Aquatic Life

Oysters

ysters are molluscs. Like most molluscs, they have a soft, fleshy body and a hard, limy shell on the outside for protection. Some molluscs have one shell (gastropods) and other have two shells (bivalves). Oysters are bivalves, having two shells joined together by a strong ligament. The ligament keeps the shells together as they open and close.

Like most bivalves, the oyster lives in muddy water and feeds by drawing water, filled with particles, into its shell. As it passes over feather-like gills, oxygen and tiny food particles are absorbed before the water is pumped out again. This is known as filter feeding.



European Flat Oyster

Ostrea edulis

Oisre Eorpach coiteann

European Flat Oysters (also known at Common European Oysters or Native Irish Oysters) are native to Irish waters. They are a flatter and rounder oyster

than the more teardrop-shaped Pacific Oyster.

For centuries, these oysters have been harvested for food. However in the 1970s, Pacific Oysters were introduced into Ireland as the stocks of these native oysters declined, due to over-harvesting.

Oysters are usually eaten raw (though it is okay to cook them as well) and are said to taste salty, like the sea.

Pacific Oysters

Crassostrea gigas

Oisre an Aigéin Chiúin

Pacific Oysters, as the name suggests, come originally from the Pacific coast of Asia. They are not native to Irish waters but have been introduced here.

To reproduce, Pacific oysters need water temperatures of over 20°C. As water temperatures in Ireland are not warm enough, oyster farmers who grow these oysters in Ireland must import the seed (young oysters) from elsewhere. Some seed is grown in special tanks, known as hatcheries, where the water temperature can be controlled. The oysters spawn (produce eggs) in these tanks and when the seed is big enough to handle, it is sold on to oyster farmers who put the seed in mesh bags, which are then tied onto special frames and placed on the shore to grow.

Oyster trestles

When oysters are grown commercially, the farmer needs to be able to reach to them easily. On Sherkin Island, Robbie Murphy (& his brother Michael) farm Pacific oysters (see page 7). These oysters are grown in mesh bags, which are tied on to steel frames, called trestles. The trestles are about knee high and can be reached at low tide.





Celebrating Oysters!

Oysters are so popular they even have their own festivals. One of the most famous in Ireland is the Galway International Oyster Festival, at which they serve thousands of native Irish oysters. They even have an oyster opening competition; the winner in 2008 opened 30 oysters in 2.27 minutes!

Pearls and Pearl Oysters

Most people are familar with the creamy-colour round pearls, used to make necklaces and other jewellery. A pearl is formed when an organic irritant (e.g. a parasite) becomes trapped under an oyster's mantle, inside the shell. To prevent it damaging the



soft tissue inside, the animal produces nacre (Mother of Pearl), which builds up layers around the irritant, eventually creating a pearl. Most bivalve (two-shelled) molluscs are capable of producing a pearl, but few do. Those that are valued as gemstones come mostly from the pearl oysters, found in tropical and sub-tropical waters. These oysters are different to those we eat here in Ireland.

For many years, people would dive for pearl oysters, opening many just to find a few "natural" pearls. As this proved very wasteful, people began to "cultivate" pearls by manually inserting an irritant into pearl oysters and growing the oysters in a controlled environment.

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