

ABOVE ACHTERCAIRN

ARCHAEOLOGY TRAIL AND MORE ...

GALE

MUSEUM

The Old Road

Hill Path

Hill Climb
(up only)

0 metres 100 200

● Roundhouses

■ Other sites

This area has been farmed for nearly 5000 years,
and is now part of a major tree-planting scheme.

Exploring a small corner of Wester Ross



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Achtercairn Archaeology Trail

The full circuit of this self-guided trail is about 2 miles / 3 kilometres: allow at least 2 hours. Several shorter routes are also possible.

There are **28 numbered posts**: read about each point in this booklet. (The ten roundhouses have also been numbered separately, in **red** circles on the map.)

Please note that you walk here at your own risk, and heed these safety warnings:

- The paths are mostly unsurfaced and vary in quality. They are quite rough in places, and after rain may be wet or muddy. Choose suitable footwear and clothing.
- You are welcome to walk off the paths, but the ground is rough and overgrown, and there are many holes made by tree-planters.
- Where bracken has been cut, the remaining stalks may be dangerously sharp; be careful where you sit or lie.
- When it is wet, any rock may be slippery.
- Feel free to walk in and around the roundhouses, but some stones may be wobbly; take care, and if you move a stone, please replace it carefully.

1 Start from Gairloch Museum

From **point 1** behind the Museum, climb the slope to reach **point 2**.

1 Start from the GALE centre

Follow the short road (Macintyre Road) from the south (right) end of the GALE building, to a bend; on the right a small path follows a wooden fence to an old wall. Cross the wall through a gap to **point 1**, then follow the rough winding path up the hill. At the top you reach the Old Road: turn right until you reach **point 2** and Roundhouse Ten (or turn left and miss it).

2 Roundhouse Ten

These stones originally formed the wall of a 'roundhouse', often called a 'hut circle'. Roundhouses were built in the Bronze and Iron Ages (2300 BC to AD 450); we do not know the date of this one. They had a circular stone wall up to 1 metre high, usually made with inner and outer facings and a filling of soil, stones and rubble. The entrance was usually in the south east, probably to give shelter and morning light. There was a conical thatched roof, supported on wooden posts, ringbeams and rafters. Up to 50 trees were needed to make a single roof.

All roundhouse walls today are, of course, ruined; here all except Roundhouse Six have been re-used, adapted or robbed by later people. Roundhouse Ten is a good example: it has been ruined in three completely different ways!

- Much of the house has slipped down the hill and disappeared. It must have been

built on an artificial platform, but that has failed.

- Before 1800, a shieling hut was built in the middle of it, re-cycling ('robbing') the roundhouse stones. A shieling was a summer pasture for animals, and small huts were built to shelter the people who looked after the animals. Shielings are usually a long distance from the farm, but this one must have been rather close. It is very ruined; there is a clearer example in Roundhouse Eight.



- By 1830, a road was built across the top edge of the house, no doubt robbing its stones for the embankment. This was the first road built from Gairloch to Poolewe, and was probably designed only for foot and horse traffic, not for wheeled vehicles. Your walk will follow part of it.

See if you can work out which stones belong to the original roundhouse wall, and how much is missing.

Now turn left and follow the Old Road to **point 3**.

3 Junction and Short-cut

The old road now enters an area of gorse, though which a narrow path has been cut. Continue straight ahead, or ...

An alternative short-cut path turns right uphill, leading to **point 6** (Roundhouse One, *page 4*): this is steeper, and needs wellies after heavy rain, but is recommended if you are footsure. It follows a cliff which was created by a geological fault. If you take it, after **point 6** you will continue to **point 5** and then to **point 4** to regain the main path, the old road, and turn right. (At the end of the walk you will take the old road back down through the gorse.)

4 Junction

Turn right uphill here to visit Roundhouses One and Two, or to take the Hill Path. (You will return to here and continue on the old road.)

You are now in a tree plantation. In 2002-2007, 2½ million trees were planted in the district between Loch Maree and the main road; it was Scotland's largest native tree plantation (*page 21*). Red deer and sheep were fenced out of the whole district, but here you may see roe deer, and signs of pine martens and badgers. It is a good area for wildlife and plants, partly because the local rock (amphibolite, *page 25*) breaks down to make quite fertile soil (*pages 22, 28-37*).

5 'Roundhouse' Two 2769 / 1391 BC

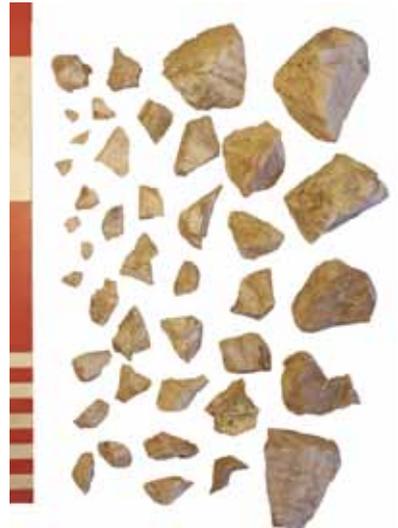
This may never have been a house: its stones seem to be too irregular. The name 'roundhouse' is used for convenience; a more accurate but clumsy term would be 'circular structure'. Two digs have taken place here.

- The first revealed a burnt area, a cobbled area, and a small 'quartz assemblage' of 80 pieces. Quartz is a hard white mineral, and was used to make sharp tools (there is no flint here). The pieces found here were chips, blocks, and one tool: a borer, used to make holes in leather. Charcoal was found, and carbon-dating tells us that people were working here around 2769 BC*. These Neolithic (New Stone Age) people lived in huts (of which nothing survives), grew crops and kept animals: they were the first farmers. Pollen analysis from a pit dug here shows how they cleared the natural scrub and trees to make their fields (*page 22*).
- In the second dig, charcoal was found just beneath one of the stones, and dated 1391 BC; an unfinished saddle quern was also found. It looks as if later people used the same area, and for an unknown reason surrounded it with stones. If this was not a house, they may have lived in the early version of Roundhouse One. Roundhouse One is 20 metres further on.



Several trenches were dug, and the results were carefully analysed by our archaeologist, Martin Wildgoose.

** Carbon-dating dates may look precise, but are only accurate to within about 30 years. The original wood was mostly birch.*



Above: part of the Quartz Assemblage.

Right: a Borer, probably for making holes in the leather used for clothing.



1 cm

6 Roundhouse One 726 BC

This small house is in a prominent position on a slightly raised platform. The entrance area is nearest to you, with far too many stones and no obvious door; there must have been a passage-like entrance to give shelter. Follow the circular wall round the rest of the house. A dig took place here in October 2012, when a trench was dug right across, from north to south; you can see where this trench crossed the wall.

It was found that there was an older roundhouse underneath the one we can see; unusually, its wall was made of earth or turf (1 in the picture below), not stone. Two post-holes were found, one with a stone 'post-pad' in it (2 below); these are holes in which the roof uprights were placed, usually about a metre in from the wall. This house may possibly date to around 1390 BC (see Roundhouse Two).

On top of this was built the stone-walled house (3 below), with a clay floor covering the older house floor and its post-holes (4 below). Charcoal was found in the central hearth and dated 726 BC (Late Bronze Age).

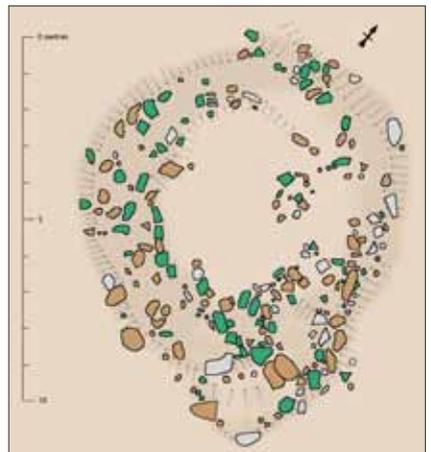
It is extraordinary to think that 2000 years separate the work in Roundhouse Two and the building of our Roundhouse One: at least 80 generations.

Now return to **point 4**, where you turn right to continue on the old road.

The HILL PATH leads from **point 6** to the top of Meall na h-Iolair (page 14).



An enjoyable find was this broken stone, about 10cm long. Each half was found separately, but they fitted together. It had first been a polisher (for smoothing leather etc), then used as a pot-boiler (page 12). It split, as 'hot to cold' pot-boilers always do, and was discarded.



7 Junction

Keep going straight ahead on the old road. At the end of your circular walk you will return here by the stony path down to your left.

For a much shorter visit, you can go down this path, cross the stream, and visit points 24-28 before returning the same way.

8 Fank

The large walled structure to your left is a sheep enclosure ('fank' is a Scottish word). The first shepherd employed here is recorded in the census of 1851, and by 1861 a second joined him. The fank was built around this time by Gairloch Estate for the tenant of Achtercairn Farm; it appears on the 1875 map. It was last used in 1944.

Note the fine stonework, with rounded corners and turf on top of the wall. But where did the stones come from? Sadly, many must have come from prehistoric sites.

9 Junction

Here a path goes uphill to the right; follow it up to Roundhouse Three. It also leads to the start of the Hill Climb.

10 Roundhouse Three

This house with a view is very badly damaged. It had not been discovered and recorded when the tree-planters were at work, and you can see many holes dug in it to create the turf mounds on which trees would be planted. Before that, it had no doubt been raided for stones by the fank-builders.

Walk round it, and try to identify which stones remain in their original positions. Beware of holes in the middle!

Then continue up the path a few metres to a small junction: turn right and climb a short steep path to reach **point 11**.

The path left is the start of the HILL CLIMB (*page 14*).

Tree-planting damage in Roundhouse Three



The upright stone and mysterious small circle at point 11

11 Possible ritual area

At the top of this short path, the first thing you will notice is a large upright rock slab, with a flat slab behind it. We cannot tell if these are naturally placed or placed by people, but it is likely that they meant something to the family who lived in Roundhouse Three. As if to confirm this, just beyond the stones you can see a small circle, originally made of upright stones (*picture on previous page*). Its purpose is unknown; perhaps some kind of ritual was carried out here. Trees now obscure the view, but it is possible that the skyline seen from this viewpoint acted as a kind of calendar as the setting sun moved along it (*page 9*).

Return past **point 10** down to **point 9**, and turn right on the main path.

12 Junction

To stay on the main path, bear right uphill.

