

New Forestry: A solution for loggers and owls?

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P-I Reporter

Seattle 8/1/90

WILLAMETTE NATIONAL FOREST, Central Oregon — On Ennis unit three here loggers can see the future, and its quirks.

The landscape looks like a sloppy clearcut done by absent-minded loggers. Scattered individual Douglas firs stand in giant solitude. Pieces of dead trees lie strewn across the stubby-brown landscape.

This is the "New Forestry" at

work. The U.S. Forest Service has hailed it as a potential blueprint for future timber harvesting. And some politicians look to it for an escape from the collision between loggers and northern spotted owls. But its ability to save loggers' jobs appears limited — and fraught with risk.

"In the short term, it doesn't really help that much," says Jerry Franklin, Bloedel professor of ecosystem analysis at the University of Washington. "Except," he adds carefully, "to the degree that we as a society are willing to bet on this."

Rep. Jolene Unsoeld, D-Olympia, has embraced the idea. Seizing on the concept as a way to have owls and loggers too, she proposes that large tracts be turned over to New Forestry including chunks of spotted owl habitat that otherwise would be preserved. Others are exploring the concept, as crisis makes a roll of the dice increasingly appealing.

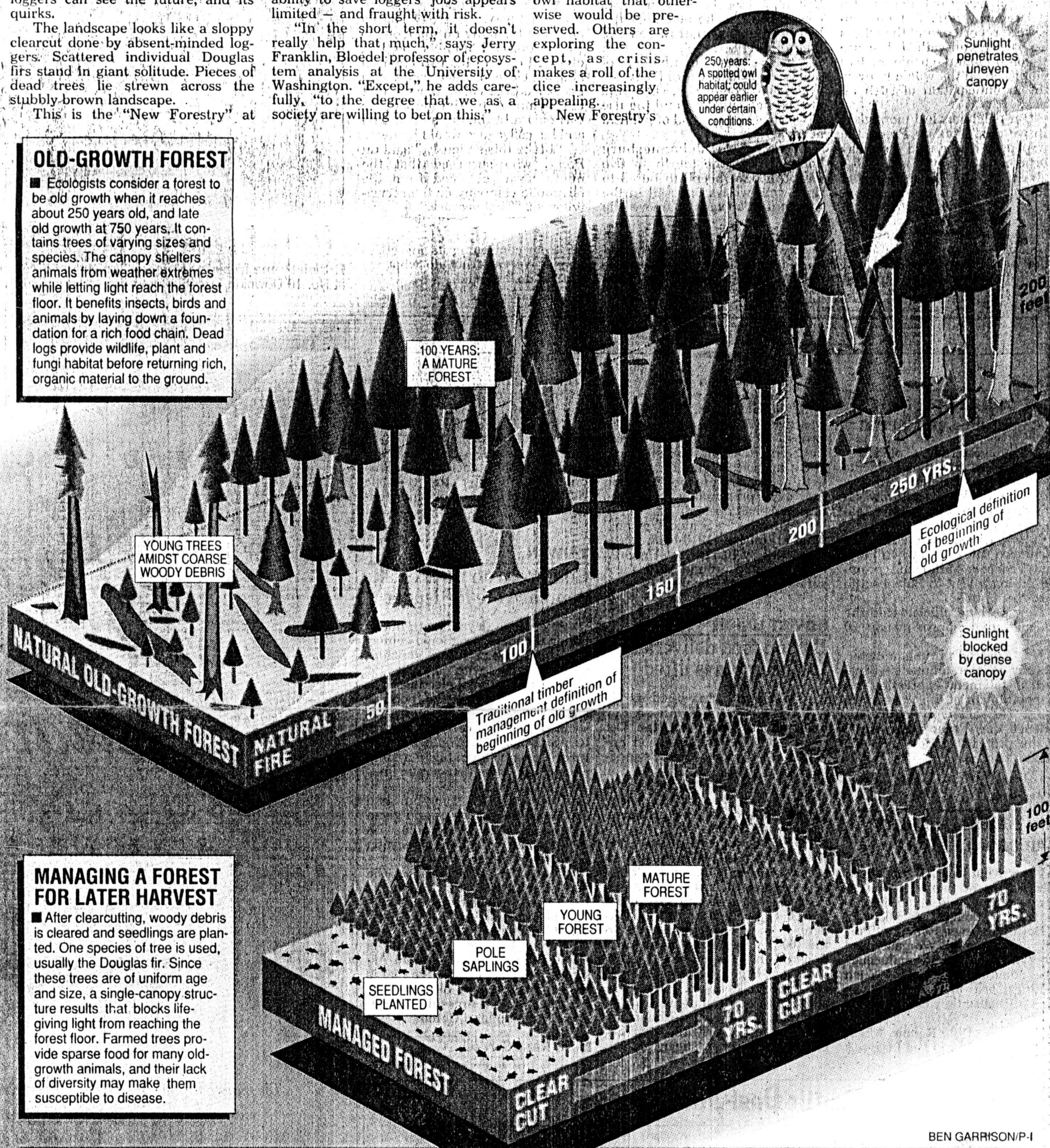
New Forestry's

goal is to grow a home for northern spotted owls and other old-growth species, and do it fast. Mother Nature generally takes 250 years or more to

