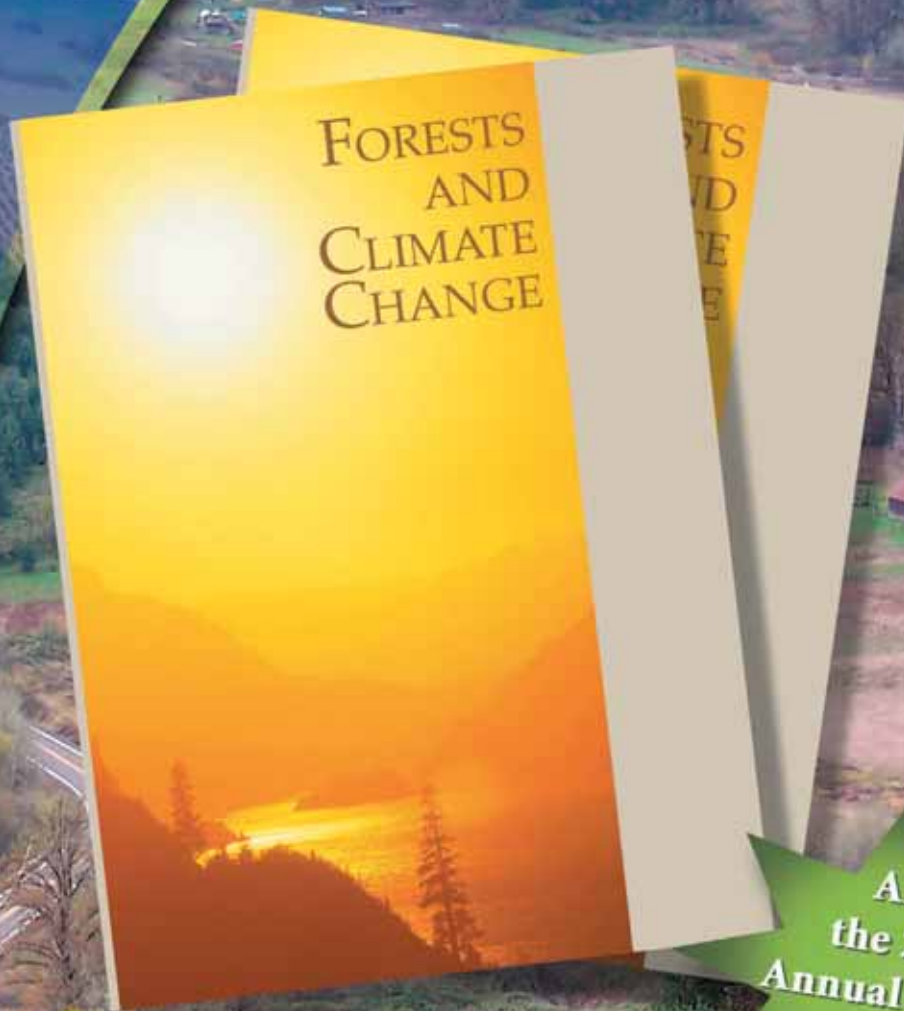


Forests

FOR OREGON

MAGAZINE OF THE OREGON
DEPARTMENT OF FORESTRY

SUMMER 2007



Also:
the 2006
Annual Report

INSIDE: Climate change: what's it mean for Oregon's Forests?

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State Forester
Marvin Brown

FROM THE State Forester

Dear Readers.

Welcome to the Summer Issue of *Forests for Oregon*.

Obviously, climate change has made it to the headlines. To make the connection with how this might concern Oregonians we've included some interesting articles about what changing climatic conditions can do to our forests.

The potential for significant change is clear, but is it something we'll wake up some day and suddenly notice? I don't think so.

More likely, the changes will creep up on us without a lot of fanfare. And the potential for us not to notice until it is too late becomes quite real.

That's why we have to look out ahead, anticipate, perhaps even speculate and try to get ahead of changes to minimize adverse impacts. We know, for example, that the threat of large fires has increased tremendously on federally owned forest lands, but have we thought about what it's going to take to restore lands that are severely damaged by these large fires in a future that could well be warmer and drier?

Fires that burn today in the uncharacteristically high fuel conditions covering much of the federal land in Eastern Oregon have the potential to alter soils and water regimes to the point where plants originally found there could have trouble growing on that site again. Couple this with climate change and we could see forest areas change to rangeland over large acres.

Do we want to anticipate this and redouble efforts to deal with these fuel conditions in light of how climate change can intensify the problem? I certainly think so.

"Have we thought about what it's going to take to restore lands that are severely damaged by these large fires, in a future that could well be warmer and drier?"

The same could be said for how the invasion of non-native species could be accelerated under climate change. Anticipating this, are we putting enough effort into invasive species control today? I doubt seriously that we are at this point.

This issue has a couple of other topics that I hope you'll take the time to read. They include preventing fires in urban areas, a look back from the one-year anniversary of our Tillamook Forest Center, a summary of an important symposium recently held at Oregon State University to explore the future of family-owned forest land in Oregon, and a great story about our long-term partnership with SOLV volunteers to pick up trash in the Tillamook State Forest.

Enjoy!

Forests

FOR OREGON

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"STEWARDSHIP IN FORESTRY"

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Photo: Terry Spivey, U.S. Forest Service, www.forestryimages.org

The Red-Tailed Hawk (*Buteo jamaicensis*, left), is one of the most common broad-winged hawks in North America. Most easily identified by the upper surface of its red tail, it ranges from northern Canada and Alaska to Panama and Central America. Its preferred habitat includes open country, scrub, woodlands or wide, rocky canyons. Typically, they nest in tall trees along the forest edge, on horizontal limbs close to the trunk.

The Mescalero (or Melcalero Apache) tribe believed Red-Tailed Hawks were a sign of good luck. Over the last 50 years, surveys in the Pacific Northwest indicate their populations have been either stable or increasing.

Cover photo by Cynthia Orlando.

Photo by Cliff Liedtke, ODF



What could climate change mean for Oregon's forests?

Jeri Chase, ODF Public Affairs Specialist

CLIMATE CHANGE. IT'S CONSTANTLY IN THE NEWS AND SEEMS TO BE ON EVERYONE'S MINDS THESE DAYS:

- This spring, the Intergovernmental Panel on Climate Change released its report: "*Climate Change 2007: Impacts, Adaptation, and Vulnerability*" – forecasting diminishing snow packs, rising sea levels, and increasing wildfire severity for the western United States.
- April 14, 2007, was the first "National Day of Climate Action."
- Recent articles in *The Atlantic* theorized that the current tragic conflicts in Darfur are not really about ethnicity at all. Historically, the now-feuding "settled farmers and nomadic herders" in that country (who are generally of different ethnic groups) have amiably coexisted on the land, sharing what they each had. The only difference now is that those lands are failing because of extensive, severe drought – and, perhaps due to climate change – there is not enough precious water to go around.

Climate change is also on the minds of those who care about Oregon's forests. This is a specialized area of study, combining many scientific disciplines – ecology, biology, meteorology and others. It's also a relatively new and rapidly evolving area of expertise. For these reasons and others, there just aren't a whole lot of true climate change specialists around.

However, some of the pre-eminent climate change experts in our nation are working for the U.S. Forest Service, both here in Oregon and elsewhere in the West.

At an April 5 meeting to identify issues affecting Oregon's federal forestlands, the Oregon Board of Forestry's Federal Forestlands Advisory Committee heard from one of these scientists about the impacts of climate change, and what it could mean to our state and its forests.

Ronald P. Neilson with the Forest Service's Pacific Northwest Research Station in Corvallis, spoke with the committee and also appeared on behalf of colleagues Linda Joyce, with the Rocky Mountain Research Station in Fort Collins, Colorado, and Connie Millar, with the Sierra Nevada Research Center of the Pacific Southwest Research Station in Albany, California.



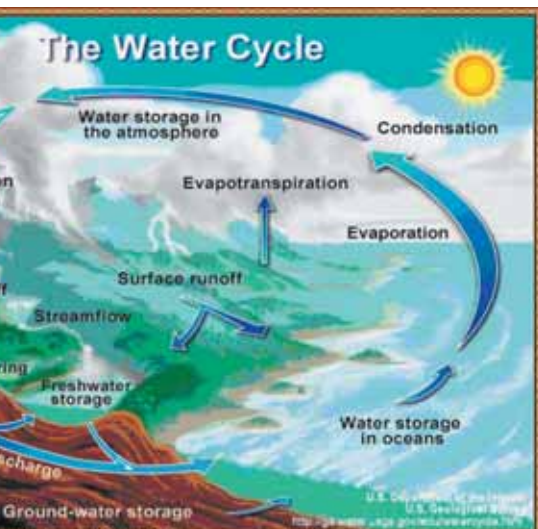
Illustration courtesy of US Geological Survey.



