



THE FLOW COUNTRY

DÙTHAICH NAM BOGLAICHEAN

A vast expanse of blanket bog, sheltered straths, moorland and mountain covers much of Caithness and Sutherland. Known as The Flow Country, or the Flows, it is one of Scotland's most important natural resources.

Blanket bog is a rare type of peatland which forms only in cool places with plenty of rain and covers the landscape like a blanket. Due to the cool, wet and acidic conditions, the plants which grow here, especially the *Sphagnum* bog mosses, don't fully rot away when they die. Instead they build up deep layers of peat. The Flow Country's bogs have been growing for more than 10,000 years and in some areas the peat is up to 10 metres deep.

On a global scale, this land of hidden riches is rare. Scotland holds about 15% of the world's blanket bog, and a large part of this is in the Flow Country.

Flow fact
There are more solids in milk than undisturbed peat.

Start your explorations online at www.theflowcountry.org.uk



#TheFlowCountry

Discover The Flow Country



THE MORE YOU LOOK THE MORE YOU SEE

Discover The Flow Country

Key sites

- 1 Caithness Horizons
- 2 Strathnaver Museum
- 3 Cnoc Craggie
- 4 Moine House
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- 6 Forsinard National Nature Reserve
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Routes and walks

- A836: Lairg to Tongue to Moine
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The surface of a blanket bog might look uniform, but it's actually a rich wildlife habitat. The hummocks and dips in the mossy surface create micro-habitats where different plants can grow.

Bogs are home to many species of insects and spiders, as well as amphibians, reptiles and small mammals like shrews. Birds that depend on this wild, unspoilt environment include red-throated and black-throated divers, golden plover and greenshank. Birds of prey like merlin, short-eared owls and golden eagles hunt over the moss and pools.

It's not always easy to see some of the rare animal species because the peatlands they live in are so vast. Being so remote and undisturbed is what makes the Flows an ideal place for many nesting birds.

The Flow Country is on the UK's tentative list for World Heritage Site status and it is considered to be the best peatland habitat of its type anywhere in the world. It is the quality and extent of the blanket bog that makes the site so important and justifies its position as a potential World Heritage Site.

How peat helps the climate

All green plants absorb carbon dioxide from the atmosphere, which is released when they die and rot away. In healthy peat bogs, however, moss and other plants don't fully decay when they die. Instead they compress down to form a layer of peat that stores the carbon.

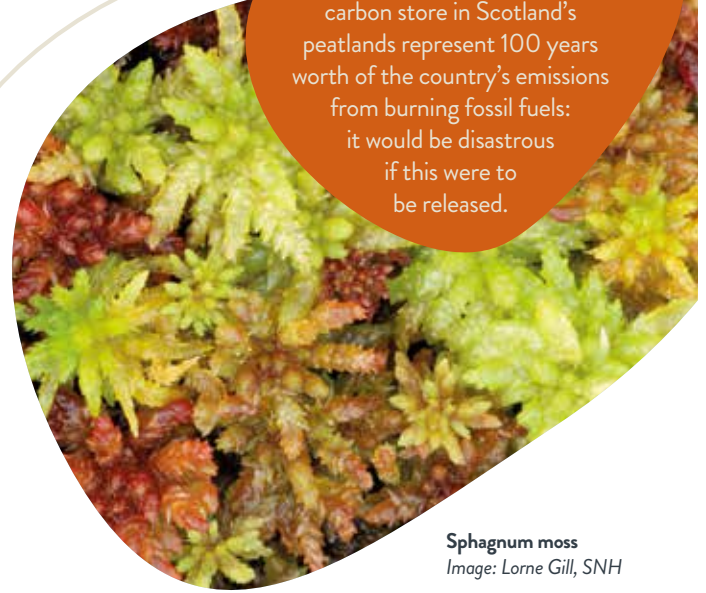
Peat acts as a carbon store or 'sink', which is why peat bogs are so important as a defence against climate change. The Flow Country's peat bogs store about 400 million tonnes of carbon, which is more than three times the amount in all of Britain's woodlands.

Landscape at Crask, with views of Ben More Assynt
Image: James Carter



Flow fact

It's been estimated that the carbon store in Scotland's peatlands represent 100 years worth of the country's emissions from burning fossil fuels: it would be disastrous if this were to be released.



