

The moonlit phenomenon of coral spawning

Every year, between late spring and early summer (November to December), corals on the Great Barrier Reef spawn over a three to five day period, triggered by the full moon and strong summer sunlight. The timing of this event is synchronised across species, and over distances of up to 1200 km. The eggs and sperm are released, and rise up to the ocean surface, forming huge slicks that extend for kilometres. Eggs are fertilised by sperm to make an embryo.

Embryos rapidly develop into coral larvae that drift with water currents and tidal systems. Coral larvae may drift for just a few hours or for several weeks. They can travel long distances before settling. The larvae will gradually move down the water column until they touch the reef surface. If the conditions are right and the ocean floor is clean, they will settle and lay down the base of their skeleton.

A single polyp, only 1-2 mm across, will form the basis of a new colony as it grows. Its lifespan may be as long as 1000 years!



Instructions

View the following Blue Planet video www.youtube.com/watch?v=wsaZ8-l7akg and the Natural History Museum clip www.youtube.com/watch?v=zuHzNRynSLc

Think pair share: answer the following questions and write down your answers.

1. What triggers corals to spawn at the same time?
2. Why is it advantageous for corals to spawn at the same time?
3. How does the scientist get the coral to spawn inside the laboratory?

The big question to brainstorm and further research as a class:

4. How do corals detect when it is full Moon and summer time?