Public Perceptions of Clearcutting

Despite widespread opposition to clearcutting, even among forestland owners, some foresters continue to think that lack of understanding is the source of public disapproval. To American citizens today, the forest is not just a fiber factory, to be manipulated to produce wood products for human consumption in an efficient and rational way, and trees are not just a crop. Now that the forest is no longer the exclusive domain of professional foresters, forest practices will not be acceptable unless they are compatible with prevailing beliefs and values—and until public trust in forestry is restored.

By John C. Bliss

Whatever your personal perspective on clearcutting, the term evokes vivid images. Denuded hillsides of stumps, or rows of vibrant green free-to-grow seedlings bathed in sunlight? A vestigial form of exploitation from the cut-and-run days, or an essential, science-based silvicultural tool to be defended and preserved? No other forest practice has engendered more public ire, or caused the profession more grief.

At its heart, the continuing controversy over clearcutting is essentially a social issue, not an ecological or technical issue. Were it otherwise, debate over clearcutting would not appear in the *Oregonian*, the *Atlanta Constitution*, or the *New York Times*. It is more about perceptions, values, and trust than about shade intolerance, economic efficiency, or even environmental protection.

This article is about public *perceptions* of clearcutting. "Perception" comes from the verb to perceive, "to become aware of through the senses" (Merriam-Webster 1987). Perception is variously defined as "a result of perceiving; a mental image or concept; awareness of the elements of environment through physical sensation; physical sensation interpreted in the light of experience; a quick, acute, and intuitive cognition."

Public perceptions of clearcutting, then, result from an array of phenomena, including sensory awareness, mental imagery, personal experience, intuition, and cognition. This is important: Perceptions do not arise from any particular set of "facts" alone, but rather

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Left: **Clearcut Douglas-fir in the Oregon Coast Range.**

from many diverse sources of human sensation and experience.

We are concerned here with human *perceptions* of clearcuts, not with clearcuts themselves. Because we humans know reality only through our perceptions of it, perceptions are pretty important. They play a major role in how policy decisions are made.

In the pages that follow, I want to make and defend three claims arising from my reading of the social science literature regarding public perceptions of clearcutting:

1. Public opposition to clearcutting is widespread. This claim is easily defended, given the overwhelming and consistent evidence from public opinion polls.

2. Public opposition to clearcutting is deep. That is, it involves many values and associations and arises from many sources. Defense of this claim will require deconstructing this opposition to get at its root causes.

3. Public opposition to clearcutting is symptomatic of public alienation from forestry in general. This is perhaps the most important of the three claims.

I'll conclude the essay by discussing those claims in the context of social acceptability.

Before launching into defense of the claims, I must make two personal disclosures. In my years as a field forester for the Wisconsin Department of Natural Resources, I personally marked many hundreds of acres of clearcut harvests, and I recommended the practice on perhaps thousands of acres more. The sight of a well-designed, well-implemented silvicultural clearcut does not repel me. I personally advocate keeping silviculturally sound clearcutting among the tools in the forester's toolbox.

On the other hand, I have invested a great deal of time trying to understand how American citizens view forestry, foresters, and forest practices, and why they feel the way they do. My conclusions will provide precious little comfort to those of you who hoped I might find in the research some justification for maintaining the status quo. So I hope that you will carefully consider the message I bring, and resist any urge you might have to shoot the messenger.

Public opposition to clearcutting is widespread

More than any other forest practice, clearcutting has been a lightning rod for public criticism. Public opinion polls conducted over the past decade have consistently documented widespread public opposition to the practice. Opposition has been found in every region of the country, among rural as well as urban populations, and even among forest owners. A few examples from around the country illustrate the general themes.

In a series of telephone surveys we conducted with the Gallup organization in the early 1990s, we sought to gauge public opinion in the mid-South regarding forest practices and policies, and to test the hypothesis that the views of forest owners were significantly different from those of the general public (Bliss et al. 1994, 1997). What we learned challenged several assumptions. First, southern citizens were no more accepting of traditional forest management practices, such as clearcutting or herbicide use, than were Americans in general. Only 14 percent of our respondents felt that clearcutting should be allowed on land owned by the government. Almost half, however, felt that clearcutting should be allowed on private land. In contrast to conventional wisdom, but in concert with several recent studies, we found no significant differences between the opinions of rural residents and those of urbanites. And forest owners were no more accepting of clearcutting than nonowners.