A small path goes straight ahead here. This is a short cut to Roundhouse Six. It descends to a small stream, and then climbs steeply up the other side to reach the main path again, where you turn left for point 19.

13 Farm Wall

A ruined wall crosses the path here, and continues erratically across the boggy area to your left. This was built in 1800, when Achtercairn Farm was first set up. The new tenant farmer, Kenneth MacPherson, had to build 'stone dykes of 4 foot high' round the farm. Typically, the wall makes use of natural features as much as possible: here it goes up to a small cliff, which then becomes the wall to the right, then hops uphill and uses another cliff to the left.

The flat area to your left is called *An Achlais*, meaning the Sheltered Place (literally, the armpit!). Recently core samples were taken from it (*right, on a midgy day*), showing that the peat here is 4 metres deep; it probably started as a small loch. The path alongside it is sometimes flooded.



14 The Old Wood

The meagre trees are the remains of a 19th-century plantation of larches and pines. Most of it was blown down in the hurricane of 2005; uphill the more sheltered part of the wood partly survives, and a walk takes you through it (*page 17*). Beyond the wood is a quarry. Geologically, the wood is planted on a rather crumbly rock called semipelite, which started as sediment on an ocean floor; it now forms an eroded valley through the main local rock, grey amphibolite, which started as the basalt of the ocean floor itself (*page 25*).

The path continues to some trees and rocks. The old road disappears into the woodland; it cannot be traced until it crosses the present A832 road.

15 Field of the Shieling of the Bird

You have now reached the furthest point of the walk. The path turns left, crosses an old wall, and enters a field. This field is named on the 1875 map *Achadh Airigh nan Eun*, but we know nothing of its history. The path undulates slightly in places, evidence of the old 'rig and furrow' style of ploughing. Apart from a raised area of heather and moss, the field is now covered in bracken.

16 Junction

A path to the right takes you to Roundhouse Four.

17 Roundhouse Four

Today this roundhouse shows only as a turf 'nest' (*below left*). Follow the raised bank round its circuit. Some of the wall has been cleared to show that there actually is a stone wall under the turf. The location of the entrance is puzzling. All the other houses here have entrances to the south east, so the sloping exit towards the wood (north east) may have been made later; farmers often remodelled roundhouse walls, for example as animal enclosures. To the right you can see a large rock where the wall seems rather narrow, and this is probably blocking the original south east entrance; a farmer may have done this, but it is known that when roundhouses were finally abandoned, the entrance was often blocked.

Return to **point 16** and turn right.

Roundhouse 4



Roundhouse 5

18 Roundhouse Five

This is at the other end of the field from Four (*above right*). We can not tell whether these two roundhouses were occupied at the same time; the occupants may have moved house from one to the other. There is little left of Five; notice the 1800 farm wall just beyond it, and guess where most of its stones have gone. What remains is a raised platform, some fine upright stones ('orthostats'), and an entrance sloping down south east.

Roundhouses Five and Six are sited behind rocky knolls which shelter them from the weather – and maybe from the sight of enemies? Perhaps they were built in more troubled times.

19 Roundhouse Six

On the left a short distance from the path, this is the best-preserved of our roundhouses. Take time to study the wall, trying to identify the inside and outside facings and what is missing. What happens to the right of the entrance? Do you think the builders paid more attention to the wall's inside facing, using better stones there?



The entrance is clear, showing two common features: a cobbled floor, and wall extensions to give it shelter. A doorstep shows the height of the original floor. The most interesting feature is a large pile of rocks up against the wall (half of the stones have been removed and are outside the wall); it seems to have been built deliberately, and one theory is that it is a burial site, perhaps for the last owner of the house.

There has not been a dig here, mainly because the ground was disturbed by having trees planted in it; luckily the planters did not do as much damage as in Roundhouse Three.

Continue on the main path.

20 Cattlefold of the Tenants

The track which you are following joins the main road (A832) ahead; it may have been built to give access when the road was moved to its present line. Between you and the main road there is a rough area which is named on the 1875 map as *Buaille na Tuatha*, Cattlefold of the Tenants. This must mean that it was the place where Gairloch crofters brought the cattle which they wanted to sell; that was how they made money to pay their rent. The cattle would be collected here and taken as a herd to Poolewe, then by the drove route north of Loch Maree to Kinlochewe, and on to the market in the east.

You may be able to see traces of 'lazybeds' here: raised beds on which potatoes were grown, fertilised by seaweed.

21 Junction

Bear left on a small path which will complete your circuit. The path to the right reaches the main road at a cattle-grid.

22 Old Field

On your left here is a flat area which was once a field. With some imagination, we can reconstruct its history.

- Early people built a wall round it, either planting crops such as barley or keeping cattle and sheep. You can see part of this wall ahead, made of large individual stones; the rest of it seems to be buried. There are about 2 kilometres of these ancient walls in the area, enclosing perhaps eleven fields; most are now overgrown by heather and bracken (*see page 20 for a map*).
- Gradually a wetter climate caused peat to build up, made from waterlogged vegetation. The area today is a 'blanket bog'.
- Peat was extracted as fuel for burning; you can see the square cuttings nearby.
- Later farmers managed to plant on peat bogs by making lazybeds; when the light is right you can see traces of them ahead.

Because it is a bog, the path at its edge can be very wet. A short drier alternative route goes right, up a small viewpoint hill; at its seaward end a stone bench has been set up as a memorial. Descend with care to Roundhouse Seven.

23 Roundhouse Seven

10 metres towards the sea from the main path, this roundhouse is buried in heather, and the entrance is in a gorse bush. To prove that there really is a wall, a small section of it on the west side has been cleared. Try walking round the wall in the heather if you can, feeling for stones with your feet!

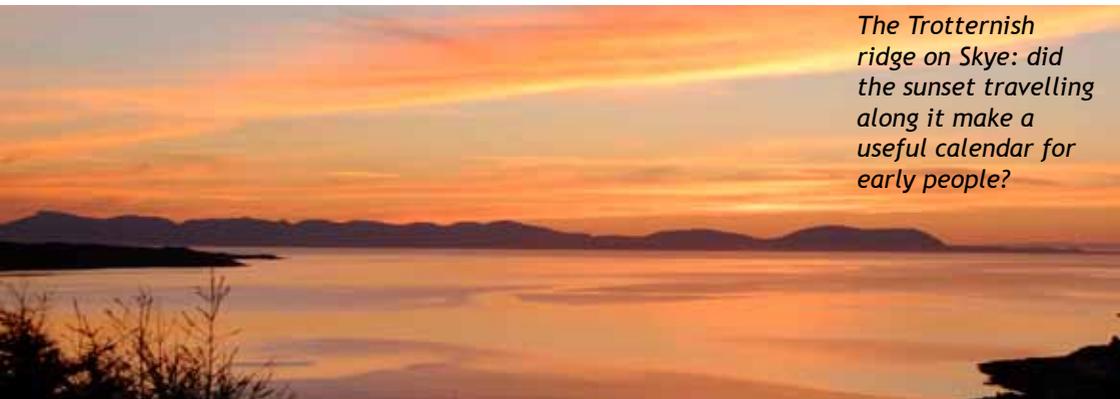
Continue along the main path, noting the prehistoric field wall on your left.



24 Junction

The main path continues ahead, but turn right for Roundhouses Eight and Nine, the highlight of the walk.

The Trotternish ridge on Skye: did the sunset travelling along it make a useful calendar for early people?



25 'Roundhouse' Eight 255 BC

This is on a grand scale. Follow the wall round, trying to work out which stones belong to its inside facing; many of them have tipped over. Where is the entrance? There was a small dig here in 2012, with a trench across the wall (can you see where?) and another in the centre to find the hearth. From charcoal, two dates were found: 254 and 213 BC (Middle Iron Age).

It has various unusual features:

- Its size. The wall averages nearly 2 metres thick, with facings made of big stones; it was probably 1.5 metres high; the outside diameter of the whole is 17.5 metres. Unusually big trees would be needed to roof it. The building of it took a major effort by the community.
- The only possible entrance faces south west, straight into the weather but with a grand view over the sea to Skye.
- The central hearth was found, with the fire directly on the soil. The redness of soil and stones implies an intensely hot fire (dangerous under a thatched roof).
- Inside the wall, no evidence was found of a floor or activity.

A theory which might explain all these is that it was a community's ceremonial centre, a kind of temple, in the form of a giant roundhouse wall, without a roof: another 'roundhouse' which was not a house! Support for this theory came when it was found that the entrance points exactly to the midwinter solstice sunset. Was there a winter festival in which a beacon fire was lit to remind the sun to return? Was it built by an Iron Age chief with authority who was afraid that the sun would vanish for ever? There may have been a larger community here than the number of roundhouses on this walk implies; most people may have lived down near the shore on the fertile raised beaches, but there is now no trace of their houses there.

An alternative theory is that it is a rare type of very large roundhouse called a 'proto-broch', with a roof in two stages: sloping to a ring of poles, with a smaller cone on top. Evidence for this would be the finding of post-holes.

Shieling Huts

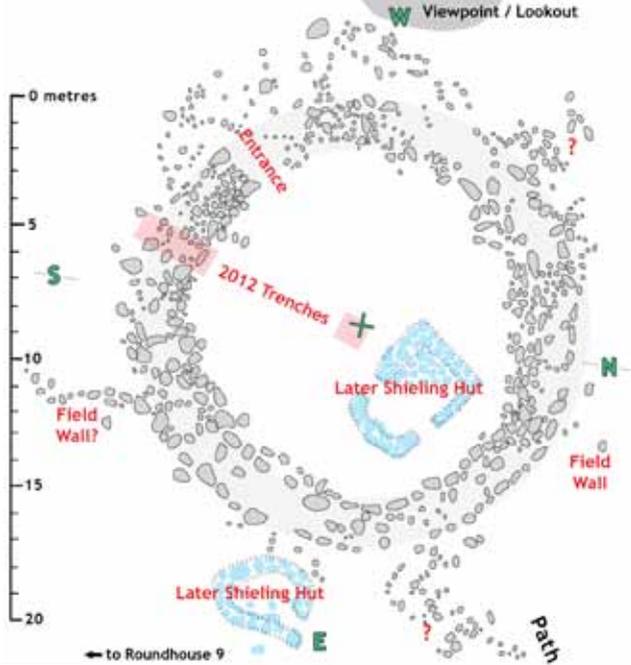
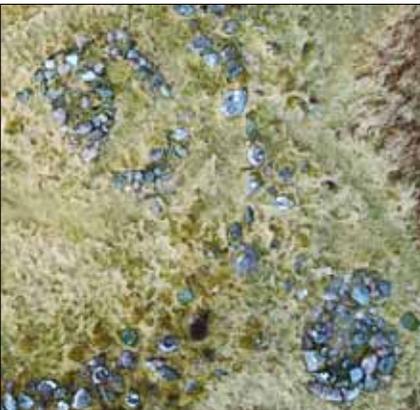
There are two shieling huts here, made later from the roundhouse stones to house those who were looking after animals in their summer grazing area. Inside the roundhouse there is a rectangular hut. It is a type seen in the Hebrides: a sleeping area, a curved wall to contain the fire, and two entrances, one to be closed depending on the wind direction. In one corner of this hut a later farmer has made a small 'lambing pen', used to hold a ewe and a new-born lamb.

