

# Western Forester

January/February 2007

Oregon • Washington State • Inland Empire • Alaska Societies

Volume 52 • Number 1

## Urban and Community Forestry—Forestry's Final Frontier

BY PAUL D. RIES AND  
SARAH GRIFFITH

To many traditional foresters, the concept of the urban forest may seem a bit oxymoronic—a contradiction in terms. After all, how can there be a forest in a city? Can the individual trees or small stands of trees in developed areas really be considered a forest, and if so, can they be managed like one?



Paul Ries



Sarah Griffith

These are some of the questions that are raised by the terms "urban forest" or "urban forestry." First coined in the 1960s, and integrated into federal policy in the 1970s, urban forestry has become established in all 50 states and across the globe. Yet there are still a great many resource professionals, including foresters, who have difficulty putting urban forestry into context of their own profession. A closer examination of urban forestry reveals that it isn't as separate from traditional forestry as one might think.

### The Urban Forest and the Rural Forest—Two Sides of the Same Coin

So how do we define the urban forest, and more importantly, how do we manage it? The urban forest consists of the planted landscape and native forest remnants left behind, intention-



PHOTO COURTESY OF PAUL RIES, ODF

**Urban forestry means managing the forests where we live so that cities can reap the economic, environmental and social benefits trees provide.**

ally or unintentionally, as our cities developed. Because people who live in smaller communities don't think of their environs as "urban," the term "community forest" is widely used to apply to the trees in smaller cities. Urban forest and community forest are often used as interchangeable terms. Likewise, the practice of managing the trees in cities is often referred to as "community forestry." In practice, the urban forest consists of the trees and related vegetation inside our urban growth boundaries. This isn't the distant forest where we go away to recreate, or seek solitude, or the forest from which we derive our valuable wood products. It isn't the forest where we go to visit; it is the forest where we live. Ultimately, urban forestry, the art and

science of managing the trees around us, means not only managing trees, but managing the relationship people have with trees.

The urban forest is managed in a manner that isn't unlike how a rural forest is managed (see sidebar on page 5). There are landowner objectives to consider, a road system to maintain, stand improvement considerations, forest health issues to address and user conflicts to mediate. Forestry tools such as inventories, management plans, GPS units and GIS maps are all equally applicable to urban forestry. Some foresters think that trees in cities are just trees; but in reality, there is an entire green ecosystem inside the city limits that can and

(CONTINUED ON PAGE 2)

## Urban and Community Forestry

(CONTINUED FROM FRONT PAGE)

should be managed as a system—or in other words, as a forest.

Some people still consider the urban forest and the rural forest to be two distinct entities. Such a view is clearly contradictory to an ecosystem approach to resource management. A more appropriate approach would be to view the urban forest and the rural forest as an inextricably linked ecosystem, or as Dr. Gordon Bradley of the

University of Washington calls it, a continuum. If we take an ecosystem or continuum approach, we begin to understand that the connectivity of these two forests is the on-the-ground reality that land managers deal with. Most foresters will tell you that they've never met a wildfire that automatically stops at the urban growth boundary or an insect that can read the city limits sign. Many salmon-bearing streams pass through urban areas on their way to the Columbia River or the Pacific Ocean. Pat McElroy, retired Washington State forester, likes to say

that "every faucet is connected to a forest." And he doesn't mean just a rural forest. From a management perspective, we can provide incentives to rural forest landowners to plant trees for water quality and we can regulate timber harvesting to provide stream buffers to lower water temperatures, but then we can undermine those incentives and regulations the minute that stream enters the urban growth boundary. If we allow urban homeowners to dump waste like used motor oil in storm sewers, or grow grass laden with lawn chemicals right down to the streamside, we can negate the habitat enhancements made on the rural side of the equation.

### Why Urban Forestry is Important to Forestry

Why should traditional foresters even care about urban forestry? One perspective is that urban forestry represents forestry's final frontier. In the late 1800s, when Gifford Pinchot was founding the Society of American Foresters, shepherding the establishment of the National Forest System, and fathering the USDA Forest Service, the United States was a largely rural nation. In the ensuing 100 years, we became first an urban nation, and then a suburban one. At the turn of the 20th century, the American West was the frontier for the professional of forestry. It was where new concepts were tried, where new coalitions were formed and where society connected with the land. Fast forward to the turn of the 21st century, and that frontier is now in and around our cities. The challenges of the wildland-urban interface include growth management, hazard trees, watershed protection, green infrastructure and a host of other complex natural resource concerns.

One of the primary reasons that urban forestry represents forestry's final frontier is population. The west, and the states of Oregon and Washington in particular, leads the entire United States in population growth since 1990. And most of those new residents moved to urban areas, not rural ones. When the Oregon Department of Forestry was founded in 1911, the state's population distribution was 42 percent urban and

## LOGGING ENGINEERING INTERNATIONAL, INC.

- Road layout and design
- Culvert and fish passage design
- Environmental, operational, and cost audits
- Logging and transportation plans
- Timber sale preparation/marketing/administration

**Greg J. Zartman, P.E.**

(541) 683-8383

Fax: (541) 683-8144

www.leiinc.com

1243 West 7th Ave.

Eugene, Oregon 97402



## Western Forester

Society of American Foresters

4033 S.W. Canyon Rd. • Portland, OR 97221 • 503-224-8046 • FAX 503-226-2515  
rasor@safnwo.org • michele@safnwo.org • www.forestry.org/wf

**Editor:** Lori Rasor • **Assistant:** Michele Docy

*Western Forester* is published bimonthly by the  
Oregon and Washington State Societies' Northwest Office

### State Society Chairs

**Oregon:** John Prendergast, 1965 Dale St., Medford, OR 97501; 541-618-2278; john\_prendergast@blm.gov

**Washington State:** Doug Rushton, CF, 2726-26th Ave. NE, Olympia, WA 98506-2909; 360-357-8554 (h); 360-407-6513 (o); rushton@scattercreek.com (h); drus461@ecy.wa.gov (o)

**Inland Empire:** Phil Anderson, CF, 815 S. Josephine Rd., Kettle Falls, WA 99141-9664; 509-738-3133; jkanderson@plix.com

**Alaska:** Jim LaBau, CF, 2951 Admiralty Bay Dr., Anchorage, AK 99515; 907-344-1018; fax 907-344-0915; jimlabau2@cs.com

### Northwest Council Members

**District I:** Kirk David, 3780 Industrial Avenue South, Coeur d'Alene, ID 83815-8918; 208-666-8626; fax 208-769-1524; kdavid@idl.idaho.gov

**District II:** Rick Barnes, 3000 Stewart Parkway, Suite 204, Roseburg, OR 97470; 541-673-1208; rbarnes@barnesinc.com

Please send change of address to:

Society of American Foresters

5400 Grosvenor Lane

Bethesda, MD 20814

301-897-8720

Anyone is at liberty to make fair use of the material in this publication. To reprint or make multiple reproductions, permission must be obtained from the editor. Proper notice of copyright and credit to the *Western Forester* must appear on all copies made. Permission is granted to quote from the *Western Forester* if the customary acknowledgement accompanies the quote.

Other than general editing, the articles appearing in this publication have not been peer reviewed for technical accuracy. The individual authors are primarily responsible for the content and opinions expressed herein.

## Next Issue: Ecosystem Services



58 percent rural. Today, that population split is 78 percent urban and 22 percent rural. The population split in Washington State also grew significantly, from 53 percent urban/47 percent rural in 1910 to 82 percent urban/18 percent rural today. The urban and suburban residents that have migrated to the Pacific Northwest don't have the same connection to natural resources that earlier residents did. Our cities are full of people who think that lumber comes from Home Depot and milk comes from Fred Meyer; people who have lost connection to the rural land and natural resources that sustain our existence.

Water and recreation are other connections between the urban and the rural. Water quality and watershed management are universal concerns of forest management, whether urban or rural. When cities are vibrant cities with healthy urban forests, there is often less recreational pressures placed on more traditional forests. If people can have the connection to nature that they seek closer to home, there is less need to travel to the traditional/rural forests for such experiences.

Of course, land use follows popula-



PHOTO COURTESY OF PAUL RIES, ODF

**This urban stream in downtown Ashland, Oregon, provides valuable habitat, scenic beauty and a link to the rural forests beyond the city limits.**

tion, which means the Pacific Northwest isn't creating any more rural

forests—by and large those are shrinking, although by a smaller per-



## Rediscover Oregon's forests.

For information about publications, tours and other opportunities to rediscover Oregon's forests, check out our Web site at [www.oregonforests.org](http://www.oregonforests.org), or call us at 1-800-719-9195.

Learn more about:

- Forest practices
- Forest habitat and wildlife
- Fish and stream protection
- Forest protection laws
- Fire in Oregon's forests



The Oregon Legislature created the Oregon Forest Resources Institute to improve understanding of forestry and to encourage sound forest management.

centage due to strong growth management laws. The Northwest, like most of the rest of the country, is creating new urban forests every day.

### The Role of Traditional Foresters in Urban Forestry

For traditional foresters uncomfortable with the notion of urban forestry, perhaps a better label is "voter forestry." Across the Pacific Northwest, it is urban residents who hold the key to the social license to practice forestry. The urban residents of cities like Seattle, Portland, Spokane, Eugene and Boise hold sway over citizen initiatives regulating forestry, and their elected representatives hold majorities in state legislatures. If these residents don't understand the management of the trees that are literally in their own backyards, how can they be expected to understand even-aged silviculture? The sheer numbers of urban and suburban residents compared with rural residents should give traditional foresters cause to consider their role in promoting urban forestry.

Wayne Kleckner is one traditional forester who sees the value of urban forestry. Kleckner, who recently retired from a position with the Forest Service's Cottage Grove (Oregon) Ranger District, is a longtime member of the City of Cottage Grove Tree Board—a group of citizens appointed to help advise the city on tree issues. "I got involved because I had a vision

that the community, despite being forested, had a need for some expertise about how trees grow," says Kleckner. "Foresters bring basic tree knowledge that can be helpful to cities. Plus, there is more opportunity to reach people than you normally have in the forest," he adds.



PHOTO COURTESY OF FRIENDS OF TREES

**Portland's award-winning nonprofit tree planting group Friends of Trees helps school children connect with trees and forests while greening their schoolyards.**

Advising local communities with tree knowledge isn't the only role for traditional foresters to play in urban forestry. Most foresters are trained to manage complexity—and there are many complexities in maintaining the integrity of natural resources in urbanizing areas. Maintaining environmental quality while managing economic development, but still preserving social values is a vexing challenge in areas where native forest remnants coexist with newly developed landscapes. Planning, mediation, project management, community leadership and other skills that foresters have honed in the rural forest landscape can play a valuable role in transition-

ing those areas to a more developed status.

