



Oregon State University Extension Service

# Blue Mountains Renewable Resources Newsletter

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## Family Forestland Symposium

If you are a family forest landowner in Oregon, an April 27, 2007 symposium at OSU, LaSells Stewart Center in Corvallis, will give you an opportunity to explore how a changing forestry environment will affect you and help you identify action plans to address priority issues and trends. The symposium will be an information-sharing event aimed at stimulating dialogue between family forest landowners and such other Oregonians as conservationists, civic leaders, and industrial forest landowners.

The Committee for Family Forestlands and the Oregon Board of Forestry are sponsoring the workshops with support from OFRI, the OSU College of Forestry, the Oregon Small Woodlands Association, the Oregon Department of Forestry and the U.S. Forest Service.

### Attend Regional Roundtables Before the Symposium. . .

To help identify ways that family forestland issues vary around the state and prepare for the symposium, a number of roundtables will be held. Two are planned for Eastern Oregon:

March 7, 2007

OSU Union County Extension  
Ag Service Center Conference Room

10507 N. McAlister Rd, Island City

March 8, 2007

Malheur National Forest  
Supervisor's Office  
431 Patterson Bridge Rd, John Day

Those interested in participating in the roundtable can register for \$10. A lunch will be provided.

For a complete announcement with registration information for both the symposium and roundtables, contact the OSU Union County Extension Office at 541-963-1010 or go to our website at: <http://extension.oregonstate.edu/union/forest/index.php>

You can send your registrations to our office and we'll forward them on if you would like.

### Oregon Small Woodlands Association Annual Meeting

April 26, 2007

"Beyond Sustainability - Enhancing Our

Best Regards,

Paul Oester, Extension Forester  
Umatilla, Union & Wallowa Counties

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Woodland Neighborhoods"

Prior to the symposium, the OSWA meeting will include family forestland field tours and great networking opportunities. The annual meeting will be held in the Benton County Clubhouse in the Benton County Clubhouse in Adair Village.

Public attendance is encouraged. To register for OSWA's Annual Meeting, visit: <http://www.oswa.org/RegForm4-26-2007.pdf> Or call: 503-588-1813

### 2007 NE Oregon Pesticide Applicator and Pre-License Training Series:

Need to take an exam for a Private Pesticide Applicator license? Need to take a Laws and Safety exam for either a public or commercial license? Need general pesticide re-certification credit? If you answered "yes" to any of these questions, call your local Extension Office today and **register no later than February 16, 2007** for one of the following free training sessions:

February 19, 2007

Union County Ag. Service Center  
Conference Room, Island City  
Contact: Darrin Walenta  
541-963-1010  
10507 N. McAlister Rd

February 20, 2007

Baker County: OSU Extension Service  
Conference Room, Baker City  
Contacts: Cory Parsons and Janice Cowan  
541-523-6418

February 21, 2007

Wallowa Co.: Cloverleaf Hall, Enterprise  
Contact: John Williams  
668 NW 1st Street, Enterprise

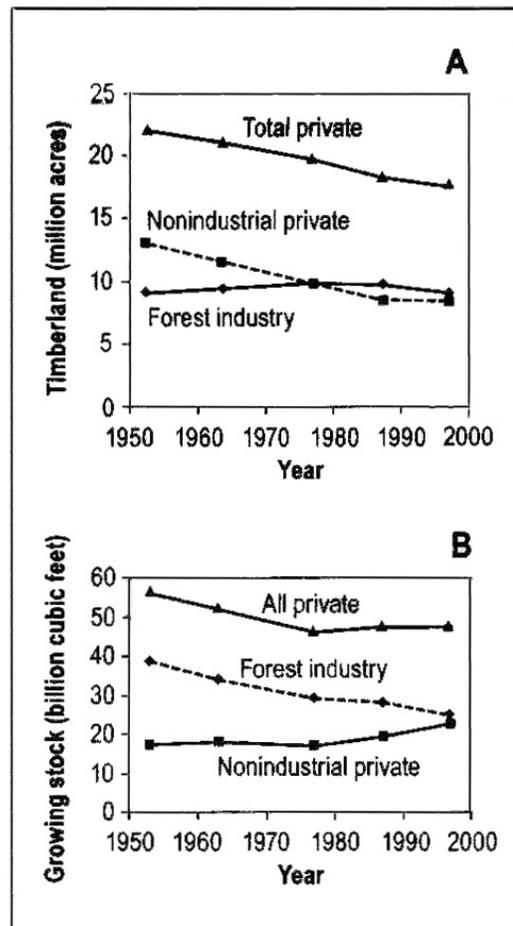
February 23, 2007

**"Optional"** Exam Session (for any license type and/or Laws and Safety exam) Ag. Service Center Conference Room, Island City

## KNOCK ON WOOD: IS WOOD PRODUCTION SUSTAINABLE IN THE PACIFIC NORTHWEST?

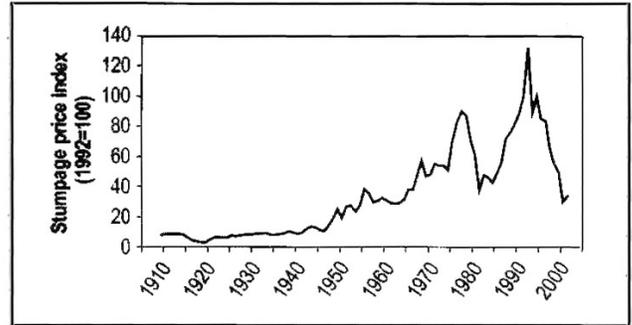
The Pacific Northwest is one of the world's major timber-producing regions, and its capacity to produce wood on a sustained-yield basis is widely recognized. Nonetheless, there has been increasing public interest in assuring that forests are being sustainably managed, as well as a desire by landowners to demonstrate their commitment to responsible stewardship.

