What Are We Hiding Behind the Visual Buffer Strip?
Forest Aesthetics Reconsidered

Welcome to the American forest, where the trees have been arranged for your viewing pleasure....Imagine you're driving through your favorite national forest. It's trees, trees, and more trees, as far as the eye can see. "Isn't nature grand?" you sigh, unaware that the US Forest Service has used a sophisticated computer program to determine precisely what parts of the landscape you can see from the road, then designed a plan to log in areas you can't see.
Forest aesthetics provide the public façade for forestry ethics. Current policies send a hypocrirical message to citizens about the practice, intent, and ethics of forestry by suggesting that foresters need to disguise the practice of forestry. Such policies imply, to an increasingly wary public, that forestry is bad for the land and that foresters cannot be trusted. We hope that the profession will discuss and negotiate an aesthetics policy that is consonant with—or part of—its Code of Ethics. We review the implications for forestry of competing aesthetic policies, and conclude that forestry should embrace an aesthetic ideal that is analogous to a gardener's work of tending a garden.

By R. Bruce Hull, David P. Robertson, Gregory J. Buhyoff, and Angelina Kendra

The forestry profession has no official policy on forest aesthetics. Neither foresters nor the public have clear guidelines as to what a socially acceptable, actively managed forest should look like. Hints of an implicit policy can be found in the Society of American Foresters (SAF) position statements on timber harvesting and in various recommendations for best management practices found in state, federal, and industrial forestry publications. These implicit policies may send a hypocritical message to the public about the practice, intent, and ethics of forestry.

Current aesthetic policies hide and disguise the practice of forestry and suggest to an increasingly wary public that the practice of forestry is bad for the land and that foresters are not to be trusted. These are not beliefs that forestry should be promoting in an increasingly politicized and regulated environment.

The issues are not trivial: The visual environment is the filter through which the public encounters and evaluates both forests and forestry. These particular concerns and conclusions about forest aesthetics are not new and can be traced back at least as far as the writings of Aldo Leopold (Callcott 1992; McQuillan 1993) and much more recently in this journal to Gobster (1995).

Three Aesthetic Ideals

Three hypothetical aesthetic ideas provide a framework for discussion.

The romantic aesthetic idealizes untouched and pristine natural landscapes. A landscape management policy built on the romantic ideal would intentionally hide or disguise human modification of the land. Humans, if present at all, stand passively and almost outside the landscape, as awestruck observers of nature. Humans cannot improve on this romanticized nature, only degrade it.

The American version of this romantic ideal emerged in the 1800s, when writers and artists glorified the wild nature then being lost. It was motivated by concerns that core American values were being degraded by industrialization, urbanization, and materialism (Oelschlaeger 1991). Romanticism celebrates wild, untrammeled nature as a holy temple where one finds God, learns lessons about morality, and seeks contrasts with civilization. Nature has value because it is beyond human control, undisturbed, and original, and because it has endured the test of time and presumably will continue doing so if humans just leave it alone. Nature is assumed to know what is best.

The ecological aesthetic assumes that appreciation of ecological states and processes can produce intense aesthetic experiences. The more we learn about them, the more we appreciate them. If the view is messy, insect infested, or obstructed, so be it. People should appreciate and evaluate the ecological processes and management actions that produce these conditions. This requires educating the public about ecology and the ecological consequences of producing the goods and services society demands. Such an aesthetic promotes a clear and unfettered view of ecological systems and the ecological impacts of the management required to meet society's resource demands.

The tended aesthetic also highlights the ecological processes and products of the land, but it draws attention to the quality of management as well. The garden serves as an analogy: The garden has a gardener who is responsible for its condition. The tended aesthetic is characterized by an image of care, involvement, and responsibility. The consequences of human action are highlighted by human presence in a cultural landscape; evidence of management is a good thing. The tended aesthetic assumes that humans can improve on natural processes—that human creativity can enhance ecological diversity, efficiency, equity, productivity, integrity, health, and other as yet "unexpressed potentialities" of nature (Dubos 1980, p. 80).

For more detail about these and other aesthetic ideals, see Callcott 1992; McQuillan 1993; Oelschlaeger 1991; Nassauer 1997; Saito 1998; and Schauman 1998.

