

Identify seaweeds found on the Rhins of Galloway Coast Path







This guide will help you identify 13 seaweeds found on rocky beaches along the Dumfries and Galloway shore. There are around 700 different species so if your discovery does not match those in this guide then search the internet or a seashore nature book to help identification. The more you look the more you will see and while many are easy to identify others are too difficult to distinguish without a microscope!





This seaweed guide is funded by Kilgallioch Wind Farm Community Fund, administered by Foundation Scotland. It has been produced as part of the Rhins of Galloway Coast Path Project managed by Dumfries and Galloway Council.









How to use this guide

The incredible variety of coastline in Dumfries and Galloway means the region is a good place to discover the hidden world of the seaside. Despite seaweeds being very common on rocky shores it is only on close inspection that the amazing range of colour, shape and size can be appreciated.

Perhaps because they lack the glamour of flowering plants the seaweeds on our shores are often overlooked and under recorded. This guide identifies the best time of year and where on the beach to see each seaweed. Compare your find with the pictures in this guide; although the shape and colour may vary, the pictures show distinctive features which will help you identify what you have found.

Oar weed
Laminaria digitata





Take Care



Enjoy your visit to the coast, but always remember to be careful especially near cliffs.



Scottish weather can be unpredictable. Check weather forecasts and take appropriate clothing and footwear.



Scottish coasts can be rugged and remote, so tell a family member or friend where you are going and when you expect to be back.



There are two tides every day. Remember to check tide times to avoid getting stranded on tidal bays.



The coast is bursting with life so try and avoid disturbing wildlife, particularly shore-nesting birds in spring.



The coast is beautiful and to keep it that way take your litter home with you.

Channelled wrack Pelvetia canaliculata

Looks: A brown seaweed with evenly forked fronds about 5mm wide and rolled to one side to form a channel. Reproductive structures grow on the end of fronds with a beaded, knobbly structure.

Found: Growing on the uppermost shore often as a distinct zone.

Easiest to see: All year on all rocky coasts.

Did you know? The channels help the plant retain seawater to help it survive out of water for long periods.





Spiraled wrack Fucus spiralis

Looks: Brown to olive green flat fronds with a midrib and a twist which is noticeable when it hangs from a rock. It has no bladders but reproductive structures with a marginal rim grow at the end of fronds.

Found: Grows on rocks on the upper shore below the channelled wrack zone.

Easiest to see: All year on all rocky coasts.

Did you know? The spiral wrack is very similar to horned wrack that has distinct inflated fronds but only grows where fresh and salt water occur together in estuaries or where burns enter the sea.

Bladder wrack Fucus vesiculosus

Looks: Brown fronds with round air bladders – often appearing in pairs on either side of a midrib. It bears oval or forked reproductive structures at the ends of fronds.

Found: On rocks usually in the mid shore in exposed areas.

Easiest to see: All year on all rocky coasts.

Did you know? This tough seaweed often grows in turbulent waters and the bladders allow it to float nearer the surface to reach the sunlight.





Egg wrack Ascophyllum nodosum

Looks: Long flat leathery fronds with egg-shaped bladders at intervals along the frond and branches. Oval reproductive structures appear at the ends of fronds.

Found: On rocks in the middle shore in sheltered locations.

Easiest to see: All year on all rocky and boulder coasts.

Did you know? This long-lived seaweed grows a bladder every year and in sheltered locations you can count 7 or 8 bladders on a long frond.

Serrated or Saw wrack Fucus serratus

Looks: Flatted frond with a midrib and a distinct serrated saw-like edge. Reproductive structures develop in winter giving the ends of the fronds a bumpy texture.

Found: Attached to rocks on the lower shore in sheltered and semi-exposed locations where it can be the dominant seaweed.

Easiest to see: All year on all rocky coasts.

Did you know? The flat fronds are not tolerant to becoming too dry so it can <u>often be found thriving in rockpools.</u>





Thong weed Himanthalia elongata

Looks: Long straplike and evenly forked fronds about 1cm wide growing from the centre of a button-like growth. It can grow over 2m long.