### Conclusion

At a recent Arbor Day Celebration, Washington Commissioner of Public Lands Doug Sutherland stated that, "Urban forestry is just as important as

traditional forestry, maybe even more so, in preserving our environment." One of the great policy questions of the next decade for state forestry agencies will be how to deal with an urbanizing population that puts increased pressures on traditional forest management, and puts growth pressures that inundate previously rural forested areas. Part of the success in that effort may just be how well the agencies integrate urban forestry as

a part of the bigger picture of natural resource stewardship. ♦

*Paul D. Ries manages the Urban and Community Forestry Assistance Program for the Oregon Department of Forestry and is an affiliate faculty member in the College of Forestry at Oregon State University. He can be reached at 503-945-7391 or [pries@odf.state.or.us](mailto:pries@odf.state.or.us). Sarah Griffith manages the Urban and Community Forestry Program for the Washington State Department of Natural Resources and is former chair of the Western Urban and Community Forestry Committee. She can be reached at 360-902-1704 or [sara.griffith@dnr.wa.gov](mailto:sara.griffith@dnr.wa.gov).*

## We've Got You COVERED

An environmentally friendly product that significantly improves seedling growth

- prevents unwanted weed growth
- raises soil temperature
- rainwater easily penetrates and soil freely breaths through the perforated blanket



**BRUSH  
BLANKET**

**Call Today For a Free Sample**

Arbortec Industries Ltd. 12519 Pilgrim St.  
RR#7, Mission B.C. Canada V4S 1C5  
[www.arbortec.com](http://www.arbortec.com) 1-800-422-6221



## Comparing and Contrasting Urban Forestry and Traditional Forestry

Urban Forestry		Traditional Forestry	
• Concerned with trees, shrubs and wildlife in cities/communities (Forests people LIVE WITH).		• Concerned with trees, shrubs and wildlife in rural forestlands (Forests people tend to VISIT).	
Discussion questions: What are the differences between the trees, shrubs and wildlife that exist in a human-dominated “built environment” and those in a vegetation-dominated rural environment? Does familiarity breed contempt or appreciation? Does caring for/cleaning up after trees encourage people to like trees or not to like them? What contributes toward people’s attitudes about trees in a city and in the country?			
• Trees are managed for human benefit: -shade, energy conservation, environmental benefits -increase real estate values, commercial values -important for public recreation, ecosystem health, beauty		• Trees are managed for human benefit: -pulp, timber, miscellaneous forest products -public recreation -ecosystem health	
Discussion questions: What values of trees are most important to city dwellers? How should/could these values be measured? How does this compare with valuing traditional forest precuts?			
• Relatively small acreage, mostly private ownership.		• Vast acreage, mostly public ownership.	
Discussion questions: Are trees a private resource (benefits go only to property owner), a public resource (benefits go to the public) or both? Do their resource values differ depending on who owns them? How does their perceived resource value influence how they are (could/should be) managed?			
• Provides recreational opportunities (parks, trails...).		• Provides recreational opportunities (parks, trails...).	
Discussion questions: How do we best manage the public’s use of public places? What activities are destructive of urban forests and of rural forests? How do different groups differ in their perceptions of trees, recreation, feelings of safety?			
• Provides wildlife habitat.		• Provides wildlife habitat.	
Discussion questions: How does urban wildlife differ from rural wildlife? Are “urban” animals perceived as “pests” or “pleasures?” What do people’s attitudes indicate about our expectations of living in cities, our comfort levels, our sense of territory? How do people relate to animals in rural forestlands?			
• Urban trees require periodic maintenance: -pruning for health, safety, beauty		• Forest stands require periodic maintenance: -thinning and pruning to increase timber value, improve health.	
Discussion questions: How do time periods between tree care activities differ? How are each of these resources managed for public safety?			
• Saving venerable old trees in our neighborhoods/developable areas.		• Saving old-growth forests.	
Discussion questions: Why is it important to save old trees in cities and old-growth forests? Are there times when old trees or old-growth forests should NOT be saved? What do old trees mean to our “collective psyche”? What ecological benefits do old trees in cities provide? Should public or private ownership of trees determine/influence which trees should be saved? When should public/private owners NOT be allowed to cut older trees? Who decides?			
• Tree topping (an improper, hazard-producing pruning practice).		• Clearcutting (a generally accepted, sometimes controversial timber harvesting practice for certain situations).	
Discussion questions: What do these two practices have in common and how do they differ? Does the public necessarily know the best way to be stewards of trees/forests? When, if ever, are these approaches appropriate? How do the opinions and actions of family and friends influence what people tend to believe?			
• Best served with a strategic management plan.		• Best served with a strategic management plan.	
Discussion questions: In what ways do management plans differ for urban forests compared to rural forests? What are some of the management strategies they share?			
• Primary fire hazard from power lines.		• Primary fire hazard from lightning and human activity.	
Discussion questions: Who is responsible for reducing fire hazards? What can citizens do to lessen fires hazard where they live? What should people do to reduce wildfire risk in a rural forest? Regarding tree hazards in general, how should urban tree managers determine what is acceptable risk? What would it mean to live in an environment completely free of risk?			
• Tree regulations in cities.		• Regulations from riparian protection and replanting after harvest, for example.	
Discussion questions: What makes ordinances and laws fair and effective? How do public tree regulations differ from private tree regulations in your community? As they relate to trees, how do private property rights relate to private property responsibilities? What criteria can cities/counties use to restrict the cutting of trees on private land? Are these/should these be different from city dwellers than for people who live in the country?			

# Urban Forestry and Ecosystem Services: Bellevue, Washington's Natural Resource Case Study

BY KEVIN LeCLAIR AND THE NATURAL RESOURCE MANAGEMENT TEAM INCLUDING DAN DeWALD, GEOFF BRADLEY, TOM KUYKENDALL, DON McQUILLIAMS, JIM BENNETT, BOB SCHAFFER AND CHRIS VANDALL

**B**ellevue, Washington, a city of nearly 120,000 residents located just east of Seattle, is fortunate to have a forest—*An Urban Forest*—that stretches from the shores of Lake Washington and Lake Sammamish to the foothills of the Cascade Mountains. Bellevue's urban forest is valuable. It slows storm water, protects soil from erosion, softens the rough edges of man-made structures and cleans the air. A 1999 American Forests study showed that Bellevue's forest canopy provided \$158.5 million in storm water management value and \$900,000 in pollution removal value. It also provides an ideal place for relaxation, recreation and education, as well as critical wildlife habitat. Bellevue's residents take great pleasure in the trees and forests that grace their community. The city's unofficial moniker is "A City in a Park."

Although Bellevue does not manage its urban forest for the wood products sought from commercial timberlands, it does have a commodity in mind. That commodity is quality of life, and it is realized by managing for the following objectives: citizen safety, forest health, storm water management, erosion control, fish and wildlife habitat,



**Bellevue Parks and Community Services Department Natural Resource Division Management Team, left to right, back row: Dan DeWald, Jim Bennett, Don McQuilliams, Kevin LeClair, Bob Schaffer; front row: Tom Kuykendall, Geoff Bradley. Not pictured: Chris Vandall**

passive recreation, environmental education, value added to the local economy and community livability. Bellevue's Natural Resource Program, which has been in existence since the mid-1980s, is a unique blend of open space acquisition, sensitive area protection, long-range planning, community involvement and management from an ecosystem perspective.

Since its inception, Bellevue's natural resource program has expanded to include stewardship of all community trees, not just as individuals, but as communities of plant and animals. This ecosystem strategy analyzes the interrelatedness of the different components of natural systems, as well as how Bellevue's citizens perceive and

interact with these systems. This strategy encompasses the disciplines of policy, planning, inventory and analysis, communications and marketing, and maintenance and operation.

Bellevue's Natural Resource Program is broken down into six major functional areas, which are highlighted below.

**Forest and Native Growth Protection Area Management.** Bellevue owns and maintains 1,800-plus acres of sensitive riparian corridors, wetlands and forested open spaces. Utilizing traditional forestry techniques like tree and habitat inventories, and modern technological tools such as geographic information systems, foresters develop strategic and targeted management prescriptions to meet the needs of the community, while improving the value and function of these remaining open spaces. Each site in the system has site-specific management prescriptions that are implemented on a predefined schedule. Over the last five years, more than 100,000 conifers have been planted to assist mother nature in the reforestation of Bellevue's natural areas.

**Street Tree and Arterial Landscapes.** Within Bellevue's rights-of-way, trees



PHOTO COURTESY OF BELLEVUE PARKS AND COMMUNITY SERVICES

**An environmentally engineered waterfall with trail bridge in Weowna Park.**



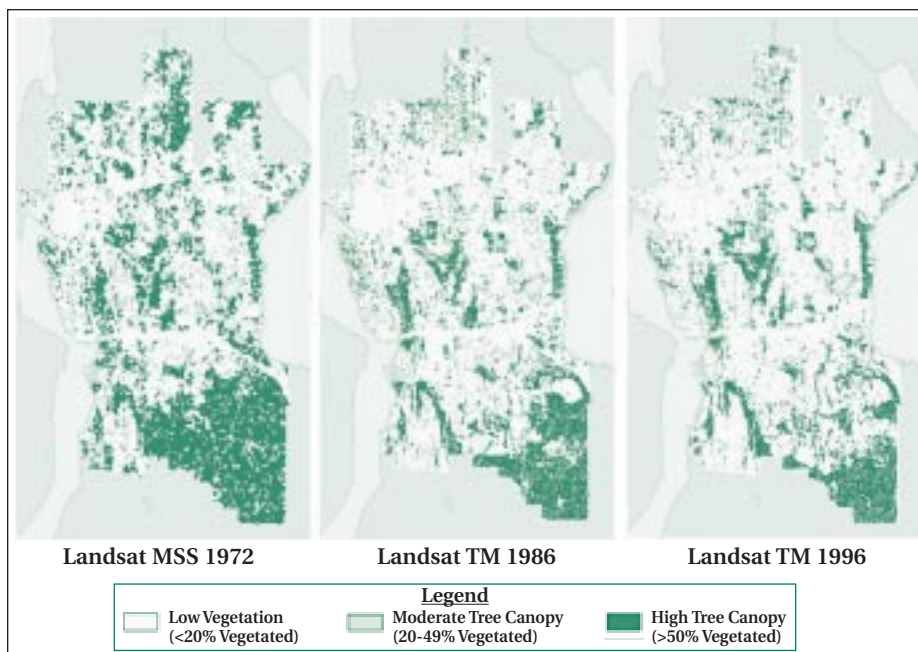
**GeneTachs**  
Richard W. Counter Professional Forester

FOREST

- Management Consultant
- Inventories and Appraisals
- Genetic Tree Improvement
- Feasibility Studies

1600 NW Skyline Blvd., Portland, Oregon 97229

(503) 297-1660



GRAPHIC COURTESY OF AMERICAN FORESTS

**This CityGreen image shows analysis of change in tree cover from 1972-1986-1996 in Bellevue, Wash.**

and landscaping are critical components of the street system and urban environment. The Street Tree and Arterial Landscape program is responsible for the maintenance and management of formal streetscapes. The program oversees the stewardship of 9,000 street trees and 115 acres of landscapes located along 65 miles of city streets. All work is completed with maintenance contractors overseen by city street tree program foresters.