Outside the roundhouse there is a simpler and probably older shieling hut, also of a common type: a D-shaped wall with the entrance at one end, and a cobbled floor. These huts had roofs made of branches and thatch or turf.

We do not know the dates of these huts, except that they were built before 1800 when Achtercairn Farm was set up. The farm took in the 17 former smallholdings of Achtercairn, plus 'all the Shieling and Grazing belonging to them'.



Above: the hearth trench
Below: the wall facings



Above: midwinter sunset
Left: aerial view of the two shieling huts

Now follow the path left of the D-shaped shieling hut.

26 Roundhouse Nine 477 BC

Just after a wall, the open space is Roundhouse Nine. Most of its stones have clearly gone to Eight, and what is left is a more-or-less flat platform. Can you find the entrance? The field wall across its upper edge has been roughly dated from charcoal underneath it: AD 800-1000, Medieval. This is our only dated field wall. Others may be the same age, or may be contemporary with the roundhouses; or, most likely, they are prehistoric walls adapted by later farmers.

This roundhouse has one excellent feature. At its centre, under the cover, there is a perfect hearth (fireplace, *below right*). Please lift the heavy cover carefully, and prop it up; and close it carefully. The sandstone slab has been crazed by the heat of the fire. Charcoal was found here, giving a date of 477 BC (Early Iron Age).

Imagine a large extended family gathered round the fire 2500 years ago. Above them the timber of many trees forms the roof, with a thatch of heather, grass, bracken, whatever can be found. Smoke fills the roof space and filters out through the thatch. Water, carried from the burn some distance away, is heated in a pottery jar or a small clay-lined stone tank by putting hot stones from the fire ('pot-boilers') into it.

The direct route from here follows a small path through the heather to **point 27**.



Hill of the Treasure: a detour

To the west of Roundhouse Nine there is a small knoll which is the top of a rocky gorse-covered slope down towards the sea (*above left*). It is called *Torr na h-Ulaidhe*, which means Hill of the Treasure. If you would like some off-path exploration, try to follow the wall which crosses the top of the roundhouse as it intermittently circles the Torr, linking rocky bits, but sometimes covered by gorse. It is hard to guess its purpose; one suggestion has been that it was a Dun (a fort), but that is unlikely.

The 'treasure' in the hill's name may be explained by local folk-lore. When sea raiders attacked (probably Vikings) the people gathered their treasures and hurried into the hills. To save having to carry the treasures, they buried them just out of sight of the raiders, behind the Torr. When they returned they retrieved them – and they were probably only household implements and the like!

27 Burial Cairn

This rather unimpressive mound is simply a pile of stones on slightly raised ground. But someone has dug out a square hole in it. Clearing the heather from this revealed a scattering of more than 20 carefully selected smooth beach pebbles. It is almost certain that this was a burial cairn; pebbles like this have been found in other graves. Perhaps, as part of the burial ritual, people dropped pebbles on the body. But someone has robbed the grave, opening it up to find treasure. Was any found? And are there other graves here?

Follow a path down to the left to cross a wall and reach **point 28**.



28 Dog's-Tooth Wall

The wall you have just crossed is an excellent example of so-called 'dog's-tooth' wall-building: big single stones, not necessarily in straight lines, and thought to be prehistoric. How did they move these boulders? They may be simply boundary markers, but there is some evidence that they were turned into fences by adding branches or planting bushes (hawthorn or gorse) between the stones.



Old wall, one boulder high; the wall is probably prehistoric, but re-used later when the smaller stones were added

Turn right and follow the main path. After crossing the stream, continue up to **point 7**, taking care on the stony ground. Turn right and follow the old road through the gorse and back to your start.

Climbing the Hill

There are two paths up the hill which rises behind the trail, *Meall na h-lolaire* (238 metres). Its name means Hill of the Eagle, and is pronounced *miowl na hulara*. Both paths are well trodden and not difficult to follow, but rough.

The **Hill Path** starts at Roundhouse One (point 6); it is eroded in places, and can be muddy higher up, but is not hard if you are reasonably fit.

The **Hill Climb** starts at Roundhouse Three (point 10); it is steeper and more difficult, on various surfaces with some rock scrambling, and for UPHILL use only, please, to reduce erosion.



Hill Path

Most of this path was originally a 'peat track', made for carrying peat down from a peat-cutting area beyond the hill. In heavy rain it becomes a watercourse, and in places erosion has eaten into the path.

At the top of the first climb the path turns left onto a stretch which was widened by the tree-planters; this has caused more erosion, but gives a chance to study the stones and 'till' (sand and gravel) deposited here by glaciers! Notice the large poised boulder up to the right: if it falls, where will it end up?

The stream *Alltan an Tuirc* (*small burn of the boar*) is crossed, and the path follows it uphill, then turns left up to the end of a small cliff. Beyond this it climbs up to the right, and at the top turns left to reach the summit, passing two rock outcrops and two large boulders: sandstone breccia (*page 26*) and gneiss.

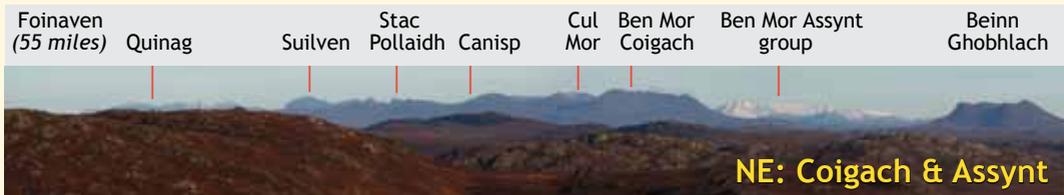
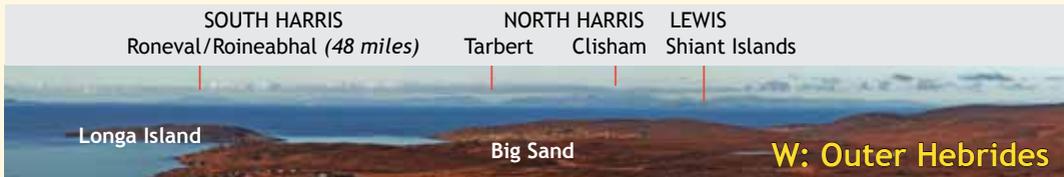
Hill Climb

PLEASE do not come down this path: descent causes much more erosion of the peat and scree, and also there is a rock step which is difficult in descent.

The route goes through heather, up scree below a cliff (please don't dislodge any), across a slope to a rocky gully. Above this it circles a small hill (an optional heather scramble: *Cnoc nam Fitheach*, 188m, Hill of the Ravens), then climbs to a second rock band. Delicate rock steps take you up this (avoid well to the right if you need to). Then you come to a very large boulder of pink gneiss (*page 27*).

There is a final rock band below the summit, climbed by a surprising ledge to the right: take care!

Views from the hill



Other Walks beyond the Trail

According to Scottish Access Law, you are entitled to walk anywhere in this area or beyond it as long as you exercise common sense and responsibility.

Beyond this area, between Meall na h-Iolaire and Flowerdale, and as far as Loch Maree to the east, there is a large wild area of small rocky hills (ten are over 300m), moorland and lochs ('cnoc and lochan'). There are almost no paths and the walking can be rough. There may be no phone reception: you walk at your own risk. A 1:25,000 map is useful if you want to explore, as are walking poles. Full day walks can be devised from here or from other A832 starts.

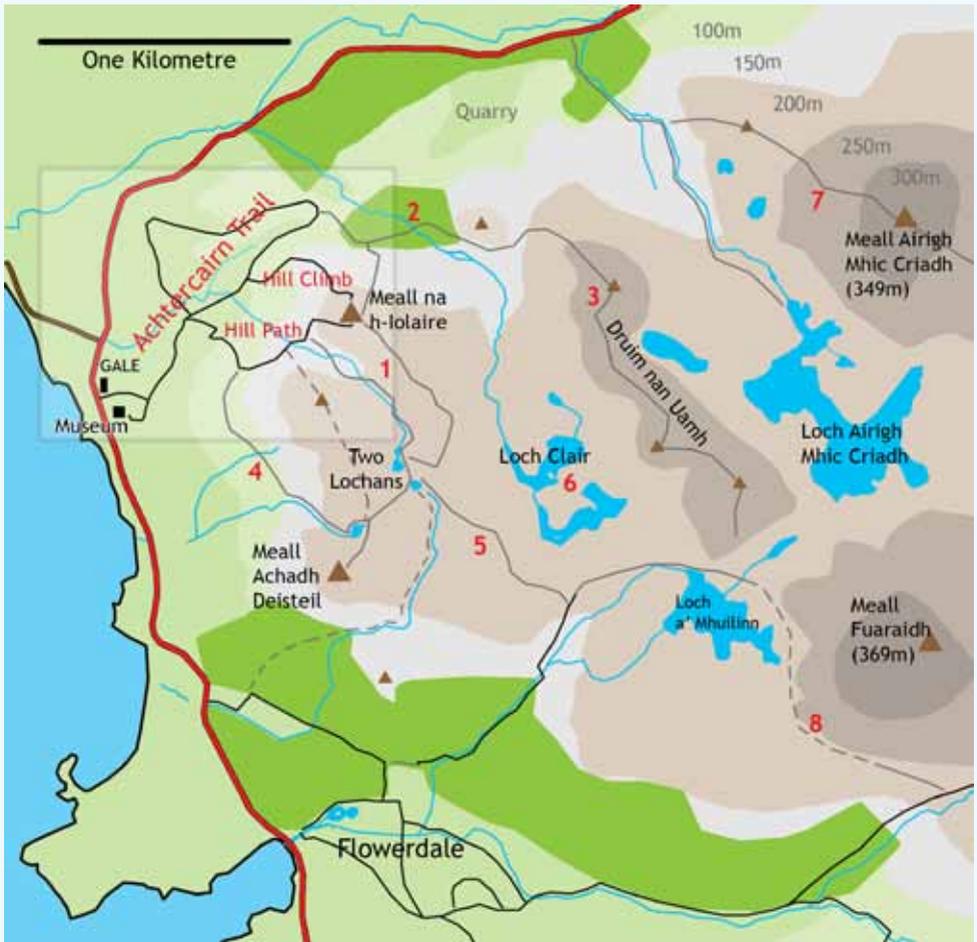
This corner of the area is shown on the map opposite, with the nearest two of the 300m hills. The black lines are paths. The grey lines are routes which may sometimes follow faint paths, made by local feet, tree-planters, otters linking lochs, roe deer, or other animals; but most are pathless, a test of route-finding skills. Higher ground is easier to walk on; at low levels there is heather or rough tussocky grass and occasional bogs. You will come across patches of planted trees (2002-7) and many holes made by the tree-planters; the planting has been notably unsuccessful above about 200m. Don't expect to average more than 1 mph!

