stones lying gravel with limited emergent vegetation comprising a narrow band of *Eleocharis palustris*, sometimes accompanied by *Polygonum amphibium*. At the northwest end there are extensive beds of *Phragmites*. The submerged vegetation of the sandy beaches formerly consisted of *Chara aspera*, *Potamogeton filiformis* and *Litorella uniflora*, with *Potamogeton pectinatus*, *P. perfoliatus* and *Cladophora* in deeper water. *Chara* no longer occurs as a consequence of chaning water quality.

Main habitat types

Open water. The loch is shallow and nutrient-rich

Well developed system of calcareous dunes and slacks.

There are peripheral marshes which are among the floristically richest in northeast Scotland.

Former areas of arable farmland within the site have been restored to wet grassland by the RSPB, and are subject to active management (including topographic restructuring) to enhance their quality for populations of breeding waders (particularly *Tringa totanus* and *Gallinago gallinago*).

17. Noteworthy flora:

Higher plants

Ranunculus reptansnationally rare in BritainCorallorhiza trifidanationally rare in BritainPotamogeton filiformisnationally rare in BritainJuncus balticusnationally rare in Britain

Lower plants

Tolypella nidifica world and European status uncertain of indeterminate status in Britain

18. Noteworthy fauna:

Species occurring at levels of international importance

Cygnus cygnus Iceland / UK / Ireland population

<u>At designation</u>: over winter, the site regularly supports 245 individuals (5 year peak mean 1986/87 - 1990/91); 1% of the Icelandic population and 4% of the population in Great Britain. <u>Contemporary:</u> over winter, the site regularly supports 183 individuals (5 year peak mean 1991/92 - 1995/96); 1.1% of the international population and 3.3% of the population in Great

Britain.

Favourable conservation status in Europe EC Birds Directive Annex I species Bern Convention Annex II species Bonn Convention Annex II species Branta leucopsis Svalbard population

<u>At designation</u>: not present in internationally important numbers. <u>Contemporary:</u> over winter, the site regularly supports 226 individuals (5 year peak mean 1991/92 - 1995/96); 1.9% of the

population.

Bonn Convention Annex II species

Anser brachyrhynchus Greenland / Iceland / UK population

At designation: over winter, the site regularly supports 27500 individuals (5 year peak mean 1986/87 - 1990/91); 25% of the

Icelandic / Greenlandic population.

<u>Contemporary:</u> over winter, the site regularly supports 39924 individuals (5 year peak mean 1991/92 - 1995/96); 17.7% of the

population.

Favourable conservation status in Europe Bonn Convention Annex II species

Anser anser Iceland / UK / Ireland population

At designation: over winter, the site regularly supports 5560 individuals (5 year peak mean 1986/87 - 1990/91); 6% of the

Icelandic population.

<u>Contemporary:</u> over winter, the site regularly supports 1577 individuals (5 year peak mean 1991/92 - 1995/96); 1.6% of the

population.

Favourable conservation status in Europe Bonn Convention Annex II species

Assemblages of international importance

Over winter, the site regularly supports an assemblage of over 20,000 waterfowl.

At designation, 32,600 birds (5 year peak mean 1986/87 - 1990/91) Ramsar citation, 1992. Contemporary: 49,455 birds (5 year peak mean 1991/92 - 1995/96) WeBS count data.

Species occurring at levels of national importance

Anas crecca Northwestern Europe population

At designation: over winter, the site regularly supports 1270 individuals (5 year peak mean 1986/87 - 1990/91); 1% of the

population in Great Britain.

<u>Contemporary:</u> over winter, the site regularly supports 1898 individuals (5 year peak mean 1991/92 - 1995/96); 1.3% of the

population in Great Britain.

Favourable conservation status in Europe Bonn Convention Annex II species

Bucephula clangula Northwestern / Central Europe population

At designation: over winter, the site regularly supports 150 individuals (5 year peak mean 1986/87 - 1990/91); 1% of the

population in Great Britain.

<u>Contemporary:</u> over winter, the site regularly supports 109 individuals (5 year peak mean 1991/92 - 1995/96); 0.6% of the

population in Great Britain.

