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# **Evolving Forest Policies, Research and Education**

BY GEORGE BROWN

The past 30 years, and especially the last 20 years, have seen remarkable changes in forest practices, forest policies, forestry education and



forestry research. These changes have been driven by an ever-expanding understanding of forest systems and by dramatically changing public perceptions of the role of forests in meeting society's needs.

My first trip to the West Coast was in 1960 with the senior forestry class from Colorado State University. We visited a logging site on Oregon's south coast and watched huge logs being varded with tractors down a stream channel. The tractors had churned the stream bed into a gray goo and were pushing a slurry of mud, stream gravel and wood with their blades. It was an ugly sight.

Only a decade later, armed with new information about forest operations, water quality and fisheries, Oregon's legislature and forest industry leaders crafted the Oregon Forest Practices Act, which set new standards for logging, road construction, reforestation and the use of chemicals on forestland. Similar legislation was quickly passed in other states. A plethora of federal legislation (Clean Air Act, Clean Water Act, NEPA, ESA) added additional regulatory emphasis for changing forest practices. These changes occurred rapidly and have forever altered the way in which forests are man-

It wasn't only regulation that broadened the focus of forest management to include protection of soil, water, fish and wildlife resources. Indeed, the basis for these changes and most of the regulatory language came from a new kind of research that began in the early 1960s, but really blossomed at the end of the decade. The Alsea Basin Logging and Aquatic Resources Study in Oregon was the first watershed study to measure the

effects of timber harvesting and road construction on water quality and salmonids. Similar studies began in Washington and British Columbia.

But by far the most sophisticated research on the structure and function of Northwest forests began in the late 1960s with the National Science Foundation-sponsored Coniferous Forest Biome project, a detailed and well-coordinated effort by the PNW Research Station of the Forest Service, and the colleges of forestry at the University of Washington and Oregon State University. The focus of this research was understanding how coniferous forests functioned as a system, not just how individual pieces



PHOTO COURTESY OF OSU COLLEGE OF FORESTRY

Many changes in forestry regulations have taken place over the years, including the number of snags and leave trees that need to be left in a harvest area.

> worked. For example, scientists didn't just examine how aquatic organisms lived in streams, but how the stream system and the surrounding forest were linked together. From this work came an understanding of the importance of large wood in the functioning of streams and the health of aquatic systems. This, in turn, led to policies and regulations that changed the fisheries agencies' practice at the time of removing logs from stream channels and beds.

This new approach of looking at forests as complex systems was incorporated in other research. For example, the FIR Research Program in

(CONTINUED ON PAGE 2)

# **Evolving Forest Practices**

(CONTINUED FROM FRONT PAGE)

southwest Oregon developed a comprehensive system for achieving reforestation on difficult sites by integrating research on forest genetics, nursery management, site preparation, vegetation management, soils, wildlife and timber harvesting. The Coastal Oregon Productivity Enhancement project brought the same comprehensive analysis to coastal forests' ecosystems.

Armed with these comprehensive descriptions of forest systems, system analysts were able to develop models that could help managers, policy makers and the public understand not only how these systems functioned, but how they might change through implementation of alternative policies, practices or regulation. These powerful tools have provided a new way for people to discuss the future of our forests.

The changes in forestry research and public policy led to rapid changes

in the way forestry was taught in our universities. Prior to 1960, relatively little research was done by the teaching faculties of most forestry schools. Now, faculties have significant research responsibilities. As a result, their research is immediately brought into classrooms. Curricula have been broadened to incorporate more policy-related subject matter and more systems-related forest science. Senior-level forest management courses now teach students to deal with a complex array of resource and policy issues and not just how to construct a timber management plan. Many of these courses are teamtaught by faculty with very diverse disciplinary backgrounds.

With this rapidly expanding research base and a growing regulatory framework for forest management, the need for post-graduate professional education exploded. The Pacific Northwest led the way in developing new programs in extension forestry and professional continuing education. The region's universities, state and federal agencies, and

forest industry began to work together in identifying educational needs and coordinating educational programming. A regional educational consortium with OSU, UW, WSU, Forest Service Regions 5 and 6 and their PNW Research Station, BLM, USGS and EPA was a national model for cooperation. Unfortunately, recent budget cuts and reorganizations have seriously reduced this outreach program.

It is difficult to gauge exactly the impact of all this progress in research and education and the changes in policies and regulations in the midst of the turmoil and political strife surrounding our region's forests. But in my opinion, it has been very significant. Long gone are the days of tractor logging in streams that I witnessed in 1960. Indeed, a 2001 comprehensive report titled *The State of Oregon's Environment* by a blue-ribbon panel of experts appointed by the governor called attention to the great progress made on forestlands and the significant work still needed on agricultural lands and in urban settings across the state. We can be justifiably proud of what forestry has contributed to enhanced water quality and the protection of aquatic resources.

In spite of this good news, there are some very troubling issues that challenge us all as we look to the future. Our society continues to grow in size and wealth and to become ever more urban in character, resulting in less connection to the land and its resources. Our economy has become more complex and more global. It is more difficult for people to discern the linkages between resource management decisions and their quality of life. Public confidence in government has eroded as elected officials find it more difficult to deal with complex policy questions, including those in natural resources. Public trust in agencies, including forestry agencies, and those who manage forestland, has deteriorated badly in these past 20-30 years. Compounding the confusion is the increasing national consumption of wood products while, at the same

# **Western Forester**

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

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#### **State Society Chairs**

**Oregon:** Bill Peterson, 2098 NW Lakeside Place, Bend, OR 97701; 541-317-8695; fax 541-383-4700; bpeterson@fs.fed.us

**Washington State:** Nancy Peckman, 705 Reynvaan Dr., Aberdeen, WA 98520; 360-537-8285; fax 360-537-8500; nancy.peckman@ weyerhaeuser.com

**Inland Empire:** Lauren Fins, Dept. of Forest Resources, University of Idaho, Moscow, ID 83843; 208-885-7920; Ifins@uidaho.edu

**Alaska:** Richard Coose, USDA Forest Service, P.O. Box 9533, Ketchikan, AK 99901; phone/fax 907-247-9533; dcoose@kpunct.net

#### **Northwest Council Members**

**District I:** Ann Forest Burns, 5508-35th Ave., NE, Suite 102, Seattle, WA 98105; 206-522-5942; fax 206-522-5392; aforestburns@msn.com

**District II:** Darrel Kenops, 1555 Hayden Bridge Rd., Springfield, OR 97477; 541-741-3466; dkenops@comcast.net

> Please send change of address to: Society of American Foresters 5400 Grosvenor Lane Bethesda, MD 20814 (301) 897-8720

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PHOTO COURTESY OF OSU COLLEGE OF FORESTRY

Forests contribute to enhanced water quality and the protection of aquatic resources.

time, citizen demands for the cessation of timber harvest on public lands accelerate.

Another troubling trend is the declining public investment in education and research. As the need for complex, comprehensive science to aid policy makers has increased and the need for sophisticated managers capable of making complex decisions has grown, funding to support research and education has plummeted. For example, funding by the Oregon Legislature for the Oregon Forest Research Laboratory in 1998 at the end of my tenure as dean was less in constant dollars than in 1960 when I graduated from college, even though the issues demanding research attention had grown dramatically in magnitude and complexity. The education budget wasn't any better. Our investment per student credit hour for forestry coursework at OSU was only 35 percent of that at a peer institution, North Carolina State. Recent budget cuts have exacerbated the problem. And Oregon is not the only state making such decisions.

Where will all this lead? It is difficult to predict given the volatility of our current political situation and the rate of change in public policy. I am concerned about the increasing gridlock that binds us up in court as we seek to manage our complex forests.

I am concerned about the flight of capital and infrastructure as our forest industry relocates off shore. I am deeply concerned about the fate of our rural communities in the Pacific

Northwest as they decay in the midst of abundant natural resources.

But I am encouraged by the quality of the people in our profession. And I am greatly encouraged by the quality of the students enrolled in our colleges of forestry. As a life-long educator, I have a fundamental belief in the value of education and the ability of teachers to make a difference in people's lives and in the way they perceive the world. If professional foresters remember that they have an obligation to serve as objective, thoughtful teachers of those they employ, those for whom they work, for their families and their communities, we might be able to rebuild the level of trust that people once had in us and move our profession and the management of our nation's forests to a different plane. •

George Brown is dean emeritus, College of Forestry, Oregon State University, in Corvallis. He can be reached at 541-737-8561 or george.brown@oregonstate.edu.



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# We've Come a Long Way Baby (haven't we?)

