
RTI News

Fall 2005

Newsletter of the Rural Technology Initiative

Volume 6, No. 1



RTI Director's Notes

In 2000, RTI was created as a pilot project with the objective of making technology more accessible to rural timber communities. With new and more complex environmental regulations, there was a growing concern whether small forest landowners and forestry-based communities could stay economically viable without access to technology that could help them.

By providing technology tools, workshops, publications, presentations, and electronic delivery, RTI has helped rural communities find sustainable forestry solutions and has provided better information for those developing policy. RTI was recognized with an award for major contributions to the education of family forest landowners and received a positive recommendation by a federal review group that we were having a unique impact and should regionalize our effort outside of Washington.

Unfortunately, despite our successful impact, RTI was not included in the Interior Appropriation Bill for federal FY06, which would have provided funds to RTI for 2006 & 2007. The practical implication of this is that we must rapidly reduce our outreach activities. We have already had to cancel our upcoming training sessions, and this will be our last newsletter for the foreseeable future.

During this transition, WSU Extension will continue Coached Forest Stewardship Planning courses, and the Family Forest Foundation has received funding to advance the development of the family forest land parcel database. The expertise brought together for RTI will be redirected to the timber supply analysis update mandated by the 2005 Legislature.

We have already embarked on an effort to regionalize the RTI concept, as recommended by the federal review group. Our goal is to join with the universities and extension services

in Idaho, Montana, Oregon, and Alaska to get funding for technology transfer of research findings and the development of tools for more immediate implementation in the field. We are confident that we will gain the support of the other institutes in our five state region as well as many rural communities and tribal groups in each state.

The federal budgeting process has put a high priority on being able to demonstrate the effectiveness of research and the transfer of technology. In order for this new five state effort to compete for funds in FY07, **we need your help**. Your contacts with state policy makers and our federal delegation will be the key to establishing a new PNW Regional Forestry Technology Consortium modeled on RTI's successes. The voice of our rural community of users will have to be very convincing. Letters on how you and your community have benefited from RTI's efforts will make the difference. Also look on page 2 of this newsletter for how you can directly support RTI.

In the meantime, our staff continues to be involved as much as possible in various projects for the benefit of the rural communities in Washington. Kevin Zobrist reports on efforts to broaden the scope of our management template process, which has gained national attention through the National Commission on Science for Sustainable Forestry (NCSSF). Larry Mason reports on a very successful Alder Symposium that RTI co-sponsored in March. Larry also reports on the recent National Indian Timber Symposium. RTI has enjoyed working with and learning from a number of tribal foresters and had the privilege of being invited to participate in this symposium.

Thank you all for past and continued involvement in RTI. We look forward to serving and working with you in the future.

Bruce Lippke, Director

Email: rti@u.washington.edu

(206) 616-3218



Management Templates for Biodiversity and Economics in Intensively Managed Private Forests

In 2004 RTI was awarded a grant by the National Commission on Science for Sustainable Forestry (NCSSF) to investigate management templates for combining biodiversity targets with favorable economics in intensively managed private forests. Intensively managed private forests are being increasingly called upon to play a larger role in meeting habitat and biodiversity goals. These forests can potentially make significant contributions to such goals, but forest owners are also sensitive to economic performance and are often under pressure to convert to more profitable land uses. A key challenge for sustainable management of these forests is balancing goals to support increased biodiversity and other ecological functions with the long-term socio-economic benefits derived from harvest activities.

RTI has developed a framework for creating management "templates" that provide specific but flexible guidelines to help forest managers successfully integrate achievement of ecological and economic goals. This framework begins with identifying a stand structure associated with ecological goals. A reference dataset is then established using forest inventory data from stands that are representative of the desired

structure. A statistical targeting and assessment procedure developed by RTI can then be used to test whether or not a stand is structurally similar to the reference dataset. This is a robust procedure that utilizes multiple stand attributes, such as stand density and average diameter, and incorporates natural variability. Finally, with the help of forestry modeling software like the Landscape Management System (LMS), potential management pathways can be projected over time and compared against the structure target as well as economic performance metrics to identify strategies that balance these objectives.

The RTI template framework was initially developed as a tool to provide scientific support for creating alternate plan templates for riparian areas in Washington. The Forests and Fish Rules (FFR) were enacted in Washington to provide greater protection for riparian areas. These rules prescribe general riparian harvest restrictions, but they also include provisions for site-specific alternate plans that can be customized to achieve riparian protection while ensuring economic viability. Templates are needed to streamline the alternate plan process for common situations.

