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## A National Perspective on Forestry Education

BY TERRY L. SHARIK AND  
ROBERT J. LILIEHOLM

In the November/December 2008 issue of the *Western Forester*, an article entitled "Forestry Education Today and Tomorrow: A National Perspective," by Terry Sharik, described undergraduate enrollment trends through 2006. Here, we update that earlier work through 2010, examine both undergraduate and graduate trends, and offer new information on gender and ethnic diversity—an extremely important issue to the forestry profession. Finally, the present treatment examines future employment trends for forestry graduates, including those from two-year programs. Our intent is to provide national context for the other articles in this issue on forestry education at institutions in the Pacific Northwest.



**Terry L. Sharik**



**Robert J. Lilieholm**

### Undergraduate enrollment trends

Undergraduate enrollments in natural resources (NR) have continued to increase since about 2005, nearly rivaling levels in the early 1980s and mid-1990s—the periods of highest enrollments since data began being recorded in 1980. Forestry enrollments have remained flat over this most-recent period, and as a result comprise a



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**University of Idaho students conduct field measurements on the University of Idaho Experimental Forest.**

decreasing proportion of overall NR enrollments—going from nearly half in 1980 to less than one-fifth in 2010. Most of the gains in NR enrollments have been in the broader degrees that we have labeled "natural resources/environmental science and management" (NRESM).

The central question then is why enrollments in Forestry have remained constant since 2005 and continued to decline as a proportion of overall NR enrollments. Our analysis of these trends suggests that there are at least eight major factors involved, including: (1) diversification of degree offerings in NR colleges; (2) changing public values toward forests; (3) public association of forestry with the utilitarian/economic perspective; (4) professional association of forestry with specialization in managing wood resources; (5) little attraction of the field to females and minorities; (6) inflexible curricula bound by

accreditation standards compared to other natural resource fields; (7) a shift in hiring practices in federal agencies toward natural resource generalists; and (8) declining harvest levels on national forests. Each of these factors is briefly explored below.

**Diversification of Degree Offerings in Natural Resources.** The bulk of undergraduate degrees in NR are conferred by the 69-member institutions of the National Association of University Forest Resources Programs (NAUFRP), hereafter referred to as "NR colleges." Diversification of natural resource programs in these institutions has a long history, dating back over a century to a period when virtually all natural resource-related offerings were subsumed under the degree title of "Forestry." As specialization within the field of forestry increased, various options were created to acknowledge

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# National Perspectives on Forestry Education

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this increased understanding in such areas as wildlife and fisheries, recreation, range, wood utilization, and watershed management. As enrollments increased in these options, they were elevated to formal degree programs.

As specialization increased, a need arose for degree programs that integrated knowledge across these disciplines, and thus the more general programs in natural resources (labeled "NRESM" above) were borne. The first of these programs date back to the rise of the environmental movement in the late 1960s-early 1970s, when enrollments in NR colleges reached an all-time high. NRESM enrollments tended to be modest at first, but gradually increased over the ensuing decades until where they now constitute about 40 percent of the approximately 20,000 undergraduate students enrolled in all NR degree programs. This begs the

question of whether this increase was a "push" away from Forestry or a "pull" toward NRESM. Our sense is that it reflects a little of both, for reasons explained below.

**Changing Public Values toward Forests.** A number of studies have documented the shift from a utilitarian, extraction-based economic view of forests to a broader array of ecosystem values, dating back to at least the 1980s.

**Public Association of Forestry with the Utilitarian/Economic Perspective.** The association of forestry with the utilitarian/economic perspective goes hand-in-hand with the change in public values toward forests as referenced above, and has been noted for the general population as a whole and for college-bound high school students as well. Such public attitudes toward or perspectives about "forestry" appear to arise from general impressions of the treatment of forests and not of professional forestry per se, as most people have little means to distinguish between the two. Interestingly, this

"negative" public image of forestry seems to be global in scope. Moreover, recent surveys of junior- and senior-level Forestry majors in the U.S. indicate that they are concerned that this negative image may impede the practicing of what they consider "good forestry."

**Professional Association of Forestry with Specialization in Managing Wood Resources.** In some ways this trend is a natural outgrowth of the increasing specialization in forestry over the past century, as noted above. Early on, Forestry and NR professionals were one-and-the-same as foresters were seen as managers of forests (or forest ecosystems, as we now label them). But with specialization, NR professionals came to see foresters as those that specialize in managing wood resources, just as they view wildlife biologists as those that manage wildlife resources, recreation specialists as those that manage recreation resources, and watershed managers as those that manage water resources. Consequently, the role of managing forest ecosystems has shifted to those that are viewed as having a broad perspective of natural resources and strong interdisciplinary skills—i.e., those with degrees in NRESM.

**Unattractive to Females and Minorities.** The reasons for the substantially lower percent of females in Natural Resources as a whole compared to the total U.S. college population is not clear, but may be related to natural resource professions not being perceived as nurturing-type professions. In other words, forestry is perceived as an extraction/utilization-oriented field, with less emphasis on resource conservation and protection. This is indirectly supported by the fact that within the academic areas of natural resources, women substantially prefer the areas of "Natural Resources and Conservation" and "Environmental Science and Studies" over "Wood Science and Products" and "Forestry."

Likewise, it is not clear why minorities choose NR majors at a substantially lower rate than most other disciplines, although we have hypothesized in the past that it may be due to a ten-



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**Next Issue: Forest Roads**

dency of minorities to avoid academic programs perceived as tangential to important issues affecting their communities, and perhaps to the perceived relatively low wages and prestige in the NR professions as compared to law, medicine, business, and engineering. Again, we can only speculate as to why within NR, Forestry is near the bottom with respect to percent minority enrollments. However, our recent surveys of women and minorities among junior- and senior-level forestry students revealed that the low numbers themselves may create challenges in that women in the survey expressed concerns about working in male-dominated workplaces, while minorities indicated a concern with low diversity in the workplace.

***Inflexible Curricula Bound by Accreditation Standards Compared to Other Natural Resource Fields.*** Among the various NR programs of study, only Forestry and Range are bound by national accreditation standards, and as a result tend to have considerably less flexibility in the choice of courses

offered than do other programs, especially NRESM, which do not even have certification standards as do such fields as Wildlife and Wood Science. In addition to an obvious “freedom of choice” advantage for students, this difference may be particularly important to students that transfer from two-year to four-year programs as it can significantly increase the time it takes to complete a four-year degree. And the number of transfer students in four-year programs is not insignificant, commonly exceeding one-fourth of the student population and sometimes approaching half.

***Shift in Hiring Practices in Federal Agencies toward Natural Resource Generalists.*** Employment data by various disciplines in natural resources and related fields is not readily available for either the public or private sector. Perhaps the best index available for the public sector is 10 years of unpublished employment data for the U.S. Forest Service, extending back to 2001. These data indicate that the number of employees in the Forestry (0460) series

has declined steadily since 2001, while the number in the General Biology (0401) series—the closest match to NRESM—has increased steadily, with the latter exceeding the former in 2006-2007. The reasons for this shift in hiring are not entirely clear, but seem to reflect a combination of the desire on the part of the Forest Service to hire more generalists, coupled with an insufficient number of Forestry graduates to fill positions in the Forestry (0460) series.

***Declining Harvest Levels on National Forests.*** Timber harvest levels on U.S. National Forests have declined roughly 80 percent since the early 1990s, mirroring sharp declines in both logging/processing sector employment and undergraduate enrollment levels in wood science and products and forestry degree programs.

#### **Graduate enrollment trends**

The picture for NR enrollment trends at the graduate level nationally is not all that different from that at the

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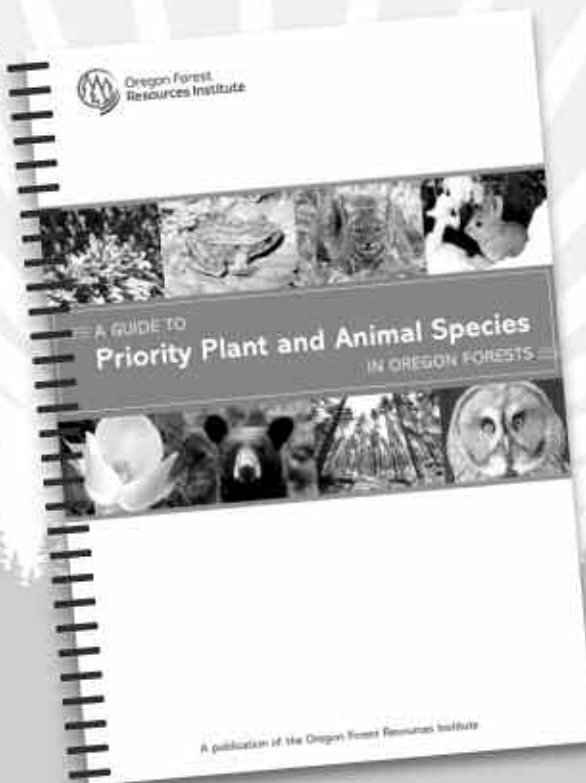
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undergraduate level. While there have been modest increases in Masters and PhD enrollments between 2005 and 2010, Forestry has shown a slight decrease. In contrast, NRESM enrollments have increased by more than three-quarters and one-quarter at the Masters and PhD levels, respectively, over this same time period. At the Master's level, preliminary evidence suggests that the majority of this increase appears to be associated with professional degrees as opposed to research degrees. Nonetheless, in 2010, Forestry enjoyed a slightly higher percentage of overall graduate enroll-

ments than at the undergraduate level. It will be interesting to see if decreases in graduate enrollments in Forestry continue into the future. The answer may depend in part on whether more institutions follow the recent move of the University of Washington to discontinue its SAF accreditation in Forestry at the undergraduate level and move this professional accreditation solely to the graduate level—a situation that currently exists at only two other institutions in the country, both of which are private. However, there are another five that accredit at both the undergraduate and graduate levels,

including Oregon State University, Washington State University, which recently discontinued its undergraduate degree program in Forestry (and thus its accreditation), never accredited at the graduate level and appears to have no intention of doing so in the foreseeable future. The differences in approaches to forestry education and professional accreditation exemplified by these three large institutions in the Pacific Northwest and described in ensuing articles in this issue represent a microcosm of the national situation.

