BIRDS - SEABIRDS

Nature and environment



Atlantic Puffin (Tammy Norie)

BIRDS "Nowhere in Britain is there such a range of bird habitats - cliffs, marshes, moors and maritime heath - and all within a few miles. So far we've counted 385 species, 116 of which breed here," Eric Meek, Orkney's RSPB Officer.

Besides having the biggest collection of archaeological remains, excellent trout fishing and the best beef in Western Europe, Orkney is also one of the finest places for birds. The fertile soils support large populations of invertebrates, which are the main food supply for many birds.

The horizontally-bedded flagstone rocks weather to ledges on the cliffs which are very attractive to many types of

at the confluence of the Atlantic Ocean and the North Sea, where warm, saline, oceanic water mixes with colder, less saline, nutrient-laden coastal water, means that the sea is rich in plankton and therefore fish.

seabird. The islands' position

In recent years increasing sea temperatures and varying circulation patterns have resulted in changes to the plankton regime. The result is fewer Sandeels, which has in turn caused many seabird species to decline.

Cliffs Orkney is one of the most important areas in the

whole temperate North Atlantic for seabird breeding. The Seabird 2000 surveys, the last full counts) found 714,038 individual seabirds breeding, about the same as the Western Isles, but more than Shetland. The three main bird cliffs are all RSPB reserves. The charity is the biggest land-owner in Orkney, with 13 reserves covering about 8,000ha in total.

Noup Head on Westray hosts one of the largest colonies of seabirds in the UK Marwick Head and the Copinsay cliffs hold slightly smaller numbers of Guillemot, Kittiwake and Razorbill. The cliffs are also home to several pairs of Peregrine, Raven and Jackdaw, as well as many Fulmar and Rock Dove.

Puffins Everyone's favourite seabird, is surprisingly hard to see on the Mainland. They only come ashore to breed in May and leave as soon as the young are fledged, in late July or early August. They prefer grassy banks where they can burrow into the soil. Most

Arctic Tern (Pickieterno)







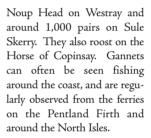
Fulmar Petrel (Mallimack)

Orkney Atlantic Puffins are on Sule Skerry (59,471 pairs) which is 40 miles out into the Atlantic.

The best place which is easily accessible for viewing *Tammy Nories* is the Castle o'Burrian in Rapness, Westray. On the Mainland they can be seen at the Brough of Birsay, near Marwick, in Deerness and on South Ronaldsay. Many Puffins also nest on Copinsay, Swona, the Pentland Skerries and the Hoy cliffs.

Gannets The main Gannet colony is on Sule Stack, near Sule Skerry, with 5,000 pairs. About 600 pairs now breed at

Great Skua (Bonxie)



Maritime Heath is a habitat unique to Orkney which forms much of the western side of Rousay, and the North Hill of Papay. It is a favourite nesting place for many of Orkney's Arctic Terns, a species which is currently having problems due to a lack of Sandeels. These are the fur-



Guillemot (Aak, Skout, Lungi

thest travelling of all birds, doing a return trip of 15,000 miles to the Southern Ocean each year.

BREEDING SEABIRDS

Numbers in estimated pairs unless stated and are from the Seabird 2000 survey unless otherwise stated.

Fulmar Petrel (91,000) Storm Petrel (1,870) Leach's Petrel (??) Manx Shearwater (50?) Black Guillemot (5,579) adults Guillemot (181,000) Razorbill (10,190) Puffin (61,532) Greater Black-backed Gull (5,560) Herring Gull (1,924) Lesser Black-backed Gull (1,042) Common Gull (11,208) Black-headed Gull (2,853) Kittiwake (57,668) Arctic Tern (13476) Common Tern (116) Sandwich Tern (215) Little Tern (5) Gannet (5,000) Cormorant (500) Shag (1,865) Great Skua (1,710) 2010 survey Arctic Skua (376) 2010 survey

WHERE TO SEE BREEDING SEABIRDS

Mainland - Marwick Head; Brough of Birsay; Yesnaby; Mull Head, Deerness Islands - Noup Head, Westray; North Hill, Papay; Hoy Reserve; Copinsay

Eider Duck (3,000)

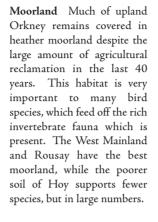




Hen Harrier (Katabelly)

Arctic Skuas also nest in these areas, and harry the terns in acrobatic displays to get them to drop their food. About 376 pairs of this skua, Britain's rarest breeding seabird, nest in

Orkney, down from 720 in 2000. They are perhaps the most graceful flyers and exist in two plumage patterns or phases, a light and a dark.



Orkney is well known for its Hen Harrier population, and with about 70 nests most years this attractive raptor is often seen. The beautiful grey male is smaller than the female, and the species is polygamous, with each male having several "wives". The



Kestrel (Moosiehaak

Short-eared Owl (Cattie-face, Cattie-ogle)







Corncrake

Hen Harrier's favourite food is the Orkney Vole, but they will also take other prey. They are frequently observed quartering ditches, field margins and marshes looking for prey.

The Kestrel nests on the ground in Orkney, among the heather, as does the Shorteared Owl, both of which prey on voles. The dashing Merlin, recovering from a decline in the mid-1980s, hunts Meadow Pipit and Skylark but is usually flying so fast that you hardly see it before it is gone. Luckily fence posts are a common perch, where it can be observed for longer.

The sounds which especially dominate Orkney during the

Rock Pipit (Shore or Tang Sparrow)



spring and summer are the Curlew calls of Oystercatcher. Both species breed in large numbers, while lesser numbers of Snipe, Dunlin and Golden Plover together with some Whimbrel also breed on moorland. Other birds of moorland and small hill lochs are Mallard. Teal. Red-breasted Merganser, Eider, and Redthroated Diver, the eerie calls of which are often heard as they return from fishing at

The Great Skua nests mostly

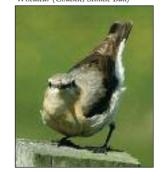


Twite (Heather Lintie)



Skylark (Laveroo)

Wheatear (Chuckie, Stinkie Buil)





Raven (Corbie, Hrafn)

in Hoy. This fierce pirate only arrived as a breeder in Orkney in 1915 and most of the world population now lives in UK

PLACES TO SEE LANDBIRDS

Hobbister, Orphir Binscarth Plantation, Firth Cottascarth, Rendall Birsay Moors, Birsay The Loons, Birsay Copinsay Egilsay Rousay Hoy

SOME COMMON LANDBIRDS WHICH BREED IN ORKNEY

Hen Harrier Kestrel Sparrowhawk Merlin Short-eared Owl Raven Hoodie Crow Meadow Pipit Rock Pipit Pied Wagtail Wheatear Skylark Twite Stonechat Linnet Blackbird Robin Song Thrush House Sparrow Starling Wood Pigeon Corncrake (scarce)

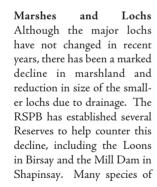


Oystercatcher (Chaldro, Shaalder, Skeldro)



(9,600 pairs) and Iceland (5400 pairs). Although aggressive, and often seen attacking other birds until they disgorge their food, in fact a large proportion of the Bonxie's food is normally fish caught by splash-diving. Recently the lack of fish has resulted in a drop in population and an increase in predation of other birds.

