

## **How long does an individual polyp live?**

Very interesting Question!

First to understand the "age" of each polyp, we have to understand the nature of a colonial (living together) corals "birth". An entire colony of coral starts as one single polyp. Then after a period of time (which varies depending on what species of coral were talking about) that single polyp fertilizes itself. This causes the first polyp to divide into two identical polyps, kind of like identical twins. Then some time later these two polyps divide into two more identical polyps, making the total number of four new polyps. This process happens over and over. (for many hundreds of years in some cases.) The rate at which these polyps can divide determines how fast the colony grows, and in some species of corals it takes as long as ten years for an individual polyp to divide. But, In the end you may have thousands and thousands of individual polyps, all of which are genetically identical and stemming from the same initial polyp. So except for cases of damage to the colony from outside forces (like major storms, or the sea star Crown of Thorns which harms the colonies) this single initial polyp never really died, but was, for lack of a better way of saying it, re-born over and over again. So, as you can see, this is a tricky question, and one that scientists are very interested in answering. Some believe that this process of long term division could lead to an understanding of eternal life! I know its not the solid answer you were looking for, but a much more interesting one I'm sure!