Peatlands are found throughout Scotland. Most extensive are the vast expanses of Blanket Bog found in the North and West; but there are peatlands in our lowlands too. Known as Lowland Raised bogs, these purely rainwater fed systems are found in the Central Belt, Aberdeenshire and Dumfries & Galloway.

Peat is formed when plants become water-logged and their decay is slowed by the lack of oxygen. Bogs are acidic, nutrient-poor environments, dominated by Sphagnum mosses, specialist plants that can store huge amounts of water. Lowland raised bogs tend to form in hollows and have developed since the last Ice Age. Their peat can store huge amounts of water.

Lowland raised bogs are often surrounded by agricultural land, forestry, industry or housing. They are very vulnerable to damage through drainage, and even small ditches can cause them to dry out, allowing scrub to invade. Sadly the majority of our lowland raised bogs are in poor condition due to past attempts to drain them for grazing, crops or forestry. Some have been completely stripped of their peat for horticulture.

Why restore them? As well as a unique habitat for specialised animals and plants, bogs also provide what are called 'ecosystem services'. A healthy bog can store huge amounts of water which can be of great help if surrounding areas are prone to flooding. They are also very valuable in fighting climate change as they lock up vast amounts of carbon. In fact, they can store far more carbon than trees, which only have a limited life span, as undamaged lowland bogs can keep growing, accumulating more and more peat for thousands of years!

Lowland bogs are also wonderful places to discover and spend time in. These prehistoric peatlands often have a peaceful, almost timeless quality and many visit them for their tranquillity. They are invaluable historical stores of information about the people who lived on them and cut peat for fuel, as well as the pristine plants and animals, whose preserved remains lie deep in the peat.

What are we doing to restore them? Restoring damaged peatlands means bringing the water table back up to the surface, achieved by blocking up old ditches and removing the encroaching scrub that can suck water from the open parts of the bog. Even forestry plantations on peatlands are now being felled so that the bogs can be allowed to grow again. Some work on peatlands is now being carried out by volunteers, such as Butterfly Conservation’s ‘Bog Squad’ (bogsquad.weebly.com).

WHICH PEATLANDS CAN I VISIT? Because of their water-logged nature, access to lowland raised bogs can be difficult. However several nature reserves have boardwalks, or are accessible to careful walkers:

- Blankerness Moss NNR, West Linton
- Flandraus Moss NNR, Stirling
- Bealach Moss, north of Lammer
- Leanne Moss, Kilmuirloch
- Langlands Moss, East Kilbride
- Red Moss of Balerno, Edinburgh
- Muckers Hill NNR, Lochgelly
- Red Moss of Nuthatley
- Stranraeri
- Kirkcudbright Flow NNR, Dumfries
- Mosstodloch Moss, Stirling
- Portmill Moss, Loch Leven
- Balallan House, 24 Allan Park, Stirling, FK8 2QG

Butterfly Conservation is a charity with over 30,000 members in the UK, and 2000 in Scotland. We work closely with the Scottish Government’s ‘Bog Squad’. For more information please visit: www.butterfly-conservation.org

For more information please visit: www.snh.gov.uk/peatlandaction
Peatland Biodiversity

The butterflies and moths of lowland peatlands

Lowland raised bogs and their fringing birch and willow woodlands provide a home for a great variety of butterflies and moths. The Large Heath butterfly is only found on peatlands, while other scarce butterflies such as Green Hairstreak and Small Pearl-bordered Fritillary can find homes on the edges of bogs. Many spectacular and colourful moths can be found on lowland logs such as the Emperor, Wood Tiger, Canary-shouldered Thorn, Lunar Hornet, Silvery Arches, Grass Wave and Orange Underwing.

What other wildlife can I see on lowland peatlands?

Lowland bogs can also be great places to see dragonflies such as the Common Hawker and Black Darter, as well as other wildlife such as Common Lizard, Adder, Short-eared Owl and Snipe. There are also some beautiful and interesting plants to be found - as well as the numerous Sphagnum species - you may find the carnivorous Round-leaved Sundew, Blueberry, Cranberry, Bog Myrtle (Sweet Gale) and Bog Rosemary.

Peat depths and Scottish historical events

- **12cm**: Forth Rail Bridge opens 1890
- **1m**: Viking raids begin on Scotland circa 800 AD
- **2m**: Romans start to construct Hadrian’s Wall 122 AD
- **3m**: Bronze introduced to Scotland 1800 BC
- **4m**: Neolithic peoples build stone circles 3000 BC
- **5m**: Farming arrives in Scotland circa 4500 BC
- **6m**: Stone age hunters established in Scotland 6000 BC
- **7m**:"