

Old Growth in a New World

A PACIFIC NORTHWEST ICON REEXAMINED

EDITED BY

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Chapter 11

Starting the Fight and Finishing the Job

ANDY KERR

It wasn't until the 1970s that scientists started taking a closer look at old-growth forests in the Pacific Northwest. Until then these forests had been typecast as "biological deserts" to justify their replacement by timber plantations. Although they did not fully realize it, the pioneer scientists poking around in these uncharted ecosystems were on the verge of opening a magnificent treasure trove of discovery, one that would affect the region's development for many decades to come.

In the late 1970s, I attended a meeting with U.S. Forest Service research scientists on the Oregon coast, where I ended up in the bar at the Inn at Otter Crest. On my left was Dr. Jerry Franklin, even then the preeminent authority on Pacific Northwest forests. On my right was Dr. Jack Ward Thomas, even then the preeminent authority on Rocky Mountain elk. Both had had more than one regional forester try to get them fired for their science. Fortunately, they were in the Forest Service's research branch, and those who wanted them fired were on the agency's National Forest System side. They went on to become the two most powerful scientists in public forest policy, figuratively being carried to greatness by the talons of the northern spotted owl.

The presence of alcohol and the passage of time have caused me to forget most of the bar talk. However, I remember Jerry being

pessimistic about the timber juggernaut's ever being reined in. At the time, two square miles of Oregon old-growth forest was clearcut each week. When Dr. Old-growth was so down, I could but quietly cry in my beer. I was doing so, when Dr. Wildlife loudly weighed in with optimism that things could and would change. Awed by both, I said nothing. Jerry, ever the skeptical and inquiring scientist, asked Jack why he thought things would change. Jack boomed out (concurrently punching my right shoulder with enough force that I had to use my left arm to counterbalance), "Because sons-of-bitches like him are going to cause trouble."

Who was I to argue with science? Actually, at the time there wasn't much published science with which to support sons-of-bitches' arguments, but that barrier was soon to be breached by a strategic leak. A few years before it was published in 1981, a Forest Service research branch draft report was leaked to the Oregon Natural Resources Council (ONRC). Conservationists feared that political pressures from Big Timber would prevent publication of the report, *Ecological Characteristics of Old-Growth Douglas-Fir Forests* (Franklin et al., 1981). As a result, enough draft copies of the report were passed hand-to-hand that it became a classic even before publication.

This fifty-two-page booklet energized the emerging debate over old forests. On the one-page summary of sixteen points, the eight authors exploded the major myths surrounding old-growth forests. They are not biological deserts. Dead trees—both standing and downed—are ecologically critical. Productivity is very high. Structure and function are very complex. Natural stream function depends upon old trees.

As is often the case when the emperor is wearing no clothes, speaking up has powerful political repercussions.

Concurrently, other scientists were learning about what would become the ultimate flagship and indicator species for the old-growth forest. The first northern spotted owl I saw was in a cage in Eric Forsman's (Dr. Spotted Owl) (see box 4.1) backyard in Corvallis. I recall no epiphany from this interspecies eyeballing, but it must have had some effect.

Initially, conservationists feared petitioning to list the species under the Endangered Species Act. It was a time when Oregon U.S. Senator Mark Hatfield—and other powerful politicians with sawdust coursing in their veins—would readily change the law if conservationists were successful in using it to limit old-growth logging. Eventually conservationists realized that the law is only meaningful if enforced, and so began a barrage of lawsuits citing a panoply of federal statutes and regulations.

First the Words . . .

In the early 1980s, as ONRC was bringing the first administrative appeals of timber sales in spotted owl habitat, we debated calling these magnificent natural forests anything but *old growth*. We had our reasons.

First, foresters then defined *old growth* as any tree older than silvicultural rotation age, or culmination of mean annual increment the point at which the maximum growth rate of a tree begins to slow. For Douglas-fir, this was around eighty years of age. To maximize wood volume, a forester would then clearcut and replant.

Second, the timber industry defined *old growth* as any tree older than the economic rotation age (age at which harvest will generate maximum revenue). Because time is money and even young trees have value once they reach a certain size, trees more than twenty-five to forty years of age were "old growth" to a capitalist. To maximize shareholder value, an accountant would then clearcut and replant (but only because the law required such; growing trees is not particularly profitable).

