



Nautical chart showing variations in depths to east and west

GEOLOGY The Lewisian Gneiss Complex was formed between 3100 million years ago (Ma) and 400Ma. It comprises of some of the oldest exposed rocks on Earth. The main structures date from the Scourian event (3100Ma to 2500Ma), with significant igneous intrusion in Harris around 1880Ma. During the Laxfordian event (1850Ma to

1600Ma) major folding and metamorphic changes took place.

The South Harris Igneous Complex was formed deep within the Earth's crust around 2000Ma. It includes minerals such as anorthosite, anorite and diorite, some of which have been subject to commercial extraction.

The highly indented coastline extends to about 2,100km (approx 1,300mi). The Outer Hebrides Fault Zone runs up the east coast, where the deep waters of the Minch reach over 100m close inshore. During Torridonian times (c.1000Ma) large quantities of sediments accumulated here. These are evident on the surface only around

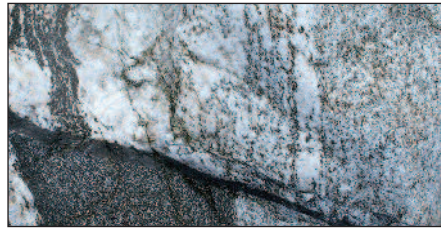
Torridonian Sandstone forms a beautiful reddish beach at Braigh na h-Aoidhe east of Stornoway



UKHO



Glacial striation on Lewisian Gneiss



Lewisian Gneiss showing characteristic banding



Laxfordian event folding in Lewisian Gneiss at the Butt of Lewis



Barra Head (190m) is formed from Lewisian Gneiss which may be over 3000Ma old

Stornoway as the Stornoway sandstone beds.

In contrast, the west coast is mostly bounded by the Outer Hebrides Platform. Inshore depths are 10-15m only and the 50m line is up to 70km (approx 40mi) offshore. These shallow seas have played a major factor in the build up of sand on the west coasts of the islands.

The Western Isles were thinly glaciated in the last Ice Age, and were one of the first areas to be ice free, perhaps around 12,000 years ago, due to the Gulf Stream. One of the results of this is that whereas much of mainland Scotland has risen since the melting of the ice, the Western Isles have sunk. Combined with the rise in sea level this means that much land area has been reclaimed by the sea, especially on the west side.

Glacial striations are apparent on many of the exposed rock surfaces throughout the isles. These parallel scratches, combined with the structure of the gneiss add an extra dimension of beauty. Dramatic folds, mixtures of different minerals and ancient deformed igneous intrusions all combined with erosion, over thousands of millions of years, have resulted in a fascinating and beautiful geology.

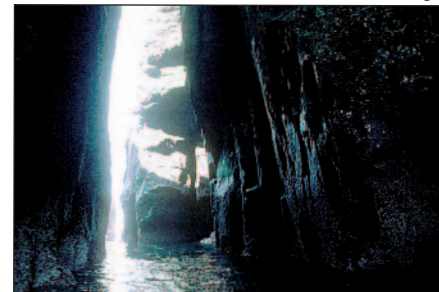


Torridonian Sandstone is exposed around Stornoway

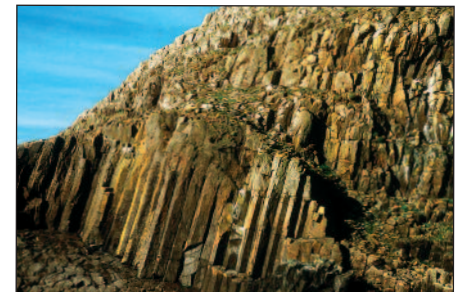


St Kilda was formed by volcanic eruption about 60Ma

Dramatic sea caves at Sula Sgeir



Dolerite columns on the Shiant Islands





Uig Bay has beautiful sands backed by extensive dunes and high mountains

ENVIRONMENT Lewisian Gneiss is predominant in the Outer Hebrides. These ancient rocks were formed deep in the Earth nearly 3,000 million years ago. Apart from the mountains of Harris and the east coasts of the Uists, most of the land is relatively low lying. The highest point is Clisham in Harris (799m).

