

The Role of Plants in Aquatic Systems
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Plants play numerous roles in a healthy aquatic ecosystem. Many plants act as the first step in the food chain by providing food for tiny “grazing” insects. These grazers in turn become the second step by becoming food for larger carnivores including bigger insects and fish. Many birds and animals also feed on the plants or their fruit.

During warm weather plants absorb nutrients from the water and soil, tying up these nutrients as they grow. Through photosynthesis many plants add oxygen into the water. This oxygen then becomes available to fish and other critters. Once the cold weather sets in, the plants die and their bodies drop to the bottom and begin to decay. During aerobic decay the dead plants are drawing oxygen from the water. Excessive amounts of plants in a water body can sometimes cause fish kills during this winter decay process by depleting the oxygen in the water under the frozen surface.

Plants also help to stabilize the bottom and shorelines of water bodies. Their roots bind soil particles together and hold them against currents and wave action. The bigger the root system is, the more stable the soil is.

Plants that overhang water also provide a route for careless insects to fall into the water where they become dinner for fish. Overhanging and floating plants block the sun from reaching the water. This shade helps to maintain cooler water temperatures. Cooler water holds more oxygen than warm water and that allows more sensitive fish like trout to survive.

Plants provide food, shelter and refuge for insects, amphibians and fish through all stages of their life. By maintaining a wide variety of native plants in and around the water we help to maintain a variety of wildlife and a healthy ecosystem around us.