

Atlantic White Regenerating a Globally threatened



BY: BOB WILLIAMS, C.F., R.P.F.

Today, cedar remains a highly prized wood for a wide variety of timber products.

Cedar Forest Ecosystem

Atlantic white cedar (*Chamaecyparis thyoides*) is found along the Atlantic and Gulf coasts of the United States from Maine to Florida and west to Mississippi. Historically, this species has been a very valuable timber species and remains so today. Over the last three centuries, the area occupied by Atlantic white cedar has declined drastically, and it's now classified as a globally threatened forest ecosystem, and its decline continues. Hurricanes, flooding, wildland fires, natural plant succession and sea level rise all continue to affect a decline in the overall acreage of this important wetland forest ecosystem.



The most recent and dramatic example of cedar loss was the impact of Hurricane Isabel on the Great Dismal Swamp National Wildlife Refuge in 2003. This loss exceeded 2,000 acres. The U. S. Fish and Wildlife Service has been managing this loss by planning salvage harvesting with helicopter operations. Since Atlantic white cedar is shade intolerant, it must be harvested by the clear-cut method to enable it to regenerate in full sunlight. Much of the wood from this salvage operation has been going to Gates Custom Milling in Gatesville, North Carolina.

A HISTORY LESSON

Atlantic white cedar has a long historical and cultural link to New Jersey. There was significant cutting between 1653 through 1750 following European settlement. As early as 1749 Peter Kalm from the Swedish Academy of Science warned that heavy cutting in New Jersey might be eliminating white cedar entirely from the state. Kalm indicated cedar was used extensively for shingles in the cities of Philadelphia and New York. In addition, he indicated it was heavily cut for export. As early as 1858, white cedar products formed about 20% of the exports from Cape May County, New Jersey. Cedar was so highly prized for wood products because of its resistance to rot and insects, it was mined out of the Great Cedar Swamp in Cape May County, New Jersey. Trees that had been buried in the muck soils for centuries still were sound and used. Today, New Jersey retains the largest acreage of Atlantic white cedar of all states—in the range of 35,000 acres.

Cedar remains a highly prized wood for a wide variety of timber products. These include: boats, tanks, siding, fencing, decking, shingles, posts, pilings, stakes, channel markers, and clam stakes. It has a rich history in coastal areas because of its durability and natural rot resistance. Cedar from New Jersey forests is still used to shingle the roof of Independence Hall in Philadelphia, Pennsylvania.

Most people believe it is illegal to harvest cedar because of environmental regulations since cedar is a wetland species. Markets for local landowners who own cedar timberland have dwindled and landowners struggle to sell their timber.

Paul Schaier of Schaier Brothers Saw Mill in Egg Harbor City, New Jersey, has hung in there to survive as New Jersey's only and last viable commercial cedar mill. Schaier Brothers has been in business for over 72 years and saws white cedar from forests throughout southern New Jersey. Paul Schaier's father, Carl, and his two brothers, John and Joseph Jr., started the Galloway Township Mill in 1936. Before that, his grandfather ran another mill. The first mill burnt down in 1936 and after building a new mill, it sustained itself until 1941 when Carl Schaier and his brothers went out of business to fight in World War II.

After a fire in the 1960s, the family rebuilt and continue operating the mill to this day. Paul runs the mill and logging operations with his Uncle Anthony and his 82-year -old mother along with eight employees.

The Atlantic white cedar industry was once a large, thriving business throughout southern New Jersey. Now, Schaier Brother's Mill is the last major commercial mill to carry on this region's long historical tradition of using locally produced cedar forest products.

Paul Schaier also owns and manages over 500 acres of forestland with the assistance of a professional forester. His latest purchase of 20 acres in 2006 added cedar to his inventory and he hopes to pass both the mill and lands onto another generation that will continue the Jersey cedar culture.

MODERN TIMES

Throughout the 1990s and into the 21st century, there has been an increase in public awareness about the importance of Atlantic white cedar, both ecologically and economically. It's recognized that active management is the key to healthy white cedar stands.

Starting in the early 1990s and continuing to the present, George Zimmerman, Ph.D. of Stockton College has done extensive research on the silvilculture and regeneration of Atlantic white cedar. This extensive research has led the way to a return to active management of this important resource.

Today, after 15 years of harvesting and follow-up forest management, Paul Schaier and certified forester Bob Williams can point to many successful projects throughout southern New Jersey, whereby the acreage of cedar has increased in the post harvest years.