There are several distinct types of terrain, including moorland and hills, machair, sandy beaches and dunes, rocky coasts and cliffs, woodlands and inland lochs. Much of the interior of the islands, especially Lewis and North Uist, comprises vast areas of peatland, while the eastern seaboard is mostly rocky, facing the deep waters of the Minch.

Seilebost is one of the fine beaches of west Harris



In contrast the spectacular sandy beaches which dominate the western sides of the islands are often backed by large areas of dunes and machair. This forms when wind-blown sand has accumulated in considerable quantities inland. When fertilised with seaweed and farmyard manure, machair makes excellent agricultural soil.

The only sandy beaches on the east side of Lewis are north of Stornoway. Benbecula and Barra as well as some of the outlying islands, also have extensive east-facing expanses of sand. The most notable is perhaps the Cockerstrand, or Traigh Mhor, which forms Barra Airfield and borders the shallow Sound of Barra.

Long fjord like sea lochs indent the coasts of the islands, especially in the east. The largest of these, Loch Seaforth, is one of many such drowned valleys which have been sculpted by glaciers. These coasts mostly rocky, with deep water close inshore. Many small islands and skerries lie offshore.

Inland, especially in Lewis and the Uists, the terrain is dotted with over 7,000 lochs, large and small. These have formed in hollows scooped out by glaciers and afford excellent trout fishing. Loch Langavat is the longest at 11km (6.8mi), while Loch Scadavay is the most irregular and Loch Suaineabhal is the deepest at 33m.

The islands are treeless apart from the plantations in Stornoway and around houses. Commercial forestry experiments have failed due to climate. Most of the interior of Lewis is a vast area of blanket peat bog dominated by heather moorland vegetation.

CLIMATE The climate is essentially oceanic, and is controlled by the North Atlantic weather systems. Most of the year this means that a series of depressions crosses the area, with their attendant wind and rain, but anticyclones can also last for weeks once established.

Peat cuttings in heather moorland



Clisham and Allt Thomnaval

Rainfall is relatively low, but average wind speed is high.

The average temperature of the sea ranges from a minimum of 7° in January to a maximum of 14° in August. This means that summers are temperate, and winters mild. Rainfall is moderate except in the mountains. Stornoway averages 1,000mm (43in) of precipitation and about 1,200h of sunshine annually.

All of the landscape is exposed to the prevailing salt laden westerly wind, which inhibits the growth of trees and shrubs except in especially sheltered locations. Gales occur on average more than once a week at the Butt of Lewis.

May until August are the sunniest and driest months, with June perhaps the best. In midsummer the sky remains bright all night, while in midwinter the sun hardly rises above the horizon. In these islands every season offers dramatic vistas. The following times are in GMT (UST) and for Stornoway:

Midsummer sunrise	04:20
sunset	22:31
Midwinter sunrise	09:13
sunset	15:32



Loch Seaforth is a drowned glacial valley



Saltmarsh occurs in many places where there are shallow inlets



Tree stumps are found in peat bogs

North Uist has a maze of lochs



MAIN HABITAT TYPES

Sea, Skerries, Small Islands
Coastal
Saltmarsh
Machair
Croftland
Wetland
Lochs, Ditches & Burns
Woodland & Gardens
Roadside Verges
Moorland
Montane



Gannet, Sula Sgeir

SEABIRDS The Western Isles are home to a large number of seabirds. Most of the big colonies are on relatively inaccessible outlying islands, where they can escape predators, such as rats.

Some of the best opportunities for seabird (and cetacean) watching are to be had from the various ferry crossings from the Mainland or between the islands. The Sounds of Harris and Barra are particularly good places for the binoculars. It is easily possible to see most breeding seabirds here in June or early July, often from close quarters.

Male Eider Duck, Sound of Harris



There are huge colonies of Gannets at St Kilda and Sula Sgeir. These spectacular birds may be seen plunge diving off all of the coasts when fish such as Mackerel, Herring or Saithe are in.