Sphagnum moss
Image: Lorne Gill, SNH

Healthy peatlands depend on a wet climate and a layer of peat-forming plants, particularly *Sphagnum* mosses. When bogs are damaged, for example through drainage or too much grazing and trampling, carbon is released through oxidation or erosion. It is important to ensure that the undisturbed bogs of the Flow Country remain in good condition and to restore any damaged bogs.

As peatlands get all their water from rain, they are greatly influenced by rainfall patterns and air temperature. They have the potential to be damaged by climate change, but research indicates that, if healthy, peatlands can be quite resilient to climatic changes.

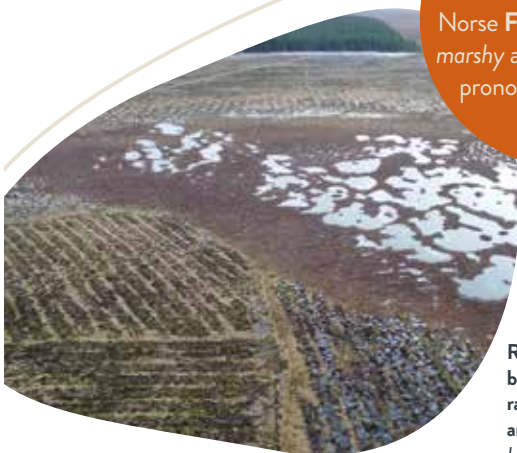
Restoring the Flows

For thousands of years, human activity left the peat bogs of the Flow Country largely untouched. During the twentieth century, improvements in technology meant that land previously seen as barren and useless could be drained for agriculture and forestry. Government funding after both the First and Second World Wars funded hill drainage across large areas of peatland. Then, in the 1970s and 80s, tax incentives led to an increase in forest planting. Large areas of the bog that had been treeless for thousands of years were drained, furrowed and planted with non-native conifers.

Flow fact

The Flow Country takes its name from old Norse **Floi** meaning wet or marshy and was historically pronounced to rhyme with cow.

Restoration at Dyke, building dams helps raise the water table and re-establish pools
Image: Paul Turner, RSPB



A flux tower, which monitors gas exchange
Image: Andy Hay, RSPB

The Flow Country became notorious as a battleground between investors and conservationists, who were concerned at the destruction of such a rare, undisturbed habitat. In the end, the tax incentives were stopped, and it's now become clear that forests planted on deep peat will never produce a valuable crop of timber.

The Peatlands Partnership was formed in 2006 and has a new approach to managing the Flows. Its vision is for a landscape underpinned by a healthy environment, at the heart of which is the great expanse of wild peatland habitat. Forestry and agriculture are part of a mosaic of productive land use in the straths (the fertile valleys in between the hill and bog) and along the coast.

Repairing the damage

Since the 1990s, scientists and conservationists have been researching techniques that can restore drained and damaged bogs in the Flow Country. RSPB Scotland, Scottish Natural Heritage, Forestry and Land Scotland, Plantlife Scotland and private land owners have been working together to apply those techniques to large areas.

Restoring a bog from a forestry plantation takes a lot of work. It begins with felling the trees. Drains and furrows are blocked to restore the water table to its original level and as much woody material as possible is removed. For many years, trees may grow from seeds left in the soil or from nearby plantations and these have to be removed.

Creating dams, to restore the water table
Image: Paul Turner, RSPB



It does not take long for signs of a healthy bog to appear, once the trees have been felled and the ground is waterlogged again. *Sphagnum* mosses and other peatland plants begin to grow back, and insects and birds that depend on the wet peatland return. Repairing damaged sections needs careful research, hard work and patience. The Flows have developed over thousands of years, and it may be decades before the damage is fully repaired, if ever.



Flow fact

Water is a big part of the Flow Country landscape, and if the bogs are in good condition, the water in the rivers and lochs is of very high quality.

Volunteers on a winter work party at Forsinard
Image: Lorne Gill, SNH



Volunteers remove regenerating trees
Image: Paul Turner, RSPB

What you can see in the Flow Country



In the Spring and Summer, birds come from all over the UK and beyond, to breed in the wild Flow Country.

