

Clam found to be over 500 years old

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Further research following a field trip carried out by Bangor University's School of Ocean Sciences in 2006 has led us to identify the age of a clam more accurately.

The clam in question was dredged during a research cruise in Icelandic coastal waters that formed part of a project investigating climate changes over the last 1000 years.

These clams contain very significant records of marine climate changes embedded in their shells and the scientists involved are the world-leading experts in extracting these records.

In order to undertake the research, live specimens, in addition to dead shells, are collected. The numbers taken are restricted in order to ensure minimal impact on the populations. The longest-lived clam was collected along with many others and, as it is impossible to age the clams until their shells have been opened, there was no indication of its extreme age until after this had been done. The notion that scientists knew in advance that it was the longest-lived species and then deliberately destroyed it is plainly incorrect. The same species of clam are caught commercially and eaten daily; anyone who has eaten clam chowder in New England has probably eaten flesh from this species, many of which are likely several hundred years old. Based on previous information and its size, this species was believed to live for around 100 years.

Preliminary analysis of the longest-lived clam by academics found it to be between 405 and 410 years. Recent further study of this clam,

however, has revealed that it is 507 years old.

It is statistically inconceivable that longer lived individuals of the [species](#) do not exist in Icelandic waters as they seem to provide the ideal conditions for extreme longevity; clams with lifetimes in excess of 100 years have been found both in the Irish Sea and the North Sea.

So why do these clams live so long? The Bangor scientists are intrigued to find out and believe that the [clams](#) may have evolved exceptionally effective defences which hold back the destructive ageing processes that normally occur. If, in this type of clam – called a 'Quahog' - evolution has created a model of successful resistance to the damage of ageing, it is possible that an investigation of the tissues of these real life "Methuselahs" might help understand the processes of ageing in a range of organisms, including humans.

Provided by Bangor University

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