Scientists from several universities and the PNW Research Station recently completed an initiative to synthesize existing research on wood production in the region. The initiative was guided by the needs of forest landowners and managers represent-



Private timberland area (A) and growing stock inventory (B) in the Pacific Northwest.

ing forest industry, small private forests, and state forestlands. They concluded that forest fragmentation and land use change, stagnating timber prices, and unfavorable public opinion regarding the scenic quality of intensive forest management were among the largest challenges to sustainable wood production in the region. New technologies and products in wood manufacturing, sustainable harvest levels, niche market opportunities and underutilized tree species were identified as opportunities; underutilized tree species were identified as opportunities for landowners and managers interested in sustainable forestry.



Timber prices in the Pacific Northwest have been through periods of stability as well as periods of growth and volatility.

## KEY FINDINGS

- In the future, the region’s wood supply will primarily come from private land, and the barriers and opportunities related to sustainable wood production will have more to do with future markets, harvest potential, land use changes, and sustainable forestry options than with traditional sustained-yield outputs.
- Private lands in the Pacific Northwest should be able to maintain recent historical harvest levels over the next 50 years given unchanged forest policies. Also, the price premium for Douglas-fir has largely disappeared, and evidence suggests there will be relatively stagnant timber prices in the region for the next five decades.

*Delivered*

## LOG MARKET REPORT \$/1,000 board feet

January 15, 2007

<b>Umatilla/Pendleton/Lewiston</b>								
Douglas-fir /Larch	Ponderosa Pine				Grand fir /White fir	Lodgepole Pine	Engelmann Spruce	Pulp/Chip Logs
	6-11"	12-17"	18-24"	25+"				
\$400-420	\$260	\$420	\$550	\$650	\$300-325	\$275	\$275	call
<b>La Grande/Elgin/Joseph</b>								
Douglas-fir /Larch	Ponderosa Pine				Grand fir /White fir	Lodgepole Pine	Engelmann Spruce	Pulp/Chip Logs
	6-11"	12-17"	18+"	20-24"				
\$360-440	\$300	\$440	\$540	call	\$340-350	\$300-340	\$320-350	call
<b>Burns/John Day</b>								
Douglas-fir /Larch	Ponderosa Pine				Grand fir /White fir	Lodgepole Pine	Engelmann Spruce	Pulp/Chip Logs
	5-7"	8-11"	12-17"	18+"				
\$350-450	\$210	\$370	\$460	\$575+	\$330-340	\$275	\$275	\$35/ton
Source: Oregon Log Market Report, Editor John Lindberg, ph 360-693-6766, fax 360-694-8466, logmkt@comcast.net								

- The amount of forest land area in the Pacific Northwest is decreasing, and most of it is being developed versus being cleared for agriculture. This trend will likely continue, as the region is expected to experience above-average population growth. Low-elevation forests on the west side of the Cascades, which represent some of the most productive forests in the world, are the forest lands most often converted to other uses.
- The scenic quality of timber harvest is an important consideration when developing socially sustainable silvicultural prescriptions. Although foresters' preferences tend to differ from the public at large, preferences are generally ordered in a similar fashion for all groups that were surveyed. The public prefers harvests that have some element of "green" and a more natural appearance without large and recent clearings.

*PNW Science Findings, June 2006*

## **PRESCRIBED FIRES ARE NOT CREATED EQUAL: FIRE SEASON AND SEVERITY EFFECTS IN PONDEROSA PINE FORESTS OF THE SOUTHERN BLUE MOUNTAINS**

In the mid-1990's, forest managers on the Malheur National Forest were concerned about their prescribed fire program. Although they have only a few weeks of acceptable conditions available in the spring and fall, they were worried that spring-season prescribed burning might be exacerbating black stain root disease and having negative effects on understory plants.

Working closely with forest managers, PNW Research Station scientists designed an experiment tailored to the problem. Prescribed fires were set in the fall and spring. The stands were then monitored for several years to determine the response of understory plants, black stain root disease development, and ponderosa pine tree

mortality. Although more trees died in fires set in the fall, the season of burn did not really matter. What did matter was the severity of fire and the amount of damage to the trees.

There was also no evidence that burn season influenced the understory native perennial (long-lived) grasses and forbs. However, exotic and native short-lived species were more abundant in the areas burned in the fall. As with tree mortality patterns, fire severity is probably driving this pattern. Short-lived native plants showed postfire invasion and spread patterns similar to exotics, but exotics were more abundant than natives.