BY ANN FOREST BURNS

orestry is a profession concerned with the long term. The crops we grow take a working lifetime or more to mature. Yet, in order to survive as a profession, we must be



responsive to the ever faster-paced changes within the society that our profession draws from and which it serves. Perhaps no change is more pronounced in that society than the increasing diversity of its workforce. The forestry profession's willingness and ability to adjust to and take advantage of those changes is one of the factors that will determine our survival as a recognized and respected profession.

It was the fall of 1966, at the beginning of my "second freshman year" at the University of Washington, when I decided to enroll in a couple of forestry courses. Imagine my surprise when I was told I could not enroll

"because [I was] a girl. Girls [could] not be foresters because there [were] no jobs for girls in forestry." I have no clear recollection of what I said to the benighted advisor who said those words. I do remember how angry I was. Prof. David Scott, then associate dean for undergraduate instruction and the father of college-bound teenage daughters, came to my rescue and signed my course entry card. I showed up the next morning in the classroom of the benighted advisor, learned to ignore being categorically called "Gentlemen" at the start of every lecture, was one of three women (out of 50) at summer camp and graduated with a degree in forest management four years later. The benighted advisor was, to some degree, right: In 1970, there were practically no forestry jobs open to women. Not caring for lab science, I decided against a graduate degree in forestry and went to law school to find a way to pursue a career in forestry. The enactment of a number of environmental laws in the next few vears made that decision a better one than my forestry professors thought.

Those same legislative enactments, Earth Day and the women's movement in the 1970s changed the demographics of forestry and natural resources student bodies across the country. Perhaps in no small part because they were told the profession was not open to them, women made their way into forestry classrooms. By the time I returned to teach forest policy and law at the University of Washington in 1978, fully one-third of the students in my classes were women. Few were people of color.

Gradually, jobs in the field opened up to women. All-woman surveying, firefighting and trail building crews proved that women could do the work. Anti-discrimination laws and settlements of lawsuits against federal land managing agencies brought an end to that sort of gender apartheid. Women's cultural bias toward working things out and seeking solutions beneficial to all parties made them good negotiators in the workplace. As finding win-win solutions to environmental issues became ever more imperative, women from many natural resource disciplines began to emerge as leaders in those negotiations. SAF, too, began to profit from the presence of women in the profession as more local and state society offices and committee chairships were filled by women. In the Northwest and nationally, people of color are still largely absent from SAF.

Some national statistics help put the forestry profession's current situation in perspective. According to a 1997/1998 academic year report of the Food and Agriculture Education Information System, women received 45.1 percent of total BS degrees awarded; 42.3 percent of BS degrees in agriculture/natural resources/forestry; 21.7 percent of BS degrees in forest science. Currently, 11.9 percent of SAF members are female. Nearly 95 percent identify themselves as Caucasian; less than one percent as Asian; approximately half a percent each as African



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Bruce H. Williams

American, Hispanic and Native
American; a quarter of a percent as
multi-racial. As the percentage of
non-Caucasian workers in America
continues to increase, it will be
increasingly important that our profession understand the perspective of
those who use the products and
amenities foresters produce. By
encouraging the participation of people of color as well as women in our
profession, forestry and the Society of

American Foresters will be better able to interact effectively with the larger society that we serve.

The work of the SAF's standing Committee on Cultural Diversity, chaired by Tina Terrell (tterrell@ fs.fed.us), and of Council's Committee on Cultural Diversity, chaired by Tim French, CF (frencht@mdc.state.mo.us) is to encourage and promote an environment with the SAF that ensures access to organizational involvement and leadership for all SAF members. Your participation in those efforts, at whatever level you work in the profession and serve in SAF, will assure that we represent the best of the forestry profession to the larger society we serve. •

Ann Forest Burns is District 1 Council Representative. She can be reached at 206-527-5942 or aforestburns@msn.com.

The Kenai Peninsula Borough and the Interagency Forest Ecology Study Team\* are proud to invite you to the following symposium:

# A CHANGING ALASKAN FOREST ECOSYSTEM

Effects of Spruce Beetle Outbreaks and Associated Management Practices on Forest Ecosystems in South-central Alaska

February 24-26, 2004 • Land's End Resort, Homer, Alaska

**Symposium objectives:** This symposium will present and synthesize results from various research, monitoring, and forest management projects to summarize our current understanding of spruce beetle (*Dendroctonus rufipennis*) outbreaks and their effects on forested ecosystems in south-central Alaska.

**Symposium sessions:** Focused sessions have been organized with invited speakers to address the following topical areas (additionally, one evening poster session will be held):

- Dynamics of spruce beetle outbreaks (this session will include a plenary talk by Dr. Edward Berg, Forest Ecologist, U.S. Fish & Wildlife Service, and his colleagues to set the stage for explaining spatial and temporal variability of spruce beetle outbreaks)
- The effects of spruce beetle outbreaks on forests
- Fire ecology and changing fuels
- Effects on wildlife habitat
- Management of infested stands and effects of stand management (includes a plenary talk from specialists with the Kenai Peninsula Borough's Spruce Bark Beetle Mitigation Program)
- Socio-economic impacts of the spruce beetle

Keynote Presentations: "Managing Natural Disturbance Regimes" by Dr. Tom Quigley, Director, USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon. "Climate Change & Alaskan Forests" Dr. Ron Nielson, Research Climatologist, USDA Forest Service, Pacific Northwest Research Station, Portland, Oregon.

For more information: Those interested in attending should contact Roger Burnside, Alaska Department of Natural Resources, Anchorage, AK at: INFEST@dnr.state.ak.us, or 907-269-8460. An email notice will be sent in mid-December that will include the tentative agenda, a call for posters, and information on registration and lodging. Go to the Kenai Peninsula Borough Spruce Beetle Mitigation Program home page for additional details on the symposium, http://www.borough.kenai.ak.us/sprucebeetle/.

\*The Interagency Forest Ecology Study Team (INFEST) was formed in 1995 to help better understand and manage forest ecosystems in Alaska through the fostering of partnerships among ecologists, natural resource specialists, land managers, and private land owners. The team includes representatives from the Alaska Department of Fish and Game, Alaska Department of Natural Resources, Kenai Peninsula Borough, National Park Service, USDA Forest Service, U.S. Fish and Wildlife Service, and U.S. Geological Survey. For more information about INFEST go to http://www.state.ak.us/local/akpages/FISH.GAME/habitat/geninfo/forestry/INFEST/infesthome.htm.

# **Silviculture: Then and Now**

BY JOE MURRAY

orestry can be understood as the art and science of human interaction with the forest. Developed over centuries, it has changed in many ways, yet there are portions of the human experience with the forest that have remained constant. Silvicultural



forests in his empire had been exhausted because of harvest, war and civilization's need for agricultural land. As the forest was depleted, public opinion began to have an impact on forest management. The result was the beginning of forest policy and the development of silviculture.

The dwindling timber resources of the ancient world brought about public

with ever-improved technologies. Railroads replaced horse-drawn wagons and steam donkeys with spar trees replaced bull whackers. Now we use roads, shovels, helicopters and highlead towers to harvest timber. Trees are grown as crops being planted, sprayed and fertilized. Cities and farms continue to consume forestland. The limits of the "inexhaustible" forest are apparent. Public policy shapes our forests and its management more so than silviculture, dictating stream buffer

widths, harvest size, leave trees and huge areas set aside with no harvest, not even for ships or temples.

For much of human history, the forest has been both in demand and in the way of human progress. Silvicultural technologies have changed; however, some regimes today are similar to those of earlier times because the basic silvics of trees have not changed. Whether we call the forest a holy grove or a wilderness area or limit harvest for warships or spotted owls, the focus of our management is on human needs and our understanding of what values the forest provides to society.

The inexhaustible forests of early human history proved less so as populations increased and technological advances were introduced to the woods. The forest will endure on its own if left to itself; it only needs our stewardship because we need its wood. •

Joe Murray is a forester for Merrill & Ring in Clallam Bay, Wash. He can be reached at 800-998-2382 or pysht@ olypen.com. He is the current SAF Field Forester of the Year award recipient for District 1.

For much of human history, the forest has been both in demand and in the way of human progress.

sciences, forest policy, regulations and holy groves are areas where we have seen both changes and consistency.

Aboriginal tribes around the world in general did not practice forestry. Populations were small and extraction from the forest was insignificant when compared to its vastness. If resources became limited, many aboriginal peoples simply moved to new locations.

During periods of human civilization, the forest was feared by people who lived on its edges. It seemed dark and menacing, and was the home of predators. The forest was harvested, but not cultivated, and settlements moved away from the edge of the forest. However, the forest was allowed to remain on the frontiers as a physical deterrent from invading neighbors.

