

An excerpt from an RVCA Update to the Lake Networking Group, April 25, 2023

Storm debris & fallen trees

With recent storms we have had many inquiries regarding fallen trees. The best advice is to leave the large branches and fallen trees along the shoreline area if they do not pose a hazard or risk. The natural process of trees falling into rivers and lakes is critical in providing a healthy habitat. There are many beneficial reasons to leave these natural features where they are.

Wood structure in the form of branches and trees is an essential physical, biological, and chemical attribute of lakes and streams for many species. For example, over 85 species of fish are recognized to rely on the wood structure during all or part of their life histories.

- Instream wood structure provides: 1. Food, 2. Refuge, 3. Spawning habitat 4. Nursery and rearing habitat
- Wood structure is a direct and indirect source of food for fish and other aquatic organisms.
- Directly, several fishes consume decomposing wood and bark, while many fish species are dependent on fruits and seeds provided by felled or flooded wood structures.
- Instream wood structure, particularly complex and branchy material, decreases predator foraging success, resulting in creating refuge habitats for small fishes.
- Loss of wood structure refuge can cause extirpations of prey species (e.g., yellow perch *Perca flavescens*, cyprinids) and ultimately determine species assemblages in lakes or rivers.
- Other species that rely on instream wood structure include muskellunge, walleye, largemouth bass, smallmouth bass, northern pike, and many minnow species which all reside in our lakes or waterways.
- They provide basking habitat for species at risk turtles that reside in the lakes that rely on this function to digest their food and for the females to produce their eggs.
- Wood structures along shorelines can also reduce erosion issues along the bank by providing protection from wave energy
- Wood along the shoreline also supports waterfowl who will use them as sheltered areas to rear their young
- Birds will use them to perch and feed along the shoreline zone

The following resources may be of interest:

- Blog from Ausable River Association that provides general information about the importance of wood. <https://www.ausableriver.org/blog/why-wood-good-streams>
- General extension note on the importance of woody debris <https://extension.psu.edu/benefits-of-large-woody-debris-in-streams>