Whimbrel (Summer or Peedie Whaup)



waders and waterfowl breed in these areas and notably several pairs of the rare Pintail breed in the West Mainland, Stronsay, North Ronaldsay and Shapinsay.

Coast The low banks and cliffs of much of Orkney's coastline are used as breeding sites by many Fulmar Petrel. Eider nearly always nest near the shore while Shelduck use sandy banks. Many Black Guillemots breed among the boulders and in disused rabbit holes, while Storm Petrels nest on many of the offshore islands in old walls and among rocks.

Plover. Ringed Oystercatcher as well as Arctic, Common, Sandwich and (a few) Little Terns also lay in scrapes along shingle shorelines, and care must be taken when walking to avoid standing on the superbly camouflaged eggs and young.

Threats The proximity of fertile farmland to the other types of habitat is very important in the overall ecosystem in Orkney. This system is

Golden Plover (Hill Laverock, Plever Pliver)





Ringed Plover (Sinloo, Sandy Laverock)



Lapwing (Teeick, Teeoo, Peewit)

finely balanced, and if further large-scale drainage or reclamation were to take place, sustainable populations of many species could fall. Equally a substantial decline in stock farming would also threaten many species.

Seabirds are sensitive to pollution, especially from oil, and it is very important that the oil companies maintain their good records regarding oil spills. Since most species are near the top of the food chain,

Dunlin (Boondie)



Snipe (Horsegowk, Water Pleep



Redshank (Watery Pleep)

PLACES TO SEE tants in the ocean may also be **BREEDING WADERS** a problem either with availability of prey or its toxicity.

build-up of chemical pollu-

Seabirds are also affected by

shortages of food species, such

as Sand Eels, whether caused

by natural fluctuations in

ocean circulation, climate or

Commercial fishermen also

suffer from such shortages.

Industrial fishing of various

species including Sandeels still

has occurred on a large scale in

influence.

made

Lochs of Stenness & Harray Burgar Hill, Evie Loons & Loch of Banks, Birsay Loch of Isbister, Birsay Echnaloch, Burray Mill Loch, Eday Mill Dam, Shapinsay

BREEDING WADERS TO SEE IN ORKNEY

Numbers are in estimated breeding pairs

Oystercatcher (10,000) Ringed Plover (500) Golden Plover (100) Lapwing (5,000) Dunlin (100) Snipe (3,000) Black-tailed Godwit (5) Whimbrel (5) 2010 survey Curlew (5,000) Redshank (1,700) Common Sandpiper (15) Woodcock (occasional)

BIRDS - WATERFOWL NATURE AND ENVIRONMENT



Red-throated Diver (Loom, Loon, Rain Goose)



Tufted Duck

Waterfowl find Orkney attractive at all seasons. At least 11 species of duck breed on the many lochs scattered across the islands. Mallard, Teal and Wigeon are the commonest species. The hides at the Loons in Birsay and the Mill Dam in Shapinsay are probably the best place to watch these species close-up without disturbance, including nationally rare species such as the Pintail. In many other places the car can be used as a hide, or a telescope used.

Red-breasted Merganser, Shelduck and Eider all nest in coastal locations and are quite common. They are frequently seen with their families once hatched.

Red-throated Divers nest on Hoy, Rousay, Eday and the Mainland, often on small

The hide at the Mill Dam Reserve on Shapinsay



lochs called Loomachun (ON Looma tjorn, Diver Loch). These lochs are usually too small to provide much food, so the adults normally fish at sea or on the larger lochs. Their mournful calls have given them the name Rain Goose. Divers may be closely observed from hides at Lowrie's Water on Burgar Hill in Evie, near the aerogenerators, or the Mill Loch on Eday.

There was until recently a small colony of Grey Heron in a tree plantation, but most of this species seen in Orkney are migrants from Scandinavia. They may commonly be seen fishing at the margins of lochs, and in burns and ditches, or at estuaries such as the Brig O'Waithe or the Ouse in Finstown.

Mute Swans breeds on many of the larger lochs, and is especially prominent on the Lochs of Harray and Stenness. Adults and young may frequently be observed from very close distances from the Bridge of Brodgar.

Greylag Geese first bred in 1985 and now there is a local population of at least 1,500 pairs. They breed on small islands as well as the Mainland, Rousay and Shapinsay. This population may have originated in Icelandic birds which stayed for the summer. Many birds, bred on Shapinsay from Scottish stock, have been released for shooting, which



Mallard (Stock Duck)

has also raised numbers which now breed here. Greylags from the native Scottish population in Sutherland are also known to have bred here.

Although wildfowl are sensitive to loss of habitat, efforts to retain or reinstate suitable marshy areas have had considerable success. During the breeding season the common species may often be seen in burns, ditches and lochsides.

Summer numbers of waterfowl are small compared with the huge numbers of winter visitors, but the variety and opportunities to see rare breeders more than make up for quantity.





Red-breasted Merganser (Herald)



Pintail breed on several lochs and marshes



Eider Duck (Dunter)

PLACES TO SEE **BREEDING WATER-FOWL**

The Loons, Birsay Loch of Isbister, Birsay Burgar Hill, Evie Mill Loch, Eday Mill Dam, Shapinsay Lochs of Stenness & Harray Echnaloch, Burray

BREEDING WATERFOWL TO SEE

(Breeding pairs) Red-throated Diver (130) Red-breasted Merganser (150) Shelduck (100) Pintail (12) 2010 survey Eider Mallard Tufted Duck Gadwall Wigeon Shoveler Pochard Garganey (very occasional) Mute Swan (c.70) 2010 survey Grey Heron (no longer breeds) Greylag Goose (1,500) 2010 survey



Greylag Geese



Greenland White-fronted Geese



Pochard on loch - winter sunset

Migration After the breeding season many birds migrate southwards or out to sea for the winter, but this does not mean that Orkney is a poor place to see birds at other times of year. On the contrary, the migration periods in autumn and spring bring interesting and unusual vagrants every year, while species which breed further north migrate annually, some passing through on their way south in autumn and again on

their way north in spring. Many Arctic breeders overwinter in Orkney. Thus a range of species can be

36

observed at different times of year. There is no such thing as out of season for the Orkney birdwatcher

Lochs In particular, the lochs are internationally important for wintering waterfowl, with over 17,000 being counted in December 1990 on the Loch of Harray alone. Large numbers of Pochard, Tufted Duck, Goldeneye and Whooper Swans arrive each autumn. The latter used to stop for a few days before continuing south, but some now stay on the loch all winter and feed on barley stubble fields.

