Fingernail Clams Species Spotlight By Emma Kull

Vernal pools are home to several hundreds of different species, including some fan favorites like the spotted salamander and the wood frog. Not all of these pool dwelling creatures are quite as well known--or as easy to identify--as the amphibian ones. One in particular, known as the fingernail clam, is so small that it is easy to miss at first glance. However, if you look a little closer at the pool floor, you'll find thousands of them!

The fingernail clam is a lesser known, yet tremendously fascinating, inhabitant of the vernal pool wetland. There are many different species of fingernail clams, but the differences are so minute that it takes a serious clam expert to tell them apart. They are aptly named for their similarity in size to a pinky fingernail, with the largest of the species measuring at no more than a half an inch. Fingernail clams are bivalves, meaning their body is protected by two shells hinged together. They thrive in vernal pools, which can have calcium rich bedrock that provides optimal conditions for building strong shells. They have one foot which they use to navigate their surroundings as they feed on the pool's algae and debris.

Interestingly enough, fingernail clams can also utilize their singular but mighty foot to survive the vernal pool's dry season by burrowing up to 8 inches into the moist soil. Other times, these clams will avoid the drying all together by hitching a ride on the toes of a salamander who carries the clam to safety by traveling to a new pool. Some fingernail clams might even clamp down on the feathers of a nearby bird, another suitable shuttle to a different pool.

Fingernail clams only live for about one to two years, during which they reproduce several times. The self-fertilizing clams store their eggs in a specialized compartment in their gills until each tiny offspring is fully formed and released. The fingernail clam offspring are so large--up to one-third of the adult clam size--that there is simply not enough room for all of them. This leads to a competition for nutrients that is generally won by the older and larger young clams. The winners complete their development and are released into the world to begin their own delightful journey as a fingernail clam.