## University of Wisconsin-Madison Lakeshore Nature Preserve Stanley Dodson Audio Field Trip at the Class of 1918 Marsh

## 31# Water Fleas

Take a close look at the water. Maybe even lie down on the grass to get a closer look. You may see tiny organisms swimming up, then sinking down—hopping and sinking in the water. They're tiny—only one millimeter long, and also transparent, making them hard to spot.

Water fleas are very important in the waters of the marsh and in ponds and lakes everywhere. How could something so small be so important? It's a question Stanley Dodson spent his adult life studying. Here are some of the answers from his research and others.

For starters, water fleas such as Daphnia can be superabundant. They live only about 1 month but have many babies—up to 40 every 10 days, which means more than 100 during their lifetime. If each of those babies has another 100 babies, that original Daphnia becomes 10,000 Daphnia in only two months. It adds up.

Daphnia also provide an important link in the food chain. You can imagine that such a superabundant critter would be a popular food for fishes and water insects.

Daphnia play a crucial role in water clarity by filtering out microscopic algae, and bacteria that cloud the water. They can clear the water of an entire lake, but that all depends on how many fish that eat Daphnia are in that lake. If there are few fish, Daphnia become superabundant and clear the water. If there are many hungry fish that means there usually aren't enough Daphnia left to effectively clear the water.