### Supply of and demand for forestry graduates

Information on the demand for forestry graduates is sparse. The Bureau of Labor Statistics (2010) estimated that there were 11,500 foresters employed in 2008, and that this number would increase to 12,900 by 2018, an increase of 12 percent. The best estimates conservatively put the number of forestry degrees awarded in 2010 at about 10 percent of the current work force. It is unknown how many forestry positions become available each year, thus making it difficult to put the supply and demand picture together. However, it does appear that, based on 2009 U.S. Census Bureau data, over 90 percent of the current work force with at least a bachelor's degree in forestry are employed full time, although it is not known in what field they are employed.

While U.S. Forest Service data referred to earlier shows a decreasing number of foresters (series 0460) being employed over the most recent decade, this same database shows an increasing number of Forest Technicians (series 0462) being hired, with the overall number in the work force exceeding that of foresters by a magnitude of 10. Most of those employed as forest technicians have less than a four-year degree, and thus this trend may bode well for those pursuing two-year Associates degrees.

### Conclusions

Forestry education continues to evolve in relation to the needs of society and the profession. In some sense, we are victims of our own success in that the increased specialization in the field of forestry over the past century



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has gotten us to a place where “foresters” are perceived less as managers of forests (or forest ecosystems) and more as specialists in managing wood resources to complement the other specialists that manage water, forage, wildlife, recreation, and so on. This evolution has led to the perceived need for “generalists” to manage forest ecosystems—i.e., people that have some knowledge of the ecological, social, and economic dimensions of natural resource science and management and are able to bring together specialists to work on critical issues related to forests and the local communities that depend on these forests for the many services they provide. Thus, we see the emergence and success of NRESM degree programs.

While challenging, the forestry community should not view these trends as the demise of the forestry profession. Instead, it should herald a return to our professional roots, when the various dimensions of forestry were more fully integrated, albeit less specialized.

Moreover, with the impending implementation of accreditation standards in NRESM developed by the Society of American Foresters, the forestry profession has the opportunity to ensure that the management of our forests into the future will be based on sound science. Indeed, the need is great, as over 500 institutions of higher education in the U.S. self-declare degree offerings in natural resources—including environmental science and studies programs—many of which lack the scientific rigor and field skills acquired through accredited forestry programs. ♦

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## For Further Reading

Sharik, T. L., and S. L. Frisk. 2011. Student perspectives on enrolling in undergraduate forestry degree programs in the U. S. *Journal of Natural Resources and Life Sciences Education* 40: 160-166. Undergraduate Education doi:10.4195/jnrlse.2010.0018u.

Sharik, T. L., and R. J. Lilieholm. 2010. Undergraduate enrollment trends in natural resources at NAUFRP institutions: An update. UENR Biennial Conference, Session Recruitment and Enrollment, Paper 1. <http://digital-commons.usu.edu/cuenr/Sessions/Recruitment/1/>.

Sharik, T. L., and R. J. Lilieholm. 2011. Overview of undergraduate enrollment trends in forestry and related natural resource fields. *Proceedings SAF National Convention*, Honolulu, HI, November 4, 2011.

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# SAF Terrestrial Ecosystem Management Task Force Update

BY GREGORY N. BROWN

**N**atural Resources Management undergraduate programs currently are offered by 52 schools belonging to the National Association of University Forest Resource Programs (NAUFRP). However, unlike their forestry programs, these programs may not qualify for accreditation under the Forestry Standards as set forth by SAF. Most of these natural resource programs require soils, ecology, GIS, policy, water, management, and wildlife courses, and generally fall into broad categories identified as forestry, policy, management, or environmental science. Many of the schools offering natural resources management programs would like to have these programs accredited, preferably by the SAF. As a result, SAF established a Task Force to consider this action.

Several definitions have been provided to describe terrestrial ecosystem management (TEM) curricula. The initial definition by the Task Force was:

"TEM is the profession embracing



the science, art, and practice of managing, conserving, and utilizing all resources on forested landscapes in a sustainable manner to meet the broad array of human-defined goals, needs, and values."

Following refinement by several task force members, there was general agreement that the following definition is more concise and applicable:

"Terrestrial Ecosystem Conservation is the science, art, and practice of conserving and managing natural landscapes and the ecological communities that inhabit them to achieve defined goals."

## TEM Task Force history

The SAF Council established the TEM Task Force on December 5, 2009. Ten SAF members were identified that represented SAF Council, SAF Educational Policy Review Committee (EPRC), SAF Committee on Accreditation, NAUFRP, Ecological Society of America, and professional forestry employers, plus one public member that did not have to be an SAF member (in this case representing The Nature Conservancy). The task force was charged to investigate the merits of accrediting TEM cur-

ricula and to articulate the justification. If warranted, the TEM Task Force was to recommend standards, procedures, and guidelines for TEM accreditation.

During 2010, two conference calls of the task force were held, and two face-to-face meetings (at the 8th Biennial Conference on Education in Natural Resources and at the national SAF meeting) were held. An initial progress report was provided to Council dated March 14, 2010. While Terry Clark initially was the SAF staff person serving as liaison to the task force, Carol Redelsheimer replaced him during mid-year 2010. A task force report dated December 10, 2010, was presented for the February 2011 Council meeting. The TEM Task Force recommended to proceed with development of TEM Standards, Procedures, and Guidelines. This recommendation was accepted by Council. On April 21, 2011, another conference call was held, and another face-to-face meeting of the Task Force was held on November 1 at the national SAF meeting. Another conference call was held on February 3, 2012, and a report was prepared dated February 7, 2012, for Council.

The theme around TEM accreditation standards was discussed at sessions during an Education Summit in Denver, Colorado, on September 11, 2011, which included representatives from SAF and other forest ecosystem management societies. This group composed the Coalition of Natural Resource Societies (CNRS). TEM accreditation was further discussed during the Future of Forestry Education Workshop at the 2011 national SAF meeting in Hawaii in November, 2011; at an Oregon/Washington State SAF Leadership Conference in January 2012; and at the 9th Biennial Conference on University Education in Natural Resources in March 2012 in Colorado. All meetings solicited feedback.

There was a feeling among many professionals that the initial TEM Standards proposed by the task force had not gone as far as they should. The model used by ABET (formerly called the Accreditation Board for Engineering and Technology) was suggested, which has very few general professional requirements, with limited specific requirements for each area of engineering. At the other extreme, a list of spe-



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cific courses for TEM accreditation was proposed, but this level of specificity was not supported. Certification (credentialing) of programs versus accreditation also was suggested, but this went beyond the charge of the task force.

There was much disparity in opinions from the meetings, and the task force realized that further work and refinement of the TEM Standards needed to be done. Therefore, the Task Force is requesting Council to extend the deadline for their final report to June 2012. Generally, the task force has agreed that the TEM Standards should be process-oriented and competency-based. It also is agreed that the TEM Standards will not replace, but be in addition to the current Forestry Standards.

### Proposed TEM Standards

An initial draft of proposed TEM Standards (prepared by Kim Steiner, Pennsylvania State University) was revised on two separate occasions by members of the task force. Generally, the general education standards remained the same as for the Forestry Standards, but the specific requirements under all four major categories of professional education standards were modified.

The titles of the four categories are:

1. "Ecology and Biology," which remained unchanged;
2. "Measurement of Forest Resources," which was changed to

"Measurement and Assessment of Ecosystem Components, Properties, and Functioning;"

3. "Management of Forest Resources," which was changed to "Management of Forest Ecosystems;" and


4. "Forest Resource Policy, Economics, and Administration," which was changed to "Legal, Regulatory, Policy, and Economic Aspects of Forest Ecosystems Administration and Management."

The Task Force agrees that the final TEM Standards should address professional management, provide hands-on experience, regional flexibility, and a core curriculum with flexibility beyond the core, and contain a human dimension component. Also, the task force agrees that the TEM Standards should be structured around basic education of ecosystem components; measurement of ecosystem components; identification, evaluation, and development of management objectives; and application and analysis of management plans.

The task force will present its final


recommendation for TEM Standards, Procedures, and Guidelines to the SAF Council through the SAF Educational Policy Review Committee in June 2012 for approval. The final proposed name for the program will also be submitted at that time as well. ♦

*Gregory N. Brown is Task Force Chair and a member of the Appalachian Section of the SAF. He can be reached at [browngn@att.net](mailto:browngn@att.net).*




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### TEM Task Force Members

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Education Policy Review Committee:  
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and Greg Brown

Council on Accreditation: Laura DeWald (Western Carolina University)  
and Keith Blatner (ex officio)

NAUFRP: Terry Sharik

Ecological Society of America: Paul Alaback

Forestry Employers: Dwight Fielder (BLM), and Greg Russell (State of Minnesota)

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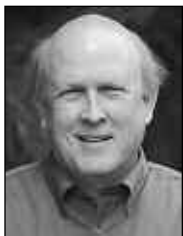
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# Change in the Air at OSU

BY ED JENSEN

**E**nrollment in OSU's College of Forestry continues to grow; in Fall 2011, we reached 889 undergrads, the highest number since the late 1970s. Programs in Forest Management and Natural Resources (especially the degree offered via distance education) experienced the largest growth, but others grew as well. That's the good news—the other side of the coin is that increased enrollments put added pressure on our highly constrained human and fiscal resources.