Puffins and other auks are also common and, apart from the Black Guillemot, only breed on offshore islands. Good views may be had from the ferries, but even better sightings are to be made from small boats.

Great Skuas, Arctic Skuas and seagulls also breed, including on coastal areas of the main islands. Large numbers of

Arctic Terns as well as a few Little and Common Terns nest with varying success on sandy or shingly beaches. They may often be seen over bays and inlets diving and crying. Terns are especially prone to disturbance, predation, food availability and weather during the critical days after hatching.

Eider Ducks may be seen commonly round the coasts. The brown females herd and protect their kintergartens of ducklings. Great Skuas and Black Backed Gulls are the main predators, but Otters and seals also take ducks and ducklings. The black and white male Eiders take no part in the rearing of their offspring and form separate rafts.

The outliers, including the Monach Islands, St Kilda, the Flannans, Sula Sgeir, Rona, the Shiant Islands and the southern Barra Isles are the best places to view breeding seabirds. Although St Kilda has the biggest of such colonies, all of these islands offer spectacular opportunities for bird watching between May and late July.

Shag on nest, near Butt of Lewis



Puffin

Boat trips are available to all of these places, especially to St Kilda and Mingulay. All are very weather dependent, but offer a rich experience of seabirds, cetaceans and off-shore adventure. Suggested operators are listed in the Services Section.

Many seabird species forage far and wide for food, especially during the breeding season, and can be seen passing the headlands mentioned in



Fulmar Petrel

Great Skua



Leaches Petrel, on Rona



Razorbill



Arctic Tern

the migrants pages. Non breeders also form rafts in bays and below sheltered cliffs.

BREEDING SEABIRDS

Gannet
Black Guillemot
Guillemot
Razorbill
Puffin
Manx Shearwater
Fulmar Petrel
Leaches Petrel
Storm Petrel
Great Skua
Arctic Skua
Cormorant
Shag
Arctic Tern
Little Tern
Common Tern
Herring Gull
Great Blackbacked Gull
Lesser Blackbacked Gull
Common Gull
Black-headed Gull
Kittiwake
Eider Duck

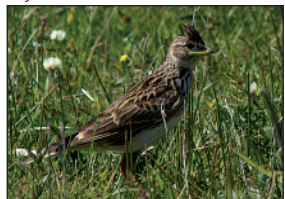


Corncrakes remain quite numerous in the Outer Hebrides

LANDBIRDS The Outer Hebrides is home to some ornithological treats. These include species rare elsewhere, such as the elusive Corncrake. The rasping call of the male is one of the characteristic sounds of summer on the machair croftlands.

Corncrakes can be hard to locate as they rarely fly and can throw their calls. They are most likely to be seen crossing the road, when they may pose conveniently. Corncrakes are locally common in the west of Lewis, the Uists and Barra. Though their calls are loudest in the early hours, they may be heard at any time of day during the breeding season.

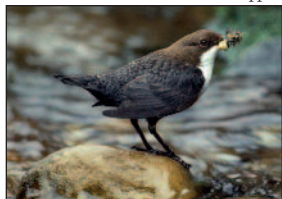
Skylark



Wheatear



Dipper



Laurie Campbell

mon here, as well as such species as Wheatear, Meadow and Rock Pipit, Grey and White Wagtails, Twite and the ubiquitous Starling. Reed Buntings breed around lochs where suitable habitat remains. Two of the commonest sounds of summer are the noisy Stonechat and the equally vocal Wren.

Rooks only nest around Stornoway, where there is a large rookery in the woods. Ravens and Hooded Crows are quite common throughout the area. The deep caw of the Raven contrasts with the mostly silent eagles. They nest early in the year on cliffs, ruined buildings and stunted trees. Hooded Crows are great stealers of other birds' eggs, but are often seen feeding along the shore or on croftlands also.

Red Grouse still breed in small numbers on the heather moorland. When they are flushed they rise fast and noisily. Their cryptic camouflage means that they are only rarely observed from close up whilst on the ground.

