

## STICKING AROUND The Wonderful World of Barnacles



### Barnacles - A Subject of Study for Charles Darwin

The first person to fully study and classify barnacles was the world-famous biologist Charles Darwin, who published a series of scientific papers on them in 1851 and 1854, before he published his groundbreaking book - 'On the Origin of Species'. Some historians have suggested that Darwin studied barnacles as a way of putting off work on his great study of evolution. But it has been shown more recently that he studied barnacles at the recommendation of his friend Joseph Dalton Hooker so that he could

understand at least one species of animal in depth. This was in order to test his theories about natural selection and the natural world in general.

### Captain Cockle's Log



Welcome aboard shipmates!  
Together, we'll be taking a look at the world's greatest natural resource - the sea.  
Copyright John Joyce 2012  
[www.captaincockle.com](http://www.captaincockle.com)

### Barnacles - the Curse of Pirates Everywhere!

As well as bad food, scurvy and the risk of sudden death in bloodthirsty battles, pirates everywhere had to deal with the threat of barnacles. Like seaweed, tube worms and other encrusting marine life, barnacles cling to the bottoms of ships and slow them down, making them easier for the authorities to catch. To keep barnacles at bay, pirates would regularly run their ships aground and scrape the bottoms clean. Richer navies would go to more elaborate measures, like sheathing the bottoms of their ships in copper, which is toxic to marine life.

### Barnacles - Upside Down Crabs?

Barnacles, like many insects, belong to that vast group of animals, the phylum Arthropoda. Within this, they are members of the same sub-phylum as crabs and lobsters. Indeed, a barnacle may be considered to be a crab that, instead of using its legs to run around and hunt for things to eat, has chosen the easier option of lying on its back and waving its legs in the water to trap passing morsels of food. To protect themselves, barnacles have developed external shells made of six calcareous plates and two moveable plates, which protect the animal inside when it is not feeding.



### Barnacles - A Medical Breakthrough?

A series of experiments by the Zoology Departmental NUI Galway are looking at the natural super glues used by barnacles to attach themselves to rocks or floating objects. If these experiments are successful, then we'll

know a lot more about creating a natural superglue that can be used to mend bones in human surgery or, on the other hand, how to create ways of

preventing barnacles clinging to ships and lowering their fuel efficiency.

