

Addressing Social Concerns

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Forest Operations Manual
The Conservation Forestry Program

Addressing Social Concerns

CHAPTER

6

6.1 The Nature Conservancy Philosophy

Typically, the idea of “conservation” conjures up images of protecting the natural environment – rare species, water quality, old-growth forests, and so on. And those issues, as the various chapters in this manual make clear, are critically important to The Nature Conservancy. But The Nature Conservancy created The Conservation Forestry Program specifically to balance these environmental concerns with the needs of the people who live in and near the forests we are conserving. This program recognizes that just as forest ecosystems depend on human protection in the face of increasing threats, human beings depend on the land for their own survival and well-being.

A healthy, well-managed forest can provide economic benefits, act as a repository for historical and cultural artifacts, and provide places of natural beauty for education, recreation, and pure enjoyment.



In light of these benefits, The Conservation Forestry Program has three primary goals as it considers the “human” side of the environmental equation:

- ☛ To promote the economic and social health of the communities surrounding the managed forestland
- ☛ To protect important cultural resources, such as cemeteries, historic farmsteads, archeological sites, and battlefields;
- ☛ To maintain the overall scenic beauty of the forest, particularly when planning and conducting timber harvests.

By taking economic concerns into account, The Nature Conservancy hopes to enable landowners who might not otherwise be able to manage for biodiversity, wildlife habitat, and related environmental concerns, the opportunity to do just that. At the same time, by considering cultural and aesthetic values, this program provides an opportunity for landowners who want to preserve the natural beauty of their landscape to contribute to the economic health of their community. This joint effort can help forge social bonds and sustain rural communities far into the future, preserving both people and land for generations.

6.2 Key Strategies

The Nature Conservancy is committed to addressing socio-economic, cultural, and aesthetic concerns within the program area, and each of these issues has its own set of key strategies:

- 1) To help promote the economic and social health of the region, forest managers will
 - ☐ Keep neighbors and local communities informed about management activities
 - ☐ Stay informed and involved in local issues affecting watershed management, particularly on managed land





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- Support educational programs related to the conservative management of natural resources
 - Manage forest resources for long-term productivity at the landscape level
 - Hire local contractors for forest management work when available
 - Work with partners to develop locally-based logging contractors, capable of harvesting in an environmentally acceptable manner
 - Work with partners to develop more opportunities for local and regional value-added wood processing
- 2) To help preserve cultural resources, managers will:
- Learn to recognize specific geographical features and on-the-ground clues that mark potential cultural resources
 - Include cultural resource locations on *maps* in all management plans
 - Develop appropriate management strategies to protect those resources
 - Mark resources on the ground to explicitly protect and isolate them from forest management activities
- 3) To help preserve and enhance the aesthetic value of the region, managers will focus primarily on harvest design and implementation that:
- Consider landscape-level aesthetics when creating forest stands and management areas
 - Lay out harvest boundaries to minimize the visual disturbance
 - Use aesthetics as one of the criteria when choosing which trees to cut and which to leave
 - In the timber sale contract, include when possible specific logging techniques designed to improve the overall appearance of the job, along with penalties for not adhering to those techniques

6.3 Understanding Human Concerns

As noted earlier, human concerns fall into three major categories: economic, cultural, and aesthetic. Each of these categories, in turn, contributes to the overall social well-being and quality of life for a community.