Eagles The spectacular White-tailed Eagle and the Golden Eagle both breed here. The former was reintroduced



White-tailed Eagle



Golden Eagle

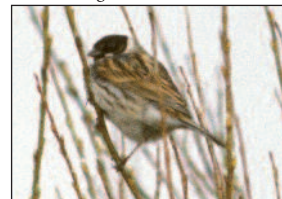


Golden Eagle

in Rum in 1975 and has since spread to Skye, Mull and the west Highlands as well as Lewis. They breed on remote cliffs but may be seen fishing around the coast or on larger lochs.

Golden Eagles may be seen almost anywhere in the isles and breed from the Lewis hills to Barra. Usually they are observed soaring high above, but a lucky few may be rewarded by a spectacular stoop to catch a rabbit or other prey. In early spring

Reed Bunting



Stonechat



during their courting displays, Golden Eagles are almost oblivious to people.

Buzzards are also common throughout and are easily mistaken for their larger cousins by the unwary. Peregrines nest on coastal cliffs and Merlins may be seen furiously chasing their favourite prey of Meadow Pipits. Hen Harriers, Short-eared Owls and Kestrels are only present in the Uists due to a lack of voles in Lewis and Harris.



Common Buzzard

LANDBIRDS

Golden Eagle
White-tailed Eagle
Common Buzzard
Peregrine
Hen Harrier
Kestrel
Merlin
Raven
Hooded Crow
Rook
Corncrake
Rock Pipit
Meadow Pipit
Skylark
Grey Wagtail
White Wagtail
Wheatear
Rock Dove
Wren
Stonechat
Twite
Starling
Blackbird
Song Thrush
House Sparrow
Reed Bunting



Greylag Geese herding their goslings

WETLANDS abound in the Outer Hebrides, especially in the Lochs district of Lewis and the Uists. The many lochs, lochans, marshes, burns, ditches as well as areas of nearby moorland and machair provide an ideal habitat for waders and waterfowl.

The extensive flat sandy beaches, salt marshes and tidal mud flats provide ideal feeding areas for waders. They hold internationally important populations of these birds, both residents and migrants, all year round.

These include Dunlin, Golden Plover, Lapwing, Redshank, Ringed Plover, Oystercatcher, Curlew and Snipe as common breeders. A few Red-necked Phalarope nest at the southern limit of their range. Greenshank also breed, mostly in the Uig area of Lewis.

Ducks breeding here include Red-breasted Merganser, Mallard, Tufted Duck, Shelduck and the rare Pintail. Both Red-throated and Black-throated Divers nest on some of the larger and more remote lochs and lochans. Both

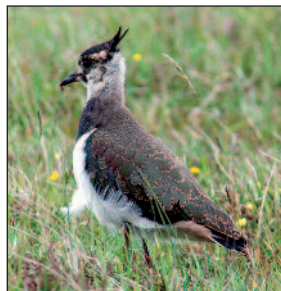
species are commonly heard as they shuttle back and forth with food for their broods.

Greylag Geese and Mute Swans breed here in considerable numbers. Loch Bee and Loch Druidbeg hold the biggest populations. The many small roads and tracks among the lochs and waterways afford good viewing opportunities for most of the species mentioned here.

The woodlands at Stornoway are host to the only heronry in the Western Isles, Grey



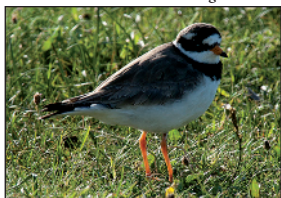
Golden Plover



Lapwing



Greenshank



Ringed Plover



Oystercatcher



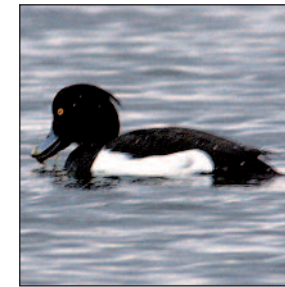
Dunlin



Red-breasted Merganser

Heron are impressive birds which are often seen fishing around the harbour. They can be observed in many other suitable places such as shallow lochs, streams and inlets throughout the isles.

