



**WILD ATLANTIC WAY**  
SLÍ AN ATLANTAIGH FHIÁIN



# Micro-nature Guide

## LICHENS AT SNAVE BEACH

See if you can find these different types of lichen on the rocks, trees, twigs and leaves on the beach!



## What are lichens?

Lichens are a unique life form made up from at several different organisms which depend on each other for survival (symbiosis). The main body of the lichen is a cup fungus. Growing inside this is are algae or cyanobacteria, yeast and bacteria. The fungus provides a protective outer layer while the alga inside makes food for the lichen by using water, air and energy from the sun (photosynthesis).

## Where are lichens found?

Lichens grow in many habitats from beside the sea to mountain tops. They can be found on trees, rocks and soil. They can even be found on artificial surfaces such as plastic and metal.

## What do lichens look like?

Lichens come in many forms. They can look like blotches of textured paint, tiny stalked cups, little trees or crinkled leaves. They can range in colour from bright yellow or orange to green, black, white or grey. They can either be cleverly camouflaged or bright and colourful.

## Why are lichens important?

Ireland is an important country for lichens with over 1,100 species and with 6% of the world's lichens - a much higher figure that one would expect for a small island. So lichens are a significant part of Ireland's biodiversity.

Around the world many creatures large and small feed on lichens, including the rare Kerry slug in Ireland and herds of reindeer in Lapland.

Lichens are often the first thing to colonise bare surfaces, helping make minerals and nutrients available to other plants and animals.

See which lichens you can find at Snave!

Leave only footprints,  
take only photographs.



# Bushy lichens

This type of lichen has branches and stalks and can look like decorations on a tree. They also grow on rocks and in peat bogs. They are known as **fruticose** lichens. Look out for the really bushy ones on trees and stalked ones on the rocks.



*Ramalina  
cuspidata*



*Usnea  
subfloridana*



*Dermatocarpon  
miniatum*



*Sticta  
fuliginosa*

# Leafy lichens

Leafy, or foliose, lichens have lobes that look a bit leaf-like. Sometimes they look like flakes of dried paint. They can grow in many places including on rocks, trees or in wet, mossy grassland.

**Elephant ears:** Look for grey leafy lichens on the rocks. Some people think the one pictured above (left) looks like tiny elephant's ears! It is quite tough and leathery so is also known as the Leather Lichen.

**Wrinkles and fissures:** There are a several different leafy lichens on the trees at Snave, especially those with rough, fissured bark such as elm. The lichen above (right) has a fungus and cyanobacterium (instead of an alga), so it requires a clean, humid environment in which to live. West Cork is the perfect place for it!

# Crusty lichens

Crusty lichens appear like splashes of colour encrusting rocks and tree bark. They are known as **crustose** lichens.

**Dots and spots:** Look for trees like ash or holly with smooth bark. Look closely for little black dots and orange spots. These are the fruiting bodies of the lichens which produce spores. Lichens growing on bark generally like shady conditions. See how many other colours and shapes of lichen you can see on the tree bark.

**Bright and colourful:** The yellow and white patches of colour on seaside rocks are also lichens. Lichens growing out in the open like this need light and are adapted to survive exposure to heat, cold and splashes of saltwater. See the leafy lobes on the yellow one? That means it's a foliose rather than a crustose lichen.

*Lecidella elaeochroma*



*Lecanora chlarotera*

*Lecidella elaeochroma* lichen with black fruits (left) and *Lecanora chlarotera* with orange fruits (right), two very common twig and branch dwelling species often found growing together.

**Black blotches:** Some of the rocks are partly covered at high tide and seaweeds can grow on them. A few lichens are also tough enough to survive being under water at times. The black, splotchy lichen at Snave is *Verrucaria mucosa*. Have you ever had a verruca (a wart on the foot)? This lichen is so-called because it was thought to be able to cure warts and verrucas.

**Black speckles:** The strandline at Snave has a mixture of seaweeds and tree leaves, washed down the Coomhola River. Look for black dotted holly leaves - dots like these are caused by the cup fungus, Holly Speckle (*Trochila ilicina*).

*Xanthoria parietina*



*Verrucaria mucosa*



*Trochila ilicina*



Rocks with the common yellow foliose lichen *Xanthoria parietina* and white or grey crustose lichens such as *Ochrolechia parella*.



**Where?** Snave Beach is located 8.2km north of Bantry on the N71 (V9961 5434). Parking is available at the side of the road where the bridge crosses over the Coomhola River.

**When?** Unlike flowers, you can look for lichens at any time of year. Low tide is the safest time to visit Snave when most of the beach is exposed.



**What you need** Good observational skills - a hand lens, magnifying glass or macro lens on a phone will help! Wear suitable clothing and footwear for the outdoors.

**Take care on slippery rocks.**



For additional information, including a more detailed guide to lichens at Snave Beach, see [www.ellenhutchins.com/lichens/](http://www.ellenhutchins.com/lichens/)

Funded by



An Ombudsman Collaborates  
The Heritage Council



Images: Maria Cullen & Clare Heardman  
Text: Clare Heardman with assistance from Howard Fox (National Botanic Gardens).