Third, scientists didn't have a common definition of *old growth*. They still don't. In hindsight, this is understandable because old-growth forests don't just become this way overnight, and characteristics vary by species, site, and other factors. Supreme Court Justice Potter Stewart said it of pornography, but he could have applied the thought to old-growth forests as well: "I shall not today attempt further to define the kinds of material I understand to be embraced . . . [b]ut I know it when I see it."

Finally, America is a youth-worshiping society, and *old* is generally not perceived to be desirable. In addition, *growth* as a noun is something one has a surgeon remove.

I favored calling it *primeval* forest, recalling Henry Wadsworth Longfellow's *Evangeline: A Tale of Acadie* (1847):

*THIS is the forest primeval. The murmuring pines and the hemlocks,
Bearded with moss, and in garments green, indistinct in the twilight,
Stand like Druids of eld, with voices sad and prophetic,
Stand like harpers hoar, with beards that rest on their bosoms.*

ONRC Executive director James Monteith argued that *primeval* was an archaic word more likely to be interpreted in this modern era as "prime evil." He favored *ancient* forest ("having had an existence of many years,

having the qualities of age or long existence, venerable”) and carried the argument by noting that “ancient” had but two syllables and seven characters.

Thereafter, we started referring to ancient forest. Within two weeks, “ancient forest” was in a headline of a story in the *Eugene Register-Guard*. The timber industry howled, citing the fourth dictionary definition of “ancient” (“prior to the fall of the Roman Empire in 476 AD”) and noting that old growth isn’t that old.

Actually, some of it is.

Conservationists were about to confirm their suspicions that controversy could be the forest’s best friend. As Frederick Douglass noted in the nineteenth century, “If there is no struggle there is no progress.” Like it or not, social progress comes from social tension—and most change comes at funerals.

Besides “branding” the ecosystem for political marketing, attention had to be drawn in other ways besides litigation. One successful strategy was nonviolent civil disobedience—specifically, tree sitting. Although many would plot tree sitters as dwellers on one edge of the human bell curve, tree sits helped bring attention to ancient forests and generate media coverage. Initially, the regional media were missing the story—precisely because it was local. Before the old-growth issued “flamed” publicly, I toured a British reporter through some old-growth forests. It became a big local news story that a reporter from the *Times* of London was covering a Pacific Northwest issue.

The Oregon congressional delegation was stunned when I was quoted in *Time* magazine as saying that expecting them to deal rationally with the end of ancient forest logging in the 1980s was like expecting the Mississippi delegation to deal rationally with the end of segregation in the 1950s (Seideman, 1990). Senator Hatfield was livid and yelled at the *Time* editors (the magazine later used the quote again). For the next decade, Congressman Ron Wyden (later to succeed Hatfield in the Senate) referred to the quote every time he saw me. Both were so stunned because both were active for civil rights. However, both were politicians of their time and place, not unlike Strom Thurmond and George Wallace.

Then the Science . . .

The role of science in informing, guiding, controlling (and yes, sometimes confusing) the debate about the future of Pacific Northwest forests has

been remarkable. More than once, I found that the latest scientific recommendations went beyond what conservationists had been advocating.

Science played such a crucial role in the old-growth forest logging controversy because the controversy was a politically unsolvable issue. The revelations about the warm-blooded and extremely mediagenic northern spotted owl's dependence upon old-growth forests set up the political paradox. As more science came out about the habits and habitat needs of the species, the politicians didn't know what to do. Playing to Big Timber's arrogance and paranoia (denial is not just a river in Egypt) and also playing for time, the political response was often to call for more science ("study"). Out it would come. When the truth about spotted owls could no longer be denied, the *timber-industrial complex* (timber industry, timber bureaucracy, and timber state politicians) said that old-growth dependency may be true for one species but certainly not others. Then came concern about the marbled murrelet, Pacific salmon, and potentially thousands of other species (not the least of which is the Malone jumping slug).

In 1991, congressional staffers convened a meeting of research scientists and agency bureaucrats at the Inn at the Quay in Vancouver, Washington. Although not invited, conservationists rented the closest room and stocked it with booze to lure the thirsty attendees after their meeting. Yet another scientific exercise was commissioned during the meeting, and later I was lobbying Jack Ward Thomas and Jerry Franklin (this time *standing* with our drinks) to include Pacific salmon stocks in the analysis. Jerry—understandably feeling daunted by the task and timetable just handed him—resisted, but Jack reflected a moment and loudly said, "We're going to do it." I am not suggesting that incorporating Pacific salmon into the political cocktail that started with the spotted owl was due to my lobbying prowess or a drink loosening Jack's tongue, although alcohol may have freed both our minds a bit. It was simply inevitable that the public debate over these two iconic organisms would be combined.