**Community Parks and Visitor Centers.** Community outreach and involvement is an essential component of Bellevue's Natural Resource Management Program. It increases public appreciation and understanding of the city's forests, streams and wetlands, and builds support for program goals and objectives. Community parks and visitor centers are places for education, community gatherings and preservation of Bellevue's agricultural heritage. Once an extensive farming community, the city now manages Bellevue's last remaining agricultural lands. The 18-acre organic Mercer Slough Blueberry Farm and 14-acre historic Larsen Lake Blueberry Farm provide pastoral settings for u-pick blueberries and farm-fresh produce sales. City crews manage the farms and machine-harvest the blueberries, with yields of up to 70,000 pounds annually. The Master Gardener's Demonstration Garden and adja-

cent P-Patches holds classes and provides opportunities for community gardening. The Ranger Station and Backyard Wildlife Habitat Gardens demonstrate techniques for sustainable building and landscaping. Programs at the Mercer Slough Environmental Education Center increase citizen awareness of the functions and values of natural systems. Educating and involving the community builds an environmental ethic, instills community pride, and

reduces maintenance costs.

**Trails and Greenways.** Trails and greenways in Bellevue are the string that holds the pearls, i.e. the parks and open spaces, together. The trails and greenways program focuses on trail planning, project management and maintenance of over 60 miles of trails located on park property and public easements. The trails are designed to be used by the broadest possible spectrum of users. Detailed trail planning and design standards have resulted in a system of pathways providing opportunities for pedestrian, equestrian, bicycle and other multi-purpose users.

**Volunteer Coordination.** A coordinated, pro-active volunteer management program provides a critical link between natural resources and the community. The volunteer program instills a sense of community pride, ownership and shared responsibility of park resources by facilitating community participation in park stewardship activities. Offering citizens hands-on stewardship opportunities through well-organized activities helps build a sense of community. Volunteers assist with many aspects of forest and trail management activities and contribute 15,000 hours of labor annually. The program meets the needs of an expanding volunteer community by providing a diverse set of volunteer opportunities.

**Development Review.** Natural



## FOREST LANDOWNERS AND CHRISTMAS TREE GROWERS

Do you have surplus seedlings for sale?  
Do you need seedlings to meet your reforestation needs?

✓ [forestseedlingnetwork.com](http://forestseedlingnetwork.com)

FSN is an interactive website that connects forest seedling sellers with potential buyers. By using FSN landowners can identify appropriate seed zones for their planting site. Use FSN to check for vendors in your area to assist you in completing a successful reforestation project.

Bob McNitt  
[bob@forestseedlingnetwork.com](mailto:bob@forestseedlingnetwork.com)  
(503) 769-9806

Forest Seedling Network  
1740 Shaff Road #306  
Stayton, OR 97383



Resource staff review subdivision plans for open space connectivity opportunities, trail construction standards and sensitive area preservation methods. On private development projects in the urban core, reviewers are looking for Low-Impact Development (LID) opportunities, inclusion of green infrastructure and the preservation of existing significant vegetation. On road projects, staff work cooperatively with urban planners and transportation engineers to plan for and design attractive, functional streetscapes that provide a sense of community identity, link open space corridors, soften the hard lines of urbanism and serve in slowing and filtering storm water.

Bellevue's landscape and demographics have changed significantly since the 1949 opening of the I-90 floating bridge across Lake Washington and its 1953 municipal incorporation with 5,000 residents. In those days, Bellevue was dominated by productive agricultural lands that provided the burgeoning population in Seattle with vegetables and a quiet suburban retreat. Things changed



PHOTO COURTESY OF BELLEVUE PARKS AND COMMUNITY SERVICES

**Community volunteers plant native plants at a restoration project in Bellevue's Right-of-Way during an Earth Day/Arbor Day celebration in 2003.**

during the second half of the 20th century. The forested hills and farm fields of Bellevue were converted to suburban and then urban development. Bellevue now serves as a major regional economic and employment center. Bellevue's residents are highly educated and ethnically diverse. Fifty-four percent of its residents over 25 years old have Bachelor's degrees, and over 25 percent of residents are foreign born.

Historically, urban forestry focused on the management and maintenance of planted street trees and individual

tree management in city parks. Over the years, urban forestry has expanded to include a unique mixture of the sciences of forest resource management, arboriculture, environmental horticulture, fish and wildlife biology, political science and public administration. A 2005 study entitled "Economic Impacts of the Green Industry in the United States" estimated that in 2004, total tree sales and services in the Pacific Northwest were valued at \$894 million, with a value-added impact of another \$990 million.

Based on the belief that the urban natural resources must be managed with the same skill and diligence as any other community asset, Bellevue's Natural Resource Program has evolved to a staff 14 dedicated professionals working together to meet the needs of the community and increase the value and appreciation of the urban forest now and into the future. ♦

*Lead author Kevin LeClair is an urban forester for the Parks and Community Services Department in Bellevue, Wash. He can be reached at 425-452-2928 or [KLeClair@bellevuewa.gov](mailto:KLeClair@bellevuewa.gov). The Natural Resource Management team, which also contributed to this article, includes Dan DeWald, Geoff Bradley, Tom Kuykendall, Don McQuilliams, Jim Bennett, Bob Schafer and Chris Vandall.*

**WOODLAND FORESTRY CONSULTANTS**

**Don Theoe, CF/CFA #17, ACF**  
Chief Forester

P.O. Box 99788 (253) 581-3022  
Lakewood, WA 98496-0788 Fax (253) 581-3023  
E-mail: [wfc.don@comcast.net](mailto:wfc.don@comcast.net)



**CHEMICAL COMPANY**

- Site Preparation Herbicides
- Conifer Release Herbicides

**PLEASE CONTACT:**

**Bruce Kelsas** 503-931-4602  
*Oregon*  
**Wes Wasson** 253-279-5293  
*Washington*

**George Severson** 541-840-6990  
*S. Oregon/N. California*



Using  
**OneStep®**  
**Here,**

Can Mean Bigger  
**Profits Here.**



**ONESTEP® HERBICIDE CAN MAXIMIZE YOUR PINES' POTENTIAL WHILE MINIMIZING THE WORK.**

OneStep is the only all-in-one, broad-spectrum site prep solution that offers consistent, long-term hardwood control. OneStep already contains the proven chemistry found in Arsenal® herbicide Applicators Concentrate and Chopper® herbicide, plus glyphosate and a surfactant. Which means you don't have to hassle with a tank mix. And your pines don't have to hassle with competition that can slow their growth. Work smarter, not harder — with OneStep.

**1-800-545-9525 | [www.vmanswers.com](http://www.vmanswers.com)**

Professional  
Vegetation  
Management



The Chemical Company

Always read and follow label directions.  
Arsenal, Chopper and OneStep are registered trademarks  
of BASF. ©2006 BASF Corporation. All rights reserved.

# Science in the City: Urban Forestry Research

BY KATHLEEN L. WOLF

**T**he term “urban and community forests” is used by professionals who work with trees found in urbanized settings—in the center of cities and towns, and in suburbs and rural communities. Landscapes that include trees, parks, woodlots, greenbelts, natural areas and native forests—both naturally occurring and planted—are found in all communities. A quality urban forest is integral to sustaining a high quality of life in cities and towns. What makes urban forests unique from rural forests is the dominant role of human activity in their creation, use and management. Research, development and effective communication of science-based knowledge are increasingly needed to sustain both natural and human populations within built environments.

Urban forests are diverse ecosystems that are receiving greater attention as city governments, organizations and citizens pursue environmental sustainability. Sustainability criteria for municipal urban forestry programs are based on three dimensions: *Vegetation Resource* or attributes and conditions of local trees and forests; *Resource Management* meaning policy



PHOTO COURTESY OF GUY KRAMER

**New studies are exploring the role of urban forestry in walkable places and public health.**

and field practices; and *Community Framework* or the involvement and interaction of constituent groups. This article provides an overview of urban forest research, including economic findings, based on these sustainability dimensions.

## Vegetation Resource

Urban forestry could be considered a version of precision forestry as arborists seek to optimize the benefits and functions of individual trees and small groves. Arboriculture and plant

scientists report on how trees grow in highly urbanized places and have learned about planting practices, growth rates, water and nutrient needs, pest and disease impacts, branching structure and guidance through pruning, and root interactions with infrastructure. For example, use of structural soils is an evidence-based approach to reducing tree and sidewalk conflicts. Hazard tree science has identified causes and conditions of failure-prone trees, enabling cities and property owners to reduce damage risk.

Urban foresters, particularly those employed in the public sector, must understand and conserve a composite collection of trees or small groves, including remnant patches of native vegetation and planted trees, on public and private properties. The tragedy of urban tree loss caused by Dutch elm disease launched urban forestry practices. Studies have explored and made recommendations about species mix and stand age distribution across a city or region in order to prevent disease outbreaks. Citywide canopy cover goals are based on studies of optimal forest function.

Landscape-level analysis shows that urbanization trends present major threats to urban trees and natural areas. In 2004, about 4.4 percent of the



Bend, Oregon

## FOREST RESOURCES TECHNOLOGY

• SAF Recognized •

Bret Michalski, M.S., Wildlife Science  
Michael Fisher, Ph.D., Forestry, Range Management  
Ron Boldenow, Ph.D., C.F., Forestry

<http://naturalresources.cocc.edu> E-mail • [rboldenow@cocc.edu](mailto:rboldenow@cocc.edu)

**(541) 383-7754**



Northwest  
Forestry  
Services

☐ Professional Forest Management

☐ Timber Inventories and Cruising

☐ Appraisals ☐ Mapping and GIS

**(503) 684-8168**

**1-800-783-6818**

11825 SW Greenburg Road 2A, Tigard, OR 97223

[www.nwforestryservices.com](http://www.nwforestryservices.com)

total land area of the lower 48 states was considered urban. By 2050, over 14 percent of U.S. land area will be urban if current trends continue. Infill development within cities reduces root and canopy growing spaces. Mature trees provide greater benefits and forest loss associated with new development is the overall greatest contributor to large tree removal.

## Resource Management

Urban forest management is politically complex. A local government may take the lead with the "big picture" vision for a city or regional forest. Best practices are carried out by multiple local governments, multiple departments within a government and private property owners within diverse land use types (such as residential, commercial and institutional).