## **KEY FINDINGS**

- Prescribed fires conducted in the fall were more severe and more ponderosa pine trees died after fall burns than after spring burns. But predictive models showed that fire severity and tree damage were more important predictors than season of burn.
- Although black stain root disease was present in some trees, there was no evidence that burn season influenced mortality of these infected trees.
- There was no difference in abundance or diversity of native perennial grasses and forbs five years after the fires. But areas burned in fall had greater cover of short-lived plants compared to spring and unburned areas. Although both exotic and native short-lived species showed similar postfire invasion and spread patterns, exotics such as cheat grass and bull thistle were much more abundant than natives.
- Indirect localized fire effects, associated with fire behavior and intensity, were

important for explaining tree mortality and understory vegetation patterns. However, decoupling seasonal and environmental fire effects is difficult because burn season greatly influences fire behavior, owing to weather and fuel conditions.

*PNW Science Findings, March 2006*

## **FAO Global Forest Assessment**

The United Nations' Food and Agriculture Organization (FAO) has been producing global forest assessments at 5 to 10 year intervals since 1946. FAO's *Global Forest Resources Assessment 2005* is the most comprehensive to date. Key findings include:

- ◆ Forests cover 30% of the Earth's land area or just under four billion hectares.
- ◆ Total forest area continues to decrease, but the rate of net loss is slowing. The estimated net rate of forest loss during the period 2000-2005 was 7.3 million hectares per year, down from 8.9 million hectares per year in the period 1990-2000. Conversion of forest land to agriculture continues to be the main cause of deforestation, totaling 13 million hectares per year. Forest planting, landscape restoration, and natural expansion of forests offset nearly half of forest losses.
- ◆ Africa and South America continued to have the largest net loss of forests. Oceania and North and Central America also had a net loss of forests. The forest area in Europe continued to expand although at a slower rate. Asia, which had a net loss in the 1990's, reported a net gain of forests in the period 2000-2005, primarily due to large scale afforestation reported by China.
- ◆ Primary forests occupy 36% of global forest area. About six million hectares of primary forests were lost or modified each year during the period 2000-2005.
- ◆ Plantation forests occupy less than 5% of global forest area. The area of plan-

tation forests increased by about 2.8 million hectares per year during the period 2000-2005.

- ◆ Eighty-four percent of the world's forests are publicly owned, but private ownership is on the rise.
- ◆ Eleven percent of the world's forests are designated for the conservation of biological diversity.
- ◆ One-third of the world's forests are primarily used for production of wood and non-wood products.
- ◆ About 10 million people are employed in forest management and conservation.
- ◆ It is estimated that the world's forests store 283 gigatonnes of carbon in their biomass alone. The amount of carbon stored in forest biomass, deadwood, litter and soil combined is roughly 50% greater than the amount of carbon in the atmosphere.

These and other finds are presented in summary documents and in detailed reports that are available at [www.fao.org/forestry/fra2005](http://www.fao.org/forestry/fra2005)

## **Effects of Silvicultural Treatments on Wildfire**

The USDA Forest Service is distributing a report titled *Wildland Fire Effects in Silviculturally Treated vs. Untreated Stands in New Mexico and Arizona* (Research Paper RMRS-RP-55, available at [www.fs.fed.us/rm](http://www.fs.fed.us/rm)). The authors are Douglas Cram, Terrell Baker, and Jon Boren at New Mexico State University. The abstract follows:

“Stand-replacement fires, particularly in ponderosa pine (*Pinus ponderosa*) forests, have replaced high-frequency, low-intensity historical fire regimes. We examined whether forest stands treated recently using silvicultural practices would be (1) less susceptible to stand-replacing crownfires, and (2) more ecologically and functionally resilient compared to untreated stands following extreme wildland fire. Reports detailing wildland fire behavior in

treated stands remain largely anecdotal. We compared fire severity indices, fire line intensity (btu/ft/s), stand characteristics including canopy bulk density (kg/m<sup>3</sup>), and post-fire recovery indices in silviculturally treated vs. untreated forest stands in New Mexico and Arizona. Results indicated fire severity in pine-grassland forests was lowered when surface and aerial fuel loads were reduced. Specifically, as density (stem/ac) and basal area (ft<sup>2</sup>/ac) decreased and mean tree diameter (in) increased, fire severity and fireline intensity decreased. The more aggressive the treatment (i.e., where the canopy bulk density was reduced), the less susceptible forest stands were to crownfire. However, mechanical treatments where slash was scattered rendered stands susceptible to near stand-replacement type damage when wildfire occurred within four years of treatment. On our study sites, mechanical treatment followed by prescribed fire had the greatest impact toward mitigating fire severity (i.e. aerial and surface fuels were reduced). Treated stands were also more ecologically and functionally resilient than untreated forest stands following wildland fire.”

*Forestry Environmental Program News, Volume 18, No.8, National Council for Air and Stream Improvement, Inc.*

## Oregon Forest Industry Directory: New and Improved

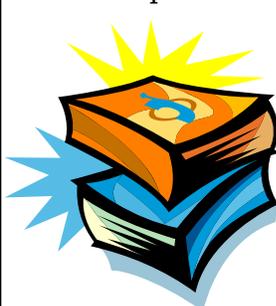
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The Oregon Forest Industry Directory is helping to connect woodland owners, wood products manufacturers, industry consultants and anyone else interested in Oregon’s forest industry. The site is generating 30,000

to 40,000 hits per month. The Oregon Forest Industry Directory has recently undergone a round of improvements, based on user feedback, designed to make the directory more user friendly.