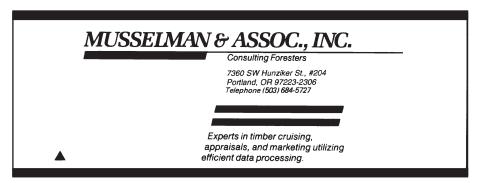
In 11 B.C., much of the civilized landscape that had been forested centuries earlier devolved into desert, and wood for temples and war ships had to be brought in from great distances. In 465 B.C. the Greeks attempted to regulate the cutting of trees. In 333 B.C. Alexander the Great found many of the

policies to regulate human use of the forest. Forest set-asides were first established during the late Roman Empire; holy groves were regulated to allow harvest for only temple and ship construction. Hunting reserves were established, and frontier forests were protected from harvest as a primary fortification against invading armies.

Early silviculture practices were documented by the Romans. Stump sprouts were thinned and the coppices used for grape stakes, while the uncut stems were allowed to grow into a mature forest. Between 1300 and 1400 A.D., silvicultural systems were developed around shelterwood and seed tree harvest regimes. These silvicultural practices developed by the Germans in the fourteenth century were the first efforts by humans at managing the forest for a sustained yield of wood for human use.

The modern concept of high yield forestry is a more recent development. Much of its development has taken place during the twentieth century. The harvest of the North American forest moved west across the continent





# **Forestry: Then and Now**

BY GARY BLANCHARD

y career as a professional forester started in 1961 following graduation from the College of Forestry at



Oregon State University. Forestry was different then, but in many ways it is still the same. The physical and biological aspects are still similar. Take care of the soil, plant good trees, keep the weeds and other competition under control, and the trees will do just fine. In 1961 "tree farming" was not only socially acceptable, but most of the public thought it was good. The biggest changes have been in the regulatory arena. We can still grow trees as a crop, but landowners no longer can use their land entirely as they choose.

In 1961, if you wanted to build a house on your back "40" all you had to do was get approval from the county sanitarian for your septic tank, ask the power company to deliver service, go through the formality of getting a building permit (cost around \$20), and start driving nails into nice tightgrained, relatively knot-free boards.

Forestry was that simple as well. We decided what and where we wanted to harvest and started cutting trees. At the end of the year we were required to submit a harvest report to the Department of Revenue, which they verified with their staff of timber cruisers. Oregon has had a reforestation requirement since the 1940s, so we did have to assure the state that we had either left seed trees, planted or seeded the areas we clearcut. Isn't it amazing that with so little regulation we have any trees or salmon left?

One thing that has stayed the same is the forester's love of the land. The profession has always recognized the value of good stewards; people who could extract benefits from the land and still keep it productive.

In 1961, there weren't many women in the woods. They had to have a lot of grit just to get into forestry. There was definitely a bias against them in some forestry schools, but, thanks to some pioneers, the doors opened.

In the 1960s, if we needed dynamite to shoot stumps, open ditches or deepen pump chances, all we had to do was go to the dynamite supplier and buy what we needed: blasting caps, fuses and powder. No license was required. Try that now.

In the 1960s, '70's and early '80s, federal lands were being actively managed. The Siuslaw National Forest, which is my "backyard forest," had many exemplary plantations. They had perfected the art of slash burning under Rex Wakefield and others, and they were committed to the establishment of the new forest following each clearcut. During that period the counties that were blessed with federal timber were enjoying their share of the timber receipts. Schools had plenty of money, roads were kept in good shape, and the Sheriff could concentrate on enforcing the law instead of fundraising. Life was good. Foresters knew what they were supposed to do—keep forests for all benefits forever. Multiple use was the goal. The situation has certainly changed. In many cases, management of the forests was turned over to disciplines that see multiple use as a negative. They have little interest in managing the forest for its

commodity values. Many of my federal forester friends have now retired and most of them were counting the days until they could get out.

One of the societal changes that has occurred since I became a forester is the growth in the "environmental industry." The environmental organizations discovered they could increase their membership and thus their influence by capitalizing on fear and controversy, so they generate it. The forestry community was slow to recognize what was happening, so did little to counter the misinformation. Even today many land managers are not very pro-active in the effort to explain good forest management to the public. Other landowners and forestry organizations (including SAF) are doing a great job of "showing and telling" our story.

I still recommend forestry to young people exploring career opportunities. The combination of art and science is very appealing. We all enjoy the solitude of the deep woods, but we also enjoy the excitement of a logging operation. We have an awesome responsibility to provide for the future and I am having the time of my life fulfilling that commitment. •

Gary Blanchard is chief forester for Starker Forests in Corvallis, Ore. He is also District II's National Field Forester of the Year. He can be reached at 541-929-2477 or gary@starkerforests.com.



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# **Fifty Years of Change in Northwest Forestry**

BY TOBY ATTERBURY

verything changes with time. Our industry has changed dramatically. Comparing today with 50 years ago, we now have different organizations,



land ownership patterns, people, logging methods, forest management objectives and forestry equipment.

As a small child growing up in a small logging town in northwestern Washington, logging camps, steam donkeys and locomotives were still being used. By the time I graduated from high school, chain saws, triple drums and truck logging were the mode of logging.

During the 1950s, while in high school, I started my career in forestry. These are some of the changes I remember looking back at those 50 years.

Many organizations have disap-

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3800 SW Cedar Hills Blvd., #190 Beaverton, OR 97005 503/646-5393 • Fax 503/644-1683 peared over these years through sales, mergers, takeovers and bankruptcies. In the 1950s, some of the organizations I remember that are no longer with us include Crown Zellerbach Corp., Diamond Match, Summit Timber, Willamette Industries, Dant and Russell, Long Bell Lumber Company, Northern Pacific RR and U.S. Plywood, just to name a few.

In the 1950s, "old growth" was being logged by almost everybody, including the USDA Forest Service and BLM. The mills were geared up for large logs. Small logs were difficult to sell. Today, it is difficult to sell large logs. Many companies and agencies no longer have old growth or will not harvest it. Most sawmills process only small logs.

Logging equipment has also changed from large equipment in the 1950s to small grapple-yarders, fellerbunchers and helicopters today.

In the 1950s, log grades were heavy to peelers, special mill with 2 sawmill and 3 sawmill; 4 sawmill and the utility grades did not exist. Log exports started in the early 1960s and then the market went down in the late 1990s.

Until the advent of GIS, timber type mapping was done by hand and acres were computed with dot counters or planimeters. Some of us used readymappers. A few companies used Kail plotters. Type maps were made on translucent paper, "onions skins," or Mylar so they could be copied by blue line copy machines. Today, maps are made using computers with

Radar Sat, Lidar and GPS.

Geographic Information Systems, global positioning and images taken from airplanes and satellites. Maps are printed using printers and plotters.

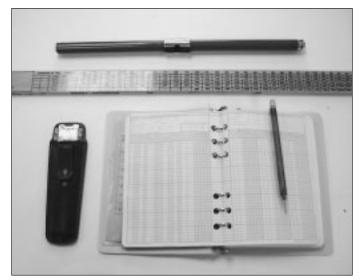
Much of the cruising in the 1950s was done with strip- and fixed-area plots. Prism cruising was just starting to be used. Cruises were calculated by hand. You were lucky to have a handcrank calculator. Many of us used slide rules. Spreadsheets were columnar pads. Word processing was done on a typewriter. Several companies and agencies used Continuous Forest Inventory (CFI) to estimate volume and growth. These amounted to a network of permanent plots across their ownership. Today, most organizations practice "in-place" inventory and use growth models to estimate growth. Everyone uses computers for forest inventory.

Cruising equipment in the 1950s consisted of prisms, abney levels, tally books, staff compasses, readymappers (or plastic cards with a grid), steel trailer tapes, hand wind-up diameters tapes, cruiser axes and Biltmore sticks. Campouts were often necessary because timber always seemed to be beyond the end of the road. Today, cruising equipment has evolved to relaskops, lasers, hand-held computers, increment borers, retractable tapes, Global Positioning System and compasses.

My first experience with computers was with an IBM 650 in the late 1950s, which was not much more than a card

#### Timeline for my adoption of cruising methods and equipment

1950s	CFI plots, first look at a relaskop, mainframe computers.
1953	My first cruising using fixed area plots, strip cruising and firefighting.
1960s	Strata-based inventory, prism cruising, aerial photographs and Kail plotters.
1961	"In Place Inventory" and state forest regulations and laws.
1962	Loggers automatic tape scribing diameters on the back.
1963	Optical rangefinder and the multiscope.
1964	Tree list taper equation program running on an IBM 1401 mainframe.
1970s	Mini computers
1980s	PCs, GIS, word processors, spreadsheets and satellite data.
1986	Hand-held data recorders and SuperACE on PCs.
1990s	Laser rangefinders, digital cameras, sub meter satellite data.





