Aquatic Leaf Eaters

Plants are important links in any food web. They are usually the first link in a food chain in the web. Plants are eaten by plant eaters. Plant eaters are eaten by predators. If there are no plant eaters, there are no predators.

In aquatic habitats, the plants may be tiny. These plants are called phytoplankton. Phytoplankton are plentiful in ponds, lakes and some large rivers. These habitats may also support large plants such as duckweed or milfoil. These plants are the foundation of food webs in those habitats.

But some of the most important plants in some ecosystems are found outside of the water. This is true for small streams. Plant-eating insects depend on leaves and other material from streamside plants. Biologists call this stuff falling into the stream from plants “litter.” Bugs then feed on this litter.

Biologists call the bugs that feed on leaf litter “shredders.” Some species of stone flies, crane flies and caddis flies are shredders. They chew up the leaves when they fall into the stream.

Shredders get a little help, though. Fungus and small microorganisms attach to leaves. They help “soften” the leaves, and make it easier for the insect to digest the leaves.

But it doesn’t end there. The shredders give off waste. Those wastes are gathered or filtered by other insects downstream. These insects then feed on the wastes. That’s recycling!

1. Leaf enters stream
2. Microbes and fungus attach to leaf and soften it
3. Shredders eat leaf
4. Wastes from shredders wash downstream.