



## Arizona Rocks 84

Text and photos by Ray Grant

In Arizona Rocks 82, I wrote about stromatolites the oldest fossils found on earth. They are cyanobacteria and the longest living organism known. They are found in rocks over 3.5 billion years old and they are still alive today.

John Christian, an active fossil collector, sent me some new photographs of the Precambrian (about 1.1 billion years old) and the Miocene (about 8 million years old) stromatolites from Arizona that were described in that Arizona Rocks.

There is also another stromatolite locality of a third age that I recently learned about. It is in the Tucson Mountains and the fossils are found in the Amole Arkose that is Cretaceous in age (about 100 million years old). They are described on YouTube in a presentation: "Meet the Scientist Episode 2 with Dr. Bob from the Arizona Museum of Natural History.

These three widely spaced in time occurrences of stromatolites in Arizona indicate that they have been present here for most of our geologic history.

Next month, which way does your compass point?



Stromatolite from the Precambrian Mescal Limestone, 1.1 billion years old, John Christian Photograph



Stromatolite from Miocene rocks, John Christian Photograph



**CRYPTOALGAL STROMATOLITIC LAMINATED LIMESTONE**



Dr. Bob from the AZ Museum of Natural History on YouTube with Cretaceous stromatolite, 100 million years old

<https://www.youtube.com/watch?v=6Kt-e5YxgYE>