Here are brief notes on some of the routes:

1. The Two Lochans. The lochans make an attractive target. (a) A low reasonably trodden walk more or less follows the burn, Alltan an Tuirc, to its source; 100m after a bent fence-post, turn right to a large triangular boulder and continue ahead. (b) A higher pathless route follows the ridge of small hills from Meall na h-Iolaire. Note the spectacular heaps of erratic sandstone boulders.



From Meall Fuaraidh. The flat low-lying ground with the lochs has the softer rock Semipelite under it; the hilly high ground on each side of it is Amphibolite.



2. The Old Wood. This walk offers moss in plenty, woodland plants, and a tangle of fallen trees. **Beware slippery branches underfoot.** From a fence-post between points 14 and 15, a small path leads towards the upper part of the wood, crosses a wet patch and then winds uphill through heather, grass and tree remains. Near the top, look for a tree ahead across the slope with a white marker on it. Follow the complex route indicated by tree markers, including crossing some fallen tree trunks, to reach the burn Allt nan Luibeana Bana (which has two waterfalls just downstream). If you can cross this, continue following markers up to the top of the wood. Return the same way, or continue to Druim nan Uamh...

3. Druim nan Uamh. The easiest approach to this ridge is through the Old Wood as above. The name means Cave Ridge, and if you follow the broad ridge from hilltop to hilltop you will certainly notice the 'cave' on a col to the right. It is a huge pile of slabs (sandstone breccia, *page 26*) with hollows beneath it: care needed! This rock originally covered the whole area, but has been broken up by glaciers. The ridge makes a scenic walk, with about six tops.

4. Above Gairloch. Start up the Hill Path from point 6. At the top of the first uphill section, instead of turning left, follow a faint path ahead. This circles a hill to meet part of the farm wall (*page 6*). It continues across a broad shelf above Gairloch Hotel, and climbs roughly up a small stream to reach its source in a lochan. This was originally the water-supply for the hotel.

5. To Flowerdale. From the second of the ‘Two Lochans’, this route crosses an open area heading south east, using an old turf wall, and then skirts to the left of rising ground, boggy in places, with bits of tree-planters’ tracks. It reaches a clear track which leads down, over a bridge, and on down the Mill Burn to the back of Flowerdale House. At the fence turn right to reach the Flowerdale path system.

6. Loch Clair, and others. This low-lying area gives especially rough walking, which can be made a little easier with careful route choice. Loch Clair and its twin (Loch an t-Sabhail Mhoine) are worth circling; if you like collecting lochs, you could add Loch a’ Mhuilinn (Mill Loch), and even Loch Airigh Mhic Criadh. They all have interesting shapes and lengthy shorelines.

7. Meall Airigh Mhic Criadh. This hill is just within reach of Achtercairn, but more easily climbed from the track to the Recycling Centre or from the quarry at the top of the road to Poolewe (or both, making a circuit). It is a rocky hill made of Lewisian Gneiss (with Scourie Dykes and Pegmatite patches), and if you like easy rock-scrambling you will enjoy finding a route.

8. Meall Fuaraidh. Another fine rocky hill, made of Amphibolite, with a formidable north west face. There are routes up the face, but the easiest way up is from the south west (near the numeral 8 on the map). You can then descend easily to the Loch Airigh a’ Phuill dam or hydroi track and on down to Flowerdale.



Meall na Fuaraidh, with An Groban behind it.

A Brief History

Until about 12,000 years ago this area was covered by ice, and nothing grew here. The ice melted and life began to appear, but it took another 6,000 years for the first people to arrive. They were nomadic **Mesolithic** families who travelled up the west coast, living and working on the coast, hunting and gathering; evidence from about 5000 BC of stone-working has been found at Red Point.

By 2700 BC we find **Neolithic** people working at Achtercairn, still making stone tools like their predecessors, but settling down and starting to clear and farm the land: the ‘Neolithic Revolution’ has arrived (*page 22, pollen analysis*).

Roundhouses, the first stone buildings, were probably introduced about 2000 BC, but the oldest we have found here is the un-dated earth-walled predecessor of Roundhouse One, which might be 1400 BC. Why were the first houses round? Well, why not? A circle is easier to draw than a square; it is more windproof; it is more spacious. Roundhouses may have been used as late as AD 800. Here they are called ‘Atlantic’ roundhouses, using stone (plentiful thanks to the glaciers) rather than wood or wattle-and-daub for the walls. The roofs needed a lot of straight trees, which implies that the coastal areas and glens were wooded.

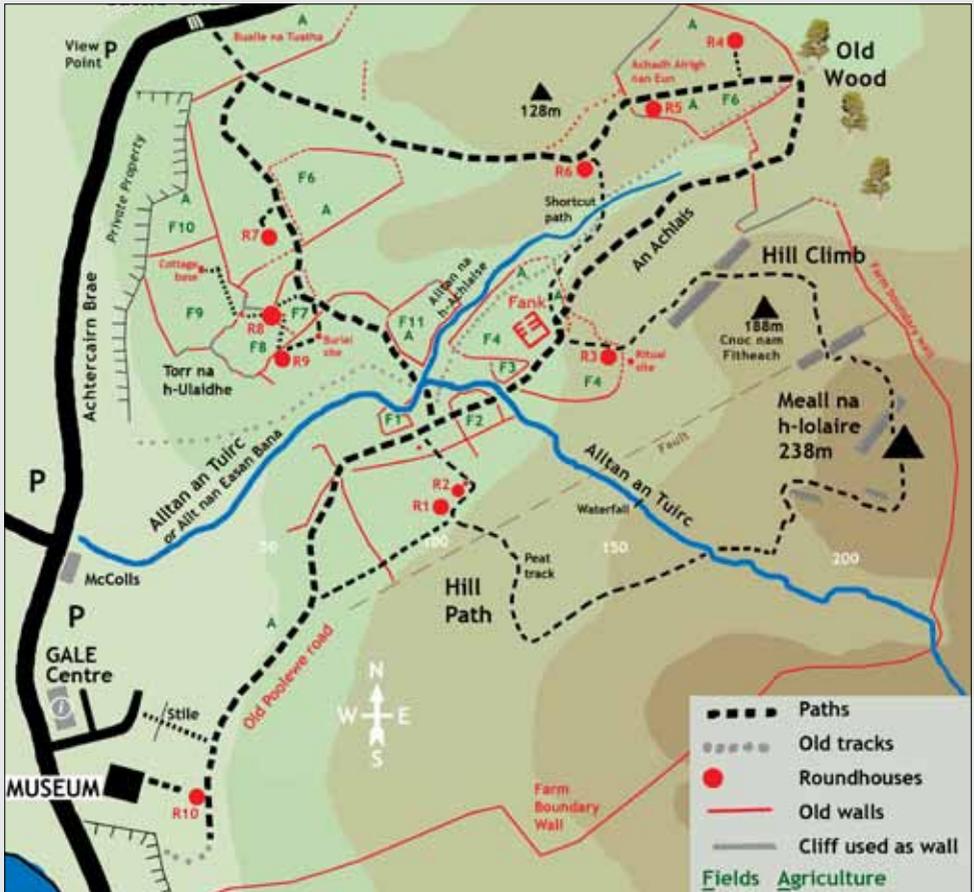
The people were **farmers**, growing ‘bere’ (an early form of barley) and oats, and keeping sheep, goats and some cattle; they also hunted and fished. They could make pottery, and in time learnt to make bronze and iron; no evidence has yet been found of early metal-working here, but you can see local bronze finds in the Museum. Grain was ground into flour using a primitive stone saddle quern, leaving stone chips in the bread which were not good for the teeth. Otherwise we know very little about them: their race, their language, their beliefs, their way of life – all are a matter of speculation.

It’s impossible to say what the **population** was. The ten houses on the Trail may represent only two or three families who moved around, and there may have been many other houses, either up here buried under the peat, or down where the village is today and their stones have all been recycled.

There is a thousand-year gap in the story of the area from 200 BC (‘Roundhouse’ Eight) to AD 800 when **Vikings** may have appeared on the scene. Apart from the possible ‘Treasure Hill’ story (*page 12*), the only evidence of Vikings here is in the place names such as the various ‘-dales’.

In the **Medieval** period, farmers were using this area, as the dating of the wall at Roundhouse Nine shows (*page 12*). Around AD 1300 the MacBeath clan, of Norse descent, ruled Gairloch; they were followed by the Earls or Ross, and then in the 1430s by the MacLeods, also of Norse origin. Finally in 1494 Gairloch was given to the Mackenzies, and they have been the lairds of Gairloch Estate ever since.