Confirmation of our results came more recently from West Virginia, where tree farmers were asked about their timber-harvesting experience and opinions (Egan et al. 1997). More than 80 percent of the owners agreed with the statement, "Forest landowners should be encouraged to harvest timber," and 68 percent had harvested timber at least once from their tree farms. Yet 55 percent took the position that "The general practice of clearcutting should be banned." There was no significant difference between those who had themselves harvested timber

and those who had not.

In a similar vein, a 1994 study reported that 59 percent of the general public and 57 percent of the nonindustrial private forest owners in Pennsylvania agreed that clearcutting should be banned (Bourke and Luloff 1994).

During this same period, forest sociologist Bruce Shindler and others were finding similar results in the Pacific Northwest (Shindler et al. 1993). They surveyed sample populations from Oregon and from across the nation to determine public support for various federal forest management policies. Sixty-three percent of the national sample and 57 percent of the Oregon sample agreed, "Clearcutting should be banned on federal forestland."

More recently, pollsters for the Oregon Forest Resources Institute (OFRI 1999) found clearcutting to be a "top of mind" issue. The survey began by asking participants, "When you think about Oregon's forests and how they are managed, what comes to mind?" Opposition to clearcutting was the most frequently mentioned specific association. Forty-three percent of the respondents reported that they opposed clearcutting on *private* land, 30 percent were neutral, and 27 percent supported the practice. The researchers found no meaningful difference between the responses of forest industry households and those of the general population, and indeed found "more balance than might be expected" across all demographic categories.

Those survey results are illustrative of a large body of data that leaves no doubt: Public opposition to clearcutting is widespread. But why is this so? What is it about clearcutting that so thoroughly turns off most Americans?

Public Opposition to Clearcutting Is Deep

Opposition to the practice is as deep as it is wide, by which I mean it is not due to only one cause; rather, it arises from diverse and complex reasons.

Aesthetics

Social research focused on public aesthetic judgments of forest practices has overwhelmingly concluded that Americans find clearcutting aesthetically offensive. Most research on scenic beauty assessment finds that forest scenes rated high in aesthetic quality contain large trees, low to moderate stand densities, grass and herb cover, color variation, and multiple species (Ribe 1989). Scenic beauty is reduced by small trunks, dense shrubs, bare ground, woody debris, and evidence of fire or other disturbance.

Becky Johnson and others (1994) assessed the aesthetic preferences of homeowners adjacent to Oregon State University's McDonald Research Forest, on the urban fringe of Corvallis. They found homeowners generally accepting of thinning forest stands, but not of clearcutting. A majority of owners expressed willingness to pay for scenic-protection easements that would prevent clearcutting of tracts adjacent to their homes.

In an assessment of perceived recreational and scenic quality of alternative silvicultural practices on the McDonald forest, Mark Brunson and Bo Shelby (1992) found, not surprisingly, that old-growth stands were judged most attractive, clearcuts least attractive, and partial cutting methods in between. In subsequent research, Brunson found that aesthetic judgments reflect not only what is seen, but also what the scenery represents to the viewer: Information about the scene affects one's judgment of it, though not always in predictable ways (Brunson and Reiter 1996).

Aesthetics are the main source of objection to clearcutting primarily among the "disinterested public," that is, casual viewers of forestry activities. They react to clearcutting primarily because of the way it looks. On the other hand, citizens who take more than a passing interest in forests and forestry, the "interested public," evaluate forest practices more cognitively, taking into consideration associations between the practice and other values important to them (Brunson 1993). In the minds of the interested public, clearcutting is associated with a host of negative images and consequences.

Negative Associations

Deforestation. In our mid-South survey we learned that many people associate clearcutting with deforestation. Most of our respondents, forest owners included, reported that they thought the extent of forestland in the region was less than it had been 50 years ago. They held this belief even though the region experienced an increase in forestland of almost 11 percent in the preceding half-century. Clearcutting in their minds was associated with a perceived depletion of the region's natural resources. This is also likely a factor in the Oregon public's opinions toward clearcutting, inasmuch as many Oregonians are unaware of the reforestation requirements of the Forest Practices Act (OFRI 1999).

Plantation forestry. Related to concern over deforestation is the association between clearcutting and conversion of natural forest stands to tree farms of monoculture plantations. In the mid-South, half of our respondents voiced concern over the trend toward converting natural hardwood stands to plantations of loblolly pine. Loss of biodiversity, increased use of chemicals, introduction of exotic species, and above all, industrialization of natural landscapes—all of these negative images of plantation forestry are associated with clearcutting.