“We all grew up . . . managing for a stable ecosystem – the status quo. That is all off the table. Change is happening – and so fast that not only are you not managing for the status quo, you are managing for change. And how you manage ecosystems through change to an uncertain future . . . the crystal ball is never again going to be as clear as we thought it once was. We are not precisely sure what that future will be or look like.”

**Ronald P. Neilson, US Forest Service
Pacific Research Station
Corvallis, OR**

“These individuals are in very high demand these days,” says Lisa Freedman, Director of Resource Planning and Monitoring with Region 6 of the Forest Service. “They have been working on this issue for many years – really before many of the rest of us even ever heard the term ‘climate change’. As stewards of our nation’s forests, we all want to know what climate change will mean for those forestlands.”



The presentation and the committee’s discussions focused on what the effects of climate change could be on our forests, and on many of the forests’ natural processes – wildfire, wildlife, and habitat.

“This information is designed for one thing,” Freedman said. “To help us all move forward. To help us determine the best actions to take for our future.”

Models help envision future forests

We all want to know what the future holds – and it’s no different when we talk about climate change.

When science can’t provide all of the answers for the future, scientists “model” the possibilities. Much of the research stations’ work has been in creating, comparing and improving produced models

Neilson’s work – and that of his colleagues – covers the gamut of climate change, from the global to the specific, the short-term through the long-term. It speaks to biodiversity – both broadly, and species-specific. It crosses forest types: savannas and grasslands.

The presentation and the committee’s discussion lasted for almost two hours – and could have gone much longer. This article only pulls out some of the pieces – a glimpse, of climate change, and what it may mean to our forests.

The hydrologic cycle . . . and warmer ecosystems

As the planet warms, the oceans heat, and more water evaporates and falls as rain – that’s the hydrologic cycle. But all of that extra rainfall increases vegetation – more

Warmer ecosystems, left. As the planet warms, oceans heat and more water falls as rain, increasing vegetation. If the planet continues to warm, soils can’t keep up with demands - possibly leading to a drier, more fire-prone forest landscape.

trees and plants across the landscape. It “greens up.” You get an even longer growing season – and a warmer one.

That all sounds great, doesn’t it? Green is good. And it seems like it would be particularly good for bucking climate change. After all, all that green stuff stores the carbon that we don’t want to build up in our atmosphere – that causes all that warming in the first place, right?

Maybe not, warns Neilson. An ecosystem will grow until it has just enough leaf area to pull all of the water out of the soil of an area in an average growing season. If the growing season ends and there’s not enough leaves, water is left in the soil. The following year, growth continues – more and more leaves – until all of the water has been pulled from the soil. This happens until the ecosystem stabilizes – regulating up and down for the given climate.

If the growing season lengthens and heats up – even a little bit, suddenly the ecosystem has too many leaves for the climate and they’ve removed all of the water. The soil dries up before the end of that growing season and the system collapses. This doesn’t even take very much time; it can take as little as one or two growing seasons. And it happens across the entire ecosystem, not just on the fringes.

So now it’s warmer and the landscape is drier. Then what happens?

At that point, it’s like putting gas on a fire. In the United States, the west burns up. Literally. Many of the models show that much of the east does, too. It’s hotter. All of that increased fuel, there for the taking. And these are not fires of a few thousand acres, but the size of entire states.

This model doesn’t even take into account decades of wildfire suppression across the west; add that, and you have compounded the wildfire risk and severity by leaps and bounds.

So, in addition to all of the other devastation that severe wildfires can cause, where’s all that carbon from the green stuff now? Right back into the atmosphere as smoke. Exactly where (and how) we didn’t want it.

Owls – or canaries?

One of Neilson’s points about wildlife and climate change almost doesn’t seem to make sense when you first hear it: the dangers of native species moving into new communities.

Spotted and barred owls: While some think the main reason barred owls have moved west is new prairie habitat created by tree planting, Neilson theorizes that the incursion of the barred owl into spotted owl territories is a harbinger of climate change. A signal – just like a canary in a coal mine. The barred owl moved from its

Continued on next page

originally native territory in the eastern United States across the boreal forests of Canada in the beginning of the 20th century, then up into Alaska, then down into the Pacific Northwest – all as our overall climate has continued to warm. Note that while placing the continued existence of a species in peril – in this case an already endangered species – this is a potential increase in overall biodiversity.

So – now what do you do?

We are seeing some difficult choices already being made in that very situation. On a larger scale, as a matter of policy, what do you choose, to foster change or resist it? Let “nature take its course,” no matter what? What species matters more, and how do you decide? Increasing biodiversity often goes hand-in-hand with protecting endangered species – usually both desirable, now in direct conflict with each other.

And this is possibly just the beginning. With endangered species in the mix, the policy choices become increasingly complex and difficult – and costly in terms of what we all stand to lose.

photo by Tom Mickel, ODF

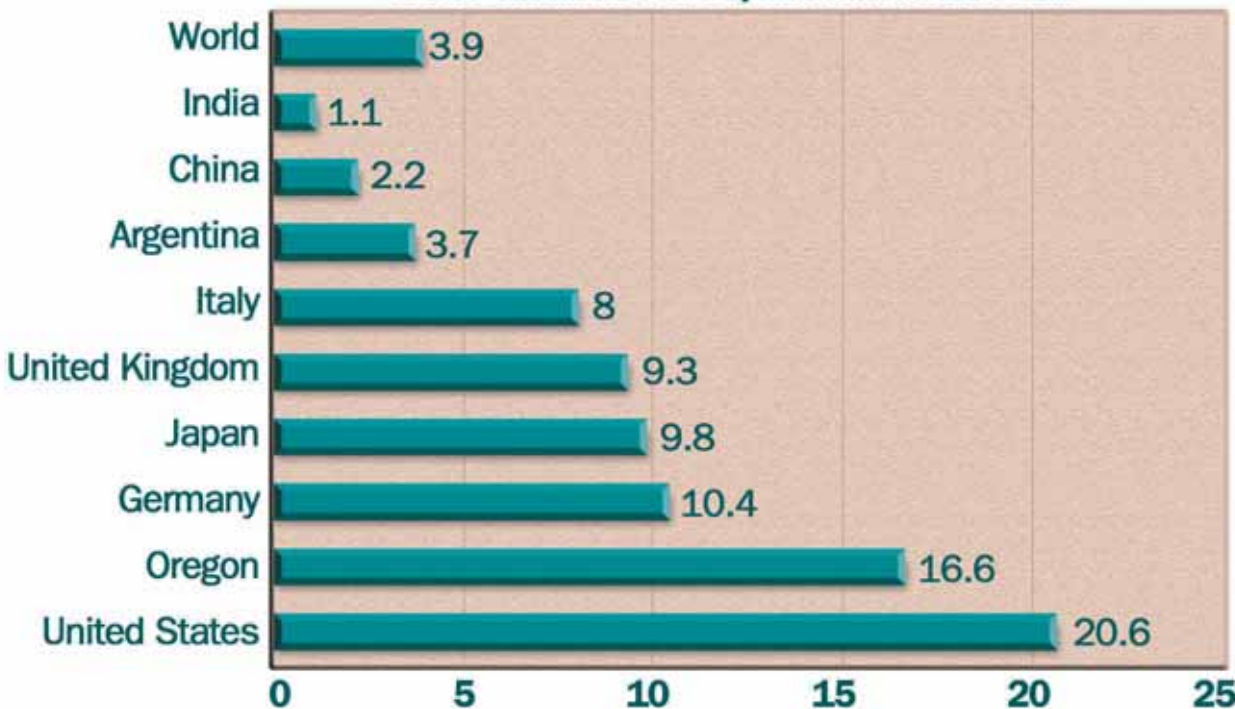


While some scientist think that Barred Owls have moved west because of expanding tree habitat in the prairies, others think the incursion of the Barred Owl (photo, left) into Spotted Owl (below) territories is a harbinger of climate change.

photo by Magnus Persmark



CO2 Emissions Per Capita From Fossil Fuels



Oregon's CO2 emissions, per capita, are slightly less than the average US citizen's because of our use of hydroelectric power. However, about 41 percent of Oregon's electricity comes from coal.

Graph courtesy O.D.O.E.

Gambel oak: There is fossilized evidence of an oak species from earlier in our own warm middle Holocene period, some 7,000 to 5,000 years ago. Remnants of living genetic hybrids from that same oak, left more than 250 miles north of where that species currently lives. Heat the climate up a bit, move the frost line a little farther north, and it rockets over the scarp where that frost line currently is, marching north. Again, perhaps at the expense of something else?

At that point, it's like putting gas on a fire. In the United States, the west burns up. Literally.

Mountain pine beetles: This same process applies to pests and diseases. Unlike endangered species – which are often slow in their migration – many weedy, aggressive vegetative species and other pests and diseases can quickly move into the ranges of other species; again, possibly endangered ones. With increased warming, the mountain pine beetle has moved into elevations never seen before – north into British Columbia, over the top of the hybrid zone between lodgepole and jack pine, and now into the jack pine.