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OLD-GROWTH FOREST

Ecologists consider a forest to be old growth when it reaches about 250 years old, and late old growth at 750 years. It contains trees of varying sizes and species. The canopy shelters animals from weather extremes while letting light reach the forest floor. It benefits insects, birds and animals by laying down a foundation for a rich food chain. Dead logs provide wildlife, plant and fungi habitat before returning rich, organic material to the ground.



MANAGING A FOREST FOR LATER HARVEST

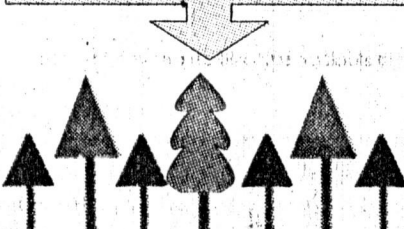
After clearcutting, woody debris is cleared and seedlings are planted. One species of tree is used, usually the Douglas fir. Since these trees are of uniform age and size, a single-canopy structure results that blocks life-giving light from reaching the forest floor. Farmed trees provide sparse food for many old-growth animals, and their lack of diversity may make them susceptible to disease.

BEN GARRISON/P-I

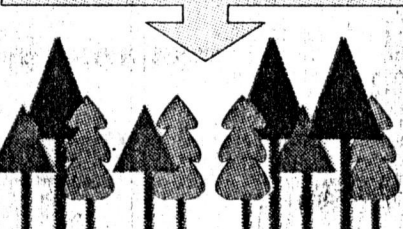
ALTERNATIVES WHICH MAY ENCOURAGE THE QUICK RETURN OF OLD GROWTH



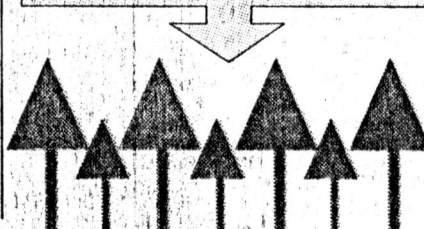
Reserving trees during a clearcut
Leaving a variety of species instead of cutting all trees down helps create a more diverse, multi-canopied forest.



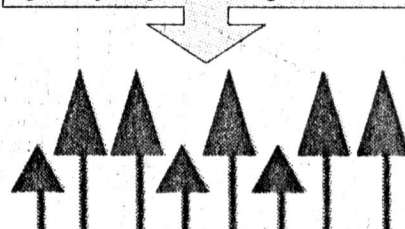
Replanting a variety of species
After clearcutting, planting different species results in different size trees. Leaving the debris fertilizes new forest.



Creating different age classes
Instead of replanting trees of uniform size and age, trees planted at different times create a multi-canopied forest.



Thinning
Instead of clearcutting, trees of uniform age and size are thinned, letting in light for younger trees to grow.



New Forestry: The initial result

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make old-growth forests, with their varied canopies and partly open interior, ecologists say. New Foresters believe that with proper management, man can create something like old growth in 60 to 100 years.

Since the theory remains unproven, few view it as a panacea. The Interagency Scientific Committee on the spotted owl headed by Jack Ward Thomas of the U.S. Forest Service viewed it with optimistic caution.

Before critical habitat of the threatened owl is put at risk, the panel said, New Forestry must be proven outside of owl conservation areas.

Biologists say wildlife benefits of the new techniques probably cannot be proven for at least five to 10 years. Foresters say their costs are uncertain. Both shrink from proposals to apply them broadly.

But with analysts predicting that the Thomas plan could lay off an estimated 28,000 timber-related workers in the next decade, any idea that offers some hope is getting attention.

The Bush administration says it is drafting a less burdensome owl-protection plan, but has not disclosed whether it will include New Forestry. Unsoeld, meanwhile, has called for broad application of the new techniques, designed and monitored by a scientific panel. "It is worth the risk," she says.

Unsoeld, whose district includes both old-forest preservationists and loggers, describes New Forestry in vague and rosy terms. She contends it would enable federal forests to harvest timber that would otherwise be off limits while "putting it on a better long-term sustainable-yield situation."

But she has yet to offer specifics. She shrinks from saying how much acreage should be committed or how many jobs can be saved.