Golden plover (*Pluvialis apricaria*) arrive between March and July and remain until the autumn. If you walk the Forsinain Trail you may see them in the fields close to the farm — listen out for their plaintive ‘peep’.



You should be able to hear their song alongside that of the **skylark** (*Alauda arvensis*) — another summer visitor. Whilst widespread here, their numbers are in decline.

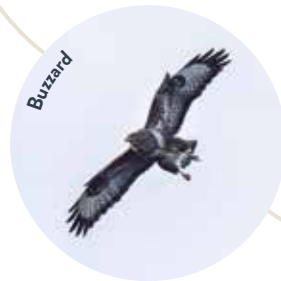


The **meadow pipit** (*Anthus pratensis*) is the most common songbird in upland areas. Its numbers are in decline, but, alongside the **wheatear** (*Oenanthe oenanthe*), it is a regular sight in the roadside fields throughout the Flow Country.

Another species in decline, **curlew** (*Numenius arquata*) are the largest wading bird in Europe and are easily identified by its long, downcurved bill. The Flow Country is an important breeding area for these graceful birds.



Harder to spot are **greenshank** (*Tringa nebularia*) and **dunlin** (*Calidris alpina*). Both visit in the summer to breed, and can be seen close to the pools and rivers of the Flow Country.



The most common bird of prey in the UK, **buzzards** (*Buteo buteo*) are regularly spotted throughout the year along the roads through the Flow Country. A less common resident bird of prey you might see is the **hen harrier** (*Circus cyaneus*). During the spring time, you may be lucky enough to see the male hen harrier's dramatic mating ritual — the sky dance.



Red-throated diver (*Gavia stellata*) and **black-throated diver** (*Gavia arctica*) enjoy the peace of the lochs of the farthest reaches of the Flow Country during the breeding season.

The **short-eared owl** (*Asio flammeus*) is one of the few resident birds here that is easier to spot in the winter.



Images: Andy Hay, Chris Gomersall, Tom Marshall (rspb-images.com) & Sam Udale-Smith

What you can see in the Flow Country

If insects and peatland plants are your thing then between June and August is the best time to visit.

One of the most widespread plants in the Flow Country are the *Sphagnum* bog mosses. Easy-to-spot species here include **feathery bog moss** (*Sphagnum cuspidatum*) and **red bog moss** (*Sphagnum capillofolium*).



Moss and lichen grow well here due to the acidic nature of the soil and the lack of nutrients. Carnivorous plants survive by trapping and eating insects. Named for their sticky insect-trapping 'dew', sundews are in abundance



in the Flow Country. Two species you can easily find are the **round-leaved sundew** (*Drosera rotuniflora*) and **oblong sundew** (*Drosera intermedia*)

Another carnivorous plant on the bog is **butterwort** (*Pinguicula vulgaris*) which has striking purple flowers between May and July.

The fluffy white flower heads of the **common cottongrass** (*Eriophorum angustifolium*) and **hares-tail cottongrass** (*Eriophorum vaginatum*) are widely seen across the bog in spring and summer. Misleadingly named, cottongrass is a sedge not a grass.

The yellow flowers of **bog asphodel** (*Narthecium ossifragum*) seen between July and August add a splash of colour to the bog.



Bog myrtle (*Myrica gale*), a small shrub, has leaves which give off a distinctive aroma when rubbed. It can be used as a natural midge repellent and has been used in brewing, as a replacement for hops. The plants emerge in May and the leaves turn yellow in October before being shed during the winter.

Bogbean (*Menyanthes trifoliata*) is the plant you can see growing out of the water in the pools themselves. The intricate white and pink stars of the flowers are best seen between May and July.



Seen flitting over the bog pools in the summer,

four-spotted chaser dragonfly (*Libellula quadrimaculata*) and **large red damselfly** (*Pyrrhosoma nymphula*) are common sights on the walk to the Flows Lookout or on the Forsinain Trail.



Red deer (*Cervus elaphus*) can be seen all year round across The Flow Country. Listen out for the roaring of the males during the rutting (mating) season in the Autumn. Dainty **roe deer** (*Capreolus capreolus*) are less common, and distinguishable from red deer by their whiter rump and smaller tail.