Environmental degradation. More generally, clearcutting is associated in the public mind with a long list of environmental problems, including soil erosion, landslides, loss of biodiversity, and degradation of water resources. No doubt some public concerns are unfounded and some are misplaced. Certainly some environmental impacts of clearcutting are imprecisely understood and subject to debate. But there is little doubt that in the minds of most Americans, clearcutting is associated with environmental decline.

Excess and exploitation. Finally, many people view widespread clearcutting as evidence of irresponsibility, greed, or exploitation. I once interviewed a Southern Baptist preacher who owned a small tree farm in east-central Alabama. We spent the morning touring his tree farm, including an area he'd recently had clearcut. As we toured, the preacher and his wife complained bitterly about how the onslaught of regulations was sure to make

the tree farmer the most endangered species of all. Then, as we concluded our tour and drove back to the homestead, I asked about a large clearcut directly across the road from their house. The sight of that cut enraged the preacher, who declared, "Those SOBs cut right up to the road with no regard to their neighbors. There ought to be a law!" His disapproval was not with the practice of clearcutting itself, but rather with the poor judgment used in its implementation.

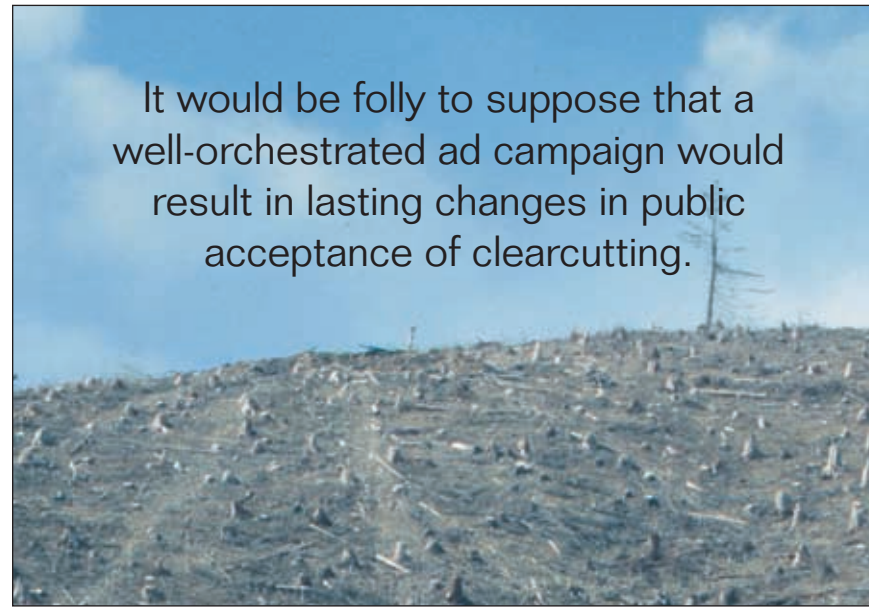
Mitigating Factors

Landownership. Some evidence suggests that citizens do not view all clearcuts as equally offensive. Several factors may serve to mitigate public rejection of the practice. I have already mentioned one such factor, landownership. Three times as many of our mid-South respondents found clearcutting acceptable on private land as on public land (Bliss et al. 1997). However, landownership appears to have less of a mitigating effect on public perceptions in Oregon. Seventy-nine percent of respondents in the Oregon Forest Resources Institute poll said that who owns the land makes no difference to their view of clearcutting (OFRI 1999). Two-thirds of respondents said it makes no difference whether or not the land is a tree farm. Their views on clearcutting have less to do with who owns the land, or for what purpose, than with the perceived environmental impacts of the practice.

Harvest characteristics. Harvest unit size, shape, composition, and distribution across the landscape also appear to influence public opinion. Less intensive harvests, such as thinnings, shelterwood, and seed tree harvests, are less strongly rejected than clearcuts. Smaller cuts, patchy harvest patterns, harvests that retain clusters of green trees, and harvests that do not dominate the landscape appear to be somewhat more palatable than conventional clearcuts (Ribe 1999). However, such physical modifications do little to change viewers' perceptions of acceptability unless they are accompanied by credible ecological justification for the practice (Ribe 1999).

Knowledge. Some research suggests that increased knowledge about forest practices raises public acceptability of them. For example, in our study of environmental opinions in the mid-South, we learned that if opponents of clearcutting were assured that harvested areas would grow back to trees, many softened their opposition to the practice (Bliss et al. 1997). Similarly, results of the Oregon Forest Resources Institute poll suggest a positive relationship between knowledge of the state's Forest Practices Act and greater approval of forestry activities.