The many geese which pass through or stay all winter also roost on the lochs and graze on the surrounding farmland. Greylag (80,700 in December 2010). Pink-footed and Greenland White-front are the commonest types of geese, but there is a flock of Barnacle Geese (2,200 in South Walls in December 2010) in the South Isles each winter.

The Sea The large areas of sheltered shallow sea water and many gently shelving beaches provide good feeding and overwintering areas for

Iceland Gull





Whooper Swan

many species. While Shag, Cormorant and Eider are resident around the coast, they are joined over the winter by Great Northern Diver, Velvet Scoter, Long-tailed Duck, Goldeneye, Slavonian Grebe and others.

Iceland and Glaucous Gulls are regular visitors and may sometimes be seen around the harbours at Kirkwall or Stromness, or on the Peedie Sea, in winter. The occasional





Great Northern Diver (Immer Goose)



Snow Bunting (Oatfowl, Snowfowl)

MIGRATION TIMES

From mid-March to early June May/start June best From end July to early October September best

SOME MIGRANTS WHICH MAY BE SEEN

Turnstone (common) Red-necked Phalarope (scarce) Purple Sandpiper (common) Sanderling (common) Great Northern Diver (common) Long-tailed Duck (common) Pink-footed Goose (common) Greenland White-front Goose (scarce) Glaucous Gull (scarce) Ring-billed Gull (very rare) Little Auk (scarce) Whooper Swan (common) Swallow (common) Long-eared Owl (scarce) Waxwing (eruptive) Crossbill (eruptive)



BEST MIGRANT SITES

Islands - North Ronaldsay, Sanday, Stronsay Mainland - Kirkwall and Stromness Harbours, Scapa Beach, East Mainland beaches, South Ronaldsay, Graemeshall Loch, old quarries, areas of scrub and woodland, gardens





Bar-tailed Godwit in summer plumage (Tang Whaup)

Ring-billed Gull also puts in an appearance, but is actually very rare.

Little Auks appear in winter. Particularly after an extended

Turnstone (Stone Putter)

period of strong easterlies, there is often a "wreck" of Auks, mostly young Guillemots, presumably caused by exposure and inexperience.

The Shore The intertidal zones provide rich feeding ground for the many waders, both resident and migrant. Estimates suggest that more than 60,000 waders winter in Orkney, especially Purple Sandpiper (28% of UK population) and Curlew (25% of UK population). Ringed Plover, Turnstone, Sanderling, Redshank, Bar-tailed Godwit, Golden Plover, Lapwing and Dunlin are also present in considerable numbers. The beaches on Sanday are particularly attractive to waders

Raptors Many Hen Harriers are resident and in winter tend to roost communally among reeds in marshes, particularly at Durkadale (HY373200). Merlin are more common in winter, as adults from Shetland and Iceland move south and the previous summer's young are still lingering about. The occasional Osprey





Red-necked Phalarope (Half-web)



Dunlin in winter plumage (Boondie)





Goldeneye (Gowdy Duck, Kwink)

or Gyrfalcon may appear on passage and White-tailed Sea Eagles are also sometimes seen. Long-eared Owls arrive every winter from Norway and roost among the few trees available.

Migration Time The islands of North Ronaldsay, Sanday and Stronsay tend to be the best places for unusual Continental migrants blown in on easterly winds. During the Spring especially, east winds can blow for some days, due to the development of a



Little Auk (Rotchie)



Long-tailed Duck (Caloo)

Baltic High pressure and often bring "falls" of interesting birds. While very exciting for the twitcher, one cannot but speculate on the fate of many of these birds, which are often many thousands of miles away from their normal destination!

North American species also get caught up in weather systems, and are seen on the islands on occasion. In addition to the eastern North Isles the eastern parishes of the Mainland can also be good for migrant hunting, particularly in foggy weather, and Holm, Deerness and Ronaldsay all have good spots. The local enthusiasts soon hear what is about. To find out what is on the grapevine, or for information on visiting its reserves, telephone the local RSPB office on (01856) 850176. The RSPB also publish various useful leaflets on their reserves. The Orkbird group in Yahoo is also a good place to check for activity: http://groups.yahoo.com/gro up/Orkbird/







Great Crested Grebe (very scarce)





The Whaup, or Curlew, is omnipresent on Orkney's farmland and moorland

Many of the birds which occur in Orkney have local names. These are frequently derived from Old Norse, but may also refer to the appearance, behaviour or habitat of the species. Most of these names are still in current usage, which underlines the place that birds have always played in the Orcadian psyche. A few of the names are of Scottish derivation, most are unique to Orkney.

English	Orkney	Systematic
	,	
Red-throated Diver	Loom, Loon, Rain Goose	Gavia stellata
Great Northern Diver	Immer Goose	Gavia immer
Little Grebe or Dabchick	Little Footy Arse	Tachybaptus ruficollis
Manx Shearwater	Lyre or Lyrie	Puffinus puffinus
Fulmar Petrel	Mallimack	Fulmarus glacialis
Storm Petrel	Alamonti, Mootie, Gourder	Hydrobates pelagicus
Gannet	Sula, Solan Goose	Sula bassana
Cormorant	Scarf, Hibling, Lerblade, Palmer	Phalacrocorax carbo
Shag	Scarf, Tappie Whaesie	Phalacorax aristotelis
Grey Heron	Hegrie, Skiop Herie	Ardea cinerea
Barnacle Goose	Claik, Rotherock, Horra Goose	Branta leucopsis
Brent Goose	Quink, Horra Goose	Branta bernicla
Shelduck	Sly or Ringer Goose	Tadorna tadorna
Mallard	Stock Duck	Anas platyrhynchos
Teal	Ateal	Anas crecca
Goldeneye	Gowdy Duck, Kwink	Bucephala clangula
Long-tailed Duck	Caloo	Clangula hyemalis
Eider	Dunter	Somateria mollissima
Goosander	Rantock	Mergus merganser
Red-breasted Merganser	Sawbill, Herald, Harle	Mergus serrator
White-tailed Eagle	Erne	Haliaeetus albicilla
Golden Eagle	Ainie-onyoo	Aquila chrysaetos
Hen Harrier	Kattabelly	Circus cyaneus
Buzzard	Gled	Buteo buteo
Kestrel	Moosiehaak, Wind Cuffer	Falco tinnunculus
Merlin	Smyril	Falco columbarius
Red Grouse	Muirhen, Muir Pout	Lagopus lagopus
Coot	Snythe, Snaith	Fulica atra
Oystercatcher	Skeldro, Chaldro, Shaalder	Haematopus ostralegus
Ringed Plover	Sinloo, Sandy Laverock	Charadrius hiaticula
Golden Plover	Hill Laverock, Plever Pliver	Pluvialis apricaria
Lapwing	Teeick, Teeoo, Peewit	Vanellus vannellus
1 0		

