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Forest and Conservation Nurseries— Improving on a Proud Heritage

BY THOMAS D. LANDIS

History of Forest Nurseries

In the Western United States, forest and conservation nurseries have been producing tree seedlings since the early 1900s, when the first nurseries were established by the federal government. The USDA Forest Service established the Bessey Nursery in 1902 to provide seedlings for the afforestation of the Nebraska Sand Hills. In 1909, the Wind River Nursery was started in Washington and the Savenac Nursery in Montana with the primary objective of growing seedlings to reforest after large fires and protect watersheds. In addition to resource protection, these nurseries had secondary goals of commercial timber production and the testing of exotic hardwoods.

In 1924, the Clarke-McNary Act provided cooperative federal funding to establish state government nurseries. Federal work programs in the 1930s, such as the Civilian Conservation Corps and the Shelterbelt Project, led to an increase in tree planting for a variety of conservation purposes. These programs continued through the Second World War. After the war, reforestation following timber harvest became the principal market for forest nursery stock in the West. That trend has continued to this day although modern nurseries are growing an increasing variety of native plants besides commercial trees.

(CONTINUED ON PAGE 2)



PHOTOS COURTESY OF USDA FOREST SERVICE

The first western forest nurseries, such as the Wind River Nursery in Carson, Wash., were established to reforest after large forest fires with the secondary objective of watershed protection. The photo below is a reforestation site on the Gifford Pinchot National Forest.



Forest Nurseries

(CONTINUED FROM FRONT PAGE)

Western Nursery Trends

Increase in Private Nurseries. One of the most prominent trends in the past 50 years is the changeover from government to private nurseries. In 1980, the USDA Forest Service operated 10 nurseries in the western states, but by the end of the century, half of them had been closed. Because federal nursery stock was primarily used for reforestation after logging, the reduction in timber harvest on federal lands greatly reduced demand for seedlings. Although federal nurseries also produce seedlings for fire restoration and other conservation purposes, this demand will never create the same demand as reforestation.

At the same time that federal nursery production was decreasing, there was an increase in the number of private nurseries—both from forest industry and small companies. Industry nurseries have been a prominent feature of nursery production in

Table 1. Nursery ownership in the Pacific Northwest states.

State	Government Nurseries			Tribal & BIA*	Forest Industry	Small Private	Total
	Federal	State	Other				
Washington	0	1	3	2	2	17	25
Oregon	1	1	2	0	7	20	31
Idaho	2	1	0	0	1	6	10
Montana	0	1	1	1	1	6	10
Total	3	4	6	3	11	49	76
% of Total	3.9%	5.2%	7.9%	3.9%	14.6%	64.5%	100%

* USDI-Bureau of Indian Affairs

the West since the 1950s. Although they constitute less than 15 percent of the nurseries in the Pacific Northwest states (see Table 1), forest industry nurseries produce around 42 percent of the total seedling production.

One of the unique aspects of the nursery situation in the western states is that many are small businesses. In fact, "small private" nurseries comprise about two-thirds of all the nurseries in the region (see Table 1) and grow seedlings for just about everyone from the federal government to small private landowners. As

far as ownership, private nurseries range from small "Mom and Pop" operations that produce less than 100,000 seedlings to large companies that grow as many as 10,000,000 seedlings per year. Currently, private nurseries produce about 18 percent of the seedlings grown in the Pacific Northwest.

Container vs. bareroot stock

Container nurseries have been steadily increasing in the West since the 1970s. At the present time, bareroot nurseries still produce over 75 percent of the seedlings in Pacific Northwest states, but container stock types continue to increase in popularity. Container size continues to increase. Twenty years ago, one industry nursery in Oregon typically produced container stock of 2 to 4 in³ (33 to 66 cm³), whereas today they grow seedlings in 15 to 20 in³ (246 to 328 cm³) containers. Plug transplants, where seedlings are started in small-volume containers and are transplanted to larger containers or into bareroot beds, are a popular stock type because they incorporate the short initial growth of container stock plus the extensive root system and caliper of transplants.

One-year stock types. Shorter and shorter planning windows are driving the demand for nursery stock types that can be produced in one year. The recent outbreak of catastrophic fires is also driving this demand as restorationists want to replant quickly. The one-year turnaround has always been one of the attractions of container seedlings. A few fast-growing species like western larch and



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Next Issue: Then and Now: A Look at Past Forestry Issues Compared to Today

ponderosa pine could be produced in one year, but most species are grown as 2+0 stock. The newest stock type is the one-season miniplug transplant where very small container seedlings are started in greenhouses in January, transplanted into bareroot beds or larger containers in April, and are ready for harvest that same winter.

Return to bareroot transplants.

Proving that many trends are circular, transplants are replacing seedlings as the stock type of choice for many seedling customers. Transplanting was the normal method of producing plants for reforestation in the first half of the 20th century. During the 1960s, forest nurseries began to switch to seedlings because of the high labor cost of transplanting and cultural improvements allowed production of seedlings with the characteristics of transplants. From 1965 to 1985, the 2+0 seedling was the most popular stock type. In the last 10 to 15 years, however, transplants have returned to favor because of the demand for a large, vigorous seedling that can compete with vegetation on outplanting sites and meet the new "Free-To-Grow" reforestation requirements. The 1+1 stock type also gained popularity and together they comprise up to 90 percent of the stock types produced in some Northwestern U.S. nurseries.

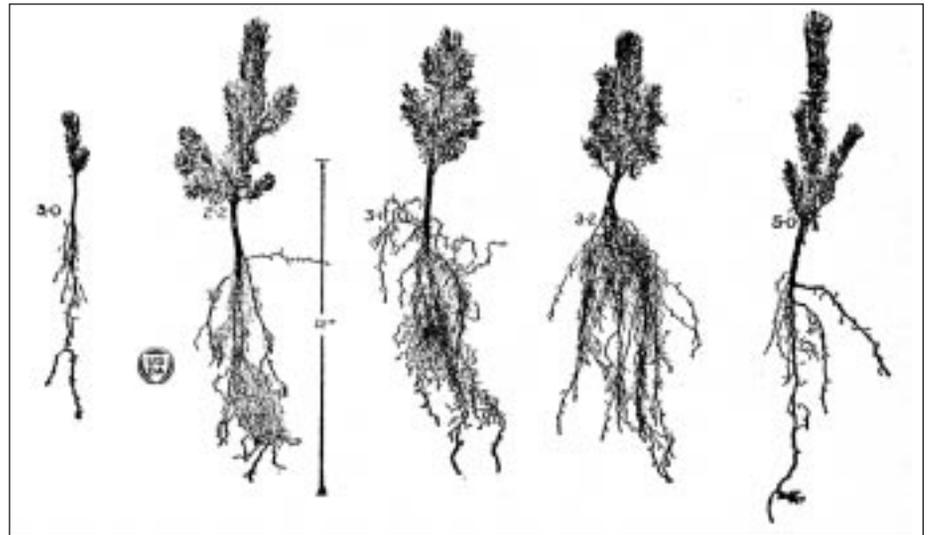
Non-commercial Native Plants.

The demand for native plants other than commercial tree species continues to increase and government and small private nurseries are responding to this demand. A wider range of native plant species from mosses and herbaceous plants to riparian shrubs and trees are now being grown. At USDA Forest Service nurseries, the total number of species produced has more than doubled in the past 20 years, and this trend shows no sign of abating.

An Increase in Seedling Quality.

Perhaps the most significant trend in forest nurseries is the quality and variety of their stock. In the early 1900s, nurseries produced only bare-root seedlings and transplants that

took from three to five years to produce. Modern nurseries offer a variety of stock types from container seedlings that can be grown in less than one year to container transplants that can survive and grow on



Nursery stock types early in the century took up to five years to produce and had relatively poor root systems.



PHOTO COURTESY OF THOMAS D. LANDIS

Today, foresters can choose from container or bare-root stock types of the highest quality.

the most challenging reforestation or restoration site.

Forest and conservation nurseries have come a long way since their inception, and the quality of their stock has steadily improved with new information about seedling physiology. Customer demands are always changing and successful nurseries will always strive to produce quality plants that survive and grow on specific outplanting sites. ♦

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A User's Guide to Nursery Stock Types

BY R. KASTEN DUMROESE AND PEYTON W. OWSTON

Foresters must consider many factors when selecting nursery stock types for their planting projects. Forest nurseries can now produce a vast array of stock types to meet any challenge in the field—these target seedlings can be defined for particular sites. It is important that foresters work with a nursery that is known from experience or reputation to provide a consistently good product at a reasonable price. Foresters and nurseries must foster open and effective communica-



Kas Dumroese



Pete Owston

tion to continually improve stock type quality. To facilitate communication between nurseries and foresters, a system of naming stock types developed and those stock type descriptions fall into three broad categories: bareroot, container and "plug plus."