Implications for Forestry

Each of the three aesthetic ideals has different implications for forestry. By
exercising how some of the major tenets of forestry are related to forestry aesthetics, we hope to draw attention to the need for forestry to be reasoned and consistent in its implicit and explicit policies.

The science of ecology. Romantic notions about pristine, balanced, and self-regulating nature are the rationale behind numerous environmental policies and laws (Wiener 1996) and dominate lay understanding of environmental issues (Kempton et al. 1995). Contemporary disequilibrium ecology, however, has discredited such notions and the idea that Nature knows best (Botkin visually disturbing following clearcut and designated scenic overlooks. has discredited such notions and the actions

The manual advises that good silvicultural operations should minimize visibility, screen, reduce the line of sight, and avoid the appearance of management actions. Similarly, the current SAF position on clearcutting suggests that, in some instances, the practice degrades visual quality and recommends hiding those silvicultural


...foresters shifted from a proud stance of 'as long as we are practicing good scientific forestry, we have nothing to hide'...to defensive attempts to mask management activities whenever possible.”

—McQuillan (1993), p. 207

has discredited such notions and the idea that Nature knows best (Botkin 1990; Pimm 1991). Similarly, environmental historians have exposed the romantic myth of untrammeled, pristine nature and shown instead that all environments reflect extensive and intensive human intervention (Denevan 1992).

The popular romantic aesthetic ideal of a balanced and pristine nature is thus inconsistent with contemporary ecology. On the other hand, the ecological and tended ideals are more compatible with contemporary notions of ecosystem function and change with the notions of a historical and anthropogenic nature.

The role of management. Current forest practices applied in the name of aesthetic resource management seem to reflect the romantic ideal by advocating that the sights and sounds and other signs of management be hidden or disguised. In a pointed and controversial critique, Wood (1989) noted that the then-current Forest Service visual aesthetics policy advocated practices to deceive or misguide the viewing public. The policy recommended management actions that would camouflage, screen, appear natural, and leave no visible construction scar.

The same argument may apply to current private and industrial forest actions: “Forest stands are sometimes visually disturbing following clearcut harvesting...visual disturbance can be mitigated by maintaining buffer zones along roads and trails.” Such practices seem consistent with a romantic view of nature and inconsistent with the many SAF policies that suggest active forest management can improve forest health and productivity.

The ecological ideal, in contrast, tries to expose ecological processes and change. According to this perspective, unobstructed views of ecologically sound timber harvests illustrate both the ecological principles of silviculture and the impact of forest management required to meet social demands for fiber. Nature is neither pristine nor untrammeled in this aesthetic.

The tended aesthetic embraces and even celebrates the potential of human management. It focuses attention on evidence of management and care practiced by the forester. The forest manager is held accountable for improving upon nature. A tended garden, for example, usually looks better than an untended one. Some species are deemed weeds and are expected to be removed. Overgrown plants are trimmed. There is a respected effort to impose the human ideals of neatness and order on an otherwise wild and messy nature. Involvement and intervention in the garden are accepted and expected; letting nature take its course would be unacceptable. The garden’s produce and abundance instill pride; shame and embarrassment result from the garden’s failure. Nature can be many things, and the gardener helps define and produce things consistent with family or community expectations for economically feasible, socially acceptable, ecologically sustainable outcomes. The gardener is evaluated on the quality of these choices and on how well they are implemented on the land.

Social acceptability. Forestry is not unique in its tendency to hide or disguise the unseemly or unsightly. Most of us store garbage cans out of sight, place electrical conduits behind walls, use deodorant to mask body odor, and purchase meat wrapped in plastic. The romantic aesthetic ideal is frequently found in the landscapes of car commercials, picture books and calendars, and designated scenic overlooks.

The popularity of that ideal is well documented. Repeatedly, studies show that the public prefers landscapes without evidence of humans or human-wrought change. Some scholars argue that these landscape preferences are learned and culturally based—promoted by art, television, and books (Callicott 1992; Soper 1995). Other scholars have argued that these preferences are inherent and result from evolutionary pressures that predispose humans to prefer certain types of landscapes (Ulrich 1993). Whether nature or nurture causes preferences for the romantic aesthetic, these preferences are held by many.