English	Orkney	Systematic
Knot	Ebb Cock	Calidris canutus
Dunlin	Boondie	Calidris alpina
Snipe	Horsegowk, Water Pleep	Gallinago galligano
Bar-tailed Godwit	Tang Whaup	Limosa lapponica
Whimbrel	Summer or Peedie Whaup	Numenius phaeopus
Curlew	Whaup	Numenius arquata
Redshank	Watery Pleeps	Tringa totanus
Common Sandpiper	Steenie Pouter, Water Pleep	Actitis hypoleucos
Turnstone	Stone Putter	Arenaria interpres
Red-necked Phalarope	Half-web	Phalaropus lobatus
Great Skua	Bonxie, Allan, Herdsman	Stercorarius skua
Arctic Skua	Scootie Allan	Stercorarius parasiticus
Black-headed Gull	Rittock, Swarfarro	Larus ridibundus
Common Gull	Whitemaa, Cullya	Larus canus
Herring Gull	Whitemaa	Larus argentatus
Great Black-backed Gull	Baakie, Swaabie, Swart Back	Larus marinus
Kittiwake	Kittick, Kittiwaako	Rissa tridactyla
Arctic Tern	Pickieterno, Rittock, Ritto, Tirrick	Sterna paradisaea
Guillemot	Aak, Skout, Lungi	Uria aalge
Razorbill	Cooter-neb, Baukie	Alca torda
Black Guillemot	Tyste, Tystie	Cepphus grylle
Little Auk	Rotchie	Alle alle
Atlantic Puffin	Tammie Norie, Sea Coulter	Fratercula arctica
Rock Dove	Doo	Columba livia
Cuckoo	Gauk	Cuculus canorus
Short-eared Owl	Cattie-face, Cattie-ogle	Asio flammeus
Skylark	Laverock, Laveroo	Alauda arvensis
Sand Martin	Witchuk	Riparia riparia
Meadow Pipit	Teeting, Titlark	Anthus pratensis
Rock Pipit	Tang or Shore Sparrow	Anthus spinoletta
Pied Wagtail	Willie Wagtail	Motacilla alba
Wren	Wirran, Wrannock	Troglodytes troglodytes
Dunnock	Hemplie, Titling	Prunella modularis
Wheatear	Chuckie, Stinkie-buil	Oenanthe oenanthe
Ring Ouzel	Flitterchack	Turdus torquatus
Blackbird	Chucket	Turdus merula
Yellow Hammer	Yellow Yarling	Emberiza citrinella
Snow Bunting	Oatfowl, Snowbird, Snowflake Skitterbroltie	Plextrophenax nivalis
Corn Bunting Linnet	Lintie, Lintick	Miliaria calandra Carduelis cannabina
Twite	Heather Lintie	Carduelis flavirostris
House Sparrow		Passer domesticus
Starling Starling	Sprog Scootie, Stare	Sturnus vulgaris
Jackdaw	Jackie, Kae	Corvus monedula
Rook	Corbie	Corvus moneauu Corvus frugilegus
Hooded Crow	Craa, Hoodie	Corvus frugilegus Corvus cornix
Raven	Hrafn, Corbie	Corvus cornix
1,011	Train, Coroic	Solv wa colux



Primula scotica (Scottish Primrose, but never called this locally)

FLORA The present flora of Orkney is the result of the geology, climate, and actions of humans, birds and animals since the retreat of the ice about 13,000 years ago. The fertile soil resulting from the underlying rocks, glacial till and wind-blown sand would have soon received seeds from

Britain and further afield by wind, sea and birds, with the result that when man first arrived the land was covered with a mixture of grassland and birch-hazel scrub.

With the coming of the Neolithic farmers the vegetation on the better land was slowly altered as they planted crops and kept animals such as sheep, cattle and pigs. No doubt seaweed and the contents of the midding were used in quantity to improve the soil on the good land which was used for crops of cereal and winter keep. Grazing of the more marginal land would have slowly modified the vegetation and prevented regeneration of scrub.

Orkney has a diverse range of habitats for plants, including coastal, lowland, agricultural and montane areas. Although much of the landscape in Orkney is agricultural, there still remains a lot of unimproved and marginal land with semi-natural vegetation. The long and varied coastline includes salt-marshes, intertidal zones, beaches, sanddunes, machair, sea blasted coastal areas and cliffs.

Mountain Everlasting



In the agricultural areas there are permanent pasture, cultivated fields, field edges, verges and ditches, as well as areas of waste ground and small patches of scrub and woodland. The nearby hills are dominated by heather moorland and rough heath, while herb and fern communities thrive in valleys, mires, marshes, burns, as well as on lochs and small islands. Montane areas occur at low altitude in Orkney due to exposure and soil fertility and include heathland, scrub and wetlands.

Primula scotica Orkney's most famous plant is Primula (the Scottish scotica Primrose). This species only exists in Orkney, North Sutherland and Caithness, on maritime heath. Orkney sites include Yesnaby, the west coasts of Rousay and Westray, Papay's North Hill and in South Walls. The plant is very small, yet sturdy to stand up to its exposed position. There are between two and eight small flowers per head, with a purple colour which can vary. The throat of the flower is bright yellow.

The plants can live for up to 20 years, and may not flower until they are 10 years old. There are two flowering periods, the first being in May, and the main period being in July. P. scotica is very sensitive to the use of fertiliser and several colonies have been lost because of this. The plants do not seem to survive well in cultivation and even introduc-



Thri



Scots Lovas



Grass of Parnassus

Sea Campion





Sea Spurrey

tions in apparently suitable habitat have always failed. However, a certain amount of grazing by cattle seems to benefit the species.

P. scotica is self-fertilizing like other primrose species in the north, which may confer advantage by making sure that at least some seed is set, but in very small colonies this may increase the risks to survival due to lack of genetic diversity in the longer term.

Maritime Heath is one of the most interesting of Orkney's habitats. It occurs particularly on soils overlying Rousay flagstone, on areas with considerable salt-gusting exposure. In



summer it is very colourful, with a tight carpet of flowers up to 10cm high. The hardy sedges and heather, with Grass of Parnassus, Thrift, Moss Campion, Eyebright, Mountain Everlasting, Sea Plantain and Spring Squill all adding to the display. The heath becomes more diverse further in from the coast. eventually merging into moorland or pasture.

On the coast much Thrift grows, often forming vivid carpets of colour. Sea Campion, red or white, also grows near the coast. Oyster Plant used to be common elsewhere in Scotland, but Orkney is now its main stronghold. It grows on the top of shingle and sandy beaches where virtually no other land plant will grow. It has strong, thick blue-green leaves. Scurvy Grass, socalled because seamen ate it for its vitamin C content, also grows on the top of the shore, and along banks and cliff tops.

