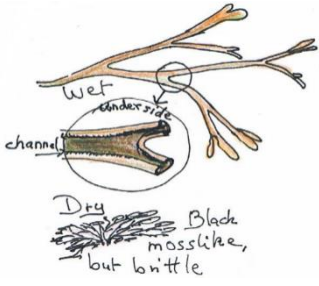
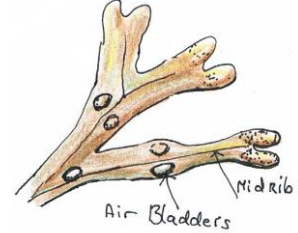

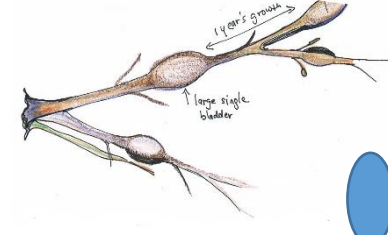
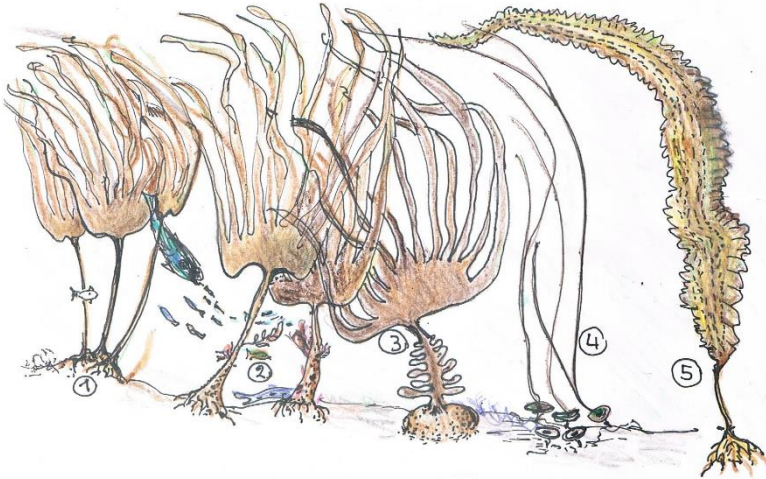



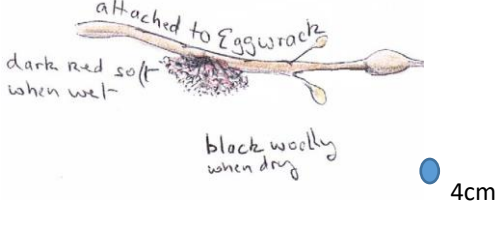

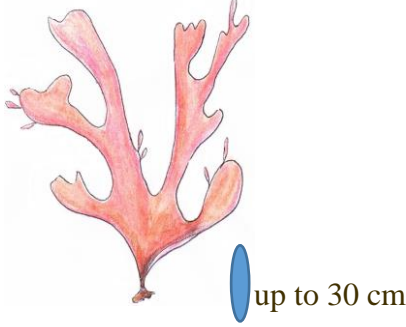


**Coastwatch SEAWEED Identification Aid** for some common intertidal and shallow sublittoral seaweeds on Irish and UK Shores. **Draft.**

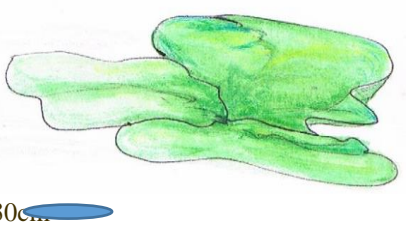
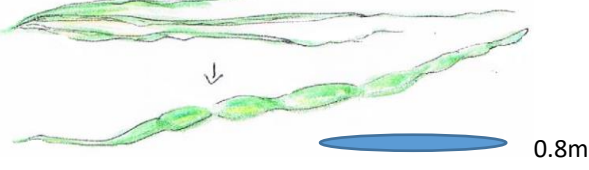