Management options – the five “Rs”.

Neilson suggested some options for forest managers to consider in climate change. It may be that a combination of these and other options – and the **balance** of this combination - could prove to be the most successful.

Options include:

- **Resisting change:** Essentially “padding upstream,” but maybe preferred in certain instances, such as the case of endangered species;
- **Promoting resilience:** Promote plant diversity, rather than homogeneity, and let the ecosystem find its own route to the future;
- **Responding to change:** “Bet hedging approaches” – having a plan to respond to catastrophes;



Photos courtesy of U.S. Forest Service archives.

The Mountain pine beetle (*Dendroctonus ponderosae* Hopkins) is native to forests of western North America. With increased climate warming, these beetles have moved into elevations never seen before. Periodic outbreaks can result in losses of millions of trees.

During the early stages of an outbreak, attacks are initially limited largely to trees stressed by injury, poor site conditions, fire damage, root disease or old age. Early signs include “pitch tubes” on the trunk, where tunneling begins.

- **Realigning to conditions** that are far out of “normal.” Proactively trying to manage our way through climate change before catastrophic disturbances happen;
- **Reducing emissions** (including carbon sequestration). When questioned by the committee, Neilson stressed two personal recommendations. First, that forest resiliency can best be achieved by promoting and planting for diversity in our forest ecosystems, and the critical importance of keeping those ecosystems’ leaf density below the water-limited carrying capacity. These strategies will lead toward ecosystems that are healthier and less susceptible to all forms of catastrophic disturbance.

“This was an outstanding presentation,” said Board of Forestry and Advisory Committee Chair Steve Hobbs. “It was very informative and also very sobering. However, Ron also offered us some opportunity, and I was very appreciative of that. Now, it will be up to all of us to seek the best solutions, consider climate change when formulating forest policy, and manage our way through what could be a very different future for us all and for Oregon’s forests.”

Tillamook Forest Center draws high praise and visitors in first year

Jeff Foreman, ODF Public Affairs Specialist

YOU BETTER BE GOOD IF YOUR
GOAL IS TO INSPIRE PEOPLE.

With nearly 60,000 visitors and heaps of praise in its first year, it's safe to say the Tillamook Forest Center on Highway 6 is good – real good.

Some visitors' comments?

"First class!" "I love this place." "The center gets 5 stars." "This is the eighth wonder of the world!"

On the "inspirational scale," the new center has pegged the needle at 10 out of 10, and why not? There's something for everyone.

For young people and students – some making their first trip to the woods, it's a chance to experience a forest. To stand among trees planted by students 50 years ago. To learn about the plants and animals that call the forest "home."

"You know what you're talking about when it comes to the forest," says one student. "You told us how to care for the forest."

From an urban teacher: "I really appreciate the opportunity to come here. These inner-city kids really expanded and grew due to this trip and have more confidence in nature."

photo by Chris Friend, ODF



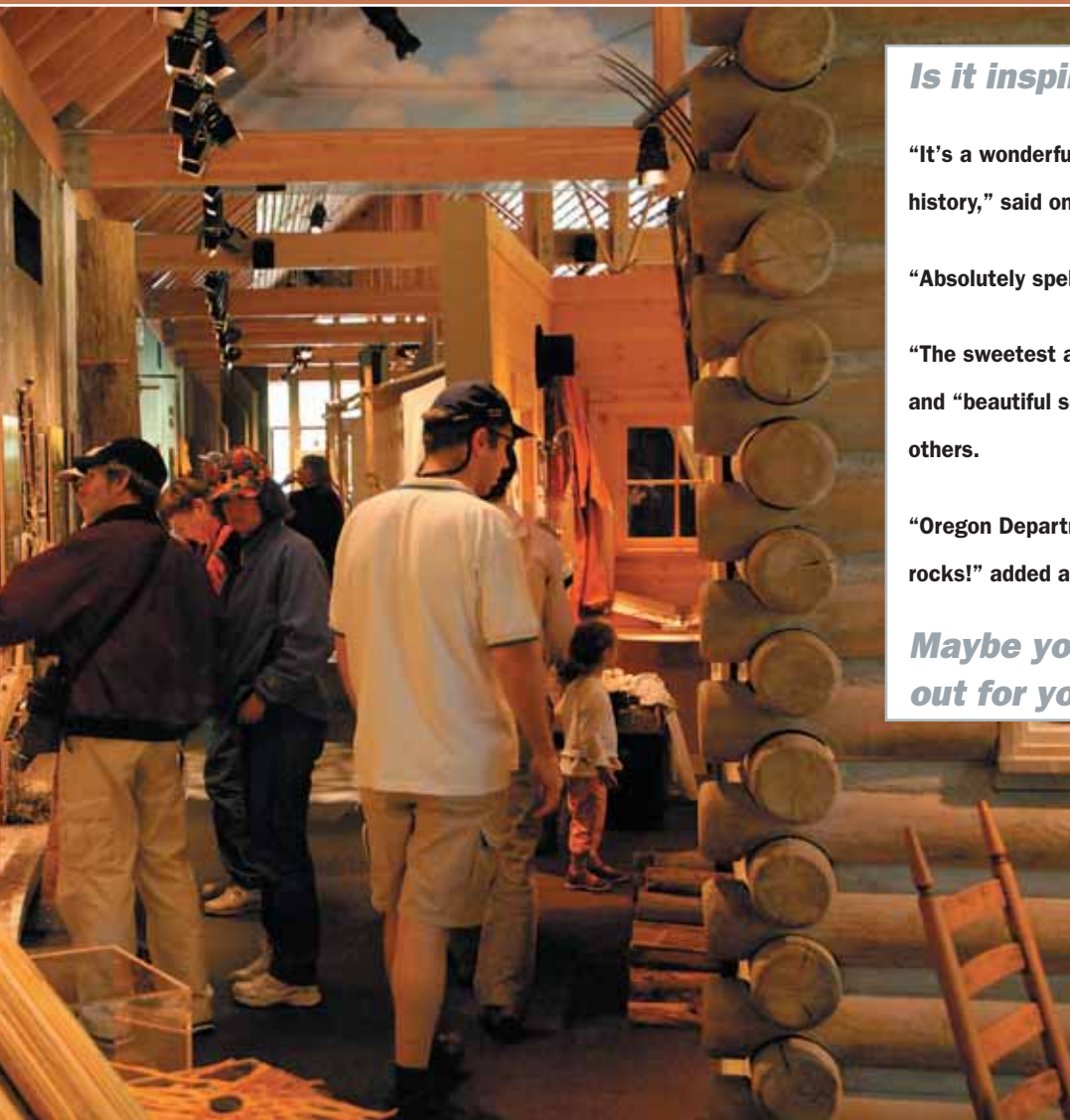
A chance to remember . . .

For older Oregonians, it's a chance to remember. To think back to when fires destroyed this forest. To remember how people came together to replant and reclaim the forest.

"I came in the '50s to help plant the trees," wrote one visitor on the memory board. "It's beautiful to see the results and it touches my heart to have been a part of this."

"We're proud to share the story of the Tillamook State Forest – even celebrate it," said Jim Quiring, the center's director. "This new place helps everyone have fun and learn at the same time. Sometimes they pick up something from us, and other times they learn on their own."

About an hour west of Portland, the Tillamook Forest Center is becoming a popular stopping point for a wide variety of visitors. People visiting the center in its first year came from 49 states (missing only Rhode Island) and 29 countries.



Nearly 60,000 people from across the country and around the world visited the Tillamook Forest Center in its first year.

Sightsee . . .

Groups of students – totaling 3,100 – have taken guided tours. Interpretative walks on the surrounding trails – also guided – have coaxed more than 2,500 visitors into the forest to learn and explore. Many more have made these hikes on their own.

A main feature of the center – the pedestrian suspension bridge over the Wilson River – beckons visitors to leave the exhibits and head outdoors to trails galore. Many visitors, though, lingered on the bridge last fall and watched salmon swim upstream, returning to their birthplace to spawn and begin a new cycle of life.

And learn.

Leaving the exhibits is no easy task. There’s a lot to see. There’s the history before European settlers, the life and times of early

logging and, of course, the fires that charred 355,000 acres. A series of forest fires, the first and biggest in 1933, cut a wide swath of bare, dead trees that stretched as far as the eye could see.

The award-winning short film shown many times daily at the center chronicles the fires and the people who fought them.

“Legacy of Fire: The Story of the Tillamook Burn”

recently won a prestigious CINE (Council of International Non-theatrical Events) Golden Eagle Award.

“We try to inspire people to connect with the forest,” Quiring said. “To have a meaningful, memorable and enjoyable experience. We see ourselves as a window to

Is it inspiring?

“It’s a wonderful place to relive history,” said one visitor.

“Absolutely spellbinding,” said another.

“The sweetest air I’ve ever breathed” and “beautiful solace here” said two others.