The desired riparian forest structure prescribed by the FFR is that of a mature, unmanaged riparian forest, characterized by large conifers to provide shade, large woody debris

continued on next page

RTI has been primarily funded by a federal grant which has been substantially leveraged by the staff being able to raise additional competitive grant funds that are complementary to the RTI mission. The risk is that even a temporary loss in the base funding also constrains our ability to compete for other projects. If we successfully raise a development pool of funds to provide a rainy day fund bridge to the future when other funds are short we will be able to continue to provide services to rural communities and compete for projects that are supportive. Based on years of experience in directing other centers I can attest to the importance of having a rainy day fund for tough times. The long term success of RTI requires a reserve for bridge finance given the loss in our primary federal grant. Your donations to RTI can make a major difference to our ability to continue. -Bruce Lipke, RTI Director

Yes I want to support RTI! Enclosed is my tax-deductible gift.

\$250 \$100 \$75 \$50 \$25 Other \$ _____

Name: _____

Address: _____

City: _____

State: _____ Zip: _____

Card Type:			
Name on Card:	_____		
Card Number:	_____		
Expiration Date:	Month ___ Yr. _____		

Please make checks payable to UW Foundation. Thank you!

Mail a check to:

University of Washington Office of Annual Giving

Box 358240

Seattle, Washington 98195-8240

Or Call 1-877-UW-GIFTS (877-894-4387) toll-free.

“Management Templates” continued from previous page

recruitment, and other functions. Young, dense Douglas-fir stands are a common situation for which an alternate plan would be appropriate. Under the default prescriptions, thinning in riparian zones is often not allowed or not economical. The absence of thinning in young, dense stands can delay or preclude the development of the desired mature forest structure, and the economic impacts of the harvest restrictions can be significant for many landowners. Using the framework described above, RTI developed a draft template that utilizes repeated, heavy thinnings to accelerate the development of the desired mature forest structure in the riparian zone while also providing economic returns for the landowner.

With the support of the NCSSF grant, the riparian template was further developed and tested and was shown to achieve good results under a range of conditions. The applicability of templates for other regions and management issues was then examined, recognizing that the overall framework was not limited to riparian management in the Pacific Northwest but could be applied to other management issues and other regions. To demonstrate the application for another region, an example management template was developed for supporting increased biodiversity in intensively managed loblolly pine plantations in the South.

In southern forests, an open, park-like structure that supports a rich, herbaceous understory is desirable for biodiversity. This type of structure is characteristic of the fire-maintained longleaf pine forests that were prevalent throughout the South in pre-settlement times. Using a reference dataset representative of these conditions, a template was created that utilizes early and frequent thinning and prescribed burning over a 55-year sawtimber rotation. Projections of this template show it to be successful at achieving the desired stand structure. The rotation is longer than is typically the case in the South and while economic returns are not maximized, they appear to be fairly competitive, providing a reasonable balance of objectives. Low current pulp prices make production of higher-valued products over longer rotations more desirable, and increased opportunities for supplemental income from hunting leases may further offset costs.

The example southern template demonstrates that the RTI template framework can indeed be successfully applied in other regions. This framework shows promise as a proactive approach to managing forests for multiple objectives in a way that minimizes economic impacts, management complexity, and the potential for unintended consequences.

The complete report on this study can be found in RTI Working Paper #5, which is available on the RTI website (<http://www.ruraltech.org/pubs/working/ncssf/index.asp>) or as a hard copy upon request. Fact Sheets on the southern template are available as well (RTI Fact Sheets #37 and #38). Also available is a streaming video version of a presentation

that was given in Washington, D.C. to several groups, including the NCSSF Applications Workshop, staff for the House Committee on Resources, Forests and Forest Health, and the USDA Forest Service (http://www.ruraltech.org/video/2005/ncssf_templates/).

- Kevin W. Zobrist, RTI Staff -

The International Alder Symposium

Once considered a weed, red alder is increasingly recognized as a premium commercial species unique to the Pacific Northwest. This tree species has proven to be a renewable resource that when manufactured into high quality products can be an attractive and affordable alternative to exotic hardwoods from endangered tropical rainforests. The rising price of alder logs is testimony to the market's recognition of its product value. Scientists now know that alder also provides very important contributions to the health of forest ecosystems by contributing nitrogen to soils and organic matter to streams. It is no wonder that forest managers now regard alder in a new light. Yet regional changes that are affecting red alder management and utilization, including advances in our understanding of ecology and silviculture, market and non-market values, and the management implications of current regulations may not be broadly understood.



More than 170 people from the U.S. and Canada attended the International Alder Symposium at the University of Washington March 23-25, 2005.

