

MONTEREY NEWS

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No Matter How Small

In our freshwater ponds and lakes we have some marvelous creatures. Some are large, some are noisy. There is a term, “charismatic megafauna,” which may have been coined by the biologist George Schaller. Schaller is best known for his conservation work and study of the lions of the Serengeti, of giant pandas, and other animals large and furry. Probably most of us human animals find the large furry mammals to be particularly appealing. We have our favorites among these, from the horse to the teddy bear, the grey wolf to the cottontail rabbit.

What makes for a favorite? Maybe a family pet or a character in a children’s book. As a kid I was nuts for horses and I was not alone in this. Hand us horse-lovers the next *Black Stallion* book and we were in heaven. Some had relationships with turtles, goldfish, parakeets. We broadened our connections, our interests, beyond the furry mammals. And then one day, some lucky ones among us looked through a microscope and discovered that world. You don’t need a microscope to notice butterflies, minnows, earthworms, and other small forms which are not so closely related to us. But if you take a very good look at anything, you’ll be rewarded with new understanding, and with more questions. Your life will be punctuated with “Aha!” followed right away by the exciting need to know more, the power of the mystery, the wild frontier of the unknown.

Right about this time of year, anyone walking along the shore of a lake or pond, or boating in the shallows, may look down in the water and be amazed by the strange gelatinous blobs to be found. These can be about the size of a softball, or they can be ten inches across. The material is like jelly, a bit sturdier than we get in a jar, and it is decorated with radiating marks like asterisks. Where has this been all summer? And what on earth could it be?

These are groups of tiny animals, living very near each other in blobs of jelly. They are colonial, like a hive of bees, but the individuals don’t fly or swim out and then return. They are sessile. The blob is the zoecium, or safe home for hundreds of little zooids, or individuals. Each zooid or animalcule lives in a pore or opening in the

something inedible into its feeding current, but the cilia are able to recognize what is good to eat and what is not. They stop beating, change direction and spit out the reject. The creatures inside the jelly blob are called bryozoans, a word from the Greek for “moss” and for “animal.” Most of the many species and forms of bryozoans live in the

sea. There are only about fifty species in fresh water. The ones in these blobs are *Pectinatella magnifica*, which means they are magnificent, and that the tentacles which form their lophophores are comb-like with their little cilia.

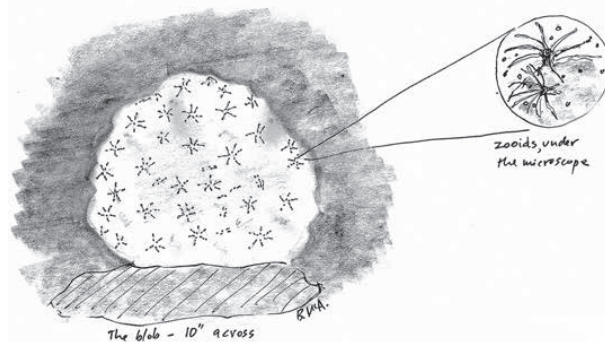
The colony won’t survive the winter, but little babies will emerge which look a bit like flying saucers. These are called sta-

toblasts and are ringed around the edge with a band or cushion that is filled with air, like a life-preserver. Around the edge of this band there are many hooks which grab onto anything they contact. Some will wash ashore and wind up in a brown band along the water’s edge. The hooks of some will anchor onto twigs or submerged logs, or onto ducks or other birds. They can disperse long distances this way. The little statoblasts are tough and will survive the winter, ready to start up in the spring and develop into a magnificent colony of moss animalcules.

With luck, with paying attention, we can learn something about these microscopic animals and have our consciousness expanded, our minds blown. We’ll be like Horton the elephant in Dr. Seuss’ famous book *Horton Hears a Who*. I like to paraphrase the huge and gentle Horton, the very image of the charismatic megafauna. A creature’s a creature, no matter how small.

— Bonner McAllester

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surface. If you find such a blob it may appear furry, but if you brush your finger gently along the surface, all the “fur” is retracted down into the zoecium. Each animal has little feeding tentacles that can be pulled in if there is some danger, but which otherwise are sticking out in the water wafting about to find microscopic food. Each tentacle is lined with hairs called cilia, and these beat or wave, setting up a current, which draws the water down into the teeny animal’s mouth in the center of this bouquet of tentacles.

From here it flows into the stomach down inside the animal’s body. After digestion, fecal matter is ejected in the form of a little pellet. The tentacles, for feeding, form the lophophore, and the anus opens beside this, in such a way as not to be caught up in the feeding current. So the digestive system is u-shaped, with the mouth at the base of all those tentacles, the stomach down inside, and then the intestine looping upward to the anus, at the surface beside the lophophore.

A little zooid, or individual, may draw

