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Empowering Communities



Kelp Forest © RJ Shucksmith



Kelp ID Guide

for wild swimmers and snorkellers

What is kelp?

Kelp is a type of large, brown macroalgae (seaweed). They are generally grow fully underwater, not being exposed at low tide. Kelp can be thought of as 'marine trees' anchored to the seabed using a holdfast and creating a forest with a 'canopy' under which many species take shelter and find food.

Why is it important?

Kelp forests **provide an important habitat** supporting a vast diversity of marine life including spawning and nursery areas for commercial species.

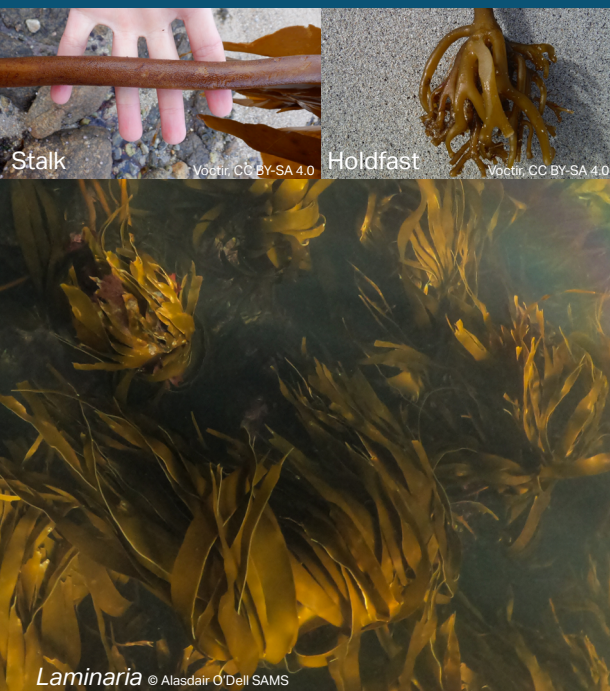
In addition, they also undertake other vital functions within the marine environment including **protecting coastal areas from flooding** by absorbing wave energy and **acting as a blue carbon habitat**. Globally, Kelp forests can capture as much carbon as the Amazon rainforest.

Kelp and carbon

Carbon is fixed within the tissue of kelp. When kelp washes out to sea during storms it can become buried, locking the carbon within sediments. The carbon can also be transferred on to animals which eat kelp, **in a process known as carbon donation**.

How can you help?

If you are a wild swimmer or snorkeller in Shetland you could help identify and map the extent of some of our kelp forests. To find out more, please get in touch with UHI Shetland.



Kelp- *Laminaria* sp.

These are the dominant forest forming types of kelp which can create a dense, completely covered canopy.

They grow to around 1.5 m but can reach up to 3.6 m.

These forests are usually found in deeper water in exposed areas where they grow attached to a rocky seabed.

These shiny brown seaweeds have a long slender round stalk with a wide leathery frond at the top and a claw like holdfast at the base where they attach to the rocks.



Furbelows Ben James © NatureScot

Holdfast

Diego Delsa, CC BY-SA 4.0

Furbelows- *Saccorhiza polyschides*

Furbelows are not a true kelp but due to their similar biology and appearance, are referred to as a pseudo kelp.

It can grow up to 2 m tall with a large frond at the top similar to that of the *Laminaria* species.

Furbelows, however have a very different stalk. It is flat, 4 or more cm wide and has an obvious wavy edge at the base.

The holdfast is bulbous, hollow and warty in texture with claw like extensions which hold on to the rocks.



Frond and holdfast

Cwmhiraeth, CC BY-SA 3.0

Sugar Kelp- *Saccharina latissima*

Sugar kelp is quite different in appearance from the other kelp in this guide.

They have only a short, thin stalk but a long ribbon like frond. This frond is tough with a distinctive crinkly, frilly edge.

It can grow up to 1.5 m in length and is light to dark brown in colour.

Sugar kelp is an annual species which grows very rapidly in spring. It likes a rocky, sheltered seabed where it attaches with a claw like holdfast.



Sugar Kelp © Per Avid Aasen

Be a responsible wild swimmer or snorkeller

The seas around Shetland can be cold and unpredictable. Wild swimming or snorkelling should only be undertaken by experienced swimmers who are used to the Shetland conditions. **Never swim or snorkel alone.**

Check the local conditions- be aware of tides, currents and weather forecasts.

Wear the right gear- a wet suit helps keep you warm. A hood and gloves are useful, especially on chilly days.

Follow the snorkellers code- do not remove animals or seaweed and try not to disturb marine life whilst navigating around underwater.

Wild swimming and snorkelling can be dangerous and should be undertaken entirely at your own risk. It is your responsibility to check the conditions on the day and assess whether it is safe to continue.

For further information contact:

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