Reserves The RSPB Reserve at Balranald on North Uist is a good place to view many of the species which breed around the machair lochs. The National Nature Reserve at Loch Druichbeg on South



Tufted Duck



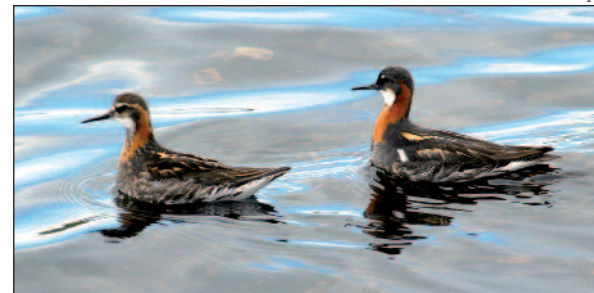
Grey Heron



Red-throated Diver



Black-throated Diver



Red-necked Phalarope

WADERS&WATERFOWL

Golden Plover
Ringed Plover
Lapwing
Redshank
Oystercatcher
Curlew
Dunlin
Snipe
Red-necked Phalarope
Red-breasted Merganser
Pintail
Tufted Duck
Mallard
Shelduck
Moorhen
Red-throated Diver
Black-throated Diver
Greylag Goose
Mute Swan
Grey Heron



Sanderling arrive in large flocks in autumn

MIGRATION In spring and autumn the islands are in the path of migrants which breed further north and in the Arctic. Apart from these regular visitors a wide range of vagrants can turn up.

Wildfowl Large numbers of geese pass through, some of which stay all winter. Greylag, Pink-footed, Greenland White-fronted and Barnacle Geese may all be seen grazing on croftland. Whooper Swans are also regular winter visitors. The lochs are host to many migrating ducks.

The Sea The large areas of sheltered, shallow sea water with gently shelving beaches

Bar-tailed Godwit

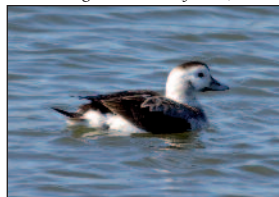


provide good feeding areas for birds on passage or when overwintering. Shag, Cormorant and Eider Duck are all resident. They are joined in the autumn by Great Northern Diver, Velvet Scoter, Long-tailed Duck, Goldeneye, Slavonian Grebe and other species.

The Shore Intertidal zones and piles of seaweed provide rich feeding areas for waders, resident and migrant. These include Purple Sandpiper, Curlew, Bar-tailed Godwit, Golden Plover, Lapwing and Dunlin.

Migration Time may bring in unusual vagrants, especially

Long-tailed Duck (female)



waders or ducks from North America. They may be found among flocks of local birds or solitary. Birds from Eastern Europe are less common but may turn up after prolonged strong easterlies.

Sea Watching There are many good vantage sites for sea watching, including on Lewis, the Butt of Lewis and Tiump Head, on North Uist, Aird an Ruanair and on South Uist, Rubha Ardvule. Large numbers of birds can be seen on passage during peak migration times.

Huge flocks of waders are often present on nearby beaches before they move on.

Dunlin in winter plumage



Turnstone

Thrushes, finches and other small passerines sometimes make landfall in numbers near such headlands before moving to suitable feeding areas and eventually heading off again.

Woodland The gardens and woodland of the Stornoway area attract many passerines. Throughout the isles there are small plantations which are worth checking during migration times.

Raptors such as Merlin and Peregrine follow these movements. Sparrowhawk and Kestrel are less common winter visitors. Long-eared Owls are seen every year in the woods. Occasionally a conspicuous white Gyrfalcon or Snowy Owl may appear for a few days and create great excitement among birders.

