

Forestry Extension Summer 2014 Highlights

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Wood Energy Futures? Participating in the recent *Northwest Wood Energy Forum* (Stevenson, Washington, May 6-8, 2014) provided me with an update on the wood energy scene and it motivated me to do some more research on the topic.

Utilization of wood for energy plays an important but uncertain role in forestry, both globally and locally. More than half of the global wood supply is still used for fuel. Wood is the most abundant renewable energy source, comprising 9% of total world energy use (wood-energy is only 2.2% of U.S. energy use). Many people envision increasing use of renewable bio-energy as key to energy independence and reduced fossil fuel consumption. But uncertainty arises from the continuing debate over how to account for CO₂ emissions—termed “biogenic” CO₂—from wood and other biological energy sources. Currently, policies on wood-energy and greenhouse gas emissions vary widely between countries.

Policies that favor wood and other bio-fuels over fossil fuels in Europe and Canada are stimulating great increases in production and sales of wood fuels (pellets, charcoal, compressed wood bricks, etc.). Pellet exports from the U.S. to Europe have

increased steadily for over ten years and doubled in the past two years. Wood fuel is excluded from a carbon tax in British Columbia, which makes it possible to profitably substitute wood for fossil fuel in industrial processes. Meanwhile, we await a decision on U.S. policy and regulations as the U.S. Environmental Protection Agency is considering an *Accounting Framework for Biogenic CO₂ Emissions*. How much will the U.S. *Accounting Framework* favor wood as a source of renewable energy compared to other energy sources? For that matter, how will the rules change in other countries?

National and international carbon policies will greatly impact forest-based enterprises via their effect on the wood-fuel component. Sawmills and plywood mills depend on utilization of mill-residues and lower-value pieces coming out the end of the process to keep the mill going. In the woods, our options to thin out small diameter trees or reduce hazardous fuels depend on markets (or extra funding) to remove and transport low-value material. Improvements in both processes and markets for utilizing wood energy have potential to maintain or expand forest management options; to provide positive outcomes in the triple bottom line of environment, society, and economy.

For now, low-cost hydropower and natural gas keep wood-energy on the back burner in the Pacific Northwest.

Regardless of the policy debate, scientists and entrepreneurs are developing some great processes and products for improved utilization of wood. These include refinement of tried and true materials such as wood pellets, wood bricks, and charcoal and highly efficient capture of energy from these. There is a great new variety of liquid fuels from ethanol to bio-diesel to jet-fuel. And there is a growing list of innovative renewable materials including bio-plastics, composites, and myriad useful chemicals. I think this is progress and I am glad for the chance to participate as part of the OSU team.

Specialty Wood Market Potential—Focusing on the high end of the wood marketplace, we are moving forward with the assessment of *Specialty Wood Market Potential* for woodland owners in Clackamas County. I am conducting the assessment in collaboration with Chris Knowles (Extension Specialist) and Alyson Wade (graduate student) and at the OSU Wood Innovation Center. Alyson will be focusing her effort on this project in order to 1) Conduct the assessment of niche and specialty wood market potential for Clackamas County woodland owners this summer; and 2) Organize and coordinate a “Clackamas Goods from the Woods Fair” for niche and specialty wood products, producers, and consumers (November 22 at the Clacka-

mas County Event Center in Canby). Outcomes of the Woods Fair itself will contribute to the assessment of producers, consumers, and market interest.

The project will include a summary of

- woodland owner timber inventory,
- potential products,
- landowner interests in niche marketing,
- manufacturer interests and capacity, and
- specific recommendations for future local and regional economic development supporting niche and specialty wood enterprises.

If you are interested in sharing your knowledge, experience, or perspectives on any of the above please contact me at glenn.ahrens@oregonstate.edu or 503-655-8631 to get involved in the assessment.

Hopkins Demonstration Forest Summer Programs—our Hopkins Forest Educator, Peter Matzka will continue running the education programs at Hopkins Demonstration Forest through the summer. After working with many school groups this spring, summer activities will switch to focus on teacher education, monitoring and maintenance of demonstration areas, and woodland owner programs. Forest road work will be featured at the June 19 workshop on *Managing Woodland Roads*. Opportunities for participation continue with the monthly *Community Forest Work Days* will be June 14, July 12, August 2, and September 13.

Peter has designed a new version of the Hopkins *Teachers in the Woods* program for teacher education this summer. The *Hopkins Forest-TREE Institute* (FTI) will engage educators in authentic forestry experiences so they can better include forest-related contexts in their teaching. The FTI experience is hands-on and project-centered. Participants will learn by doing forestry in order to develop cur-

riculum connections that can be applied in classroom and/or field studies with a focus on Science, Technology, Engineering, Art, and Math. The desired outcome is that participants incorporate their forestry experiences into their teaching, including field studies at Hopkins Demonstration Forest (or other similar facilities), and share their experiences and resources with colleagues and the community. Teachers can choose either a 4-week intensive course or a 4-day short course. Both options will cover forest management, ecology, wildlife, and measurements. Please encourage any teachers you know to consider this experience at Hopkins Forest.

Another part of the job at Hopkins later this summer will be to prepare for the 2nd annual *Hopkins Forest of Arts* event, scheduled for October 4-5, 2014. Last year we had about 800 people participating and we hope to do more this year. This event is a “collaboration to bring together art, music, and environment in a stunning natural setting” and in the process expose a wide variety of people to a working family forest. Forest of Arts features artists displaying, demonstrating, and selling sculpture, paintings, jewelry, woodwork and more; Family friendly, hands-on crafts and demonstrations; Performances, interactive displays, painting, music, and forest tours.

Pacific Logging Congress—we are gearing up for an outstanding *In the*

Woods Show, demonstrating the latest in forest harvesting and management technology at the *Pacific Logging Congress*, hosted by Port Blakely Tree Farms on September 25-26, 2014.

Do you like to see students learning in the woods? Would you like to spend a few hours helping students learn about forest management or watching an active logging operation? If your answer is, “YES”, we need your help! The Pacific Logging Congress’ *In the Woods Show* is coming this fall, to Port Blakely’s Molalla Tree Farm (Clackamas County). The Pacific Logging Congress happens once every four years.

Over three thousand fourth-through 12th-graders are expected at the September 25-26 event. These students will see the most high-tech, environmentally advanced logging methods available. Various forestry organizations and associations are hosting education stations for students to learn about the science, practices and stewardship of forestry. We need volunteers to guide student groups along the trail.

OSU Extension Forestry is organizing a community leader’s tour and also coordinating volunteers to teach thousands of young students and other public participants about forest management. If you are interested in helping, please contact me at glenn.ahrens@oregonstate.edu or 503-655-8631 or Julie Woodward at Woodward@ofri.org or 503-807-1614. ■