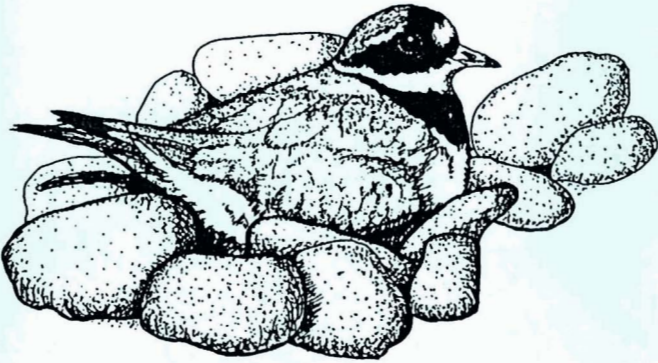


# DUNES



# SCOTTISH WILDLIFE TRUST

The reserve at Loch Fleet was established by agreement with the estates of Cambusmore and Sutherland.

Management at Loch Fleet aims to conserve the pinewoods, dunes and estuary for all the wildlife living here. Ferry links is very popular with summer visitors, but vehicles which are driven thoughtlessly onto the dunes can cause disturbance to wildlife and danger to families with young children. To help solve this problem new carparks have been created at several sites on the reserve and access to the dunes has been limited to pedestrians only. Plans have also been made to protect the wildflowers of the pine forest by the removal of spruce and gorse which has formed a dense understorey in some parts of Balblair wood.

The Scottish Wildlife Trust's summer warden provides information and help for visitors between April and August. Events at the reserve include a series of guided walks to explore the habitats of Balblair pinewood and Ferry links. Details of these and other events are advertised locally throughout the summer.

A permit, which can be obtained from the Scottish Wildlife Trust, is required when venturing off the paths in the pinewood. Please note that there is a very high risk from fire on this reserve.

For more information about the Scottish Wildlife Trust and its work contact:

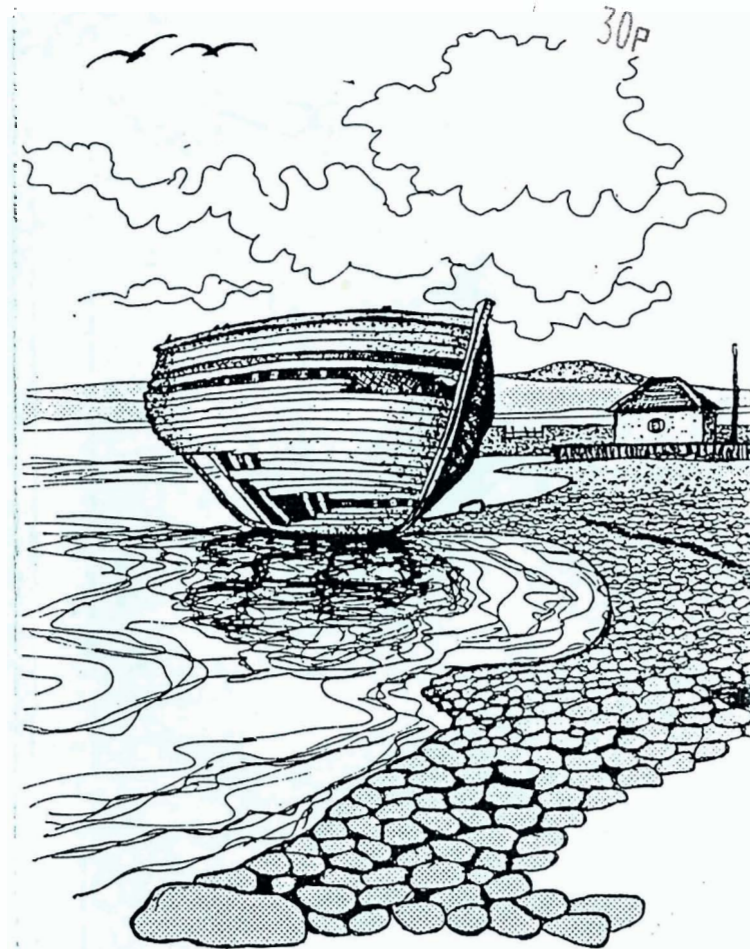
Scottish Wildlife Trust  
Cramond House  
Kirk Cramond  
Cramond Glebe Road  
EDINBURGH  
EH4 6NS