Eventually, the timber industry wised up and quit trying to fight the science of old-growth forests. They have since diverted the context of the debate to focus on what to do after natural disturbance of a forest (fire, windthrow, insects, disease, etc.), where the science wasn't as well developed. In addition, the public has been brainwashed by Smokey Bear, and most think that a singed forest (poor Bambi) is a lost forest that might as well be clearcut and planted. The last best chance for the timber industry to log federal forest lands is by exploiting the public's unbounded ignorance of wildfire. The public loves old trees, scenic forests, healthy watersheds, and roadless areas. The public does not love burned forests.

Yet.

As political controversy deepened, so did the science of old-growth forests. Each new scientific report noted that it was necessary to conserve and restore even more land to maintain a functioning forest ecosystem, both across the landscape and through time.

Today, the debate over the definition(s) of old-growth forests has been won by scientists and accepted by the public, although scientists themselves continue to dicker over the details. Meanwhile, Oregon Wild research shows that both "old-growth forest" and "ancient forest" poll equally well.

And Finally, the Religion

Although science drove the Pacific Northwest forest debate publicly, not readily acknowledged was the religious dimension. There is no doubt that religion was an undercurrent of the economics versus ecology debate, although all sides generally avoided any public mention of it.

Although there were exceptions to the rule, those who fervently advocated for ancient forests were motivated not only by the science but also by spiritual and moral components. These components were expressed in various ways: Christian stewardship (i.e., we don't have a right to destroy what God created), worship of nature (some people do hug trees), and/or worship of science (in which science coincided with core beliefs).

Equally the case, those who fervently advocated against old-growth forests were motivated not only by greed but also by spiritual and moral components. These components were expressed in various ways: Christian stewardship (God gave us these forests to use and improve), aversion to nature (the wild is to be tamed for the good of all humankind), and aversion to science (because science conflicted with core beliefs). An acceptance or rejection of the science of evolution is a good—but, of course, not perfect—predictor of the stance one takes on leaving forests standing.

Today, the debate over old-growth forests is finished. Polls tell us that vast majorities of the public don't want any more old-growth forest logged. They don't even want any "mature" forest logged—80- to 149-year-old trees. Federal forest logging levels everywhere have fallen dramatically. Most of the timber industry has downsized and resized to survive mostly on smaller logs from private lands. The number of mills still operating in the Pacific Northwest that are capable of even milling a very-large-diameter log can be counted on two hands (no need for feet).

President Bill Clinton was a big tree between a couple of bushes in more ways than one. The spotted owl hit the fan during the term of George H.W. Bush, and the timber industry counterattacked during the terms of George W. Bush. In between, Clinton, who was a very successful politician and also a policy wonk, solved the Pacific Northwest old-growth forest issue—politically, although not ecologically. Yet, as in the Battle of the Bulge, the timber industry, led by George W. Bush's undersecretary of agriculture Mark Rey, counterattacked with great force, seeking to undo the Northwest Forest Plan. Nonetheless the fall of Big Timber—perhaps just like that of Berlin—was inevitable.

The challenge for conservationists was to provoke a political crisis commensurate with the ecological crisis. By all measures, they achieved this. The dramatic change in public policy toward Pacific Northwest old-growth forests is unprecedented in conservation politics and most other kinds of politics as well. Northwest public timber-cutting levels plummeted eighty to ninety percent in the course of this relatively civil war for forests. The political half of my brain is very pleased with the progress, but the ecological side knows that while the worst bleeding has been staunch, the patient is still losing blood and is quite weak.

So Where Are We Going?

Enough reminiscing about the past thirty years. It's time to speculate on the next three decades of public forest and private timber management in the Pacific Northwest. And if I suffer from wishful thinking in this endeavor, it is no more or less than I always have.

- *More people.* The region will become more urbanized. In the early 1990s, a poll revealed that a vast majority of Oregonians didn't even know anyone who worked in the timber industry, never mind did they work in it themselves. This will increasingly become the case as the timber industry continues to shrink in economic and social importance, in both relative and absolute terms.
- *Competing uses for biomass.* The economics of forest biomass will change. As the United States comes to its senses on global warming, it won't be just about reducing fossil fuel emissions but about transferring excess atmospheric carbon back to the biosphere. Growing—and not logging—forests is the most proven form of carbon sequestration. In time, the carbon industry will outcompete the timber industry in acquiring biomass.