In the mid-**1700s** estate records tell us that Achtercairn had ten rented smallholdings, divided into East and West (probably by the Alltan an Tuirc). This rose to sixteen by 1795. There was probably one on the slopes below Roundhouse Seven where there are the foundations of a cottage; but most of the Trail area,



A detailed plan showing walls and fields

which might be called Upper Achtercairn, was used as shielings, for summer grazing only, with small huts for those who were tending the animals, making cheese, etc; animals were thus kept away from the planted fields below. Some of the prehistoric fields were re-used, with lazybeds or rig-and-furrow ploughing, but we cannot tell when this was: fields and walls are very hard to date.

In 1800 there was a major change. Kenneth MacPherson, who rented the Gairloch (now Old) Inn from 1795, decided to become a farmer. He must have got on well with the Laird, Sir Hector, because he was given the rental of all Achtercairn plus the shieling area; the sixteen smallholders were moved, or perhaps some worked for him. The rent was 'Thirty pounds Sterling' per year, but he was let off £100 for building a house and a boundary dyke (*see point 13*). This wall (*on the map above*) can be followed intermittently from near the sea as far as the 'Field of the Shieling of the Bird', which is outside it; one wonders why, and who rented it.

The next important date was the opening of the road to Poolewe in about 1830, replacing footworn paths. An intriguing detail is that the road at first followed

a different route after point 7, going below the present fank and becoming the short-cut path down to the small stream; it then follows the foot of the slope to enter the field, where the gateway is now blocked. Later, of course, the road was moved completely to its present route, to allow for the wheeled vehicles which arrived after the opening of the Loch Maree road in 1849.

Achtercairn was not affected by the 1845 Gairloch Estate crofting revolution because it was a large farm. Sheep came to the farm rather late, about 1850; but the size of the impressive fank implies that there were a lot of them. In time the farm spread well beyond its wall into the hill land above, where various old fences can be seen. In 1868 a new farmhouse and steading were built, now seen on either side of the main road at the foot of Achtercairn Brae. In 1881 the farm had 6000 acres, of which 40 acres were arable. Ten years later, Gairloch Hotel Company took over the rent of the farm, but without 'Achtercairn grazings, Glen and Hill Grazings' which were taken back by Gairloch Estate for their sheep. Sheep were taken on foot to Dingwall Market until 1938, when a lorry was first used; the shepherd told his dog that it was not needed and to stay at home, but when he reached Dingwall the dog was there waiting for him. The fank was last used in 1944 and then replaced by a modern structure south of point 2.

Finally, most of the farm was bought from the Estate by Donald Macrae in about 1975. Parcels of it have been sold to accommodate the modern development of Achtercairn, and only a few fields remain today. Upper Achtercairn was still used for sheep grazing for a while, but by 2000 the sheep had gone.

A new use was found for the area when Millennium Forest funds became available from the Forestry Commission for tree-planting. In 2002-5 the **Baile Mor Plantation** was created, costing £2 million. The statistics are impressive. It was Scotland's biggest native tree plantation, with 2000 hectares of woodland planted over an area twice that size, enclosed by Loch Maree and the A832. 2½ million trees were planted: Scots Pine (just over half), Birch, Rowan, Alder and Oak. It took 64 man years of work, 200 helicopter drops, 800 quad bike trips, 200 deer culled, 10,000 miles walked by the planters. Each tree was planted on top of a turf cut out by hand or machine, leaving a hole beside it, a technique called 'mounding'. You can see the results in the trees growing around the trail; but on the high ground, above 200 metres, the planting has been remarkably unsuccessful because the weather and the peaty soil mean that trees find it hard to grow there.

The Fank from Meall na h-Iolaire. The field beyond is prehistoric, with a boundary made of large boulders, but you can see signs of later cultivation: pre-1800 'rig and furrow' ploughing. It is now overgrown by trees.



Nature

A walk round the Trail is not only about archaeology. The ancient rock is the foundation, and breaks down into reasonably fertile soil. The area has been popular with farmers for nearly 5000 years. Now that the farmers and the sheep have gone, thanks to the tree plantation, wild plants and animals have taken over. The time of year will affect what you see, but if you walk with open eyes there is always something to enjoy.

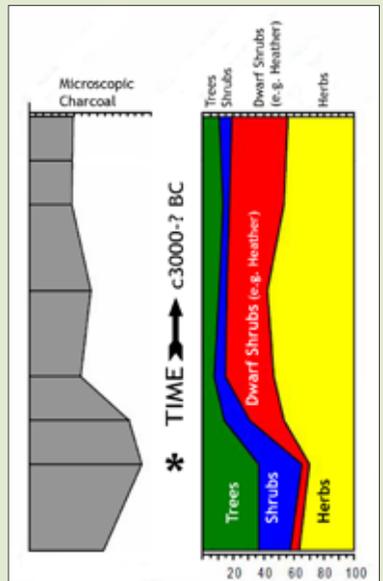
The Ice Age ended here about 12,000 years ago, leaving a desert of gravel, sand and boulders: a blank space which nature has now filled. Mosses, lichens and a few tough plants first colonised the ground, followed by arctic animals. When the climate warmed, scrub trees grew, and in time larger trees; woodland animals appeared from the south such as deer, wild boar and beaver, and their predators followed – wolf, lynx and bear. Much of the area may have been thickly wooded until climate change about 4000 years ago accelerated the growth of peat; most surviving trees were then cut down or burnt by house-builders and farmers, but the recent plantation and its exclusion of red deer is bringing them back, along with a varied crop of wild plants. Perhaps less welcome are bracken and gorse, both of which are too successful! Many animals use the area, including pine martens, badgers and roe deer, but they are mostly nocturnal and elusive.

Evidence from the soil

During the dig at Roundhouse Two (the Neolithic site, *page 3*) a pit was dug and samples of soil were taken for analysis. Plenty of **pollen** was found in the soil, along with microscopic pieces of **charcoal** which were evidence of Neolithic farmers clearing the land.

The point * on the diagram marks when this happened, probably about 3000 BC. The proportions of **pollen** found show how woodland of trees and shrubs starts to be replaced by heather, grass and other flowering plants ('Herbs'), as trees are felled and burnt. Here is a summary of the report on this part of the soil:

"The large microscopic charcoal values indicate that burning activity was taking place near here as well as in the wider landscape, and is thought to be due to human activity rather than natural causes. At the same time as the decline in trees and rise in heather, there is a rise in plants associated with arable land such as ribwort plantain. It is during this phase that the first cereal pollen is recorded with the appearance of barley-type pollen. (Cereal pollen is absent in previous studies from Wester Ross, perhaps because these studies took place too far from settlements and agricultural activity.) The presence of cereal pollen and other arable species occurring at the same level as the decline in tree pollen implies that the woodland in this location may have been deliberately felled by people to create areas for arable farming."



Geology

The local bedrock in the Trail area is all of the same type, Amphibolite; but you will see other types as glacial erratics, in roundhouse walls, and in the distant views: especially Gneiss and Sandstone. These pages summarise the geological story of the Gairloch area – from the very beginning!

IGNEOUS BEGINNINGS

Oceanic Crust: the first rock

In the beginning, 4570 million years ago, the surface of planet Earth was a sea of molten rock. When this rock cooled, it became a crust of solid **BASALT**, a dark heavy rock.

Then this basalt crust broke up into ‘plates’, like sea ice. These plates were moved around by convection currents in the hot rock below, the ‘mantle’. Often the plates collided, and one plate was driven under another. This is called ‘subduction’; the lower plate is said to be ‘subducted’. This theory is called Plate Tectonics.

Today Earth’s surface consists of oceans with basalt crust below them, the ‘oceanic crust’, and also continents, which are made from different rocks.

Igneous rock is made when molten magma or lava solidifies



Basalt

Continental Crust: where did continents come from?

When a subducted plate reaches about 80km underground, ‘partial melting’ begins: some minerals in the rock (especially quartz and feldspar) melt at a lower temperature than others, so these melt first. They are less dense, and the pressure down there makes them move upwards.

When this molten rock reaches the solid crust above, some of it may break right through and erupt as volcanoes. But the rest forms huge reservoirs underground, where it cools slowly. The minerals ‘freeze’ slowly into crystals in a random pattern, and the result is a pale new rock:

GRANITE (and various rocks of the granite family).



Granite

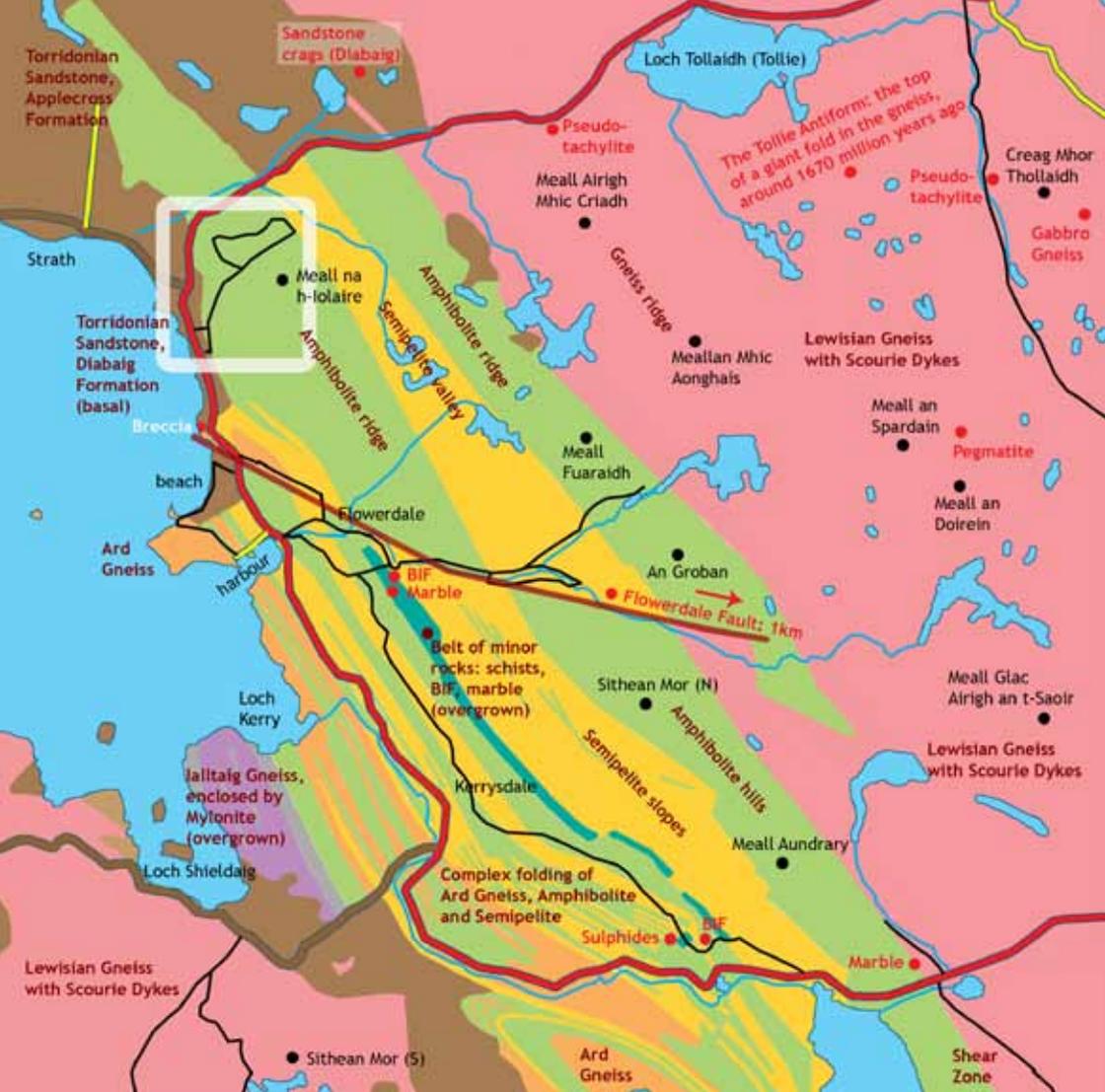
These granite masses were the first true continental rocks: the start of the ‘continental crust’. Because granite is less dense than basalt, continental crust is never subducted; the continents float like icebergs on Earth’s surface, moving around and sometimes colliding.