Whooper Swans



Goldeneye



Great Northern Diver resplendent in summer plumage in May

Eruptions Every few years species such as Waxwing or Crossbill, which breed in Scandinavia and Northern Russia have such a successful breeding season that they erupt in large numbers to Britain, where they rapidly strip off all of the berries before carrying on south. For a short time every suitable bush and tree will be thronged.

MIGRATION TIMES

From mid March to early June
May best

From end July to early October
September best

SOME MIGRANTS WHICH MAY BE SEEN

Great Northern Diver
Barnacle Goose
Whooper Swan
Greylag Goose
White-fronted Goose
Long-tailed Duck
Goldeneye
Widgeon
Pochard
Turnstone
Purple Sandpiper
Knot
Sanderling
Dunlin
Wheatear
Redwing
Crossbill
Waxwing
Iceland Gull
Glaucous Gull



Thrift and yellow lichen

FLORA The wide range of habitats found in the Western Isles has allowed a diverse flora to proliferate. July is perhaps the best month for a profusion of wild flowers on the machair. In fact any time between May and September will reward the visitor interested in botany.

Coastal habitats include sandy beaches, dunes, dune slacks, machair, exposed clifftops and rocky shores. Thrift is ubiquitous all around the coast, along with Sea Campion, Scurvy

Grass, Silverweed, Yarrow, Scots Lovage and other salt tolerant plants.

Rocky shores tend to be more exposed and thus support a smaller range of plants, which are often stunted compared to the same species growing in more sheltered surroundings. Spring Squill, Grass of Parnassus, Sea Plantain, Thrift, Scurvy Plant and Mountain Everlasting as well as many lichens are a few of the plants that thrive here.

Sandy beaches and dunes also support many species. Sea Rocket, Scentless Mayweed, Sea Milkwort, Sow Thistle and Orache are widespread above the high water mark. Large areas of sand dunes have remained unexploited here unlike in other areas. Many have been stabilised by planting Marram Grass.

Saltmarshes are frequently found at the heads of shallow sea inlets which get flooded at high tides. A variety of plants

Lesser Twayblade



Red Campion



thrive in these zones, which may be a sea of pink, blue and yellow in early summer. Thrift, Spring Squill, Sea Plantain and Silverweed are a few of the many colourful wild flowers to see here. Later, Sea Aster turns saltmarshes mauve.

Machair forms behind many beaches, where windblown sand encroaches over peat further inland. It is composed of up to 90% shells and thus the soil has a high lime content. In summer these areas are covered by a carpet of wild flowers, with up to 40 different species per square metre. Earlier, whites and yellows predominate, while later reds, blues and purples take over.

Orchids, some of which only occur in the Hebrides, are particularly common. Fragrant, Pyramidal as well as Hebridean versions of Marsh and Spotted Orchids are all present on the machair. Further inland the rare Irish Lady's Tresses grows on pasture which has been grazed and trodden by cattle.

Sea Aster



Scentless Mayweed



Sea Plantain



Ladies Bedstraw



Yarrow

Silverweed



COASTAL WILD FLOWERS

Thrift
Red/white Campion
Eyebright
Scots Lovage
Goldenrod
Ladys Bedstraw
Sea Milkwort
Scentless Mayweed
Sea Rocket
Orache
Scurvy Grass
Silverweed
Sea Aster
Grass of Parnassus
Mountain Everlasting
Spring Squill
Eyebright
Yarrow
Sea Plantain
Sea Bindweed
Orchids



Meadsweet and Vetches are common roadside flowers

Blackland Inland, the cultivated blackland between the machair and the moorland, with fields for pasture and hay, also supports a wide variety of wild flowers. If reseeded has not been done recently, and the crop is harvested late in the season the displays are more spectacular.

Reduced grazing and cropping for hay or silage has resulted in many meadows becoming overgrown with rank grasses and rushes. The best wild

flowers are always found where the land is well eaten by cattle and where fertiliser, especially nitrogen, has not been applied.

Roadside Verges, particularly when only cut late in the season, retain a huge diversity of species. The lack of use of crop spray in the Outer Hebrides means that roadsides present a very easily visited variety of wild flowers. They include dry grassland, ditches, burns, uncultivated meadows, exposed rocks, peaty or sandy

soil and many other habitats.