Some stock types afford advantages over others under certain circumstances. If seedlings are needed on short notice, container seedlings can be grown faster than bareroot. If only small amounts of seed are available, or the seeds are extremely valuable, container nurseries can usually make more efficient use of seeds. Slow-growing, high-elevation species can be grown larger and faster in containers. Container stock is generally easier to plant in shallow or rocky soils.

Bareroot seedlings are a better choice for fall or early spring planting on sites prone to frost heaving. Large, robust bareroot seedlings are often useful on very stressful sites where big game browse or dense plant competition exists. Bareroot stock is generally less expensive than comparably sized container stock.

Larger seedlings, whether container or bareroot, usually outperform smaller seedlings and are always more expensive to purchase and plant. Foresters should remember, however, that seedling physiological condition and morphology are more important than stock type.

For bareroot stock types, a two-number notation is used, for example 1+0 or 2+1. The first number indicates how many years (growing seasons) seedlings grew in their original seedbed. The second number tells

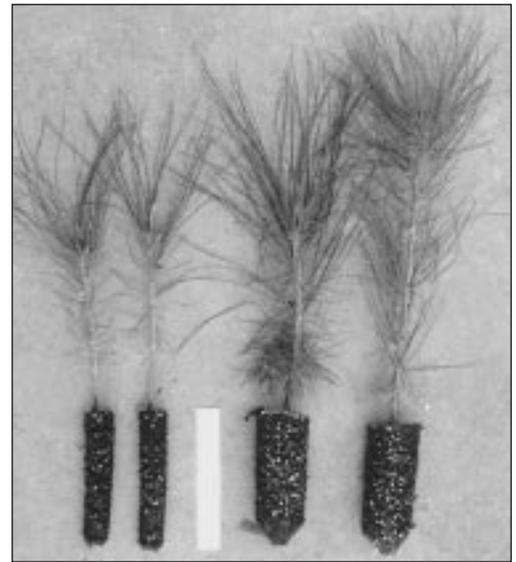


PHOTO COURTESY OF KAS DUMROESE

Seven-month-old ponderosa pine seedlings grown in 5.5 inches³ (left) and 20 inches³ (right) containers. The ruler is 15 cm (6 inches) long.

how many years seedlings grew after being transplanted into a different nursery bed. Therefore, a 1+0 seedling grew one year in the seedbed, whereas a 2+1 grew two years in the seedbed and another year in a transplant bed. Other common stock types are 2+0, 1+1 and 2+1. Selection of species is, of course, an important matter, but is not considered as part of the stock type designation. Seedling sizes are not usually included in stock type designations either, but local growers and users can and do, through experience, infer general sizes from stock type designations.

In container nurseries, describing different stock types is difficult because of jargon. Many terms are used interchangeably although they should not be because, technically, they mean different things.

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Regardless of local jargon, in reforestation nurseries in the western United States and Canada, most seedlings for reforestation are grown in rectangular block containers, usually made of Styrofoam®, containing a number of cavities in a regular pattern. Although the dimensions (width and length) are mostly uniform (about 14 x 23.5 inches and usually six inches deep), cavity volume and density (that is, number per square foot or meter of area) vary. Root volume for typical reforestation stock ranges from 4 inches³ to 20 inches³, although container stock can be much larger for specialty projects. Generally, volume and density are related, with larger-volume cavities having lower densities within the container. For



PHOTO COURTESY OF DAVID STEINFELD

A plug+1 Engelmann spruce seedling.

most nursery managers and reforestation foresters, cavity volume is of paramount importance. Stock type volumes have been steadily increasing and densities decreasing, with cavity volumes of 8-15 inches³ now being commonly used for reforestation. The advantage of larger-volume stock types grown at lower densities is seedlings with larger root collar diameters, larger diameters have been correlated with enhanced seedling per-

formance after outplanting.

Generally in U.S. nurseries, container stock types are sold by the volume of the root plug, either in milliliters, cubic centimeters or cubic inches. In Canadian nurseries, stock type designations are more detailed and the container is designated with a code indicating the cavity width, depth and cavity density within the block. As with bareroot stock, the designation starts with an abbreviation for species and ends with an abbreviation for planned season of planting. In between, container type, container size and seedling age are indicated. The code for size includes approximate top diameter, cavity volume and cavities per block; and seedling age is described using the two-number system to indicate whether a seedling was grown in one or two places and for how long (with 0.5 used to indicate half-growing seasons). For example, coastal Douglas-fir seedlings destined for fall planting and grown for one year in a Styrofoam container that has cavities 3 cm wide by 13 cm deep and 160 cavities per block, has the stock type designation "Fdc PSB 313B 1+0 Fa."

In the last decade, the line separating bareroot and container stock types has blurred because of increased production of "plug plus" (plug+) stock types. Plug+ stock types involve container seedlings being transplanted into bareroot beds for further growth. Essentially, growers can achieve the rapid growth of container seedlings and then realize the advantages of bareroot seedling culture, notably better root collar diameter and more fibrous root systems.

Larger, more robust seedlings can be produced in a shorter period of time and less expensively with this hybrid system, particularly for high-elevation seed sources. The designation for stock types followed the traditional bareroot nomenclature, except that "plug" is used to designate the container portion of production and the following number to indicate the time spent bareroot. So, historically, a plug+1 was grown one year in a container, transplanted to a bareroot bed, and grown an additional year. As container culture has improved, the time that seedlings are grown in containers has decreased. Some growers are now extensively using mini-plugs (volumes less than 2 inches³) as the starting stock types, so a plug+1 may now be a three-month-old mini-plug sown in February, transplanted to a bareroot bed in April, and harvested in November—essentially less than a year old.

Foresters have many stock types to choose from for their reforestation and restoration projects. Foresters and nursery managers must work together to identify the target seedling necessary to meet planting objectives. ♦

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The Use of Controlled-Release Fertilizers for Conifer Seedling Production and Outplanting

BY DIANE L. HAASE AND
ROBIN ROSE

Controlled-release fertilizers (CRF) have been used for decades in horticulture, agriculture, turf, orchards, and suburban landscaping. More recently, CRF are gaining popularity for forestry applications. Studies have shown that CRF can increase nutrient efficiency and stimulate growth of conifer seedlings when applied in the nursery or at the time of outplanting. However, in order to achieve optimal response, acute attention to CRF characteristics and their interaction with the growing environment and seedling nutrient demand is required.



Diane L. Haase

The term "controlled release" is used to describe fertilizer products that are not 100 percent readily available to plants in their initial form. Nutrient release is dependent on water, temperature and/or microbial activity, and varies widely among products. The ultimate goal of CRF are to deliver nutrients at a rate that matches the demand rate of the plant to which it is applied, therefore avoiding waste. This results in maximum efficiency by optimizing plant quality while minimizing fertilization frequency and leaching losses.

Organic Products

Organic fertilizers have been used for thousands of years. These include animal manures, fish emulsion, seaweed, bone meal, sewage sludge, sawdust and composted plant materials. These products tend to have a lower percentage of nutrients than synthetic

fertilizers and therefore must be applied in greater quantities. The elements in these materials can be quite variable and can release unpredictably. However, these products may provide an inexpensive CRF option and have been used successfully in a variety of applications.

Nitrogen-reaction Products

Nitrogen-reaction products are created via chemical reactions of water-soluble nitrogen compounds such as urea or ammonia, with an aldehyde. This results in complex molecular structures that have limited water solubility. Once introduced to the soil environment, these products are slowly broken down in the soil to plant-available forms.

Ureaform is one of a group of urea-formaldehyde reaction products and is composed of methylene urea polymers of varying size and solubility. Ureaform has been used successfully as a slowly available source of nitrogen in fertilizer blends and is broken down in the soil primarily by microbial activity. Therefore, nutrient release is dependent upon environmental factors (e.g., soil temperature, moisture, pH, and aeration) that influence microbial activity.

Commercial products that contain ureaform include Agriform® pellets (O.M. Scotts & Sons, Marysville, OH) and Nitroform® (Nu-Gro Technologies, Inc., subsidiary of Nu-Gro America Corporation, Brantford, Ontario, Canada). The more soluble methylene ureas can be found in other Scotts fertilizers (O.M. Scotts & Sons) and Nutralene® (Nu-Gro Technologies, Inc.).

Isobutylidene diurea (IBDU), like ureaform, is formed through a reaction between urea and an aldehyde. Unlike ureaform, however, nitrogen in IBDU becomes available to the plant through hydrolysis. The rate of release is dependent upon the IBDU particle size and the soil water content. IBDU is manufactured by Nu-Gro Technologies, Inc. and is available in bulk for fertilizer blends or in briquettes.

