## Aquatic Life

# Ocean Climate Change

#### Warming Waters . . .

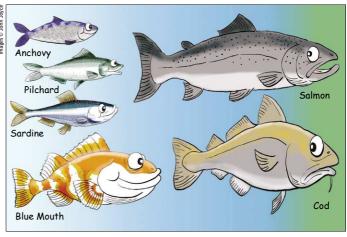
A recent report by the Marine Institute shows that sea surface temperature around Ireland has increased by over half a degree centigrade every ten years since 1994. The warmest sea temperatures over the last 150 years have been in 2005, 2006 and 2007.

Part of this recent increase can be linked to a natural rhythm in the ocean called The Atlantic Multidecadal Oscillation. However the fact that we have recently witnessed the warmest sea water temperatures in the last 150 years may mean that other factors, such as global climate change, may be at work.

Even small increases in sea temperature have an effect on the animals and plants that live there. Fish that prefer colder water (such as cod and salmon) tend to migrate northwards where the water is cooler. Meanwhile, fish such as anchovy, pilchards, sardines and blue mouth, also migrate northwards into our waters from the south.

One potentially negative effect of these migrations is that snake pipefish, which resemble sand eels but which have a tough skin and are difficult for birds to eat, are showing up in Irish waters in greater numbers. This could result in seabirds such as Puffins trying to feed them to their chicks by mistake.





You can download the Marine Institute report "Irish Ocean Climate and Ecosystem Status Report 2009" at

http://www.marine.ie/NR/rdonlyres/E581708D-6269-4941-836F-6B012DD7A4BD/

#### Captain Cockle's Log

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### Surf's Up!

Another effect of climate change in the oceans is the increase in significant wave height (the average height of the highest one-third of all waves) off the southwest of Ireland by as much as 0.8 metres per ten years. While this might be great for surfers, it could be dangerous for other water users.

The highest wave ever recorded anywhere in the world happened on the night of July 9th, 1958 when an earthquake created a landslide at the innermost point



of Lituya Bay in Alaska causing a tsunami. This monster wave then swept the entire length of the Bay, tearing away trees as high as 1,720 feet (524 metres) above sea level.

The highest natural wave ever recorded out at sea was only 112 feet (34 metres) above sea level in a Pacific hurricane on February 6th, 1933.

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