**SELECT BROWN SEAWEEDS**

 <p>● up to 16 cm long</p>	<p><b>Channel Wrack</b> <i>Pelvetia canaliculata</i></p> <p>Dúlamán; Múirín na Muc; Caisíneach</p>	<p>Yellow-brown, bushy. Edges of fronds rolled up forming a channel (for water retention).</p> <p>Black, brittle when dry, then vulnerable to trampling.</p> <p>Sheep like grazing on it.</p>
 <p>● up to 0.5 m</p>	<p><b>Bladder Wrack</b> <i>Fucus vesiculosus</i></p>	
 <p>● up to 0.5 m</p>	<p><b>Serrated Wrack</b> <i>Fucus serratus</i></p>	
 <p>● up to 2 m</p>	<p><b>Egg Wrack</b> <i>Ascophyllum nodosum</i></p>	<p>Distinct egg shaped bladders run along the midrib and used for ageing this seaweed.</p> <p>Look for the rare cushion form <i>A. nodosum mackaii</i> the most sheltered bays. It has less bladders, is finer and lighter in colour; cushion up to 1 m diameter.</p>
		<p><b>The forests of the sea from low tide down and in rock pools up to 4 m high.</b></p> <p>(NB 1,2,3 and 5 are Kelps, Sea spaghetti grows among them. Important for blue rayed limpet!</p> <ol style="list-style-type: none"> <li><b>Oar weed</b> <i>Laminaria digitata</i></li> <li><b>Mayweed</b> <i>Laminaria hyperborean</i> ( see ID notes on kelp survey form)</li> <li><b>Furbe lows</b> <i>Saccorhiza polyschides</i></li> <li><b>Sea Spaghetti</b> <i>Himantalia elongata</i></li> <li><b>Sugar Kelp</b> <i>Laminaria saccharina</i></li> </ol>
 <p>up to 4 m</p>	<p><b>Sargassum or Japweed</b> <i>Sargassum muticum</i></p>	<p>Fine long with tiny beads along the stems. When you hold it the branches flop down like wet washing on the line. Invasive alien which grows very fast but breaks off in winter to its holdfast from where it regrows in spring.</p>

## Select Red Seaweeds

	<p><b>Sloke or Laver</b> <i>Porphyra</i> spp</p>	<p>Tough shiny skin on a tiny chord and holdfast. Brown to reddish/greenish in water, brittle near black shiny when dried out. If stretched in water, you can see the shadow of your hand through it.</p>
	<p><b>Corallina</b> <i>Corallina officinalis</i></p>	<p>Pink Rigid tufty fronds due to calcium rich 'shell' which is bleached white in strong sun light and when dead.  POSSIBLE CLIMATE CHANGE INDICATOR</p>
	<p><b>Vertebrata lanosa</b></p>	<p>Tufts of dark red algae -moss like – which lives in probably symbiotic relationship on Egg wrack and occasionally other brown seaweeds.</p>
	<p><b>Irish Moss or Carrageen</b> <i>Chondus crispus</i></p>	<p>Small flat fronds with wedge shaped branches on low shore rock. Colour from deep redish browns to greens. In summer when it grows fast the tips have bluish purple iridescence which reflect UV light.</p>
	<p><b>Dulse</b> <i>Palmaria palmate</i></p>	<p>Fine almost translucent lobes and small almost sucker like hold fast.  The only red seaweed of this group which looks red. Often found growing on Kelp especially May weed.</p>

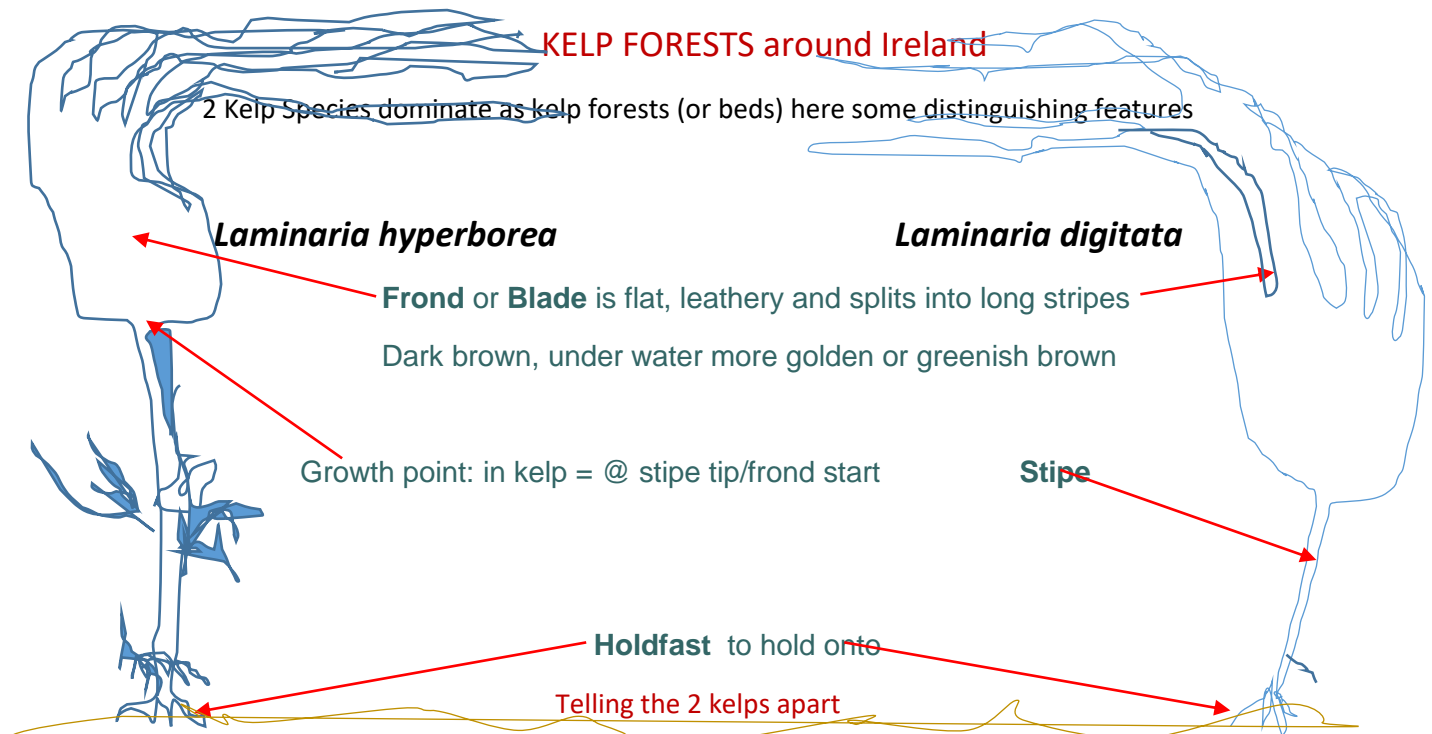
## Select Green Seaweeds – fresh water and/or enrichment indicators if large and plentiful in summer.