PHOTOS COURTESY OF ATTERBURY CONSULTANTS

The forester's tools of the trade have changed from an increment borer, Biltmore stick, slide rule, and plot book and cards in the 1950s (left photo) to the modern loggers tape, laser rangefinder, compass, GPS and PDA.

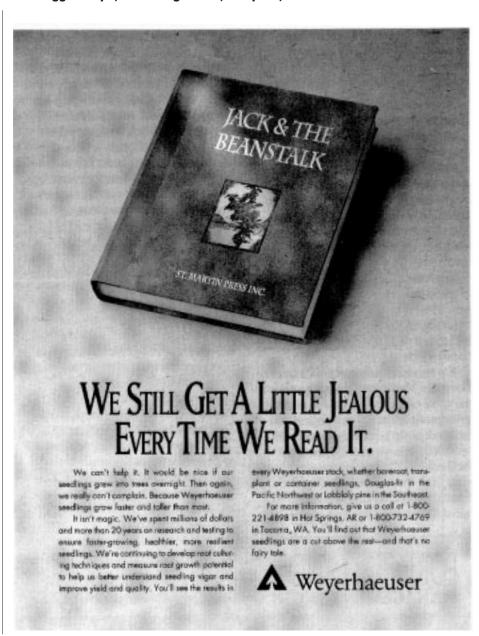
reader. We began to think about processing data on machines. During the 1960s, mainframe computers were used to process forestry software. In the mid 1980s came the PCs, which has been the greatest help to foresters to process their own data in real time. These machines also feature word processors, spreadsheets, spell checkers and graphics.

In the 1950s, organizations on the westside of the mountains clearcut, burned, planted and logged more old growth. Some experiments were being done with thinning, fertilization, precommercial thinning and genetics (plus trees).

Intensive forestry management has developed over these last 50 years. Reforestation became the law. Brush control, precommercial thinning, fertilization and thinning all became practical management tools. Nursery stock has improved dramatically.

Today our tree farms are second growth, the mills are processing small logs, and land ownership keeps changing. New equipment is on the horizon—more satellites, smaller lasers and electronic equipment that will measure diameters and give us various basal area factors. As always, many more changes are coming. ◆

Toby Atterbury is president of Atterbury Consultants, a forestry consulting firm in Beaverton, Ore. He can be reached at 503-646-5393 or tatterbury@ atterbury.com.



# **Recovery from Disaster by Intentional Management**







PHOTOS COURTESY OF WEYERHAEUSER CO.

Figure 1. Shultz Creek 10 miles north of Mount St. Helens is shown in the background with snow in 1980 and 1983. The photo on the left was taken in 1980 after the blast, center is 1982 following salvage logging, and photo on the right, taken in 1997, shows trees planted on Weyerhaeuser land and no trees planted on Mount St. Helens Monument land.

#### BY FREDERICK C. HALL

D isasters such as fire, wind or volcanic blast have destroyed forest stands in the Pacific Northwest. Should we "let nature take its course" or should we encourage recovery? These questions are being raised in regard to the Biscuit Fire in southwest Oregon and the B & B Fire complex along U.S. 20 in central Oregon.

I would like to make a case for encouraging recovery. Two disasters are illustrated: the Tillamook Burn and Mount St. Helens explosion. In both cases, trees were killed over large areas, eliminating regeneration seed sources. Foresters guided rehabilitation by salvage logging with subsequent seeding or







PHOTOS COURTESY OF WEYERHAEUSER CO.

Figure 2. The Mount St. Helens blast effect at the junction of roads 2500 and 2520, 14 miles northwest of the mountain. The top photo, taken in 1980, shows a large pole-sized stand with many downed trees. The photo on the left was taken in 1982 after salvage, and the photo on the right was taken in 1997.

planting trees, and by later precommercial thinning or replanting for stocking level control. Two examples from Mount St. Helens and one example from the Tillamook Burn are provided.

The first example (see figure 1) illustrates conditions in 1980 after the Mount St. Helens blast at Shultz Creek 10 miles north of the mountain. The 90-year-old stand was salvaged in 1982 and planted. By 1997, Weyerhaeuser Company land that was treated had a well established stand of trees, while the Mount St. Helens Monument land, left untreated, was still open and poorly stocked. Ash deposition in this area was very light. Poor tree stocking was a result of remote seed sources. Weyerhaeuser planted Coho salmon in Shultz Creek, which produced bigger fish than in a forest-covered stream due to more food.

A second example from Mount St. Helens (see figure 2), also on Weyerhaeuser land, is at the junction of Roads 2500 and 2520, 14 miles northwest of the mountain. Conditions after the blast (small sawtimber) are shown in 1980 and after salvage logging in 1982. By 1997, a thriving stand of trees covers the landscape. The scene in 1980 clearly suggests that a regeneration seed source was not available, and that down woody material would create impassable conditions over the ground and an enormous fire hazard.

The third example (see figure 3) is from the Tillamook Burn at Kilchis Creek after the fire in 1945 completely killed a large pole-sized stand. It was salvage logged and a limited amount of down woody fuel was left, as shown in the 1962 photo. By 1990, most of the drainage was stocked with seeded or planted trees.

In all three of these illustrations, large diameter, multistoried "old-growth" stands were not present. Instead, evenaged large pole or small sawtimber-sized stands were prevalent, stands 70 to 120 years old suggesting previous crown fires. (See Agee, James K, 1993, *Fire Ecology of Pacific Northwest Forests*, Island Press, for a good discussion of fire in the Pacific Northwest.)

Intentional forest management—treating devastated areas to reduce fuels (salvage logging) and planting to replace trees—seems like an acceptable alternative to doing nothing. ◆

Frederick C. Hall is founder of PlantEcol NW, LLC, a natural resources consulting firm in Portland, Ore. He is currently the chair of the OSAF Portland Chapter. He can be reached at 503-285-8729 or Fred C Hall@plantecolnw.com.

#### **Helms Elected SAF VP**

ohn A. Helms of Orinda, Calif., has been elected vicepresident of the SAF. After serving SAF as vice-president in 2004, Helms will assume the SAF presidency—the organization's top volunteer leadership post—on January 1, 2005. Oregon SAF's John Beuter is the current vice president and will serve as president in 2004.

Helms, one of the nation's leading experts in silviculture, is professor emeritus at the University of California-Berkeley. He served as professor of silviculture at the university from 1964-94 and chaired the Department of Forestry for four years. ◆







PHOTOS COURTESY OF OREGON DEPARTMENT OF FORESTRY

Figure 3. Kilchis Creek in the Tillamook Burn. A large pole-sized stand killed by the fire is shown in 1945 (top). It was salvaged and trees seeded by 1962 (center). Most of the better sites supported a well stocked young stand by 1990.

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# **Stand Management: Yesterday's vs. Today's Forester**

BY BRYON LOUCKS

n 1963, Joe Smith started working as a field forester in what today we would call stand management. During the winter months, he was responsible for supervising crews that were planting two-year-old seedlings. The six- to eight-inch seedlings, packed 1,000 to a bag, were planted with a very light hoedag that could easily be swung with one hand. The average planter could plant 1,500 to 2,000 trees per day. In the winter and spring, if the budget would allow it, he would oversee crews doing precommercial thinning on dense natural stands. Any field forms or maps that the crew needed were handdrawn by Joe, and then duplicated with a mimeograph machine. In spring and summer he would oversee crews clearing road edges to keep the road system open. In the fall, the dreaded budget time would arrive. Each budget line item would carefully be hand copied 3 to 10 times for senior management approval. When management demanded cuts by 10 percent on one line and 19 percent on another, he would have to start from scratch and make new copies with the changed amounts. Since very little money was allocated toward stand management, he would spend most of his time cruising timber stands prior to harvest.

Loggers were still cutting old growth and sending three logs per train car to the mill. When foresters talked about a rotation of planted trees, they were talking about 80-100 years. No one could even imagine logging something 12 to 18 inches in diameter!

Looking back on his career, Joe would probably have said that life was good and simple, but sometimes frustrating, such as at budget time.

Now 40 years later, his granddaughter, Josephine Smith, is working for the same company in the stand management group. Her year is totally different and a level of complexity has been added that Joe still has trouble understanding. In September, February and March, she oversees the planting of third generation improved P+1 (plug plus one year in a transplant bed) seedlings that are 18 inches tall and are packed 150 to 200 to a bag. She knows that at least 95 percent of the seedlings will survive, how tall they will be in 50 years, how many limbs per whorl, the wood density and amount of sinuosity (waviness of the bole) and ramicorn branching (spike knots) to expect at harvest time. Josephine's seedlings will be logged sometime within 30-40 years of planting. She will very likely see plantations she planted being harvested during her career!