Lots of curriculum revisions are underway in the college, especially in the SAF-accredited programs of Forest Engineering (FE), Forest Operations Management (FOM), and Forest Management (FM). Each of these programs is actively exploring the creation of a professional school, much like Engineering and Business already have at OSU. In this model, students in their first two years of university work will enroll in a pre-professional program, during which they will complete foundational forestry courses, prerequisite science and math courses, and general education requirements. The pre-professional program will be available online, on-campus, and through certain community colleges. On completion, students can apply to the professional school.

Each of these programs (FE, FOM, FM) is also in the process of instituting a formal cooperative education program with industry, agency, and NGO partners. Students that elect to participate will engage in two six-month cooperative education internships in which they will work for a sponsoring organization. The internships will have formal learning outcomes and students will earn college credit while on the job. For students that select this approach, it will replace the existing six-month work requirement.

Yet another development is the creation of a program in Forest Conservation Management (FCM) to

complement the existing forest management-related programs. The FCM program will provide students with a broader and more science-based program that will serve them well in careers with government agencies, nonprofits, and science organizations, and graduate school. One final change is implementation of a mandatory two-week summer field camp program. Part of the camp will be held near Corvallis and part in central/eastern Oregon. All students must complete the camp prior to admission to the professional school.

Renewable Materials is an undergraduate degree program now two

emphasis on mentored research experiences for undergraduates. The hope is to have every undergraduate student complete a mentored work experience prior to graduation.

Discussions are also underway between the faculties of Resource Recreation Management on the Corvallis campus and Tourism and Outdoor Leadership at OSU's Cascades campus in Bend to see how the programs might combine efforts to create new educational opportunities for students interested in recreation and tourism. It's too early to tell what might develop but we're hopeful of creating new synergies between the two campuses.

We're also excited about two mentor-protégé programs that we've devel-



PHOTO COURTESY OF SCOTT LEAVENGOOD

**Allison Zumwalt, dual major in Renewable Materials and Interior Design, measures slope-of-grain in poplar boards for a mentored project with Scott Leavengood, director of the Oregon Wood Innovation Center.**

years into its transformation from a wood technology-based program to one that includes other renewable materials. Enrollment is creeping slowly upward, but it's already attracting a different kind of student from the previous program. As an example, we currently have three students working on double majors in Interior Design and Renewable Materials. A great deal of thought and effort has gone into this revision, and also into producing marketing and recruiting materials to attract students (check us out at [www.facebook.com/#!/OSU.Renewable.Materials](http://www.facebook.com/#!/OSU.Renewable.Materials)).

Another feature is an increased

opened over the past several years. One (SEEDS—Strengthening Employment and Education for Diverse Students) targets traditionally under-represented students while the other (BOV—Board of Visitors) is open to all students in the college. Both programs pair undergraduates with faculty mentors in paid, mentored work experiences. In both programs the emphasis is on creating opportunities for students that might not otherwise be available to them, and in fostering relationships between the students and their mentors. Both programs have been highly successful in helping students succeed at OSU, as well as in helping them



transition into graduate school and the working world. SEEDS was initiated with a start-up grant from the BLM, followed by two years of funding from the federal ARRA program. As our ARRA funds phase out, we are actively looking for new supporting partners, so if your organization is interested in supporting traditionally underrepresented students in forestry, please let us know.

Our graduate enrollment has grown to 162—and our programs continue to change. In the past year we have replaced traditional Master of Forestry, Master of Science, and PhD programs in Forest Resources, Forest Engineering, and Forest Science with new degree programs in Sustainable Forest Management and Forest Ecosystems and Society. These new programs began enrolling students in Fall 2011. Wood Science and Engineering continues to offer its full suite of degrees. We also offer a new Master's of Natural Resources (MNR) degree. This degree is only available online and has grown rapidly to currently serve 30 students. It graduated its first student earlier this year.

Finally, we're also in the midst of several leadership changes in the college. Many of you know that Hal Salwasser has announced that he is stepping down as dean of the college at the end of this academic year; a search is underway for his successor. In June, Laurie Schimleck will join us as head of the Wood Science and Engineering Department. Paul Doescher has recently been appointed head of the Forest Ecosystems and Society Department, and John Mann has recently been appointed director of College Forests.

When all of these changes are implemented, and combined with the strong set of existing programs already in place, we're confident that we'll be well positioned to remain a strong and vibrant leader in forestry education in the region, the nation, and the world. ♦

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## Natural Resource Education Days

BY EVA BAILEY AND TRISTAN HUFF

**T**his April marks the eighth year that the Coos Chapter of SAF, Bureau of Land Management (BLM), South Slough National Estuarine Research Reserve (SSNERR), and Coos County Oregon State University Extension Service have partnered to host Natural Resource Education Days for local fifth graders at South Slough NERR Interpretive Center. During the week approximately 175 students

spend the day engaged in hands-on, interpretive learning stations led by natural resource professionals. These learning stations give students the opportunity to learn about the complex and diverse nature of local forests and the environment, along with the social and economic benefits they provide.

This program is a group effort of many partnering agencies and organizations. Organizational and planning duties are handled by a planning team comprised of personnel from South Slough, BLM, and OSU Extension. South Slough National Estuarine Research Reserve provides the use of their excellent indoor and outdoor facilities as well as significant staff time to help facilitate the program. The Coos Chapter provides monetary support to help defray the costs of supplies, and Oregon Forest Resources Institute (OFRI) reimburses school districts the cost of transporting kids to the program. This year the planning group received a grant from the Foresters' Fund and plans to update current supplies and improve the program with other durable materials such as dbh tapes, field note books, and rain ponchos for the students. Additionally, professionals from local natural resource agencies and companies (many are SAF members) donate their time and energy to teach students program material and about their field of expertise. Involving field foresters and other professionals adds a lot of value to this program; not only are volunteers able to share their expertise, but students are exposed to the wide variety of careers that are available within the field of forestry.

Most of the activities are based on Project Learning Tree and Project WILD curriculum ([www.plt.org](http://www.plt.org) and [www.projectwild.org](http://www.projectwild.org)) that is provided through professional development programs for educators by the Oregon Natural Resources Education Program (ONREP) at Oregon State University. These hands-on activities are designed to meet state and national learning standards while covering a wide range of natural resource topics.

Throughout the day groups of 8-10 students team up with a natural resource professional (instructor) and rotate through six stations covering topics including tree identification, tree measurements, wildlife and forests, habitats, tree growth, and compass and maps. The planning team has worked hard to develop a diverse program that promotes critical thinking about forests and every year we receive positive feedback from all the teachers, students and instructors. ♦

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*Eva Bailey and Tristan Huff are members of the Coos Chapter. Eva is a forester with the BLM and can be reached at [ebailey@blm.gov](mailto:ebailey@blm.gov). Tristan is an Extension forester with OSU Extension Service and can be reached at [tristan.huff@oregonstate.edu](mailto:tristan.huff@oregonstate.edu).*

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PHOTO COURTESY OF NR EDUCATION DAYS COMMITTEE

**Students get a lesson on plant and tree identification.**

# Celebration, Change, and Collaboration: Forestry Education at the University of Idaho

BY JO ELLEN FORCE

**T**he University of Idaho celebrated 100 years of forestry education in September 2009 to recognize the 1909 arrival of the first forestry professor, Charles Shattuck. Forest Service Chief Emeritus Dale Bosworth ('66) was the keynote speaker during the two-day celebration. Alumni, faculty, and staff from across the decades and the country joined the celebration to share memories and renew friendships. Presentations and field trips throughout the celebration provided many opportunities to hear about the forestry education, research, and outreach activities of today and for the future during panel discussions with current faculty and students. Topics covered the spectrum of the wide-ranging disciplines and challenges that define forest science and management in the 21st century.

The past couple of years have also meant several changes in the administrative structure that facilitates forestry education as the university and the College of Natural Resources (CNR) has faced challenging budget times. The Department of Forest, Rangeland, and Fire Sciences now houses the B.S. Forest Resources degree, which has been accredited by the Society of

American Foresters since SAF accreditation began in 1935. We celebrate its growing enrollment. The "forest operations" option in the former Forest Products department has been incorporated into the SAF-accredited BS degree. The Department of Forest, Rangeland, and Fire Sciences is in the final stages of hiring a new faculty member with expertise in forest operations.

CNR is also reviewing the curricula across the college to identify more areas for possible collaboration and efficiencies in the curricula. The CNR "core" has been expanded and now includes sophomore- and junior-level courses in ecology, economics, geospatial tools, and societal issues. This will provide the students in the forestry program opportunities to develop more skills to work with students across all the CNR programs and to be better prepared for the interdisciplinary nature of professional careers today.



PHOTO COURTESY OF ERIN BRADETICH

**University of Idaho student Erin Bradetich takes a breather from working in the forest.**

The University of Idaho Experimental Forest with over 10,000 acres in locations near Moscow and McCall, Idaho, is a working forest used extensively by the students and faculty in the forestry program. Numerous classes in the forestry program conduct field exercises on the Experimental Forest and many students gain experience through a variety of summer work opportunities. The Frank Pitkin Forest Nursery is the only operational forest nursery associated with a university in the country. Students working at the nursery help produce over 300,000 seedlings a year for reforestation activities and plantings undertaken by over 1,500 citizen and clients throughout the state and region.

The B.S. Fire Ecology and Management degree was the first—and still the only—BS program in fire. It is in its fifth year and enrollment is growing rapidly. The department is also seeking to fill a faculty position in wildland fire sciences with a geospatial and modeling emphasis. The students in this program have been involved in an intense experiential and service learning activity the past three years, which involves getting prescribed burning training and experience with The Nature Conservancy



PHOTO COURTESY OF UI PHOTO SERVICES

**Students help produce seedlings at the Frank Pitkin Forest Nursery, one of the University of Idaho's unique facilities.**

over spring break.

The former Forest Products faculty members are in the new department. They are in the final stages of getting approval for a B.S. Renewable Materials. This degree focuses on renewable materials and has a fully integrated business-forest products dimension. The emphasis is on producing sustainable, engineered wood products, bio-based composites, and other bio-based materials.