Sea Rocket, Orache, Sea Milkwort, Scentless Mayweed, Yarrow, Sow Thistle and Silverweed all

Sea Aster





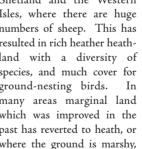






thrive near or on beaches, while Sea Aster and Sea Spurrey give colour to saltmarshes. Brilliant yellow Goldenrod, together with Devil's Bit Scabious and Honeysuckle inhabit sheltered cliffs, especially around Scapa Flow, as at Waulkmill Bay.

Moorland in Orkney is relatively ungrazed, in contrast to Shetland and the Western Isles, where there are huge numbers of sheep. This has resulted in rich heather heathland with a diversity of species, and much cover for ground-nesting birds. In many areas marginal land which was improved in the past has reverted to heath, or where the ground is marshy, has become full of rushes. In

















Cotton Grass grows on damp moorland and bogs

late summer, when the heather flowers, the hills take on a mauve tinge. Orchids and Bog Asphodel together with insectivorous Butterwort and Sundew flower, while Cotton Grass covers the marshy places.

Wild Flowers The relative lack of crop-spraying has helped retain a diversity of plants, especially on the roadside verges, which provide a wonderful variety of wild flowers, starting in springtime with yellow Daffodils (planted but very pretty), Dandelions, Coltsfoot and Lesser Celandine. Marshes sparkle in



Heather and Woodrush dominate most moorland

Cross-leaved Heath



the sun and are lent colour by plants such as the Marsh Marigold with their shiny leaves and yellow flowers.

Primroses, or May Flowers, appear in profusion in late April and May on many verges and roadside banks, in company with violets and Germander Speedwell. The verges could be even nicer in future if Orkney Islands Council took a more wild flower-friendly approach to cutting their many miles of roadside verges. Road safety makes some cutting essential, but roadsides do not need to be like lawns.

Buttercups add colour to many fields, while Red Clover (Curly Doddies) and White Clover are everywhere near cultivated land. 211 species of orchid including Northern Marsh, Early Marsh, Heath Spotted and Frog Orchid occur in Orkney.

On the less intensively farmed islands the whole place takes on a colourful appearance in summer, especially where fields have not been reseeded for a long time. This increases













Crowberry





Typical verge with Meadowsweet, vetches and thistle

the attractiveness of a visit to one or more of the Outer Islands, especially during the summer. Most uninhabited islands are only lightly grazed,

which allows many more wild plants to grow.



Primroses or May Flowers are pretty in springtime

Lesser Celandine also flower early

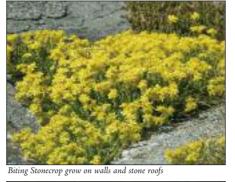




Natural Woodland Very little natural woodland exists in Orkney, and the small area at Berri Dale near Rackwick on Hoy is virtually unique in the islands. Its preservation is no doubt a combination of protection from grazing and its own micro climate. It is one of the best places for butterflies and moths, with over thirty species present only there.

Pollen studies show that by around 6000BC there was mixed woodland vegetation in Orkney with Willow, Birch, Hazel and Alder. By 3000BC this had become open grassland and heather moorland. The change was obviously influenced by the arrival of man and his grazing stock but was also probably part of natural climax vegetation progression.

Today there are many small patches of trees and shrubs, as well as a few plantations which provide cover for large numbers of birds. Although Orkney may seem treeless, trees and shrubs will thrive if protected from wind and graz-







Northern Marsh Orchid with Cocks and Hens



Berrie Dale wood, Rackwick, Hoy





SOME ORKNEY PLANT NAMES

English Orkney Systematic Chickweed Arvo, Ervo Stellaria media Thrift Arbv Armeria maritima Elder Boorwid Sambucus niora Evebright Euphrasia officinalis Bright-eye Dactylorhiza purpurella Northern Marsh Orchid Adam Dactylorhiza maculata Heath Spotted Orchid Eve Early Purple Orchid Deadman's Liver Orchis mascula Daisy Cockalowrie Bellis perennis Kemp, Die Flooer Senecio jacobae Ragwort Dock Dochan, Tirso, Bulwand Rumex sp Klepsie Girs, Eccle Grass Pinguicula vulgaris Butterwort Meadow Vetch Fudsho Lathyrus pratensis Birds Foot Trefoil Cocks and Hens Lotus corniculatus Clover, Bird's Foot Trefoil Lotus: Trifolium Smero, Smuiro Trifolium sp clover **Kippacks** Curly Doddy Trifolium pratense Red Clover Purple Vetch Moose Pea Vicia sepium Ox-eye Daisy Gullan, Gowan, Karkit Chrysanthemum vulgare Artemisia vulgaris Mugwort Grobyie Crowberry Heather Berry Empetrum nigrum Primula vulgaris Mey Flooer Primrose Charlock, Wild Mustard Runcho, Bresso Sinapis arvensis Iris Segs Iris pseudacorus Soorick Rumex acetosa Sorrel Kecko, Chocksie, Kekks Anthriscus sylvestris Cow Parsley Tishalago, Lago Tussilago farfara Coltsfoot Wartie Girse Euphorbia helioscopia Sun Spurge Gorse Whin Ulex europaeus Caltha palustris Yellow Gowan Marsh Marigold Eriophorum angustifolium Bog Cotton Lucky Minnie's Oo, Mussa-kruppan Trowie Girse Digitalis purpurea Foxglove Goose Grass Sticky Willie Galium aparine Yarrow Dog or Tea Flooer Achillea millefolium Ruithy Girs, Sand Arvo Spergula arvensis Corn Spurrey Angelica sylvestris Angelica Spoot Girse umbillifers Umbelliferae Spurry Girse Meadowsweet Yule Girs Filipendula ulmaria Sea Rocket Strandby Cakile maritima Tormentil Bark, Smero Potentilla erecta Tripleurospermum maritinum Feeblo Sea Mayweed Silverweed Moors, Moorek Potentilla anserina coarse hill grass Loba Couch Grass Mettick, Russy or Sinnie Girse Agropyron repens Fussy Punds Holcus lanatus Yorkshire Fog Crested Dogstail Grass Pinstrae Cynosurus cristatus old tree in peat Skrog moss (Sphagnum) Mussa Sphagnum

Lichen Orkney's clean air allows the growth of many spectacular lichens, ranging from black, through greys and browns to bright orange and yellow. With few trees to grow on, they cover fence posts, standing stones, roofs, dykes and shore-side rocks. Lichens soon cover new structures and give an "aged" impression.

Formed by a symbiotic relationship between species of algae and fungi, lichen species are normally very particular about the substrates that they will thrive upon. Most of those found in Orkney tend to like growing on sandstone in salty locations and thus find man-made standing stones and the like very attractive.

