

Shoreland stewardship series

Ideas for helping lakes, fish and wildlife

Healthy lakes and streams are important resources to North Woods communities. In Vilas and Oneida Counties alone, there are hundreds of lakes and many streams that support wildlife, recreational activities, commerce, and industry.

Because these assets must be adequately protected in order to sustain our clean lakes and a high quality of life. The Three Lakes Waterfront Association (TLWA) is trying to spread the word on shoreland protection techniques.

This article is the first in a series of weekly stories that will be published this summer, through Labor Day, to give residents and visitors accurate information on the management of shoreland areas and lake ecosystems. Besides an introduction, the first story will deal with the significance of woodland shorelines and fallen, woody debris to lake quality. All of the stories will focus on lake issues and stewardship opportunities that can benefit wildlife and maintain water quality.

Management and stewardship of area waters and adjacent shorelands helps maintain and improve water quality. Careful management also protects and improves visual and scenic values--qualities not easily measured until they are lost.

“We all have a job to do to help in protecting and maintaining our healthy lakes and clean water. There is much that lake groups and lake property owners can do to care for and restore North Woods lakes,” said Bob Wojtusik, a TLWA board member.

“No one likes to be told what to do and no one wants to appear heavy handed, so TLWA is suggesting some relatively easy steps lake users can take to maintain shorelands and lake habitat,” he said.

Natural shorelines are critical to health and well-being of fish, wildlife, and native plants. Fish and wildlife are highly dependent on vegetated shorelines to provide healthy spawning areas, as well as habitat for feeding, resting, and mating life stages.

Fishing and hunting are benefits of good shoreline management practices too. Wildlife observation is best along riparian areas with healthy vegetation.

“They want to assist all lake property owners, new and old, to be better stewards of their shorelands,” said Patrick Goggin, lake conservationist for the Vilas County Land and Water Conservation Department, which is lending technical support to the project.

Goggin said education, best management practices and stewardship activities taken on by local citizens are important to maintain and improve water quality and scenic resources.

Woody debris

The first article topic is wooded shorelands and coarse habitat. This kind of aquatic habitat is essential for many kinds of animals and plants.

Woodland shorelines provide shelter for songbirds, small mammals, insects and other animals. Many species nest or raise their young here along the wooded shoreline.

Native songbirds including warblers, vireos and thrushes nest. Feed and find shelter in these shrubs and trees. Other birds like ducks, loons. And herons also frequent the living shore.

Unlike a manicured lawn, a woody shoreline supports a diversity of plant and animal species. Mammals such as mink, otters, muskrats and deer use natural shorelines as travel corridors and places to find their food. Fruits, leaves and seeds of woody shoreland plants, plus insects and other small creatures living there, are important to aquatic and near-shore food chains.

Woody cover and aquatic plant beds protect the shoreline from wind and wave action.

Water quality and fish habitat are protected by these shoreline wooded buffers too.

Fallen trees and logs enrich shoreland habitat and provide important functions. Fish spawn and feed under shady protection. Turtles bask on sunny branches, while kingfishers perch above, waiting to dive in for a meal. Insects are plentiful among the fallen, woody material and aquatic plants, providing a fertile food supply for

fish, turtles, frogs, and shorebirds. Entire plant communities can spring up on the top side of downed logs including plants like grasses, leatherleaf, sedges, and sundews.

Picture one of your favorite fishing spots. Numerous logs are lying along the shore with their craggy limbs all green with moss and algae. Huge cedar and tamarack trees line the shore, leaning out over the water, defying gravity as they cast a shadowy glow over the water.

Beds of aquatic plants like pickerel weed, bulrush, 'cabbage,' and water lilies fill the shallows, setting the stage for lurking predators. Submersed vegetation swishes underwater, hiding its bright green swirls from the above air.

The whole image burst with opportunities for fish—a northern pike or muskie stalking the water nest to the sunken log over by the hanging cedar. A school of perch darts along under the lily pads. Up the bank, newly hatched crappie, about 1 inch long, live unless that 3 inches of water among the bulrushes. A largemouth bass waits close to one of these transparent fingerlings waiting for it to venture too far out beyond cover.

All these places where fish and other critters live is called habitat. The logs, underwater vegetation, shady holes next to shore, and thousands of other nooks and crannies in the lake provide food and hiding spots for two dozen different kinds of fish, several species of frogs like green, pickerel, and mink frogs, and a plethora of aquatic insects in various stages of their life cycle.

Unfortunately, many North Woods lakes lack wooded shorelines and coarse wood habitat. Long ago, all the logs were pulled out because someone was worried they might damage a propeller on an outboard motor. The leaning trees were gone from shore and replaced with groomed lawns and docks jutting out into the water like spikes. The aquatic vegetation is often uprooted and the rocky or mucky bottom has been covered with sand to make a beach. Very little of anything can live on or in sand.

These changes in the amount of coarse wood habitat along the shore impact the fishery. It has changed—crappie, bass, and northern are less frequent visitors or residents along the shoreline. Natural diversity has lessened in this lake due to these changes.

Currently, researchers with the Ontario Ministry of Natural Resources (Cole et al) are studying coarse wood habitat in Canadian lake ecosystems. Preliminary results indicate that removing coarse wood habitat from shorelines impact fish population production and size class distribution in lakes.

Water chemistry, zooplankton, and macro invertebrates might also be impacted. These researchers also found that submerged hemlock trees can persist for more than 150 years in a lake and some pine species can last up to 700 years as coarse wood habitat in a lake.

So if a log fall in, let it be! Think about that favorite fishing hole of yours and how great it would be if it were right out your back door!

Future topics include information on shoreland buffer areas, native plant restoration, landscaping to enhance wildlife habitat, exotic species, and descriptions of various shoreland publications and resources you can peruse to learn more information about managing your shoreland property in years to come.

About the group

The Three Lakes Waterfront Association Incorporated formed in 1967 and its initial membership was approximately 64 members, each paying annual dues of \$2. Today there are more than 700 families that contribute \$20 annually toward dues. Contributions made to TWLA are tax deductible due to the organization's 501 (C)3 designation.

TLWA has board of directors consisting of 13 members that are elected by the body each July at the annual meeting.

The mission of TWLA is to preserve and protect Wisconsin inland waters, their watersheds and ecosystems in the Three Lakes vicinity by encouraging responsible stewardship and water quality education outreach. For more information about TLWA, contact them at P.O. Box 145, Three Lakes, WI.