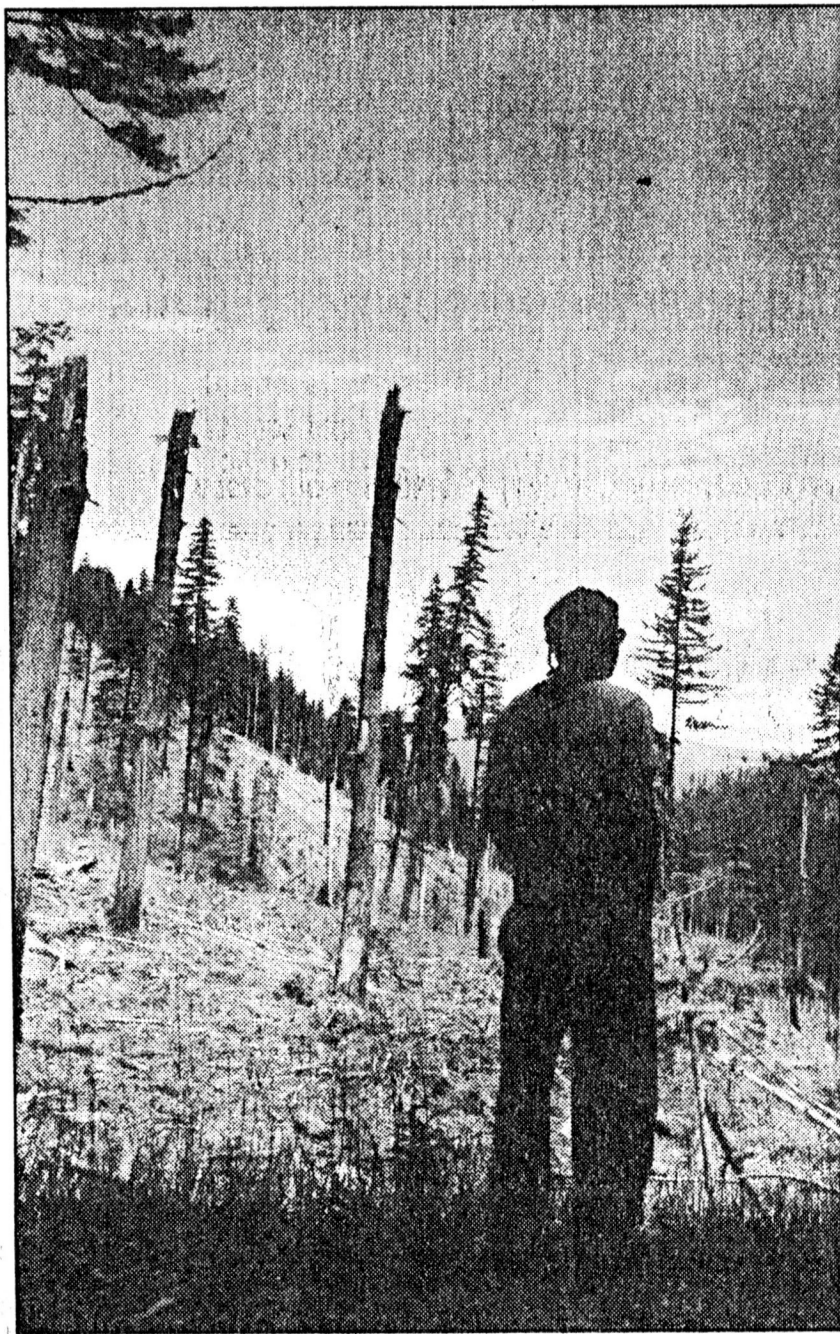
Franklin suggests that a bet on New Forestry is worth the risk on some lands. But he would not bet the ranch. While New Forestry eventually could eliminate the need for special spotted owl protections, he says, "that doesn't mean you can go in and cut all the old growth," with its variety of benefits and dependent species.

Even in the best scenarios, most New Forestry proponents doubt it can avert a fairly sharp reduction in harvests on federal lands because of the dwindling supply of old growth.

"The truth is there's no way we can get through the short term without a lot of pain," says Franklin. "We waited a long time to begin thinking about the changes that need to be made. We've been running an ecological deficit and the bills are coming due."

For New Forestry techniques, wry foresters have coined names like gonzo logging or baroque forestry. The initial result does not look better than a clearcut, it looks worse.

To imitate nature, New Forestry proponents leave downed logs to rot, provide homes to wildlife and, eventually, return organic materials to the soil. They leave



Gary Miller, a research scientist at the H.J. Andrews Experimental Forest

standing dead trees, called snags, to provide homes for wildlife. They even leave some of the best live trees and deciduous trees to break up the uniform canopy of the next generation of trees.