The other degree program in the department is the B.S. Rangeland Ecology and Management. A new Rangeland Center has been established as a collaborative group from the College of Natural Resources, College of Agricultural and Life Sciences, and University of Idaho Extension. It is focused on advancing the understanding and stewardship of rangelands. The virtual center promotes active partnerships with individuals, organizations, and communities that work and live on the expansive, iconic, and economically important western landscapes.

The faculty in the forestry program are actively involved in collaborations over a wide range of internal and external research and outreach programs. The Intermountain Forest Tree Nutrition Cooperative, the Inland Empire Tree Improvement Cooperative, and the Center for Forest Nursery and Seedling Research all collaborate with their external advisory groups to determine research and outreach activities each year. These research collaborations and many others provide our students with opportunities to gain research experiences working on these teams during the academic year and the summer.

The faculty and students in the forestry program at the University of Idaho are celebrating, changing, and collaborating to be forestry leaders prepared for the challenges and the opportunities to provide science-based forest management in the 21st century. ♦

*Jo Ellen Force is department head and professor, Department of Forest, Rangeland, and Fire Sciences, College of Natural Resources, University of Idaho, Moscow. She can be reached at 208-885-7311 or joellen@uidaho.edu.*

## SAF Council Winter 2012 Meeting Highlights

BY JOHN WALKOWIAK, BOB ALVERTS AND JOHNNY HODGES

**S**AF is governed by a Council/Board of Directors headed by a president, vice-president and past president elected by the membership. There are 11 council representatives with John Walkowiak of Tacoma representing District 1 (Washington State, Inland Empire and Alaska SAF), Bob Alverts of Tigard representing District 2 (Oregon SAF), and Johnny Hodges of Fort Collins representing District 4 (Colorado/Wyoming, Dakotas, Intermountain, Montana, and Southwestern SAF).



On March 3-4, SAF President Bill Rockwell led a day-and-a-half SAF Council meeting at the Westin Hotel-Detroit/Wayne County, Michigan, Airport. Despite the weather challenges, 10 of the 11 Council members, Vice President JoAnn Cox, and Past President Roger Dziengeleski were present plus non-voting representatives from the Forest Policy Committee, Forest Science and Technology Board, National Student Congress, and the House of Society of Delegates along with Michael Goergen, SAF executive vice president.

Council approved three forest policy position statements on: (1) Non-Native Invasive Species; (2) Forest Offset Projects in a Carbon Trading System; and (3) Utilization of Forest Biomass for Energy. In addition, Council heard additional information with regard to accreditation of natural resource management/terrestrial ecosystem management programs with a final report due at the June 1-3 Council meeting in Bethesda, MD. Council also heard the House of Society Delegates recommendations involving membership, forest policy, and the Certified Forester Program.

President Rockwell presented his thoughts on the future of SAF committees to empower them by providing clearer roles and regular reporting to the Council. Goergen discussed the challenges of the budget for 2011, first impacts of the new dues structure (revenues up), successful implementation of the member database, and continued update on the sale of a portion of the SAF/RNRF (Renewable Natural Resources Foundation) property located in Bethesda. Past President Dziengeleski provide the Council his evaluation of 2011 with kudos and challenges.

The Council focused on revising and incorporating into SAF's strategic plan (road map) a new process of building a culture of discipline from Jim Collins' books *Good to Great* and *Great by Choice*, as well as developing strategic clarity to develop the needed "flight plan" to get SAF going in the right direction. Activities focused on developing SMaC—specific, methodical, and consistent side boards to evaluate direction/opportunities and developing dashboards for measuring results.

SAF faces many critical/strategic decisions to address declining membership, negative budgets, and overworked staff and volunteers. By working strategically we are embarking not on a Band-Aid approach, but a long-term forestry approach to make SAF stronger and better. Stay tuned. ♦

*This Council report is a collaborative effort between John Walkowiak, SAF District 1 Council representative (360-534-1303; johnwa@dor.wa.gov); Bob Alverts, SAF District 2 Council representative (503-639-0405; balverts@teleport.com); and Johnny Hodges, SAF District 4 Council representative (970-226-6890; jah.16@live.com).*

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# University of Washington Terrestrial Natural Resources Program

BY B. BRUCE BARE AND  
THOMAS HINCKLEY

**T**he University of Washington was among the first forestry schools to be accredited by SAF in 1935 and has retained at least one accredited curriculum ever since. Faced with small and/or diminishing enrollments in our seven majors and a university moving toward greater unit-level financial accountability, in 2003 we modified our undergraduate BS curriculum to include two identifiable majors: a) Bioresource Science and Engineering (BSE); and b) Environmental Science and Resource Management (ESRM). The ESRM major gives students interested in learning about natural and human-dominated landscapes a broad, flexible



**B. Bruce Bare**



**Thomas Hinckley**

undergraduate science degree with an opportunity to select one of four upper-division program options.

The four options within the ESRM major are: a) landscape ecology and conservation; b) wildlife conservation; c) restoration ecology and environmental horticulture; and d) sustainable forest management (SFM). The latter option replaced our SAF-accredited forest management major and was restructured to focus on the sustainability of natural resources and environmental services. All options provide a broad science foundation for students wishing to study environmental science and natural resource management.

With the introduction of university budget models that allocate funds to a school based on student enrollment, graduation numbers, and student credit hours generated, we are faced with having to increase student enrollment or have our budget reduced. No matter how laudatory a program might be, we are forced to make our curriculum both efficient and attractive to an increasingly urbanized student population. And, in spite of our ability to

quickly respond to these budgetary and organizational signals, the recent economic downturn has led to budget reductions.

The basic design of the transformed ESRM major is similar to most four-year curricula with the first two years of study largely devoted to general education courses in English composition, technical writing/communication, biology, chemistry, economics, mathematics/statistics, GIS/earth science, and electives in the social and physical sciences. ESRM students also take six courses in the school that focus on various ecological, social, and economic aspects of sustainability, a multi-resource measurements course, and a senior-level capstone case study course. Thirty-five credits of restricted electives (or students may choose to follow an independently designed degree option) in one of the four degree options plus 30 or more free electives constitute the 180 quarter credits required to obtain a BS degree.

Figure 1 shows the autumn quarter enrollment history in our school over the past 23 years. In autumn 2011, we enrolled 353 undergraduate students (73 percent in ESRM and 27 percent in BSE) and 166 graduate students. Fifty-one percent of our school's enrollment is composed of women and 25 percent from under-represented minorities. We believe that the 2003 curriculum transformation stimulated the increase in undergraduate student enrollment.

A consequence of the curriculum revision in 2003 was that we chose not to seek continued SAF accreditation of the SFM option. There were several reasons for this: a) student demand for the SFM option was low; b) with numerous free and restricted elective courses we could not guarantee that all students would fulfill SAF's accreditation requirements in the four required subject areas; and c) to retain the maximum degree of flexibility, students are not required to elect an option. In fact, most ESRM students choose the self-designed independent degree option as it offers the most flexibility to meet degree requirements. However, the

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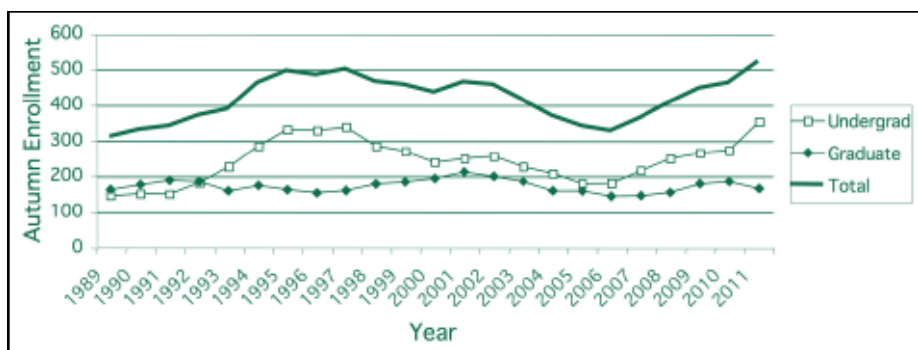
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**Figure 1. Autumn quarter enrollment at UW School of Environmental and Forest Sciences.**



Source: School of Environmental and Forest Sciences, University of Washington

critical reason we chose not to seek continued SAF accreditation of our SFM option was that we wanted to initiate a professional forestry degree at the graduate level. Therefore, a new professional Master of Forest Resources in Forest Management degree was developed and accredited by SAF in 2006.

The Master's degree is closely integrated with the SFM option of the ESRM curriculum enabling qualified students to earn BS and Master's degrees in five years (graduates are encouraged to apply for Candidate Certified Forester status with SAF). Using coursework from the SFM option (or comparable undergraduate forest management education from another institution), students gain added proficiency in the four SAF subject areas of Forest Ecology and Biology; Measurement of Forest Resources; Management of Forest Resources; and Forest Resource Policy and Administration. Graduates possess essential knowledge and skills required

for careers in sustainable forest management; can creatively solve problems and exercise sound professional judgment in complex land management decision making environments; and have a broad education that promotes intellectual maturity and allows them to make contributions to society and their profession.

In recent years, there have been numerous symposia and surveys dedicated to the topic of "forestry education" as reported in the *Journal of Forestry* and elsewhere. Among the many topics discussed is the need or desirability for graduate professional forestry education. We believe that the increasing complexity of natural resource management brought about by increasing human populations on a shrinking forestland base and the changing demands of society for sustainable forest practices and products necessitates elevating the status of professional forestry education to the graduate level. We find that students emerging with a professional Master's

degree have, through additional time and course work, garnered appropriate critical-thinking, problem-solving and group work skills to better address these challenges. Over time we anticipate that our students, the university, SAF, and the forestry profession will place increased value on this level of education. ♦

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## OSU Offers Leadership Academy

**T**his summer Oregon State University will host its first-ever Natural Resources Leadership Academy. This unique offering is designed for graduate students and natural resources professionals to enhance leadership skills, gain knowledge, and connect with others in their field.