- *Naturally occurring young forests.* More rare than old-growth forests, young forests that naturally developed after disturbance will be greatly valued in the future (after an initial period of controversy over salvage logging) because they are extremely important biologically, having the legacy of the previous old forest and the productivity of the young forest. Such forests are rare because of decades of systematic salvage logging and artificial replanting after natural disturbance.
- *Congressional protection of natural forests.* Prior to the ancient forest war (1984±5 to 2014±5), battles for forest conservation were primarily fought in Congress in the context of designating national parks and wilderness. The ancient forest war was fought mostly in the courts of public opinion and law. Congress was a minor arena, because it was politically divided, as (initially) was the public. In the future, Congress will legislate protection not only of big trees but of natural processes because the public will increasingly value them.
- *Challenging the fire-industrial complex.* The timber industry's last best chance to log public forests is in the name of "salvage" logging after a forest fire, a process named to even greater effect than ancient forests. The *fire-industrial complex* (an iron pentagon of the timber industry, government bureaucracy, old-guard foresters, elected politicians, and private firefighting corps) conspires for its mutual self-interest at the expense of both naturally functioning forests and the public treasury. Tighter fiscal times, increased scientific knowledge, and public outrage as this racket is exposed will bring dramatic changes to forest management.
- *Three decades and you're out.* At most the timber industry has three decades before any significant commercial logging ends on federal public lands. Social attitudes toward forests—especially public forests—will continue to change. The ever-urbanizing public will value scenic and ecological function more than wood products and stumps. The public will increasingly value the federal public forests for goods and services that the private sector is unable or unwilling to provide. Supply and demand affect the price of wood, but the social effects on price are even greater. As magnificent forests become more rare, they are more valued by the public for reasons other than board feet and chips. Economically, socially, and ecologically, timber production is no longer the highest and best use of the public forests, where much of our remaining old-growth forests reside. Such will increasingly be the case also with private timberlands.

- *Three decades of public forest restoration.* Big Timber's last three decades will trace an inevitable decline, but this final decline will be deferred because of the ecological necessity of often (but not always) using chain saws to repair and/or remove unnatural configurations and amounts of wood from the forests. Monoculture plantations in wet Westside forests can often benefit from variable-density thinning to accelerate the onset of late-successional characteristics. Similarly, many dry Eastside forests have unnatural buildups of understory trees due to high-grade logging, fire suppression, and livestock grazing. Reintroducing fire to these ecosystems is critical, but the danger from otherwise beneficial ground fire being carried into the residual old-growth canopy via this unnatural buildup of ladder fuels is significant. Thinning from below is often ecologically desirable. Industry can profitably thin both plantations and fire-suppressed stands on federal forests, and this should be done sooner rather than later. However, the backlog of excess biomass won't last forever, as forests will be regulated more by nature than chain saws.
- *Trees grow more slowly than money.* Increasingly, fiber is fungible and products traditionally made of wood—such as construction and paper products—have substitutes, some often bad (steel, petroleum-based plastics, etc.), and some good (agricultural wastes now mostly burned, etc.). The unsolvable problem of forestry is the time-value of money. As the timber industry moves from its hunter-gatherer phase (find a forest and clearcut) to its agricultural phase (plant fiber, wait, and harvest), it finds shorter rotation fiber crops to provide better returns on investment than long-rotation trees. Fiber production will move to the farm from the forest.
- *Marketizing nontimber forest values.* Economic markets will develop or be refined to value biodiversity, water (both quality and quantity), carbon, open space, recreation, habitat, medicinal molecules, and other forest products. Market forces will apply more—but not exclusively—on private timberlands than public forest lands. An interesting economic and social question will be whether it is more efficient for the public to obtain nontimber forest benefits by subsidizing and otherwise encouraging such markets or by simply reconverting private timberland to public forest land, thereby removing these areas from the pressures of the market.

Conclusion

The days of logging old growth are effectively over, for it has become politically incorrect to log old or big trees. The debate on the future of old growth has waned, although there is still some fizzing and fuming. The chore now is simply to mop up the pockets of resistance. Although conservationists remain ever watchful of the primeval forests they have helped remove from the path of the chain saw, other battles and other bars await.

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