

## Survey finds 'faceless and brainless fish' in Scottish waters

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Amphioxus - a "faceless and brainless" fish-like creature. Image: Courtesy Scottish Government

A series of 15 marine surveys in 2011, covering over 2,000 square miles, have uncovered rare species and furthered our knowledge of the biodiversity of Scotland's seas.

Off the west coast, very rare Fan Mussels were found - at up to 48 cm long, this is Scotland's largest [sea shell](#). Around the Small Isles more than 100 specimens were discovered, the largest aggregation in UK waters. With golden threads likened to human hair so fine they can attach to a single grain of sand, seamen once believed they fed on drowned sailors.

In the waters off Tankerness in Orkney, the prehistoric 'faceless and brainless fish' Amphioxus was uncovered. This elusive, rarely seen

species is regarded as a modern representative of the first animals that evolved a backbone. With a nerve cord down its back, this strange [fish](#) has no specific brain or face.

The largest Horse Mussel bed in Scotland was revealed in waters near Noss Head, Caithness. Horse Mussels stabilise mobile seabeds and provide a critical ecosystem for other species. Known as 'Clabbydhhu' in Gaelic (translates as 'enormous black mouth') these slow-growing [molluscs](#) can live to nearly 50 years old.

Other finds included Flame Shell beds in Loch Linnhe, Argyll, a cryptic species only found in a very few west coast locations with bright orange feeding tentacles. Meanwhile new communities of Northern Feather Star - a brightly coloured species with 10 feather-like arms fanning out from a central disc - were revealed off the Sound of Canna.

Environment Secretary Richard Lochhead said:

"In an age where the lands of the world have been mapped out and recorded, it's amazing how many discoveries are waiting to be found under the waves. Spanning from the weird to the wonderful, discoveries this year have included the bizarre Amphioxus and the beautiful yet elusive brightly coloured Flame Shell.

"The waters around Scotland are rich in such fascinating biodiversity and it's our responsibility to protect this fragile environment. That's why we have ramped up our marine survey work, with plans being prepared for new surveys in 2012 to further our knowledge of what lies beneath Scotland's seas."

The survey this year benefited from the use of the latest technology, with acoustic multi-beam scanners used to create 3D images of the seabed. As a result, first-ever marine maps of many new areas was possible,

including waters around Rockall, to the west of the Outer Hebrides, around the Isle of Canna and within Sinclair Bay in Caithness.

Susan Davies, director of policy and advice with Scottish Natural Heritage, added:

"With many new discoveries 2011 has been an exciting year for everyone involved in the marine surveys around Scotland. Working with scientists from our partner organisations has not only been enjoyable, pooling our resources has enabled us to cover a far greater area and learn so much more about the life our seas support.

"Scotland's seas really are a fantastic asset. The findings from these surveys will help us to manage them sustainably and ensure future generations can also enjoy the benefits of a healthy and diverse marine environment."

The survey methods included use of acoustic multi-beam scanning to create a 3D image of the seabed, underwater videoing and photography, and sea bed sediment sampling. Marine Scotland coordinated the survey in collaboration with Scottish Natural Heritage, Scottish Environment Protection Agency, Northern Lighthouse Board, Joint Nature Conservation Committee, British Geological Survey (NERC) and Scotland's science institutions.

Provided by The Scottish Government

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