The academy will be held June 18-22 and June 25-29 on campus in Corvallis, Ore., and includes courses in the areas of conflict management, communication, sustainable natural resources, and leadership.

Study with internationally renowned faculty on the campus of one of the nation's leading natural resources universities, and expand on what you learn in the classroom through field trips throughout the state.

Courses can be taken for graduate or continuing education credit.

Pre-registration for the academy is now open and is required for all participants. Learn more and register online at <http://outreach.oregonstate.edu/nrla>. ♦

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# Big Changes at Washington State University

BY KEITH A. BLATNER

**O**n January 1, 2012, the Department of Natural Resources Sciences and the School of Earth and Environmental Sciences merged to form the School of the Environment at Washington State University (WSU). The merger was the culmination of 11 years of efforts by the Department of Natural Resource Sciences and other units to form a larger academic unit focused on the environment. These efforts were largely faculty driven and the new school has broad faculty support. The School of the Environment includes faculty and students on the Pullman campus as well as the Washington State University-Vancouver and Tri-Cities campuses. The school has 33 faculty members and over 300 students. The merger is consistent with the university's goal of "One Campus Geographically Dispersed."



Stephen Bollens (WSU-Vancouver) was appointed the founding director of the new unit. Steve previously served as director of the School of Earth and Environmental Sciences. I was appointed associate director for Undergraduate Education after previously serving as chair of the Department of Natural Resource Sciences. John Wolff was appointed associate director for Research. Both John and I have a wide array of responsibilities beyond those implied by the position titles given our familiarity with different aspects of the new unit and that the faculty in Pullman is located in various buildings. It is hoped that the Pullman faculty will be co-located in a single building on the Pullman campus in the next few years in an effort to further improve unit cohesion and synergies in teaching, research, and extension.

By bringing together earth sciences, ecosystem and natural resource ecology, sustainability sciences, and social sciences in a single academic unit, it is expected that the school will increase

team-based research and scholarly output while also providing cutting-edge training for the next generation of scientists, resource managers, policy makers, and well-informed global citizens. It also reflects the university's emphasis on administrative consolidation.

We are in the early stages of developing new degrees and curricula for the School of the Environment. It is expected that our new undergraduate curriculum will be in place by the end of the calendar year. We also expect to have a new website in place for the School of the Environment shortly. In the interim, we will continue to offer a B.S. in Natural Resource Sciences with majors in Natural Resources and Wildlife Ecology, a B.S. in Environmental Science, and a B.S. in Geology at the undergraduate level. At the graduate level we will continue to offer an M.S. in Natural Resource Sciences, an M.S. in Environmental Science, and a PhD in Environmental and Natural Resource Sciences.

Given the School of the Environment's statewide focus we are well positioned to address many facets of the natural resources issues facing the

State of Washington and the Pacific Northwest. The merger represents an exciting opportunity for faculty, staff, and students at Washington State University as well as strong resources to help address the environmental issues facing the state.

On a more somber note, the last three forestry students at WSU completed their degrees in December 2011. Their graduation marked the culmination of the multi-year phase out of the undergraduate major in Forestry at Washington State University. The forestry major at WSU has a long history with the first graduates completing their degree in 1937. The forestry major was accredited by the Society of American Foresters in 1965. SAF accreditation of the forestry major remained in effect through the Fall of 2011, so all of our recent graduates were able to complete their degrees from an accredited forestry program. ♦

*Keith A. Blatner is professor and associate director, WSU School of the Environment, in Pullman. He can be reached at 509-335-4499 or [blatner@wsu.edu](mailto:blatner@wsu.edu).*

## Technical Programs Offer Unique Opportunities to Students

BY DICK HOPKINS

**T**he technical programs teaching forestry and natural resources in the Pacific Northwest have some similarities to universities and many unique components. Student demographics, leadership provided, concentrated facilities and course offerings, a school forest nearby, limited faculty members, and distinctive opportunities to serve and provide education are advantages.



The average age of students in the community college technical programs is 30-something and age ranges from post-high school to the 60s. Students

with some life experiences and work history contribute to each individual's ability to learn, as well as to share with the cohort of students.

There is a cohort of students each year that participate in most of the same classes, work together, and graduate together. This cohort provides initiative, energy, support, and assistance to one another. Each second-year class provides the leadership and experience for the first-year class. Even when students spend three years (instead of two) completing the degree, they still are known, are looked to for experience, and are embraced by the cohort following. Forestry clubs and SAF student chapters provide additional opportunities for leadership to the student population.



PHOTO COURTESY OF GRCC

**Middle to right: Green River CC students Krystle Winters, Steve Cooke, Ranae Laske, and Heather Anseth, with Simpson log buyer Terry Pelt, listen to check scaler John Calkins discuss log characteristics and grades. The group was joined by a Simpson operator and his daughter, shown on the far left.**

Community college class enrollments are smaller than university survey courses, and course offerings are concentrated and limited. The technical programs tend to have concentrated facilities and are not scattered over several acres with several buildings. Most of the technical programs have an “outdoor classroom” very close to their indoor classrooms; many of the courses are taught in part outside. To clarify, that is outside, every week! This is valuable to the kinesthetic and visual learners, and provides practical hands-on experience that employers need.

Technical programs tend to operate with two to three full-time faculty. Instructors know the students very well and students also know their instructors on a personal level. Interactions on field trips, field classes, working on SAF projects, conducting research, or work for clients brings instructors and students together. Each instructor is not only an academic/career advisor for the students on a quarterly basis, but provides personal counseling and assistance at various times. It is not unusual for male or female students to be in tears in the office of an instructor each quarter regarding an issue in which the student trusts the faculty's discretion and guidance.

The students and instructors have fun and participate in college, community, state, and national activities. End-of-the-quarter barbeques, SAF

and Forestry Club meetings at lunchtime, or entering a vehicle in the Morton Loggers' Jubilee Parade are all opportunities for fun and personal connection. Participation in Arbor Day, Earth Day, and SAF chapter, state, and national meetings are opportunities for education (inward and outward) and enrichment.

The Green River Community College (GRCC) Student Chapter of the SAF assists the South Puget Sound Chapter each year with a display and public education at the Western Washington Fair. The student chapter has also been involved with the design and presentation of the “Biomass in Washington” display that is used by the Washington State Society. A new display focusing on “Working Forests” is on the horizon.

The GRCC Student Chapter is involved with creating a forestry interpretative center in conjunction with the Mt. Rainier Scenic Railroad historic destination that is coming to Mineral, Wash. While the focus of the destination stop is historic logging and railroad portrayal, an interpretative center showing how modern forestry is conducted will be presented, complete with examples of regulations, instruments, and educational components.

Research is not unique to universities. GRCC silviculture classes and Washington Department of Natural Resources (WDNR) forest pathologists have participated in 10 years of

research that will be presented at the SAF national convention in Spokane. The hypothesis presented: “An increase in available potassium will alter the physiology of Douglas-fir seedlings to make them more resistant to laminated root rot (*Phellinus sulphurascens*), and thus reduce tree mortality.” Twenty-one plots have been monitored and measured by students studying no application of potassium, the equivalent of 200 pounds/acre of potassium, and the equivalent of 400 pounds/acre of potassium. Additional plots have been added since the 2002 initial trials.

Providing services to clients is also something technical programs do. Grays Harbor Community College provides forest management for Grays Harbor Public Development Authority. GRCC manages the quarter-section of “school forest” of WDNR at Auburn and manages the 320-acre Lincoln Tree Farm of Tacoma Public Schools for compensation. The SAF student chapters of many of the technical colleges sell firewood to the public. Central Oregon Community College (COCC) recently co-hosted a workshop on forest restoration that brought a profit to the local SAF chapter and the Northwest Office. Through courses and club projects, COCC provides management plans to private landowners as well as Deschutes County. The students measure and mark fuels and timber projects for these constituents. They also work with the High Desert Museum to help demonstrate “defensible space.” Mount Hood Community College in Gresham, Ore., recently formed a new SAF student chapter.

The technical programs providing forestry and natural resources in the Pacific Northwest have many unique components, which provide tight-knit cohorts at graduation, hands-on student experience before graduation, and service to communities. ♦

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*Dick Hopkins is Natural Resources Instructor, Forestry Club co-advisor, GRCC Student Chapter of the Society of American Foresters advisor ([www.grcc-studentsaf.com](http://www.grcc-studentsaf.com)) at Green River Community College in Auburn, Wash. He can be reached at 253-833-9111 x4509 or [dhopkins@greenriver.edu](mailto:dhopkins@greenriver.edu).*

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# Communities and K-12 Schools: Collaborating to Prepare the Future Workforce

BY JULIE WOODWARD

**A** recent study by the North American Environmental Education Association shows that time spent outdoors for learning during the school day is critical to the intellectual, emotional, and physical health of students, along with increasing their understanding of nature.



As foresters, we may worry about preparing the next generation to care for the land so they can provide the needs for our society in the way many of us do today. So how are K-12 schools preparing the next workforce generation, and what involvement should foresters have?

I am often asked: How many K-12 forestry programs are in Oregon? Some people think they no longer exist. Truth is, there are numerous programs around Oregon and all over the Northwest; they just don't look the same as they used to.

Does this sound familiar? As an industry that sees constant change—with land sales and exchanges, mills opening and closing, formation of TIMOs and REITs—things definitely are not like they were when my grandfather walked these hills. Why should we expect that K-12 classrooms should look the same?

There has been a paradigm shift in many Oregon school districts toward integrating natural resources, multiple disciplines, and communities into their classrooms. The schools most successful at this new approach have involvement across the school district, from superintendents and school boards to students and teachers. These stakeholders will tell you that success can be directly tied to community involvement. And that includes the involvement of professionals, just like you.