On March 23-25, 2005, the University of Washington, College of Forest Resources hosted the fourth symposium on red alder. Previous symposiums were held in 1967, 1977, and 1992. The International Alder Symposium brought together regional experts for a critical examination of the economic, ecological, and social values of red alder. The conference was attended by more 170 people including representatives from educational and research institutions, government agencies, private industry and interested members of the public from the U. S. and Canada. Activities

included a one day field trip to view an alder saw mill and alder plantations and two days of presentations and discussion.

The Rural Technology Initiative has created streaming videos of all 45 presentations that are available on the web for viewing at http://www.ruraltech.org/video/2005/alder_symposium/index.asp. A special video that is also available entitled *Western Alder: It's worth more than you may think* was created by Dr. Grant Sharpe and Dr. Laury Istvan and features historical images and chronicles the evolution of knowledge and opinion in regards red alder. The entire proceedings from the Alder Symposium are also available on DVD-ROM for a \$10 handling fee. To order, contact Clara Burnett at RTI office at (206) 543-0827 or clara75@u.washington.edu.

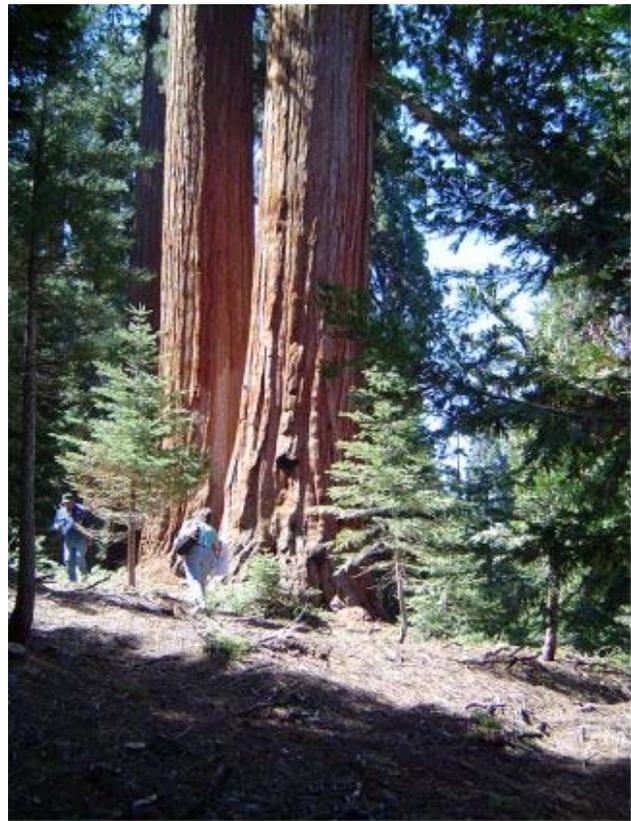
- Larry Mason, RTI Project Coordinator -

The Twenty-Ninth Annual National Indian Timber Symposium

The National Indian Timber Symposium is an annual conference that brings together tribal and BIA foresters from throughout the nation to discuss current issues that affect forest resource management in Indian Country. The 2005 meeting was held on June 6-9 in Visalia, California and was attended by representatives of 59 tribes and tribal organizations that manage timber. The symposium is organized by the Intertribal Timber Council (ITC), which was established in 1976 to provide a forum for promoting sound management of natural resources and tribal enterprises to sustain Indian forests and dependent economies in accordance with tribal goals and objectives. Each year the symposium is hosted by a different tribe in a different location. This year the Tule River Indian Tribe was the host. The Tule River Indian Reservation, most of which is mountainous terrain, comprises approximately 48,000 acres east of Porterville, CA, in the foothills of the Sierras. Tule River is the only reservation in the United States that has Sequoia trees on its land. The people of Tule River graciously welcomed symposium attendees and hosted a tour of their forestlands followed by a dinner with performances by traditional drummers, dancers, and singers. The primary objective of Tule River forest management is the removal of understory trees to reduce fire risk to Sequoias while creating jobs and generating revenue for the tribe.

The theme of the 2005 Indian Timber Symposium was "Tribal Forest Resource Protection: Threats and Solutions". Presentations included talks on invasive species, utilization of small diameter timber, biomass-to-energy from wood fiber, forest fire issues, stewardship contracting, tribal stumpage, tribal enterprises, and more. Each year high-achieving Native American students are awarded scholarships from the Truman D. Picard Scholarship Fund to further their educations in natural resource management. This year 14 students received awards.

4



Giant Sequoias on the Tule River Indian Reservation

RTI staff members Kevin Ceder and Larry Mason presented an introductory short course on the use of the Landscape Management System (LMS) with tribal and BIA forest managers attending from the Warm Springs, the Yakama, the Menomonee, the Salish Kootenai, the Leech Lake Band of Ojibwe, and the Stockbridge-Munsee Community. This is the second year that RTI has had the honor of being invited to contribute to this important symposium, and we are grateful to have been asked to participate again in next year's symposium, hosted by the Tanana Chiefs Conference in Fairbanks, AK (June 5-8, 2006). More information regarding the symposium and Indian forest management is available from the Intertribal Timber Council website: <http://www.itcnet.org/>.