November through April she is involved with fertilization. The helicopter has a GPS tracking system that plots its course against a topographic map to ensure that there are no overlapping swaths and no fertilizer gets into the streams.

During the summer she is involved with a site preparation spray program that will help the third generation planting stock reach six feet in height within three years of planting. The helicopter uses the same GPS system to prevent spray from reaching any streams.

Whenever Josephine travels in the woods, she carries a laptop computer that contains all the data about the stands that her company owns. If she finds an error or something that needs to be updated, she will do it on site and then electronically transfer it to the data specialist so the company tracking system can be updated.

Throughout the year she oversees crews doing precommercial thinning in young stands and deals with commercial thinning contractors who are using modern cut-to-length systems to thin 20- to 35-year-old stands. All field work done to audit these projects is recorded on handheld data recorders that will download to her laptop and then be faxed via her cellular phone to appropriate partners.

Like her grandfather, she still has a budget to prepare, but she copies last year's spreadsheet from her computer files, makes any necessary changes, and easily prints as many drafts as are needed. As alterations are requested by her managers, it is an easy task to make changes and print or forward them via email.

Josephine still plants trees and presents a budget, but these and everything in between have changed so much in 40 years that a forester practicing in 1960 would have no idea what Josephine is doing today.

Josephine thinks her job is very complex when compared to her grandfather's career. However, in 2043, she may look back and think how simple a forester's job was in 2003! ◆

Bryon Loucks, a retired consulting forester and SAF member, owns and manages 200 acres of forestland in Lewis County, Wash., with his wife Donna. He can be reached at 360-736-2147 or loucks@localaccess.com.



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# **WSSAF Establishing an Educational Foundation**

BY DAVE YATES AND ANN JOHNSON

s past state society chairs, we wanted to see WSSAF take the opportunity to establish an educational foundation to fund scholarships for students interested in forestry, and for state and chapter educational projects. We just never seemed to have the right opportunity to reach that goal. However, with the generous donation of \$4,500 from a member, we now have the opportunity to start the Washington State Society of American Foresters Foundation (WSSAF Foundation). The foundation is a chance for members to become involved in a long-term plan for the future, a chance to leave a legacy.

Your executive committee has been working on the legal issues and details to create the foundation. We've gotten through many difficult questions like: Do we have to change our bylaws? Do we have the legal framework to establish a scholarship program? How is a foundation structured?

Using Oregon SAF Foundation's data as a template, a draft foundation charter has been written. The draft charter is on the WSSAF website at www.waforestry.org, or you can receive a copy by calling the Northwest Office at 503-224-8046. We need to hear your thoughts and ideas on the management of the foundation and how to further the efforts.

Many may wonder if the WSSAF Foundation will conflict with the Foresters' Fund maintained by National SAF. Others may wonder if the funds will only provide scholarships to four-year students. The answers to these and many other questions are spelled out in the draft charter. On the website there is also a section with a list of common questions and the things we've learned, as well as the draft bylaws, to help members understand the interrelationships between WSSAF's executive committee and the foundation board.

Part of our goal is to create a broad

enough charter to give the foundation board latitude to capture a variety of educational opportunities. For example, no one specific forestry school is dedicated as the recipient of the scholarships. If the foundation board becomes aware of an especially deserving student who needs assistance to attend a school in another state, the draft charter gives the foundation board that ability. Another potential opportunity is providing grants to chapters for educational projects. For example, if a chapter would like to schedule a "Walk in the Woods" day, but lacks funds for the

handout booklets, they could apply for a grant from the foundation.

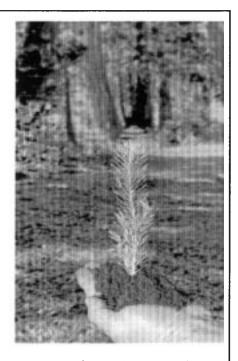
Please take a moment to look at the draft foundation charter on the website and give us your thoughts, opinions and ideas. Dave Yates can be reached at dmysaf@comcast.net and Ann Johnson can be reached at annies42@hotmail.com. You can also contact Lori Rasor at the Northwest Office and she will forward your comments to us. This is an exciting opportunity for members to leave a personal forestry legacy, and we are so pleased to share the news with you all. ◆

Dave Yates was WSSAF chair for 2001 and Ann Johnson was WSSAF chair in 2002.

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# **Guest Editorial**

# End the Balance Paradigm in Forest Policy

BY ROBIN ROSE

he word "balance" has become so much a part of the forestry vernacular in the Pacific Northwest as to lose all meaning. Without going into papers, personalities and politics, can we all agree that we hear this word throughout our debates, discussions and political forums? We hear "balanced approach to forest management," we hear "balance competing goals" and we hear "balance public needs." Forestry professionals, academics, the forest industry and the forest ecology movement have all tacitly given lip service to balance as the basis for a fundamental approach to solving our collective environmental

What working foresters have been presented with is a false paradigm! Balance is so often presented as two factors equally arranged over a fulcrum. The balance to be reached is solvable if the weights can be made the same. We know this to be false since so often the balance we reach shows heavily weighted laws on a short-end balancing out light-weight evidence (as an example) on the long end. The opposite also occurs. Is this not balance? Somehow this balance of forces is presented such that balance means "equal." A good example of this is when legal wrangling leads to a proposed law where riparian zones can legitimately have 300-foot buffers to balance the public perception of need, and this is balanced by so-called scientific views that riparian zones will benefit from this "balanced approach."

We see a balanced approach to the use of herbicides, fire and dozens of other conundrums. Take herbicides. It is perfectly balanced to have laws governing their sale and use by a pop-

ulation that nationally purchases tons of (say) 2-4D for their lawns on a yearly basis. The weight in favor of killing lawn weeds is so great that the weight of using 2-4D in a Pacific Northwest forest at the other end of the teeter board could be imagined as out somewhere near infinity. Canadian thistle in a front yard stands no chance at all of surviving, while the same plant in a clearcut requires a stay-of-execution until management plans are written and legal notice of each herbicide application is registered with a governmental agency. In truth, the lawn will receive multiple 2-4D applications both yearly and over multiple years, while the forest may get a maximum of two applications every 40 to 500 years. These are not scenarios or hypothetical notions. These juxtaposed actions, regulations and laws are "balanced" approaches that our region accepts as equal both morally and legally.

Balancing the needs of society with the needs of the forest is another one of these false paradigms. The problem with this is that the balance cannot be presented intellectually as a board-over-a-fulcrum image. It is more like that of a round compass azimuth balanced and centered over the head of a spindle, floating and bobbing in a quivering hand. Each social issue is a pie section on the azimuth with its counter pie section on the opposing side. The problem with gaining balance in this situation is that...IF the opposing sections are the same size, they may not have the same weight. They might even be of different sizes and be in balance due to having the same weight. Balance may be achieved in opposing counter sections on one issue, but the azimuth as a whole cannot sustain balance due to the variation in section weights among the other sections or issues.

Socially, politically and even scientifically, we constantly attempt to force a balance in forest policy because we need the emotional security balance provides us. At various times we declare ourselves, our laws and our science in balance when, in fact, the azimuth we work with has been forced into balance through mere empirical tinkering. The competing issues can and often are completely out of synchronization and balance. Things "look" balanced.

How do we tinker with these social engineering schemes to get forest policy to balance? It is not that we lie to ourselves. That would be too easy. The azimuth we deal with can be balanced by moving the spindle around underneath. A new hole must be made to keep the azimuth from slipping back off this new center of social and scientific gravity. When one of the issues gains a new weight or density or volume within, we must find a new balancing point. The bobbing takes us off kilter.

And so it goes. The balance paradigm in so many ways simply does not work. The balance "theorem" we hold so dearly lacks much too often the heart of truth. In truth we choose balance in order to ignore realities. Balance becomes a relative term. There is no true balance between the use of 2-4D on lawns while attempting to exorcise 2-4D from legitimate applications in a forest. What balance is there when the fulcrum for one goes nearly to infinity? Where is the balance in forbidding the cutting of timber while our society runs ever more paper through high-speed color printers? Where is the balance when 400,000 acres burns up and some "guru" finds that socially acceptable? Where is the balance in demanding ever-increasing quality in toilet paper, while attempting to shut down forestry operations driven by the demand for wood? How can there be balance in a world filled with highprofit ink cartridges, yet wood pulp is seen as evil?