Sustainable Northwest and the Oregon Economic & Community Development Department generously provided funding to enable the creation of an “aggregated landowner inventory” function. This new function is intended to address a key gap in “market connections,” particularly for niche markets. Entrepreneurs and community groups have expressed a need to know the volume of timber available in their region and how to contact the landowners. The new function allows landowners to specify the region where their timber is located and standing volume (i.e., volume potentially available for sale) by species. We opted not to specify log grade (at

least in version one) given the lack of consensus on the specific grade information that the majority of landowners would have at their fingertips. Landowners who want their contact information to be confidential need only enter their email address--



the address is not displayed in search results.

Interested log buyers can click on 'Timber Volume' to see the available volume by species in each region and can then fill out a form to contact all the landowners as a group. Landowners already listed in the directory can simply update their entries to add the inventory data.

Other recent upgrades to the directory include:

Streamlined searches - Users can now locate log buyers, sources of logs, custom sawyers, and cabinet and furniture makers in a single click.

Hardcopy results - Results can be saved in a print-friendly format (PDF) or in a spreadsheet.

How is the information kept up-to-date? The Oregon Forest Industry Directory allows

users to update their own information; update reminder notices are sent every six months. Companies not currently listed in the directory may sign up by filling out an online form at: <http://www.orforestdirectory.com/post.php>.

The **Oregon Forest Industry Directory** is a joint effort of the Oregon Wood Innovation Center at Oregon State University, Oregon Small Woodlands Association and Northwest Wood Products Association. Funding for the development of the directory was provided by the Oregon Forest Resources Institute. The Oregon Forest Industry Directory can be found at: <http://www.orforestdirectory.com/>

## Research Synthesis , Special Report and Conference Address Relationships Between Forests and Climate Change

A new book – *Forests, Carbon and Climate Change*—provides a synthesis of science findings on the effects of forests on climate change and the effects of climate change on forests.

Although there is not full scientific consensus about the extent of climate change and all its causes, it is widely agreed that carbon dioxide (CO<sub>2</sub>), a greenhouse gas, plays a significant role and that forests collect and store carbon and reduce its presence in the atmosphere. There is also wide agreement that climate change can, in turn, affect forest health, with a warmer climate making forests more vulnerable to disease and fire. This increases their potential for emitting carbon into the atmosphere through fire rather than collecting and storing it.

Another new publication is included in OFRI's Special Report series—also called *Forests, Carbon and Climate Change*, it addresses the topic in layman's language, providing an overview of the importance of trees and products made from trees in reducing atmospheric carbon. Both the book and the Special Report examine how forests can be managed to play an even bigger role.

Coming up on February 13 and 14 at

OSU in Corvallis is a day and a half conference featuring many of the scientists who contributed articles to the research synthesis. For more information on the conference or to register go to: <http://www.oregonforests.org/conferences/carbon>

## Flatheaded Fir Borer

*(Melanophila drummondii)*

### Hosts

Douglas-fir, true fir, western larch, spruce, and western hemlock

### Importance

Flatheaded fir borers commonly breed in felled trees or those weakened by fire, defoliation, drought, or other types of disturbance. Trees infested are usually pole size or larger. Beetles can infest the entire tree or attacks can be confined to the upper crown and result in topkill. Flatheaded fir borers are considered less aggressive in their attacks on living trees than bark beetles. This beetle is particularly aggressive in southwest Oregon where it attacks

Douglas-fir growing on the edge of stands or scattered patches of trees on dry sites. In Eastern Oregon, the flat-headed fir borer is also one of the few insects that attacks and kills western larch.



Figure 5: Adult beetles are approximately 3/4-inches long, with a metallic bronze or black body color. Yellow spots of varying size are sometimes present on the beetle's back

### Look For

Detection of flatheaded fir borer attacks prior to the yellowing of the tree's crown is difficult. Unlike bark beetles, there are no external indicators of attack such as boring dust or pitch streams on the bark. For this reason, infestations are rarely diagnosed before the



Figure 1: Douglas-fir mortality from flat-headed fir borer attacks in southwest

damage has already occurred. However, it is sometimes possible to identify infested green trees during the fall and winter months from the patches of bark removed by woodpeckers searching for beetle larvae. By the time the infested tree's foliage turns red, usually in the late spring or early summer in the year after attack, beetles have already left the tree (Figure 1).

The only way to confirm a beetle attack is to remove a piece of bark and look for its distinctive gallery pattern (Figure 3). Larvae construct wide, winding galleries that

increase in width as larvae grow. Galleries are filled with a brown dust packed in concentric lines. The removal of bark from the tree's lower bole does not guarantee detection of a flat-headed borer attack, since sometimes attacks are confined to the upper crown (Figure 4).