Many people believe that Nature knows best and that human management only harms, never improves, on what nature does naturally (Kempton et al. 1995). Brunson (1993), for example, examined factors that make forest practices socially acceptable. He found that changes to a forest condition resulting from “natural” causes (e.g., forest clearing caused by wind) were more acceptable than changes resulting from intentional, active management by humans (e.g., harvest) and that management techniques replicating “natural” processes (e.g., fire) were
more acceptable than management techniques with less natural precedents (e.g., aerial spraying of herbicides).

The ecological aesthetic ideal views any effort to hide the means of production as pandering to people's "head in the sand" mentality. It argues that society should see and understand that the forest products industry is an integral part of ecological processes, and thus forest management should show not just how ecological processes operate but also the consequences of our consumptive lifestyles on these processes. Though it might be good medicine, this ecological aesthetic is likely to be politically unpopular because of the romantic aesthetic's dominance. The ecological aesthetic also may be difficult to implement because ecological processes are notoriously difficult to illustrate: They are often too big (e.g., water flow through a watershed), too small (e.g., carbon fixation), or too slow (e.g., species migration in response to climate change) to be easily or conveniently witnessed.

Perhaps the tended aesthetic has more potential to be socially acceptable than the in-your-face ecological aesthetic or the behind-your-back romantic aesthetic. Society has established expectations about how a garden should look. Nassauer (1995) recommends that land managers use "cues to care" to frame messy but ecologically healthy landscape patterns. For rural landscapes Nassauer (1992, 1995, 1997) identified such indicators of care as lack of weeds and erosion, contour plowing, windbreaks, trimmed shrubs, plants in rows, fences, and wildlife feeders. These interventions signal that the landscape is being tended and cared for by managers. Providing landscape cues that the public recognizes as care makes management actions more acceptable.

Nassauer (1992) describes applying an aesthetic of care to the USDA's Conservation Reserve Program. When millions of formerly cultivated acres were first planted with perennial cover to provide wildlife habitat and soil stability, many local residents saw the land as ugly, weedy, and neglected. Adding cues to care changed this apparently messy and abandoned landscape into one that was socially acceptable. Cues to care in logging operations might include signs describing reforestation efforts, visible erosion-control mechanisms, minimal mud on the road, minimal wasted and damaged trees, and a neat work site.

Recreation experiences. Recreation is one of the accepted multiple uses of forests and one of the justifications for attention to forest aesthetics. The romantic aesthetic provides profound and intense recreation experiences, as is evidenced by the popularity of wilderness recreation and the impassioned prose of American nature writing, a tradition that extends back to Muir, Thoreau, and Emerson.

Although less popular (largely because it requires the investment of personal time and energy to become educated about ecology), the ecological aesthetic also can generate intense and positive emotional reactions to the land. Leopold (1949) noted that aesthetic appreciation "begins with the pretty" but deepens with understanding of ecological and evolutionary sciences.

The tended aesthetic similarly produces emotional experiences—experiences that may be more lasting and significant than those produced by either the romantic or the ecological aesthetic. Jordan (1994) argues that active involvement with ecological restoration projects creates profound experiences in volunteers (see also Gobster and Hull 2000). Being involved, responsible, and informed about changes made to the environment may evoke deeper and richer feelings and memories than "leaving no trace" or passively observing a presumed pristine landscape. By taking responsibility, one feels pride or grief in the outcome. Recall that Thoreau experienced profound moments while working his bean field and Leopold felt great passion restoring his Sand County farm. One need look no further than the popularity of home gardening to find ample examples of a shared appreciation of a tended aesthetic.

Ecological literacy. Nassauer (1992, p. 239–40) noted that

If we assume that people want to live in healthy ecological systems, the problem is that the way the landscape looks might not tell us whether the landscape is healthy or not. If we can see that the landscape is not healthy, we might do something about it. But we are unlikely to do that if we can't see it!

The visual landscape is a powerful communication tool that can educate people about ecology and land stewardship. People learn from what they see. Forestry should take advantage of this opportunity to use forested landscapes to teach the ecological principles that inform forestry's ethics. Forestry aesthetics should promote ecological literacy.