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# LOCH FLEET

*wildlife reserve*



SCOTTISH  
WILDLIFE  
TRUST



# LOCH FLEET



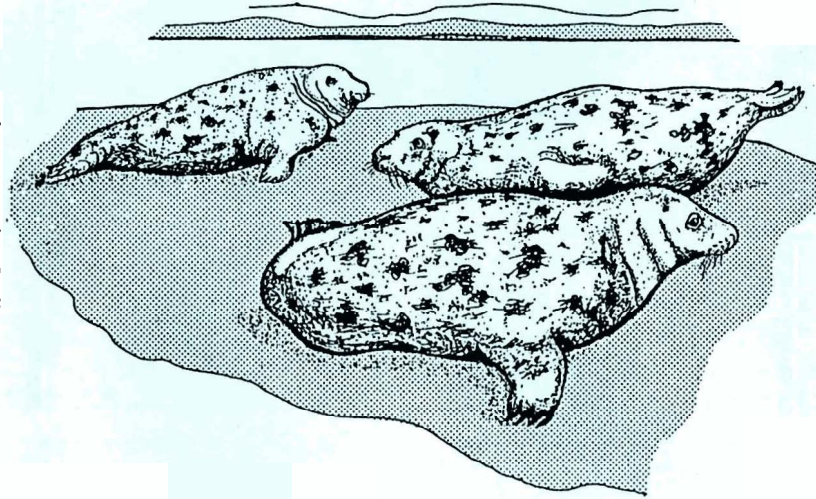
The reserve at Loch Fleet lies within the estuary of the River Fleet, the most northerly inlet on the east coast of Scotland. Within its boundaries are the contrasting habitats of estuary, pinewoods and sand-dunes, from Ferry links in the east to the Mound causeway which runs along its western edge, and from Balblair pinewood in the north to the dunes of Coul links on the loch's southern shores.

## CHANGING SEASCAPE

Ancient sea-cliffs tower on the hills above Loch Fleet, remnants of a time when the sea level was higher than today, and the River Fleet flowed into an open cliff-lined bay. With the end of the last Ice Age the sea level fell, stranding the cliffs above the new shoreline. At the same time the growth of sand and shingle spits along the north and south shores of the bay gradually confined its entrance to a narrow channel, and formed the tidal estuary of Loch Fleet with its extensive mudflats.

Man has inhabited this coast from early times. Some relics of these Pictish settlements can be seen at the Dunrobin museum north of Golspie. Later, in the 18th century, Littleferry became a thriving centre for the import of lime and coal, and the export of grain, wool and whisky. Its importance declined with the opening of the Mound causeway in 1816, built by Thomas Telford to carry the main road north. Today little is left of the original ferry crossing—only the rotting pier at Littleferry remains to tell of its importance in the past.

## ESTUARY



The estuary's rich feeding grounds are an attraction to many birds in winter. Redshank, oystercatcher and bar-tailed godwit probe the mud with sensitive bills for crabs, shrimps and mussels, often joined by large flocks of mallard and wigeon. Long-tailed duck and common scoter, more commonly found on the open sea, seek shelter on Loch Fleet's calmer waters during the wildest winter storms.

Among Loch Fleet's summer visitors, common and arctic terns dart and hover over the shallows, diving to catch fish and sandeels. Eider and red-breasted merganser raise their broods of ducklings in the area. Sometimes the young of several merganser pairs may be seen in the care of a single female while the other parents are away fishing — a sort of merganser "crèche". Common seals regularly haul out to sun themselves on favourite sandbanks near the mouth of the river. They can be seen from vantage points on the shores near Littleferry and Skelbo Castle.

Sluice gates in the Mound which were constructed to protect the surrounding fields from flooding by saltwater also have an effect on the movements of salmon travelling from the sea to spawn in the River Fleet. As the pressure of a rising tide shuts the sluice gates the salmon gather in the pool below the bridge where they remain, without feeding, until the flood gates reopen at slack tide.