### Life Cycle

Although called a borer, the larvae of this large beetle feed and develop in the phloem/cambium interface, much like bark beetle larvae, and never bore into the tree's sapwood. The life cycle of the flatheaded fir borer normally requires one year. Adults emerge in the spring and feed on conifer needles before flying to a suitable host tree. Adult beetles can sometimes be seen resting on tree bark exposed to direct sunlight (Figure 5). Eggs are laid in bark



Figure 3: Flatheaded fir borer larvae are one inch or more in length with an enlarged head and distinct body segments. Galleries made by this beetle are extremely flat and packed with layers of sawdust-like pellets.

crevices and upon hatching, larvae immediately bore into the inner bark.

Larvae feed in the inner bark without boring into the sapwood. Late in the summer or early fall, larvae construct pupal cells in the outer bark. Winter is spent in the outer bark and adult beetles

emerge the following spring.

### Management

Procedures to maintain stand vigor, such as sanitation cuttings and thinning, are thought to be helpful in reducing tree susceptibility to flatheaded borers. On harsh sites in southwest Oregon, regenerating or favoring pine during thinning rather than Douglas-fir will reduce future flatheaded borer problems.

Disturbance of trees during land clearing or construction of home sites can increase the likelihood of flatheaded borer and bark beetle attack.

Practices detrimental to trees include back-filling over roots, soil compaction in the root zone, and road cuts through well-established stands.

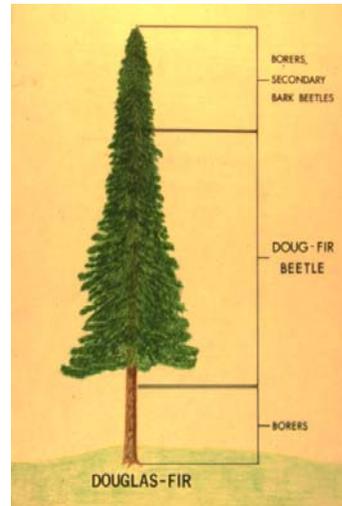


Figure 4: Distribution of borers and bark beetles infesting a mature Douglas-fir tree. Flatheaded fir borers are typically found in the lower bole and upper crown of Douglas-fir, but occasionally infest the entire tree.

Either the flatheaded fir borer or the Douglas-fir beetle commonly attack and kill fire-damaged Douglas-fir. Trees with more than 50% of its crown or 25% of the cambium damaged by fire has a high probability of beetle attack and should be removed to prevent a build-up of beetle populations.

Oregon Department of Forestry Forest Health Note, March 2002

### Seedling Availability

If you are seeking seedlings to plant, check out the Private Lands Forest Network (PLFN) website: <http://mysite.verizon.net/restcxnr/privatelandforestnetwork>.

## Improve Your Reforestation Success!

- Handle seedlings carefully and as little as possible
- Keep seedlings cool (34-36°F) but not frozen
- Keep seedling boxes and bags sealed
- Plant on cool, rainy days
- In the field, store seedlings in the shade or under a reflective space blanket
- If planting in hot/dry conditions, consider dipping root in water for one minute before loading into planting bags
- Don't squeeze too many seedlings into the planting bag
- Keep the bag covered

-- Douglas County Woodlander

## GPS in Woodland Management: It's a Useful Tool But Has Its Limitations

Max Bennett, Jackson County Extension Forestry Agent

Global Positioning System (GPS) receivers are cheap, widely available and increasingly used by forest owners, forestry professionals and recreation enthusiasts.

However, a lot of woodland owners are asking the questions, "Is this a useful tool for ME? What can I actually DO with this thing?" In this article I will try to answer these questions. My focus will be on GPS applications for forest owners, not all possible uses of GPS. I won't talk brands, and won't give detailed how-to instructions.

### What is GPS?

GPS is short for the Global Positioning System (not Systems). The Global Positioning System consists of a network of satellites built by the U.S. Defense Department. As it orbits the earth, each satellite in the network transmits its location (latitude, longitude and altitude) and the precise time. A GPS receiver (the unit you hold in your hand) receives these signals and, using a complicated

mathematical formula, determines your location. The receiver must receive signals from at least three satellites to determine a two-dimensional location (latitude and longitude) and four satellites to determine a three dimensional location (the first two plus altitude). As the receiver picks up more satellite signals, accuracy improves. Anything that impedes signal reception, such as tree canopies, steep walled canyons, buildings and so forth will diminish accuracy. Under dense tree cover, it may be hard to get a fix on any satellites at all.

### How accurate is GPS?

While survey grade GPS units can be accurate to less than a centimeter, the recreational grade receivers most of us will purchase are accurate to within five to 15 meters, or roughly 15 to 50 feet. Under typical field conditions, my Garmin Etrex Vista receiver is accurate to within 19 to 30 feet. That means the location (latitude and longitude) shown on my receiver is within 18 to 30 feet of the true location.

### Types of GPS receivers.

There are three basic grades of GPS receiver: Recreational, Mapping and Surveying. Recreational grade GPS receivers are most often used by hikers, hunters and others wanting to navigate in the woods. They generally cost less than \$500, have built-in maps and, as noted above, have an accuracy range of 15 to 50 feet. The built-in base maps typically show major roads and contour lines, but not much additional detail. More detailed maps can be often downloaded to the receivers from CDs or directly from the internet, but these will cost.

Mapping grade GPS receivers cost \$3,000 and up. As their name suggests, they are better suited to precision mapping, with accuracy to as little as one meter. Survey-grade GPS receivers can get you to within a centimeter or less of the true location, but



you will have to pay for it: they cost \$30,000 and up.