Another new concept calls for leaving larger areas of forest intact, avoiding fragmentation of home ranges for old-growth species like the spotted owl. To keep yields up, this can lead to cutting larger areas, while leaving corridors or stepping stones of forest to connect the large blocks.

The goal is complexity. Old-growth forests are enormously complex mixtures of tree species, ages and dead wood debris. Over the past 15 years, scientists have developed a growing appreciation of their benefits: diverse wildlife, enhancement of soils, ground stability, retention and purification of water, and scenic beauty, to name a few. And "there may be a bunch of others we haven't discovered," Franklin says.

In contrast, most commercial forests in the Northwest are managed almost single-mindedly for wood fiber production. After clearcutting, most woody debris is hauled off or burned to reduce wildfire risk and clear the ground for planting. Newly planted stands of Douglas fir rise from the soil like a crop of corn. Even thinned, such stands are designed to grow

thick, tall, uniform carpets of trees.

Common practice has scattered clearcuts of 100 acres or so across the landscape to spread out the environmental damage. While that benefits a few species, such as deer, it makes a hostile environment for species that prefer virgin forests.

New Forestry techniques are expected to vary widely, custom-tailored to the needs of each site.

Oregon State forestry professor David Perry, another New Forestry advocate, plans to feather experimental timber harvesting through Oregon's Bluefoot district of the Bureau of Land Management, leaving half the trees standing.

Franklin talks of leaving 15 percent to 20 percent of the trees standing, on average. Some schemes leave clumps of trees, others isolated trees. And delays between harvests may be as long as 200 years, said one Forest Service forester.

"We don't have one thing that will show you what the forests are all going to look like," says Lynn Burditt, Blue River District Ranger on the Willamette National Forest.

The Washington Department of Natural Resources is developing its own experimental tracts on 260,000 acres of the Olympic Pen-

looks worse than a clearcut



GRANT M. HALLER/P-I photo

in the Willamette National Forest, looks at an example of New Forestry where loggers left four to six trees per acre.

insula. The U.S. Forest Service has set up a "New Perspectives" office devoted to promoting New Forestry. Federal officials are planning such experiments on tens of thousands of acres of Oregon's Siskiyou and Gifford Pinchot National Forests. But New Perspectives admits most are "still taking shape."

Rather than wait 60 years for results, New Forestry champions are searching for analagous situations in nature. They are scouring the Northwest for areas where many trees were felled by winds or fires 70 to 80 years ago. If these prove good hosts to spotted owls and other old-growth species, Franklin reasons, so could the planned "new" forests.

Biologists remain skeptical. Thomas' interagency federal scientific committee on the spotted owl said, "We do not yet know if creating these structural conditions in stands will retain spotted owls and allow them to breed successfully."

"It might be difficult to reach conclusions in five to 10 years, but I wouldn't rule it out," says Russ Peterson, Field Supervisor for the U.S. Fish & Wildlife Service regional office in Portland. With a scientist's caution, he says, "We'd like to see it demonstrated on a fairly large scale."

To Charles Meslow, Oregon

State biology professor and a member of the committee that recommended listing the spotted owl as threatened, that means studying about 50 pairs of owls on 20,000 acres. He doesn't expect to find that much in a single block. Franklin is more optimistic.

But for the most part, companies are loath to take the financial risk of applying the techniques broadly.

Jim Rochelle, Weyerhaeuser Co.'s manager of environmental forestry research, says the company already is leaving more live and dead trees on clearcuts in the past few years as an outgrowth of the Timber Fish and Wildlife agreements. But he concedes these fall far short of most New Forestry prescriptions.

Rochelle worries that New Forestry would shrink productivity without providing clear benefits. Weyerhaeuser is monitoring experiments with it, he says, but plans no broad application of its concepts.

Kevin Brett, a spokesman for the American Forest Resource Council, expresses willingness to

be "open minded" about New Forestry if, in return, environmentalists are willing "to open up wilderness areas" to logging.

Franklin scoffs at demands for demonstrations of New Forestry. "Science presents a strong basis for believing this would work better than our current practices." And clearcutting, he notes, was justified on theory, not by demonstrations. "We just did it and learned as we went."

Regardless of what happens in the short term, Franklin sees New Forestry "as a major component of a long-term solution" to the conflict between the needs of wildlife and the timber industry.

He contends New Forestry is the lesser of two evils facing the timber industry in an era when the public values diverse wildlife and other ecological benefits of old-growth.

"If the timber companies do not respond to these ecological values, they're going to be increasingly regulated by the public," he says, and "we're going to pull more and more acres out of the (timber) land base."

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