Coated Products

Coated CRF consist of a soluble nutrient core surrounded by a water-insoluble coating. Each coated particle is called a prill. Sulfur coating was one of the earliest technologies for coated fertilizers. Sulfur-coated urea (SCU) nutrient release is via water penetration into cracks, pores and imperfections in the coating. Once the water penetrates, the dissolved urea is rapidly released from the particle. The



PHOTO COURTESY OF DIANE HAASE

A Douglas-fir tree just 32 months after outplanting. This tree was grown with CRF in the growing media and was significantly larger than those grown without CRF.

most commonly used coated CRF are polymer-coated. Unlike nitrogen-reaction products, coated fertilizers allow for the slow release of other nutrients in addition to nitrogen.

Polymer-coated CRF are considered the most technically advanced form of CRF due to product longevity and subsequent efficiency of nutrient delivery. In most applications, polymer-coated CRF have replaced SCU because they provide a more gradual and consistent pattern of nutrient release. The release of nutrients from polymer-coated CRF

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is dependent upon the coating thickness and composition, as well as the environment in which it is applied.

Polymer-coated CRF are given a specific release rate by the manufacturer, usually ranging from 3-18 months. However, this release rate is based on a constant laboratory temperature (typically 21°C). Actual release under field conditions can vary considerably from the fertilizer label and is usually not at a steady rate. Most products release a percentage of nutrients shortly after application. The remaining fertilizer release is dependent on time, temperature and moisture. As water infiltrates into the prill and condenses on the soluble fertilizer, osmotic pressure develops, which leads to outward leakage of the fertilizer solution. As the solution in the prill becomes increasingly dilute, pressure decreases, thereby decreasing nutrient release.

A variety of polymer-coated products are on the market. Nutricote® (Chisso-Asahi Fertilizer Company, Tokyo, Japan) has a highly water-impermeable, thermoplastic resin coating. Release-controlling agents and surfactants added to the coating determine the rate of nutrient diffusion and are mainly affected by temperature. Osmocote® is manufactured by the O.M. Scotts Company and has been in use for decades. Several Osmocote fertilizer formulations and release rates are available. Of all the products mentioned in this article, Osmocote is the most common CRF found in the literature. Polyon® is the trade name given to the polyurethane coating on products distributed by Simplot under the brand name Apex® (Pursell Technologies, Inc.) Release occurs by osmotic diffusion and the thickness of the coating is the prime factor controlling release.

Advantages and Disadvantages

The primary and obvious advantage of CRF are their ability to supply seedlings with nutrients for extended periods with a single application as compared to conventional water-soluble fertilizers. Due to their prolonged release, the potential for seedling damage associated with nutrient toxicities can be reduced and nutrient use efficiency can be increased. CRF are often thought to be expensive compared to their soluble counterparts. However,

the need for multiple soluble fertilizer applications can add up to higher costs than a single CRF application. CRF can be used in a variety of forestry settings such as greenhouse production, bareroot

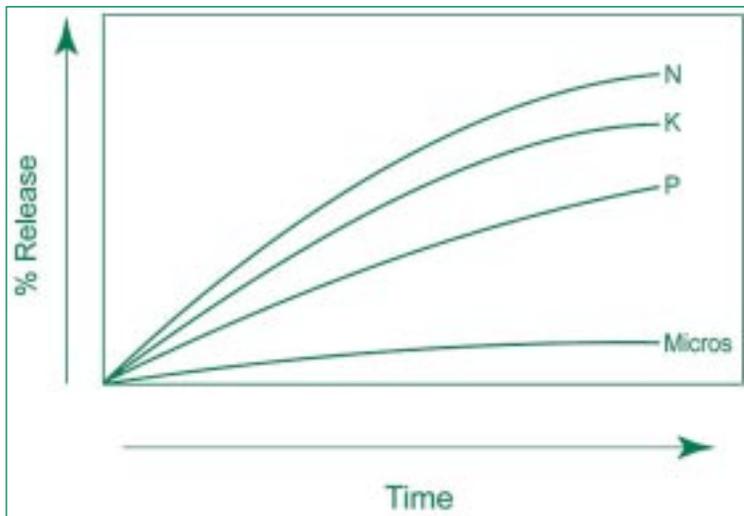
production and field fertilization.

The biggest disadvantage associated with CRF is the potential for "uncontrolled release." Unlike soluble products, CRF nutrient supply cannot be adjusted once it is applied. Research shows that nutrient release can be uneven with the highest rate occurring during the initial few weeks, especially with an increase in temperature and by the shorter-term release products. This results in nutrient release being greater than nutrient demand and the likelihood of leaching. Furthermore, the intensity and pattern of nutrient release can differ significantly among polymer-coated CRF. Another disadvantage is that release patterns of individual nutrients can vary. In particular, phosphorus and micronutrients have been found to release at lower rates than nitrogen and potassium (see Figure 1), likely due to the formation of insoluble metal phosphate compounds.

Environmental Considerations

Site conditions, particularly temperature and available soil moisture, can have a profound effect on the level of response one can expect from fertilization. In a Nursery Technology Cooperative study with Apex and Osmocote CRF, Douglas-fir seedlings grown with CRF-amended container media had a two-fold difference in stem volume response between a coastal site and a drier inland site after five field growing seasons. Vegetative competition, soil fertility and other site conditions will also

Figure 1.



Release of individual nutrients can vary greatly over time.

affect the magnitude of fertilizer response. The possibility of fertilizer "dumping" under high temperatures could lead to toxic salt accumulation, especially under dry field conditions. In the greenhouse, this could necessitate leaching with water. In the field, this could lead to poor seedling growth or a rise in mortality.

Recommendations

The best approach to using CRF is to first gain a general understanding of the different kinds of CRF and then to carefully and methodically test a variety of fertilizers over a range of rates and environmental conditions. As the CRF industry continues to improve available products, we can expect to see increased interest and understanding regarding CRF technology accompanied by improved greenhouse and field performance. ♦

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Diseases in Forest Nurseries: Implications for Forest Managers

BY ROBERT L. JAMES

Continued sources of high-quality seedlings are needed for proper management of forestland in western North America. Diseases may often be important factors limiting production of seedlings in forest nurseries. Fortunately, organisms that cause important diseases within nurseries are usually not of concern once seedlings are outplanted on forest sites. Rather, they are similar to or the same organisms that elicit diseases on agricultural crops. This would be expected because forest nurseries are really agricultural enterprises, producing large numbers of plants using intensive cropping systems.

An example of one of the most important groups of pathogens in forest nurseries is *Fusarium*. These pathogens induce damping-off and root diseases on both container-grown and bareroot crops. In some cases, disease levels can be very high, with a large proportion of the crop being damaged. These organisms may also elicit diseases of many agricultural crops including a wide range of vegetable, fruit and cereal crops.

In some cases, the same *Fusarium* species that causes root disease of vegetable and fruit crops, such as tomatoes and melons, also elicit disease on young conifer seedlings in forest nur-

eries. Fortunately, these pathogens are mostly restricted in their activity while seedlings are in nurseries. Seriously infected seedlings displaying disease symptoms are usually culled before being sent to the field for planting. However, if seedlings are infected with nursery root or foliar pathogens and are outplanted on standard forest sites, the resident pathogens usually either die out or are replaced by other

seedlings leave nurseries is molding of seedlings held in cold storage. When seedlings are stored for prolonged periods, fungi residing on foliage or roots may become metabolically active and damage seedling tissues. This is especially true when seedlings are stored at above-freezing temperatures and at high humidity. These conditions are ideal for growth, sporulation and spread of many microorganisms, including certain fungi that can cause disease.

A good example is *Botrytis cinerea*, a pathogen with an extremely wide host range that can grow and cause seedling



PHOTO COURTESY OF ROBERT L. JAMES

Bare root conifer seedlings are grown for one to several years and then shipped for outplanting on forest sites.

mycoflora once seedlings are planted. This is primarily because typical forest environments are usually not conducive to these pathogens, that is, the pathogens are not capable of competing with natural organisms residing within forests, whereas they seem to thrive in many forest nursery settings.

Beware of molding

One exception to the general lack of problems elicited by pathogens once

damage at very low temperatures. Seedlings can readily become infected with this pathogen in nurseries, especially on seedlings grown in containers within greenhouses. Infection by *Botrytis* may not always be evident, resulting in some infected seedlings being shipped for outplanting. Under storage conditions, especially at above-freezing temperatures, this pathogen may become active and cause substantial damage.

Storage problems are usually alleviated by reducing the time of storage as much as possible, keeping seedlings frozen during storage, and rapidly thawing seedlings and outplanting them as soon as possible after thawing.