Inventory and assessment is needed to first understand the full scope and condition of a natural resource, and then plan for its preservation or conservation. Studies have explored the most cost effective and efficient methods to conduct citywide tree surveys, including sampling and citizen involvement in data collection. A number of western states have also done assessments across all their municipalities to collect baseline data on forest condition and management practices.

Meeting ongoing nutrient, pruning and water needs of urban trees is cen-



PHOTO COURTESY OF GUY KRAMER

**Canopy cover across all parts of the city generates environmental services such as improved air and water quality.**

**Table 1. Average annual net benefits values per tree by size and city location.**

	small tree	medium tree	large tree
PNW cities, Westside	\$1-\$8	\$19-\$25	\$48-\$53
PNW cities, Eastside	\$0-\$9	\$8-\$19	\$21-\$32

tral to management. There are two priority issues in many communities: (1) invasive species; and (2) critical or emergency events. Infestations of invasive plants and insects have reached epidemic proportions, as increased global trade has aided introductions of damaging organisms from other nations. Research aids managers with diagnostics, treatment and eradication recommendations. Critical events that threaten forests in short time frames include fire, snow and ice, and high winds. Studies are exploring first response actions as well as long-term, preventative and dam-

age management.

A comprehensive forest inventory enables detailed evaluation of environmental services followed by economic valuation modeling. Forested open spaces, small groves and even individual trees, when analyzed across an entire urbanized landscape, provide substantial environmental services. The Center for Urban Forest Research conducted two benefit/cost analyses for Pacific Northwest states and outcomes were consistent with other U.S. regional studies. The direct costs of urban street trees, such as planting, pruning, removal, pest and disease

# You're not growing deer food!



## "Everything went well until the deer came in."

*Animals damage \$1,000,000,000 in trees every year in North America. Is your investment at risk? Acres of newly planted trees can be destroyed overnight.*

## Protect more trees for less.

The cost of physical barriers is prohibitive and other spray deterrents don't last long enough. Plantskydd Deer & Rabbit Repellent is the longest lasting spray deterrent and it's easy to apply. USDA Tested and trusted by 10,000 professionals, Plantskydd has protected over 100 million trees in the wettest, coldest environments in North America.

## Field or nursery application:

After grasses "brown out" in late summer and during winter, deer have little left to eat but your trees. So the best time to apply is late fall for over winter protection and a few weeks after bud flush in the spring. All deer control methods work best when used before damage begins. Give your trees a fighting chance by spraying Plantskydd at the nursery or in the field prior to planting.

## For more info:

visit [www.plantskydd.com](http://www.plantskydd.com) to learn from dozens of industrial operational reports or call 1-800-252-6051 to talk with Bill Lasuta, consulting forester with 12 years experience using Plantskydd.



available at:





control, irrigation and miscellaneous costs (such as litigation) were tallied. Benefit values were then calculated, including buildings' energy savings due to strategic tree placement, reduced atmospheric carbon dioxide, improved air quality, reduced stormwater runoff and amenity benefits. Individual trees generate positive net values over a 40-year life cycle (see Table 1). The USDA Forest Service has released the *i-Tree* suite of science-based software so that any community can do urban tree valuation modeling.



A BALANCED APPROACH

▲  
TIMBER MANAGEMENT  
▲  
ALTERNATIVES TO  
CLEARCUTTING  
▲  
FOREST PLANNING  
AND RESTORATION  
▲



These forests have been  
independently certified  
as well managed.

Scott Ferguson 503-222-9772  
Barry Sims 503-233-2131  
Mark Miller 541-602-2180

[www.TroutMountain.com](http://www.TroutMountain.com)

*Forest stewardship  
for productivity and diversity*

FSC Trademark © 1996 Forest Stewardship Council A.C., • SCS-FM/COC-00062GN

## Community Framework

Urban forests are typically widely dispersed across multiple political jurisdictions and are integrated within multiple land uses. Stakeholder and constituent responses to trees range from the direct interactions of citizen stewards, to property owners with land development interests, to political decision makers.

The Forest Service, International Society of Arboriculture and National Arbor Day Foundation recommend using community policies and practices that have been derived from both natural and social sciences research. For instance, advisory tree boards are promoted and studies have assessed their activities and impacts, finding them to be important political champions for tree programs. An emerging research interest is the use of appropriate social models to test the outcomes and efficacy of management decisions and plans.

There is no federal regulatory code for urban forests (though the EPA acknowledges tree planting as an innovative technology to improve air quality) and few states regulate urban forestry either. Local governments may adopt tree codes and regulations to achieve community purposes. Policy studies have described a range of regulatory strategies and the degree

to which communities have implemented code types. Simple code includes public tree responsibilities and heritage tree recognition. More elaborate laws indicate tree canopy requirements, tree preservation practices during development and forest mitigation procedures.

Social science studies reveal that natural systems provide human services, making cities more livable and vibrant. Contact with nature improves human wellness and healing, worker productivity, and mental functioning of youth and community cohesion, and reduces crime. These benefits appear to underpin positive economic assessments. Residential property values are enhanced by retention and presence of trees and open space by up to 20 percent, rental rates are 7 percent higher for commercial office properties having a quality landscape, and consumers report willingness to spend 9-12 percent more in downtown business districts having streetscape trees.

## Practical Applications

How does a manager make use of urban forest research and science on a daily basis? There are many opportunities! Imagine an urban forester is hired by a mid-sized city to launch an urban forestry program. She starts with few resources, so prepares infor-



PHOTO COURTESY OF GUY KRAMER

**Consumers report being willing to pay 9-12 percent more for products in commercial districts having a quality streetscape.**



PHOTO COURTESY OF GUY KRAMER

**Residential properties near quality trees, landscape and green spaces are found to have 2-20 percent higher market value.**

mation on environmental and human services economics and makes a case for an operating budget with the city manager—request granted! An inventory is needed so studies about methods are reviewed, including current data recording technologies and research on how to boost motivation and satisfaction of citizen volunteers. While in the field the new manager notices that street trees have long been neglected, so a work plan is prepared based on studies of structural and corrective tree pruning, and recommended pruning cycles.

Meanwhile, the inventory process provided an overall profile of tree species, ages and health on public property; future plantings will acknowledge evidence-based recommendations for urban forest structure. The manager will contract out future

tree planting, so prepares planting specifications based on best available science. While ground-truthing the inventory data the forester observes that many private property owners are topping trees, a particularly abusive practice. The energetic manager reviews studies concerning tree physiology, corrective procedures, and studies on citizen motivations and attitudes concerning topping to develop a public information campaign.

Managers rely on quality, credible science to inform their decision making, advocacy and action. Much of the research reported here has been

conducted in the Midwest and eastern United States. Funding for urban forestry research and related technology transfer efforts has been historically low relative to the constituency served in the west. Additional resources are needed to keep pace with regional population trends and resulting forest issues. New research can validate how well prior findings apply in western regions and address unique knowledge needs. However, urban conditions are similar across many places; current knowledge is a good starting point to support local policy and management. ♦

*Kathleen L. Wolf, Ph.D. is a research social scientist at the College of Forest Resources, University of Washington. She can be reached at [kwolf@u.washington.edu](mailto:kwolf@u.washington.edu). Web link for research on human dimensions of urban forestry: [www.cfr.washington.edu/research.env-mind](http://www.cfr.washington.edu/research.env-mind).*

#### REFERENCES

- Clark, J.R., Matheny, N.P., Cross, G. & Wake, V. (1997) A model of urban forest sustainability, *Journal of Arboriculture*, 23, 1, pp. 17-30.
- McPherson, E.G., Maco, S.E., Simpson, J.R., Peper, P.J., Xiao, Q., VanDerZanden, A.M. & Bell, N. (2002) *Western Washington and Oregon Community Tree Guide: Benefits, Costs, and Strategic Planting* (Silverton OR, International Society of Arboriculture, Pacific Northwest Chapter).
- McPherson, E.G., Simpson, J.R., Peper, P.J., Xiao, Q., Maco, S.E. & Hoefer, P.J. (2003) *Northern Mountain and Prairie Community Tree Guide: Benefits, Costs and Strategic Planting* (Davis CA, USDA Forest Service, Center for Urban Forest Research, Pacific Southwest Research Station).

### INTERNATIONAL FORESTRY CONSULTANTS, INC.

Professional Forestry Services

Certified Foresters® • 10 Staff Foresters

4 Certified Arborists

GIS and Certification Services

Throughout the Pacific Northwest



(425) 820-3420

INFO@INFOrestry.com

Tom Hanson  
Dennis Dart

**Our professional staff has a complete range of expertise in natural resource management.**

**Complete Forest Land Management  
Watershed Analysis ▲ Wildlife Surveys  
Cruising ▲ Forest Appraisals ▲ Marketing  
Forest Inventories ▲ Harvesting  
Reforestation ▲ Growth Projections**



**BARNES & ASSOCIATES, INC.**

3000 Stewart Parkway, Suite 204, Roseburg, OR 97470

Phone (541) 673-1208

Fax (541) 673-9789



# Working to Create an Urban Forest Inventory

BY GENE McCAUL

**M**ost people do not think that they live in a forest. A city is not where forests are found by most people's definition, but increasingly, cities are viewing their trees as a forest—an urban forest. An urban forest can be defined as the planted and native trees within a town or city's borders. It may consist of the trees owned by the public in the parks and cemeteries, the trees lining the city streets or the private trees planted in yards or around commercial buildings. As such, urban forestry requires



answering many of the same management questions used in our traditional forests. For example, what is the purpose of having a city forest? How should they be managed? These and other questions are ones most of our organizations have answered in some way to help define what we do with our forests.

A key component to managing any forest is having a good inventory. This is especially true in the urban setting, where often every tree is inventoried so managers can plan work loads and report on various aspects of the city's trees.

The city of Sumner, Washington, where I live, is a small city of about 9,000 residents. It has many of the

characteristics of a small town, including a downtown core of small businesses surrounded by residential areas dating back nearly a century to the city's beginnings. In 1995, the city began an effort to recapture some of the past glory of the tree-lined streets, recognizing the many benefits to having trees in the city. A citizen's questionnaire found overwhelming support for planting and maintaining city trees, so a Forestry Commission was established to plan and carry out a strategy for increasing the number of trees in the city and maintaining them.

The commission is comprised of up to seven people with interest and knowledge of the city's urban forest, preferably residents of the city. Included on the commission is a member of the city's parks and recreation staff and a professional arborist. I became involved by responding to a city newsletter advertising an opening on the commission. I was appointed to a three-year term after an interview with the mayor.