ECONOMIC HEALTH

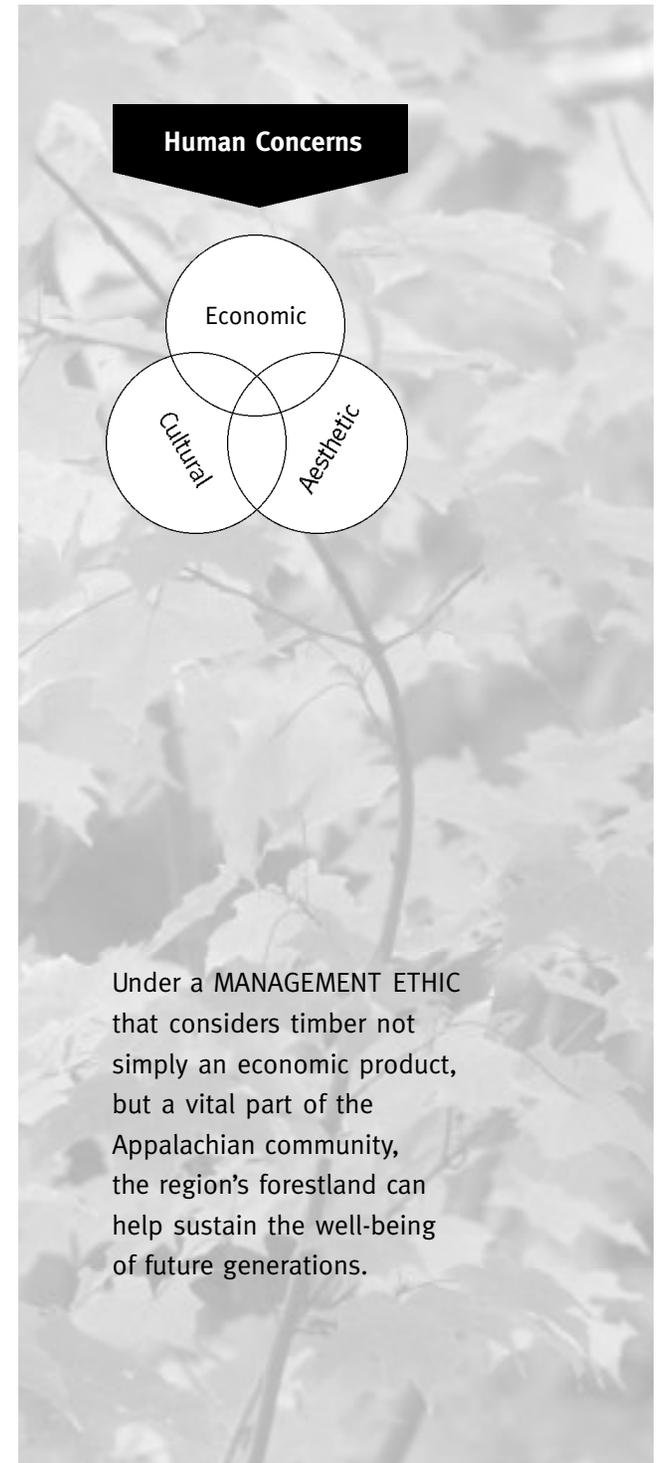
In southwest Virginia, natural resources such as coal, timber, and natural gas have been the heart of the region's economy for generations. Over the past century, increased mechanization in the coal mining industry and high-grading of the timber resource have decreased their supplies in places, leading to fewer economic opportunities.

The forest resources that remain, if properly managed, offer some of the most promising opportunities for renewed economic health, not only for this generation, but for years to come. Under a management ethic that considers timber not simply an economic product, but a vital part of the Appalachian community, the region's forestland can help sustain the well-being of future generations.

Central to these efforts is managing the land for long-term rather than short-term gain. Managers will work not simply to get the most money possible now, but to ensure that the forest can continue to provide income and employment far into the future.

CULTURAL RESOURCES

Cultural resources are the visible *signs* of life left by past inhabitants of the land; they include all artifacts or structures, whether standing complete or in ruins, that were created by human beings. Historic, prehistoric, archeological, and architectural objects and structures all fall into this category, which includes things such as old log farmsteads, collections of arrowheads, mansions, covered bridges, stone culverts, county courthouses, railroad stations and lines, dams and locks, coal mines, oil derricks, furnace sites, battlefields, coal





Natural Beauty

LANDSCAPE
from a Distance

FOREST
from Within

company stores, mills, schools, theaters, farms, brick plants, rock shelters, chapels, graveyards, pottery shards, fossils, indian petroglyphs, burial mounds, and so on. Even the landscape itself, shaped by these structures and artifacts, is a kind of cultural resource.

Protecting Cultural Resources

Once a cultural resource is located, the forest manager will include appropriate protection strategies in the management plan, depending on the nature of the resource. Important strategies include keeping slash and garbage out of cellar holes, quarry sites, or other historically significant depressions; felling trees so that they fall away from important structures; using only existing openings to cross stone walls; and protecting wells (and people) by installing concrete well covers.

Cemeteries merit special consideration; when dealing with old graveyards, forest managers should at a minimum, create a no-harvest zone around the site. Regardless of the resource type, forest managers should always flag or mark the structure or artifact clearly so that loggers and other workers know which areas to protect and monitor.

AESTHETIC VALUES

When defining goals for their land, many public and private landowners today place as much emphasis on aesthetics as they do on timber production. The peace and beauty of forest land provides a place of spiritual renewal for many of us, and landowners without immediate personal economic needs are often reluctant to harvest timber for fear of destroying an area's natural beauty.

Importantly, natural beauty exists at two different levels—the landscape seen from a distance, and the forest as seen from within. Each level has its own unique set of questions and concerns that forest managers should consider when planning management strategies and harvest operations.