### **So, what can I do with my GPS?**

The following are five typical mapping-related tasks that can be accomplished with a recreational grade GPS receiver:

- Follow a bearing, such as property line, using the built-in compass.
- Mark a waypoint, such as a property corner or measurement plot, and find it again.
- Determine the acreage of an area, such as an opening to be planted with trees.
- Measure a linear distance, such as a new spur road
- Map stand boundaries, roads and other features.

Let's say you know where the corners of your property are but the boundaries aren't marked. You could start at one corner and, using the compass function on the GPS receiver, follow a bearing and mark the line. Or, maybe you know where one corner is and want to locate the others. If you can navigate a straight line on the correct bearing and know the distance to the corners, you should be able to get close. A **major caution** here is that the recreational grade GPS is only accurate to perhaps 15 feet at best. Will the GPS tell you exactly where your line or corner should be? No, it will not. You will be close, but not right on. So this type of GPS is no substitute for a professional survey. Sorry.

### **Marking and locating waypoints**

Where the GPS receiver really comes in handy is in marking waypoints. A waypoint is simply a location that you want to return to. Let's say you've thrashed around in the brush and found a property corner and you want to be able to get back to it. You mark it as a waypoint and store it in the GPS receiver. Then sometime in the future when you want to return to that point, activate the "Find" or "Go To" function on the re-

ceiver. The receiver will now tell you what direction to go in to get to the waypoint, and how far away it is. You needn't follow a bearing or predetermined route, because the receiver constantly adjusts to your new location and shows the correct direction and distance to the waypoint. This ability is what makes GPS so useful for navigation.

In addition to property corners, you could mark features like wildlife trees, plot centers, photo points, springs and culverts. You can also establish waypoints within or near non-point features, such as clumps of dead trees or ponds.

### **Measuring distance and acreage**

Let's say you want to walk a section of road but don't know how long it is. You can walk the road segment and, using the trip odometer feature on the GPS, measure the segment's length. Then multiply by the average width of the road and you will have a good indication of how much material is needed.

Acreage is also easy to measure. Using the acreage calculator in the Garmin, you simply press start, walk the boundaries of the area you want to determine acreage for, and press stop when you've completed the traverse. Voilà, the receiver's screen shows the calculated acreage!!

### **Using a GPS receiver to map features**

I can store the waypoints and tracks in the Garmin Etrex unit, then using some freeware (free software) download to a Geographic Information System (GIS) program such as ArcMap. From there, I can map roads, stand boundaries and other features, as well as use the many spatial analysis tools of GIS. In many ways, this is by far the most powerful application of GPS, but it requires GIS software and a lot more training and experience. There are a couple of relatively easy-to-use, free GIS programs available over the internet (such as the Landscape Management System or LMS from the Rural Technology Initiative, [www.rti.org](http://www.rti.org))



## Is it for you?

Is it worth plunking down a few hundred bucks for another gizmo? Personally, I've found GPS to be quite handy for the type of applications described in this article. If you can integrate it with computer mapping it becomes a much more powerful tool. However, there is a fairly steep learning curve. Some aspects of GPS use are difficult for some adults, such as the small, squint-inducing screens and tiny toggle switches. The multiple menus, features and options can overload your brain circuits pretty quickly. In this regard, familiarity with computer navigations is very helpful, which is why teenagers seems to pick up GPS more quickly than most adults. Still, just about everyone can learn to use it with enough patience and practice. If you enjoy mastering new technology and need a tool for the mapping applications described above, GPS may be a good investment. If not, save your money.

## A Few Woodland Management Tips From Bob and Margaret Kintigh, 2006 National Outstanding Tree Farmers (from Oregon)

1. Learn the different soils on your tree farm and their characteristics and capabilities.
2. Learn the different tree species you have, the soils and aspects they prefer and whether or not they tolerate shade or need full sun.
3. When thinning a forest, the most important thing is to leave the right trees.
4. When planting trees, use genetically improved seedlings if available.
5. When planning to harvest, talk to the neighbors living near the site before cutting.
6. Before selling timber, get prices from at least several buyers.
7. Don't necessarily hire the logger



whose bid is the lowest—hire the best logger.

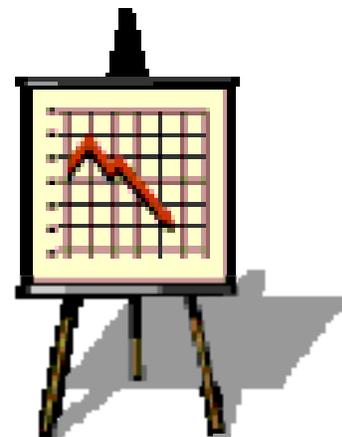
8. If you can afford to wait, do not sell logs on a down market.
9. Make roads only as wide as necessary to accommodate trucks.
10. Rocking roads reduces erosion and provides all-year access.