“Oregon Department of Forestry rocks!” added another.

Maybe you better find out for yourself.

the forest to increase public awareness.”

But the story of the Tillamook State Forest doesn’t end with the fires. Exhibits at the center show how Oregonians, many of them schoolchildren and volunteers, helped plant more than 72 million Douglas-fir

seedlings in what is regarded as one of the largest forest planting efforts ever undertaken.

And the story continues today, with displays depicting how the forest is being managed for multiple values so Oregonians can enjoy economic, environmental and social benefits. Harvesting generates revenue for local counties and schools, and the harvesting is planned so it results in diverse habitat for native species. Timber revenue also pays for development and maintenance of recreation opportunities.

Even before you enter the center and the exhibit area, there’s a good chance you’ll take a 40-foot detour up the replica of a fire lookout tower. It’s a grand view from the top and the authentic cot, cookware, old-time radio and spotting devices transport you back in time to the 1950s when these towers were a first-line defense against forest fires.

TILLAMOOK FOREST CENTER

Located along Wilson River on Highway 6 at milepost 22 (1 hour west of Portland).

Summer hours:

Open 7 days a week, 10 a.m. to 6 p.m.

Free admission

RAISING AWARENESS AND DONATIONS, THE TILLAMOOK FOREST TRUST EXPANDS HORIZONS



photo by Chris Friend, ODF

Donors to the Tillamook Forest Heritage Trust have their names engraved on trees that grace a display at the entrance to the Tillamook Forest Center.



With completion of the capital campaign to build the Tillamook Forest Center, the Tillamook Forest Heritage Trust has re-focused its efforts on building support for the Center and contributing to public understanding and appreciation of Tillamook Forest heritage.

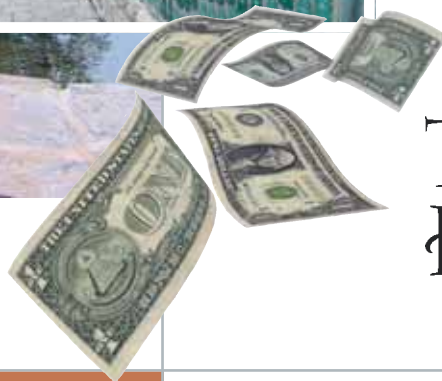
“We are grateful to the hundreds of donors and supporters who helped make the Center a reality,” said Trust Executive Director Doug Decker. “We’re also excited about this next chapter.”

The Trust will continue to raise funds to help support Center operations and is working on several projects, including development of the James E. Brown Forest Education Scholarship (which will be soliciting applications in Fall 2007), installation of a new donor tree monument at the Center, and updating and reprinting the book *Tillamook Burn Country: A Pictorial History* by Ellis Lucia.

The Trust welcomes new members Steve Thomas and Bob Stacey to the Board.

They join current board members, including chair Janet McLennan, vice chair Jim Brown, Treasurer Jerry Eckstein, Secretary Jim Fisher, and Trustees Vic Atiyeh, Marvin Brown, Doug Decker, Steve Hobbs, Barte Starker and Tim Wood.

For more information about the Trust, or to consider donation opportunities, please call 503-359-7474.



**Tillamook
Forest
HERITAGE
TRUST**

Photo by Cynthia Orlando, ODF



photo by Brad Kroets, ODF

**False brome
(*Brachypodium
sylvaticum*).**

This plant poses a threat to natural areas in Oregon as it grows in a wide variety of habitats and can quickly become the dominant plant species under the forest canopy. A weedy looking perennial grass with hollow stems and flat leaves.

Climate change, invasive plants, and Oregon’s forests

Cynthia Orlando, ODF Public Affairs Specialist

The spread of invasive plants or noxious weeds into our forests is sometimes described as a “biological wildfire” — and for good reason.

Just as wildfires introduce fear, worry and uncertainty into communities causing enormous destruction, so too, are invasive plants causing disruption and destruction as they’re introduced into Oregon’s forests.

Noxious weeds are non-native plants designated as serious pests because they cause economic loss and harm the environment. Yes, when it comes to forestry, exotic species often have an advantage over native species.

Why is this?

For the most part, invasive plants all share one very detrimental trait: they don’t grow well with others. To the dismay of many a forest landowner, noxious weeds have no natural enemies, making them irritating opportunists. Experts at establishing themselves, they’re quick to crowd others out and occupy precious space, making the establishment of new, young forests all the more difficult.

Are invasive plants spreading throughout Oregon? Is climate change a part of the equation? The answers you get depend on who you ask, but the general consensus seems to be that as average annual temperature rises in the state, the numbers of harmful, non-native invasive plants will continue to rise, too.

Continued on next page

Landowner vigilance keeps invasive plants at bay

Sarah Deumling, resident forest manager for Germany-based Zena Timber just west of Salem, avoids the use of herbicides on her property but understands first-hand the importance of due diligence when it comes to nasty invasive plants like blackberry and scotch broom. With some 1,700 acres of land, Deumling's been persistent in locating and cutting back patches of blackberry using just a machete. She cuts the plants back at the crowns "until the conifers and maple trees over-top them," and says she has treated whole stands of timber this way.

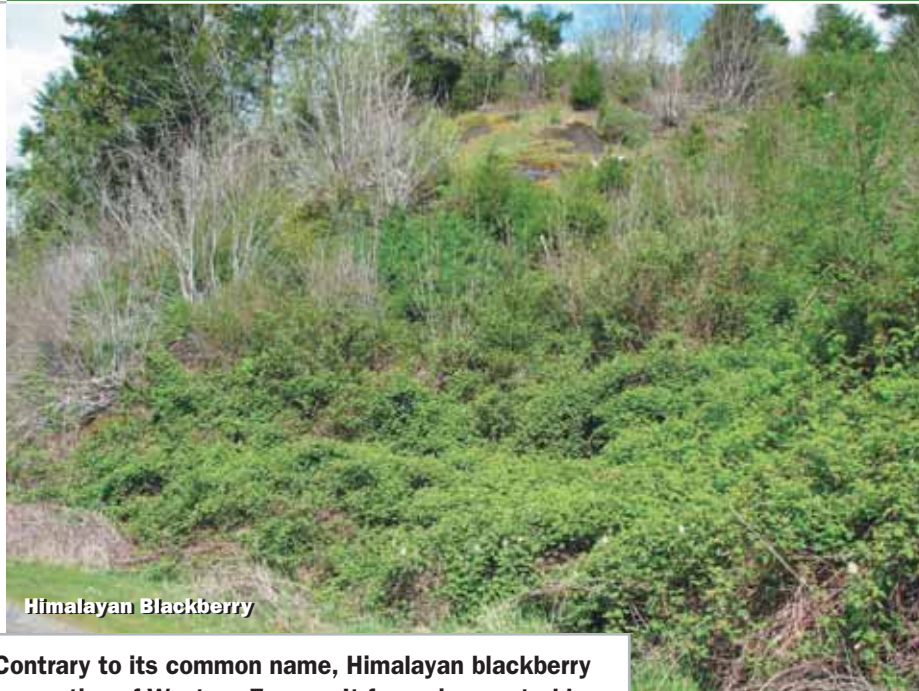
Deumling also has pulled invasive English ivy out by hand, and says it took her 5-6 years to eliminate blackberry from a stand of western red cedar on the property.

Terry Lamers, a forestland owner with 492 acres of property southwest of Monmouth, is another good example of a property owner doing all the right things when it comes to keeping his forestland free of invasive plants.

"We've kept out scotch broom from our property for more than 20 years," says Lamers, "by pulling out young plants - anywhere from five to fifty a year." Lamers also uses herbicides to control scotch broom. "There's scotch broom north of us," says Lamers, "but not on our property."

English ivy is another pesky plant Lamers has had experience with. "We found some growing on a dry site near a road" on the property, says Lamers, adding that after spraying with 2-4-D, he hasn't seen it come back. Yellow star-thistle is just now showing up on his property, and Lamers is working to keep that at bay as well.

"Fortunately, we've not seen any gorse or false brome" on the property," says Lamers. Yet.



Himalayan Blackberry

Contrary to its common name, Himalayan blackberry is a native of Western Europe. It forms impenetrable thickets in forests, forest plantations, roadsides, pastures and streamsides, preventing establishment of shade intolerant trees like Douglas-fir and ponderosa pine. Its dense thickets limit movement of large animals from meadow to forest, and vice versa. Oregon Department of Agriculture is currently testing a rust fungus as a biological control agent for this unwanted blackberry in Oregon.

climate change conference in Portland, Agricultural Research Service speaker Lewis Ziske told the audience that climate change and invasive plants could be a potent mix. Ziske said that many invasive and non-native plants respond to a rise in CO2 levels with increased growth, and that levels of carbon dioxide increase as one travels from farm to park to inner city. How these different

Climate Change, Invasive Plants ... Continued from page 11

Talking to the experts

Claire Hibler, a botanist for the Salem District of the Bureau of Land Management, thinks it's a pretty natural conclusion. "Invasive plants coming from warmer and drier places in the world, such as the Mediterranean, will probably do better" in Oregon as temperatures get warmer, says Hibler. Yellow starthistle (*Centaurea solstitialis*) or common crupina (*Crupina vulgaris* Cass.), both invasive plants that originally came from the Mediterranean, could be among them.

