

Identification of Gelatinous Zooplankton in Irish Waters

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European Union

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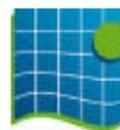
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Introduction

For descriptive purposes you can categorise Irish jellyfish into 4 main types: the 'true' jellyfish (**scyphomedusae**) which are the largest and most conspicuous; little jellyfish (**hydromedusae**) which are often overlooked due to their small size; colonial jellyfish (**siphonophores**) which can be very small or incredibly long; and comb jellies (**ctenophores**), which unlike the other types listed above, possess no stinging cells.

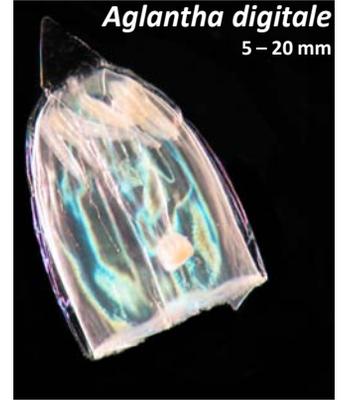
There are 6 species of scyphozoans in Irish waters, compared to some 20+ species of hydromedusae. Siphonophores can look like tiny jewelled strands in the water or like thick frayed rope and at least 6 species occur in Irish coastal waters. Ctenophores can often be quite noticeable as well, for example blooms of the sea gooseberry (*Pleurobrachia pileus*) can be easily identified in surface waters, and so are their predators, another species of ctenophore (*Beroe* sp.).



In addition to the above mentioned jellyfish there are two further unusual species: the **Portuguese man-o-war** (a siphonophore with a float that is visible above the water surface); and the **by-the-wind-sailor**, which are from a group called vellelids, these bright blue visitors to our shores are often noticed when the wash up on the beach in huge numbers with certain winds.



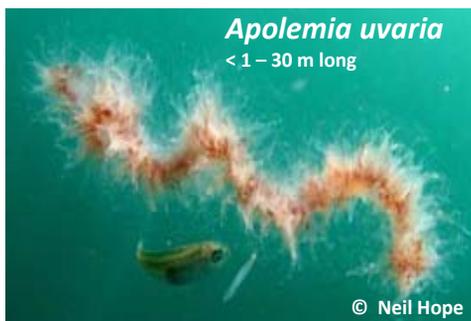
Hydromedusae



Bell shaped or flat and circular medusae; with or without visible tentacles; generally small (< 5 cm); pale and often difficult to see - translucent with opaque features (see above).

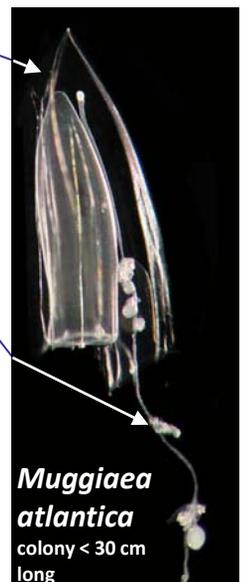
Warning! Some species can sting (e.g., *S. corona*).

Siphonophores



swimming bell

tentacle



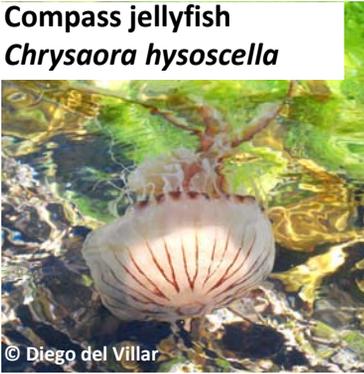
Colonial organisms composed of nectophores (swimming bells) and trailing tentacles and other structures such as reproductive organs; often translucent (see right) but may have a red to reddish-brown colour and appearance of a frayed rope (see above).

Warning! Can cause a severe sting.



Scyphomedusae

Compass jellyfish
Chrysaora hysoscella



Moon jellyfish
Aurelia aurita



Mauve stinger
Pelagia noctiluca



Large medusae (up to ~ 50 cm across); hemispherical or flattened bell; thick jelly; with oral arms and tentacles; often highly coloured.

Warning! Can give a mild to moderate sting.

Ctenophores

Pleurobrachia pileus

1 to 20 mm



Beroe cucumis

up to 150 mm long



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Spherical or elongate body; fine hair-like comb rows running lengthways; sometimes iridescent thick jelly; some have tentacles however, these have no stinging cells; can form dense blooms in coastal waters.

These animals have no sting.



Information on harmful species

***Solmaris corona* - hydromedusae**

- Oceanic species brought in by currents, usually July to November.
- Caused mass mortality of salmon in Scotland in 2002 when highly abundant via stinging and suffocation.

***Muggiaea atlantica* - siphonophore**

- Coastal species common to Irish and UK waters, July to January (can tolerate colder waters).
- Several population explosions throughout Europe - when highly abundant can cause mass mortality of salmon (as seen in Norway and Ireland).

***Apolemia uvaria* - siphonophore**

- Coastal species fairly common to Irish and UK waters and may be carried by coastal currents – often observed around the Irish coast in August.
- High numbers caused mass mortality of salmon in Norway in 1997/1998 via severe stings.

***Pelagia noctiluca* - scyphomedusae**

- Oceanic species brought from warm to temperate waters, brought up by shelf currents into coastal waters, usually July to January.
- Caused mass mortality of salmon in Northern Ireland in 2007 – severely stung fish and depleted oxygen supplies.

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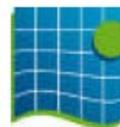
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