*Tree Farmer Magazine, January/February 2007*

## Forest Products Industry Trends Forecast

Here are some of the major trends that are expected through 2007:

1. U.S. interest rate policy is expected to maintain higher interest rates.
2. U.S. single and multi-housing starts will fall from 2.07 million in 2005 to below 1.8 million units in 2007, a 13% drop.
3. The rapid growth of low-cost plantation fibre suggests that the global movement to find lower-cost industrial round-wood will intensify.
4. Soft-wood lumber consumption in the U.S. will drop due to interest rates and housing starts. Total consumption from 2005 to 2007 will decrease by 4.4 billion board feet.
5. U.S. and Canada production as well as off-shore imports will need to curtail (that trend is well underway). Five to six billion board feet of lumber production capacity needs to disappear through 2007 to allow supply and demand to re-balance.
6. Lumber prices will remain at much lower levels. U.S. lumber prices are hitting five- and 10-year lows.
7. Lower demand and a wave of new Oriented Strand Board (OSB) mills will result in very low prices for the product.
8. In contrast to North America, European markets are strong due to a combina-



tion of log shortages in the first half of 2006 and high demand in most European countries. At the same time, good markets in Japan and the Middle East have allowed for further European lumber industry expansions. However, they may experience a market correction by mid-2007.

“Due to the poor outlook for housing starts,” indicated Russell Taylor, editor of *Woods Markets Monthly*, “there is little good news on North American lumber prices for 2007. Weak prices are expected to continue due to excess slumber capacity unless a more aggressive rate of curtailments and/or closures occurs.”

The good news is that these trends are (relatively) short-term but the longer-term outlook for the North American market is very favorable. Just need to hang on until then!

*(Courtesy of Wood Markets Monthly International Report)*

## Oregon Forestland and Timber Tax Issues and Changes

by Dr. Norman E. Elwood and Ms. Susie R. Gregory, EA

- ❖ **Severance Tax Rates**—The department of Revenue sets and announces these rates each June 1 for the next calendar year. Rates for 2006 tax filings are:
  - \* Western Oregon—\$4.11/MBF
  - \* Eastern Oregon—\$3.21/MBF
- ❖ **Forest Products Harvest Tax (FPHT) Rate**—The statewide rate is set by the Oregon legislature and Oregon Forest Resources Institute Board of Directors on a calendar year basis.
  - \* Rate for 2006 tax filings is \$2.61/MBF.
  - \* A reminder: the first 25 MBF harvested by an owner each year is exempt from the FPHT.
- ❖ **Forestland Values**—The Department of Revenue has established new forestland values for the property tax year of July 1,

2006 to June 30, 2007. The values cover the usual eight forestland classes (FX - FA) for Western Oregon and one class for all of Eastern Oregon. Rather than reproduce the entire table here, access it at:

[www.oregon.gov/DOR/TIMBER/docs/06-07\\_forestland.pdf](http://www.oregon.gov/DOR/TIMBER/docs/06-07_forestland.pdf)

- ❖ **Forestland Tax Program**—There were no changes to the program itself applicable to the July 1, 2006 - June 30, 2007 period. Reminders of key program features include:
  - \* All landowners whose forestland ownership totals either less than 10 acres or more than 5,000 acres must be in the Forestland Program.
  - \* Property tax is based on 100% of the specially assessed land value for forestland use.
  - \* Forest Products Harvest Tax is levied on harvested timber.
  - \* No Severance Tax is levied on harvested timber.
- ❖ **Small Tract Forestland( STF) Tax Option**—There were no substantive changes to the option itself applicable to the July 1, 2006 - June 30, 2007 period. A minor, but important, change was made to the “notification surrounding disqualification” process. The new process is written notification to the new landowner of options available (either continue in or leave the STF Option). The new owner must then notify the assessor with a decision within 30 days of the date of the assessor’s letter. Reminders of key option features include:
  - \* Applies to landowners whose forest land ownership totals from 10 to 4,999 acres.
  - \* Property tax is based on 20% of the specially assessed land value for forest land use.
  - \* Both Harvest and Severance Taxes are levied on the volume of timber harvested.
  - \* Apply to the County Assessor by April 1 of the year you wish to enter the option.

- \* The current application version is dated 11-06 and available at the following web site:

[www.oregon.gov/DOR/TIMBER/docs/390-001.pdf](http://www.oregon.gov/DOR/TIMBER/docs/390-001.pdf)

- \* Land not previously classed as forestland requires an additional application (current version 11-06) for “designated forestland” available at:

[www.oregon.gov/DOR/TIMBER/docs/309-024.pdf](http://www.oregon.gov/DOR/TIMBER/docs/309-024.pdf)

❖ **Revised Oregon Forest Tax Publication from OSU Extension Service**—

*Taxes and Assessments on Oregon Forestland and Timber*, previously revised and published in March 2006, has been revised and republished in Oct. 2006. To order, send the complete title and publication number (EC1151) along with payment (\$4.00/copy) to Publication Orders, Extension and Experiment Station Communications, Oregon State University, 422 Kerr Administration, Corvallis, OR 97331-2119. You may also call toll free 541-561-6719 or email to: [puborders@oregonstate.edu](mailto:puborders@oregonstate.edu)