Today

Today’s continents are made of many types of rock, many of them very old, and average 35km thick; they cover 40% of the world. But the basalt oceanic crust, only 7-10km thick, is always being subducted and destroyed; it is never more than 200 million years old. To make up for this, new crust is always being made at mid-ocean ridges.

The Trotternish ridge in Skye, in our view to the west, is mostly made of basalt.

GRANITE and **BASALT**: these, as it happens, were the ‘protoliths’ of our two oldest rocks – the rocks from which they were made...



LEWISIAN GNEISS, 3000 million years old, metamorphosed granites (white, pink, grey), with amphibolite Scourie Dykes 2400 million years old (dark)

LOCH MAREE GROUP rocks, 2000 million years old –

Amphibolite: metamorphosed sea-bed basalt (grey)

Semipelite: metamorphosed greywacke, sea-bed sediment (grey, rusty)

Minor rocks: sea-bed sediments, ironstone, marble, minerals from sea-bed hot springs

+ **Ard Gneiss**, joined the Loch Maree Group at 1900 million years (often with ‘augen’)

+ **lalltaig Gneiss**, meta-diorite, joined the Loch Maree Group at 1875 million years

TORRIDONIAN SANDSTONE, here from the Torrison Group, 1000-950 million years old; here mostly **Diabaig Formation** (the oldest, with layers of breccia containing older rocks) and **Applecross Formation** (coarse sandstone, as seen in the mountains)

Especially interesting features

Metamorphic rock is made when an older rock, the 'protolith', is altered by heat and pressure

METAMORPHIC FOUNDATIONS

One of the new granite masses will become the mini-continent (or 'terrane') named 'Gruinard', and Gairloch will be built on its southern edge; it was formed 2850 million years ago. Its neighbour to the south, 'Rona', is even older: 3125 million years.

Lewisian Gneiss

Early in its life, Gruinard was buried 40km deep. How? We cannot tell, but we can guess at a major pile-up of plates. That was not deep enough to melt it, but the temperature and pressure were so great that the Granite was very slowly transformed – 'metamorphosed' – into a rock called **GNEISS** (pronounced 'nice'). It became harder and stronger, with its minerals sorted so that it usually looks striped rather than speckled. It is named 'Lewisian Gneiss' after the Isle of Lewis.

In the next 1200 million years Gruinard's gneiss went through many processes. It was buried and metamorphosed again. It was stretched to form cracks which were filled by basalt from below; you can see the result of this today – dark bands across the landscape called 'Scourie Dykes'.



Multi-coloured Lewisian Gneiss

Loch Maree Group: our local rocks

Meanwhile, 2000 million years ago a new set of rocks appeared on the scene. They were formed in an ocean nearby: ocean-floor basalt, of course, along with a fascinating collection of other rocks made from sea-bottom sediments, some of them affected by sub-sea hot springs and some by island volcanoes; they include the only Banded Iron Formation (BIF) in the UK, and colourful minerals from 'hot smokers'. These are now called the 'Loch Maree Group', and are found north of Loch Maree and east of Gairloch. They are much studied by geologists as evidence of conditions in ancient oceans.



Grey Amphibolite

The North West is assembled

Finally, 1670 million years ago, Gruinard's most important event happened. A group of mini-continents, all gneiss, collided and joined together. To the north of Gruinard was Assynt, to the south Rona. In the process two important things happened: (1) the gneiss was metamorphosed yet again; (2) the Loch Maree Group rocks were folded into the gneiss and were metamorphosed with it: the basalt became **AMPHIBOLITE** (also called 'Meta-basalt'), and the sediments became 'Meta-sediments' such as SEMIPELITE, a mica schist.

Today

So today we have in this area two major metamorphic rocks:

(1) The **GNEISS** is amazingly varied and complicated after all its mistreatment, very tough, and at least 30km thick. It is the 'basement rock' of North West Scotland. Near here you can see it exposed on each side of the road to Poolewe.

(2) Incorporated into the gneiss we have the **AMPHIBOLITE**; here you can see it in the small hills of the Trail and beyond; it forms ridges separated by a valley of softer semipelite.

Sedimentary rock is made from the eroded remains of older rocks: sand, pebbles etc.

A SEDIMENTARY SURFACE

When two continents collide, they cannot be subducted. Instead they tend to pile up and form mountain ranges like the Alps and the Himalayas. These mountains do not last long: they are eaten away – ‘eroded’ – and may disappear within a mere 50 million years.

Torrionian Sandstone

1000 million years ago there was a mountain range, the Grenville Range, just west of the Hebrides. Its remains – sand and pebbles – were washed down in big rivers across a desert landscape and deposited on top of our gneiss and amphibolite. The land had sunk because of the weight of the mountain range, and the sand was laid down to a depth of at least 6km in a deepening rift valley. Under its own weight this sand hardened to form layers of **SANDSTONE**, called the **Torrion Group**.

Before this, 1200 million years ago, there had been a smaller deposit of sandstone in some areas, 2km deep, called the **Stoer Group**. Its best-known feature is the ‘Stac Fada’ rock which was affected by a huge meteor, perhaps a 3km wide asteroid. This probably fell near Lairg in Sutherland, making a crater 5km deep and 40km wide. The nearest example can be seen at Inverewe.

The bottom (‘basal’) layer of each group is a conglomerate of broken rocks, called **Breccia**: sandstone incorporating the scree of earlier rocks, gneiss and amphibolite, which was lying on the surface.

The Stoer and Torrion Groups together make the Torrionian Sandstone.

Cambrian Quartzite

A long time after the Torrionian rock was formed, when our continent (Laurentia, now North America) was near the south pole, there was an ocean to our east – the Iapetus Ocean. 540 million years ago, on its coast and shallows, sand was laid down about 200 metres thick, making a beach at least 80 miles long. The only mineral which survived was white quartz (silica), which solidified into a hard white sandstone called **QUARTZITE**.

The top half of the quartzite is called Pipe Rock. It shows clear evidence of life – fossilised worm-casts, known as ‘pipes’, made by an unknown creature. This was the time of the ‘Cambrian Explosion’ when life started a rapid advance; the first complex fossils date from this period. Neither of these rocks is seen here on the coast.

Today

So sandstone covered all our gneiss and amphibolite, miles deep. Most of it has now been worn down and removed by erosion. Today the red Torrionian sandstone makes mountains and plains, and white Cambrian quartzite caps some of the mountains.

Near here you can see the Torrionian on the Gairloch shore, on the peninsulas, and in views of the Torrion Hills. The nearest quartzite is in Beinn Eighe National Nature Reserve.



Torrionian Sandstone



Breccia erratic boulder near the top of Meall na h-Iolair

MAKING THE LANDSCAPE

We say ‘solid as a rock’, but is rock really solid? Remember that the gneiss was buried 40km deep, but is now on the surface; this means that up to 40km of rock was removed. And the sandstone was at least 6km deep, but now most of it has gone, leaving isolated mountains. How does this happen? And why is our landscape the way it is?

Weathering and Erosion

The surface of rock is attacked and weakened chemically by air and water, and physically by the expansion when water freezes in cracks; this is called ‘weathering’. When the rock crumbles, its remains are carried away by rivers and glaciers; this is called ‘erosion’.

Faults

Faults are cracks in the bedrock where movement has taken place, and the rock on each side has been broken and weakened. A nearby example is Flowerdale Fault, which moved at least 1km; the broken rock has been eroded, leaving the valley. The best example in the district is the Loch Maree Fault, where the land to its north has moved 16km east, and erosion by glaciers has made the trench in which Loch Maree and Loch Ewe lie.

Glaciation

Glaciers shaped much of our landscape, most recently in a series of cold periods from 2.5 million to 12,000 years ago. Small glaciers have scooped out corries; large ones have tended to follow the lines of rivers and faults, creating and carrying a huge amount of debris. You can see everywhere rock shaped by ice; glacial sand, gravel and stones (‘till’); and ‘erratic’ boulders (made of non-local rock). Roundhouse builders made full use of this abundance.



Gneiss erratic boulder on amphibolite, on the Hill Climb path

The Moine Thrust

You will have noticed that the landscape of Wester Ross is very different from the land to the east! The reason is the Moine Thrust. 430 million years ago, we were on the edge of the continent Laurentia. Then another continent, Baltica, collided with us from the east, driving up a mountain range and thrusting a rock called **MOINE SCHIST** 50-100km westwards. It stopped (luckily!) at Kinlochewe. This rock is softer than ours and erodes to make a smoother and less rocky landscape.

So today, as you drive down Glen Docherty with Loch Maree ahead of you, you are travelling along the Loch Maree Fault through the Moine Thrust, following the line of a glacier, and entering a land with completely different rocks: ancient hard rocks which give to the scenery its unique character.