How we define and count these natural resource programs has not yet

been established. The Oregon Department of Education (ODE) encourages development and evolution of these types of programs at a local level versus a state control. There is not one “category” at ODE to count and measure these programs. But what if we tried? Reynold Gardner with ODE took on this task and reported that in 2010, “181 high schools offered at least a course in the natural resources arena (forestry, field biology, environmental science, agriculture, etc.).” Gardner adds, “Industry can connect and engage with the instructors and provide the support, expertise, and resources for enhancing these programs to help prepare the next phase of career- and college-ready foresters.” Much like trying to define “old growth,” foresters may not all describe this term exactly the same, but often there is a certain feel associated with these forests. The same can be said of schools that are integrating natural resources and their community: There may not be one definition, but it often involves the word and the feeling of “pride.”

Below are some accounts from various schools and forest-sector professionals that are taking the initiative and making changes to meet the current and future needs of their students and communities.

## **A longstanding community and school collaboration**

The Philomath forestry program is one of the longest-standing programs in Oregon, and it has evolved over time to include the rich logging history of the area, while also incorporating more science and technology. Simon Babcock, Philomath High School forestry instructor, says “The program was developed by the local community and industry. They came together to build the facilities, our research forest, and the program curriculum. We have an advisory group made up of industry and community members to ensure that the direction of the program continues to align with current and future industry needs.”



PHOTO COURTESY OF SIMON BABCOCK

**Philomath High School forestry students use high tech equipment supported from the community to inventory the school research forest. The students are working with community professionals to submit a forest management plan to the American Tree Farm System to gain certification.**

This program offers a progression of classes through four years of high school. Community members not only provide time, but also donations of funds and resources, along with student projects, field trip sites, and expertise. A local timber company, Starker Forests Inc., has even provided Babcock with professional development opportunities during the summer. This provides him with hands-on experience to take back to the classroom and use in teaching the students current industry skills. “The industry is constantly changing, and when I’m in class with the students we’re not always able to see and learn the changes,” Babcock says. “Local industry support provides me these opportunities to keep learning new skills so the program continues to move forward.”

The forestry program also gives back to the community through serv-



ice-learning projects, such as tree removal; firewood sales, thinning, stand assessment and improvement; and wetland restoration. One program graduate now attending Oregon State University noted that the program provided her the pathway to see the possibilities of working in forestry; she also liked that the program worked within the community to make it a better place, and that this helped the students take pride in their community.

### **An innovative consortium keeps students working in their community**

What if natural resources were taught in every grade, from kindergarten through 12th grade, and not just high school? Tillamook School District is modeling this in their classrooms. Tillamook, Ore., may be best known for its cheese, but it's also where vast forests meet the ocean. Several years ago this community was noted for having a high dropout rate among high school students, and those who did leave for college rarely returned. This has changed, thanks to innovative community partnerships and a complete district makeover. Tillamook's K-12 Natural Resource Education Program uses the local community as partners and an extension of the classroom.

One career-related partnership is for students moving directly into the workplace after high school. A consortium consisting of Tillamook Bay Community College, Tillamook School District, Hampton Lumber, Stimson Lumber, and Tillamook County Creamery Association is now training current and emerging workforces in the areas of industrial maintenance technology and electrical apprenticeship.

Hampton Lumber Mills plant manager Mark Elston says, "This partnership will help our industry. In skilled trades, we're facing a deficit. We have to be prepared and looking forward. We're all trying to help align the education system to fit the needs of businesses in the community. It also helps the community by keeping talented people here working family-wage jobs."

The district worked with Oregon

Bureau of Labor and Industry and the Oregon Apprenticeship and Training Council to develop this program, which has students working part-time as apprentices in the mill while also taking classes.

The local community also supported remodeling a vocational building at Tillamook High School to create a shared facility for industry, career, and technical programs. "The school district recognizes it takes

time to develop partnerships, and has two people that do much of the relationship building, grant writing, and setting up projects, giving teachers time to teach concepts and relate work to the community environment," says Bruce Rhodes, Tillamook School District representative. "Tillamook's school board, superintendent, administrators, and community have a collective vision: that of having students become lifelong learners and take pride in the place they live."

### **Stewardship schools with a community investment**

Vernonia, Ore., is a rugged logging community that has overcome a lion's share of adversity with floods and mill closures. Vernonia has been at the center of Oregon's traditional timber industry, and a bedroom community to the state's "silicon forest" high-tech industry. In 1924 it was home to the largest

electric sawmill in the world. Today the town is a modern-day pioneer, constructing the first LEED-certified public K-12 building in the country.

The sustainable features (such as passive heating and cooling, daylighting, and photovoltaic and ground-source energy use) will create a healthier and more productive learning environment, and considerably reduce long-term operating expenses. It also includes a natural resources



PHOTO COURTESY OF MARCUS LEONETTE

**Students of Vernonia High School participate in an annual tree planting with local community members along Rock Creek on the Vernonia Lake Trail.**

center that will combine science labs and classrooms for the schools with space for Oregon's colleges, universities, and community colleges to conduct sustainable forestry and clean energy research and to provide job skills training.

And the town's schools aren't waiting until they're in their new homes to start integrating natural resources into their classrooms—they're already

(CONTINUED ON PAGE 20)



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## We Remember

### Bob Kintigh 1922-2012

Bob Kintigh, who advocated for his rural constituents in the state senate for 12 years and was a tireless advocate for sustainable forestry, died at his home March 21 of age-related causes. He was 90.

He was born in Irwin, Pennsylvania, in 1922. He was raised on a farm in western Pennsylvania and graduated from Penn State University in 1943 with a bachelor of science degree in forestry. He then served in the Navy during World War II as an officer on a destroyer in the Pacific. After his military service, he headed west and earned a master's degree in forestry at the University of California, Berkeley.

In 1947 he and wife Margaret moved to Lane County, Ore. In 1956 they purchased a 170-acre property in the Cedar Flat area in the lower McKenzie Valley, which became known as Kintigh's Mountain Home Ranch. It was there that he and Margaret raised their family of five children. He worked a number of years as a consulting forester, several years as a BLM forester, and also operated a cabinet shop several years. After 1960 the main source of support for the family came from Mountain Home Ranch where they raised cattle, timber, Christmas trees, and nursery stock. The cattle operation was later discontinued in favor of increasing the Christmas tree production. Later the Christmas trees and nursery were turned over to sons Mark and Dan, and Bob retained the management of the timber on the Mountain Home Ranch and another property in the Cottage Grove area.

Kintigh took pride in the fact that he and his wife of 68 years, Margaret, were the only tree farmers to ever be named National Grand Champion Christmas Tree Growers as well as National Outstanding Tree Farmers of the Year.

The former honor was bestowed in 1992, when a Douglas-fir from their farm in Cedar Flat earned a place in the Blue Room at the White House. The latter honor, received in 2006 from the American Tree Farm System, recognizes outstanding sustainable forest management on privately owned forestland.

He and his wife grew more than 700 varieties of rhododendrons and azaleas on their property, and were members of the American Rhododendron Society and

Rhododendron Species Foundation.

Bob joined SAF in 1943 and was elected an SAF Fellow in 1986. He was also a Certified Forester. He was active in many other organizations including Oregon Small Woodlands Association, Pacific Northwest Christmas Tree Association, National Christmas Tree Association, World Forestry Center (charter member), and Oregon Farm Bureau.

He was a three-term senator in the Oregon Legislature between 1987 and 1999. In his last Senate term, Kintigh led the Senate Agricultural and Natural Resources Committee and served as Senate president pro tempore.

Bob served two terms as a director of the Oregon Forest Resources Institute and several terms as a director of the Friends of Paul Bunyan Foundation.

A memorial service took place on March 31 at Grace Community Fellowship in Eugene, where Kintigh and his wife were longtime members. Remembrances may be made to the Eugene Mission.

### Theodore Schlapfer 1921-2012

Ted Schlapfer peacefully passed away in Bend, Ore., on March 7. He was fully accepting of his own passing and clearly looked forward to the territory ahead and reuniting with his wife Beth, who passed in April 2009.

He was born in Fairfield, New Jersey, on October 11, 1921, the second of three sons and a daughter born to Louis and Ethel Schlapfer.

As a farm boy in rural New Jersey he developed a love for the natural world, which eventually led him to the University of Georgia where he graduated in 1943 with a degree in forestry. Before accepting a job with the U.S. Forest Service in northern California, he served in the U.S. Navy during WWII as an ensign aboard an LCI beach-landing vessel in the South Pacific. Immediately following the war he safely returned to marry his sweetheart, Elizabeth Harper, in 1946. Departing from their homeland on the east coast, together they embarked for the west coast in a 1935 Ford and began a long relationship with the U.S. Forest Service.

Ted had the privilege of living and working on most of the national forests in the USA, ranging from Alaska to Washington, D.C. He served as the regional forester for the Southeast and Northwest regions, and in 1972 he and Beth retired to Cornelius, Ore., to fulfill his family destiny as a farmer. They started Sun Shower Orchards and simply reveled in the love of community, friends, and working the land.

Ted was highly regarded as a natural resource professional and continued in this vein as an adjunct professor at Lewis and Clark College for 10 years after his retirement. There he started the Executive Seminar Program, which is an advanced leadership program designed to instill leadership principles and techniques for natural resource policy resolution. This program continues today. He was a believer that if all the players in a controversy could stand on the same dirt, feel the same wind, and listen with respect, there was very little that could not be solved.

Ted Schlapfer was a long-time member of the Society of American Foresters, the American Forestry Association (AFA), and also served on the board of directors for the National Forest Museum. He was an active member of Rotary in several communities that led him and Beth on several international missions of good will.

Ted is survived by his four children—Todd, Joanna, Jeff and Jake, eight grandchildren and one great grandchild.

A lover of nature, people, family and the spirit that animates all living things, he will greatly missed by all who ever met him.

