Survival of the Northern White Cedar

Since 1997, the Au Sable River System Property Owners Association (ARSPOA), with financial support from the Anglers of the Au Sable and other river conservation organizations, has been conducting a restoration/reforestation project called Cedars for the Au Sable (CFAS). More than 200 river property owners have planted over 3,500 northern white cedar seedlings in protective enclosures in the riparian corridor of the Au Sable River.

The river property owners have purchased all the needed materials in Cedar Tree Planting Kits assembled by members of the ASRSPOA. These northern white cedar seedlings have been planted into the "green-belt" area of the Au Sable River consistent with special management practices. This natural vegetation strip is managed cooperatively by the Michigan Department of Natural Resources through the Natural Rivers Act, Part 305 of the 1994 Public Act 451, and the river property owner. This has been the first phase of a project to re-establish and regenerate the growth of the native northern white cedar to our river system.

Many of the mature northern white cedars that you see lining the Au Sable River are upwards of 200 to 300 years old. They have been quietly helping to maintain the cold water fishery of the Au Sable River for centuries. The primary benefits of long-living cedar trees include stream shading, bank stabilization, undercut bank cover for fish and delivery of organic material. The benefits of cedar "sweepers" and downed logs along the stream margins are the retention of organic detritus, creation of scour and plunge pools, erosion control and habitat for fish, macroinvertebrates and other food sources.

But if you take a look around the banks, what you do not see is an abundance of northern white cedars as replacements in the years to come. Other species of trees, such as soft maples and red pines, that are replacing the northern white cedar, do not offer the same long-term benefit to the Au Sable River watershed.

Northern white cedar seeds released onto undisturbed areas need moisture and light to survive. The forest experts tell us that we are not having problems with the germination and recruitment of northern white cedar seedlings because we still have a viable seed source. Yet we are experiencing a high mortality rate. With the growth rate of the northern white cedar being only several inches in the first few years, this gives the white-tailed deer and the hare plenty of opportunities to browse the seedlings before they have an opportunity to become established.

Protecting the northern white cedar seedlings in an enclosure is the only practical method at the present time to ensure we will have this native species in the years to come. To receive information about Cedar Tree Planting Kits for this unique, one-of-a-kind program, or if you have an interest in developing a similar program on your home waters, please contact project chair Howard N. Johnson at hnjohnson@aol.com.

If you are aware of an area on any northern Michigan river system that currently has a small stand of 3 ft. to 8 ft. high northern white cedars, please make this information available to Howard at the above number. The second phase of this project will partner with the educational community to investigate ways to prevent the browsing of the northern white cedar seedling without the need of a protective enclosure. We will attempt to research the possibilities that there could be members of this conifer family that have characteristic that the white-tailed deer find undesirable. There is the potentiality that these traits could be genetically reproduced into our native northern white cedar.

CONTRIBUTOR:

Howard N. Johnson

Johnson is the originator and chair of the Cedars for the Au Sable project, board member of the Au Sable River System Property Owners Association, currently serving as past-president of

the William B. Mershon Chapter of Trout Unlimited, and is sitting on the Executive Committee of the Au Sable River Watershed Restoration Committee.

The Johnson family has had a cabin on the south branch of the Au Sable River at Chase Bridge for over 80 years.