Nassauer (1995) criticizes romantically motivated management practices because they create a "false identity" and confuse the public into associating picturesque landscapes with "good" land management. Contending that "what is good may not look good, and what looks good may not be good," she argues that implementing a romantic aesthetic makes impotent the greatest public relations device available to natural resource managers—the landscape people see (Nassauer 1995, p. 161). By hiding or disguising ecological consequences and processes, forestry promotes an ecologically ignorant public, a public that will be less capable of planning and negotiating an environmentally sustainable future, a public that may be more of an adversary than an advocate of ecologically sound forest management.

Both the ecological and the tended aesthetics strive to illustrate (rather than hide) ecological processes, thereby improving and demanding ecological literacy of the viewer. The challenge for forest and other land managers wanting to promote ecological literacy is to find metaphors or other mechanisms to make people aware of what is otherwise invisible or difficult to observe.

Public trust. The forested landscape is the most publicly accessible aspect of forestry. Foresters should expect, and even encourage, the public to evaluate forestry based on what it sees in the forest. Aesthetics should provide the public "a clear audit" of the land manager's ethics (Schauman 1998, p. 183).

The ecological aesthetic ideal is based on that premise. It attempts to expose ecological processes and the consequences of actively managing these processes to meet demand for
forest products and services.

The romantic aesthetic ideal, on the other hand, has the potential to be used deceptively as a public relations ploy. The romantic aesthetic ideal is, if you will, false advertising. Hiding the practice of forestry invites a skeptical public to think that forestry has something to hide. Forestry science claims to have developed ecologically sensitive and sustainable forestry practices and therefore should welcome inspection. Instead of hiding ecological processes and forest stewardship behind buffers, forestry should lay open, display, and exhibit forest ecology and the consequences of management.

A tended aesthetic can also be deceptive and subject to misuse. As Dubos (1980, p. xvi) notes: "I could not celebrate the wooring of the Earth without constantly having in mind the rape of the Earth." For example, streams that flow through the gardened lawns of suburbia often carry more organic and pesticide runoff than the most intensively managed agricultural lands (Jenkins 1994). Likewise, neat and tidy forests are missing the downed wood and understory vegetation that plays important roles in nutrient recycling and in fish and wildlife habitat. Some ecological functions may look messy even though they are ecologically appropriate and economically feasible. The tended aesthetic's association with neatness and control could easily be used to justify or motivate ecologically unsound practices.

**Implementing an Aesthetic**

If forestry adopts a tended aesthetic, it cannot blindly apply the social norms of the current neat, tidy, carefully tended aesthetic; rather, forestry must pick and choose those parts of the garden metaphor it advocates (McQuillan 1993). Forestry must be aggressive in this regard by taking a leadership role in shaping public tastes. Obviously such a policy has the potential to be abused. An advocacy role for a tended aesthetic could be subverted and the cues to care could be used to disguise forestry practices that are ecologically unsound.

In the end, the public's confidence in any land aesthetic will likely reflect the public's confidence in the profession advocating that aesthetic. We believe that forestry is more likely to earn public confidence if its aesthetic policy is consistent with its other policies and ethics. With these reasons in mind, several states are already advocating public relations efforts designed to show the public that "forestry cares" (Tappero 1998).

The forestry profession needs an explicit and serious discussion about its policy on forest aesthetics. If, as we contend, forest aesthetics provide the public façade for forestry ethics, then forestry practices should not appear hypocritical to skeptical citizens. Forestry's aesthetic policy should be socially acceptable, ecologically appropriate, easily comprehended, and economically feasible. We recommend that professional foresters design, implement, and advocate an aesthetic that:

- is consistent with the ethics, practice, and science of forestry;
- takes advantage of the visibility and communicative power of forested landscapes to help create an ecologically literate public aware of forest stewardship goals;
- builds public trust by providing a clear audit of the purpose and consequences of forest management; and
- is socially acceptable and does not ignore current public standards of taste.

The public's understanding and appreciation of the tended garden may provide a useful example. Forestry portrays itself as a responsible provider of forest goods and services and a responsible steward of sustainable forest ecosystems. The tended garden may be the metaphor with which to promote a forest aesthetic that is consistent with forestry's self-image.

**Literature Cited**


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