

## Micro Ecologies

'A moss is the most primitive of land plants: mosses are often described by what they lack. In comparison to more familiar plants, they lack flowers: fruit, seed and have no roots, they have no vascular system, no Xylem and phloem to conduct water internally. They are the most simple of plants: in their simplicity, they are elegant.' Robin Wall Kimmerer

'Ecology': Ecology is how organisms (i.e. plants, animals, mosses, humans, bacteria etc) interact with one another and with their physical environment.

Moss is the perfect support system for other plants, tiny invertebrates, frogs and fungi. Squirrels use it to line their dreys, and dormice hibernate in nests made underneath moss.

We often forget or easily pass these micro-ecologies, but these micro-ecologies open a dialogue about alternative collaborations and life at a slower pace. So have a look in your garden, on your window ledge or balcony, or on your daily walk for these Micro-environments and see which moss, lichen or liverworts you can identify?



### Wall Screw Moss

Scientific name: *Tortula muralis*  
Family: Pottiaceae  
Fruiting season: occasional  
Habitat: Walls



Wall Screw Moss is one of the first mosses that you will find. It grows in patches like cushions on walls or ledges less than 1 cm tall. A long, smooth, silvery, nerve sticks out from the rounded leaf tip, making the moss look grey when dry.



### Common-straited feather-Moss

Scientific name: *Eurhynchium striatum*  
Family: Brachytheciaceae  
Fruiting season: occasional  
Habitat: woodland, hedge banks, rocky ground



The Common-straited feather moss has finely toothed leaves and is found in cushions of feathery, green moss all over woodland floor: common-straited (or, striped) feather-moss brings fluorescent colour to shady places as it doesn't like to be exposed to full sunlight. Growing to about 1.5-2cms.

### Springy Turf Moss

Scientific name: *Rhytidiadelphus squarrosus*  
Family: Rhytidiadelphus  
Fruiting season: occasional  
Habitat: Turf/grass patches, Woodland

A common moss easily found on garden grass or in woodland near streams. It likes acidic conditions. Red-stemmed with star-like shoot tips. An appropriate alternative name is 'electrified cat's tail moss'. It grows to 2-2.5cm in height.



### Rigid Beard-Moss

Scientific name: *Barbula rigidula*  
Fruiting season: Spring and Autumn  
Family: Didymodon  
Habitat: Walls, paving stones

Its shoots form dark green tufts, 0.5 to 1 cm tall. The narrow leaves are about 1.5 to 3 mm long. Rigid beard likes sheltered, often shaded, walls that are made of substances like limestone.

These have short fringes of 'teeth' surrounding their 'mouth'. These can sometimes be slightly twisted.



## Lichens

Lichens are composite organisms, meaning something made up out of two or more independent organisms. They are made up of a fungus growing in partnership (or, symbiotically) with an alga. There are more than 1,800 species of lichens in the British Isles. Lichen species are difficult to identify, but to make it easier, we can divide them into three types:

- Foliose, or leaf-like, lichens are flat and creeping, and of various colours.
- Crustose lichens appear as thin, flat crusts, with or without distinct borders.
- Fruticose lichens usually attach to the surface on which they live (known as a substrate) by a single point at their base. They give the impression of a bush-like plant.



## Liverworts

Liverworts are small plants related to mosses. There are nearly 300 species in the British Isles. Broadly, liverworts can be divided into two types: thallose and leafy.

- Thallose liverworts have a flattened, plate-like body - the thallus - and no leaves.
- Leafy liverworts have two rows of flattened 'leaves' growing out from a stem. The third row, or rank, of smaller, forked 'leaves' lies on their underside.



### Forest Star Moss

Scientific name: *Mnium hornum*  
Family: Mniaceae  
Fruiting season: frequent  
Habitat: Woodland



The Forest Star Moss is one of the most common mosses. Dark green colour with narrow, triangular-shaped leaves that look similar to thyme leaves, or little stars. We can find it in clumps 2cm- 4cm tall growing on tree bases, rotting wood and peat. It likes acidic conditions.