- Larry Mason, RTI Project Coordinator -

Forest Management in Indian Country

Since the Rural Technology Initiative was established in 2000, RTI staff members have had the privilege of working with many outstanding professional foresters from tribal natural resource programs and the Bureau of Indian Affairs towards meeting the technology transfer needs that are unique to Indian country. For me this has been an opportunity to renew old friendships, make new acquaintances, and learn a tremendous amount about the complexities of sustainable forestry on Native American lands. The hurdles faced by tribal

continued on next page

resource managers are on one hand different from those faced by other private and public foresters, but on the other hand can be viewed as a microcosm of larger societal challenges replete with a diversity of opinions about how forests should be managed. Yet tribal managers are uniquely accountable, as tribal members rely on the management of their forests for employment, economic development, cultural resources, and healthy ecosystems. There is much to be learned from an examination of tribal forest enterprises in the United States and especially the Northwest where Indian nations have become a significant component of the forest industry infrastructure.

There are approximately 18.5 million acres of Indian forestlands on 287 reservations held in trust by the United States. The Northwest region has the most productive tribal forests. In 2001, tribal forests in the Northwest accounted for more than 67% of the timber volume and more than 72% of the revenue generated from harvests on all Indian forests in the United States. Indian harvests in the Northwest have remained stable at just under 400 MMBF/year (an annual harvest volume close to that of the Washington Department of Natural Resources).

In contrast to current divestiture of forestland assets by many industrial forestland owners, tribes are increasing reservation forests through purchases of allotments and non-Indian lands and by reclamation of tribal titles. During the decade from 1991 to 2001, tribal forestland acreage increased in the United States by 2.1 million acres.

In addition to expanding their forest holdings, some tribes have been investing in timber manufacturing enterprises. For example, in Washington State, the Confederated Tribes of the Colville Reservation operate a saw mill and a veneer plant which currently provide 300 jobs, 80% of which are held by Indians. The Yakama Nation operates two sawmills with 320 employees, 92% of which are Indian. The economic multipliers of Indian forest enterprises in Washington ripple throughout the state with substantial benefits for both native and non-native publics.

If sustainability is to be the national goal for forestry in the 21st century, Native American successes in forest management could provide valuable insight on how to move beyond the resource conflicts of the last century.

Next month, a special issue of Evergreen Magazine, created in partnership with the Intertribal Timber Council, will be dedicated to Indian forestry in America. With articles provided by 22 scientists and forestry professionals, this 80-page report will be a valuable contribution to the literature on forestry in Indian Country. For more information, contact Evergreen Magazine: www.evergreenmagazine.com or (406) 837-0966.

- Larry Mason, RTI Project Coordinator -

Education website for forest and range landowners

The National Learning Center for Private Forest and Range Landowners is a nationwide initiative providing web-based education to landowners about sustainable natural resource management. Through a free and easy to use website, www.forestandrange.org, landowners from around the nation have access to interactive modules and other activities where they can find valuable information to help them manage their natural resources in a more efficient and sustainable manner. Topics currently include forest management, range management, wildlife management, estate planning, post-fire restoration, and others. The site is frequently updated with new topics. RTI will be contributing a learning module on forest finance in the spring of 2006.



www.forestandrange.org



Upcoming Events



Notice

Due to the loss of funding for the RTI training program, all LMS, GIS, and GPS trainings have been cancelled through 2006

Oct 11 - Dec 6, 2005

Forest Stewardship Coached Planning Shortcourse
Stanwood, WA

For registration/information contact Andy Perleberg, WSU Extension, at (360) 428-4270 or andy@wsu.edu

December 3, 2005

2005 Fall Forestry Education Seminar: Introduction to Small-Scale Forestry Equipment
Pack Forest, Eatonville, WA

For registration information contact Donna Loucks, Lewis County Farm Forestry Association, at 360-736-2147 or loucksd@localaccess.com

Readers may send comments to:

Editor, RTI News
Rural Technology Initiative
Box 352100
Seattle, WA 98195-2100
Phone: 206-543-0827
email: rtinews@u.washington.edu

RTI is in cooperation with:



University of Washington
College of Forest Resources



USDA Forest Service
State & Private Forestry

RTI on-line!
www.ruraltech.org

University of Washington
Rural Technology Initiative
College of Forest Resources
Box 352100
Seattle, WA 98195-2100
Return Service Requested