Unfortunately, some years ago all of the lichen was "cleaned" from the Standing Stones at Brodgar and Stenness, thus destroying a large part of their ancient appearance and making them look stark. Luckily the plants have regrown and restored the previous attractive and more natural look.

The relative lack of trees means that wood-loving species tend to grow on any timber object in the country-side - the many fencing posts are thus prime places. Rocks on the shore are also good places to look, though shore-loving species can grow on hillsides 100m above the sea in Orkney.



Stone of Setter, Eda



Xanthoria on rocks near shore, Berstness, Westray







Lichens have regrown at Brodgar

Many rocks are covered with colourful growths of various species



SEASHORE Nature and environment



The rocks between the Brough of Birsay and the Point of Buckquoy

SEASHORE With nearly 800km (500 miles) of coast-line the littoral environment is very important in Orkney. The shallow coastal waters have always been of advantage to fishermen, seaweed collec-

tors and as a source of food, tempered in the past by a terrible toll in shipwreck and loss of life. Thankfully modern navigation systems have greatly reduced the number of shipwrecks.



The south end of the Holm of Papay is prime Groatie Buckie territory

Warebeth beach faces Hoy Sound and can be excellent for shells at low tide



Orkney's many and varied beaches are interesting at every season. Something seems to happen to normally quite sensible people on an Orkney beach, many become *Groatie Buckie* junkies. There is hardly a house in Orkney without a jar of these little shells. Collectors will find not only this ubiquitous, but hard to find, cowrie shell on many shores, but also a wide selection of other species.

Sea shells seem to have an inherent beauty that is most satisfying to humans and for millennia have been used as jewellery or decoratively. The best time to go shell hunting is just after an onshore storm, when all manner of new material will have been washed up. It is hard to say where to go as beaches change so much from year to year, or even overnight. Exposed shores near strong tides tend to be good places.

The beaches at Birsay, Warebeth and Carness are three examples of this type of shore. Another type of coast where shells tend to accumulate is at the head of a long bay near a strong tidal stream, such as St Peter's Pool in Deerness and Inganess Bay. Where the sea has thrown up large piles of seaweed after a storm, even quite fragile shells may be found intact. Scadman's Heids (Sea Urchins) are a good example.

At low tide rock pools are fascinating. Even a small one can harbour a diverse range of species including algae, small fish and crustaceans, beautiful sea anemones and starfish. One of the best places for observing shore life is the Brough of Birsay, where the strata form many suitable hollows which retain water when the tide is out. For variety of colour and form a rock pool may surprise the observant.

Less exposed beaches with flat rocks are best for seaweed growth, with a range of species and types occupying different zones of the beach. Several species are edible, and Teeting Tang (Fucus canalliculatus)

Barnacles are called Slykees in Orkney





Groatie Buckies at the Brough of Birsay



Groatie Buckies are usually found as empty shells, but occasionally alive

seems to be particularly tasty to sheep and cattle. In the past animals were fed this weed as a mineral supplement in the winter. Dulse (Rhodymenia palmata) is said to be good for the health, especially with water from a healing well, while Purple Laver (Porphyra umbilicicalis) can be used like lettuce in a seafood salad and Carrageen

(Chondrus crispus) can make a delicate jelly.

The abundant life of the shore also includes many small animals. Lift a pebble near the tideline and lots of *Sholties*, little jumping amphipods, will appear and immediately hide under other stones. Their relatives the Hermit Crabs inhabit discarded whelk shells

Sea Anemone or Selkie Pap



SEASHORE Nature and environment



Fucus vesiculosis and Fucus serratus grow on the inter tidal zone



Laminaria or "Ware" gets washed up in storms



Evening light on the shore



54

and may be found in rock pools. Several species of their larger relatives may also be found at low tide.

Always of interest is the varied flotsam and jetsam which appears. Sadly, much is simply rubbish which somebody elsewhere threw away, but everything from whole coconuts to beached whales may be found. No matter what the season or weather the shore is always interesting!

On calmer days it is possible to study the succession of different types of algae on the beach. The variety of species present depends mostly on the exposure and profile of the beach. Exposed shingle beaches and rocky shores have less diversity of species, whereas sheltered sandy or muddy shores harbour a much greater variety of life forms.

On the west coast the depth rapidly falls to 50m over a short distance, but between the islands depths are much less, and rarely deeper than 10m. Many areas have extensive rock shelves which are good for the growth of Laminaria, the long-fronded seaweed growing below the low water mark, locally called Ware, as well as lobsters and crabs. The strong tides scour the sounds, but also bring daily food to filter feeders. The warm North Atlantic Drift brings good conditions for plankton growth in summer.

The shallow shores are very good for the growth of many seaweeds, an important factor in maintaining agriculture before the advent of artificial fertilisers. In fact, the soil improvements due to alginates are probably still having an effect. On sandy beaches, Cockles and Spoots (Razor Shells) are common and are collected at low tides. Scallops are also abundant, liking the flat muddy bottoms of the sounds. Rock shores often have large numbers of Mussels and Whelks.

Many other invertebrate species inhabit the intertidal zone, including Sea Anemones, Sea Cucumbers, various sponges and a huge variety of worms. Visits to such places as the Brough of Birsay or Marwick Bay at low tide can provide a whole new natural history experience, best aided by reference to a good Seashore Guide.

On shore there is a diverse selection of lichens and blue-green algae, which do well in extremely exposed positions around the shores, and even better when there is some shelter. What appears like black rocks on the top of the shore is in fact blue-green algae, one of the most primitive species on earth, while higher on the shore are a series of other species, in varying colours and morphology.



In summer large wrecks of jelly fish occur



The inter tidal zone is a good hunting ground for shells and pretty pebbles



Minke Whale - dead cetaceans get washed up regularly

Jellyfish-eating Leather-backed Turtles occasionally come ashore



FAUNA - MAMMALS NATURE AND ENVIRONMENT



FAUNA During the last Ice Age sea level was 100 to 150m lower than today, so that Orkney may well have been connected to Mainland Scotland for a time as the glaciers retreated. However, the rapid rise in sea level after the melting of the ice, ensured that Orkney did not acquire an extensive fauna of terrestrial animals. Indeed many of the existing species have been introduced by man.

Orkney Vole (Microtus arvalis orcadensis). This vole is genetically distinct from the Short-

Orkney Vole



tailed Vole (Microtus agrestis), but similar to the Continental Vole (Microtus arvalis). Vole remains were found in the earlier deposits at Skara Brae, suggesting that they have been in Orkney for at least 4,000 years, and it seems likely that they came to Orkney with the early settlers.

The Vole is much more stumpy than a mouse, with short rounded ears, and a short tail. It is normally darkish brown, but a range of colours have been observed. A variety of habitats are occupied, including heather moorland, marshland, grassland, cereal crops, field margins and ditches. Long runs are made from the nest and the animals are not often seen.