Cedar management is difficult and can be expensive. In many instances, the costs of deer exclusion fences or seedling





planting are cost prohibitive. Successful projects are ones in which a logger can make a profit that allows for money to be reinvested into the forest for cedar restoration and future timber supply. Anyone who harvests or manages timberland understands the economics of forestry. Someone must make a profit and money must be reinvested in the land.

In most cases, those who claim to care more about forests or in this case, Atlantic white cedar ecosystems, would have the public believe it is or wrong to make a profit from a forest. They would have us believe state government can continue to spend \$2,000 to \$3,000 per acre to restore cedar forests at the taxpayers expense when in fact, if the forest were allowed to, it would pay for its own stewardship ten fold.

Many forest restoration projects are going to be expensive. We now see the hundreds of millions of taxpayers dollars spent in our western forests to thin the forest and return them to a fire-safe condition. In addition, we see a growing interest from wildlife biologists in restoring active forest management for ecological objectives. Yet there is little thought or effort given to the economics of the forest that clearly would pay for all of our forest's stewardship needs.

Spending hundreds of thousands of dollars to restore an Atlantic white cedar swamp (in the middle of fire excluded pitch pine forests that insure the cedar will burn some day without consideration for the management of the adjacent forestlands) makes no sense. And we see this approach to sustaining our forests all over North America.

VOICE FROM THE PAST

As far back as 1931, a senior silviculturalist with the Appalachian Experiment Station, C.F. Korstian, prepared a technical bulletin that laid out the future for Atlantic white cedar. He stated that in 1931 unusually large boards of high quality and clear of defect sold for \$250/thousand board feet. In 1931! Seventy-seven years later, we are still studying this species when we know what is needed — forest management and logging.

Atlantic white cedar provides an economic model that ensures landowner's profitability and restoration of a critically imperiled forest ecosystem. Yet, in today's wood markets, Eastern society would rather import Western red cedar or Alaskan yellow cedar to the east coast to satisfy its need for cedar lumber products.

Landowners in New Jersey who wish to manage and sustain vital cedar forests for watersheds and important wildlife habitat as is the case with New Jersey's large cranberry farms, struggle to sell their cedar stumpage due to the lack of viable markets. Potential markets struggle to commit to buying cedar in concern for a longer-term supply. It's the chicken-or-the-egg syndrome. The supply and stumpage is here, but the forest just needs a more sustainable market.

Schaier's Mill presently sells products in a 40 to 50 mile radius of Atlantic County, New Jersey. The mill only cuts around 300,000 board feet of timber annually. They do their own logging with a cut-to-length system. Their Valmet Harvester allows for utilization of the tops and slash as temporary corduroy road material, since cedar is cut in swamps of muck soil. The roads are further enhanced with slab material from the mill from time to time. To further subsidize the operation, hardwood that is suppressing cedar regeneration is harvested for the local firewood market.

There are those that would like to see New Jersey's last cedar mill fade into the sunset. They would then push for government grants to restore the mill as a historical artifact to enable school children to see the historical cultural history of southern New Jersey. Of course this is ludicrous. We need to support existing local forest industries and their return to areas where they have been forced out of business throughout the United States. Children need to be able to visit working mills and working forests to truly appreciate their importance in their daily lives. As the greening of America explodes, the catch phrase "Think globally, act locally" actually does mean something. Encouraging the use of local forest products is, in fact, the "green" thing to do. But it depends on whose green you are speaking about.

One small sawmill, against all odds in southern New Jersey is leading the way by example. The only wood sawn in this mill, is wood that comes from lands that have stewardship approvals and all state and local forestry permits.

This is a historical mill that now provides as example for sustaining critically-important forest ecosystems, perpetuating cultural and historical uses, providing jobs and economic opportunities and profits from trees to landowners —all while truly reducing wood's carbon imprint.

Schaier Brother's Sawmill provides an example to all throughout North America who are struggling to steward and manage their local forest resources. "Perfect Together, Forest Ecosystems and Forest Industry"—the only answer to sustainability on all levels.

EDITOR'S NOTE: BOB WILLIAMS, C.F., R.P.F., CERTIFIED FORESTER, RESIDES IN GLASSBORO, NEW JERSEY. BOB@LANDDIMENSIONS.COM