Favourable conservation status in Europe Bonn Convention Annex II species

Sterna sandvicensis Western Europe / Western Africa population

At designation: during the breeding season, the site regularly supports 280 pairs (5 year peak mean 1985 - 1990); 0.6% of the

population in Great Britain.

<u>Contemporary:</u> during the breeding season, the site regularly supports 520 pairs (5 year peak mean 1992 - 1996); 3.7% of the

population in Great Britain.

Unfavourable conservation status in Europe

EC Birds Directive Annex I species Bern Convention Annex II species Bonn Convention Annex II species

19. Social and cultural values

aesthetic conservation education current scientific research sport fishing sport hunting tourism

20. Land tenure / ownership

at the site: partly owned by the RSPB, partly privately owned

in the catchment area: owned by the Ministry of Defence

21. Current land use and human activities

at the site:

nature conservation large-scale small-scale tourism recreation small-scale scientific research small-scale recreational / sport fishing small-scale arable agriculture small-scale large-scale grazing sewage treatment / disposal small-scale

in the immediate catchment area:

nature conservationlarge-scaletourismsmall-scalerecreationsmall-scalearable agriculturelarge-scalegrazingsmall-scale

22. Significant factors adversely affecting the ecological character of the site:

at the site:

eutrophication due to external factors *in the immediate catchment area:* direct loss of fauna due to hunting or capture eutrophication from agricultural run-off

23. Conservation measures taken:

at the site:

Site of Special Scientific Interest (SSSI)

Special Protection Area (SPA)

Land owned by the Royal Society for the Protection of Birds (RSPB) and management for nature conservation (RSPB site management plan)

Management agreement

in the immediate catchment area:

Site of Special Scientific Interest (SSSI)

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Land owned by RSPB and managed for nature conservation

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Site vulnerability & management statement

Almost the entire site is managed by the Royal Society for the Protection of Birds (RSPB) for nature conservation. The main land use of the catchment is mixed and arable agriculture. There is no evidence that eutrophication is affecting the internationally important bird populations, however, there is concern over the longer term effects of enrichment upon the water quality of the loch, its aquatic and marginal vegetation and on nationallty important numbers of overwintering common goldeneye *Bucephula clangula*. Scottish Natural Heritage (SNH) intends to undertake a programme of research to identify possible options for the management of the loch in the near future. Through the Ugie Wetland Project, SNH is encouraging farmers in the catchment to reduce inputs by improving the efficiency of their fertiliser use, and to carry out sound management of watercurses and wetlands.

SNH has a management agreement with a private landowner to limit the amount of shooting that takes place on part of the aite. In addition, shootinf within and adjacent to the site has been reduced in recent years through the RSPB's acquisition of the land. In 1997, SNH successfully completed a goose management demonstration scheme at the Loch of Strathbeg. The scheme demonstrated an efficient and relatively cost effective method of influencing the distribution of pink-footed geese *Anser brachyrhynchus* on farmland, thereby reducing conflict between farming and conservation interests.

24. Conservation measures proposed but not yet implemented:

not supplied

25. Current scientific research / survey / monitoring and facilities:

Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetlands Bird Survey (WeBS) ofganised by the British Trust for Ornithology, Woldfowl & Wetlands Trust, the Royal Society for the Protection of Birds, and the Joint Nature Conservation Committee.

The Royal Society for the Protection of Birds undertakes research on a variety of aspects of wetland and waterfowl ecology and management, pursuant to the implementation for their reserve management plan.

There are no research facilities.

26. Current conservation education:

The Royal Society for the Protection of Birds undertakes educational activities at its visitor centre..

27. Current recreation and tourism activities:

Activities are bird watching and walking.

Facilities provided: there is a Royal Society for the Protection of Birds visitor centre at Starnafin and a network of hides around the loch. The visitor centre is undergoing refurnishment. It re-opens spring 1998

Sasonality: none

28. Functional jurisdiction:

Scottish Office, Agriculture, Environment and Fisheries Department

29. Management authority:

Scottish Natural Heritage

30. Bibliographical references:

A list with 9 bibliographical references is available on the original copy.