Voles are the favoured prey of Hen Harrier, Short-eared Owl and Kestrel, all of which are common in Orkney, but absent from vole-less Shetland.

Otter The Otter (Lutra lutra) is relatively common in Orkney, but less so than in Shetland or parts of the west coast. This may be partly due to the exposed nature of many of the coasts as well as the intensive nature of the farming. They are rarely seen, but on the other hand their spraints are frequent sights around the coast, or along the loch shores, often being left on small green mounds.

Most glimpses of Otters are fleeting as they dive into ditches, run across the road or, if

Vole tunnels in long grass





you are lucky, swim among the seaweed along the shore. Otters are carnivores, and although they normally live on littoral fish such as Blennies. Butterfish and Eels, as well as Crabs, they will also take Black Guillemots, breeding ducks, rats and mice. The Otters Crossing sign at the Peedie Sea in Kirkwall is not a joke. Signs of Otters are regularly seen in this populated and busy area, and more than one has been accidentally run down here.

The best time to see Otters is in early morning, when they



Not a joke!



Blue Mountain Hares occur on Hoy

are most active and no one is about. By keeping quiet it is possible to observe these elusive creatures at quite close quarters, but a great deal of





Hare tracks in the snow

LAND MAMMALS

Otter (shy, but common) Pigmy Shrew (common) Orkney Vole (abundant) Rabbit (unknown when) Blue Hare (early 1900s) Hedgehog (1800s) Brown Rat (by ship?) Field Mouse (Vikings) House Mouse (pre-Norse?)

SEA MAMMALS

Common Seal (abundant) Grev Seal (abundant) Killer Whale (quite common) Minke Whale (quite common) White-sided Dolphin (regular) Risso's Dolphin (regular) White-beaked Dolphin (regular) Harbour Porpoise (common) Sperm Whale (almost annual) Pilot Whale (now rare) Humpback Whale very (rare) Fin Whale (very rare)



FAUNA - MAMMALS, SEALS

NATURE AND ENVIRONMENT



Grey Seal and pup

patience is needed!

Grey Seal (Halichoerus grypus)
The Grey Seal can be seen at all times of year, but most often during the breeding season.
Females come ashore on small islands from late September onwards to have their pups and mate, before leaving again for sea after the pup is weaned at about four weeks.

Adult males are up to 2.3m long and weigh up to 300kg, while females reach only 2m and 120kg. The males become sexually mature at 6-7, but do not gain social status to breed until at least 10 years. They do not survive much beyond 20. Bulls fight ferociously on the breeding grounds and also at



Bull Grey Seals spend a lot of time fighting and posturing

Grey Seal pups are born with a white pelt and moult at about three weeks old



sea, which increases their mortality rate. Cows, on the other hand, commence breeding at 6-7 years and may survive and bear pups until at least 35 years old.

Baby Grey Seals are born with a very attractive silky white coat, and gain weight rapidly on their mother's very rich milk. The mothers identify their pups by smell, and though they are very defensive, if separated they may not be able to find their pups again.

Grey Seals will feed pups that are not their own, but these pups do not do so well. The pups moult at about 3-4 weeks to a beautiful silverblue-grey coat, and are ready for sea five or six weeks after birth. Although they can swim and dive before moulting they do not normally leave the land until fully moulted.

The cows are ready to mate at about 3 weeks after giving birth and may copulate with several bulls. The aggressive reaction of the cows to the bulls prior to intimacy may

Young female Grey Seal





Common Seals are very inquisitive and can be quite confiding

well encourage mating with the most dominant nearby bull. Neither sex does much feeding during the breeding season, especially the dominant bulls.

Grey seals were killed for their skins on a large scale in the past, and have also had periodic attacks of a fatal disease. Controversy over competition with commercial fishing has led to much research on Grey Seal diets, with very interesting conclusions.

Study of faeces has shown that Sand Eels make up about 60% of the diet and total fish consumption is estimated at 5kg per seal per day. Thus, although there is little evidence that seals catch much commercial fish, they could be in competition with birds and other mammals for Sand Eels. There are about 25,000 Grey seals in Orkney waters, about 18% of the world population.

Common Seal (*Phoca vitulina*) Smaller than their cousins, at about 1.9m, and 120kg, the Common Seals are also more coastal in habitat. They may be seen all round the shores on skerries, small islands, and sand banks at low tide.

Pups are normally born in late June and July, in their adult coat, having moulted in the uterus. Those born with a white coat moult within days. The pups can swim within hours of birth, although it takes about three weeks before they become strong enough to haul themselves up the beach. They suckle for several weeks on the tide line and keep a close relationship with their mother for an extended period.

Common Seals seem to be very good mothers and this close relationship may well greatly



Common Seals have dog-like heads

assist the survival of the pups. There are about 7,000 Common seals in the Orkney area, about 1% of world population, and numbers seem to be fairly constant. In general the species is much less social than Grey Seals, although they do haul out in large groups in several places, including Helliar Holm, Eynhallow, Deerness and, especially, on Sanday.

This population seems to generally escape the epidemics which kill large numbers in the Baltic and Southern North Sea, which may be exacerbated by pollution. There has not been excessive shooting for several decades, but some rogue seals do learn how to attack salmon cages, and creels, and are dealt with, but these are a

Common Seals spend a lot of time lying up on rocky beaches and skerries





A large pod of Dolphins at speed in the Pentland Firth

CETACEANS Eighteen species of whales have been recorded in Orkney. In recent times increasing numbers have been observed in these waters and sadly there have been several strandings over the last few years. There is a good chance of seeing one or more species, particularly from the west coast of the islands, or from the ferries.

Blackfish (smaller, toothed whales) usually live in structured groups, although they may be seen singly. The Long-finned Pilot or Caain' Whale (Globicephala melaeana) is mostly a pelagic species. Now rarely seen inshore, it was formerly common, especially in the winter, either singly or sometimes in large groups. This whale used to be driven or *caa'd* ashore in large numbers as it still is in the Faeroes, but this stopped in the 1860s. They are jet-black in colour, with a low but prominent dorsal fin and reach up to 6m in length.

Baleen Whales (Rorquals) of various species are sometimes sighted around Orkney. By far the most common in coastal waters is the Minke Whale (Balaenoptora physalus) They can be seen close inshore near headlands, passing between the islands or over shallow banks at times, but are more frequently seen at sea, especially near Fair Isle and in the Westray and Pentland Firths. They are quite distinctive, with their relatively large dorsal fin, small size and white striped flippers.

The Minke is known by fishermen as the Herring Hog on account of its liking for that species. Most sightings are between April and October, especially between July and September.

Other Rorquals, such as Fin (B borealis), Sei (B borealis) and Blue Whales (B musculus) are sometimes seen offshore as they migrate south along the continental shelf in late summer and autumn, or come ashore dead. Humpback Whales (Megaptera novaeangliae) have been observed in deep water off Orkney and Shetland in recent years, suggesting that their numbers may be recovering.