Many conifer seedlings leaving nurseries are mycorrhizal. This is due either to natural infection, particularly on bareroot seedlings grown for two or more years, or to artificial inoculation with commercially available sym-



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bionts, commonly applied to container-grown seedlings. Whether or not seedlings are mycorrhizal prior to outplanting, they will normally develop this symbiosis during the first growing season on typical forest sites.

Exceptions may be if seedlings are planted on sites where local mycorrhizal inoculum is limited or not present, such as certain reclamation sites, pasture land or other locations where natural trees are lacking. When seedling stock is destined for such sites, it is important to introduce mycorrhizal inoculum while seedlings are being produced in nurseries; otherwise their chances for survival are reduced. On forest sites, planted seedlings with mycorrhizae obtained from the nursery usually become infected with alternative fungal symbionts after awhile. These alternative symbionts may be better adapted to the specific forest sites than those obtained at the nursery.

In summary, foresters generally need not be overly concerned with diseases of seedlings in forest nurseries. Most nursery growers take steps to make sure diseases are minimized during seedling production, cull seedlings with any evidence of disease that might adversely affect outplanting performance, keep molding of seedlings during storage to a minimum and provide mycorrhizal inoculation when required.

Most growers of forest nursery seedlings utilize the latest technological improvements to enhance seedling quality. As a result, most seedlings coming from nurseries are of high quality, with the best potential for successful establishment and growth once outplanted. Very rarely are diseases obtained in nurseries major contributors to problems following outplanting. Site and environmental factors, such as vegetation competition, animal damage or drought are much more important contributors to outplanting problems. ♦

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Selkirk Chapter Partnership Proves Highly Successful

BY BOB "BOS" BOSWORTH

The Selkirk Chapter, IESAF, formed a four-way partnership this spring for the 13th annual North Idaho Timberfest, held in Sandpoint, Idaho, on June 14. The partnership project was called Buy-A-Board-For-Habitat. Partners joining SAF were Timberfest and the Sandpoint and Bonners Ferry units of Habitat for Humanity (HFH). At the partnership booth, boards were offered for sale with proceeds dedicated to HFH.

Timberfest is an annual celebration of our heritage related to the timber industry and features truck driving contests, traditional lumberjack competitions, and a variety of natural resource-based business and craft exhibits from the north Idaho area. The event attracts visitors from north

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SAF's objective in the partnership was to help the public establish the link between professionally managed forests, products that come from these forests, the industry that produces these products and the necessity of these products in providing human habitation and other human needs. Timberfest provided the space for a joint SAF/HFH booth and advertising indicating that Buy-A-Board was a new addition to the celebration venues.

SAFers Bernie Janoski and Steve Bloedel solicited sawmills and other



PHOTO COURTESY OF STEVE BLOEDEL

SAF members Bernie Janoski (front) and Bill Love work the Selkirk Chapter/ Habitat for Humanity booth at Timberfest in Sandpoint, Idaho.



PHOTO COURTESY OF BILL LOVE

A Habitat for Humanity representative and Selkirk Chapter Chair Steve Bloedel promote the SAF Selkirk Chapter, Habitat for Humanity and Timberfest "Buy a Board" program by opening Timberfest events with a crosscut saw contest.

forest products companies, seeking donations of units of lumber for HFH. Industry was very generous, donating a total of seven units. Several logging companies made cash donations to Habitat. Transportation was also donated to assure delivery of the donated units of lumber to Sandpoint and Bonners Ferry. A banner to adver-

tise the booth and donors to the project was donated. Bill Love coordinated activities between SAF/HFH in preparing the booth for business.

One donated unit of lumber (approximately 300 boards) was placed in the booth and boards were offered for sale at \$5 per board. Board purchasers got to sign their board with a



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marker, knowing that that board would go into the next HFH home to be built in Sandpoint. During the day, about 100 boards were sold. All proceeds from board sales will go to HFH for purchasing needed non-donated items for a "build." There was often a line of folks at the booth with \$5 in hand.

Booth visitors could talk to HFH members about its program and plans. They could also talk to foresters about forestry issues. Brochures about forest health and home fire safety provided by SAF were popular take-home items for the public.

SAF members working in the booth felt that this was by far the most successful venture into fair-type booths that SAF has tried. They enjoyed the opportunity to meet and make new friends with the HFH volunteers in the booth. HFH members agreed that this was one of the most enjoyable fund raising events they have participated in for their organization. Timberfest was satisfied with the partnership. Several



PHOTO COURTESY OF STEVE BLOEDEL

An eager customer steps up to the plate to sign a board purchased to support Habitat for Humanity at the joint Selkirk Chapter/Habitat booth during Timberfest last June.

visitors said they were attending Timberfest specifically to Buy-A-Board.

Donors of lumber include CEDA-Pine Veneer, Idaho Veneer, L-P-Bonnars Ferry, L-P-Moyie Springs, Merritt Brothers, Plummer Forest Products, Ponderay Valley Fiber, Riley Creek Lumber and Stimson Lumber Co. Companies making cash donations to HFH through SAF include Mike Cutler

Logging, Foust, Inc., Newport Equipment, Gary Regehr Logging, Mike Reynolds Logging and Ruth Ann Wilson. Ground Work Services donated lumber transportation. Booth banner was created and donated by Benchmark Signs & Graphics. ♦

Bob "Bos" Bosworth, retired from the Forest Service, is a past president of SAF. He was on the Timberfest organizing committee and continues to compete in Lumberjack events, including Timberfest. He can be reached at bosworth@cdreams.com.

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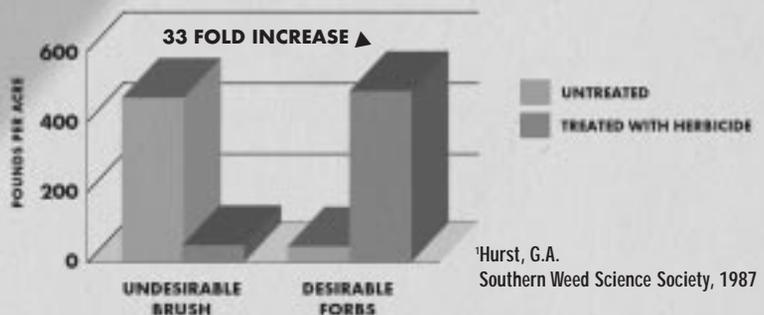
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¹Hurst, G.A. Southern Weed Science Society, 1987

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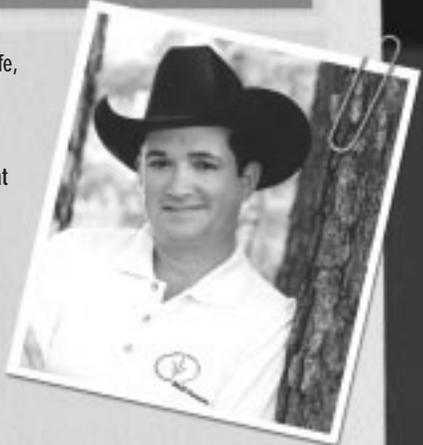
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What Paradigm Shift?

BY JOHN BEUTER

At the state meeting of Oregon SAF this year, I was asked to provide a vision of what “new paradigms for forestry” mean for the forestry profession and SAF. The concept of paradigm shifts bothers me because it is so often used to hype even small changes by folks competing for research grants and running for public office.



The classic example of a paradigm shift is when Copernicus debunked the idea that the earth was the center of the universe with his theory that the sun was instead—a move from something that was clearly wrong to a better theory. What’s the parallel in forestry?

Some perceive a shift from multiple-use to ecosystem management to be a paradigm shift. What has been debunked in that process? The answer, of course, is nothing at all. The underlying theory of scientific forestry that has been evolving over the last several hundred years is intact. It’s called **sustained yield**.

Sustained yield was conceived in the context of subsistence economies and forests that were being decimated by war and creeping mercantilism. The measurable outcome of sustained yield was wood for human use, a myopic focus to some critics. But you can’t have sustainable wood supplies without sustainable forests.

It fell to early forest scientists to figure out how to sustain forests, not just any kind of forest, but a forest that would most efficiently produce what people needed and wanted. They learned about the requirements for tree growth, distinguished between tolerant and intolerant trees, learned about the need to control competing vegetation and protect trees from animals, learned to enhance growth through stocking control and nutrient supplements, and above all, how to control harvest to correspond with the growth of the forest to assure sustainability.

So, what’s new in forestry? It’s still about growing trees and managing forests to ensure sustainability. In the early days, landowner concerns had mainly to do with subsistence and

survival; today, affluent landowners often aspire to higher level social and esteem objectives. Foresters exist to serve landowners across the spectrum of these needs and wants.