### Norman Bjorklund 1922-2012

A Celebration of Life program for long-time Pacific Northwest forest industry advocate Norm Bjorklund was held March 17 at the World Forestry Center's Cheatham Hall. Norm spent nearly 40 years with the Industrial Forestry Association headquartered in Portland, first as an assistant forester and later working up to executive vice president. During that time, he also served as a forest practices spokesman, with a weekly tree segment on local television, frequent newspaper interviews, and many trips to Washington D.C. on behalf of Pacific Northwest forest interests. He also played a role in the effort to build the World Forestry Center.

Born in Portland, Norm spent most of his childhood in Klamath Falls. He served in the Army Air Corps during World War II, and then returned to Oregon State University to finish a bachelors degree in forestry before going to work in the forestry field. In retirement, he enjoyed fishing, traveling, gardening, and visiting wineries.

Norm is survived by wife Elinor; daughter, Karen; sons, Roger and Neil; and granddaughters Erin and Kelsey. In recent years, Norm battled Parkinson's disease and the family asks that in lieu of flowers, donations be made to the American Parkinson Disease Association. ♦

## Calendar of Events

**OSAF annual meeting**, April 25-27, Seaside, OR. Contact: Jim Culbert, jhculbert@yahoo.com.

**Alaska SAF annual meeting**, April 25-28, Pikes Waterfront Lodge, Fairbanks, AK. Contact: Jeremy Douse, 907-452-8251 x3374, jeremy.douse@tanachiefs.org, www.forestry.org/media/docs/ak/2012\_Annual\_Meeting\_Reg.pdf.

**Pacific Northwest Timberland**, April 26-27, Portland, OR. Contact: The Seminar Group, 800-574-4852, info@the-seminargroup.net.

**WSSAF annual meeting**, May 2-4, Port Angeles, WA. Contact: John Walkowiak, 253-320-5064, jwalkowiak@harbornet.com.

**Washington GIS Conference**, May 7-9, Tacoma, WA. Contact: Dana Trethewy, 206-684-3180, dana.trethewy@seattle.gov.

**National Mitigation and Ecosystem Banking Conference**, May 8-11, Sacramento, CA. Contact: 800-726-4853, cbahler@comcast.net, www.mitigation-bankingconference.com/.

**SkylineXL 2.1**, May 8-9, Corvallis, OR. Contact: FEI.

**Starker Lecture Series: Land Use, Climate Change, Water and Other Ecosystem Services**, May 10, Corvallis, OR. Contact: Starker Lectures.

**SERNW Beyond Borders: Conference 2012**, May 15-18, Victoria,

B.C. Contact: Josh Jensen, 360-733-4311, jjensen@anchorqea.com.

**Starker Lecture Series: Capstone Field Trip**, May 31, Corvallis, OR. Contact: Starker Lectures.

**Oregon Urban and Community Forestry Conference-Community Natural Areas: Restoration, Management and Enhancement**, June 7, Portland, OR. Contact: Rick Zenn, 503-488-2103, http://oregoncommunitytrees.org/conferences/community-natural-areas/.

**Joint Western Mensurationists/Western Economists annual meeting**, June 10-12, Newport, OR. Contact: WFCA.

**Washington Hardwoods Commission annual meeting**, June 13, Kelso Red Lion, Kelso, WA. Contact: Dave Sweitzer, 360-835-1700, whc@wahardwoodscomm.com, www.wahardwoodscomm.com/2012\_AnnualMtg.html.

**OSU Natural Resources Leadership Academy**, June 18-22 and June 25-29, Corvallis, OR. Contact: Lynette deSilva, 541-

737-7013, desilval@geo.oregonstate.edu, http://outreach.oregonstate.edu/nrla.

**Starkey-RMEF Field Day**, June 22, LaGrande, OR. Contact: Bill Richardson by June 12 at brichardson@rmef.org.

**ArcPad Seminar**, Sept. 11-12, Beaverton, OR. Contact: Atterbury.

**Professional Timber Cruising with SuperACE**, Sept. 13-14, Beaverton, OR. Contact: Atterbury.

**Who Will Own the Forest? 8**, Sept. 18-20, Portland, OR. Contact: Sara Wu, 503-488-2130, swu@worldforestry.org.

**URISA NW GIS Conference**, Sept. 30-Oct. 4, Portland, OR. Contact: Bruce Kessler, 509-235-5500, bruce@kesslergis.com.

**NAAEE annual conference**, Oct. 10-13, Oakland, CA. Contact: NAAEE, 202-419-0412, www.naaee.net/conference/registration.

**SAF National Convention**, Oct. 24-27, Spokane, WA. Contact: National SAF, 866-897-8720, www.safnet.org.

**OSAF/WSSAF Leadership Conference**, January 18-19, 2013, Silverton, OR.

### Contact Information


**Atterbury:** Diane Sandefur, Atterbury Consultants, 3800 SW Cedar Hills Blvd., #145, Beaverton, OR 97005, 503-646-5393 x10, dsandefur@atterbury.com, www.atterbury.com.

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

**Starker Lectures:** OSU College of Forestry, 541-737-1585, http://starker-lectures.forestry.oregonstate.edu/.

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

Send calendar items to the editor, **Western Forester**, 4033 SW Canyon Rd., Portland, OR 97221; rasor@safnw.org.



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## Communities and K-12 Schools

(CONTINUED FROM PAGE 17)

making great strides. The high school has started a new forestry program, developed as a partnership between entities including logging companies, timber management groups, watershed councils, OSU Extension Service, and numerous others.

Aaron Miller, a highly involved principal, is overseeing the development of the new curriculum for the district. He says, "These partners are local people and groups interested in having schools as a part of what they do. These are valuable and long-term partnerships for our school and community." The forestry class, taught by Byron Brown, has access to timberlands and partners that each week takes students out for field work and demonstrations.

The Vernonia School District is also a stewardship school. The Corvallis-based Oregon Natural Resources Education Program (ONREP) is the coordinator for stewardship schools in Oregon. "The stewardship school program is successful because it's a partnership between ONREP and the educators, staff, and administrators of a school or district," says LeeAnn Mikkelsen, ONREP program coordinator.

ONREP works in partnership with teachers and administrators to identify goals for integrating natural resources across the K-12 curriculum. They design a professional development program to meet each school's needs. Through a series of workshops, teachers inventory current practices and engage in strategies that integrate the environment into grade-level and subject-area goals.

A key piece is to investigate and engage community partners and resources. There are seven schools participating in the program so far in Oregon. Mike Hughes, superintendent of Elkton Charter School, credits the program for "providing an

enhancement of hands-on learning experiences for all their students, creating professional learning opportunities and interaction with community members, and the ongoing development of a model education program." Another example is at Fossil Charter School, created as a natural-resource-themed charter school in 2007. The administrators use the stewardship school program "to support educators in working together through collaboration and partnership to engage students in a place-based approach to teaching and learning, using natural resources as a context for learning," says Brad Sperry, Fossil School District superintendent.

### Forest literacy in the Northwest

Oregon's natural resources serve as a foundation of the state's economy and represent a vital heritage, one Oregonians want to preserve for generations to come. While we see numerous examples of communities working with their local schools to teach about natural resources, a statewide effort has created the foundation for an environmental literacy plan for Oregon. This was fanned from a national movement of the No Child Left Inside Act of 2009, which amends the Elementary and Secondary Education Act of 1965 to require states, as a prerequisite to receive implementation grants, to develop environmental literacy plans.

The Oregon Legislature enacted the No Oregon Child Left Inside Act (HB2544), directed at state policy leaders, school districts, teachers, non-formal educators, community partners and other interested parties in 2009. The act is intended to serve as a roadmap for the development and implementation of an educational program for environmental literacy. The plan puts forth a vision in which all students are lifelong stewards of their environment and community. Idaho's proposed environmental literacy plan states, "whether a rancher or

city dweller, newcomer or from native or pioneer stock, Idahoans understand that the well being of their community, economy, and environment are woven together." In all, 46 states have responded to the national campaign and are in some stage of developing or revising environmental literacy plans.

How does the forest sector play a role in the environmental literacy plan? In 2010-11, the Oregon Forest Resources Institute (OFRI) brought together more than 30 forest-sector representatives to answer "Why teach about Oregon's forests?" and "What should be taught about the forests?" This effort created The Oregon Forest Literacy Program, which includes a forest-education conceptual framework and a scope and sequence that together offers educators guidance for developing curricula and classroom lessons related to forests. It includes examples of service-learning projects that connect to Oregon forests. The program's built-in flexibility makes it useful for a wide range of applications to increase forest literacy, including classroom instruction. The Washington Forest Protection Association is adopting a similar program with plans for implementation later this year.

How do businesses survive in a harsh economic climate? How do communities strengthen in times of adversity? What makes students thrive and engage in their learning? Another recent study shows that providing students with quality opportunities to directly experience the natural world can improve the students' overall academic performance, self-esteem, personal responsibility, and community involvement. How involved are you with your local schools and the next generation? They may just be waiting for you to take them outside and show them the amazing "fields" in which foresters work. ♦

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*Julie Woodward is Forest Education Program manager for the Oregon Forest Resources Institute, located at the Oregon Garden in Silverton. She has been an SAF member since 1998. Julie can be reached at woodward@ofri.org or 503-584-7259.*

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# SAF Old and New Meet at Mount Hood Community College

BY ROBERT L. DEAL

The SAF Portland Chapter held their February chapter meeting at Mount Hood Community College (MHCC) and was hosted by the MHCC SAF Student Chapter, Oregon's newest SAF chapter.



PHOTO COURTESY OF ROBERT L. DEAL

**A crowd of Portland Chapter and Mount Hood Community College students met in February. The MHCC Community Chapter is Oregon SAF's newest.**

For the past several years, the Portland SAF chapter has had a winter meeting at MHCC but this year was different. The Portland SAF is one of the oldest and largest chapters in the country and the February 27 meeting brought together new and aspiring students with mature SAF members. In late 2011, Kit Jennings, a student at MHCC, organized an effort to start the new SAF student chapter. Kitt, along with a few other students, visited with Portland SAF members in December to get needed endorsement, and in January 2012, the Oregon SAF officially approved the new student chapter. The February meeting was a first introduction to SAF for many of MHCC students and was attended by about 40 students and 30 Portland SAF members.