Managers need to account for aesthetic concerns in the development of the overall management plan for a property and when developing specific harvest plans. But while logging is inherently messy, that mess does not necessarily translate into harm to the forest. Despite public perceptions triggered by the visible changes in the landscape and, at times, by poor logging practices that do in fact damage the environment, timber harvesting can be an important step for maintaining both the health of the forest and the economic viability of the local community. In fact, harvesting timber is often the only way to achieve some silvicultural improvements and to restore certain species.

Landscape Considerations

When people look at a landscape, they like to perceive a sense of order and harmony resulting from parallel lines, gentle curves, and overall symmetry. Such landscape views exist on a variety of scales – the view from the neighbor’s house across the valley and the view from a scenic overlook five miles away are both “landscape-level” vistas, and should be considered in management planning. By taking the entire landscape into account, forest managers can significantly improve both local community relations and public perceptions of forestry at large.





Two key questions guide landscape-level planning:

How sensitive is the landscape? Factors such as intrinsic qualities, visibility, and recreational use all influence how sensitive a particular area is to landscape-level concerns. Visibility, in particular, plays a key role; the number of people who see an area, its elevation, and its steepness all affect how visible management activities are in a region. The more sensitive the landscape, the more carefully forest managers should consider aesthetics when laying out management areas and creating harvest plans.

What is the heritage of the landscape? Beyond simply looking at “natural beauty,” people may value a particular landscape for its history, its traditions, even its association with artistic works. Managers should take particular care in areas with such associations to minimize any disruptions that management activities might cause.

When considering landscape-level aesthetics under these conditions, forest managers should consider four key elements of design:

Shape: The shape of a forest area, stand boundary, or open space influences landscape more than any other factor.

- When designing management areas, create forest shapes that match the surrounding landscape and follow the landform.
- Avoid geometric shapes, which stand out noticeably, along with parallel lines, boundaries perpendicular to or following contours, and right angles.
- Near hilltops, keep forest shapes at the appropriate scale, allowing them to reflect rather than parallel the rise and fall of the skyline; avoid small slivers of open land or fringes of trees. To avoid scale problems, maintain a completely wooded skyline.
- Upper stand boundaries should follow landforms, rising in concavities and falling on convex ground. The line should reflect the quality of the landform—jagged in rugged terrain, angular in angular topography, smooth on smooth ground, and so on.

Visual Forces: Visual forces occur when a static element creates an illusion of movement or energy, and they tend to draw the eye down convex slopes and up concave ones. Design forest shapes to follow these natural forces by rising in hollows and falling on spurs to create a direct, unified relationship between the two.

Scale: Scale involves the relative size of objects or shapes, and significantly influences perception. As a result, the scale of forest shapes should reflect the scale of the landscape, keeping in mind that the landscape scale increases with distance. The further you see, the wider your view, and the greater the differences in elevation.

Diversity: Diversity refers to the degree and number of differences in a landscape design. Forest managers should maintain some level of diversity, but keep in mind that too much diversity looks chaotic.

Forest Considerations

In addition to considering what the landscape looks like to people who view it from a distance, forest managers should also consider what the forest looks like to those who walk through it. Species composition; form, size, and number of overstory trees; and species and density of understory trees all affect the “look” of a forest. Understanding a stand’s species diversity, structure, intended uses, and health, along with information about future threats to species, all play a key role in managing forest aesthetics.

In addition, forest managers should keep the following principles in mind:

- ❑ Take landowner opinions into consideration, particularly concerning special trees such as those with initials carved in the bark, trees along old boundary lines or pastures, oddly shaped trees near streams, large open-grown trees, or trees with unusual bark or foliage.
- ❑ Keep several large trees with good form, interesting branching patterns, and attractive fall coloring in frequently visited areas.





James Johnson

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- ❑ Select crop trees for aesthetic appeal as well as potential timber value. Choosing crop trees with attractive flowers or colorful fall foliage, with an expected longevity of 20+ years, unique characteristics, or high visibility from travel corridors or adjacent streams can help enhance forest aesthetics.
 - ❑ During harvest operations, minimize damage to flowering understory trees such as dogwood, serviceberry, redbud, and witchhazel.
 - ❑ To reduce stand openness, cut fewer trees per acre and leave midstory trees intact.

6.4 Related Management Practices

Applying the strategies listed in Section 6.2 and preserving landscape and forest aesthetics involves a broad range of practices, including:

- ☛ Developing management plans (see Chapter7)
- ☛ Planning and managing harvests (see Chapter10)
- ☛ Laying out and building roads (see Chapter9)

