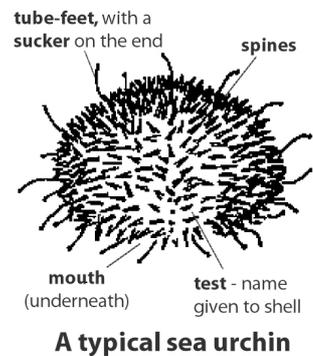


## Up Close

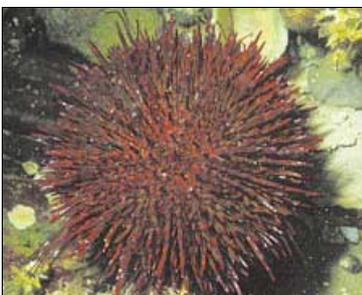
# SEA URCHINS

The sea urchin is quite easy to identify, with its rounded, spiny shell protecting a soft body inside. The mouth of the sea urchin is on the underside of the body and contains five strong teeth which are used to scrape seaweed from the rocks. When living, the round shell contains the soft body of the sea urchin and it feels surprisingly heavy – though it is safer not to pick it up because of its sharp spines. If the sea urchin dies, these spines drop off and the body rots, leaving an empty shell. This shell is called a test. Sea urchins and starfish are related, and like starfish, they also have tube-feet with suckers. These feet are long and are found all over its body, in between the spines. They help it move about and also anchor the animal in one spot.



### Edible Sea Urchin *Echinus esculentus* Cuān mara coiteann

The Edible Sea Urchin is the largest urchin to be found around Irish coasts. Empty shells, or tests, are commonly seen washed up on the shore. The shell is fairly thick and strong, offering good protection against predators and damage from waves. It is found in shades of pink, red and purple and has white spines, which often have purple or yellowish tips. It feeds on tiny seaweeds, and on any encrusting animals that it can scrape off the rocks.



### Black Sea Urchin *Paracentrotus lividus* Cuān mara dubh

The Black Sea Urchin is easily recognised by its dark colour, varying from dark green through brown to dark purple. It also has a habit of making shallow burrows or pits in the rock, in which to shelter. To do this, it moves its strong spines backwards and forwards to grind away at the rock. The Black Sea Urchin is often found in large numbers. Although it usually lives in warmer waters, it can be found as far north as the west coast of Ireland because of the warm sea currents of the Gulf Stream or North Atlantic Drift.

### Green Sea Urchin *Psammechinus miliaris* Cuān mara glas

This small sea urchin is common on the seashore but can be hard to find. It has a habit of covering itself with bits of gravel, shells or seaweed, which are held by its tube-feet. It can be found on the lower part of a rocky shore, particularly under boulders and among kelp holdfasts. The shell, or test, is slightly flat and is greenish in colour; the short spines are green with purple tips, and there is sometimes a whitish or pinkish tinge to the area around the mouth, which is underneath the urchin's body.



### Sea Potato/Heart Urchin *Echinocardium cordatum* Croíđín buí

The Sea Potato gets its common name from the potato-like appearance of its empty whitish test, which is sometimes found washed up on the shore. It usually lives in deeper waters where it can burrow into clean sand. Covered in a thick layer of yellowish-brown spines that point backwards, the Sea Potato can grow up to 9cm but is usually smaller. It is a deposit feeder and uses rows of tube-feet to collect particles from within its burrow. (A deposit feeder takes in a mixture of water and sand/mud, extracts the food and then passes out the undigested material.)

Images courtesy of Paul Kay

Text & images from "A Beginner's Guide to Ireland's Seashore" © Sherkin Island Marine Station

© 2010 Sherkin Island Marine Station & its licensors. All rights reserved.