❖ **Oregon Department of Forestry Flyer Update**—

The Oregon Department of Forestry publishes a semi-annual summary of Oregon forest tax material, usually during the first and third quarters. Link to “Oregon Forestland Taxes, Assessments and Credits” at the following web site: [http://egov.oregon.gov/ODF/PRIVATE\\_Forests/private\\_forests.shtml#Forest\\_Taxes](http://egov.oregon.gov/ODF/PRIVATE_Forests/private_forests.shtml#Forest_Taxes)

❖ **Department of Revenue Timber Tax Web Site**—

An excellent, up-to-date source of information about tax programs, options, deciding which program to choose and links to resource people and publications can be found at the following web site:

[www.oregon.gov/DOR/TIMBER/index.shtml](http://www.oregon.gov/DOR/TIMBER/index.shtml)

❖ **Taxpayer Assistance from the Department of Revenue**—

To get help with Ore-

gon forest taxes, contact the Department of Revenue as follows:

- \* **General tax information**—on the internet at: [www.oregon.gov/DOR](http://www.oregon.gov/DOR)
  - Salem—503-945-8618
  - Toll-free from Oregon prefix—1-800-356-4222
- \* **Asistencia en Espanol**
  - Salem—503-945-8618
  - Gratis de prefijo de Oregon—1-800-356-4222

*This update and summary is offered as educational information only, not legal advice. Remember that many of these provisions have “fine print” that may refer to rules not presented here. Read the fine print! Evaluate **all** of the options! If you have questions talk with your attorney, tax professional and forester to assess implication for your particular situation.*

In the Federal section we have drawn heavily on and in several instances quoted directly from the National Timber Tax Website in order to prevent unnecessarily complicating the text with quotes and others in creating and maintaining the website. In the Oregon section, we have drawn from and acknowledge helpful contributions by Norman A. Miller, Oregon Revenue Dept., Manager, Timber Tax and Property Tax Deferral Programs.

**Manual #12** *Ecology and Management of Eastern Oregon Forests: A Comprehensive Manual for Forest Managers.* Oregon State University. Gives an overview of Eastern Oregon forest types and various silvicultural systems for managing them. Discusses in depth the ecology and management of ponderosa pine, lodgepole pine, and mixed-conifer forests. Describes major pests of eastside forests and tells how to manage them. Suggests ways to enhance range and wildlife values while managing eastside forestland. To order a copy visit—<http://extension.oregonstate.edu/catalog/>. \$25, plus shipping

## Publications of Interest

OSU Extension Publications Update First, link to

<http://extension.oregonstate.edu/eesc/status/stat07086.html> for the latest listing of new, revised,

reprinted and purchased publications and multimedia

available from Oregon State University's Extension

Service for all educational program areas including

forestry and Christmas trees. Many of these new publi-

cations can be purchased from the Extension office.

**Ag Handbook 718 update** The federal government's

Washington DC Government Printing Office reports

that *Ag Handbook 718, Forest Landowners' Guide to*

*the Federal Income Tax*, is now out of print. Those

familiar with this classic publication regard it as the

bible of forest income taxation. There are hopes for an

updated version in the future, but with the current

status of U.S. Forest Service budgets, don't hold your

breath. That's the bad news.

**Here's the good news.** . . . Ag Handbook 718 is still

available free on-line from the National Timber Tax

Website at: <http://www.timbertax.org/>. Just go there

and follow the publications links to it. You can also

print it if you so choose. The available version is the

most current.

**EC1200, Forestry Issues and Public Policy: An Ac-**

**tion Guide for Woodland Owners** Authors: Max Ben-

net, Paul Adams, Norm Elwood; Revised August

2006, 16 pages, \$3.00 <http://extension.oregonstate.edu/catalog/pdf/ec/ec1200.pdf>

**EM 8745, Backyard Woodlands: Caring for Trees,**

**Forests, Water, and Wildlife on Small Forested Acre-**

**age (preview only online)** Authors: Stephen Fitzgerald,

Max Bennett, Steve Bowers, Ralph Duddles, Gregory

Fillip, Paul Oester, Mike Reichenback, Viviane Simon-

Brown, Brad Withrow-Robinson, Bob Parker, Norman

Elwood; Revised August 2006, 557 pages, \$54.00 <http://extension.oregonstate.edu/catalog/pdf/em/em8745.pdf>

**PNW 590, Fire Resistant Plants for Home Landscapes**

Authors: Amy Jo Detweiler and Stephen Fitzgerald;

New August 1006, 48 pages, \$3.00 <http://extension.oregonstate.edu/catalog/html/pnw/pnw590.pdf/ec/ec1151.pdf>

**EC 1151, Taxes and Assessments on Oregon Forest-**

**land and Timber** Authors: Norman E. Elwood, Norman

A. Miller, Chal G. Landgren; Revised October 2006, 24

pages, \$4.00 <http://extension.oregonstate.edu/catalog/pdf/ec/ec1151.pdf>

**Shaping Your Forest: An Introduction to Thinning**

*Practices in Eastern Oregon* Produced by OSU College

of Forestry. This DVD features a 20-minute video of

land owners and forest managers talking about thinning

to enhance valuable habitat, and improve health and

productivity. Get your free copy by contacting the Un-

ion County Extension Service at 541-963-1010.

**PNW 584 Pruning Western White Pine: A Vital Tool**

**for Species Restoration** \$5 For a copy, contact the Un-

ion County Extension Service at 541-963-1010.

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