

RAMSAR INFORMATION SHEET

FOR WETLANDS OF INTERNATIONAL IMPORTANCE

Date of designation: 30/03/98

Site reference number 4UK122

1 **Compilation date** Feb 1999

2 **Country** UK (Scotland)

3 **Name of wetland** Ythan Estuary and Meikle Loch

4 **Site centre location:** Latitude: 57 20 30 N Longitude: 01 57 30 W

5 **Altitude** Not being submitted

6 **Area (ha)** 314.16

7 **Overview**

This site comprises the long, narrow estuary of the River Ythan and the eutrophic Meikle Loch. Extensive mud flats in the upper reaches of the estuary are replaced by coarser gravels with mussel beds closer to the sea. The margins of the estuary are varied, with areas of saltmarsh, reedbeds and poor fen. Meikle Loch is an important roost site for geese which feed on surrounding farmland in winter. It is a eutrophicloch supporting limited aquatic vegetation. It is joined by a burn to the smaller Little Loch.

8 **Wetland type** Inland wetland, Marine/coastal wetland

Code	Name	% Area
E	Sand / shingle shores (including dune systems)	6.4
F	Estuarine waters	52.9
H	Salt marshes	6.7
O	Freshwater lakes: permanent	22.9
U	Peatlands (including peat bogs swamps, fens)	0.6
Other	Other	10.5

9 **Ramsar Criteria** 3a, 3c

10 **Map of the site** ✓

11 **Compiler** Joint Nature Conservation Committee
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12 **Justification of criteria**

Ramsar criterion 3a

Internationally important waterfowl assemblage (greater than 20,000 birds)

Ramsar criterion 3c

During the Breeding Season the site regularly supports internationally important populations of: Sandwich Tern *Sterna sandvicensis*

Over winter the site regularly supports internationally important populations of: Pink-footed Goose *Anser brachyrhynchus*

13 **General location**

Nearest town/city: Aberdeen
 20 km north of Aberdeen on the northeast coast of Scotland

Administrative Region: Aberdeenshire

14 Physical Features

Soil & Geology	mud, nutrient-rich, sand, shingle
Geomorphology and Landscape	estuary, lowland
Nutrient status	eutrophic
pH	acidic
Salinity	fresh
Soil	mainly mineral
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

No special values known

16 Ecological features

The Ythan estuary has a varied substrate, including clay, sands and gravels, with a highly mobile river channel. As well as extensive areas of bare mud, there are small areas of saltmarsh, with a representative northern saltmarsh flora. Small areas of club-rush swamp are associated with the saltmarsh. In the upper parts of the estuary, there is a reed-bed. Near the mouth of the estuary there are also shifting sand-dunes, with areas of bare shingle (part of the Sands of Forvie). To the west of the estuary there is a large area of improved grassland.

Meikle Loch is a small eutrophic loch with little aquatic vegetation.

17 Noteworthy flora

Assemblage.

The site is internationally important because it contains the following habitats:

Shifting dunes and Shifting dunes with marram grass.

18 Noteworthy fauna

Birds

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

During the breeding season the area regularly supports:

Sandwich Tern, <i>Sterna sandvicensis</i> (Western Europe/Western Africa)	1125 pairs, representing an average of 0.9% of the breeding population (Count as at late 1980s-early 90s counts.)
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Over winter the area regularly supports:

Pink-footed Goose, <i>Anser brachyrhynchus</i> (Eastern Greenland/Iceland/UK)	14825 individuals, representing an average of 6.6% of the population (5 year peak mean 91/92-95/96)
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Species currently occurring at levels of national importance:

During the breeding season the area regularly supports:

Common Tern, <i>Sterna hirundo</i> (Northern/Eastern Europe (breeding))	265 pairs, representing an average of 2.2% of the GB population (Count as at early 1990's)
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Eider, <i>Somateria mollissima</i>	1860 pairs, representing an average of 6% of the
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(Britain/Ireland)

GB population (5 year mean, 1991-1996)

Little Tern, *Sterna albifrons*
(Eastern Atlantic (breeding))

41 pairs, representing an average of 1.7% of the
GB population (Count as at early 1990's)

Over winter the area regularly supports:

Eider, *Somateria mollissima*
(Britain/Ireland)

1550 individuals, representing an average of 2%
of the GB population (5 year peak mean, 1991/2-
1995/6)

Assemblages of international importance:

Over winter the area regularly supports:

22817 waterfowl (5 year peak mean 1991/92-1995/96)

Assemblage.

The site has an interesting estuarine invertebrate fauna which includes the uncommon worm
Lunbicus variegatus, the very local mollusc *Hydrobia ventrosa* and the very rare marine midge
Halocladus braunsi.

19 Social and Cultural Values

Aesthetic
Archaeological/historical site
Conservation education
Current scientific research
Fisheries production
Non-consumptive recreation
Sport fishing
Sport hunting
Tourism

20 Land tenure/ownership

Ownership category	On-Site	Off-Site
National/Crown estate	+	+
Private	+	+
Public/communal		+

21 Current land use

Activity	On-Site	Off-Site	Scale
Nature conservation	+	+	Large-Scale
Recreation	+	+	Large-Scale
Fishing: commercial		+	Small-Scale
Fishing: recreational/sport	+		Small-Scale
Shifting arable agriculture		+	Large-Scale
Rough or shifting grazing		+	Large-Scale
Hunting: recreational/sport	+		Small-Scale

22 Adverse factors affecting the ecological character of the site

Activity	On-Site	Off-Site	Scale
Eutrophication	+		Large-Scale
Measures not linked to specific factors	+		Large-Scale
Predation (eg by foxes)	+		Large-Scale

23 Conservation measures taken

Conservation measure	On-site	Off-site
SSSI	+	
NNR	+	
SPA	+	
Candidate SAC	+	+
Management agreement	+	+

24 Conservation measures proposed but not yet implemented

see below

Site vulnerability and management statement

The site lies within the Forvie National Nature Reserve which is managed for its nature conservation interest under an agreed management plan. The reserve agreement restricts management activities such as burning which would damage sensitive habitats and species. Byelaws are in force to prevent visitors to the reserve from carrying out damaging activities and disturbance to tern colonies. In recent years, terns have bred in much lower numbers owing to predation and the periodic overtopping of the favoured shingle beds by sand. Fox control measures are in place to reduce predation and it is expected that the tern population will increase in response. Small numbers of wildfowl are shot by wildfowlers but at present there is no evidence that this shooting is detrimental to the interest.

There is growing concern about the effects of eutrophication on the estuary and its flora and fauna. The continuing build up of algal mats has apparently led to a reduction in the populations of invertebrates which are the prey of waterfowl such as redshank and shelduck. As a result of these concerns, the River Ythan has been proposed as a Nitrate Vulnerable Zone under the EC Nitrates Directive. This should result in measures to reduce the input of nitrate into the estuary.

25 Current scientific research/survey/monitoring and facilities

Fauna.

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

There is a university research facility at Culterty.

SNH monitors the eiders, terns, wader and wildfowl at the site. Geese numbers are also monitored.

26 Current conservation education

There is a visitor centre in the adjacent part of the NNR with a comprehensive environmental education programme targeting all ages - from early stages to adults, and specialist to general interest groups.

27 Current recreation and tourism

Activities, Facilities provided and Seasonality.

Walking, Bird watching (hide provided), Angling, Wildfowling. Watersports.

28 Functional jurisdiction

Scottish Office, Agriculture, Environment and Fisheries Department

29 Management authority

Scottish Natural Heritage

30 Bibliography

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Reference should also be made to Country Agencies Management Plans for sites that are within National Nature Reserves.