Why is Wood Good?
The natural condition of the lake shore in Wisconsin is wooded forest or wetland edge. After the glaciers receded 10,000 years ago, the newly formed lakeshores were colonized by adapting vegetation which climax ed in forests of mixed hardwoods and conifers. These forested lakeshores continue to provide essential complex habitat through the perpetual process of shoreline trees falling into the water. This continuous recruitment of trees creates a wood-based physical structure in the near shore area that is common on all pristine water bodies. The insects, fish, amphibians, birds, and other animals have also evolved with this abundance of near shore wood which is essential to their life cycles.

Food—The abundance of wood in the near shore areas creates a super market for the animals in the lake. The bottom of a single pine log laying on shoreline could house a density of up to 75,000 invertebrates. While the invertebrates dine on the white pine, small fish gather to feast on them, and larger fish find the abundance of smaller fish to their liking. Research has proven that panfish in lakes with significant complex woody habitat have growth rates up to three times that of fish in more simple habitats due to the increased availability of invertebrates. Studies also showed that not only are there more fish along woody shorelines, but they feed in these areas at rates seven times higher than along shorelines void of wood. Waterfowl and shore birds utilize the high protein diet of invertebrates and small fish that call “Fish Sticks” home.

Shoreline Protection—Wood complexes can protect shorelines from wind and wave erosion. The forty to fifty foot long trees commonly used to construct wood complexes calm the waters by absorbing the energy both of wind and powerboat generated waves. Without wood, waves can crash full force against the shoreline, creating areas of raw soil that will harm the lake. “Fish Sticks” protect shoreline property owners’ interests as well as the fishes.

Cover—Wood complexes provide the critical cover fish and other animals require to successfully complete their lifecycles. All living things must have the opportunity to be born, to live and to successfully procreate. The nooks and crannies of the wood complexes offer critters safety from predators while at the same time concentrating prey to make predators more efficient. Wood provides the structure on which many species must lay or attach their eggs. More quality spawning and nesting habitat produces more young; more young provide more prey and the cycle continues.

How much wood is enough?
On undeveloped lakes, the density of natural woody complexes often exceeds 1,100 pieces per mile; or one every five feet. On Bony Lake, the original density of wood was 36 pieces per mile, and has been increased to 179 pieces per mile through landowner efforts. This five-fold increase is still only 20% of the density usually found on the undeveloped lakes.

There is a tremendous opportunity for waterfront landowners to improve the quality of their lakes through the addition of more “Fish Sticks” to their shorelines.
What is the “Fish Sticks” Project?

In 2007, property owners on Bony Lake in southwest Bayfield County, in partnership with the Bayfield County Land & Water Conservation Department and the DNR, began a whole lake restoration project to move the shoreline on their lake toward a more natural appearance by enhancing the near-shore eco-system. An innovative part of this project was the installation of large diameter wood (whole trees and branches) to the restored or natural shorelines of interested landowners. In 2008, the Eau Claire Lakes Conservation Club provided volunteers and financial assistance to advance the concept of installing woody habitat on the Eau Claire Lakes Chain.

More landowners are participating and the number of lakes benefitting from the habitat work is increasing. Developing a process for landowners to easily install woody habitat complexes along their shorelines has sparked a revolutionary approach to shoreline restoration.

Financial and technical assistance is available to landowners wishing to install wood complexes on their shorelines.

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To see more pictures of completed “Fish Sticks” go to the Bony Lake website: www.bonylakewi.org