Sperm Whales (Physeter catodon) are seen most years, usually between September and January. The head shape, small dorsal hump and back knuckles are diagnostic. Dead specimens are washed up sometimes, and there are occasional major strandings. In 1994, 11 young males beached themselves at Backaskaill Bay on Sanday. Pods of young males have visited Scapa Flow and Holm Sound in recent times.

Killer Whale or Orca off Copinsay









Dolphins Several species of Dolphin frequent Orkney waters, including Harbour Porpoise (Phocoena phocoena), which is often seen in bays feeding on small fish, or from boats among the islands, usually in the summer. White-beaked Dolphin (Lagenorhynchus albirostris) also occurs in summer and autumn in small herds, usually off to the west, but sometimes in Scapa Flow. The White-sided Dolphin (L. acutus) and Risso's Dolphin (Grampus griseus) tend to be more oceanic, but can also be seen to the west of Orkney, usually from boats, or from headlands.

Killer Whale The Killer Whale or Orca (Orcinus orca), prefers deeper water. They are seen occasionally in Scapa Flow or in the North Isles, but more usually in the deeper water of the Pentland Firth or off western

coasts. The tall dorsal fin, white chin and eye patch are unmistakable. Males average 7.3m and females 6.2m in length and they rarely strand. Possibly the large seal population is attracting more to these waters.

Whales are far more likely to be seen from a boat with the echo sounder off, as they do not seem to like the ultrasonic frequencies. A simple code of conduct can help reduce disturbance to whales. Do not approach headon, but from the side quarter or

from astern of the animal. Do not go closer than 30m and avoid loud noise. Very active whales should be given a wide berth! Curious individuals may come very close, but do not usually threaten boats.

SHARKS The Basking Shark is being increasingly seen around the north of Scotland. In recent years numbers have been increasing after intensive overfishing in the 1950s. The large dorsal fin is very distinctive.



Pilot Whale (Caain' Whale or Blackfish)

Basking Sharks are making a comeback







INSECTS



Small Tortoiseshell Butterfly is very common in some years and rare in others

INSECTS Orkney may not seem like prime territory for insects, but in fact it supports a wide range of species. The ubiquitous Midge is not much of a problem, except on heather moorland in the "right" conditions. The wide range of wild flowers and lack of use of chemicals mean that many species have survived here which have elsewhere disappeared.

Bumblebees Perhaps the most prominent are the bumblebees, many of which have become rare elsewhere in UK due to industrial farming. There are several species, which may be distinguished by their size, head shape, tongue length and prominent black, yellow and white stripes. They are easily seen feeding anywhere there are wild flowers - roadside verges are especially good.

Butterflies Seven species of butterfly are resident in Orkney, and a further 7-8 arrive most years as immigrants from Britain or Europe. Cabbage White are the bane of all vegetable gardeners. Green-veined Whites and Small Tortoiseshells appear in May, while the Common Blue and Meadow Brown are later. Dark Green Fritillaries and the Large Heath appear later

Larvae and adults of each species have their own plant preferences and most prefer to fly on bright days. The Meadow Brown, by contrast, is about on the dullest and windiest of days. Butterfly numbers, especially of immigrants, vary annually due to food availability and weather conditions.







Common Blue Butterfly



Dragonflies are best seen on Hoy during July and August beside pools and burns, especially on sunny days. There are 4 resident species. The 3 species of damselflies are more widespread and can be seen on the Mainland and Rousay as well as Hoy.

Moths Over 250 species of moths have been recorded in Orkney. Most are nocturnal and thus only generally observed by specialists. However, a number of the most spectacular species are commonly seen in daylight hours. These include the large Emperor, and colourful Garden Tiger, while the Magpie may be seen feeding on Heather flowers on summer evenings.



Emperor Moth - found on moors and marsh, male flies in afternoon dayligh



Bumblebee on Mint



Magpie Moth - feeds on Heather



Green-veined White Butterfly in early May



Garden Tiger Moth





Dragonfly on Hoy



SOME ORKNEY ANIMAL NAMES

INVERTEBRATES (INSECTS, ETC.)

Arboo, Maith Maggot Horsefly Cleg

Matlo Hornie Golach, Forkie Tail Earwig

Caterpillar Brottlick Beetle Gablo

Jumping insects Jumpan Jecks

Keb Sheep Tick

Bluebottle Fish

Long-legger Spider Kirstie Kringlick Jumping insects (beach) Loopacks

Fly, Bluebottle Matlo Earwig Muiro Ant Myroo Midge Meeo

Daddy Longlegs Kirsie-kringlos

INVERTEBRATES (SEA SHORE)

Woodlouse Slatroo, Slaterworm

Sandhopper Sholtie Edible Crab Partan

Sea Urchin

(Horse) Mussel

Dead Men's Fingers Sponge Cuttlefish Footho, Skeeto Starfish Krossick Uivigar Sea urchin Kleck, Slykee Barnacle Selkie Paps Sea Anemone **Jellyfish** Klanker Hermit Crab Kleppispur

INVERTEBRATES (MOLLUSCS)

Scadman's Heid

Groatie Buckie

Yam, Yug Dog Whelk Cattie Buckie Sand Gaper Smirlin Razor Fish Spoot Periwinkle Buckie Scallop Gimmer Shell Seashell Mya Smirlin Big Limpet Spiko Harpo Pecten Cyprina islandica Kooshell Edible Mussel Krane Sand Gaper Shell Grice Cowrie Shell

VERTEBRATES (FISH)

Coal Fish Saithe Saithe (2nd year) Kuithe, Piltick Saithe (3rd & 4th year) Doondie Small Cod Washie Cod Stockfish Big Cod Keelin Redware Cod Drumman Pollack Lowrie, Lythe Flounder Fluik Plaice Goldrick

Turbot or Halibut Kleppy Sand Dab Sannyback Wolf Fish Swine Fish Catfish Tusk Lumpsucker Paddle Wrasse Bergilt Picko Blennie Butter Fish Swirdy Rockling Bramplo Young Herring

Sile Gurnard Horsegornick, Kroolter

Lumpsucker Steen Biter Sea Scorpion Uiko Spotted Blennie Swarfish Angler Fish Finnigal Skate Thornie, Torno Lesser Dogfish Hullion

Spotted Dogfish Daa Large Dogfish Homer, Hamer

Dogfish Hoe Basking Shark Hoe Mither

VERTEBRATES (LAND & SEA)

Young Seal Bungy Grey Seal Selkie Common SealTangie Tang Whesser Common Seal Paalo, Neesicke Porpoise Minke Whale Herring Hog Caa'an Whale Pilot Whale Orkney Vole Voldro Hedgehog Burstigull Rone-Moose Shrew Toad Норро



Atlantic Puffin on Muckle Skerry (July)

Common Seal with pup on her back, Holm of Boray (June)