One of the goals of this commission is to establish and maintain an inventory of the city-owned trees. The city knew they owned many large old trees and several varieties of trees had been planted around the city over time, but no one really had a good idea of how many, where they were, their health or even if a particular species was suited for the city environment. For example, most of us have seen trees that grew into overhead power lines and then were either topped or pruned to grow around the power lines. The city of Sumner wanted to address all of these questions to ensure that future tree plantings made sense for the city and its environment.

Initial inventory efforts were done in a manner similar to what a forester might do on an unfamiliar piece of land. A windshield survey was completed, where a city employee drove around the city and made general notes about the trees within the city. This formed a good starting point to get the general character of the forest, but lacked enough information to make good management decisions. It was from this survey that the inap-

**Starker Lecture Series** Natural Resource Science, Policy and Management  
2006-07 Series 100 Years of Forestry in the Pacific Northwest:  
A Critical Look Back, A Fresh Look Forward

**Forest Industry  
Globalization and Consolidation:  
A Family-held Company's  
Perspective**

**Andrew W. Miller**  
Chief Executive Officer  
and President  
Stimson Lumber Company

**MONDAY FEB. 15**

**4 P.M.** CH2M HILL Alumni Center  
**FREE**

Sponsored by the Starker Family, the OSU College of Forestry and the Oregon Forest Resources Institute

More Information: 541-737-9300  
Accommodations for disabilities: call 541-737-9300

**www.cof.orst.edu/starkerlectures**

**OSU**  
Oregon State  
UNIVERSITY

Oregon State University  
College of Forestry  
100 Years  
1906-2006  
Legacy of Excellence  
Future of Possibilities



appropriate species planted in some locations and the lack of consistent pruning and maintenance in other areas was noted.

This survey was followed by using a professional arborist and two college interns to create a more detailed tree-by-tree inventory. Since the city does not have "stand" boundaries as we normally think of them, the city was divided into "areas" of manageable size consisting of 10-15 city blocks each by the city's GIS department. Each area was assigned a letter designation and then every city tree within that area was numbered sequentially, which created a unique ID for each tree within the city. The GIS department printed an 11x17 size map for each area with all of the streets and buildings for reference. As the interns moved throughout the city, they marked the number on the map in its approximate location and recorded various details about the tree on a simple data form. This information was then entered into an Excel spreadsheet.

This inventory captured existing conditions and possible maintenance needs, and provided a snapshot in time of what the forest looked like, much the same way many of our older inventories were created. For the first time the city could answer questions about the number, types and condition of its trees. Plus, it gave them an idea of needed maintenance. Unfortunately, the tree locations were never entered into a GIS system, so the inventory lacked the ability to visually show where maintenance was needed or provide additional maps of the city trees.

However, in spring 2006, the city GIS department digitized all the tree locations with the tree number, which allowed the information from the spreadsheet to be imported into the GIS system. The Forestry Commission has found this addition alone to be a very valuable improvement, as now we can see at a glance where the trees in poor condition or with overhead wires are. Currently, the commission is

using the map products to field check all of the information and update the data where needed. Also, the commission is working to define exactly what questions the inventory should answer, who will maintain it and how it will be maintained. The desire is to be able to send the city maintenance crew to the field with data sheets and/or hand-held devices so maintenance can be recorded as it

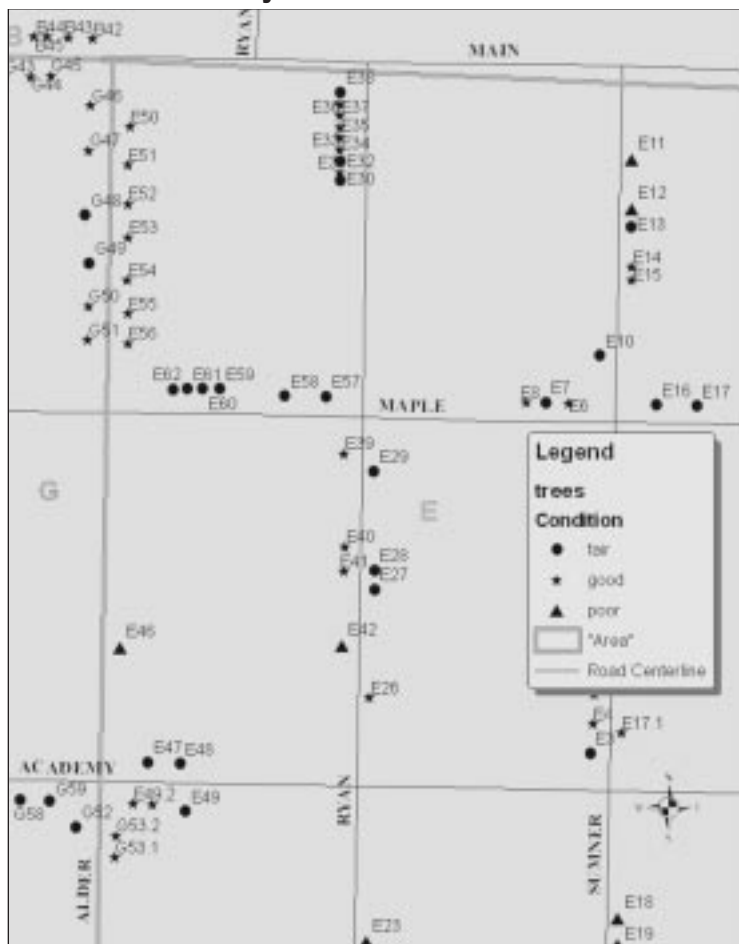
is completed. Additional information about the trees themselves may be added to allow for reporting to the city council about work accomplishments, money spent and how the new tree plantings fit into the overall strategy for the city forest.

Many cities throughout the United States have begun working on similar projects. Input and involvement of professional foresters can be a valu-

able asset to the community in helping to plan and implement a good inventory of the urban forest. ♦

*Gene McCaul is the inventory/operations forester for West Fork Timber Co., LLC in Lakewood, Wash. He has been a member of the City of Sumner Forestry Commission since July 2005. He can be reached at 253-896-3326 x3 or gmccaul@murraypacific.com.*

#### Sumner Tree Inventory "Area E"



**This map, taken from the most recent survey, shows tree condition and area boundaries of a portion of downtown Sumner.**

## Jackson and Prochnau, Inc

Since 1954

Feasibility Studies & Investment Analysis World Wide,  
Inventory, Appraisals, Engineering, Management, Log Marketing  
www.jacksonandprochnau.com Steve@jacksonandprochnau.com  
Albany OR Tel: 541-926-3320 Olympia WA Tel: 360-352-9680

# www.forestseedlings.com

# This Forester's Boots Walk Both Paved, Unpaved Roads

BY CYNTHIA ORLANDO

Sometimes when people get to a “certain age” in life, they begin to look back at choices and decisions and wonder, “*what if?*” Yes, it’s human nature to wonder about “the road not taken,” but in the case of Certified Arborist Walt Knapp of Beaverton, Ore., a lifelong career in forestry has provided him with a chance to enjoy and experience his profession in more than one way.

Knapp got his forestry degree at Pennsylvania State and obtained a graduate degree in forest resource management at the University of Idaho. Over his 30-year career, Knapp worked for the USDA Forest Service on the Freemont, Winema and Ochoco

national forests, specializing in silviculture on Oregon’s eastside. His positions with the Forest Service focused primarily on writing silvicultural prescriptions.

He retired from his position as regional silviculturist in 1992. Several years following retirement, Knapp took his arborist exam in Portland. Knapp began practicing immediately after getting certified; engineering and design firms often contact him for advice and consultation.

And yes, Knapp says there are differences between traditional and urban forestry—but there are also some similarities.

“When you write prescriptions you try to identify what the objectives are, and then satisfy those with a prescription,” says Knapp. “In urban forestry

we do the same thing, but usually, a land developer is the client.”

Knapp says a lot of the aspects of silviculture—insects and disease, soil problems and tree physiology, for example—have applications in urban forestry. “In (traditional) forestry, we traditionally look at stands of trees and landscapes; in urban forestry the consultant or arborist tends to look more at *individual* trees,” says Knapp. “Many of the arborists are actually practitioners; in my case, I’m primarily a consultant.

“The challenges exist in the remnant forests—the native forests we’re building into,” says Knapp. “One of the problems of a forester coming into the urban forest is their background is typically oriented more toward commercial species. How many of us know about diseases of Oregon ash or Oregon white oak?” In his case, Knapp was able to rectify this by taking courses through ISA (International Society of Arborists), as well as attending workshops on insects and disease offered through the USDA Forest Service.

Other differences? “In wildland forests, issues of trespass are pretty clear-cut,” says Knapp. In urban situations, though, Knapp says a tree’s value is really “much more aesthetic” than lumber. “It’s a very subjective thing,” laughs Knapp, “and the insurance companies are often involved.”

Knapp also provides services to those that need help identifying and dealing with hazard trees. In one situation, he assisted Oregon’s Fort Stevens State Park, helping identify and prioritize the hazard trees in their campgrounds. Root disease had created hazardous trees, and Knapp designated these for removal. Sure enough, a severe windstorm blew through the area, taking out all of the trees he had identified for removal. Knapp also works to identify hazardous trees in development areas and construction sites, including homeowner’s associations.

He’s offered his services from Eugene to Vancouver—including the redesign of an 18-hole golf course to a 9-hole course, where he helped decide which trees to retain on the site. In Washington, he provided consultation during a large, 80-acre development project. “What I did was a site reconnaissance with emphasis on retaining high-quality Oregon white oak,” says



PHOTO COURTESY OF PAUL RIES

**New construction next to an old tree in the community of Villebois, which translates to “village near the woods.”**



Knapp. "I took digital photographs and used GPS (global positioning) with the engineers, architects and planners so we could decide where to build," he adds.

In addition, Knapp has worked with the Villebois housing community of Wilsonville for a couple of years now. "Often, because we're trying to have high density housing," says Knapp, "between the homes and the roads, there's not enough room for the trees."

What things does Walt miss from traditional forestry?

"I would say I miss being out in truly wild lands," Knapp says, "I kind of miss that." Smelling ponderosa pine on warm spring days in Eastern Oregon looms large in Knapp's memory, too. "Most of the areas in urban forestry—even remnant forests—are truly in an urban area—even though you might meet some wild people nearby," laughs Knapp, adding, "and the only hazards I've run into working in urban forestry are hobo camps and rottweilers."

What advice might he pass along to others?

"For anyone wanting to work in urban forestry, certification is a must," says Knapp. "And ISA has recently implemented a Board Certified Master Arborist program as well."

This credential is designed for arborists who've reached the pinnacle of their profession. Knapp adds that the ISA offers a strong continuing education program and training sessions available online.

Knapp says he's enjoyed having the opportunity to work in both urban and traditional forestry. "One of the things that has been really nice has been working with a variety of people with a variety of skills," says Knapp, "and, spending time in the field."