Where roads are salted in winter many coastal species predominate, even well inland. Overgrazing by sheep or deer in the past tended to decimate roadside flora, but this has become less severe as ovid munching has decreased. Roadsides are particularly good places for orchid hunting since most have never been cultivated. Disturbance due to roadworks also frequently creates conditions where long dormant seeds may suddenly be stimulated into germination.

Woodland Although there are few areas of natural woodland today there is evidence that trees were more widespread in the past. Many tree stumps have been found underneath peat cuttings. This suggests that climate change to wetter conditions encouraged the expansion of peatbogs, which engulfed the woodland.

The legend is that the Vikings burnt all the trees, however it is more likely that cutting for fuel and timber combined with the

Machair wild flowers in June



Primrose



Gorse or Whin flowers from winter to midsummer

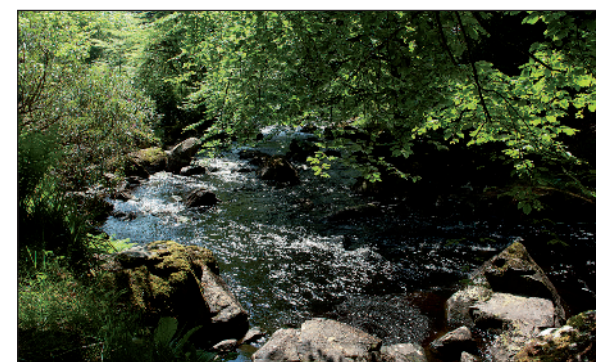


Wild Thyme

grazing of domestic animals preventing regeneration wiped out most of the woodland. Small islands on sheltered lochs are nearly always covered with trees and bushes, suggesting that protection from sheep and deer would allow woodland to thrive in some places.

The only large wooded area is around Lews Castle at Stornoway. This was planted in the mid-19th century on imported soil and includes a large variety of exotic species. Experimental plantations of forest were planted in several places, and while not perhaps commercially viable some are now managed as a recreational resource. Insect pests killed many of the exotic conifers.

Hebridean Spotted Orchid



The River Creed at Stornoway runs through the woodlands of Lews castle



Kidney Vetch

Spotted Orchid



ROADSIDE & MEADOW WILD FLOWERS

Whin
Coltsfoot
Primrose
Lesser Celandine
Buttercups
Daisies
Plantain
Kidney Vetch
Northern Marsh Orchid
Common Twayblade
Lesser Twayblade
Heath Spotted Orchid
Hebridean Spotted Orchid
Frog Orchid
Fragrant Orchid
Pyramidal Orchid
Lesser Butterfly Orchid
Meadsweet
Vetches
Foxglove
Hawkweeds & Dandelions
Scabious
Knapweed
Thistles
Primroses



White Water Lilies occur on many lochs

Lochs are prominent in the landscape of the Outer Hebrides, especially in low lying areas of North Uist, South Uist and Lochs in Lewis. About 25% of Scotland's 30,000 lochs are situated here.

Machair Lochs are generally alkaline and relatively high in nutrients due to the shell sand and windblown salt spray. They are also affected by runoff from surrounding culti-

vated land. They are often surrounded by Yellow Iris and Marsh Marigolds with many orchids in the surrounding damp meadows.

Dubh (G Black) Lochans are common in hollows in peaty areas. Stained dark brown by the peat, they tend to be acidic and dystrophic, or low in Oxygen. They are also affected by windblown salts and so tend to be richer in nutrients than similar bodies of water inland.

Many of these lochs are covered by White or Yellow Water Lilies and Bogbean thrive around the edges. The surrounding marshes hold insectivorous Sundew and Butterwort as well as Bog Asphodel and many mosses.

Moorland The moors are mostly covered with blanket peat, often several feet deep. Heather, Bell Heather, Cross-leaved Heath, Woodrush and Cotton Grass add colour to the drier areas during the summer.