Many of us in forestry think that if we could just get the public to understand the facts, their opposition to clearcutting (and many other practices) would dissolve. This notion assumes, incorrectly, that lack of understanding is the source of public disapproval. To the contrary, one's understanding of an issue derives from more than facts: It is born of personal experience, observation, beliefs, and values, as well as facts. Experts perceive issues in their field differently from lay people, and they are notoriously poor at understanding others' perceptions about their field (Kearney et al. 1999). It would be folly to suppose that a well-orchestrated ad campaign extolling the scientific basis for clearcutting would result in lasting changes in public acceptance of the practice.



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Public Opposition to Clearcutting Is Symptomatic of Public Alienation from Forestry

More fundamentally, clearcutting is emblematic of an industrial, utilitarian model of forestry—a model of the past. In that model the forest was a fiber factory, and through the judicious application of science, it could be manipulated to produce wood products for human consumption in an economically efficient, rational, and totally predictable manner. Clearcutting was ideally suited to the conception of forests as mere crops of trees. In that model the forest was the exclusive domain of professional foresters who knew what was best for the forest and could be trusted to do what was best for society. Ordinary citizens played no role in the model; forestry was left to the foresters.

Opposition to clearcutting is, in part, symptomatic of the public's rejection of that model of forestry. Many see clearcutting as an artifact from an earlier, unenlightened age, before foresters understood that trees were more than wood, and forests were more than trees.

I recently heard an illustration of this on Oregon Public Radio. A commentator praised the Boy Scouts of America for their good work with young boys but was incredulous to find the forestry merit badge book out-of-date. He was shocked by what he deemed the Scouts' irresponsibility in

treating the archaic practice of clearcutting as if it were an appropriate tool of modern forestry. It was as if the health sciences merit badge book had recommended applying leeches to treat tired blood!

Social Acceptability

I have now laid out the three claims I made at the outset—that public opposition to clearcutting is widespread; deep, arising from many different sources; and symptomatic of public rejection of "old forestry." Assume for the moment that I've adequately defended these three claims. So what? Is social acceptability a requirement for the continuation of forest practices? Or put differently, must forest practices be socially acceptable to be sustainable?

Walter Firey argued 40 years ago that successful resource processes (such as forest practices) must be physically possible, economically gainful, and culturally adoptable (Firey 1960). This triad of environmental, economic, and social requirements is now widely used to describe sustainability in forestry, agriculture, rural development, and other fields. Any practice that doesn't meet all three tests cannot long persist. In other words, a forest practice may be environmentally sound and economically feasible, but if it is socially unacceptable, it will be modified until it is acceptable—or it will be eliminated.

Bruce Shindler and colleagues offer several propositions regarding what makes forest practices more or less acceptable (Shindler et al., in press). First, people judge forest settings not only by what is there but also by *why* it is there. Conditions that arise as a result of natural causes are generally accepted, whereas conditions resulting from management receive increased scrutiny. Second, acceptability judgments are based on beliefs, values, and personal observation, as well as the geographic and normative context of the practice. Finally, Shindler et al. make a strong case that social acceptability hinges on public trust in natural resource agencies. Trust, they assert, results from decisionmaking processes that involve genuine dialogue and relationship building. Public acceptance of forest practices requires not only that such practices be compatible with prevailing beliefs and values, but also that public trust in forestry and foresters be restored.

George Stankey, a veteran Forest Service social scientist, proposes three premises that underlie social acceptability of forestry (Stankey 1996). First, natural resources are social constructs defined by their utility and value to society. Second, "What society values, and the management regimes judged appropriate to realize those values, can change" (p. 102). Add to this Stankey's third premise, that society possesses the political power to achieve its conceptions of acceptability, and you have a compelling argument that forest practices must be socially acceptable to be sustainable. From a social science perspective, I agree with Stankey's observation that "the challenges confronting forestry today have less to do with solving complex technical questions than they do with resolving the growing conflicts over the values of forests"

(Stankey 1996).

I confessed at the beginning of this article that I personally believe a carefully designed and implemented clearcut can be an ecologically sound way to accomplish particular silvicultural objectives in specific situations. I also believe, however, that continued, indiscriminate use of clearcutting can only further alienate the public from forestry, with regrettable consequences for the profession.

Although some foresters may hold out hope that "if the public only understood us, they'd love us," I submit that we would be better guided by the advice of St. Francis of Assisi: "Grant that I may not so much seek to be understood as to understand." I hope that reaching a better understanding of what the public values will help us grow forestry into a profession that is not only accepted by society, but honored by it as well.

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