Images: Lorne Gill, Laurie Campbell SNH, Andy Hay (rsfb-images.com), John Wright & Sam Udale-Smith

Discover the Flow Country

Heading North

Travel guide and walks
in the Flow Country

Dudh-lochain Trail and
the Flows Lookout tower
Image: Sam Udale-Smith

Travelling through the Flow Country by road

White-tailed eagle

Image: Sam Udale-Smith



A836: Lairg to Tongue to Moine

To visit the Flow Country from Lairg, head north on the single track A836. Heading away from Loch Shin the landscape to the east is dominated by Dalchork Forest, although large areas of the forest have been restored to peatland in recent years. Just south of the Crask Inn is a viewpoint with information and seating. This is a great place to catch a glimpse of golden or white-tailed eagles or to listen out for greenshank and golden plover as they sing over the peatlands of Cnoc an Alaskie.

At the Crask Inn, the trees disappear to reveal distant views of Ben More Assynt (998m) and Ben Hee (873m) to the west and Ben Klibreck (931m) to the east. In the early morning in spring, it is also sometimes possible to see black grouse (*Tetrao tetrix*) displaying here.



Crask viewpoint

Image: John Wright

Continuing northwards the road follows the River Vagastie before entering Altnaharra. The road climbs gently to reveal Ben Loyal (764m) to the north and Ben Hope (927m) to the north-west. All around the peatland is broken up by rocky outcrops. At Loch Staing the road passes between two lochs, and then drops down and along the shore of Loch Loyal. The Cnoc Craggie viewpoint, at the top of Loch Loyal, offers a stunning Flow Country panorama!

Cnoc Craggie viewpoint

At the old quarry at Cnoc Craggie you will find a viewpoint that looks over open peatland towards Borgie Forest. Planted on peatland in the 1920s, this was one of the first forests in Scotland planted by the Forestry Commission. The straight lines in the peatland in the foreground are an indicator of past peat cutting for fuel.

Cnoc Craggie viewpoint

Image: Iain Sarjeant



Travel north from Cnoc Craggie to reach Tongue. From Tongue, you can travel west, across the stunning Kyle Of Tongue, to reach Moine House.

Moine House

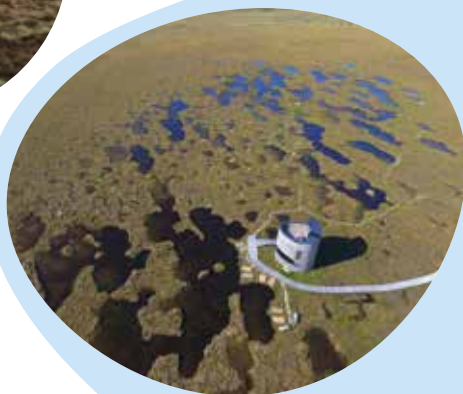
The long stretch of bog between the Kyle of Tongue to the east and Loch Hope to the west is called 'A' Mhòine' - meaning 'moss' or 'peat' in Gaelic. It was a difficult and dangerous place for travellers to cross until the Duke of Sutherland had a road built across it in 1830.

At the ruin of Moine House you will find viewpoints with information, and two short walks suitable for a wide range of abilities, including wheelchairs.

On a clear day, this is one of the most dramatic locations in the Flow Country. Even when the mountains are hidden in cloud, this is an ideal place to understand why this habitat is called blanket bog. The huge stretch of wet, mossy ground in front of you looks very much like a thick covering draped over the land.



View from
Moine House
Image: John Wright



Travelling through the Flow Country by road

A897: Helmsdale to Forsinard

From the small fishing village of Helmsdale take the single track road towards Melvich and to the heart of the peatlands. You will pass Baile an Or - the site of Scotland's goldrush in 1869, where people still pan for gold today! The landscape opens up with wonderful views of Ben Armine (704m) and Ben Klibreck (961m) to the west and the Ben Griams to the north.

24 miles north of Helmsdale you will reach Forsinard and the RSPB Forsinard Flows National Nature Reserve.

RSPB Forsinard Flows National Nature Reserve

Accessible by train, car or bike.

Visitor Centre open daily.

09.00 – 17.00 April to October.

Next to the Visitor Centre, the Dubh-lochain Trail is a great way to explore the bog without getting your feet wet, taking you to the Flows Lookout and through peatland pools. The trail and tower are open at all times.