In fact, we still do need balance. We need forests, we need pulp mills and we need to protect our forests no matter who owns them. Yet, we also need to reach a deeper understanding of the truths underlying the balance we seek. This whole notion of balance is so overworked. "Balance what?" you might ask. Look deeper into the notion of balance when it comes up. "What factors and evidence do you see contributing to a balanced outcome?" you might ask. "How will you know when whateverit-is is balanced?" Just imagine how these discussions go when "balanced and integrated" get combined!

Maybe...just maybe we all need to realize that there never IS a balanced outcome to be had. In the real world the gain of one thing does lead to the loss of other things. For each action there is an equal and opposite reaction. As with atomic bombs, we may end up with "opposite reactions" that are perfectly in balance, which means...in the "physics" of some "balanced" forestry outcomes we may not find the consequences very livable! There in lies the fallacy of balance. ◆

Robin Rose, an SAF member, is an associate professor in the Forest Science Department at Oregon State University in Corvallis. He can be reached at 503-737-6580 or robin.rose@oregonstate.edu.

# **Admiralty Inlet Chapter Views Sequim Bay Restoration Project**



PHOTO COURTESY OF STEVE RICKETTS

he Admiralty Inlet Chapter held a field trip to the Jimmy-Come-Lately Creek Estuary Restoration Project at the southern tip of Sequim Bay. The field trip was in conjunction with their September 18 chapter meeting.

The field trip was led by Bryon Rot,

senior habitat biologist for the Jamestown S'Klallam Tribe. The goal is to put the straightened creek back into its historical channel, provide large wood debris, and restore the adjacent forest ecosystem to improve habitat for the listed summer chum salmon and other estuary wildlife. •

# **WANTED: A FEW GOOD ARTICLES**

Themes for the 2004 issues of the *Western Forester* have been announced. Please take a minute to see what's on tap for next year and provide a couple suggestions on the types of articles you would like to see. Suggestions can be sent to Lori Rasor at rasor@safnwo.org.

#### 2004 Western Forester Publication Schedule

<u>Issue</u>	<u>Theme</u>	<u>Deadline</u>	<b>Date Mailed to Members</b>
Jan./Feb.	Understanding Conservation Easements	Dec. 8, 2003	Jan. 29, 2004
March/April	State Society Annual Meeting Publicity	Feb. 16, 2004	March 29
May/June	Fire in the Forest	April 19	May 31
July/August	Wildlife Management	June 14	July 26
Sept./Oct.	PNW Research Station's Focused Science Delivery Program: Enhancing the use of scientific knowledge in natural resource management	August 16	September 28
Nov./Dec.	Status of Forestry Education in the PNW	October 18	November 29
Jan./Feb. 2005	Water and Fish Issues	December 6	January 28, 2005

## **2004 Northwest SAF Leadership Conference**

#### **Sustainable Forestry - Sustaining SAF**

#### January 9 and 10, 2004 - Doubletree Hotel Columbia River, Portland, Oregon

The Pacific Northwest is on the road to sustainable forests and professional foresters are leading the way. The Northwest SAF Leadership Conference is your chance to become better prepared as one of the leaders. This is an important opportunity to join with other foresters from the region to share ideas and learn how to become more effective. The first day's focus is executive committee meetings for the Oregon and Washington State societies where you can help set goals for 2004. The second day will feature comprehensive presentations on the structure of SAF, followed by a series of workshops speakers on membership, communications, policy and fundraising. The conference will close with a Leadership Forum including presentations by some of the region's top forestry leaders on sustaining forests and sustaining professional forestry.

Take advantage of the early registration discount by mailing in your registration form by January 5. By attending this conference, you will be eligible for 10 CFE Category 2 hours.

Pete Heide, 2004 WSSAF Chair, (360) 705-9287

#### NORTHWEST SAF LEADERSHIP CONFERENCE PROGRAM HIGHLIGHTS

#### FRIDAY, JANUARY 9

- Northwest Office Committee Meeting-9:30 a.m.
- Leadership Conference registration opens at 10:30 a.m.
- Luncheon buffet-Welcome and introductions SAF in 2004-John Beuter (invited), 2004 SAF President
- Joint Executive Committee session
- Concurrent State Society Ex-Com meetings
- · No-Host social and icebreaker
- · Dinner and speaker

#### **SATURDAY, JANUARY 10**

- Breakfast with your Council Representatives-7:30 a.m.
- SAF Organizational Structure
- Membership: The Foundation of SAF
- Communications: Our Members, the Public
- Policy: Having a Say in the World of Politics
- Fundraising: Sustaining our Efforts
- Luncheon Buffet
- Sustainable Forestry-Sustaining SAF Leadership Forum
- Adjourn-3:00 p.m.

#### **LODGING**

A block of rooms has been reserved at the Doubletree

Hotel Columbia River for SAF members attending the conference. A special room rate of \$78 plus tax is available on a first-come basis. For reservations, call 1-800-643-7611 and mention that you are attending the Northwest SAF Leadership Conference.

The Doubletree Hotel Columbia River is located next to the Columbia River in Portland off of I-5 at the Jantzen Beach exit. For additional information on the hotel, go to www.doubletree.com.

#### **REGISTRATION INFORMATION**

The registration fee is \$95 (\$110 if received after January 5), which includes two lunches, one breakfast, one dinner and all conference materials. Spouses or guests wishing to join the meals may register by contacting Aimee Sanders at 503-224-8046 or aimee@safnwo.org.

Please return your completed registration form and a check payable to Southwest Washington Chapter SAF to:

SAF Northwest Leadership Conference 4033 SW Canyon Road Portland, OR 97221

Registration Form – 2004 SAF Leadership Conference January 9-10, 2004 • Doubletree Hotel Columbia River • Portland, Oregon							
—Registration includes Friday lunch, Friday dinner, Saturday breakfast and Saturday lunch—							
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Address, City, State, ZIP							
Phone	_ Email Address						
Special Needs (dietary or otherwise)							
Will you be attending lunch on Friday? (circle one) yes no							
□ \$95 if received by January 5. □ \$110 if received after January 5. Total Enclosed							
Program Questions? Contact Pete Heide at 360-705-9287 or pheide@wfpa.org Registration Questions? Contact Aimee Sanders at 503-224-8046 or aimee@safnwo.org							

#### **Calendar of Events**

#### **UNIVERSITY-SPONSORED EVENTS**

<u>Course</u>	<u>Dates</u>	<u>Sponsor</u>	<b>Location</b>
Plantation Forestry Symposium	Jan. 20-22	OSU	Portland, OR
Managing Fire Adapted Landscapes Conference	Mar. 8-12	OSU	Medford, OR
Human Dimensions of Family and Farm Forestry International Symposium	Mar. 28-Apr.1	WSU	Pullman, WA
Variable Probability Sampling	Mar. 29-Apr. 2	OSU	Corvallis, OR
IUFRO Foliage Meeting	Jun. 14-18	OSU	Corvallis, OR

#### OTHER EVENTS

Conservation Easements and Forestry: Understanding How they Work Together, cosponsored by SAF Northwest Office and WFCA, Dec. 18, Wilsonville Holiday Inn, Wilsonville, OR. Contact: WFCA.

**2004 Northwest SAF Leadership Conference,** Jan. 9-10, Doubletree Jantzen Beach, Portland, OR. Contact: Pete Heide at 360-705-9287 or pheide@ wfpa.org. (See form on page 18.)

**Road Design,** Jan. 12-15, Corvallis, OR. Contact: Forest Engineering.

**LoggerPC V4,** Jan. 20-21, Albany, OR. Contact: Forest Engineering.

**12th Annual NIPF Foresters Workshop,** Jan. 23, Westcoast Ridpath Hotel, Spokane, WA. Contact: Chris Schnepf at 208-446-1680 or Peter Griessmann at 509-684-2588.

**Cable Logging Workshop,** Feb. 23-26, Corvallis, OR. Contact: Forest Engineering.

A Changing Alaskan Forest Ecosystem, Feb. 24-26, Land's End Resort, Homer, AK. Contact: Roger Burnside at 907-269-8460 or INFEST@ dnr.state.ak.us; www.borough.kenai. ak.us/sprucebeetle/. (See ad on page 5.)

**Innovation Fair,** Feb. 25, World Forestry Center, Portland, OR. Contact: WFCA.

**Oregon Logging Conference,** Feb. 25-28, Eugene, OR. Contact: 541-686-9191 or www.oregonloggingconf.com.

Send calendar items to the editor, Western Forester, 4033 SW Canyon Rd., Portland, OR 97221; fax (503) 226-2515; rasor@safnwo.org. The deadline for the January/February 2004 issue is December 8. **Unit Planning & Layout,** March 1-4, Corvallis, OR. Contact: Forest Engineering.