"Consulting is a good balance between the technical and field aspects, so no two days are alike," he adds. "There's always a new challenge—a new insect pest, for example—that keeps you learning." ♦

---

*Cynthia Orlando, A.P.R., is a forester and public information officer and works with the urban forestry program at the Oregon Department of Forestry in Salem. She can be reached at 503-945-7421 or caorlando@odf.state.or.us.*

---

## Countdown to Convention '07

### Volunteers Get Ready!

BY BOB WILLIAMS AND  
VICKI CHRISTIANSEN

**I**n less than nine months the National SAF Convention will return to Portland, Oregon. On October 23-27, we will be welcoming as many as 2,500 SAF members, companions, exhibitors and presenters back to the Pacific Northwest. We previewed and promoted the 2007 Convention theme, "SAF—Sustaining America's Forests" at the 2006 convention in Pittsburgh and people are excited. We had an outstanding booth and displays that were received with great interest and enthusiasm. The standard response was, "We will be there!"

Now to get ready! A convention of this size and quality does not happen without the collaboration and assistance from our local SAF members. We are seeking volunteers and contributors to make this the best convention yet! This is a great opportunity for you to be involved at the national level of our professional society. You have not fully experienced SAF until you have been involved with the national convention. Here are a few ways you can contribute your time, talents or resources.

#### Volunteer

Many volunteers are needed for planning the convention activities as well as on-site volunteers during the convention. The convention arrangements team is organized into the following sub-committees and co-chairs:

*Local Publicity:* Bob Alverts, CF, and Darrel Kenops, CF

*Foresters' Fund:* Joe Heller, CF, Dave Yates and Tom Ortman

*Hospitality:* Don and Florence Theoe and Stephen Fairweather

*Student Activities:* David Zahler, CF, and Dick Hopkins

*On-site Volunteers:* Jocko Burks, Bob Tokarczyk and Jim Rombach, CF

*Technical Tours:* Eric Schroff and Julie Woodward.

We need your help in two main areas. First, we need you to participate on one of the above committees starting now to help get ready for the con-

vention. Outstanding co-chairs are heading up each of the committees and will welcome your participation. Second, we will need a legion of volunteers during the convention to make everything happen like a well-oiled machine. Your involvement will make a difference.

If you have an interest in being a general volunteer or helping with any of these specific activities, please contact Jana Greer at Washington State Department of Natural Resources at [Jana.Greer@wadnr.gov](mailto:Jana.Greer@wadnr.gov) or 360-902-1730.

#### Contributions

Donations for the Foresters' Fund raffle and drawings are the essential foundation for raising money to support local SAF activities throughout the nation. It is not too early to start thinking about items that you or your organization can contribute to the Foresters' Fund raffle and auction. If you would like to donate items for the Foresters' Fund activities, please contact Jana Greer at the contact information listed earlier.

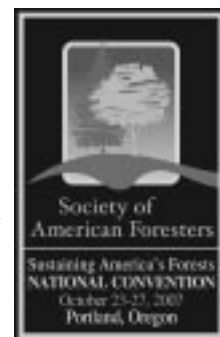
#### Sponsorship

You will be hearing more about sponsorships and other opportunities to contribute in a future article in the *Western Forester*. Contact Clark Seely, general co-chair, if you would like additional information about sponsorships or contributions for the 2007 SAF Convention. Clark can be reached at Oregon Department of Forestry at [cseely@odf.state.or.us](mailto:cseely@odf.state.or.us) or 503-945-7203. ♦

---

*Bob Williams and Vicki Christiansen are 2007 National Convention Arrangements co-chairs. Bob can be reached at 360-576-5364 or [rwums35@aol.com](mailto:rwums35@aol.com). Vicki can be reached at 360-902-1401 or [Vicki.christiansen@wadnr.gov](mailto:Vicki.christiansen@wadnr.gov). For additional information on the convention, visit [www.safconvention.org](http://www.safconvention.org).*

---





# SAF Council Report: Year-end Meeting Prepares for Changes

BY G. KIRK DAVID

The December Council meeting started with a welcome and an orientation session for Vice President-elect Tom L. Thompson; District Council Members-elect Julie G. Lydick (District 3), Roger A. Dziengeleski, CF (District 6), and Roger D. Weaver (District 9); and non-voting members Forest Science and Technology Board (FS&TB) Chair-elect H. William Rockwell, Jr., CF/CFA, Committee on Forest Policy (CFP) Chair-elect Robert W. Malmshemer, and House of Society Delegates (HSD) Chair-elect Craig A. Vollmer, CF.

Council ratified President Marvin Brown's Cooperative Conservation comments letter to the secretaries of the departments of Agriculture, Commerce and Interior, and the administrator of the Environmental Protection Agency. The letter called for establishment of "a unified goal for all of the nation's forests to provide citizens with a sustainable forest resource."

HSD Chair Chuck Lorenz, CF, presented six recommendations that resulted from the Pittsburgh HSD meeting. Council approved the HSD Charter amendment to institute the annual election of an HSD chair-elect, and gave direction on proceeding with membership proposal discussions, SAF sustainable operations concepts, National Student Congress (NSC) chair and NSC reports, and non-native species concerns from interstate transport of woody nursery stock.

FS&TB Chair George Ice, CF RPE, PH, reported on the working group (WG) officers meeting, the special panel on lessons learned from the *Science* article on salvage logging, the benefits of joining an SAF WG, and restoring mechanisms for joining a WG.

## Strategic Outcome #1: A Strong Forward Thinking Organization

Council reviewed and approved the Unit Assessment that will be sent to each SAF unit in early 2007, and approved two clarifications to the Fellow nominations instructions.

Council members commented on the current state of interest and concerns within their districts on perceptions raised in the VOS Foreword; reviewed SAF student governance and Council representation; considered strategic planning of programs and priorities from internal and external factors in society at large and in the profession that may affect SAF; and heard a presentation from three members requesting that SAF change its name to the Society of American Forestry.

Council reviewed the "Create 21" initiative from the National Association of University Forest Resources Programs (NAUFRP), which has proposed legislation to create a National Institute of Food and Agriculture within the USDA to integrate research, education and extension programs (currently divided among four different USDA Services) and to change research to a predominantly competitive funding process.

Council approved a few changes to the SAF Strategic Plan for 2007. The plan is posted on the SAF website at [www.safnet.org/who/Strategicplan.cfm](http://www.safnet.org/who/Strategicplan.cfm).

## Strategic Outcome #4: Effective Engagement in Forest Policy

Council heard a progress report from the Committee on Forest Policy; the World Forestry Committee's action plan; and the SAF/NASF Task Force on Forest Sustainability report on their partner engagement, commitment rationale, communication objectives and policy strategy. Approving their

recommendation, Council took action to sunset the Forest Practice Regulation Task Force.

## Strategic Outcome #5: Enhanced Professional Education, Performance and Leadership Capability

Council heard recommendations from the Ethics Committee on procedures to promote and assure confidence in processing ethics cases and reviewed a draft of Ethics Case Process Standards.

On a close vote, Council agreed currently to disband the Leadership Academy Steering Committee and move the Leadership Academy to a two-year cycle (2006, 2008).

Council approved specialized urban forestry accreditation standards, procedures and guidelines, and the Committee on Accreditation charter revision prepared by the Educational Policy Review Committee.

Council approved formation of a Task Force on Forest Technology School Accreditation to evaluate the merits of SAF accreditation of forest technology education programs.

## Strategic Outcome #6: Development and Sound Stewardship of SAF's Resources

Council reviewed the financial returns, auditor's report, Sarbanes Oxley compliance, Mollie Beattie fund, Planned Giving program, and approved the 2007 SAF operating and capital budgets.

This report can only highlight the many issues discussed and actions taken by Council at this meeting. For a more in-depth explanation of any of these subjects, feel free to contact your Council representative. We are always glad to clarify topics and to receive commentary from SAF members. ♦

*District 1 Council Representative Kirk David can be reached at 208-666-8626 or [kdavid@idl.idaho.gov](mailto:kdavid@idl.idaho.gov). District 2 Council Representative Rick Barnes can be reached at 541-673-1208 or [rbarnes@barnesinc.com](mailto:rbarnes@barnesinc.com).*

**FOREST & LAND  
MANAGEMENT, INC.**

- Management of timberland, Appraisals, Marketing
- Export operations, Cruising, Feasibility Studies
- Properties larger than Forty (40) acres

PO Box 110149 • Anchorage, Alaska 99511-0149 • 907/346-4021 FAX 907/346-4022

## ADVERTISE!

Call 503-224-8046 for  
advertising rates & deadlines  
or email: [rasor@safnwo.org](mailto:rasor@safnwo.org).



## Calendar of Events

### **Forests, Carbon and Climate Change,** Feb. 13-14, Corvallis, OR.

Contact: [www.oregonforests.org](http://www.oregonforests.org) or Dave Odgers at 971-673-2948.

**Cost Control Workshop,** Feb. 13-14, Corvallis, OR. Contact: Forest Engineering.

**Road Series Workshops,** Feb. 15 (Water Control) and Feb. 16 (Slope Staking), Corvallis, OR. Contact: Forest Engineering.

**Starker Lecture Series: Forest Industry Globalization and Consolidation: A Family-held Company's Perspective,** Feb. 15, Corvallis, OR. Contact: Starker Lecture Series.

**2007 Oregon Logging Conference,** Feb. 21-24, Lane Events Center, Eugene, OR. Contact: [www.oregonlogging-conference.com](http://www.oregonlogging-conference.com) or call 541-686-9191.

**Natural Resource Law for Foresters,** Feb. 22-23, Vancouver, WA. Contact: WFCA.

**Scaling and Marketing Private Timber,** Feb. 24, St. Maries, ID. Contact: UI Extension Office at 888-884-3246 and ask for Benewah Co. office.

**Forest Road Surfacing: Principles, Design and Applied Practices,** March 5-6, Canyonville, OR, and March 8-9, Olympia, WA. Contact: WFCA.

**Starker Lecture Series: 100 Years of Forestry in the Pacific Northwest: A Critical Look Back, a Fresh Look Forward,** March 15, Oregon State University, Corvallis, OR. Contact: Starker Lecture Series.

**Keeping the Family Forest Intact,** University Inn-Best Western, Moscow, ID, March 26-27. Contact Clearwater RC&D Office, 208-882-4960 x4, [www.clearwater-RCD.org](http://www.clearwater-RCD.org).

**Pathways to Resilience: Sustaining Pacific Salmon in a Changing World,** April 3-5, Portland, OR. Contact: OSU Conference Services, [conferences@oregon-state.edu](mailto:conferences@oregon-state.edu), 541-737-9300.

**Starker Lecture Series: Preparing Resource Professionals for an Uncertain World,** April 5, Corvallis, OR. Contact: Starker Lecture Series.