Guided walks are led by RSPB Scotland staff on a regular basis during the summer.

Flows Lookout Tower

Image: Neil Cowie

Travelling through the Flow Country by road

A9: Helmsdale to Thurso

When the A9 turns inland at Latheron follow the road for 5 miles. At Loch Rangag there is an information point and sweeping views to the south and west over peatlands, including *Blar nam Faoileag*, the bog of the seagulls. The impressive open landscape is framed to the north and south by windfarms.

There are two walks close to here listed in the 'Suggested Walks' section of this booklet.



Loch Rangag
Image: John Wright

Continue north for 18 miles and you will arrive at Thurso, the most northerly town on the UK mainland.

Discover the Flow Country

Suggested walks

For more information
please check our website at
theflowcountry.org.uk

Image: Iain Sarjeant

Suggested walks

1

Forsinain Trail

(6.5km)

The Forsinain Trail explores the landscapes that make the Flow Country so special, taking you through farmland, open hill ground and former plantation. The farmland is an important feeding ground for birds like golden plover, dunlin and curlew. The trail also takes you past an area of dubh-lochain and a small loch where red-throated divers sometimes breed.

To get there: Travelling north up the A897, the starting point is 4 miles north of Forsinard. Park at the RSPB Scotland car park opposite the concrete bridge.

Start point co-ordinates:
NC 903 485



Red-throated diver

Image: Chris Gomersall
(rspb-images.com)

Forsinain Trail in autumn
Image: Sydney Henderson



2

Loch a'Mhuilinn Walk

(1.6km)

A short walk with two branches, both leading to the loch. Along the walk you will be able to see areas where people have cut peat in the past for household fuel.

To get there: Turn off the junction on the A838 signposted to Talmine and Melness (on the right if you are heading west). Head along this road until you see a small car park on the left, close to a turn off to Melness House.

Start point co-ordinates:
NC 579 607

Image: Andy Hay



3

Strathy Pools Walk

(3.2km)

A track leads out to the phone mast and an extensive panoramic view over the North Sutherland part of the Flow Country.

To get there: From Strathy, head west on the A836 and park in the first marked parking space just outside the village on the left.

Start point co-ordinates:
NC 825 652

Suggested walks

4

Munsary Reserve

(9.5km)

The reserve at Munsary is managed by Plantlife Scotland. There is a 6-mile return walk along a farm track, along which you can see common heathland and wetland plant species.

To get there: Heading North on the A9 beyond North Rangag turn right at Achavanich onto the road signed to Lybster. About 820m from the junction, turn left onto a track, cross a cattle grid and park by the sign on the right

Start point co-ordinates:
ND 186 423

More information can be found on plantlife.org.uk

Image: Andy Hay



Bog cotton

Image: Paul Turner, RSPB

Image: Shenaz Khimji



5

Flows of Leanas (Camster wind farm)

(6 km)

A circular walking and bike route, with good views of peatland in different stages of restoration.

To get there: From Latheron take the A99 north towards Wick. Shortly after Lybster take a left turn signposted to Grey Cairns of Camster. After the Cairns (which are on the left hand side as you head north) you will see the wind farm and a track turning off to the right.

Start point co-ordinates:
ND 257 461

Other walks in the area can be found on
walkhighlands.com
highlifehighland.com/rangers
highland.gov.uk

Visitor information

The Peatlands Partnership welcomes responsible access in line with the Scottish Access Code.

Please dress appropriately for the conditions bearing in mind the weather can change quickly in the Flow Country. Please also help to safeguard sensitive peatland habitats and species by taking marked trails and paths where they exist.

For information about volunteering opportunities in the Flow Country contact:
Forsinard@rspb.org.uk

Volunteers tending native trees
Image: Lorne Gill, SNH



The Flows by train

The Far North Line is one of Britain's most impressive railway journeys and crosses the heart of the Flow Country. It runs from Inverness to Wick and Thurso, passing dramatic coastline, peat-brown rivers and some tiny stations that serve just a couple of houses.

Train by Loch Lucy
Image: James Carter



The journey offers unique views of the peatlands, and you can download a series of audio guides from Scottish Natural Heritage that reveal the hidden secrets of the landscape passing by the window. 'View from the Train' is available on the izi.travel app which you can download for apple and android OS, or on Youtube.