In fact, studies and research now show that, on the whole, invasive, noxious weeds have a higher than expected growth response to increasing CO2 levels, and there is also increasing evidence that rising CO2 can, in fact, "preferentially select for" invasive species within plant communities. This may be particularly true for vine-like plants. Just to raise the stakes a little higher, initial studies also indicate that controlling these weeds with chemicals may become even more difficult in the future.

These thoughts and other theories have been discussed among natural resource professionals for some time now. At a 2005



Japanese knotweed

factors will play out, however, seems uncertain.

Cindy McCain, forest ecologist for the Siuslaw and Willamette National Forests, has spent some time pondering the question of climate change and its relationship to invasive plants and organisms. McCain thinks the answer may lie in which direction climate change proceeds: will it become warmer and *wetter* in Oregon, or warmer and *drier*?

“If it becomes warmer and drier, invasive plants from Eastern Oregon could move west - especially if we start seeing more fires in western Oregon,” says McCain. That’s because fires create ground disturbance and conditions that are just right for invasives to become established.

“In western Oregon, false brome is moving from lower elevations to higher elevations,” says McCain. “If the climate gets warmer, its distribution could expand,” she adds.

How big a problem is false brome? “It takes over meadows and endangered species,” says McCain, who recently took a field tour at the Mt Pisgah Arboretum in Lane County, where false brome is presenting some serious challenges. The arboretum’s site manager, Tom LoCascio, says the plant was first identified by site founder Theodore Palmer in 1992, when Palmer pointed out a small, 3-square meter area to staff. LoCascio says



English Ivy Vine

English Ivy Vine (*Hedera helix L.*)

A gnarly mass of stems is all that remains following removal of ivy by a creek near Lyons. First introduced to the U.S. by European immigrants and widely sold as an ornamental plant for landscaping, ivy is a woody, evergreen vine with waxy leaves and long, trailing stems. Provides poorer wildlife habitat than the species it replaces, chokes out native plants and tree seedlings, and spreads rapidly.

the plant “rapidly started to spread, and within three years time it started taking off. We then found it was fairly well-established on the east side of Pisgah, and since then it has pretty much taken over the park.”

“There is no really easy way to control it,” adds LoCascio, “herbicides seem to be the only way to get a handle on it.” He urges forest landowners to be vigilant about their property. “Forestry owners really need to become aware of it because if they can spot it early, they can control it and not allow it to become established,” says LoCascio. “We all have to be really vigilant about inventorying our forests, even if that means hiring a consultant to help.” McCain adds that prudent landowners may also want to be on the lookout for signs of Swiss Needle Cast, a native, fungus-caused foliage disease of Douglas-fir that first shows up as brown needle tips in the spring. That’s because if Oregon starts experiencing *wetter* spring seasons, “this disease could move into the Cascades,” says McCain. (In fact, adds McCain, it

could spread from the near-ocean zone inland, “across the east side of the Coast Range,” as well as into the Cascades).

In addition, in eastern Oregon the spread of spotted knapweed (*Centaurea maculosa*) could potentially convert pine communities to a desert-type

community without trees. That’s because this non-native plant uses water from different soil zones - and during different seasons - than do native plants, so, just a small difference in moisture could have a significant effect on forest succession.

Invasives: the old and the new

One thing that’s known for certain is that invasive plants, including “oldies” like scotch broom and blackberry, are continuing to spread in Oregon – and, newbies are starting to show up, as well. Garlic mustard is one such example. This plant has attractive heart-shaped leaves and small, white flowers, but is an aggressive invader of wooded areas throughout the eastern and central states.

“Garlic mustard is now present in the Columbia Gorge,” says Barb Raible, an ecologist with the Bureau of Land Management, “and is also now present in Forest Park in Portland.” False Brome is also spreading rapidly, says Graebel, “although it’s also possible more is being identified because people are starting to look for it.” If it becomes warmer and drier in Oregon, Graebel says two other invaders – Star Thistle and Spotted Knapweed – are “likely to become more prevalent.”

A partial list of some of the more worrisome plant invaders in Oregon includes Gorse, Yellow starthistle, Spotted Knapweed, Japanese knotweed, Scotch Broom, which

Continued on page 20



Japanese knotweed (*Polygonum cuspidatum*).

Many invasive plants including Japanese knotweed (note inset photo, opposite page, showing re-emergence after spraying), began as garden specimens imported for their beauty in the landscape. If left unchecked, these plants could cause significant economic and environmental damage to Oregon’s forests.

Fire prevention in Oregon's urban areas continues to challenge firefighters

Rod Nichols, ODF Agency Affairs Specialist

As housing development continues to press into forested areas of the state, fire prevention specialists are sticking with their key messages.

They inform the many new residents of the wildland-urban interface that:

- proper landscaping can act as a buffer to shield a house from an encroaching wildfire, and,
- installing fire-resistant roofing and keeping the roof and rain gutters clear of leaves and needles can prevent airborne embers from igniting the structure.

These and other common-sense tips are helpful to individual homeowners seeking to live safely in a fire environment. In recent years, the overall strategy to protect the interface has evolved. Fire educators have long advised homeowners to create “defensible space” on their property. The structure and grounds of an interface home need to be maintained chiefly to withstand a wildfire’s initial



Photo by Ann Walker, ODF.

A home in Cascade Locks, western Hood River County BEFORE fuels treatment . . .

advance, which would afford enough time for firefighters to arrive and protect it.

But in light of Oregon’s steady population growth and intensifying fire seasons, the “defensible space” message has been strengthened to place greater responsibility on the homeowner. Urban growth has outstripped the capability of most local fire departments to protect even the majority of interface homes in their districts. In many communities, fire engines may never arrive in sufficient numbers to safeguard a neighborhood against an approaching flame front.

Faced with this new reality, prevention specialists now advise homeowners to take the extra steps to upgrade their homes from



In light of Oregon’s steady population growth and intensifying fire seasons, the “defensible space” message has been strengthened to place greater responsibility on the homeowner.

“defensible” (firefighters required on scene to assist) to “survivable” (firefighter assistance not needed). Only a few additional measures are needed to achieve this higher level.

Learning from disaster

A key lesson learned from recent wildfire disasters is that, while alarming, a flame front passing through a neighborhood does not necessarily pose the greatest threat to well-maintained properties. Rather, it is the embers carried aloft by the fire that are more likely to destroy homes.

Post-fire images of burned communities show suburban neighborhoods in which houses untouched by fire stand next to others that have been reduced to rubble. Comprehensive analysis revealed that the simple practice of periodically clearing leaves and tree needles from the roof and gutters was the key to survival for scores of homes.

... and **AFTER** excess fuels were removed from the property.



(See the checklist on the next page for key actions.)

While it is possible for an individual homeowner to significantly increase the survivability of his/her house in the event of a wildfire, group action can provide for a more comfortable margin of safety. A vacant lot overgrown with brush and grass, for example, can jeopardize adjacent homes in a wildfire. For this and other reasons, fire educators now stress preventive action on the community level.

Community Wildfire Protection Plan

When a *Community Wildfire Protection Plan* (or CWPP, which meets minimum requirements of the 2003 federal Healthy Forests Restoration Act) is completed by a community, the result is improved planning, response and recovery from a wildfire event. A CWPP improves the working relationships between the community and emergency response agencies. It also makes the community eligible for grants and other assistance to put the plan into action.

In crafting a *Community Wildfire Protection Plan*, community members and fire officials bring together local knowledge and expert analysis to identify both the high-priority assets and risks. Areas most in need of fuel reduction (commonly tree thinning and pruning, and brush removal) are scheduled for treatment first. And, strategies to protect essential infrastructure such as evacuation routes and essential communication links are put in place. The CWPP also specifies steps the community and individual homeowners should take to reduce the ignitability of structures throughout the area. In addition, a CWPP identifies a wildland-urban interface boundary that may extend onto federal land where hazardous fuels-reduction work is needed to protect the community from fire coming onto privately owned lands. Creation of a fuel break in the forest is another option that could prevent a wildfire from reaching structures.

Photo by Ann Walker, ODF.