**Brazil Forestry Study Tour,** April 15-29, Curitiba, Brazil. Contact: Mark Willhite, [mark@worldforestinvestment.com](mailto:mark@worldforestinvestment.com), 503-695-6419.

**Family Forest Symposium—Beyond Sustainability, Enhancing our Woodland Neighborhoods,** April 26, Oregon State University, Corvallis, OR. Contact: Oregon Small Woodlands Association, 503-588-1813 or [www.oswa.org](http://www.oswa.org).

**Chart the Future of Oregon's Family Forests,** April 27-28, Oregon State University, Corvallis, OR. Contact: Oregon Small Woodlands Association, 503-588-1813 or [www.oswa.org](http://www.oswa.org).

**Starker Lecture Series: Science and the Sustainability Transition,** May 3, Corvallis, OR. Contact: Starker Lecture Series.

**Western Forest Economists 42nd annual meeting,** May 7-9, The Resort at the Mountain, Welches, OR. Contact: WFCA.

**Oregon SAF annual meeting,** May 17-18, Riverhouse, Bend, OR. Contact: Ed Keith at [ekeith@odf.state.or.us](mailto:ekeith@odf.state.or.us).

**Mixed/Multiple Tree Species Management,** May 31-June 1, Corvallis, OR. Contact: Steve Pilkerton at [steve.pilkerton@oregonstate.edu](mailto:steve.pilkerton@oregonstate.edu).

**The Art and Science of Multi-Aged Forest Management,** June 5-6, Klamath Falls, OR. Contact: Anne Maloney at 541-883-5681 or [amaloney@odf.state.or.us](mailto:amaloney@odf.state.or.us).

### Contact Information

**WFCA:** Western Forestry and Conservation Association, 4033 SW Canyon Rd., Portland, OR 97221, 503-226-4562; [richard@westernforestry.org](mailto:richard@westernforestry.org); [www.westernforestry.org](http://www.westernforestry.org).

**Forest Engineering:** Forest Engineering Inc., 620 SW 4th St., Corvallis, OR 97333, 503-754-7558; [office@forestengineer.com](mailto:office@forestengineer.com); [www.forestengineer.com](http://www.forestengineer.com).

**Starker Lecture Series:** Oregon State University, Corvallis, OR, 541-737-1585; [www.cof.orst.edu/starkerlectures](http://www.cof.orst.edu/starkerlectures).

**Send calendar items to the editor, Western Forester, 4033 SW Canyon Rd., Portland, OR 97221; fax 503-226-2515; [rasor@safnw.org](mailto:rasor@safnw.org). The deadline for the March/April 2007 issue is February 13.**



**Forest Inventory, Biometrics, and GIS Services**

- Forest Inventory Design, Maintenance, and Due Diligence
- Growth Model Development, Testing, and Calibration
- Applied Statistics, Modeling, and Simulation
- Spatial Analysis, Database Development, and Mapping

**Mason, Bruce & Girard also Provides Expertise in Forest Management, Economics, and Planning**

**Contact Jessica Burton (GIS) or Steve Fairweather (Biometrics)**  
[jbarton@masonbruce.com](mailto:jbarton@masonbruce.com) - [sfairweather@masonbruce.com](mailto:sfairweather@masonbruce.com) - 503.224.3445  
 707 SW Washington St., Suite 1300 Portland, OR 97205  
[www.masonbruce.com](http://www.masonbruce.com)

# Who's a Member in the Society of American Foresters?

BY CHUCK LORENZ

**A**t the House of Society Delegates (HSD) meeting in Pittsburgh on October 24, 2006, Charlene Schildwachter, senior director, Membership and Marketing, presented a proposal to revise various parts of the membership process of SAF. Charlene made a similar presentation to the Council at its meeting on October 25, 2006.

What is proposed and what might it mean?

1. Change the membership application in the following way: (1) Limit member categories on the application form only to two: Member and Student; and (2) Eliminate the requirement for a member's endorsement.

2. Allow all members other than Honorary members to vote on all issues.

3. Establish a flat dues structure: Professional rate would be \$133; Retired rate would be \$105; and Student rate would be \$35.

4. Allow students who continue their membership from student to

member to count their student membership in total years as members.

5. Maintain the Golden Member status with the option to receive the *Journal of Forestry* for a \$25 subscription fee.

6. Create a single "Local Unit" fee of \$20 on the application for membership.

7. Additionally, the proposed member category on the application would become a **permanent change** to the membership categories.

The proposed changes would be the result of a combination of Council administrative action, bylaw changes and constitutional changes. Constitutional changes require a national referendum and the approval of two-thirds of the members voting.

## What has happened to date?

HSD requested Council not take any action until the SAF membership had an opportunity to review and respond to the proposal. At its October meeting, Council deferred action on all of the items, other than the endorsement requirement, until

its March 2007 meeting. Council did act to eliminate the endorser requirement. At its December meeting, Council reiterated its intent to begin dealing with the proposals in March 2007.

## Where from here?

The application changes are an effort to simplify the process of becoming a member. Currently there are nine member categories on the application. Reducing the number to two simplifies the joining process. Eliminating the endorser requirement was targeted at permitting online application processing, as well as reducing administrative burden.

The voting proposal would have implications at several levels. Currently, Student members vote only at the student chapter level. Professional members vote on all issues at all levels: chapter, state society and nationally. Conditional Professional, Associate and Technician members vote at chapter and state society levels. Corresponding, International and Honorary members have no voting privileges.

Though unstated, presumably, the voting proposal would affect the opportunity to hold office as well. Currently, Student members hold office only at the student chapter level, and may serve on their division and state society executive committees. Professional members may hold office at all levels: chapter, division, state society and nationally. Conditional Professional, Associate and Technician members may hold office at chapter and state society levels, as well as at HSD and in Working Groups. Corresponding, International and Honorary members have no office-holding privileges.

The flat national dues structure has previously been endorsed by Council, but it has not been fully implemented. Currently, rates (other than students) vary between \$79 and \$133 depending on member status and tenure.

The proposal to count student membership in total years of membership is forward looking, not retrospective. The intent is to recognize total years of SAF membership. One consequence is that members would reach Golden Member status earlier.

Charging Golden Members for *JOF*



## LOG LINES Log Price Reporting Service

*Since 1989, publishing monthly report of delivered log prices from private timber sales in western Oregon and Washington. Call for free sample issue and subscription information.*

P.O. Box 2215

Mount Vernon, WA 98273

[www.logprices.com](http://www.logprices.com)

Phone 360 336-6850

Fax 360 336-2624



## THE TIMBER EXCHANGE

15110 SW Boones Ferry Rd., Lake Oswego, OR 97035  
[www.thetimberexchange.com](http://www.thetimberexchange.com)

Serving timberland owners since 1987

Transaction Foresters, Licensed Real Estate Brokers in Oregon and Washington

Timber & Timberland

\* Focus \* Experience \* Success

▲ Marketing

▲ Appraisal

▲ Negotiation

▲ Management

Over \$400 million and  
300,000 acres of timberland  
transactions completed

[mvolk@thetimberexchange.com](mailto:mvolk@thetimberexchange.com) (503) 636-7064



is proposed as an alternative to eliminating the category. Golden members do not pay dues at any level. Demographics suggest the number of Golden members, currently about eight percent of SAF's membership, will continue to expand, and has the potential for significant fiscal impact. In recent years donations by Golden members have approached the \$25 proposed *JOF* subscription rate.

The local unit fee was proposed to ease an administrative burden. Currently, only national dues are listed on the application. National staff must then determine the appropriate "local unit(s)" for each new member and invoice them for that additional fee, raising the concern that our application process is not as transparent as it could be. There are 32 state societies, 13 divisions, and 100 chapters that collect dues.

There are two related sets of information that describe these proposals: "SAF Membership Analysis and Proposal" and "Membership PowerPoint." These are available on the joint Oregon/Washington State SAF website at [www.forestry.org/wf](http://www.forestry.org/wf).

Many of the mechanisms for implementing these or alternative changes to membership and dues have not been formulated.

### What's your role?

Take the opportunity to read these documents and discuss them at your chapter and state society meetings (both OSAF and WSSAF have held discussions at the executive committee level). Take the time to familiarize yourself with the SAF Constitution and Bylaws available at [www.safnet.org](http://www.safnet.org).

Share your comments, concerns and suggestions with your local unit leadership, your District Council member (listed on page two of this issue) and with the national office staff. The Council will take up these proposals in March 2007. SAF operates best when each member gets involved. Your leadership wants to hear from you. ♦

*Chuck Lorenz was chair of the 2006 House of Society Delegates and is a former WSSAF chair. He can be reached at [c\\_4str@yahoo.com](mailto:c_4str@yahoo.com).*

## Wiggins Receives 50-year Award

**Glenn Wiggins receives his 50-year certificate from Gordon Gibbs, North Olympic Chapter chair. Congratulations to Glenn on his Golden membership.**

PHOTO COURTESY OF MARIE WIGGINS



## HAGLUND KELLEY HORNGREN & JONES LLP

ATTORNEYS AT LAW

Providing Innovative Counsel for Avoiding and Resolving Timber Contract, Endangered Species Act, State Forest Practice Act, Timber Trespass, and Log Lien Disputes

Professional Forester on Staff

101 SW Main Street, Suite 1800  
Portland, Oregon 97204-3226  
Telephone (503) 225-0777  
Facsimile (503) 225-1257  
[www.hk-law.com](http://www.hk-law.com)



Site Selected Seed Sales For

Alaska • Washington • Oregon • No. California • W. Idaho

### CUSTOM CONE COLLECTION & SEED PROCESSING

Complete Progeny and Seed Orchard Processing Services  
Preferred Sources of Christmas Tree Seeds and Seedlings

### CUSTOM SEEDLING STOCK

Container Grown (plugs) and Transplant Service (plug + 1)

David Gerdes

Mike Gerdes

F O R E S T E R S



*"Serving Many of the Reforestation Needs of the World From This Location Since 1889"*



## Policy Scoreboard

*Editor's Note: To keep SAF members informed of state society policy activities, Policy Scoreboard is a regular feature in the Western Forester. The intent is to provide a brief explanation of the policy activity—you are encouraged to follow up with the listed contact person for detailed information.*

### OSAF Survey on Credentialing.

OSAF recently surveyed its members about their interest in various options for credentialing of forestry professionals in Oregon. This is not a new issue for OSAF, but the survey was intended to offer a current picture of members' views before pursuing the issue further. The survey was designed to gauge interest in some major options that exist, from no credentialing to voluntary registration to required licenses to practice, like those for engineers (i.e., with education, experience and examination standards). A background report on credentialing and summary of existing state programs can be seen at [www.safnet.org/policyandpress/LRCinfo.cfm](http://www.safnet.org/policyandpress/LRCinfo.cfm). At least one state (Virginia) has a law that defines a "forester" through an SAF-accredited college degree requirement and prohibits individuals without such a degree from publicly representing themselves as a forester. And, of course, national SAF sponsors the Certified Forester program as a form of voluntary credentialing.

