

Rock Lichens

Life's creeping conquerors

A guide to the lichens at Radnorshire Wildlife Trust's Gilfach Nature Reserve



With thanks to Bob Kemp for the photos of *Cladonia*, *Ophioparma* & *Umbilicaria*

Plantlife

Plantlife guides to Lichens.

From www.plantlife.org.uk
Titles include;- Lobarion Lichens of Welsh Atlantic Woodland and Pamelion Lichens of Welsh Atlantic Woodland.

13,000 years ago the Marteg Valley was filled with glacier ice which melted as the climate warmed, leaving bare rock. Then came the creeping colonizers, the lichens, a community of living organisms comprising mostly of fungi but also including algae and sometimes nitrogen fixing bacteria. This community enabled them to conquer and thrive on the naked rock.

Gradually, as they lived, died and rotted they formed the first pockets of soil in the rock fissures. These allowed mosses to grow which were succeeded by heather and bilberry until finally the plants we see today could survive.



Directions to Burial Mound Corner

Drive up the road from Pont Marteg to the bend at the highest point of the road and park in the layby here.

You will see these clusters of rock which are covered with Lichens. 420 species have been found at Gilfach reserve.



Umbilicaria deusta This lichen usually grows further north. The rounded folds can look like a navel as they are attached to the rock by a central holdfast.



Cladonia uncialis subspecies biuncialis. There is a rock garden of *Cladonias* on this ledge. Look out for the ones with cups and matchstick like fruiting structures.



Ophioparma ventosa. Patches of this lichen can be grey or greenish. The greenish ones produce usnic acid but the grey patches do not. The red spots are fruits.



Tephromela atra. This has many black tart like structures with wavy edges. These are the fruits of the main fungi in the lichen. They produce spores which explode out of sacks.

Find out more

Lichens can tell us about air pollution. See 2 citizen science projects on lichens; OPAL air survey www.opalexplornature.org & APIS survey www.apis.ac.uk

The British Lichen Society (BLS)
www.britishlichensociety.org.uk

Clare Dalby wallcharts Tree and rock lichens are available from the BLS, 2 inexpensive and beautiful posters.