Continued on page 16



As the first order of business in implementing the Interface Act, commonly known as “Senate Bill 360,” county and state officials set about identifying the forestland-urban interface statewide – no easy task, as wildfire experts and urban planners soon discovered, when they encountered the myriad variations within this zone where development intermingles with the forest. Today, with Oregon’s interface areas largely mapped and an index of fire risk level established, residents can easily find out where they stand. With the aid of the Oregon Explorer Internet portal - <http://oregonexplorer.info> - even a

Fire prevention . . . Continued from page 15

Sharing interface responsibility

The Oregon Forestland-Urban Interface Fire Protection Act requires property owners in identified interface

areas to share in the responsibility of protecting their homes from wildfire. Passed in 1997, the act has been fully implemented in three counties, with nine counties at various stages of completion, and several others to start soon.

homeowner with modest computer skills can view wildfire risk maps of the entire state as well as local areas.

Department of Forestry field offices and local fire departments are available to advise homeowners on the steps necessary to bring an interface home into compliance with the Interface Act.

Is your home fire-safe?

Here are some basic steps homeowners can take to make their homes survivable:

Home survivability checklist:

- ✓ Manage the trees, shrubs and grass around the house so they won’t carry fire to the walls or roof. Trimming shrubs and pruning the lower branches of trees will prevent fire from climbing into the tree crowns. (Before burning yard waste, check with the local fire department or ODF for any applicable permits.)
- ✓ Select fire-resistant landscaping plants. The booklet, *Fire-resistant Plants for Home Landscapes*, contains color photos of many native species that can form an attractive fire buffer around a
- home. It is available on the Internet, <http://extension.oregonstate.edu/catalog/html/pnw/pnw590/>.
- ✓ A well-watered lawn provides a buffer against an advancing ground fire.
- ✓ Locate firewood, lumber, gas cans, tires, yard waste and other flammable materials away from the house.
- ✓ Regularly clean leaves and other debris from the roof and rain gutters.
- ✓ Do not connect wooden fences to walls.
- ✓ Attach skirting to decks.
- ✓ Put wire mesh screen over ventilation openings in the walls.

Many organizations offer free information on fire-resistant building materials and landscaping techniques. Two popular websites:

**Firewise, www.firewise.org
FireFree, www.firefree.org**

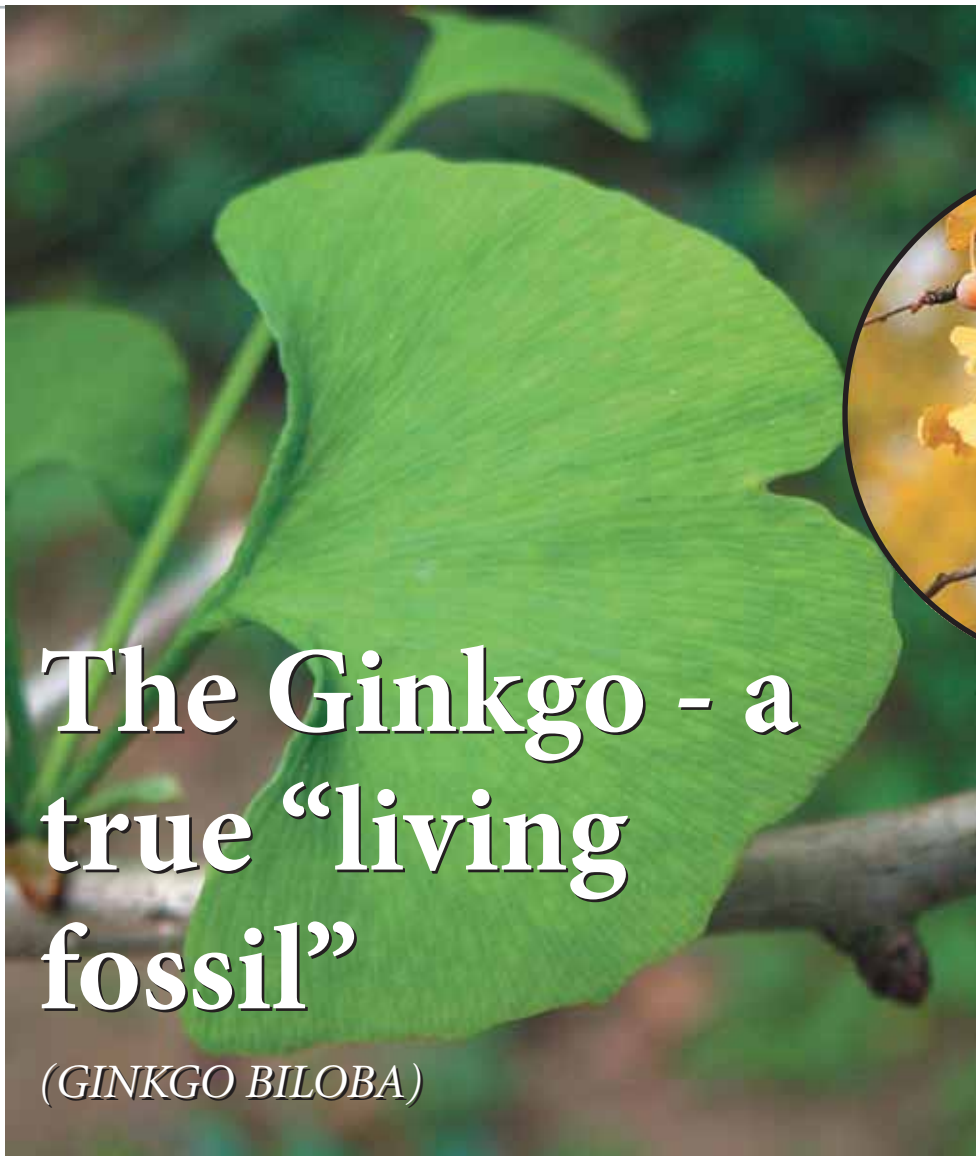


photo courtesy OSU Extension

The Ginkgo - a true “living fossil”

(*GINKGO BILOBA*)

Jeri Chase, ODF Public Affairs Specialist

Dinosaurs roamed among them. Millennia ago, they ranged across what is now Asia, Europe, and North America. Today, they are one of the best trees to plant – for so many reasons. The ginkgo – the very picture of Darwin’s “living fossil.”

Ginkgo fossils – 19 species of them – have been found from as far back as the Permian period, over 270 million years ago. The extinctions of the dinosaurs and larger reptiles – the ginkgo seed dispersers – may have played a role in this species’ downfall. They were all gone from North America seven million years ago; and from Europe about two and one-half million years ago.

Today, you can see fossilized evidence of these amazing trees at the Ginkgo Petrified Forest State Park

at Vantage, Washington. Buried in lake bed sediments and then covered by lava flows for millions of years, 15-million-old logs of ginkgo *beckii* can now be seen in the basalt bluffs overlooking the Columbia River Gorge and Wanapum Lake.

Ginkgos were thought extinct from the planet until, with great excitement, German scientist and physician Engelbert Kaempfer discovered them in Japan in 1691. It turns out they had survived in China – where they were considered sacred – in the mountain monasteries, and temple and palace gardens, cultivated by Buddhist monks who then spread them to Japan.

Continued next page

photo by David Scarboro
courtesy of The Ginkgo Pages: <http://www.xs4all.nl/~kwaniten/>



Today’s ginkgo has survived essentially unchanged since the Jurassic times. It may be the oldest living seed plant – a true wonder of our natural world.

Of the ginkgo, paleobotanist Sir Albert Seward said: “It appeals to the historic soul: We see it as an emblem of changelessness, a heritage from worlds too remote for our human intelligence to grasp, a tree which has in its keeping the secrets of the immeasurable past.”

Losing its leaves in the fall, it is deciduous — but not a true broadleaf. Nor is it a conifer. Scientifically, and in many other ways, it’s in a class all its own, the only link between the “lower” level of plants, the ferns, and the “higher” level, the conifers.

The trunk has light brown to brownish-grey bark that becomes deeply furrowed and highly ridged with age. Ginkgo leaves are fan-shaped, inspiring two more names for this beloved tree, one again from the Japanese: “I-cho”, meaning “tree with leaves like a duck’s foot.” The second name this unique leaf shape inspires is the one that’s the most commonly known and used in North America: the “maidenhair tree,” for its resemblance to the maidenhair fern whose fronds have an almost identical shape.

Their amazing leaves dance and flutter with the slightest breeze. In spring, they unfurl as a delicate, soft, deepening green during summer, to a warm, emerald tone. But it is in the fall when the ginkgo really comes into its own – glistening in gold. Autumn leaf color may range from chartreuse to bright yellow to deep gold, depending on the tree. If these leaves happen to fall in a pool of water, they put on another striking show as they often don’t lie flat on the water’s surface, but bend and, at the slightest movement, mimic shimmering golden butterflies.

And when that show is over, ginkgos lose their leaves almost all at once – inspiring a former Poet Laureate for the United States to muse upon this unusual phenomenon. In the northwest, this often happens around Halloween. Very tidily, too. The leaves fall fast and form a golden carpet beneath the tree – easy for fall clean-up in a garden.

Ginkgos are tough – they have to be to have survived for millennia.