These bogs form over hard, impervious rocks when rain-water does not drain away, resulting in a very high water table. This prevents breakdown of plant material, especially Sphagnum Moss, which builds up to form peat. The underlying undulating Lewisian gneiss has thousands of hummocks and hollows. As a result the higher areas are drier and the lower areas wetter.

Small shrubs such as Bog Myrtle, Dwarf Willow and Juniper grow in some places, especially where protected from grazing. Depending on exposure they may be very small or even prostrate.

Lichens grow everywhere in the Western Isles, from the most exposed seashore to the highest peak. There is a profusion of colours and forms, depending on the chemistry of the rocks, exposure, salinity and humidity.

Orchid



Bog Asphodel



Yellow Iris



Bogbean



Sundew



Butterwort



Bog Cotton

Cross-leaved Heath



WILD FLOWERS Wetland Lochs & Moorland

White Water Lily
Yellow Water Lily
Bogbean
Yellow Iris
Marsh Marigold
Sundew
Butterwort
Sphagnum Moss
Bog Asphodel
Bog Myrtle
Dwarf Willow
Juniper
Bog Cotton
Heather
Cross leaved heath
Woodrush
Bell Heather
Loueswort
Orchids
Mosses
Lichens



Common or Harbour Seal

FAUNA The Western Isles are home to only a small number of indigenous mammal species. At the end of the last Ice Age there was probably no land bridge to Scotland, due to the depth of the Minch. Thus native species are limited to Grey Seals, Common Seals and Otters.

Grey Seals come ashore to pup and mate on many of the outlying islands, especially the Monachs and Rona, in autumn. The pups are white when born. They moult and go to sea after about a month ashore.

Common Seals have their pups in early summer. They can swim almost immediately and can be seen with their mothers being taught to hunt

and dive. Also known as Harbour Seals, they haul out on sheltered rocks, often in large numbers.

Otters are elusive, but not uncommon. They are generally seen early or late in the day along rocky shores. Ferry terminals, old piers and breakwaters are often good places to look. Spraints and tracks are much easier to see than the animals themselves.

Cetaceans The Hebridean waters are home to several species of cetaceans which may often be observed from the ferries. Bottlenose, Risso's, White-beaked and White-sided Dolphins are quite common. Porpoises are also present, and usually seen in groups.

Whale species include Minke, Killer, Pilot, and occasional Sperm and Humpbacks. Large pods of Pilot Whales are often seen offshore, while groups of young male Sperm Whales sometimes appear. Killer and Minke Whales follow the shoals of Herring and Mackerel in summer.

Tiumpnan Head on Lewis is a good place from which to watch Risso's Dolphin, of which there is a resident population. In summer, White-sided Dolphin may also be seen. The water depth of over 100m close inshore means that other cetaceans may be present. All whale watching needs patience, a sharp eye, good light and a relatively calm sea. Photography needs a very fast reaction time!



Grey Seal



Otter

Laurie Campbell



Risso's Dolphin



Minke Whale

Laurie Campbell

Basking Shark A species which may also be observed is the Basking Shark. They are once again being observed regularly offshore in summer.

Land Mammals All land mammals were introduced by people. There are three sub species of Field Mouse, the Hebridean, St Kildan and Barra varieties. Voles are only present on the Uists.

Red Deer may often be encountered on the hills, especially in the Uists and Harris. Rabbits are common. They do much damage to crops and destabilise sand dunes. Mink, which have escaped from farms, and Hedgehogs, which were recently introduced cause much harm to ground-nesting birds, and are the sub-



Basking Shark



Red Deer

ject of culling programmes. Hares are also present in small numbers.



Bottlenose Dolphin

Laurie Campbell

FAUNA

Otter
Red Deer
Vole (only on the Uists)
Grey Seal
Common Seal
Bottlenose Dolphin
White-sided Dolphin
White-beaked Dolphin
Porpoise
Killer Whale
Risso's Dolphin
Minke Whale
Pilot Whale
Sperm Whale
Basking Shark