

What's the Big Idea?

Embracing Ecological Forestry

By Howard Silverman

Driving along backcountry roads, on route to a favorite hiking spot, I stopped to fill up the gas tank. While standing in line to pay, I noticed that the corndog machine, full of deep-fried wieners on rotating spits, posted a handmade sign on the front: "Spotted Owl Legs." I couldn't help but laugh, but as I left, I reflected on how the issue of forestland management continues to divide this region like no other.

On the one hand, factors such as increased mechanization, the concentration of milling capacity, and a slowdown in logging have led to hard times for some communities. On the other hand though, the last few decades of industrial-style logging have put clean water, salmon, and wildlife at risk.

Are there viable grounds to reconcile these perspectives? Thanks in part to huge strides in the scientific and economic understanding of forests and their role in our society, a third way has indeed begun to emerge. We've touched on many of the key pieces in this issue of SectionZ. Call it the radical middle. Here are the main points:

- Life cycle analysis, comparing factors such as energy and water consumption, shows that wood is a more environmentally friendly building material than steel or concrete.
- A report by the World Wildlife Fund finds hopeful signs that, with increased efficiency and independently certified management, two and a half billion acres - currently close to a quarter of the world's forestlands - can satisfy global demand for wood products into the future.
- On West Coast timberlands that have already been cut at some point in their history, foresters have developed a type of logging that maintains, or even enhances, biological productivity, while also providing both good jobs and a return on investment.
- To provide guidance to both citizens and consumers about good forest management, one clearly credible, international, third-party certification system has emerged - the Forest Stewardship Council (FSC). FSC certification allows consumers, for the first time, to know that their wood purchases are not contributing to destructive, short-term forestry practices. In fact, they are directly supporting forestry that balances economic, social, and ecological concerns.

It adds up to this: A new model of ecological forestry is possible. We can have both the forests and the lumber - but only if we can move past the mistakes and acrimony of recent decades.



"Landscape management alternatives can serve both commodity production and non-timber goals."

- Bruce Lippke
Co-Author, "Economic Analysis of Forest Landscape Management Alternatives"

Homeland Securities

With global competition forcing prices down and West Coast mills shutting their doors, the regional timber industry has been in the doldrums. Given those factors, one might think that timberlands haven't been a great place to grow one's money. But that assumption would be mistaken. In fact, over the last thirty years, annualized returns on US timberland investments have averaged 14.5%, a payoff that beats Standard and Poor's 500-stock index by nearly four percentage points. Even in the midst of the slowdown, ten-year annual returns for the Pacific Northwest reach close to eight percent.

On commercial timberlands around the nation, vertically integrated companies have been following a business model described by Robert Mendelson of the Yale School of Forestry as "timberlands were owned to feed the mill." In other words, optimizing the productivity of the mill - by managing timberlands to guarantee a flow of logs - has been a key goal. But now land ownership patterns are in flux. Changes in investment rules have led institutions to invest in forests under the umbrella of "timberland investment management organizations" (TIMOs). These funds don't have a capital-intensive mill to answer to, and so have more leeway in their management of timberland assets.

Is this a positive development for those who care about stable jobs and the biological integrity of our forests? That depends. Some TIMOs see their ownership of forestland purely as a way of maximizing their short- and medium-term returns. But a few others are taking the opportunity to establish the kind of working forests that we've written about in SectionZ.

Thus far, investment dollars earmarked for ecological forestry have flowed to the hardwood forests of the Northeast, Midwest, and Southeast. The largely softwood forests of the West have yet to see these ventures take hold. Here in our home terrain, Ecotrust has launched a fund - Ecotrust Forests LLC - to demonstrate a new model of socially responsible investment in our homeland. Ecotrust will manage forests for timber, as well as for other values such as habitat for salmon and carbon sequestration to stabilize our climate - all of which can contribute to the forest's financial returns. Where others see timberlands, we see a forest.



Drawing Lines

As we've come to understand the forest better, much of yesteryear's conventional wisdom turns out to be less than accurate. Within the last decade or two, alder trees were attacked with herbicides as a "weed" species, but we've learned that they have value both as timber and as soil-builders that enrich the growth of Douglas fir. And in past years, loggers used to chop down snags - standing dead trees - for safety reasons. Now they are cut only when absolutely necessary, because they provide habitat for woodpeckers, bats, and other creatures. Our understanding of forest dynamics has truly come a long way.

Notions of how to protect the forest have evolved as well. Since the time of John Muir, strategies for conservation have relied on lines drawn across maps, fencing off nature with "do not disturb" signs. But ecology tells us that biodiversity will not be preserved in isolated patches. With the vast majority of forestlands already logged in-whole or in-part, this strategy has become anachronistic. What's more, economics suggests that removing some forestlands from the pool of available timber will increase pressure on the land that didn't win protection. Perhaps most damaging of all is this: We begin to think that a "habitat" - the stuff on the other side of the line - is something for other animals, but not for us.

These days, we are learning to see the landscape as a whole. All of it is habitat, including the parts that provide us with sawlogs, chips, and firewood. Even as we cut down trees, we can still consider our impact on the other creatures that call the forest home - and which coincidentally also contribute to its ongoing productivity.

Our new conservation strategy is one that draws lines, not on maps, but around human behavior. Through self-restraint and mutual agreement, we can adopt new ways of providing for our needs that accommodate the owls, the salmon, and ourselves. After all, we live in the landscape, just as the owls and salmon do. For forest management, hard-won guidelines that provide our best shot at biologically viable, working forests are already available - from the Forest Stewardship Council (FSC).

Seeking a path that harmonizes our needs with those of other creatures turns out to satisfy two ways of looking at the world, and can please those who like their spotted owls on the wing, as well as those who joke about roasting them on wiener sticks. One is the utilitarian argument - a stance that emphasizes the best interests of humankind. Philosopher John Stuart Mill summarized its ethical equation as: "Actions are right in proportion as they tend to promote happiness." Working forests become more productive when we treat them as whole systems, so FSC-approved forestry would make Mill happy. But we might also consider another way of grasping these issues - call it the stewardship argument. It's ethical equation was perhaps best expressed by naturalist Aldo Leopold: "A thing is right when it tends to preserve the integrity, beauty, and stability of the biotic community." At this point in human history the two arguments point to the same conclusion. Perhaps they always did.



"We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect."

-- Aldo Leopold
Author, *A Sand County Almanac*

Notes

Life cycle analysis:

See SectionZ Facts and Footnotes.

World Wildlife Fund Report (pp.3-5):

Current consumption is 1.6 billion cubic meters, drawn from a landbase of 800 million hectares. Peak future demand estimated at two billion cubic meters.

<http://www.wwf.org.uk/filelibrary/pdf/forestind21century.pdf>

Total world forest cover estimated by UN Food and Agriculture Organization at 3,870 million hectares (p.ix):

<http://www.fao.org/docrep/003/y0900e/y0900e00.htm>

1973-2002 timberland annual returns: 14.54% vs. S&P 500: 10.66%, according to Hancock Timber Resource Group (p.3):

http://www.htrg.com/htrg/research_lib/quart_letters/pdfs/rn_port_div.pdf

1993-2002 timberland annual returns for Pacific Northwest 7.90%, according to Hancock Timber Resource Group (p.9):

http://www.htrg.com/htrg/research_lib/quart_letters/pdfs/rn_returns_02.pdf

Robert Mendelson quote:

<http://research.yale.edu/gisf/assets/pdf/yff/05.03.pdf>