The underlying theories and scientific principles of forestry haven’t changed. The weighting of objectives has changed. Now we ask: Sustained yield of what? Monitoring of what? It was a lot simpler when the focus was on timber because it was relatively easy to measure and monitor. Today, foresters are expected to ensure sustainability of an infinite variety of ecosystems, some transitory and others arbitrarily defined. It’s become a lot more complicated, but the underlying theories and principles of forestry are still solid.

If there’s been a paradigm shift in forestry, it’s cultural rather than scientific. I remember a *Journal of Forestry* article about 30 years ago that warned against the attitude of “the omnipotent forester.” Timber was king then, and a lot of foresters acted omnipotent in their efforts to forestall timber shortages. Today, it is generally accepted that there is no shortage of wood in the world and the focus has shifted to a more holistic approach to forest sustainability. Even foresters still focused on timber production realize their limitations in accounting for shifting landowner and societal desires for sustainability. Collaboration with wildlife, fisheries and other natural resource specialties is becoming routine in management planning for all owner classes to satisfy legal and regulatory requirements and commitments to

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“best management practices.” Old-line forestry consulting firms that used to focus primarily on cruising, harvest scheduling and valuation are now hiring or partnering with other resource specialists to broaden their skills in forest management planning.

What’s the vision for the future of forestry and SAF? From my perspective, the future is bright and exciting. Knowledge about forests continues to grow, requiring foresters to continue to learn. And, with higher expectations by forest owners and society, foresters have more opportunity to use what they learn in managing and monitoring a broader variety of forest resources.

As for SAF, its role in representing America’s forestry profession is more important than ever. It has always done a good job of bringing foresters together to exchange knowledge about forests and forest practices, and will continue to do so. The bigger challenge for the future is to sustain the integrity of our profession, enhance its credibility with the public, and defend it against unwarranted attacks and misrepresentation in public forest policy debates. SAF’s foundation is solid—it has a clear mission, a code of ethics, strategic outcomes that evolve over time in response to changing conditions, well-established forestry education accreditation standards, and a well-established and improving Certified Forester® Program.

SAF established the profession of forestry in America and nurtured its recognition and development. To thrive in the future, SAF needs committed, active participation by professional foresters. Foresters need SAF and SAF needs foresters. ♦

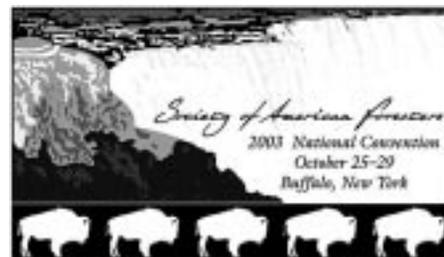
John Beuter is vice president of SAF and president of Umpqua-Tualatin, Inc., consulting on forests and forestry. He can be reached at 541-758-6516 or beuterj@comcast.net.

Where’s a Reporter When You Need One?

BY LESLIE BATTEN

You are the manager of several hundred acres of forest recently acquired by a timber management investment organization. Typically, it is fragmented somewhat with scattered holdings by individual private owners. On the property you manage, there are three spotted owl nests, and you know of two others on the individually owned land. The area around two of these sites is infested with bark beetles and needs immediate harvest. The company has a general policy regarding protection of owl nest sites, but currently there is no specific plan for this property. Knowing that the nests are monitored by a local group interested in spotted owl protection, and that some individuals are suspicious of the company’s motives, what message do you, as the local manager, take to the media regarding your harvest plans?

You are the communications chair for your state society. A legislator with a strong environmentalist constituency has introduced a bill that would effectively stop all timber harvesting on the state forests in your state. The state forester has been directed by his superiors to stay out of the policy issue, but is able to provide data to whoever asks for it. The state SAF leadership is alarmed by these events and asks the policy committee to develop a position on the issue essentially stating that well-managed timber harvests are an important tool that should not be denied to the state’s foresters. What is



your message? How do you get it to the media and get it noticed in a state where forestry issues generally are ignored until there’s a controversy?

Your first response is likely the “deer in headlights” speechlessness. Or wishing you could run for the hills. Or hoping you can put the caller on hold indefinitely. We’ve either had these very uncomfortable experiences or dread the future possibility of such an experience. Get a huge confidence boost and enhance your communication skills at the national communications committee workshop at the national convention!

We will be joined by media people in the Buffalo/Ontario area and by forestry public relations people. We will answer the questions to the real-life scenarios presented above as well as others, and get immediate feedback from our panelists.

You will learn from the reporters how to talk with them, how to develop a relationship with them, and how to craft a message that they will respond to. They will tell us whether field trips are effective and what the protocols are for the various mediums. You will learn from forestry public relations representatives how to develop a message, how to “pitch” the message, and how they have cultivated their relationships with reporters.

Please join us on Tuesday, October 28, from 1:30 to 5:00 p.m. in Buffalo during the national convention. You will return home the picture of confidence and professionalism, cool and composed when dealing with the media! ♦

Leslie Batten is national communications chair and can be reached at 503-295-4024 or leslieb@swiftnet.com.

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Blanchard, Murray Named Best Field Foresters

The Society of American Foresters (SAF) has recognized 11 foresters with its Presidential Field Forester Awards. Initiated by SAF Past-president Fred Ebel, the awards recognize foresters who have displayed uncommon talent and innovative methods to achieve a record of excellence in the application of forest management.

"Forester practitioners are the true foundation of our profession," says Ebel. "They often operate in complete anonymity, yet their actions are the single most important contribution to the viability and understanding of our profession. This is where forestry truly happens and it is important that we recognize those who perform the art and science of forestry each and every day."

Given the regional differences in forestry, the award recipients are selected from each of the 11 SAF voting districts. The following are this year's award winners.

• **Gary Blanchard**, chief forester for Starker Forests in Corvallis, Ore. Gary began his career with Starker Forests in 1961. He supervises a staff of seven foresters and two forestry technicians in road-building and harvesting opera-

tions. He also coordinates forestry research projects in cooperation with Oregon State University's College of



Forestry and leads **Gary Blanchard** forestry tours for both professionals and the public. In addition to his work with Starker Forests, Gary is also a long-time advocate for SAF. Since he joined the Society in 1961, he has served in every officer position from the local chapter to chair of the Oregon SAF (1985). In 2001, he served as Foresters' Fund chair for the Oregon SAF's annual meeting.

• **Joseph E. Murray** of Clallam Bay, Wash., forester for Merrill and Ring, Inc., in Port Angeles, Wash. Joe has been with Merrill and Ring since 1980. Among his principal responsibilities are the management



Joseph Murray

and supervision of silviculture, inventory and public access for Merrill and Ring's properties in Washington and British Columbia. He is credited with initiating several innovative practices on Merrill and Ring lands, including the restoration of riparian hardwood stands to conifer; starting forestry tours for students, teachers and the public; and implementing a controlled access and private lands wildlife management agreement for Merrill and Ring lands with the Washington Department of Fish and Wildlife. An SAF member since 1980, Murray has served as chair of the Washington SAF's North Olympic Chapter.

• **Michael P. Anderson** of Perryville, Missouri, forestry district supervisor with the Missouri Department of Conservation.

• **John M. Dunn** of Alexandria, Louisiana, district forester with Roy O. Martin Lumber Company, LP.

• **Anthony Filairo**, area forester with Great Northern Paper, Inc., in Millinocket, Maine.

• **Keith D. Horn**, president of Keith Horn, Inc., in Kane, Pennsylvania.

• **L. Keville Larson**, vice-president and part owner of Larson & McGowin in Mobile, Alabama.

• **William F. Milliken**, founder of the Milliken Forestry Company, Inc., of Columbia, South Carolina.

• **Doug Nickles**, urban fire forester for the Glendale (California) Fire Department.

• **Stephen E. Patterson** of McCall, Idaho, forest silviculturist for the Payette National Forest.

• **Ronald W. Severs**, forest manager at the University of Minnesota's Cloquet Forestry Center.

The awards will be presented at the 2003 SAF National Convention, which will be held October 25-29 in Buffalo, New York. For more information about the award winners, visit the SAF website at www.safnet.org/who/nationalawards.cfm. ♦

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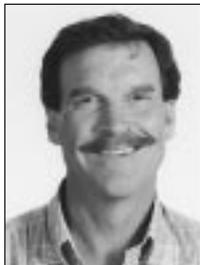
SAF Names National Award Winners

The Society of American Foresters has identified outstanding contributors to the forestry profession by announcing the winners of six national awards. Two are from Oregon. The winners will be recognized at a special ceremony at the 2003 SAF National Convention, to be held October 25-29 in Buffalo, New York.