	<p><b>Sea Lettuce</b> <i>Ulva lactuca</i></p>	<p>Like salad head lettuce which has been put under hot water. In autumn it dies down and most might be swept up or dislodged on mudflats. Strong colour, large size and lots of it and Gut weed are indicators of nutrient enrichment.</p>
	<p><b>Gut Weed</b> <i>Ulva</i> species</p>	<p>Thin <u>tubes</u>, deflated or inflated with gas. (Nb - if veins, it a sea grass blade, not seaweed. See Zostera species - special find!)  Several Gut Weed species may be present.</p>
	<p><b>Cladophera</b> species</p>	<p>Several species from very fine meshlike and bright yellow green to coarse moss like darker.</p>

# KELP

**Kelp is included in this survey because:** - Kelp forests have been described as one of the most ecologically dynamic and biologically diverse habitats on the planet (Birkett *et al.*, 1998). Kelp species are considered as *Keystone Species* or species whose presence affects the survival and abundance of many other species in the ecosystem. Their removal is likely to result in 'significant shift in the composition of the community and perhaps in the physical structure of the environment' (Wilson, 1992). Additionally, material that is continually being lost from kelp forests fuels a complex recycling system:

<http://www.npws.ie/sites/default/files/publications/pdf/IWM17.pdf>



<i>L hyperborea</i> (Kelp or May weed)	The Stipe is:	<i>L digitate</i> Kelp
Round cross section, rough skin (unless v young)		Oval in cross section, more delicate, smooth
1 m+ ( longest in Scotland 3 m ) long		adult stipe 40-70 cm long
Snaps easily when bent over		flexible stipe, not easily broken
Other seaweeds (Epiphytes) often red seaweeds grow on older stipes		Smooth and usually no epiphytes on the stipe
Blade		
The old blade is shed annually (May/June) A new one grows bigger than the last one for the first ~ 5 years. The new blade develops between stipe and old blade, creating a 'waistline' in the middle.		Blade isn't shed, it just grows on from the tip of the stipe like a conveyor belt as the tips get worn or eaten.
<b>Kelp forest species grow on rocks in overlapping zones</b>		



## Egg Wrack *Ascophyllum nodosum*



Author: [Ardfern](#) CC BY-SA 3.0

Photo: Egg wrack/Asco *Ascophyllum* with a bit of bladder wrack at top left to show difference between the two in air bladders. Also note fine dark mossy growth - Vertebrata seaweed - on the Asco.

### References

Use any introductory seashore guide to get an introduction to seaweeds and learn to identify just a few. This Irish seaweed website <http://www.seaweed.ie/index.php> has fine images.

If you want to learn more about Egg Wrack *Ascophyllum* - here are three nice scientific sources for public consumption:

- M.D. Guiry & G.M. Guiry (2009). "[Knotted wrack \*Ascophyllum nodosum\*](#)". *AlgaeBase: listing the world's algae*. Galway: [AlgaeBase](#).
- J. M. Hill & N. White (2007). "[Knotted wrack \*Ascophyllum nodosum\*](#)". *Marine Life Information Network: Biology and Sensitivity Key Information Sub-programme*. Plymouth: [Marine Biological Association of the United Kingdom](#).

O. Morton. "[Ascophyllum nodosum — knotted wrack](#)". *Priority species in Northern Ireland*. [Ulster Museum](#). Retrieved 2007-01-30.