That is just one of the many reasons they make such a great tree for our cities and communities. They can withstand air pollution, salt, snow, wind, hail, drought, heat, insects and disease, mismanagement, and even radiation. Four ginkgos in Hiroshima, Japan, withstood the atomic bombs at the end of World War II – thriving, even blooming – while everything about them was devastated in the blast.

Ginkgos are also believed to provide protection against fire; the bark and leaves are thought to secrete a fire-retardant sap. Many of these trees survived the great fire after the 1923 Tokyo earthquake – and a temple that was surrounded by ginkgos made it through the massive blaze unscathed.

They aren’t all that picky about where they grow. If you are doing your own planting, sun is recommended, and about any soil will do. The only thing they don’t like is poor drainage, or for their very deep roots to be overly wet.

They are slow-growing and long-living. There are ginkgos believed to be 2500-3000 years old – specimen trees that are over 170 feet in height. In most urban areas, though, ginkgos reach 40-100 feet tall and spread about 20-40 feet.

Young ginkgos are slender and sparsely branched – columnar. It is only as they age that their crown truly fills in, and that might not happen for 100 years or more. They broaden into a classic pyramidal shape.

There are male and female ginkgo trees – and sometimes, both genders can be found on the same tree. Females must be growing in the presence of a male tree to be pollinated.

Lacking dinosaurs, seed dispersal for the ginkgo biloba is now done by small mammals and birds.

Their flowers are insignificant, but that fruit! It is foul-smelling – resembling rancid butter and Limburger



Photo by Cynthia Orlando, ODF

This ginkgo tree near Oregon’s state capitol building is a bigger, much taller specimen than you’re likely to see in most neighborhoods. Note the unique, fan-shaped leaves, right.



A ginkgo tree near a temple survived the dropping of the 1945 atomic bomb on Hiroshima. The temple was destroyed. However, the staircase of the new temple was divided into left-and right hand sides, protecting the Ginkgo inside a U-shape.

cheese. For that reason, nowadays most people prefer to plant the male tree. Since it can be difficult to tell the male and female trees apart until maturity – at 20 years or so of age – most nursery varieties sold are males grafted onto root stock.

or broiled, ginkgo seeds are still often eaten in Japan when drinking sake. From the 1950s until today, western medicine has been studying uses for the ginkgo. It is frequently prescribed in Europe, and used in North America and other countries as a herbal supplement for muscle pain, fatigue, for the treatment of Alzheimer’s and for the cognitive symptoms of multiple sclerosis.

A ginkgo tree near a temple survived the dropping of the 1945 atomic bomb on Hiroshima. The temple was destroyed, but the staircase of the new temple was divided into left-and right hand sides, protecting the tree inside a U-shape. Engraved on the tree are the words “No more Hiroshima.”

Some ginkgo history: pass the tea or sake

As befits a species that has been around for more than 270 million years, the ginkgo has a rich and legendary history.

Ginkgo seeds were used for medicinal purposes in both China and Japan. The seeds are also eaten at weddings and feasts – like the Chinese New Year – and, in Japan, during tea ceremonies. Today, grilled

The ginkgo is popular in many different types of artwork from many Asian cultures - first seen on Chinese silk paintings by 400 AD, used on Japanese family crests since the Middle Ages, and still common in many logos and emblems in the Far East. It also was a popular motif during the Art Nouveau movement at the end of the 19th century in Europe, and has inspired poetry, from ancient Chinese and Japanese sages to the German poet, botanist, and philosopher Goethe.

There are many places in Oregon to see and enjoy these gems. Some grow in the Japanese Gardens of Lithia Park and elsewhere in Ashland, and many in Salem, Corvallis and Gresham. In Portland, they can be found at OMSI, near the Oregon Zoo, in the Japanese Gardens at Washington Park, and the newly-built Classical Chinese Garden in Chinatown.

Plant a “living fossil” today, and generations who will follow will thank you.



Photo by Cynthia Orlando, ODF

Is there anything good to say about these guys?

"The only treatment that seems to (be effective) is cutting down the invasives, treating the stems with herbicides, and planting native species in the gaps where the invasives once were," says research scientist Peter Del Tredici, in a recent article from *Landscape Architecture*, adding, "it looks an awful lot like gardening."

"Can we ever really put the invasive species genie back in the bottle, or are we looking at a future in which nature as we know it becomes a cultivated entity?" asked Del Tredici rhetorically in a recent talk in Fort Lauderdale, Florida. "As I see it," says Del Tredici, "the critical question faced by the professionals who design, build and maintain our urban landscapes is not what plants grew there in the past, but which ones will grow there in the future?"

Likewise for our rural areas. Regardless of how we feel about "the unique assemblages of plants that populate our sprawling cities" (and forests), "they have become the de facto native vegetation" of the environment.

"As such," says Del Tredici, "we need to acknowledge they are actually performing significant ecological functions including water and air filtration, heat absorption, mineral cycling, and carbon storage."

"In a very real sense, the diversity and spontaneity of these new "immigrant" biological communities mirror those of our own society," says Del Tredici. "Indeed, the very same processes that have led to the globalization of the world economy - unfettered trade and travel among nations - have also resulted in the globalization of our environment." "And rest assured," he adds, "that the globalized environment is every bit as difficult to control as our globalized economy, if not more so."

has been present in Oregon for many years, Tansy ragwort, and the high-climbing vine, Kudzu. Oregon has a history of being somewhat of a leader when it comes to managing invasive plants and successful control programs. For instance, the 1975 Legislature added Tansy ragwort - a common weed poisonous to livestock - to a state weed law; eighteen years later, an Oregon study estimated that for each dollar spent controlling Tansy, Oregonians derive \$13 worth of benefit.

Climate change and biodiversity

Researchers who analyze ecological models over different climate scenarios see signs that the location and area of habitats for many tree species are very likely to shift. For example, trees favored by cool environments are very likely to shift north, while habitats of alpine and sub-alpine spruce-fir could possibly be eliminated. Habitats that could possibly expand in the US are oak/hickory and oak/pine combinations in the eastern states, and Ponderosa pine and arid woodland communities in the West.

It's thought that those invasive plants that disperse or spread most easily are also most likely to quickly spread into these newly forming communities. Thus, the makeup of the forest communities we see around us today could change substantially.

What the future holds

At the June, 2005 Portland conference on climate change, researcher Lewis Ziska, USDA Agricultural Research Service in Maryland, described relationships between climate, carbon dioxide, and invasive weeds including Canada thistle, spotted knapweed, and yellow star-thistle - suggesting the possibility that recent increases in atmospheric carbon dioxide during the 20th century may have been a factor in the growth of these invasives. He also suggested that urban areas may provide a hint of what's to come: early results suggest that a warmer environment coupled with higher levels of carbon dioxide is an excellent environment for weedy species.

Dick Waring, a Distinguished Professor Emeritus of Forest Science at Oregon State University, works with NASA using satellite imagery to model forest productivity. The studies operate by the fairly simple notion that in nature, wherever more disturbance

takes place - such as in logging sites, or areas where large fires have occurred - you're more likely to find conditions ripe for invasive plants to move in. Using satellites to study disturbed and undisturbed vegetation and associated surface temperatures, Waring says researchers "hope to be able to predict forest and other locations where invasive plants might next become problematic."

Although noxious weeds have invaded many parts of Oregon, large acreages still remain healthy and free of invasive weeds. A lack of adequate resources for county, state, and federal weed programs is a great challenge, causing insufficient attention to many weed issues. The challenge presently faced by Oregonians is to protect Oregon from new invasions, and lessen the impact of weeds already established.

How You Can Help

Learn to identify the plant species that are invasive in your area. Walk and survey your property on a regular basis, and, if necessary, hire a consultant to help you. Remove any invasive plants already present on your property, and talk to your neighbors about the problem (you can also bring a copy of this article with you).

Since manual removal is labor intensive, a ready supply of cheap labor is the first obstacle to overcome for manual control programs. Some land managers have been successful with inviting volunteers to form weekend broom-pulling parties. Plants should be pulled as soon as they are large enough to grasp, but before they produce seeds.

Join volunteers working to control invasive species on public lands. Weed pulls are organized by National Park or National Forest staff, regional Exotic Pest Plant Councils, or native plant societies. More specific information is often available from these sources.

The most desirable approach for controlling weeds is that of an integrated pest management plan. This involves the optimum use of all control strategies. This approach is generally accepted as the most effective, economical, and environmentally sound long-term pest control strategy.

Lastly, learn about federal and state governments' efforts to address the invasive species problem and support these programs. A good place to start is the Oregon Invasive Species Council at "<http://oregon.gov/OISC/>" <http://oregon.gov/OISC/>.

Symposium underscores threats to Oregon's family forestlands

Some of Oregon's most important forests - family-owned forestlands - face an uncertain future, and many may be lost to development without new strategies to protect and improve them, participants at a recent symposium concluded.