**2004 OSWA Annual Meeting/ Oregon Family Forest Fair,** March 19, Chemekata Community College, Salem, OR. Contact: Mark Havel at contact@futureforestry.com.

**Fuel Reduction on Steep Slopes Using Cable Systems,** March 29-30,
Coeur d'Alene, ID. Contact: Forest
Engineering.

Wildlife Damage Management for Natural Resource Managers, April 27-28, Olympia, WA. Contact: WFCA.

**2004 Washington Farm Forestry Association Annual Meeting,** April 29-May 1, Lake Chelan, Wash. Contact:

Maurice Williamson at 509-684-8550 or general@williamsonconsulting.net.

**2004 OSAF Annual Meeting,** May 5-7, Southern Oregon University, Ashland, OR. Contact: Bill Yocum at 541-618-2384 or bill\_yocum@blm.gov.

Forest Seedling Root Development from the Nursery to the Field, May 12-13, Eugene, OR. Contact: WFCA.

**Washington State SAF Annual Meeting,** May 12-14, Red Lion Hotel,
Port Angeles, WA. Contact: Joe Murray at
1-800-998-2382.

**Ecological Society of America National Meeting,** August 1-6, Portland, OR. Contact: Fred Hall at 503-285-8729 or Fred\_C\_Hall@plantecolnw.com.

#### **Contact Information**

**OSU:** OSU College of Forestry Outreach Education Office, Peavy Hall 202, Corvallis, OR 97331-5707; 541-737-2329; http://outreach.cof.orst.edu/.

**WSU:** Department of Natural Resource Sciences, Cooperative Extension, Washington State University, P.O. Box 646410, Pullman, WA 99164-6410; 509-335-2963; http://ext.nrs.wsu.edu/.

**WFCA:** Western Forestry & Conservation Association, 4033 SW Canyon Rd., Portland, OR 97221, 503-226-4562; richard@westernforestry.org; www.westernforestry.org.

**Forest Engineering:** 620 SW 4th St., Corvallis, OR 97333, 541-754-7558, office@forestengineer.com.

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# My Biltmore, My Pickup and Me

BY MICKEY BELLMAN

t happens at least once a month whenever I stroll through the sawmill. Some mill worker wishes he could trade places and have my job—just driving around in the forest every day, looking at trees and wildlife, and having an enjoyable picnic in the woods. I listen politely, keeping my hands deep in my pockets where they won't rip the tongue out of the speaker's mouth. Usually, I control myself and walk away, kicking sawdust instead of millwrights.

I am a professional forester, which is about as descriptive as saying someone is a designer. My job requires a wide range of duties and knowledge, but forget all the images of tan uniforms, Smokey Bear hats and fire towers. I don't talk to the trees either, at least not that I would

admit in print. I do cruise timber, buy logs for the sawmill, supervise loggers and road builders, serve as purchaser representative and substitute for an accountant. On occasion, I even visit the woods when I am not giving a speech or planting trees.

Take timber cruising, for example. (Believe me, there are days when I wish someone would take timber cruising.) It is a peculiar trade, trying to figure out how many square boards can be cut from round trees. I must walk (climb, run, jump, crawl, fall) through a piece of forested terrain—landscape that often resembles the Himalayan Mountains—and count trees. From my brief inspection, I must estimate the quantity and quality of the lumber that the sawmill might produce from the large plants. Usually, this inspection takes place in a blizzard that would discourage a polar bear, or in a

monsoon that makes Noah's 40-day deluge look like a light drizzle.

During these forest forays, I often carry a Biltmore stick with me. The wooden device is similar to a yardstick and is used to measure the heights and diameters of trees. It also functions as walking stick, machete and sword. While I gaze skyward at a particularly interesting tree, I sometimes use the Biltmore stick as a crude flyswatter, since I often find myself standing atop a yellow jacket nest and the insects are eager to say hello in a most intimate fashion.

Nursing many contact points of my close encounter of the worst kind, I return to the office. I carefully entrust my cruise notes (which now look like the Dead Sea Scrolls) to my faithful secretary. In less than one hour she has deciphered my illegible scratchings and condensed three days of wilderness trekking into a readable summary of my daring exploits. Three days of sweat, blood and pain reduced to a single scrap of cellulose and ink! I scowl politely and return to my desk.

I gather several mathematical devices around me—calculator, slide rule, charts, Farmer's Almanac, Ouija Board, tarot cards, tea leaves—and attempt to evaluate what I have seen. I estimate what some logger might charge to bring the trees to the mill, even though the poor man has never been within five miles of the sale area. I concoct a road construction cost, although any sane road builder would sooner build the Golden Gate Bridge with a Gilbert Erector Set. There are taxes to consider, slash costs and road maintenance costs to factor into the equations. I add in enough to buy a bottle of Jack Daniels, and I arrive at "The Logging Cost." This figure is chiseled into a stone tablet, to be later hung in the boss' office where it is referenced at least daily with the appropriate exclamations.

Next, "The Lumber Value" must be calculated. I make discreet inquiries of the lumber salesman about recent lumber prices. I always reduce these values by 25 percent, since salesmen always tell me what they hope to sell the lumber for. I then increase the values by 35 percent since the trees won't be harvested for two years, and I know the market will get better by

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then. This figure is also chiseled into a stone tablet, hung in the boss' office and referenced daily.

The finale of so many precise calculations arrives when I subtract The Logging Cost from The Lumber Value, only to discover the resulting number is negative, which means someone ought to be paying me to buy the timber sale. After further consultations with tea leaves and Jack Daniels, I dispose of the stone tablets and the Dead Sea Scrolls in the nearest waste receptacle.

Sometimes by accident, I purchase a timber sale for the mill. I then become the "Purchaser's Representative." In theory, I am to represent the mill's interest under the terms of the contract with the government, while supervising the road building and logging operations. In fact, I catch hell from everyone. The government has concerns about the logging operation because the mud is deeper than the top of the Cat tracks. The mill doesn't like the logs and wants me to give them back to the government. The road builder decided the plans are all wrong and put the road on the other side of the ridge. The timber cutters just cut the painted trees instead of leaving them (or vise versa). Two ranger districts are wondering why the monthly payments are 20 days late. And the mill foreman drops a spike on my desk—a spike he discovered with his now toothless nine-foot band saw from inside the log I bought from a local landowner. At times like these, I consult with Mr. Jack Daniels as I try to remain calm and

diplomatic.

As company forester, I am also company log buyer. The process usually begins with a phone call when an unfamiliar voice on the telephone says, "I got me some trees out back. How much will you give me for them?" I am always flattered that this total stranger assumes I know precisely which "out back" he is referring to. I still ask a few pertinent questions—where precisely is "outback?" What tree species? How big are the trees? How old? If the caller can answer two out of four questions, I will stop by, because I was heading that direction anyway to check if my cutters felled the painted trees or the unpainted trees on the government sale.

When I finally discover the timber patch after several hours of driving because the caller said "left" instead of "right," I park my truck behind the three other log buyers' trucks who were also summoned. More often than not, the 17 trees to be sold are along an old fence row, with remnants of barbed wire and old tree forts poking through the bark. I politely thank the proud owner, telling him the trees do not meet my requirements. Perhaps the Mayco Lumber Company (my chief competitor and arch-rival) would be interested. Half the time it was the Mayco log buyer who referred the owner to me.

I also substitute as junior accountant. It is my responsibility to check and approve all payments to loggers, road builders and any private landowners who are naïve enough to sell me logs. This must be done at

least twice a month and be accurate to the nearest penny. To keep things interesting, I either tell the secretary the wrong rates to use, or I let her read my mind by not telling her at all.

I am a company forester, driving 4,000 miles every month through the trees; I observe wildlife everyday as it splatters on my windshield. I talk to the trees with loud shouts and curses whenever I slip and slide down a hill-side. My picnics often times consist of a smashed or soggy sandwich eaten hastily in the shelter of some tree during a rainstorm.

Yes, I can understand why the mill worker in his warm, dry sawmill is so envious of my job. But I still won't trade places with him for even a minute—I am having too much fun! ◆

Mickey Bellman, CF and member of the Capital Chapter, is a consulting forester and freelance writer from Salem, Ore. He can be reached at 503-589-4530 or ginny@ncn.com.

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## **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.

Update: President's Healthy
Forests Initiative. A good source for
keeping up to date on the many policy
activities associated with the President's
Healthy Forests Initiative is provided on
the U.S. Forest Service website
(www.fs.fed.us/projects/HFI.shtml).
Contact: Jay O'Laughlin, IESAF Policy
chair, 208-885-5776; jayo@uidaho.edu.

