

Senate Standing Committee on Environment and Communications
Legislation Committee
Answers to questions on notice
Environment and Energy portfolio

Question No: 332

Hearing: Additional Estimates

Outcome: Agency

Program: Great Barrier Reef Marine Park Authority

Topic: Corals

Hansard Page:

Question Date: 6 March 2017

Question Type: Written

Senator Roberts asked:

Are corals considered to have first formed in an era when earth's temperature was far warmer than today's temperature.

Answer:

The first clear descendant of the modern day individual coral animal is thought to have originated in the Middle Triassic period. Based on fossil evidence, the earliest widespread coral reefs did not appear until approximately 20-25 million years later.

The Late Jurassic period was a time of high coral proliferation and diversification. A high proportion of the coral families present today have their origins in the Middle to Late Jurassic period.

Based on geological records, it is thought that the Jurassic Period was characterised by tropical and sub-tropical warm and moist climate conditions which allowed plants and animals to thrive. Sea levels rose and created warm, shallow-coast environments conducive to coral reef development.

The Jurassic period, along with the Triassic and Cretaceous period, make up the Mesozoic era. It is thought that during the Mesozoic era, particularly the mid-Cretaceous period, temperatures were warmer than present day temperatures.

Corals are adapted to survive within the given average temperature range for region or specific location in which they live.