"If we do not use forests or use them unwisely, we will lose private forests to other land uses, and we will lose public forest health and vitality to fires, insects and invasive species," said Hal Salwasser, dean of the Oregon State University (OSU) College of Forestry, explaining the importance of maintaining a sustainable forestland base.

Many family landowners manage for a balance of forest values - such as healthy streams and wildlife habitat - that benefit all Oregonians, and family forestlands are often more visible to Oregonians than more remote federal and industrial holdings.

More than 250 people attended the symposium, "Oregon Families & their Forestlands: What's at Stake," held at Oregon State University in Corvallis in April.

Participants examined challenges to family forestlands caused by development pressures, changing land use laws, increasing real estate values and succession planning. The Oregon Board of Forestry and its advisory Committee for Family Forestlands, chief sponsors of the symposium, focused the agenda on issues affecting the future of Oregon's family forestlands, which make up 16 percent of the state's forests. Attendees included family forest landowners, forestry professionals, environmentalists, policymakers, civic leaders, industrial forest landowners and other interests.

"The conversion of forestland to development is a major concern of the Board. We have found that inadequate return on investment is prominent among

reasons for conversion," said Steve Hobbs, chairman of the Oregon Board of Forestry and associate dean at the OSU College of Forestry.

Following several small-group discussions, symposium participants prioritized strategies for achieving profitability through federal, state and private incentives for the environmental and other public benefits that these lands produce.

The symposium's chief sponsors will consider the recommendations emerging from the discussions as they focus on supporting family forestland owners and helping to keep forestlands in forest uses.

Some of the many sponsors included Audubon Society of Portland, Trout Unlimited, The Nature Conservancy, Oregon Trout, OSU College of Forestry, Oregon Watershed Enhancement Board, US Forest Service, Oregon Small Woodlands Association, Pacific Rivers Council, Oregon Forest Resources Institute, and Oregon Department of Forestry. 🍷

Forest Center recognized for "Heritage Excellence"

The Tillamook Forest Center received an Oregon Heritage Excellence Award in May. The award recognized the successful planning and development of the center as a place for forest history and forest heritage.

The Oregon Heritage Commission announced 14 award-winners at its conference in Pendleton. Oregon First Lady Mary Oberst presented the award, an attractive glass plate made by Oregon artist Candace Pratt, which will be displayed at the center. The awards program is designed to recognize organizations and individuals for excellent work in promoting or preserving Oregon's heritage.



Forestry landowners, policymakers, environmentalists, civic leaders, family forestland owners and others had a chance to meet and network informally at an April conference in Corvallis about the future of Oregon's family-owned forestlands.

Photo by Cynthia Orlando, ODF

Tillamook work project leaves clean legacy behind

Photo by Stephanie Beall, ODF



Massive amounts of garbage and debris were removed from the Tillamook State Forest during April's annual "SOLV" ("Stop Oregon Litter and Vandalism") event.

66 volunteers from various agencies removed 280 tires, two full-sized vehicles, three tons of scrap metal, six appliances, and approximately nine tons of garbage.

Clubs and organizations included the Portland United Mountain Pedalers,

Oregon Equestrian Trails, Poor Boy Off-Road, Braille Trail Four Wheelin', and the Tillamook State Forest Trail Patrol.

SOLV was founded by Oregon Governor Tom McCall in 1969.

2007 Legislative Summary

As of mid-June, the 2007 Legislature had passed most bills introduced by the Department, but had not yet given final approval to the Department's budget.

The Department, with Board of Forestry approval, introduced a series of bills dealing with protecting working forests from conversion to other uses, helping landowners maintain healthy forests, and other topics.

Among bills that had passed as this issue of *Forests for Oregon* went to press:

House Bill 2293 enhances the Forest Resource Trust Program, intended to help non-industrial landowners improve forest management and establish forests on under-producing lands.

Although the bill does not provide immediate funding to help with cost-

sharing and other incentives, it sets up mechanisms to use should funds become available. It makes other changes to simplify the program and make it easier for landowners to use.

A key fund source is payments from developers of power plants or other facilities that emit greenhouse gases. These payments could help fund forestry projects that offset the emissions.

House Bill 2114 improves the Stewardship Agreement Program, which, like the Forest Resource Trust Program, has experienced low participation. The bill adds benefits for landowners who agree to exceed regulations to conserve, restore and improve water quality or fish and wildlife habitat.

The bill does not provide immediate funds, but like House Bill 2293, provides mechanisms for future use. It does provide other benefits, including

assurance that landowners will not be subject to certain future regulations, as long as their stewardship agreements remain in effect.

Senate Bill 99 fine-tunes 1997's Senate Bill 360, under which the Department works with the State Fire Marshal and local partners to protect communities from wildfire.

Bills that did not pass include **Senate Bill 98**, which sought to allow the state to buy working forestlands at risk of conversion to other uses, and use revenue from their management for an eventual scholarship fund for public university students. The Department will continue to work with agencies and interest groups on this concept.

A fuller accounting of 2007 legislative activity will appear in *Forests for Oregon's* next issue.

New “narrowband” radios ahead of FCC 2013 deadline

First-time visitors to a large wildfire are struck by the frenzy of firefighting activity, both on the ground and overhead. This precise interplay of people and machines would not be possible without close radio communication.

To make the system work even better, this spring the Oregon Department of Forestry completed a four-year effort to modernize its statewide radio network to the new Federal Communications Commission “narrowband” standard.

No small feat

The conversion entailed re-programming some 4,500 pieces of radio equipment,

including mobile, portable and base station radios. Department technicians traveled to 62 mountaintop radio repeater sites to make upgrades. The final task, completed just before fire season, renovated three radio repeater trailers that are deployed to large fires for use by ODF’s incident management teams. While the Department converted its network well ahead of the 2013 deadline set by the FCC for emergency services providers nationwide, ODF firefighters will still be able to converse with local fire and sheriff’s departments that have not yet made the switch.

Legislation places State Forester on Invasive Species Council

House Bill 2068 places the State Forester as a voting ex officio member of the Oregon Invasive Species Council. In May, the Senate Committee on the Environment and Natural Resources held a hearing and work session on House Bill 2068.

Ted Lorensen of ODF testified in favor of the bill, noting that forest landowners have cited invasive species as increasingly serious problems on forestlands. Dan Hilburn, representing the Oregon Department of Agriculture and the Oregon Invasive Species Council testified in support of the bill. Hilburn noted that current and potential invasive species pose serious threats to Oregon forestlands, and Randy Henry of the Oregon State Marine Board testified in support of the bill, noting that the exchange and relationship between ODF and ODA especially was critical and would be cemented by the bill.

The committee voted unanimously to send the bill to the Senate floor with a “do pass” recommendation. Senator Beyer carried the bill.

Oregon Plan for Salmon turns 10

2007 marks the 10th anniversary of the *Oregon Plan for Salmon and Watersheds*, a uniquely Oregon approach to restoring native fish populations

Four key concepts of the plan:

- coordinated state, federal and tribal actions
- monitoring of water quality, watershed health, and salmon recovery
- scientific oversight by an independent panel of scientists
- voluntary restoration actions by forest land-owners.

Since 1997, the *Oregon Plan for Salmon* has been responsible

for more than 8,000 restoration projects on private, state, federal and tribal lands. A volunteer-driven initiative, the plan relies on partnerships and cooperation from landowners for its success.

If you’d like to help support the *Oregon Plan for Salmon*, consider purchasing a new salmon license plate, and visit www.salmonplate.org.



photo by Cynthia Orlando, ODF

coming up

July 12

West Oregon Forest Protective Assn Summer Tour

Philomath OR.

541.929.3266 for info.

July 21 – 10 a.m.

Non-motorized trail work party

Tillamook Forest Center

503.359.7464 for info.

July 25 –8:00 - 5:00 p.m.

Board of Forestry Meeting

Red Lion Inn, Coos Bay

503.945.7210 for info.

August 1 – 9:00 - 3:00 p.m.

Federal Forestlands Advisory Committee Meeting

Salem Hdqtrs, Tillamook Room

August 18 – 10 a.m.

Non-motorized trail work party

Tillamook Forest Center

503.359.7464 for info.

August 25 – 11:00 - 5:00 p.m.

“Return from the Burn” Event

Tillamook Forest Center

www.tillamookforestcenter.org

September 5 – 8:00 - 5:00 p.m.

Board of Forestry Meeting

Salem Hdqtrs, Tillamook Room

September 7 – 9:00 - 3:00 p.m.

Federal Forestlands Advisory Committee Meeting

Salem Hdqtrs, Tillamook Room

September 8 – 10 a.m.

OHV Trail Work Party

Tillamook Forest Center

503.359.7463 for info.

September 15 – 10 a.m.

Non-motorized trail work party

Tillamook Forest Center

503.359.7464 for info.

Forests for Oregon

Oregon Dept. of Forestry

2600 State Street

Salem, OR 97310



"STEWARDSHIP IN FORESTRY"