

Improving Fish Habitat in Your Lake

A lake left untouched by man offers natural habitat for fish such as weed beds, weed edges, shoreline drop-offs, deep holes, fallen trees and oxygenated springs. But how many lakes are lucky enough to be completely insulated from civilization? Fortunately, some of these natural habitat-enhancers can be transferred to lakes where they are lacking.

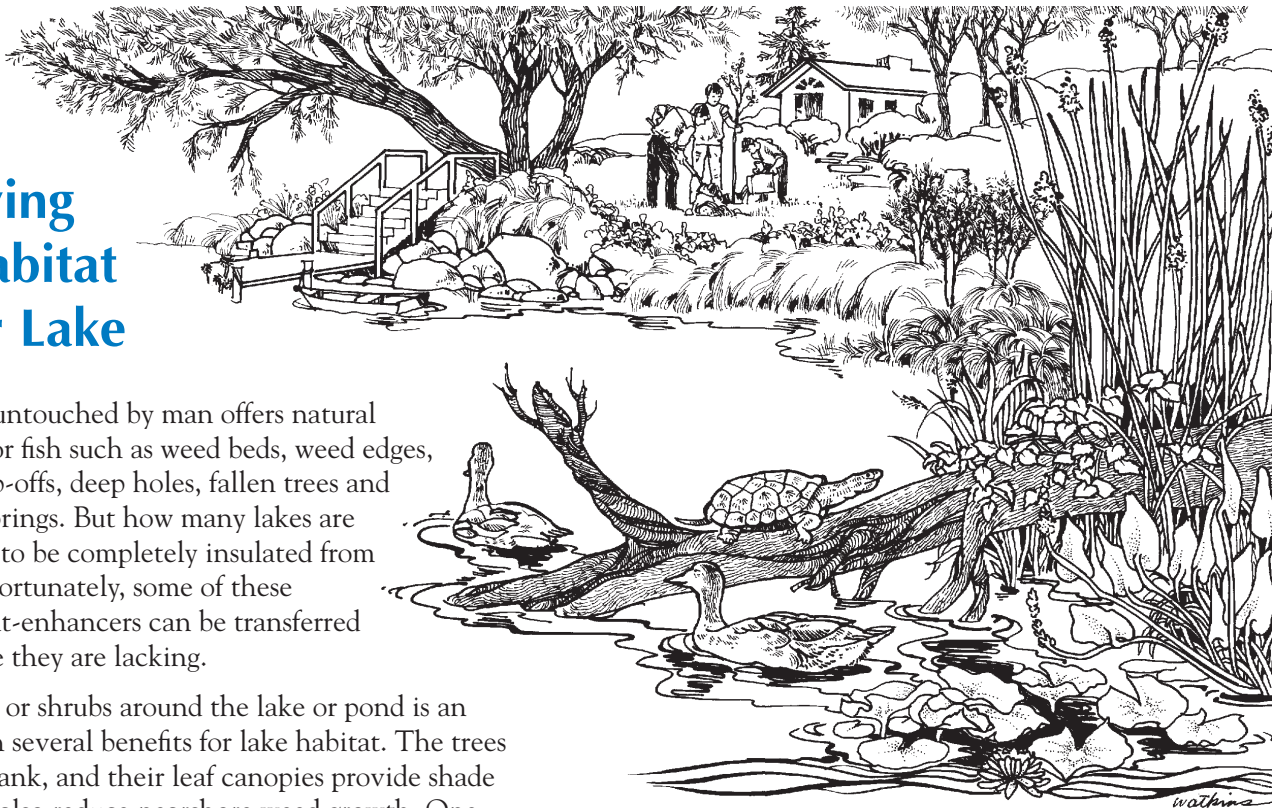
Planting trees or shrubs around the lake or pond is an approach with several benefits for lake habitat. The trees stabilize the bank, and their leaf canopies provide shade for fish. They also reduce nearshore weed growth. One note of caution, however: these benefits are not available for several years after planting. Since some trees will drop leaves into the water, which could add excess nutrients, some species are better than others. Some good varieties to plant around the lake shore are willow, aspen, birch, dogwood and seedless cottonwood.

Establishing aquatic plant beds will improve habitat in several ways. The plants themselves will help to protect small fish and will harbor zooplankton, a food source for young fish. Aquatic plants also provide a source of oxygen to the water. But if there are no aquatic plants, it may be difficult to establish them. In addition, care must be taken so that one species does not take over and create a monoculture. Establishing aquatic plants is not the same as planting your garden – you can't till it up and start over if you make a mistake.

Some suitable plant species for transplanting are sago pondweed, water celery and lily pads. These species offer some shelter but do not grow too densely. Check with your Department of Natural Resources or Land Conservation Department staff for more information on appropriate plant species. Here are some typical plants that you might consider for your lake's habitat:

Plants in 0 to 1 foot of water

Burreed (*Sparganium eurycarpum*); three-square rush (*Scirpus fluviatus*); nodding smartweed (*Polygonum muhlenbergh*); and cattails [note: can spread beyond area planted; make sure you really want it!]. Plant the root stocks one foot apart.



Plants in 1 to 1.5 feet of water

Wild rice (*Zizania aquatica*) [note: wild rice can get quite dense, taking over open water]; Arrowhead (*Sagittaria latifolia*); bulrushes (*Scirpus acutus* and *Scirpus validus*); pickerel plant (*Pontederia cordata*). Plant root stocks one foot apart. However, wild rice is planted as seed; sprinkle it over the area to be planted.

Plants in 0 to 2 feet of water

Deep water arrowhead, also called duck potato (*Sagittaria rigida*); waterlilies (*Nymphaea* spp.). Plant root stocks one foot apart.

Plants in 1 to 5 feet of water

Sago pondweed (*Potamogeton pectinatus*); water celery (*Vallisneria americana*). Plant tubers one foot apart in shallow water. For deeper water, place five or six tubers in a mud ball and drop it over the side of a boat.

Plants in 1 to 6 feet of water

Coontail (*Ceratophyllum demersum*); elodea (*Elodea canadensis*); muskgrass (*Chara* spp.) To plant, lay a handful of plants on the water and push them into the bottom sediments with the end of a paddle or an oar. Use one bushel per 100 square feet. To concentrate plantings in patches and let them radiate is better than spreading the plantings too thinly.

—adapted from "Lakesmarts" by Steve McComas