Mount Hood Community College has several natural resource programs available including an international student group. The student SAF chapter developed because, as new student

chapter chair Kitt Jennings said, "Students in the Natural Resources Technology program felt like we didn't have a lot of opportunity to get involved with things we care about on campus. We wanted to provide professional and educational opportunities by networking with other organiza-

tions, bringing speakers to campus, and planning special events."

The students knew they wanted a strong professional tie, so founding an SAF chapter would be ideal. The natural resources department at school consists of both forestry and wildlife tracks, so they combined the relatively inactive Natural Resources Club with interested students and created a new SAF student chapter. Student chapter officers include both forestry and wildlife-focused students. The vice chair (Skyler Hoefer), treasurer

(William Evers) and Kitt Jennings are forestry students, and the secretary (Caleb Epp) and member-at-large (Darin Hamilton) are both wildlife students. The chapter also has a lot of interest from SEED (Strengthening Employment and Education for Diverse) students that travel from Central/South America and the Caribbean to study natural resource management.

Their first official chapter meeting was the one held February 27 with the Portland Chapter. According to Kitt, "It has been a lot of work to craft bylaws, constitution and such to fit the needs of both National SAF and MHCC campus requirements. So far, we've succeeded in getting all the paperwork finished and have also been planning the meeting with the Portland SAF chapter here on our campus. We're hoping to spend the rest of this term doing a recruitment push, attending other events, and possibly setting up some volunteering with a few other organizations."

The Portland Chapter program featured George McFadden from BLM giving a LiDAR presentation on the advancements being made in applying this technology to natural resource management. The February meeting included a lively discussion and a great opportunity for new and mature SAF members to mingle and discuss our current and future forestry profession. ♦

*Robert L. Deal is research forester and Science Team leader, Ecosystem Services, USDA Forest Service, PNW Research Station, Portland, Ore. He has been the Portland SAF program chair since 2004 but this was the first new SAF chapter meeting he has attended. He can be reached at 503-808-2015 or [rdeal@fs.fed.us](mailto:rdeal@fs.fed.us).*



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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.*

**Commercial Harvest Position Update Approved.** OSAF updated its position statement on "Commercial Timber Harvest on Public Lands in Oregon," with approval by the executive committee in February. This remains a very timely issue given extensive forest management needs and costs on federal lands, as well as the fundamental and long-held economic obligations to communities with large areas of nearby state or federal forests. Lawsuits and appeals of commercial harvests also continue to impact both forest management and economic benefits, with some cases originating with groups whose goals include complete elimination of commercial harvest from public lands. All OSAF members are encouraged to use this and other position statements ([www.forestry.org](http://www.forestry.org)) to help discuss such issues when interacting with those outside the forestry profession. Contact: Paul Adams, OSAF Policy chair, 541-737-2946; [paul.adams@oregonstate.edu](mailto:paul.adams@oregonstate.edu).

**Capitol Hill Symposium Includes PNW Perspective.** In February SAF held an all-day event at the U.S. Capitol titled "Forest Management and Watershed Health Technical Symposium—A Retrospective on the Connections between Responsibly Managed Forests and Clean Water in the 40 Years since Passage of the Clean Water Act." The program was prompted largely by the "logging roads as pollution point sources" issue and was targeted at federal agency representatives and Congressional staff. Several PNW forestry professionals were part of a panel that discussed research and monitoring on forest practices and water quality, including George Ice (NCASI), Maryanne Reiter (Weyerhaeuser Co.), Liz Dent (ODF), and Paul Adams (OSU). Attorney Per Ramfjord of Portland-based Stool Rives LLP also reviewed the legal context of the 9th Circuit Court decision on NEDC vs. Brown and related developments. Contact: Paul Adams, OSAF Policy chair, 541-737-2946; [paul.adams@oregonstate.edu](mailto:paul.adams@oregonstate.edu).

**Logging Roads as Point-Sources: The Sequel.** The federal court decision (NEDC vs. Brown) recognizing logging roads as a pollution point source has garnered more attention than any other forestry case in recent years, given that this leads to federal permit requirements for public and private forest owners or operators under the Clean Water Act (CWA). Logging roads had been exempted from such permitting for decades, being included with silvicultural activities as a nonpoint-source for

regulatory purposes. This approach allowed states to develop forest practices regulations and other programs to control pollution to comply with the CWA. The decision effectively adds federal permit requirements for logging roads, and makes the permitting process open to citizen appeals and lawsuits. The decision prompted three notable responses: 1) an appeal by Oregon to the Supreme Court, with related friend-of-the-court support from over half the U.S. states; 2) bipartisan efforts in Congress for legislation that would codify the historical approach; and 3) Congressional approval of a temporary delay in logging road permit requirements. The Supreme Court also has requested input from the U.S. Solicitor General, a step that effectively extends its decision on whether or not to hear the case. Thus, much remains to be resolved and many key questions about the federal permit process and its applicability have yet to be answered, so stay tuned! Contact: Paul Adams, OSAF Policy chair, 541-737-2946; [paul.adams@oregonstate.edu](mailto:paul.adams@oregonstate.edu).

**From Saws to Skidders: Montana Logging Sees Big Change.** What do Alaska, eastern Oregon, eastern Washington, Idaho, and Montana have in common? Lots of trees, most of them on federal lands, and struggles to maintain forestry infrastructure. Montana SAF president Scott Keuhn, extension forester/landowner Peter Kolb, and a couple of Montana loggers talk forests and forestry in a brief well-produced TV news segment. Policy is why we leave those trees, right Scott? Is wood the ultimate renewable natural resource? Maybe so, Peter. View it online at [www.kaj18.com/news/from-saws-to-skidders-mt-logging-](http://www.kaj18.com/news/from-saws-to-skidders-mt-logging-)

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Contact: Jay O'Laughlin, IESAF Policy chair, 208-885-5776, jayo@uidaho.edu.

**Straight Shots.** Serena Carlson knows Idaho's forests and the national policies that affect what's happening in them. Her weekly newsletter covers a wide spectrum of issues and is must reading for me. Plus the price is right (free!). Sign up at [www.carlsonstratcomm.com/csc\\_2012\\_home\\_009.htm](http://www.carlsonstratcomm.com/csc_2012_home_009.htm). Contact: Jay O'Laughlin, IESAF Policy chair, 208-885-5776, jayo@uidaho.edu.

**Go Wood.** Blogs (i.e., web logs) are a mixed blessing. Go Wood is the only one I read regularly, partly because I have known the author—Dr. Chuck Ray, Penn State Univ. wood products extension specialist—since he was a grad student at Texas A&M University, but mostly because the blog entries are darn interesting! Recent posts include updates and cultural insights on Japan one year after the tsunami disaster and China's "ghost cities"—a housing bubble waiting to burst. Sign up at <http://gowood.blogspot.com/>.

Contact: Jay O'Laughlin, IESAF Policy chair, 208-885-5776, jayo@uidaho.edu.

**Position Statement Outreach Plans.** At its recent executive committee meeting, Washington State SAF voted to request that each chapter develop a community outreach plan to promote both national and state position statements. Chapter chairs will report on their outreach events at each executive committee meeting. Contact: Harry Bell, WSSAF Policy chair, 360-460-2502; [harry@greencrow.com](mailto:harry@greencrow.com). ♦

## International Forestry Consultants Acquired by AFM

Charlotte, N.C.—American Forest Management, Inc. (AFM), a timberland management consulting firm with corporate offices in Sumter, South Carolina, and Charlotte, North Carolina, has acquired International Forestry Consultants, Inc. (INFO), headquartered in Kirkland, Wash.

The acquisition will combine the knowledge and expertise of two of the leaders in the field of forest management consulting, providing management activities on over 4.7 million acres of forestland throughout the United States. AFM will have a staff of 250 professionals operating from 41 offices in 15 states.

Tom Hanson and Dennis Dart, principals of INFO, will continue to lead and manage the operations in the Northwest.

"After operating for 41 years in the Pacific Northwest, I am pleased to merge with AFM and expand our services into new geographic areas and be able to provide additional technical services to our clients" said Hanson. Further, AFM will continue to offer the

INFO brand of unique "boutique" management of family-owned forestlands as it has over the last four decades. AFM's operations extend throughout the Southeast, Northeast, Gulf, Pacific Northwest and Lake States regions and Hawaii. As a leading timberland manager for the forestry community, AFM offers a broad range of consulting services including land management, investment analysis, timberland sale

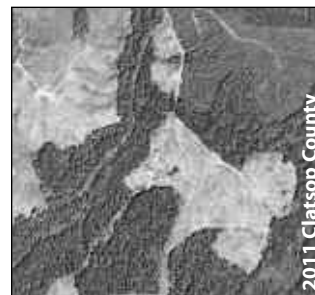
and acquisition services, appraisals, enhanced decision support, growth and yield modeling, soils mapping, wetland delineation, Phase I environmental assessments, conservation easement appraisals, forest inventory and design, acquisition due diligence, forest resource data management, and harvest scheduling and analysis.

For additional information, contact Tom Hanson at 425-820-3420. ♦

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## — THE LASER TECHNOLOGY — SURVIVAL GUIDE TO FIELD WORK

### SURVIVING A GRIZZLY BEAR ENCOUNTER



1



Use your TruPulse laser, in distance mode, to see how far away the bear is.



2



From that data, decide if you should run, or if you need to climb a tree. (NOTE: Make sure it's a grizzly. Other bears climb trees.)



3



If you chose to climb, measure the bear's height using your TruPulse's height routine.



4



Climb a tall enough tree and hang out until the bear gets bored and leaves. (NOTE: To pass the time, measure the height of other surrounding trees.)

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