OLD-GROWTH FORESTS

Spotted Owl Plan Kindles Debate on Salvage Logging

A proposed plan to save the northern spotted owl and to protect logging jobs in the Pacific Northwest has been strongly criticized by both environmentalists and loggers since it was announced on 1 July by President Bill Clinton. But one part of the plan—a provision allowing the selective harvesting of dead wood—has also triggered a debate within the scientific community, including complaints that an advisory panel to the U.S. Forest Service reversed earlier recommendations that such logging be virtually banned in reserve areas.

The forest plan, which is expected to be submitted today (16 July) to a federal judge, is the latest government attempt to ensure the future of the northern spotted owl, which in July 1990 was listed as a species threatened with extinction. Until that time, logging had decimated nearly 90% of the old-growth forests in the United States, roughly defined as forest undisturbed for at least 200 years. In May 1991, U.S. District Court Judge William Dwyer ordered a stop to logging in the old-growth forests of the Pacific Northwest until the U.S. Forest Service, responsible for managing about 23 million acres of such land, had a scientifically sound plan to protect the spotted owl. Dwyer also instructed the service to analyze the impact of logging—if it were to resume alongside a spotted owl recovery plan—on other inhabitants of old-growth forests.

The Clinton Administration thinks it has produced the kind of plan Dwyer requested and is expected to ask the judge to lift his injunction on logging. The plan calls for the Forest Service to set aside about 7 million acres of mostly ancient forest as reserves for spotted owls. The only commercial activities permitted would be salvage logging (the removal of dead or dying trees) in some areas and logging to "thin out" younger stands of trees. The reserves extend from the Canadian border into Northern California. Interspersed in and around the reserves is old-growth forest designated as "matrix" that will be opened to logging.

Aside from the salvage provision, environmental scientists are particularly interested in two aspects of the plan. In a departure from earlier Forest Service proposals devoted to protecting the spotted owl, the latest plan tries to protect entire ecosystems. At the heart of many of the reserves are rivers and lakes designed to protect salmon and other fish as well as the marbled murrelet, a diving bird threatened with extinction. The plan also sets aside 10 swaths of ancient forest, ranging in size from 78,000 to 380,000 acres, for research on forest management. "From a biologist's point of view, what we've proposed is eminently reasonable," says Jerry Franklin, a University of Washington forest ecologist who served on the ecosystem working group that recommended 10 different forest plans, including the one picked by the Clinton Administration.

But not everyone shares Franklin's view, especially on salvage logging, which now accounts for about 20% of logging on federal lands. Although the forest plan does not specify how much of the 1.2 billion board feet of lumber to be removed from ancient forests each year will be salvage timber logged from reserves, environmentalists allege that the service anticipates a higher level of salvage logging than most people anticipate. Their evidence includes a December 1992 memo from one Forest Service timber manager to another that states, "...even if a sale is totally green, as long as one board comes off that would qualify as salvage... it should be called salvage. It's a political thing." Claims Greg Aplet, a forest ecologist with the Wilderness Society: "It's pretty obvious they intend salvage to make up a portion of that cut."

JILL BAUR MEISTER/USDA FOREST SERVICE

Scientific snags. Should dead trees be cut in reserves?

There's no dispute among environmentalists and working group scientists that salvage logging will affect spotted owls and other wildlife. What separates them is their estimate of the magnitude of that threat. Spotted owls often make their homes in snags—jumbles of dead trees and brush—as do flying squirrels and woodrats, two favorite prey for owls. "If you look at organisms we're worried about, most to some extent depend on this dead wood for a nesting cavity," says Ed Starkey, a National Park Service biologist and working group member. In addition, insects that live in downed trees help recycle organic nutrients, says Oregon State University entomologist John Lattin, adding that the trees also provide insects with a refuge during forest fires.

Indeed, an interagency committee considered dead wood so important to the health of old-growth forest ecosystems that it recommended in a 1990 report the cessation of all logging—including salvage operations—in reserve areas unless such logging could be shown to benefit the owls. The new plan shifts the burden of proof, allowing salvage operations that pose no threat to the owl.

"It's an incredible loophole," asserts the National Wildlife Federation's Rick Brown. "I don't think scientists fully appreciate the perversions that can happen on the management side," he says, referring to scant monitoring that can lead to practices indicated in the Forest Service memo.

Working-group scientists acknowledge that the salvage provision departs from past recommendations, but they say the shift is scientifically justified. "What's evolved is a greater willingness to deal with management inside reserves in order to deal with fire and disease problems," says Jack Ward Thomas, a respected wildlife biologist at the Forest Service and the working group leader. He argues that salvaging, when done moderately, will reduce the threat of fires and of massive outbreaks of tree disease. Besides, Thomas says, the plan places salvage logging under heavy restrictions, for example, only in areas that suffer more than 1 acre of damage from fires or pests and only to trees smaller than 20 inches in diameter. "The conservative side of me says we shouldn't remove any dead wood, but the literature suggests that the large-diameter material is most valuable," Starkey says.

Don't expect the environmentalists to accept *any* salvage in the reserves, however. They may challenge the provision when the forest plan is submitted for public comment later this year. The burden of proof that salvage logging—however limited—will not harm the ancient forest ecosystem "should be on those who want to manipulate the stands, rather than on those who would protect them," Brown says. In 1988, the Forest Service did begin an experiment to determine how important log decomposition is to old-growth forest. However, barring a last-minute compromise, the question of the impact of salvage logging on forest species seems more likely to be settled in court than in the field.

–Richard Stone