Why are seaweeds important?

We need oxygen to breath and marine algae, including seaweeds, produce at least half of the oxygen in our atmosphere.

Seaweeds are a vital part of the food chain - without them life in the oceans would not exist. Tiny creatures graze the seaweeds, these tiny creatures get eaten by larger creatures and these creatures, e.g. fish, provide food for larger animals such as seals or dolphins.

Seaweeds have always been important to humans. In the past, Irish people ate many types of seaweed, including carrageen moss and dillisk, and also spread them on the land to help feed their crops. People still use seaweeds for food and fertiliser and scientists are studying them to make new medicines and other products.

Where? Seaweeds can be found on any accessible part of the shore. Places to see seaweeds in inner Bantry Bay include Gearhies, Bantry, Whiddy Island, Seal Harbour and Adrigole Harbour.

When? Seaweeds can be seen any time of year, but it's best and safest to visit the shore at low tide. A calm day after a storm is a good time to explore, when some deep water seaweeds get washed up and can be found on the strandline. **Check the weather forecast and tide tables!**

WHAT TIME OF YEAR

What you need Good observational skills are important so you can spot the differences between different seaweeds. Welly boots are useful. **Take care on slippery rocks.**

Leave only footprints, take only photographs.

For additional information, including a more detailed guide to seaweeds in Bantry Bay, see www.ellenhutchins.com/seaweeds/

FLAG SOUTH

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WILD ATLANTIC WAY
SLÍ AN ATLANTAIGH FHIÁIN

Mini Guide to the SEAWEEDS OF INNER BANTRY BAY

Explore the shore and see
how many different seaweeds you can find!

Ellen Hutchins
IRELAND'S FIRST FEMALE BOTANIST

What are seaweeds?

Land plants can't survive in saltwater – seaweeds are special because they can! They are a type of many-celled (multicellular) algae which live mostly underwater but can also cope with some drying out at low tide. They have a root-like holdfast which attaches them to rocks and other places so they can grow.

Where are seaweeds found?

Seaweeds grow from the top of the seashore down to around 100m underwater, which is the deepest light can reach. The part of the shore exposed at low tide (intertidal) is the easiest place to see seaweeds. It's harder to see seaweeds below the low tide mark (subtidal) unless you go diving! Some of the largest seaweeds such as kelp grow in these deep waters.

What do seaweeds look like?

Even though seaweeds can be many colours, biologists divide them into three main groups: RED, BROWN and GREEN. Some reds form a crust on rocks, some greens look a bit like a lettuce leaf whilst browns can be big with a stem, branches and wide leaves. In seaweed language, the 'stem' is called a stipe and the 'leaves' are fronds.

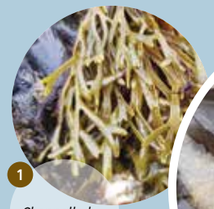
Brown seaweeds

Wracks (types of brown seaweed) are the most common seaweeds found on our seashores. In deeper waters, brown seaweeds include kelps and Japanese wireweed (an invasive species from Asia).

Channelled Wrack *(Pelvetia canaliculata)* a small seaweed, with grooves like mini gutters, which grows on rocks in a distinct zone above the bigger brown wracks.

Toothed Wrack *(Fucus serratus)* a very common brown seaweed on rocky shores. Look out for its flattened fronds with distinctive serrated (toothed) edges.

Egg Wrack or Feamainn Buí *(Ascophyllum nodosum)* Egg Wrack is very common in Bantry Bay. It's like a leather thong with a series of small eggs (bladders) growing along it. Every year it produces a new bladder. If you find a long piece of Egg Wrack see if you can tell how old it is by counting the 'eggs'!



1 Channelled Wrack

2 Toothed Wrack

3 Egg Wrack

4 A small, tufty red seaweed, called Sea Truffle, often grows as a harmless passenger (epiphyte) on Egg Wrack.

UPPER SHORE

Green seaweeds

All plants on land originated from green seaweeds or algae around 500 million years ago. Some green seaweeds grow on the shore but others float around in the sea as plankton and are so small you might need a microscope to see them.

Sea Lettuce *(Ulva lactuca)* Sea Lettuce looks like a floppy, transparent lettuce leaf and loves growing in sheltered rock pools.

Common Green Branched Weed *(Cladophera rupestris)*
A small green seaweed with thread-like leaves that are rough to the touch. It likes to grow in sheltered areas, often under bigger seaweeds.

5 Sea Lettuce

6 Common Green Branced Weed

MIDDLE SHORE

Red seaweeds

Red seaweeds are the most ancient plants in the world, with fossils up to 1.8 billion years old. There are 1000s of types of red seaweed species, around 300 of which are found in Irish waters.

Carrageen Moss *(Chondrus crispus)* and Irish Moss *(Mastocarpus stellatus)* These little fan-shaped seaweeds are often found growing under big brown seaweeds. They are leathery and very variable in colour and can be used to make a jelly-like pudding

Dillisk or Dulse *(Palmaria palmata)* Dulse is often found growing on kelp stipes (stalks). It can be dried and eaten as a snack.

7 Carageen Moss

8 Dillisk

Coralline seaweeds
Coralline seaweeds look like miniature corals or chalky crusts in rock pools. Their remains fall to the seabed after they die to form coral sand. The coral sand is full of calcium (like milk and cheese), which can be used to make food supplements.

9 Corallina

LOWER SHORE

Kelps

Kelps are the largest seaweeds - they form 'underwater forests' which provide an important place for many other creatures to live. The biggest kelps in the Pacific Ocean grow as fast as half a metre a day. Our kelps in Bantry Bay don't grow this fast but are still impressively big!

SUB TIDAL