'New Forestry' Is Kinder, Gentler Way Of Logging

Leaving Some Trees Standing, Then Planting Gives Ecosystem An Essential Mixed-Age Base

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SEATTLE

A NEW WAY of logging, called "New Forestry," may provide a partial solution to the Pacific Northwest's bitter timber conflict, experts say.

Loggers who practice this "kinder and gentler forestry" leave behind several live trees of different ages on each acre of harvested land.

Such a technique provides a mixed-age forest structure that maintains the logged area's ecological health, said Jerry Franklin. He is a University of Washington scientist and the leading proponent of the new technique.

New Forestry could be an important alternative to the stark choice between preserving the Pacific Northwest's old-growth forests and making them into tree farms, Franklin and other scientists said.

It also could save spotted owls, salmon and thousands of other species that could become extinct if the old-growth forests are cut.

"The big problem is, we've gone hell-bent for leather for the last 100 years on private land and 50 years on public land, and any adjustment becomes extremely traumatic," Franklin said.

"But we still have the ability to lifeboat these old-growth species," he said. "To do it with a high probability of success is going to require a high degree of preservation or reservation. But it also means we're going to have to change our practices on the land between the reserves."

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Viewed from the air, New Forestry cuts leave behind trees in many configurations : polka dots, clumps and wagon wheels with spokes. In addition, downed trees, brush and standing dead trees provide nutrients and wildlife habitat.

In a few decades, those living trees will combine with newly planted ones to make up the multi-age forest that the spotted owl and other old-growth organisms need.

Traditional intensive forestry practices often destroy the linkages among organisms in natural forests.

New Forestry has made enemies on both sides of the timber conflict.

"It's a concept that riles everybody because it threatens everybody," Franklin said.

Environmentalists don't like it because they believe it gives the industry a passport to continue cutting old-growth trees on public land.

The Sierra Club in Seattle applauds Franklin's efforts to move the timber industry away from clear-cutting, but it points out that New Forestry is experimental.

Said Sierra's Charles Raines: "If we put all our eggs in the New Forestry basket, we will fail. When so little old-growth forest is left, we have to preserve as much as we can."

For its part, the timber industry dislikes New Forestry because it entails leaving live trees behind.

"The real question is, how much should be [logged] and how much should be preserved?" said Chris West, of the Northwest Forestry Association, an industry group in Portland.

Franklin gets trapped in the middle of the New Forestry debate. Still, he has won respect for the concept with his mild manner and his reputation as the nation's leading authority on old-growth forests.

Species cannot be allowed to become extinct, but the reality is that society needs wood fiber from the forests, Franklin said. Industry and environmentalists must learn to "share the sandbox," he said.

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The Plum Creek Timber Co. is putting New Forestry theory into practice in its corner of the sandbox.

Environmentalists have dubbed Plum Creek the "Darth Vader of clear-cut forestry" for the intensity and scope of its logging in the 1980s.

New Forestry got its foot in the firm's door when an employee who took a class from Franklin brought him to Plum Creek for a talk to its top managers early in 1990.

Months later, the company implemented New Forestry in 20 percent of the forest units in the 1.4 million acres of forest it owns in Washington, Montana and Idaho, said Gary Johnson, manager of Plum Creek's Puget Sound operations.

The wagon-wheel design of a New Forestry cut east of Seattle. This experimental technique leaves behind trees that will one day be the old-growth component of a multi-age forest.

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Traditional intensive forestry practices often destroy the linkages among organisms in natural forests. New Forestry helps maintain what scientists call the "biological legacy." With backing from the National Science Foundation, Franklin and other forestry scientists in 1970 began in-depth studies of the forests. They looked at such phenomena as the way forests and streams interact and the nutrient cycle, from soil to tree to insect to soil.

What they found has changed scientists' perspective: No longer should forestry be geared toward getting the most wood fiber from the land as fast as possible, they said.

"It's pretty clear from our state of knowledge that clear-cutting and plantation forestry [growing trees of the same age and variety] don't provide for some of the values we're searching for," Franklin said.

In traditional selective logging, the aim is to extract the wood of highest commercial worth. In contrast, the aims of New Forestry include stable soils, nutrients, healthy streams and enough natural habitat to support a diverse array of animals, plants and micro-organisms needed to maintain the complex forest ecosystem.

"By eliminating some of its components, you can lose the ability of the forest system to work," Franklin said.

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Once Plum Creek managers gave their foresters the signal to innovate, "they began to get really creative," Franklin said. "You have to give them credit for what they're doing."

On a tour of Plum Creek's New Forestry cuts, Johnson said: "This is a different model for land management. Some people even in the industry are still skeptical."

So, too, are environmentalists.

"Plum Creek is like a murderer released from prison who says, 'Look at me, I haven't killed anybody in two days,' " Raines said. "They have trashed the forest, and their New Forestry is nothing but a public relations program — a showcase to visitors."

Retorted Plum Creek's Johnson: "If this is a gimmick, it's an expensive gimmick."

At times, Johnson said, loggers leave behind 15 percent of the wood value, which can be worth several thousand dollars per acre.

Why, then, is Plum Creek taking such a big step?

"The bottom line is that we want to be survivors in the industry," Johnson said. "In order to survive, you need to be willing to adapt as the science changes."

New Forestry cut leaves behind a small stand of trees and ebris on a Plum Creek Timber Co. tree farm in Washington tate's Puget Sound area.

The wagon-wheel design of a New Forestry cut east of Seattle. This experimental be the old-growth component of a multi-age forest.