Results of the survey (34% of OSAF members responded) suggest that although there is only about 18 percent who support mandatory credentialing, a majority (55 percent) supports OSAF

action to promote formal but voluntary credentialing or a law like in Virginia that defines a "forester" to prohibit public misuse of the term. The OSAF Executive Committee, with further help from the Policy and Legislation Committee, will examine and discuss the survey results in more detail before deciding on a potential action plan. Contact: Paul Adams, OSAF Policy chair, 541-737-2946; [paul.adams@oregonstate.edu](mailto:paul.adams@oregonstate.edu).

### BLM Westside Planning Continues.

The process to develop new management plans for over 2.5 million acres of BLM lands in western Oregon continues. The agency took some public input during the initial scoping period and in reaction to its draft planning criteria and management alternatives. Revised alternatives in response to public comments were issued earlier this fall, and a draft management plan and EIS are expected in spring 2007. OSAF submitted some comments to BLM during the scoping period and in response to its draft planning criteria, and will consider additional input after the draft plan and EIS are released. For further background and links to major documents related to this BLM planning effort, see [www.blm.gov/or/plans/wopr/](http://www.blm.gov/or/plans/wopr/). Contact: Paul Adams, OSAF Policy chair, 541-737-2946; [paul.adams@oregonstate.edu](mailto:paul.adams@oregonstate.edu).

**Two Position Statements under Review in 2007.** OSAF is reviewing two position statements scheduled to expire in 2007. "Commercial Timber Harvest on Public Lands in Oregon" will expire February 22, 2007, and at this writing a slightly revised version has been prepared for potential approval by the Executive Committee at its January meeting. This issue remains very timely given extensive forest management needs and costs on federal lands, and due to long-held economic obligations to communities from nearby

state and federal forests. "Landslides on Forest Lands" is set to expire on December 6, 2007. Although a lack of large storms has reduced the visibility of this issue in recent years, our steep, uneven terrain reflects the potential that exists for it to be front page news before too long. All OSAF members are invited to review the existing statements ([www.forestry.org](http://www.forestry.org)) and pass along any comments to your local chapter officers or the Policy Committee. Contact: Paul Adams, OSAF Policy chair, 541-737-2946; [paul.adams@oregonstate.edu](mailto:paul.adams@oregonstate.edu).

### Forestry Professionals as Stakeholders.

Public agencies and other decision-making groups often seek input from stakeholders as they evaluate forest issues and develop policies and management plans. Forestry professionals may be included due to their affiliation with commonly identified groups (e.g., forest industry, landowners), but rarely are they called upon to represent a professional perspective independent of their employer or client interests. The result is missed opportunities to tap highly relevant expertise and experience, as well as a limited voice for a key group that must deal directly with policies and plans shaped by others, often without the unique, independent insights of the professional forestry community. SAF members are encouraged to help fill this gap, and to remind agency leaders and decision makers of the importance and value of including forestry professionals as stakeholders. A one-page handout has been prepared to help communicate these points. Contact: Paul Adams, OSAF Policy chair, 541-737-2946; [paul.adams@oregonstate.edu](mailto:paul.adams@oregonstate.edu).

**OSAF Members Encouraged To Use Position Statements.** With adoption of a new position statement on Managing Mature and Old-Growth Forests in late 2005, OSAF now has eight active positions



## Woodland Management Inc. Professional Foresters

5285 SW Meadows Road, Suite 468  
Lake Oswego, Oregon 97035

(503) 684 4004 (phone)  
(503) 684-4005 (fax)

**Jim Wick**

[jim@woodlandmgmt.com](mailto:jim@woodlandmgmt.com)

**Dan Green**

[dan@woodlandmgmt.com](mailto:dan@woodlandmgmt.com)



**Serving Northwest landowners for over 20 years.**



on important forestry issues. The others are: Active Management to Achieve and Maintain Healthy Forests, Salvage Harvesting, Commercial Timber Harvest on Public Lands in Oregon, Clearcutting, Using Pesticides on Forest Lands, Riparian Forest Management and Fish, and Landslides on Forest Lands. Members are encouraged to use OSAF's position statements to help convey their professional forestry views to key decision makers and the interested public. In addition to handouts and mailings, text from the position can be helpful in articulating important points in letters to the editor, comments to public agencies, etc. All of the OSAF position statements are posted at [www.forestry.org](http://www.forestry.org). Contact: Paul Adams, OSAF Policy chair, 541-737-2946; [paul.adams@oregonstate.edu](mailto:paul.adams@oregonstate.edu).

**EPA Tightens PM<sub>2.5</sub> Air Pollution Standard.** Pursuant to the goals of the federal Clean Air Act (CAA), the U.S. Environmental Protection Agency in September 2006 reduced by almost half the 24-hour average standard for fine particulate matter (PM<sub>2.5</sub> or particles less than 2.5 micrometers; by comparison, a human hair is about 70 micrometers in diameter). When breathed in, these tiny particles can reach the deepest regions of the lungs. Short-term exposure to particle pollution is linked to a variety of significant health problems, ranging from aggravated asthma to premature death of people with heart and lung disease (see details at [www.epa.gov/air/particulates/index.html](http://www.epa.gov/air/particulates/index.html)). A major source of PM<sub>2.5</sub> is forest fire smoke.

For example, the 500,000-acre Biscuit Fire in southwest Oregon emitted 115,000 tons of it in 2002; during that year all United States wildfires emitted approximately one million tons of PM<sub>2.5</sub>—an amount exceeding industrial process sources (0.9 million tons), fuel combustion sources (0.7 million tons) and transportation sources (0.4 million tons). Forest managers are concerned that the new standards may reduce or perhaps curtail opportunities for prescribed burning. Most foresters believe prescribed fires can improve resource conditions and because burning is done under planned conditions, rather than resulting from random natural events, forest managers can help reduce subsequent wildfire emissions. Policies have been that if a state has all the program pieces of the CAA in place all wildland fires were treated leniently (see details in a University of Idaho report at [www.cnrhome.uidaho.edu/default.aspx?pid=77222](http://www.cnrhome.uidaho.edu/default.aspx?pid=77222)). That may change. Additional research likely would be useful to demonstrate to airshed managers the beneficial “pay me now or pay me later” aspects of prescribed fire—a little smoke now in exchange for reduced wildfire smoke in the future.

Contact: Jay O’Laughlin, IESAF Policy chair, 208-885-5776; [jayo@uidaho.edu](mailto:jayo@uidaho.edu).

**Spotted Owl Habitat Lawsuit.** In early November, the Seattle and Kittitas Chapters of the Audubon Society, with the support of the Washington Forest Law Center, named Weyerhaeuser, Doug Sutherland (Commissioner of Public Lands), Washington State Department of Natural Resources, and all the members of the Forest Practices Board in a lawsuit directed at protecting spotted owl habitat. The plaintiffs hope to show that the state’s forest practices rules violate the federal Endangered Species Act. The suit targets four owl circles under approved Forest Practices Applications and seeks to prevent any timber harvesting FPAs from being

approved inside an owl circle that is outside of a Spotted Owl Special Emphasis Area. Contact: Doug St. John, WSSAF Policy co-chair, 425-564-5702; [dougstjohn@greencrow.com](mailto:dougstjohn@greencrow.com).

**WSSAF to Host Legislative Reception.** The Southwest Washington Chapter is hosting a legislative reception on behalf of WSSAF for the Washington State House and Senate natural resources committees on February 21. The reception provides an opportunity for foresters to communicate directly with legislators and staff on issues important to the management of Washington’s forests. For more information and to RSVP, contact John Ehrenreich at [jehrenreich@wfpa.org](mailto:jehrenreich@wfpa.org). ♦

## MUSSELMAN & ASSOC., INC.

Consulting Foresters

7360 SW Hunziker St., #204  
Portland, OR 97223-2306  
Telephone (503) 684-5727

Experts in timber cruising,  
appraisals, and marketing utilizing  
efficient data processing.



IDEAS TO GROW WITH®

## WESTAR®

The Brightest New Herbicide for  
Herbaceous Weed Control for Douglas-fir.

—See your Wilbur-Ellis Pro for more details—

*For information on this or any other herbicides, call:*

**Bruce Alber 503-227-3525—western Oregon & western Washington**

**Joel Fields 509-928-4512—eastern Washington, Idaho & Montana**

**Scott Johnson 916-991-4451 & Jerry Gallagher 530-570-5977—California**

9685 Ridder Rd. S.W., Suite 190 • Wilsonville, OR 97070

## “Finally, a Professional Laser at a Reasonable Price”



The new TruePulse laser rangefinder made by Laser Technology is available from Atterbury Consultants.

- Accurate to  $\pm 1$  foot (usually sub foot)
- Slope & Horizontal Distance
- Calculates Heights
- Fast and Easy to use
- Less than \$700.00
- New Patented Optics
- Laser Technology Quality

Call Jon Aschenbach at 503-646-5393 for more information.

### AVAILABLE NOW!

#### ATTERBURY CONSULTANTS, INC.

3800 SW Cedar Hills Blvd., #145  
Beaverton, OR 97005

## 2006 Washington Imagery \$50/County



Orthorectified NAIP color imagery is available for Washington state. The resolution is 1 meter. Imagery is delivered on DVD in MrSid format.

- Only \$50.00 per county!
- 1 meter Color imagery
- Use in ArcView or ArcGIS or even Internet Explorer
- 2005 Oregon imagery also available
- UTM, NAD83, Meters
- Available in other coordinate systems for \$50.00 more per county
- Buy entire state for only \$995.00

Order Online at [www.atterbury.com](http://www.atterbury.com).  
Call Jon Aschenbach at 503-646-5393 for more information.

#### ATTERBURY CONSULTANTS, INC.

3800 SW Cedar Hills Blvd., #145  
Beaverton, OR 97005

SOCIETY OF AMERICAN FORESTERS

### Western Forester

4033 S.W. Canyon Road  
Portland, Oregon 97221

Non-Profit Org.  
U.S. POSTAGE  
**PAID**  
PORTLAND, OR  
PERMIT NO. 16

PRINTED ON  
RECYCLED PAPER

## Take the guesswork out of your job.

Forget rigid height routines. Forget the limitations of set targeting distances. Forget settling for mediocre accuracy. Forget manually factoring in vertical angles. Forget struggling with obscured sightlines. In fact, with the two new low-cost products from Laser Technology, Inc., you can forget all the hassles typically associated with gathering accurate field data. The one thing you do have to remember though is to visit: [www.lasertech.com/wsaf](http://www.lasertech.com/wsaf) to learn more.