Roundhouse builders may have enjoyed the variety of the rocks they used. This picture shows part of the wall and the mysterious pile of stones in Roundhouse Six (when they were cleared; their colour has now faded).

White/pink crystalline rocks are Gneiss.
Grey smooth rocks are Amphibolite (local).
Red-brown rocks are Torridonian Sandstone.



Plants and Animals

Pictured here are some of the species which you may see in the Trail area or on the hill above. Here are a few seasonal highlights:

Spring: gorse flowering, celandine, wood-sorrel + wood anemone, willow warblers arrive, bluebells and new bracken compete, cuckoos return

Summer: stonechats chat, red-throated divers fly overhead quacking, young birds, dragonflies, tormentil + heath bedstraw + speedwells, orchids, bell heather; watch the sea for dolphins

Autumn: heathers, bracken dies, devil's-bit scabious, migrating geese, colours!

WILDFLOWERS (arranged by flower colour, and then roughly in order of flowering)

WHITE

<p><i>Oxalis acetosella</i> Wood-sorrel</p>  <p>Leaves and flowers are edible, 5 petals</p>	<p><i>Anemone nemorosa</i> Wood Anemone</p>  <p>Anemone means Windflower, 6 petals</p>	<p><i>Cardamine pratensis</i> Cuckooflower</p>  <p>Often pink; also called Lady's Smock</p>	<p><i>Conopodium majus</i> Pignut</p>  <p>Umbellifer, edible tuber at base of stem</p>
<p><i>Galium saxatile</i> Heath Bedstraw</p>  <p>Tiny flowers & leaves, abundant, spreading</p>	<p><i>Alchemilla vulgaris</i> agg Lady's Mantle</p>  <p>Greenish flowers without petals</p>	<p><i>Antennaria dioica</i> Mountain Everlasting</p>  <p>Tufted flowers, on hill</p>	<p><i>Achillea millefolium</i> Yarrow</p>  <p>Brush-like leaves, Daisy family</p>
<p><i>Sedum anglicum</i> English Stonecrop</p>  <p>Fleshy leaves, creeping, on rock</p>	<p><i>Plantago maritima</i> Sea Plantain</p>  <p>Also likes roadsides (salt!)</p>	<p><i>Valeriana officinalis</i> Valerian</p>  <p>Pink tinge, tall, like an umbellifer</p>	<p><i>Rubus fruticosus</i> agg Bramble</p>  <p>Prickly, fast-growing, edible blackberries</p>

<p><i>Rubus idaeus</i> Wild Raspberry</p> 	<p><i>Achillea ptarmica</i> Sneezewort</p> 	<p><i>Teucrium scorodonia</i> Wood Sage</p> 	<p><i>Filipendula ulmaria</i> Meadowsweet</p> 
<p>May have edible berries, soft prickles</p>	<p>Related to Yarrow, larger flowers, thin leaves</p>	<p>In dry rocky places: on the Hill Climb</p>	<p>Frothy-looking flowers, sweet scent</p>

YELLOW

<p><i>Angelica sylvestris</i> Wild Angelica</p> 	<p><i>Primula vulgaris</i> Primrose</p> 	<p><i>Ranunculus ficaria</i> Lesser Celandine</p> 	<p><i>Ulex europaeus</i> Gorse / Whin</p> 
<p>Large umbellifer (up to 1m)</p>	<p>"First Rose", the first sign of Spring?</p>	<p>In grassy areas, early</p>	<p>Over-successful very prickly tall shrub</p>
<p><i>Ranunculus repens</i> Creeping Buttercup</p> 	<p><i>Lotus corniculatus</i> Bird's Foot Trefoil</p> 	<p><i>Lysimachia nemorum</i> Yellow Pimpernel</p> 	<p><i>Potentilla erecta</i> Tormentil</p> 
<p>Spreading; also Meadow Buttercup</p>	<p>"Eggs & Bacon", often partly red</p>	<p>Creeping, at foot of the Hill Climb</p>	<p>Abundant, long-flowering, 4 petals</p>
<p><i>Ranunculus flammula</i> Lesser Spearwort</p> 	<p><i>Sonchus asper</i> Prickly Sow-thistle</p> 	<p><i>Galium verum</i> Lady's Bedstraw</p> 	<p>Hawkweed, Hawkbit, Cat's-ear, etc</p> 
<p>In or beside water, narrow leaves</p>	<p>Multi-headed yellow-flowered thistle</p>	<p>Upright with tiny yellow flowers</p>	<p>Large group of similar, hard to distinguish, dandelion-like flowers</p>

<i>Senecio jacobaea</i> Common Ragwort	<i>Hypericum pulchrum</i> Slender St John's Wort	<i>Solidago virgaurea</i> Goldenrod	<i>Saxifraga aizoides</i> Yellow Saxifrage
			
Can be poisonous to grazing animals	Flowers and buds have a reddish tinge	On Hill Climb, grows up to high altitudes	Wet rocky ground, on Hill Path

PURPLE / RED

<i>Narthecium ossifragum</i> Bog Asphodel	<i>Pedicularis sylvatica</i> Lousewort	<i>Geum rivale</i> Water Avens	<i>Geranium robertianum</i> Herb-Robert
			
Abundant on moors; our county flower	'Wort' means used as food or medicine	Lantern-like flowers, near Roundhouse One	A small geranium (cranesbill)

<i>Orchis mascula</i> Early-purple Orchid	<i>Dactylorhiza purpurella</i> Northern Marsh-orchid	<i>Dactylorhiza maculata</i> Heath Spotted-orchid	<i>Gymnadenia conopsea</i> Fragrant-orchid
			
The first orchid to flower	The tallest orchid found here	Most common, spotted leaves, white to pink	Uniform pink, scented

<i>Rosa canina</i> agg Dog Rose	<i>Epilobium montanum</i> Broad-leaved Willowherb	<i>Digitalis purpurea</i> Foxglove	<i>Centaurea nigra</i> Common Knapweed
			
A wild rose shrub	Commonest willowherb	Can be 1.5m tall, sometimes white	Like thistles but not prickly

<p><i>Cirsium vulgare</i> Spear Thistle</p> 	<p><i>Thymus polytrichus</i> Wild Thyme</p> 	<p><i>Drosera sp</i> Sundew</p> 	<p><i>Erica cinerea</i> Bell Heather</p> 
<p>Large flowerheads, often single</p>	<p>On dry ground, forms low mats, tiny</p>	<p>Insect-eating; in wet areas</p>	<p>Larger flowers than Ling, reddish purple</p>
<p><i>Erica tetralix</i> Cross-leaved Heath</p> 	<p><i>Calluna vulgaris</i> Common Heather / Ling</p> 	<p><i>Vaccinium myrtillus</i> Blaeberry / Bilberry</p> 	<p><i>Empetrum nigrum</i> Crowberry</p> 
<p>Another heather, pink, likes wetter ground</p>	<p>Very abundant, pale purple</p>	<p>Bright green leaves, tasty berries (if any)</p>	<p>Spiky leaves, edible berries (if any)</p>

BLUE

<p><i>Viola riviniana</i> Dog-violet</p> 	<p><i>Hyacinthoides non-scripta</i> Wild Hyacinth</p> 	<p><i>Pinguicula vulgaris</i> Common Butterwort</p> 	<p><i>Polygala serpyllifolia</i> Heath Milkwort</p> 
<p>Spring, especially in woodland</p>	<p>"Bluebell", abundant, rarely white</p>	<p>Sticky leaves catch insects, damp areas</p>	<p>Common but small and shy</p>
<p><i>Veronica chamaedrys</i> Germander Speedwell</p> 	<p><i>Veronica officinalis</i> Heath Speedwell</p> 	<p><i>Prunella vulgaris</i> Selfheal</p> 	<p><i>Succisa pratensis</i> Devil's-bit Scabious</p> 
<p>Upright speedwell, blue flowers</p>	<p>Creeping speedwell, lilac flowers</p>	<p>Common, complex violet flower head</p>	<p>Very common, tall, late flowering</p>

TREES and SHRUBS (* = mostly planted, 2002-7)

<p><i>Betula pubescens</i> Downy Birch*</p>  <p>The common birch here; Silver Birch is rare</p>	<p><i>Crataegus monogyna</i> Hawthorn</p>  <p>Thorny, white flowers, red berries</p>	<p><i>Quercus petraea</i> Sessile Oak*</p>  <p>Acorns almost stalk-less on the branches</p>	<p><i>Sorbus aucuparia</i> Rowan*</p>  <p>5-10 leaflets on a stalk</p>
<p><i>Pinus sylvestris scotica</i> Scots Pine*</p>  <p>Native pine, needles in pairs, blue-green</p>	<p><i>Larix decidua</i> European Larch</p>  <p>Our only deciduous conifer, introduced</p>	<p><i>Salix aurita</i> Eared Willow / Sallow</p>  <p>Low scrub, small "ears"</p>	<p><i>Myrica gale</i> Bog-myrtle</p>  <p>Low moorland shrub, scented leaves</p>

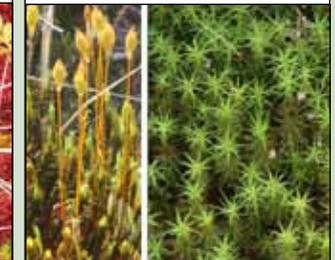
GRASSES, SEDGES, RUSHES (small selection)

<p><i>Dactylis glomerata</i> Cock's-foot Grass</p>  <p>Hard flower heads, coarse leaves</p>	<p><i>Cynosurus cristatus</i> Crested Dog's Tail Grass</p>  <p>One-sided flower heads</p>	<p><i>Lolium perenne</i> Perennial Rye-Grass</p>  <p>Flowers alternate sides; a lawn grass</p>	<p><i>Holcus lanatus</i> Yorkshire Fog Grass</p>  <p>Soft flowers and leaves</p>	<p><i>Anthoxanthum od.</i> Sweet Vernal Grass</p>  <p>Simplest flower head</p>	<p><i>Festuca vivipara</i> Viviparous Fescue Grass</p>  <p>Grows plantlets which drop off</p>
<p><i>Trichophorum cespitosum</i> Deergrass (a Sedge)</p>  <p>Abundant, autumn colour like deer's hair</p>	<p><i>Eriophorum angustifolium</i> Common Cottongrass</p>  <p>Multi-flowered "bog cotton" (a sedge)</p>	<p><i>Carex binervis</i> Green-ribbed Sedge</p>  <p>Most prominent sedge here</p>	<p><i>Schoenus nigricans</i> Black Bog-rush</p>  <p>Note 'bract' at top, common on wet flushes</p>	<p><i>Juncus effusus / conglomeratus</i> Soft / Compact Rush</p>  <p>Soft: smooth, abundant Comp: ribbed, uncommon</p>	