The award winners were approved at an SAF Council meeting held June 7-8 at the SAF National Office. The awards process begins with written nominations and references by professional peers. The Forest Science and Technology Board or the Committee on Professional Recognition then reviews the nominations. These two bodies then forward their recommendations to the SAF Council for its review and approval.

The rigorous review process produces candidates with a national profile and a comprehensive history of sustained contributions to the forestry profession and service to the public.

The Technology Transfer and Extension award was awarded to Tom Landis. This award recognizes outstanding achievement in technology transfer, implementation



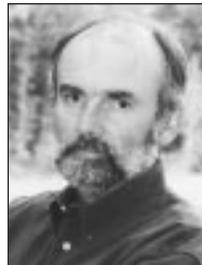
Tom Landis

and extension by an SAF member as evidenced in the recipient's career or involvement in SAF working group and science activities. Enhancing the practice of forestry based on good science is a foundation principle of SAF. Technology transfer is critical to ensuring that sound technical information becomes available to those concerned with the management and conservation of forest resources. Presented annually, the award includes a \$1,000 cash honorarium.

Tom Landis has spent more than 20 years transferring technology to growers and users of tree, shrub and other native plant seedlings for reforestation, restoration and conservation. For the majority of his professional career, Landis has served as national nursery

specialist for the USDA Forest Service Cooperative Programs. During that time, he has assisted with planning most of the regional forest and conservation nursery meetings held in the United States and coauthored what many believe to be the definitive seedling production guides for the forest and conservation nursery industry—the *Forest Nursery Manual* and the six-volume *Container Tree Nursery Manual*. In 1980, he started *Forest Nursery Notes*, a semi-annual publication on pertinent forest nursery issues, and he later helped launch the *Native Plants Journal* and the web-based plant propagation protocol database. An SAF member since 1970, Landis holds a bachelor's degree in forest management from Humboldt State University and master's and PhD degrees in forest ecology from Colorado State University.

The outstanding Journalism award, given to Jim Petersen, recognizes high-quality journalistic coverage of topics that increase the American public's understanding of forestry and natural resources. Established in 1996, the award may be presented to an individual, a team or a media organization involved in publishing, television or radio journalism. Presented annually, the award includes a cash honorarium of \$500.



Jim Petersen

Jim Petersen is founder and editor of *Evergreen Magazine*, which functions as the voice of the Evergreen Foundation, a nonprofit forestry research and education organization with a membership of 30,000. The magazine's summer 2002 edition, "*The New Pioneers: Hope Rises from the Ashes in Southwestern Forests*," focuses on forest ecology, sustainability, technology and current

restoration research. In developing this issue, Petersen consulted with foresters and other resource managers and policymakers on the federal, state and local level; forest products industry representatives; tribal forest landowners; and others. His research efforts resulted in a factual, comprehensive and informative publication that uses abundant photo documentation to illustrate its subject matter. In addition to his work on *Evergreen Magazine*, Petersen is executive director of the Evergreen Foundation, serves on the board of directors for the Pacific Logging Congress, and maintains a rigorous public speaking schedule. He joined SAF in 2000.

Other award winners include Martin E. Jurgensen, Carl Alwin Schenck Memorial award for outstanding performance in the field of forestry education; David Van Lear, Barrington Moore Memorial award, for achievement in biological research leading to the advancement of forestry; George Gertner, Award in Forest Science, for distinguished individual research in any branch of the quantitative, managerial or social sciences leading to the advancement of forestry; and Bill Banzhaf, Gifford Pinchot Medal, for outstanding contributions by a forestry professional in the administration, practice and professional development of North American Forestry. More detailed information on these awards and recipients are available in the September issue of *The Forestry Source*.

It's not too early to begin thinking about nominating colleagues for the 2004 SAF National Awards. The nomination period for 2004 awards is from December 1, 2003, to February 28, 2004.

For more information, visit the SAF website at www.safnet.org/who/nationalawards.cfm, or contact Louise Murgia, associate director, field services, at 301-897-8720 x118 or murgia@safnet.org. ♦

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OSAF Foundation Forum

Scholarships Awarded to OSU Students

The Oregon Society of American Foresters Foundation has been providing support for forestry education and other worthwhile activities to enhance the development of young forestry professionals since 1985.

For 2003, the foundation is proud to announce that Taylor Fielder and Joseph Berry have been awarded scholarships for the 2003-04 school years.

Taylor Fielder, from Newport, Ore.,

is a junior in Forest Recreation Resources with a minor in Fish and Wildlife and an option in Law Enforcement at Oregon State University. After graduating she plans to apply to the Peace Corps. Taylor intends to focus her career on the preservation and conservation of our recreation areas and wildlife and habitat. She was awarded \$4,500.

Joseph Berry, a Native American

from Beaverton, Ore, is a transfer student from Mount Hood Community College to Oregon State University. He hopes to become a forest practices forester and possibly pursue a Master's in silviculture. He was awarded \$3,500.

Today, the OSAF Foundation fund stands at about \$214,000, which yields enough interest for an annual project budget of approximately \$13,000 (we don't spend more than we receive in investment returns).

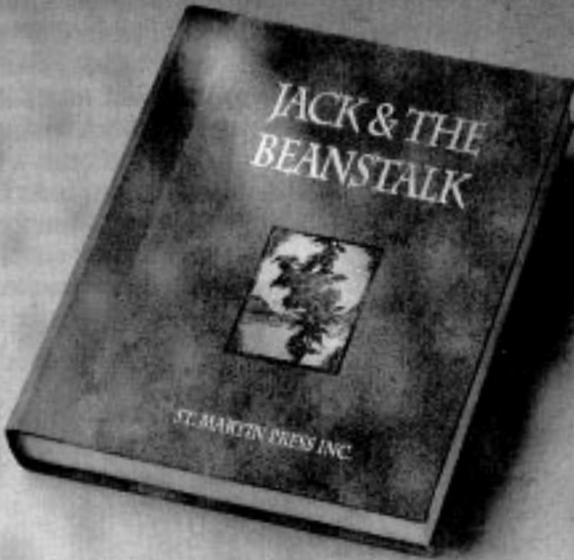
Please consider giving a gift to the OSAF foundation to help support its goals of attracting the best students to the profession of forestry and improving the knowledge of Oregonians about professional forestry.

Contributions can be mailed to OSAF Foundation, 4033 SW Canyon Rd., Portland, OR 97221. For additional information, contact the Northwest Office at 503-224-8046 or rasor@safnw.org or any of the following foundation trustees: Rick Barnes, chair, Tom McLain, secretary, Bill Peterson, Leslie Batten or Jerry Anderson. ♦

Sustainable Workshop Slated

Barriers to sustainable forestry will be the topic of a workshop on November 7 at the World Forestry Center in Portland, Ore. The Pacific Northwest Research Station is sponsoring a three-year sustainable wood production initiative to identify and understand the key issues related to sustainable forestry in Washington and Oregon. As a part of this initiative, the workshop speakers will identify major barriers to sustainable forestry, potential compatibilities of wood products with other forest resources, public perceptions about sustainable forestry, and the implications of active management on the social, economic and ecological aspects of sustainable forestry.

The full agenda is posted at www.westernforestry.org. For further information, contact Richard Zabel at 503-226-4562 or richard@westernforestry.org. ♦



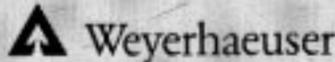
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Calendar of Events

UNIVERSITY-SPONSORED EVENTS

Course	Dates	Sponsor	Location
Starker Lecture Series: Complexity in Fire Ecology: The Case of the Biscuit Fire	Oct. 23	OSU	Corvallis, OR
Advanced Variable Probability Sampling	Nov. 5-7	OSU	Corvallis, OR
Starker Lecture Series: Complexity in Forest Products: Forest Products Life Cycle Analysis	Nov. 6	OSU	Corvallis, OR
PNW Integrated Vegetation Management	Nov. 12-13	WSU	Portland, OR
Fall Forestry Educational Seminar	Nov. 15	WSU	Eatonville, WA
Risk Assessment for Decision-making Related to Uncharacteristic Wildfire	Nov. 17-19	OSU	Portland, OR
Starker Lecture Series: Complexity and the Common Good—So Why Are We Confused?	Nov. 20	OSU	Corvallis, OR
Selling Forest Products	Dec. 4-5	OSU	Corvallis, OR
How to Dry Lumber for Quality and Profit	Dec. 8-11	OSU	Corvallis, OR
Introduction to GIS Applications in Natural Resources with ArcView 8.3	Dec. 11-12	OSU	Corvallis, OR
Intensive Plantation Forestry in the PNW	Jan. 20-22	OSU	Portland, OR
Human Dimensions of Family and Farm Forestry International Symposium	Mar. 28-Apr.1	WSU	Pullman, WA

OTHER EVENTS

CINTRAFOR's Annual Conference on International Forest Products Markets, Oct. 16-17, Seattle, WA. Contact: CINTRAFOR at www.cintrafor.org.