Found: On rocks and stones on the extreme lower shore in exposed locations so it is easier to find washed up on the strandline.

Easiest to see: All year on all rocky and boulder coasts.

Did you know? The fronds are the reproductive part of the seaweed. It grows quickly and lives for 2 or 3 years.

Sugar kelp Saccharina latissima

Looks: A large brown seaweed up to 5m long with a smooth stalk and a wide frond that has a tough crocodile skin texture.

Found: On rocks and boulders in sheltered areas where the sea is agitated by tides and currents.

Easiest to see: During the summer months.

Did you know? This seaweed contains mannitol, a naturally occurring sugar which appears as a visible white power on the surface when the fronds are dried.





DabberlocksAlaria esculenta

Looks: A delicate-looking blade with a distinct midrib. The blade is often tattered and torn by wave action so that only the midrib remains to be seen.

Found: Growing on rocks at the extreme low tide of rugged shores and thrives in cooler waters.

Easiest to see: All year on the most exposed rocky coasts.

Did you know? Dabberlocks is an edible seaweed and the species name literally means "edible wings".

WakameUndaria pinnatifida

Looks: A large brown seaweed with a broad midrib and wavy fronds. The stipe has a wavy edge and a branched holdfast.

Found: On manmade structures such as pontoons where it is submerged at all times.

Easiest to see: All year.

Did you know? This invasive species of seaweed has only recently arrived in south west Scotland and is slowly spreading northwards! It is an invasive species from Asia where it is economically important in the food industry.





WireweedSargassum muticum

Looks: A distinctive olive-brown seaweed with alternate branches with flattened blade and numerous small bladders.

Found: On shallow stoney waters or rockpools and can tolerate estuarine conditions.

Easiest to see: During the summer months.

Did you know? Introduced from the Pacific it is also known as Japanese weed. Fast growing and reproducing in one year, it is considered an invasive species. Wireweed is spreading quickly along the Galloway coast.

Harpoon weed Asparagopsis armata

Looks: Soft rosy-pink seaweed with fluffy looking branches some of which are barbed like a harpoon.

Found: Below low water and in deep rockpools.

Easiest to see: Not easy to see at all! This seaweed has only been recorded once in Galloway.

Did you know? An introduction from the Pacific and Indian Oceans. It was first recorded in Britain in 1949 and is now found in southwest England and the north of Scotland. It is probably only a matter of time before it becomes common in Galloway.





Calcified crusts many different species

Looks: Often called pink paint weeds these red seaweeds cover rock surfaces with a hard chalky crust. Ranging from white to vivid pinks they form patches or cover the whole of a rockpool.

Found: Growing on hard surfaces including rocks, shells and other seaweeds.

Easiest to see: All year round.

Did you know? As more carbon dioxide is absorbed by the sea it becomes increasingly acidic and may corrode the chalky skeletons of encrusting seaweeds.

Coral weeds many different species

Looks: Taking a variety of different forms the most common types have stiff jointed branches with a feather-like appearance. They are usually a chalky pink colour but can be bleached white in strong sunlight.

Found: Growing on rocks in pools.

Easiest to see: All year round.

Did you know? Not looking like other seaweeds they are protected by a hard calcium carbonate covering which is unpalatable to other marine creatures.



Big Seaweed Search

Take part in a seaweed recording project that is a partnership between the Natural History Museum, Marine Conservation Society and community scientists like you!

By reporting sightings of the seaweeds that are in this guide you can help scientists monitor the impact of climate change, ocean acidification and invasive species.

Choose a 5 metre wide section of shore at low tide, take photographs of what you find growing on rocks and follow the instructions at bigseaweedsearch.org





Enjoy your search for seaweeds

You will find many more seaweeds than are described in this guide. An array of sea creatures live on or underneath them and some are so scarce that they are protected. It is always a good idea to take a photograph which you can refer to for later identification.

Remember rockpool creatures always look better in the water than in your bucket!

Please follow the Scottish Outdoor Access Code.

