LIVING LANDS

Helping Land Trusts Conserve Biodiversity



Case Study #3

Land Trust for the Little Tennessee: Integrated Watershed Management

Project Summary: The Land Trust for the Little Tennessee promotes active stewardship of land, both for restoration and maintenance of ecosystem integrity and for providing goods and services desired by landowners and society.

Regional Setting: The upper Little Tennessee River basin lies in the heart of the Southern Blue Ridge Mountains in North Carolina, with a relatively intact rural landscape surrounded by a "green infrastructure" of public lands. Yet several of the nation's most sprawling metropolitan areas are located within a half-day's drive.

Land Trust Mission: The Land Trust for the Little Tennessee is dedicated to conserving the waters, forests, farms and heritage of the Upper Little Tennessee and Hiwassee River valleys. It works in partnership with private landowners, public agencies and others to conserve land, ensuring that the natural beauty, ecological integrity, and rural character of the region are preserved for generations to come.

Service Area: Southwest North Carolina, Northeast Georgia.

Contact: Paul J. Carlson, Executive Director P.O. Box 1148, Franklin, NC 28744-1148

Phone: 828-524-2711 E-mail: pcarlson@ltlt.org

Website: www.ltlt.org

Biodiversity Values

The Southern Blue Ridge is one of three major ecoregions that make up the southern Appalachian Mountains and is one of the most biologically diverse regions in the United States. With nearly 3,000 species of plant life alone, the Southern Blue Ridge is home to more native tree species than any other temperate region on earth. Habitats range from warm sheltered valleys to the highest mountain ranges of the eastern United States. The landscape harbors species of both tropical and boreal origins. Its streams and rivers are world renowned for their aquatic diversity,



supporting a broad array of fish, mussels, snails and crayfish. Much of this diversity depends on the high quality of water that flows out of the mountains.

Conservation Strategy

In 2003, with the support of the Doris Duke Charitable Foundation, the National Forest Foundation and others, the land trust completed a conservation assessment and strategy for the upper Little Tennessee River basin. The strategy identified natural and cultural heritage resources, conservation priorities and threats, and a strategic framework for conservation.

Landscape elements identified as conservation priorities include: rivers, riparian lands and floodplains, imperiled species and rare natural communities, archaeological and historic sites, working farms and forests, and ecological corridors and gradients.

Identified threats include: incompatible development practices, non-native invasive species, poor forestry and farming practices, air pollution and climate change.

Conservation strategies include: rural land protection, habitat restoration and stewardship, research and monitoring, outreach and education, partnerships and capacity building and policy development.

livinglands@defenders.org

202-682-9400 x126

www.defenders.org/livinglands



Living Lands is a collaboration between Defenders of Wildlife and the Land Trust Alliance, to support and increase the capacity of the land trust community to conserve biodiversity on private lands through financial and technical assistance.

Living Lands Case Study #3

Land Stewardship Strategies

Preserving the Little Tennessee River Corridor

A major focus of the Land Trust for the Little Tennessee's conservation work is on the Little Tennessee River corridor. A 100-year flood event caused by Hurricane Ivan in September 2004 damaged floodplain residential areas and provided a stark reminder of the need to preserve these bottomlands as open space. In addition to river corridor protection through easements and fee acquisition, the land trust is actively involved in the restoration and stewardship of these bottomlands, including stabilizing eroding streambanks, establishing forested riparian buffers, restoring wetland habitats and controlling invasive plants. Major funding partners include the North Carolina Clean Water Management Trust Fund, the U.S. Fish and Wildlife Service and the National Fish and Wildlife Foundation.

Along the River: Farming as a Landscape Strategy

The Little Tennessee River valley harbors a rural landscape of farmlands that have sustained agriculture for more than 4,000 years. The Land Trust for the Little Tennessee believes that farming can coexist with clean water, rare species, and native fish and wildlife habitat. The land trust has brought hay management back to portions of its riverside acquisitions. There is no soil erosion on a well-maintained hayfield and, at different stages of growth, hayfields provide useful bird habitat. Although the land trust works to restore wetland habitats and riparian buffers wherever possible, agricultural management is a cost-effective way to maintain floodplain lands and open space. Working farm conservation easements help extend this approach to other private lands.

In the Uplands: Forestry as a Landscape Strategy

Like farming in the bottomlands, another strategy of the Land Trust for the Little Tennessee is to provide support for sustainable forest management as an economic alternative to inappropriate private land development in headwater forests. The land trust joined with Western Carolina University, Duke University, The Conservation Fund and the Region A Council of Governments for this innovative partnership. A student intern program at Western Carolina University provides assistance to private landowners, leading to a network of research and demonstration sites and often to working forest conservation easements on their properties. The National Forest Foundation and the Doris Duke Charitable Foundation have been key supporters.

River Cane and Other Indigenous Plant Communities

River cane brakes once occupied large sections of southeastern United States river valleys, including large expanses of the Little Tennessee. Cane was likely the most important economic



Photo above: Cherokee students harvest native river cane.

plant for the Cherokee Indians, who traditionally lived near rivers. Cane created a unique natural habitat which has largely disappeared over the past century. With support from the Cherokee Preservation Foundation, the Little Tennessee Land Trust has begun a program

for propagation and management of cane and other traditionallyused plants, such as butternut and white oak, as part of its bottomland stewardship program. Meanwhile, the Cherokee's Qualla Arts & Crafts Cooperative is reviving artisan skills which use these plants as raw materials. Over time, these plants of powerful historical and cultural significance can again become an important component of the region's natural bottomland plant communities.

Looking Ahead

As the Land Trust for the Little Tennessee and its partners gain field experience and establish demonstration sites, its education and outreach program is reaching out to private landowners. By tapping into its own membership, interns and service organizations, the land trust is building a volunteer stewardship network that maintains these habitat management and restoration practices on the land trust's lands and helps expand them to neighboring lands.

For More Information

RIVER CORRIDOR

- North Carolina Clean Water Management Trust Fund: <u>www.cwmtf.net</u>
- National Fish and Wildlife Foundation: www.nfwf.org
- U.S. Fish and Wildlife Service: www.fws.gov/habitat

FARMING

 Natural Resources Conservation Service: <u>www.nrcs.usda.gov/programs</u>

FORESTRY

 Land Trust for the Little Tennessee: <u>www.ltlt.org/forestry.html</u>

RIVER CANE

• Revitalization of Traditional Cherokee Artisan Resources: www.rtcar.org