Post-fire Restoration and Salvage: Applying our Knowledge and Experience, sponsored by the SAF Central Oregon Chapter, Oct. 21-23, Riverhouse, Bend, OR. Contact: Lena Tucker at ltucker@odf.state.or.us.

SAF National Convention, Oct. 25-29, Buffalo, NY. Contact: SAF at 301-897-8720 or www.safnet.org/convention/index.cfm.

Professional Timber Cruising, Oct. 28-29, Beaverton, OR. Contact: Atterbury.

ArcReader Training, Oct. 30, Beaverton, OR. Contact: Atterbury.

Overcoming Barriers to Sustainable Forestry: Critical Issues, Current Findings & Ongoing Research in the Pacific Northwest, Nov. 7, World Forestry Center, Portland, OR. Contact: WFCA.

GPS for Mobile Professionals, Nov. 19, Beaverton, OR. Contact: Atterbury.

ArcReader Training, Nov. 20, Beaverton, OR. Contact: Atterbury.

Logger Training-Harvest Planning, Dec. 1 in Coeur d'Alene, ID, and Dec. 9 in Corvallis, OR. Contact: Forest Engineering.

Logger Training-Skyline Payloads, Dec. 2 in Coeur d'Alene, ID, and Dec. 10 in Corvallis, OR. Contact: Forest Engineering.

Logger Training-Multi-Span Systems, Dec. 3 in Coeur d'Alene, ID, and Dec. 11 in Corvallis, OR. Contact: Forest Engineering.

Logger Training-Guying and Anchoring, Dec. 4 in Coeur d'Alene, ID, and Dec. 12 in Corvallis, OR. Contact: Forest Engineering.

Logger Training-Cost Control, Dec. 5 in Coeur d'Alene, ID, and Dec. 8 in Corvallis,

OR. Contact: Forest Engineering.

Western Forestry & Conservation Association Annual Meeting, Dec. 9-10, Sacramento, CA. Contact: WFCA.

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

2004 Joint Washington State/Oregon SAF Leadership Conference, January 9-10, Doubletree Jantzen Beach, Portland, OR. Contact: Terry Orton at 360-740-6850 or terry.orton@wadnr.gov.

Contact Information

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

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

Atterbury: Atterbury Consultants, 3800 SW Cedar Hills Blvd., #190, Beaverton, OR 97005; 503-646-5393; fax 503-644-1683; jaschenbach@atterbury.com; www.atterbury.com.

WFCA: Western Forestry & Conservation Association, 4033 SW Canyon Rd., Portland, OR 97221, 503-226-4652; richard@westernforestry.org; www.westernforestry.org.

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

Send calendar items to the editor, *Western Forester*, 4033 SW Canyon Rd., Portland, OR 97221; fax (503) 226-2515; rasor@safnwo.org. The deadline for the November/December 2003 issue is October 20.

Cloughesy Joins OFRI

Mike Cloughesy joined the Oregon Forest Resources Institute (OFRI) August 1 in the newly created position of director of forestry information and interpretation. He will be responsible for the development and



implementation of OFRI's forestry education programs for landowners and the general public and will serve as a liaison with constituents, forestry experts and other organizations with forestry information needs or programs. He was previously director of outreach education, assistant leader of the Forestry Extension Program and professor of forest resources at

the Oregon State University College of Forestry. Mike joined SAF in 1978.

Mike was a forester with the Confederated Tribes of Siletz Indians before joining OSU's College of Forestry as a Douglas County forestry extension agent in 1987. Prior to that, he was staff chair for the Douglas County Extension Service office and a Lane County forestry extension agent. ♦

Forestry Center Selects New President

The World Forestry Center's board of directors has selected Gary Hartshorn as the center's new president and CEO. He begins his appointment in October.



Hartshorn will be responsible for overseeing the forestry center's Forest Discovery Center museum, demonstration forests and World Forest Institute. He comes to the center with strong credentials including work in fields of forest ecology, forest management, biodiversity conservation and environmental assessment.

His degrees include a B.S. from Moravian College, an M.S. from North Carolina State University, and a Ph.D. in forest resources from the University of Washington.

Currently the chief executive officer of the Organization for Tropical Studies (OTS) based at Duke University, Hartshorn is professor of the Practice of Tropical Ecology in the Nicholas School of the Environment. Prior to joining OTS, Hartshorn served as chief scientist and a vice president of the World Wildlife Fund U.S. in Washington, D.C.

The World Forestry Center is an independent, community nonprofit organization located in Portland, Ore., dedicated to educating and informing people about the world's forests and trees, and their importance to all life, in order to promote a balanced and sustainable future. ♦



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We Remember

Allen W. Neff 1924-2003

Al Neff died July 5, 2003, in Salem, Oregon. He was born in New Haven, Connecticut, on July 21, 1924.

Mr. Neff received his bachelor of science from the University of New Hampshire in 1948, and his masters from the Yale School of Forestry in 1949. He was a 50-year plus member of SAF. Mr. Neff also served in the U.S. Navy in WWII and the Korean War, retiring as a Lt. Commander after 27 years of service.

Mr. Neff began his career working at a small family sawmill. For several years, he was a consulting forester in New Hampshire, Maine and Connecticut. He later followed the advice to "Go West, young man" and worked for the Oregon Department of Revenue, Timber Section, for almost 30 years. He was a very dedicated forester, trained in "old school" methods, very proud to be an SAF member, and treasured the many close friendships acquired during his career.

He loved spending time with family and friends, baseball, traveling, stamp collecting and fishing. Going on his annual pilgrimage to Arizona for Spring Training was among his favorite things to do. Al and his wife Edie traveled the world often, including Peru, Iran and Argentina, visiting many of the foreign exchange students they had hosted.

Thomas Bradford Glazebrook 1917-2003

Tom Glazebrook died July 27, 2003, at age 86. He was born in Nashville, Tennessee on May 4, 1917.

In 1939, Mr. Glazebrook earned a bachelor's degree in forestry from Purdue University in West Lafayette, Indiana, and he received his master's degree in forestry in 1941 from the University of Idaho in Moscow, Idaho. He was a 50-year SAF member and a Fellow.

Mr. Glazebrook began his 37-year career with the USDA Forest Service during the summers of 1939 and 1940 as a lookout, and one year as state forester in Nevada. He then enlisted with the 799th



Forestry Engineers Company of the Army. He served in Alaska, Germany and the Philippines.

After being discharged in 1945, Mr. Glazebrook resumed his career with the Forest Service. He was stationed at the El Dorado, Modoc, Stanislaus and Klamath national forests, as well as Region 5 headquarters before coming to Portland in 1959. While in Portland, Mr. Glazebrook had a 10-year assignment in timber and watershed management. He was appointed director of watershed management at the national headquarters in Washington, D.C., and he held this position until he retired in 1977.

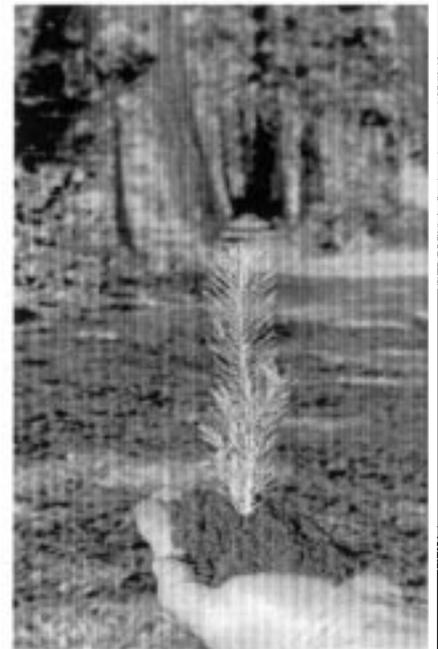
Robert Stanley Winniford 1921-2003

Bob Winniford of Sweet Home, Ore., died on July 9, 2003, when a tree fell and struck him on the head at his tree farm in Holley, Ore. Mr. Winniford was born on October 10, 1921, in Portland.

During World War II, Mr. Winniford served in the U.S. Army. He graduated from Oregon State College, received a masters from California Tech, and a PhD from the University of Tennessee. For 10 years, he worked as an industrial research chemist. He taught chemistry at Whitworth College in Spokane, Wash., for 20 years until he retired as a professor emeritus in 1981. After his retirement, Mr. Winniford and his wife, Georgene, moved to Sweet Home and built a log house and managed the timber on his tree farm in Holley. Mr. Winniford was a member of SAF. ♦

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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.

