Trooper's Hill Mosses and Lichens Walk; Dec 2009

A winter walk was held on Trooper's Hill on Sunday 6th December 2009, primarily to introduce members of the public to some of the species of moss and lichen found on the hill. We were also on the look out for liverworts, but as this group prefer damper environments, none were found on the typical dry heath of this habitat

Around 12 members of the public attended, along with a few members of the Friends group. Attendees were introduced to lichens as symbiotic relationships between fungi and cyanobacterium/green algae, and to mosses which are similar to higher plants, but in miniature, with well developed stem and leaf structure, typically with a fully or part developed midrib on the leaf. We were on the look out for any of the 800 species of moss and 1875 species of lichen found in the UK.

After a 2 hour walk, attendees were introduced to 11 species of moss and 29 species of lichen. Walkers even found some choice specimens of Wax Cap to examine.

Of the lichens found the range of golf tee or antler shaped *Cladonias* was intriguing. This genus is mostly found in acid environments on poor soil, with poorly developed higher plant vegetation, such as heathland and tundra. 7 species were found including the locally scarce *Cladonia ramulosa* and red topped *Cladonia diversa* (=coccifera). There was also a fair covering of lichens on bare Pennant sandstone, including the bright yellowish green *Psilolechia lucida* on shaded, vertical surfaces and a large patch of the mostly tropical genus *Parmotrema* (in this case *P. perlata*) which is normally found on trees. There was an interesting amount of nitrogen loving lichens found, indicative of air pollution, including *Candelariella vitellina* and *C. reflexa* on stone, and *Xanthoria parietina, Physcia tenella* and *Hyperphyscia adglutinata* on trees.

Of the mosses, the dominant species on the heath was the fir tree like *Polytrichum juniperinum*, with patches of *Polytrichum piliferum*, *Bracyhtecium albicans*, *Dicranella heteromalla* and *Campylopus flexuosus*. Pollution tolerant species such as *Brachythecium rutabulum* and *Kindbergia (Eurhynchium) praelongum* occurred in shadier areas.

It is recommended that a full lichen survey is undertaken of both heathland and Pennant sandstone, both seemingly species diverse habitats. The trees on the site, being mostly less than 50 years old, have a typical suite of common lichens for the area.

Species Recorded

Lichens on Stone

Porpidia tuberculosa Lecidella stigmatea Candelariella vitellina Physcia caesia Lepraria cf incana Psilolechia lurida chlorococcum Parmotrema perlata Lecidia lithophila Lecanora dispersa Lecanora conferta (mortar) Aspicilia contorta (mortar) Buellia aethalea Candelariella reflexa

Lichens on Trees

Lecidella elaeochroma Lecanora chlarotera Xanthoria parietina Physcia tenella Hyperphyscia adglutinata Scoliciosporum

Lecanora symmicta Lecanora conferta

Lichens on Soil

Cladonia fimbriata Cladonia cervicornis Cladonia subcervicornis Cladonia furcata Cladonia diversa (=coccifera) Cladonia ramulosa Cladonia chlorophaea Peltigera hymenina (=lactucifolia)

<u>Fungi</u>

Hygrocybe pratensis Hygrocybe miniata Psilocybe montana Galerina hypnorum +/- mycorrhizal with *Polytrichum juniperinum*

Bryophytes (Mosses)

Tortula muralis Polytrichum juniperinum Polytrichum piliferum Dicranella heteromalla Campylopus flexuosus Hypnum cupressiforme Brachythecium albicans Brachythecium rutabulum Kindbergia praelongum Oxyrhynchium hians Didymodon insulanus