FERNS (look behind the leaves: the spore capsules may help identification)

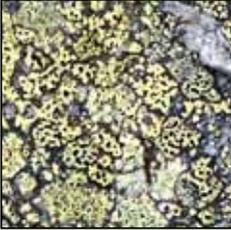
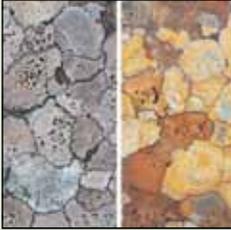
<p><i>Pteridium aquilinum</i> Bracken</p>	<p><i>Oreopteris limbosperma</i> Lemon-scented Fern</p>	<p><i>Blechnum spicant</i> Hard Fern</p>
		
<p><i>Dryopteris filix-mas</i> Male-fern</p>	<p><i>Athyrium filix-femina</i> Lady Fern</p>	<p><i>Polypodium vulgare</i> Common Polypody</p>
		

MOSSES (small selection; usually know by their Latin names)

<p>Fringe-moss <i>Racomitrium</i></p>	<p>Bog-moss <i>Sphagnum</i></p>	<p>Haircap <i>Polytrichum</i></p>
		
<p>Wood-moss <i>Hylocomium</i></p>	<p>Shaggy-moss <i>Rhytidiadelphus</i></p>	<p>Golden-head Moss <i>Breutelia</i></p>
		

LICHENS (very small selection)

Lichen is a symbiosis of a fungus and an alga; it likes our cool wet climate and clean air.

<i>Lecanora</i> on rock	<i>Rhizocarpon geographicum</i> true 'Map Lichen'	<i>Lecidea</i> on rock better 'Map' lichen!	<i>Platismatia</i> on trees
			
<i>Usnea</i> on trees 'Old Man's Beard'	<i>Sphaerophorus globosus</i> 'Coral Lichen'	<i>Cladonia</i> on ground 'Reindeer Moss'	<i>Parmelia</i> on rock 'Crotal' (used for dye)
			

VERTEBRATES (you would be lucky to see any of these!)

<i>Capreolus capreolus</i> Roe Deer	<i>Meles meles</i> Badger	<i>Martes martes</i> Pine Marten	<i>Microtus agrestis</i> Field Vole
			
Small shy woodland deer, M buck F doe	Nocturnal, lives in a sett, snuffle holes seen	Largely but not only nocturnal, predator	Short tail, small ears
<i>Lacerta vivipara</i> Common Lizard	<i>Anguis fragilis</i> Slow Worm	<i>Rana temporaria</i> Frog	<i>Bufo bufo</i> Toad
			
Reptile, hibernates, common	Reptile, a legless lizard, harmless	Amphibian, spawns Feb-Apr	Amphibian, warty skin, walks rather than hops

INVERTEBRATES (very small selection)

MICROSCOPIC CREATURES

Cordulegaster boltoni
Golden-ringed



Our largest dragonfly, tamer than most

Aeshna cyanea
Azure Hawker



M: black + blue marks
F: brown + greenish

Sympetrum striolatum
Common Darter



M: reddish brown
F: brown + greenish

Pyrrhosoma nymphula
Large Red Damselfly



A teaspoon of soil may contain 5 billion organisms, belonging to 10,000 different species (algae, fungi, bacteria, protozoa, actinomycetes, etc)



Inachis io
Peacock



Often in gardens, hibernates

Vanessa atalanta
Red Admiral



Migrant, wintering in Mediterranean area

Pararge aegeria
Speckled Wood



In shady woodlands

Pieris napi
Green-veined White



The "veins" may fade

Erethia aethiops
Scotch Argus



Common in this area

Geotrupes stercorarius
Dor Beetle



Feeds on and buries dung

family *Carabidae*
Ground Beetle



Active hunter and scavenger

family *Aprophoridae*
"Cuckoo Spit"



This holds the young of a hopping Spittle Bug

Arion ater
Large Black Slug



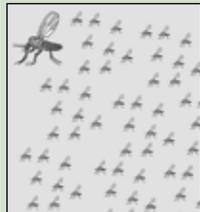
Often met on grassy paths

Tubifex sp
Tubifex worm tubes



Strange crowded tubes in muddy puddles

Culicoides impunctatus
Midge



Tiny fly, our best known insect!

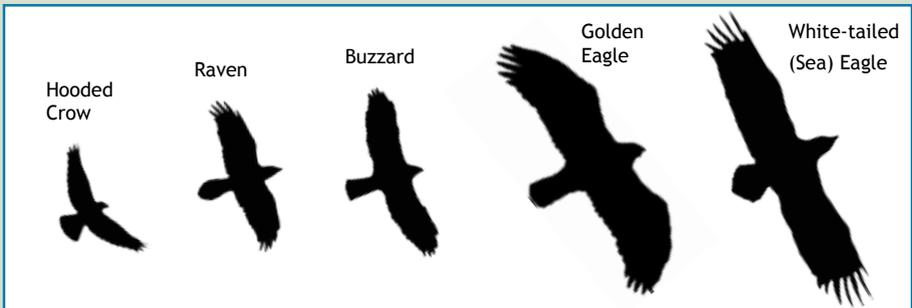
There are many species of **Midge**, but this is the one most likely to be biting you. Only the female bites, needing blood for a second brood. They hatch in wet soil; a 2m square may produce ½ million midges. They like: over 8°C, under 5mph wind, no sun, no rain, dark clothes.

BIRDS

<p><i>Gavia stellata</i> Red-throated Diver</p> 	<p><i>Larus argentatus</i> Herring Gull</p> 	<p><i>Larus marinus</i> Greater Black-backed</p> 	<p><i>Haliaeetus albicilla</i> White-tailed / Sea Eagle</p> 
<p>Nests on lochans, flies high to/from sea, quacking</p>	<p>Commonest gull, pink legs</p>	<p>Largest gull, pink legs</p>	<p>Broad 2.5m wings, nests in trees</p>
<p><i>Aquila chrysaetos</i> Golden Eagle</p> 	<p><i>Buteo buteo</i> Buzzard</p> 	<p><i>Accipiter nisus</i> Sparrowhawk</p> 	<p><i>Lagopus lagopus</i> Red Grouse</p> 
<p>Nests on cliffs, seen gliding high</p>	<p>Common large raptor, distinctive mewwing call</p>	<p>Large female and small male, long tail</p>	<p>On moorland and hill</p>
<p><i>Scolopax rusticola</i> Woodcock</p> 	<p><i>Streptopelia decaocto</i> Collared Dove</p> 	<p><i>Cuculus canorus</i> Cuckoo</p> 	<p><i>Corvus corax</i> Raven</p> 
<p>Mostly in winter, flies fast and low</p>	<p>Annoyingly repetitive cooing song</p>	<p>Apr-Aug, parasite, male "song" famous</p>	<p>Largest crow, playful flier, cronking call</p>
<p><i>Cardamine pratensis</i> Hooded Crow</p> 	<p><i>Anthus pratensis</i> Meadow Pipit</p> 	<p><i>Turdus iliacus</i> Redwing</p> 	<p><i>Turdus pilaris</i> Fieldfare</p> 
<p>"Hoodie", highland version of Carrion Crow</p>	<p>Very common little brown bird</p>	<p>Migrant, travels in flocks with Fieldfares</p>	<p>Migrant, large flocks, pale underwings</p>

<i>Turdus merula</i> Blackbird	<i>Turdus philomelos</i> Song Thrush	<i>Phylloscopus trochilus</i> Willow Warbler	<i>Locustella naevia</i> Grasshopper Warbler
			
Very successful, well-known songster	Distinctive song of repeated phrases	Summer, repeated descending song	Summer, heard not seen: song a long trill
<i>Fringilla coelebs</i> Chaffinch	<i>Carduelis spinus</i> Siskin	<i>Carduelis cabaret</i> Lesser Redpoll	<i>Troglodytes troglodytes</i> Wren
			
Very successful, found everywhere	Small lively finch, feeds in trees	Small, woodland, red patch on head	Tiny, everywhere, loud song includes a trill
<i>Saxicola torquata</i> Stonechat	<i>Oenanthe oenanthe</i> Wheatear	<i>Saxicola rubetra</i> Whinchat	<i>Strix aluco</i> Tawny Owl
			
Easily alarmed, call "hweet-chac-chac"	Summer, white eye stripe and above tail	Summer, streaky brown upper	Nocturnal, familiar eerie call

It is tempting in this part of the world to call any high-flying bird an eagle! These silhouettes, drawn to scale, may help you to decide if it is (note that eagles usually glide without flapping).



All plant and animal illustrations are taken from the companion booklet *Wild Wester Ross*

Above Achtercairn, one of the communities which make up Gairloch in Wester Ross, there is a network of paths.

Here you can –

- Walk a self-guided Archaeology Trail, including ten prehistoric roundhouses and many other interesting features from the past 5000 years.
- Climb a hill with a magnificent view.
- Visit the wild country beyond.
- Find out the history of the area.
- Learn about Scotland's oldest rocks.
- Discover the plants and animals.



Do you want to know more?

See the other guides in this series:

Archaeology: Roundhouses of Wester Ross

History: The Story of Gairloch

Geology: Wester Ross Rocks

Wildlife: Wild Wester Ross

Hills: Hills of Wester Ross

Any comments or corrections? –

contact the author:

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aerial photography by Jim Buchanan

KNOWING OUR PLACE

Walk humbly in this place. We are tiny moments treading on numberless years. Feel the slow, crunching crash of continents, the ruthless deep-down cookery of rocks, the violent artistry of land-sculpting ice. See the spreading of green on glen and hill,

softness of moss, dew-drop sparkle of flowers; and the coming of life that crawls and runs and flies. When all is ready the last act opens: men, tilling and building, tending their cattle and crops, living and dying, leaving to us only stones and questions. Sense their harsh centuries as you walk, and be grateful for softer days.