Three OSAF Position Statements Approved. Two revised OSAF position statements (Clearcutting and Using Pesticides in Forests) and a new position statement (Salvage Harvesting) were approved by the Oregon SAF Executive Committee at its meeting in Salem on May 7. Final revision and executive committee approval of an updated position on active management to achieve and maintain forest health is expected late this summer. The approved statements have been posted on the OSAF website (www.forestry.org) and also will be presented for endorsement by OSAF voting members in a referendum to be held in

late 2003 or early 2004. Although not required under SAF guidelines, OSAF takes this step to strengthen the credibility and member understanding and ownership of the positions. Contact: Paul Adams, OSAF Policy chair, 541-737-2946; paul.adams@orst.edu.

Oregon Board of Forestry Considering Rule Changes and Forestry Plan. The Board of Forestry (BOF) continues to discuss revisions to the Forest Practices Rules for stream protection, a process stemming from the Oregon Plan for Salmon and Watersheds, the input of several advisory groups, and a synthesis of concepts by Oregon Department of Forestry (ODF) staff. The Forest Practices Act requires that proposed rule revisions be supported by monitoring or research evidence, and that non-regulatory alternatives be considered. Because ODF staff found some proposed rules lacked a specific scientific basis, as an alternative the BOF was asked to endorse development of some voluntary measures under the Oregon Plan. Both voluntary measures and rule changes will continue to evolve as ODF staff work with regional forest practices committees and other interested parties. The formal rulemaking process will begin

following approval of the proposed changes by the BOF, possibly at its January 2004 meeting. The formal process will focus on general public input about the proposed rule changes, and after final approval by the BOF, new rules could become effective in July 2004.

The Forestry Plan for Oregon (FPFO) is a strategic plan to help guide the Oregon Board of Forestry and the State Forester as they work with the public, landowners, political leaders and others in developing and implementing forest policy in Oregon. Having last completed an FPFO in 1995, an updated draft plan was developed and released for public comment in early March. Although professional foresters represented by OSAF were not recognized among the core stakeholders invited to assist in developing the 2003 FPFO, OSAF Chair Bill Peterson sent a letter to the ODF in late May with some comments about the draft FPFO. Input received during the public comment period is likely to prompt some revisions, and the BOF is expected to consider endorsing a final revision of the 2003 FPFO within the next few months. To view the draft FPFO, visit www.oregonforestry.org/fpfo/2003/default.htm. Contact: Paul Adams, OSAF Policy chair, 541-737-2946; paul.adams@orst.edu.

Forestry and Salmon Position Statement Expired. The SAF regional position statement on Forestry's Role in the Protection of Pacific Salmon Habitat in Forested Watersheds expired in September 2003. Renewal of this statement will depend on the involvement of SAF units in Alaska, California, Idaho, Oregon and Washington. Contact: SAF Council Representative Ann Forest Burns at 206-527-5942 or aforestburns@msn.com.

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

Wildfire Risk Assessment Conference. Assessments of wildfire risks and risks to endangered species habitats are at the center of many forestry debates. Experts will address decision-making issues at a conference on Risk Assessment for Decision-making Related to Uncharacteristic Wildfire on November 17-19 in Portland, Ore. A policy panel of agency leaders, including USDA Forest Service Chief Dale Bosworth and U.S. Fish and Wildlife Service Director Steve Williams, will follow an opening keynote address by



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USDA Under Secretary for Natural Resources and Environment Mark Rey. The rest of the conference is designed to develop tools and information necessary to assess risks and benefits associated with restoration to prevent uncharacteristic wildfire, and the risks and benefits of no such restoration. See <http://outreach.cof.orst.edu/riskassessment>.

Pilot Projects Position Statement.

The SAF advocates the development, authorization and implementation of pilot projects to test alternative approaches for managing federal forestlands administered by the U.S. Forest Service and Bureau of Land Management (BLM). Pilot projects are needed to address and help resolve the ecological, economic and social challenges presented by the currently complex and confusing statutory and regulatory framework that encumbers federal lands management decision making. The SAF supports the further development and implementation of existing pilot projects and additional new ones. Examples of existing pilot projects and those proposed by various sources are described in the Background section. Additional pilot projects should address the concepts detailed in the Recommendations section. See "Pilot Projects for Evaluating Innovative Federal Land Management Opportunities" at www.safnet.org/policyandpress/positionstatements.cfm. Contact: Jay O'Laughlin, IESAF Policy chair, 208-885-5776; jayo@uidaho.edu.

Forests and Economic Development.

A new University of Idaho report analyzes Idaho's rural communities for evidence to support the commodity-based and amenity-based models of economic development. Some policy analysts have suggested that the choice is either a future based on wood products manufacturing or one based on amenities protection. This report found little evidence that the path is "either/or." Communities can do both. The key to implementing either the commodity-based or amenity-based model of forest resource development, or some combination of the two, is maintaining or restoring desired forest ecosystem conditions. How to define those conditions has long been and continues to be a topic of debate and disagreement among forest scientists, resource managers and policy analysts, as well as many citizens and interest groups. Much work needs to be done to reconcile these differences, and the work will not commence until there are discussion forums that promise to take ideas forged through consensus and implement them on the ground. The report is online at

www.cnr.uidaho.edu/pag/pdfs/Report%2022.pdf. Contact: Jay O'Laughlin, IESAF Policy chair, 208-885-5776; jayo@uidaho.edu.

Forest Service Moving on Bug Kill.

The Gifford Pinchot National Forest proposed this summer a series of activities within the Gotchen Late Successional Reserve (LSR) to deal with a severe spruce budworm infestation. Gotchen LSR is between Trout Lake and Mt. Adams and has been under attack by the budworm for about 10 years. Several previous attempts to act have been appealed and stopped, but this EIS and its proposed activities appear well done and likely to succeed. Contact: Bob Dick, WSSAF Policy co-chair, 360-352-3910; bdick@afrc.ws.

Wenatchee/Okanogan National Forests Get New Supervisor.

SAF welcomes new Wenatchee/Okanogan National Forest Supervisor, Jim Boynton, from California's Sierra NF. Boynton is a hydrologist and has spent most of his career in California. He brings a BSF and MS from Utah State and 20 years experience as a forest supervisor to the new job. Previous Forest Supervisor Sonny O'Neal retired earlier this year. Contact: Bob Dick, WSSAF Policy co-chair, 360-352-3910; bdick@afrc.ws.

DNR's Sustained Yield Numbers Out.

DNR technical staff recently released initial western Washington sustained yield estimates for six scenarios. Estimated harvest levels range from 400 MMBF to 820 MMBF per year. The Board of Natural Resources seems most fascinated with Alternative Six (780 MMBF) and is likely to tinker with that alternative to produce the preferred alternative. Washington SAF has closely followed the process and will comment on the EIS, which is due out in October.

DNR, at Board of Natural Resources request, will evaluate an "Alternative 7," but will not propose it in the immediate future. A-7 substantially increases timber

production, but departs significantly from DNR's EIS and will require reworking the HCP over the next several years. Contact: Bob Dick, WSSAF Policy co-chair, 360-352-3910; bdick@afrc.ws.

WEC vs. DNR Update.

The Washington Environmental Council sued DNR and the Board of Natural Resources in July 2002, alleging SEPA violations related to the sustained yield and forest plan update and certain aspects of the timber sales program. They threatened to ask the court to enjoin the timber sales program until the court had ruled. Much of the case was dismissed in February 2003, and DNR asked the Washington Appeals Court to dismiss what the lower court did not. The appeals court commissioner (the Court's traffic cop) accepted the appeal, which will be heard next spring. Contact: Bob Dick, WSSAF Policy co-chair, 360-352-3910; bdick@afrc.ws.

DNR Combines Regions.

Washington DNR is in the process of combining Southwest and Central Regions in a cost-cutting move. DNR's budget, as did all state agency budgets, took a significant whack in general fund allocations and has made several moves to address the shortfall. It is unlikely that other regions will be combined, but it is likely that appropriate activities will be co-mingled. Contact: Bob Dick, WSSAF Policy co-chair, 360-352-3910; bdick@afrc.ws.

Washington's SEPA Rules Amended.

Washington's Department of Ecology recently adopted SEPA rule revisions that make SEPA regulations consistent with the statutes. Forest landowners no longer need to fear SEPA challenges to forest practices applications based on SEPA segmentation rules. Environmental attorney Peter Goldman asked the Forest Practices Board to adopt the rules dropped by DOE, an action that was denied by FPB. DOE's order is available at www.ecy.wa.gov/laws-rules/activity/wac19711.html. Contact: Bob Dick, WSSAF Policy co-chair, 360-352-3910; bdick@afrc.ws. ♦

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