## PINEWOOD

The path through Balblair wood is a good place to look for wildflowers. Common and bell heather, cross-leaved heath and crowberry all flourish along the edges of the path and in the open canopy of the pinewood. In springtime the elusive scent of sweet violets can be detected, disappearing almost as soon as it is noticed.

The native Scots pines provide a sanctuary for many breeding birds—goldcrest, coal tit, siskin and the Scottish crossbill, which may be distinguished from its close relative, the crossbill, by its heavier bill. It also occupies a more northerly range than the crossbill, being almost totally confined to pine forests in the Highlands of Scotland. Scottish crossbills may be glimpsed as they move parrot fashion amongst the highest branches, using their strong, crossed bills to extract the seeds from pine cones. Signs of their presence can also be detected in the litter of discarded cones at the base of the trees where they have been feeding.



## Wildflowers of the Dunes

strandline — frosted orache  
 searocket  
 saltwort  
 foredunes — marram grass  
 lyme grass  
 lady's bedstraw  
 wild thyme  
 dune pansy  
 purple milk-vetch

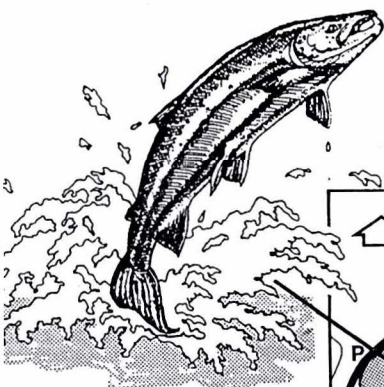
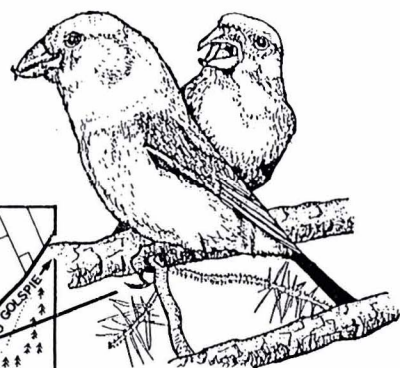
inner dunes — common heather  
 bell heather  
 cross-leaved heath  
 bilberry  
 crowberry

