

City editor: Les Harper
Features editor: Barb Curtin
Telephone: 753-2641

Community

News about Benton County,
the mid-Willamette Valley
and the Pacific Northwest

OSU study: Old growth not ultimate forest

A new study by researchers at Oregon State University suggests that old-growth forests have no monopoly on high levels of plant and animal diversity.

The study published Tuesday also indicates they are not the only type of natural forest ecosystem that needs to be conserved.

The research found that some younger natural forests in the Pacific Northwest have a diverse structure and as many or more plant and animal species as old-growth forests.

The report draws on earlier work done in this area by a number of researchers and is one of the first of its type to scientifically compare natural vs. managed forests across all age levels.

The study also outlines possible approaches to achieve higher biodiversity in a managed forest.

Andrew Hansen, an assistant professor of forest science at OSU working with the Coastal Oregon Productivity Enhancement program based in Newport, was the principal investigator. The study was published in the professional journal BioScience.

Hansen said a common misconception is that old-growth forests are the only "natural" stage of a forest. In fact, fire, insect attack, plant disease and other natural catastrophic disturbances make "old growth" just one of four stages in continuous forest succession.

"These days, we commonly try to suppress every type of natural disturbance, especially fire," he said in an OSU press release. "And if we fail to stop the disturbance, we rush right in to salvage whatever timber is left. By

doing this, we're eliminating important habitats for some species.

"Each age class of a natural forest offers important habitat for some plant and wildlife species. There are some animal and plant species that can only live in young, naturally disturbed forests, just as there are species such as the spotted owl that depend on old growth."

Among other findings, the OSU research indicates:

- Diverse structure and from 50 percent to 90 percent of the same plants, birds, small mammals, amphibians and other life forms are found in any age or type of natural forest.

- Some species do depend on forests of a certain age and type, with old growth and young forests both supporting relatively high numbers of species.

- Some species, such as the western bluebird, American kestrel and various woodpeckers, thrive only in young forests that have snags, downed logs and other features typical of a natural, recently disturbed forest.

- Most of the significant features of biodiversity are not found in forests managed for timber production by traditional techniques, such as clearcutting, debris removal and replanting with a single tree species.

- There is a need to develop young managed forests that follow the structural characteristics of a young natural forest.

"If we are serious about maintaining biodiversity and want to continue multiple use forestry, we're going to have to change our approach," Hansen said. "And the research indicates that struc-

tural diversity is the key."

That type of diversity is a primary focus of the concepts of "new forestry," he said. It includes varied tree size, snags, fallen logs, diverse shrubs and other characteristics.

"We'd hasten to add, however, that while many of the ideas proposed by new forestry show considerable promise, they are still unproven," Hansen said. "What is more clear is that traditional approaches do not adequately protect biodiversity in our forests, and that alternative approaches should be tested."

The variety of animal species in natural forests of the Pacific Northwest relates less to the age of a forest than to latitude, elevation and nearness to the coast, a U.S. Forest Service study has found. The implication is that

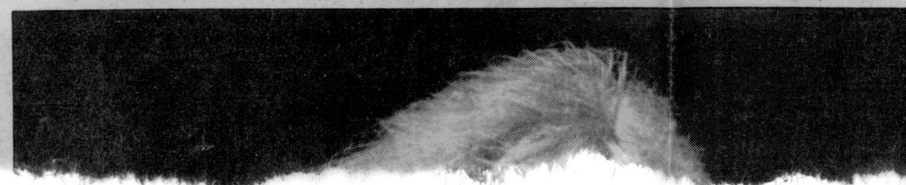
young natural forests in the Oregon Coast Range merit conservation as much as an old-growth forest in the Washington Cascades.

Until a proven strategy is developed, landowners striving to maintain biodiversity should consider retaining representative tracts of all ages of forests, not just old growth, the study suggests.

"This would likely cause a further impact on the Pacific Northwest timber supply," Hansen said, "but that may be the cost of conserving biodiversity."

"Old-growth forests are just one part of that. Studies of this type make it fairly clear that protection of the northern spotted owl will not necessarily protect every other species that is also important."

Journalism of going



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