Risk Assessment and Resource Management. Risk-based decision-making undergirds our environmental laws, and consideration of wildfire risks and risks to endangered species habitats are at the center of many forestry debates. To develop tools and information necessary to assess risks and benefits associated with restoration to prevent uncharacteristic wildfire, and the risks and benefits of no such restoration, a conference on

**January 23 in Spokane** 

Risk Assessment for Decision-Making Related to Uncharacteristic Wildfire was convened on November 17-19 in Portland, Ore. Papers presented at the conference will be published in an outlet not as yet identified. For updates see http://outreach.cof.orst.edu/riskassessment or contact Jay O'Laughlin, IESAF Policy chair, 208-885-5776; jayo@uidaho.edu.

**The ESA at 30.** The Endangered Species Act was signed into law in December 1973. Regardless of individual perspectives on the act, most all natural resource managers and scientists recognize it is ripe for reform, as congressional reauthorization is 11 years overdue. The Endangered Species Act at Thirty: Lessons and Prospects conference that was convened November 12-14 in Santa Barbara, Calif., will soon publish a book of presented papers. Some papers suggest ways to make the ESA work better. For further information see www.esm.ucsb.edu/supporting/special\_projects.html or contact Jay O'Laughlin, IESAF Policy chair, 208-885-5776; jayo@uidaho.edu.

**SAF Position Statement on the ESA.** The SAF has a position statement on the ESA approach for protecting habitat on non-federal lands and suggested reforms. See www.safnet.org/policyand-press/psst/ProtEndgSpcOnPrvtLand\_62102.cfm. Contact: Jay O'Laughlin, IESAF Policy chair, 208-885-5776; jayo@uidaho.edu.

# NIPF Foresters Workshop Slated for

on-industrial private forest (NIPF) lands are vital to the economy and quality of life in the Inland Northwest. Unique skills are required of individuals who help private forest owners manage their property. The 12th Annual NIPF Foresters Workshop is designed to strengthen the skills of consulting foresters, state-employed service foresters, and other natural resource professionals who work with private forest owners. It serves as a forum to provide updates on emerging technology and knowledge applicable to non-industrial private forestry.

This year's program will be held at the Westcoast Ridpath Hotel in Spokane, Wash., January 23, 2004. Topics to be covered include: visual impacts and forest management; the Family Forest Foundation; cedar silviculture (tentative); native and exotic hardwoods for family forests; digital data sources for family forests; wildlife diseases; and the annual Inland Northwest NIPF economics/policy update.

The facilities can accommodate up to 120 people. Registration forms are available at local University of Idaho and Washington State University Extension offices, and are due by January 16, 2004. A \$48.00 pre-registration fee (\$65.00 after Jan. 16) includes lunch and refreshments. For questions on the program, contact Chris Schnepf at 208-446-1680 or Peter Griessmann at 509-684-2588. ◆

#### **OSAF Approves Forest Health**

**Position.** The OSAF Executive Committee recently approved a position statement on "Active Management to Achieve and Maintain Healthy Forests." This is the fourth new or revised position statement adopted this year by OSAF, the others being Salvage Harvesting, Clearcutting, and Using Pesticides in Forests. Given the timeliness and visibility of the forest health and salvage harvesting issues, OSAF members are encouraged to make use of the positions to help convey their professional forestry views to key decision makers and the interested public. All of the statements are on the OSAF web site (www.forestry.org) and they have been sent to all OSAF voting members for their approval along with the ballots for state officers for 2004. Although not required under SAF guidelines, OSAF uses the referendum approach to strengthen the credibility and member understanding and ownership of the positions. Contact: Paul Adams, OSAF Policy chair, 541-737-2946; paul.adams@oregonstate.edu.

# Oregon Board of Forestry Considers Rule Changes and Forestry Plan.

Draft Forest Practices Rule revisions that would increase stream protection requirements for forest landowners and operators were the focus of several public meetings and considerable discussion during 2003. Some of this discussion prompted a shift in some rule requirements to voluntary actions that would be added to the Oregon Plan for Salmon and Watersheds (www.oregon-plan.org). Approval of the proposed rule changes by the Board of Forestry (BOF) will initiate the formal rulemaking process, which focuses on taking public input about the proposed changes and final consideration and endorsement by the BOF.

The Forestry Plan for Oregon (FPFO) is a multi-year strategic plan to help guide the BOF and the State Forester as they work with the public, landowners and other decision makers in developing and implementing forest policy in Oregon. An updated draft FPFO was released for public comment earlier this year. Although professional foresters represented by OSAF were not among the core stakeholders who helped develop the updated FPFO, OSAF Chair Bill Peterson sent a letter about the draft during the comment period. Public input was incorporated into a revised draft released in August, and BOF endorsement of a final draft is expected soon. In addition, a new and closely related draft strategic plan by the Oregon Department of Forestry has been the focus of some recent meetings and discussion. To view the 2003 FPFO, see: www.oregonforestry.org/fpfo/2003/ default.htm. Contact: Paul Adams, OSAF Policy chair, 541-737-2946; paul.adams@ oregonstate.edu.

Forestry and Salmon Position Statement Expired. The SAF regional position statement on Forestry's Role in the Protection of Pacific Salmon Habitat in Forested Watersheds expired in September 2003. Renewal of this statement will depend on the involvement of SAF units in Alaska, California, Idaho, Oregon and Washington. Contact: John Ehrenreich, WSSAF Policy co-chair, at 360-705-9285 or jehrenreich@wfpa.org.

**WSSAF Adopts Two Position** 

**Statements.** The Executive Committee of the WSSAF has adopted two position statements to be placed on the fall ballot for ratification by its full membership. Both statements address the forest health conditions of Washington's forests and the need to have active management techniques in the professional forester's tool kit. The first statement, entitled "Forest Health," was written and adopted by the IESAF. The second statement, entitled "Active Management to Achieve and Maintain Healthy Forests," was borrowed largely from the Oregon SAF. Contact: John Ehrenreich, WSSAF Policy co-chair, at 360-705-9285 or jehrenreich@wfpa.org. ◆



#### **We Remember**

#### Charles H. Willison 1910-2003

Charles "Herb" Willison IV died October 12, 2003. He was born on January 29, 1910, in Portland, Ore., and lived in Hazel Dell, Wash., for 43 years.

Mr. Willison was a forester for Crown Zellerbach for more than 30 years. He also taught forestry at Oregon State University and the University of Idaho. Mr. Willison was a member of the Society of American Foresters for 68 years.

Mr. Willison was a member of the First Presbyterian Church, Toastmaster and Kiwanis. He loved the outdoors and mountain climbing.

A memorial service was held on November 3, 2003.

#### Richard Apple 1947-2003

Portland Chapter member Richard Apple passed away on August 29, 2003, at the age of 56.

Mr. Apple was education director of the then Western Forestry Center from 1975-1980 when he left to go to graduate school in forestry. He graduated with a master's in 1983 from the University of Minnesota and went to work for the USDA Forest Service in Salmon, Idaho, in 1984, where he worked in forest planning.

He married Carol Apple (also a forester) whom he met while going to grad school. In 1987 they moved to Nevada City, Calif., where they both worked on the Tahoe National Forest. In 1990 they moved to Portland, Ore., where both worked for the Natural Resources Management Unit at the USFS Regional Office.

Mr. Apple fought a long battle against cancer (melanoma). ◆

# **Emerald Chapter Sponsors Fall Education**

BY RICH KELLY

all is a colorful season and this year, thanks to a grant from the SAF Emerald Chapter, Lane County elementary schools had an opportunity to experience the season in an outdoor education program. The chapter sponsored the "Fall Discovery" Education Program at Mount Pisgah Arboretum this fall with a \$1,500 grant. The program is open to elementary schools in Lane County and ran from September 29 to November 7. Thirty schools and over 1,000 students attended this program. Volunteer guides, trained by the arboretum, led groups on guided hikes at the arboretum, a park located on the Coast Fork of the Willamette River near Eugene and Springfield. The hikes lasted about two hours and included small groups of six to nine students and parent chaperones or

The Mount Pisgah Arboretum is a nonprofit organization that manages the arboretum in cooperation with



PHOTO COURTESY OF RICH KELLY

A volunteer guide with the Mount Pisgah Arboretum Education Program discusses fall ecology topics with students.

Lane County. "The arboretum presents a high quality education program," explains Eric Kranzush, Emerald Chapter chair. "We believe it is an effective use of our funds to partner with the arboretum. I guess we are also hoping that this experience could lead some of the kids to a

future forestry career," adds Kranzush. ◆

Rich Kelly is an Emerald Chapter member and works for the Bureau of Land Management. He can be reached at 541-683-6405 or rich\_kelly@or.blm.gov.

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