## Birds of the Pinewoods

Scottish crossbill  
 goldcrest  
 coal tit  
 siskin  
 buzzard

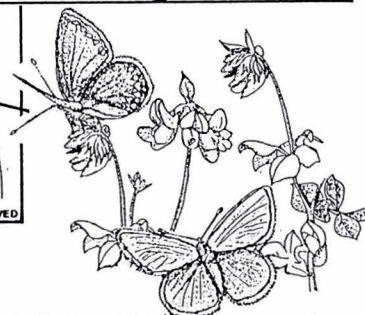
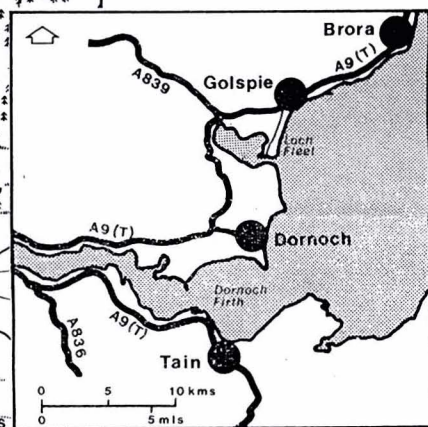
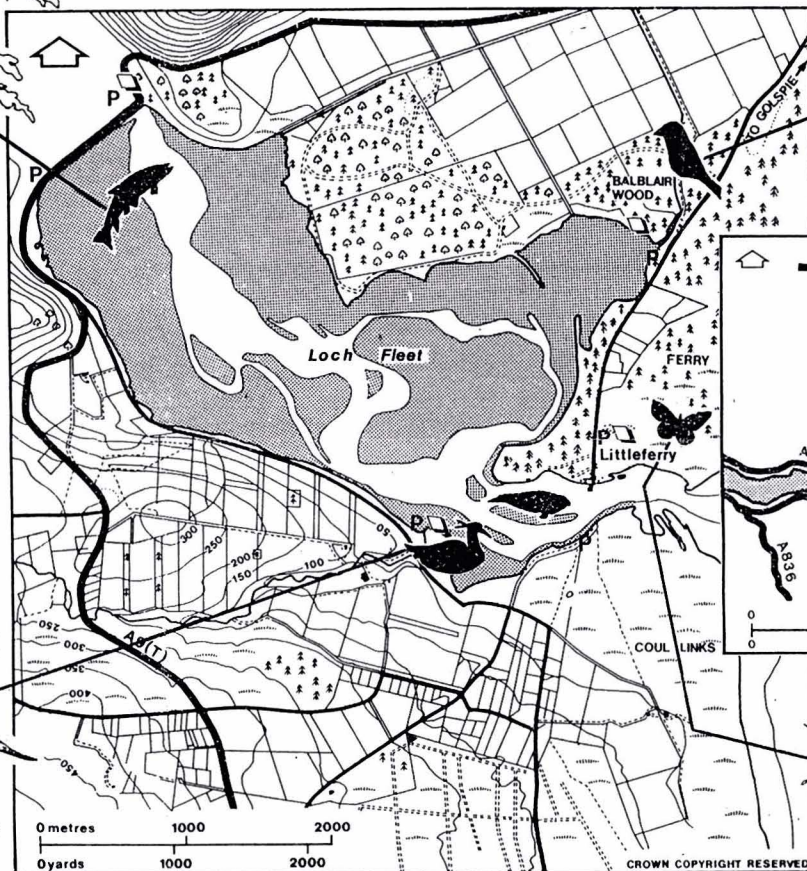
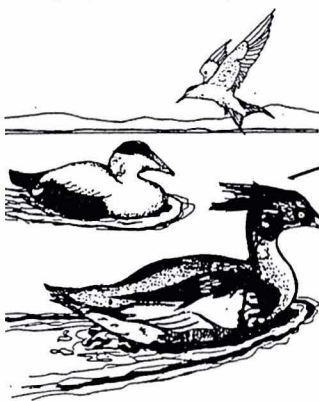


This open landscape of pinewood, dunes and estuary on the shores of Loch Fleet is home to a host of Scotland's wildlife — ducks and waders on the mudflats, butterflies amongst the dunes and Scottish crossbill in the pinewoods.



## Salmon Pool

When the sluice gates are shut, salmon moving in from the sea to spawn in the River Fleet are halted temporarily in the pool below the bridge. Frustrated in their attempts to continue their journey upstream, they make a splendid display as they leap out of the water.



## Seawatching

Seabirds can be observed all along this coastline between Golspie and Dornoch with the best views from Embo pier about one mile south of the reserve. The best time of year for birdwatching is in autumn and winter when up to 2000—3000 eiders congregate on the sea near the entrance to Loch Fleet. A rare drake king eider has regularly been sighted here since 1973, often joining the feeding eiders.

Red and black-throated divers are amongst the winter visitors to this coastline, leaving to build their nests beside remote inland lochans in the spring. Common and velvet scoter do not usually venture close to shore but sometimes join the flocks of feeding seaducks in the calmer coastal waters during stormy weather.

Gannets fish for mackerel and sandeels around these coasts in spring and summer. During the summer months they make the journey to these inshore fisheries from their breeding colony on Sule Stack, 50km off the north coast of Britain.

## Butterflies of the Dunes

grayling  
 common blue  
 dark green fritillary  
 small heath  
 meadow brown  
 red admiral  
 small copper  
 large white  
 green veined white  
 small tortoiseshell

### Key to Map Symbols

- P** car park
- board with information about Loch Fleet and its wildlife
- common seals bask on sandbanks at the mouth of the estuary



#### dunes walk

follow the coastline from the carpark at Littleferry as far as the "go kart" track — wildflowers, birds, butterflies



#### pinewoods walk

follow the path through Balblair wood from carpark at entrance — wildflowers, breeding birds in summer



#### estuary

wildfowl and waders — vantage points at carparks along the shore



#### salmon pool

spectacular sight in summer when salmon gather in the pool below the bridge