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## Understanding public perception of forest management

### Highlights

- Forest managers are increasingly required to work with the public in the development of forest management plans.
- Understanding public perspectives and the factors that influence them can assist managers in better communicating and sharing their forest management objectives and plans.
- Public perspectives are influenced by demographics, geographic location, education and interpretation of information.
- When local citizens are able to provide an advisory role in forest management decisions, acceptance of industry or government management increases substantially.

**Forest managers** are increasingly required to work with the public in the development of forest management plans. Gauging public perception is a complex task but a necessary one since forest policies and their successful implementation depend in part on public attitudes towards forestry and conservation. Experience is proving that ignoring public concerns can be a recipe for disaster and may lead to failed policy. In Canada, as in other countries, citizens have used legal and political tools to influence the policymaking process when they feel their interests have not been considered.

Increasingly, the forest manager's role as "expert" has been replaced by processes which allow a diversity of perspectives

to be considered. Perceptions and values held by citizens, when properly understood, can guide forest managers in forest management planning and public education efforts. Understanding these perspectives and the factors that influence them can assist managers in better communicating and sharing their forest management objectives and plans.

This research note summarizes some of the work done regarding public perception of specific forest management practices, and looks at how these perceptions vary across demographics and geographic location.

### Factors influencing public perception of forest management

#### *Perceptions vary by demographics*

Public perception of forest management practices vary according to socio-economic background, education, gender, area of residence and a host of other factors. Judgments leading to social acceptability of any given forest management practice are influenced by technical and personal knowledge but also by individual circumstances. Since circumstances can change over time, judgments may change as well.



Public perceptions of forest management vary by demographics. For instance, studies have found that women in northern British Columbia communities were more optimistic about forest management and its community benefits than their male counterparts. In the same communities, respondents with higher education (regardless of sex) expected very few positive results from forest management in areas related to business opportunities, better jobs, improved retirement circumstances and a healthier environment.

In another study, participants vacationing at the Nimmo Bay Lodge on British Columbia's mid-coast were accepting of minimal to moderate landscape modification but not of intensive forest management. They were generally younger, more urban, better educated and wealthier than average BC residents. Half of the respondents were from the United States and were predominantly male.

### *Perceptions are influenced by information*

Trust and credibility about the source and provider of information is another major factor in judgments of acceptability. Information from university or industry scientists, from government or non-governmental organizations can be perceived differently, despite its scientific rigour or accuracy. Regardless of the source, scientific information will always be subject to alternative explanations and varying interpretations.

Studies in the United States found that foresters, environmentalists, educators and the general public showed a common preference for minimal disturbance patterns in a forested landscape near Olympia, Washington. However, foresters were the only group to prefer intensive forest management practices. This not only points to the role of knowledge in perception but how that knowledge is interpreted.

This inherent variability of public perceptions presents a real challenge and means that working with and monitoring these perceptions is necessary and ongoing.

## **Perceptions of different forest management scenarios**

Specific forestry practices and their visual impact often play a significant role in the public's perception of overall forest management. Esthetic objections, however, are often only the first sign of public discontent that precede deeper concerns over biodiversity, long-term site productivity and even the trust and credibility of the source of information. How the public perceives information to be shared or not, and whether or not that information comes from university, industry or government scientists all contribute to how the public perceive forestry management practices.

### *Visual impact of forest disturbance*

It is no surprise that old-growth and intermediate-aged, regenerated forests are regarded as beautiful, rich and healthy in the eyes of surveyed community residents in northern British Columbia. Clear-cut areas were not favourably viewed and prescribed burned areas received the most negative reaction. Other researchers have found similar results regardless of the individual's prior exposure to arguments for either forest management or preservation. It appears that the visual response to nature is a strong, inherent 'gut' reaction.

### *Dispersed versus continuous cutblocks*

In a study of public perception of harvest block aggregation and alternative tree retention scenarios in BC's south-central interior forests, researchers found that the majority of participants perceived aggregated cutblocks to be a better form of forest management than smaller, dispersed blocks. This perception was reinforced when they were provided with information about the benefits of aggregation (i.e. harvest layout to more closely resemble natural disturbance patterns). Aggregated clearcuts that were open (or with limited tree retention) were viewed with some disdain, suggesting a perception of poorer management. Continuous clearcuts with dispersed green-tree retention were viewed more favourably.

### **Partial tree retention versus clearcuts**

Research indicates that the public still view clearcuts as an undesirable forest management practice and as “eyesores”. Surveys suggest that the presence of dispersed trees (e.g. retention or rapid green-up) in clearcuts is perceived as more natural and better managed.

Similarly, surveyed lodge visitors to Nimmo Bay in BC, while neutral about partial tree retention, found a harshly modified landscape (e.g. clearcuts) unacceptable. Seventy-seven percent indicated they would return to the lodge if the viewscape remained unaltered, 71% would return if the viewscape included some areas of partial retention (i.e. the modified harvest pattern is generally not visible), but only 42% and 35% would return if partial retention cuts and clearcuts (respectively) were visible.

### **Logging road and clearcut patterns**

A large majority of students at Lakehead University in Ontario, when surveyed for their perceptions of forest industry operations, felt logging roads were acceptable landscape interruptions (only 5% of those surveyed disagreed). Almost the entire educated group felt an irregular pattern of clearcuts that were greenish (i.e. containing regrowth) was more natural and acceptable.



**Figure 1.** The visibility of clearcuts may have a negative impact on tourism. Photo courtesy of S. Dallaire.

## **Public perceptions of forest management in other countries**

A look at public perception of forest management in other countries such as Finland, Britain and the United States highlights the impact that education and awareness campaigns can play on public opinion and approval.

The Finns, known for their positive view of forest management, generally trust their experts in the forestry field and feel that the forests in their vicinity are being very or fairly well managed. The Finnish forest industry is one of the top income-generators for the country providing both full- and part-time well-paid jobs. Conflict over forestry issues is more readily addressed since private individuals and families own 60% of the 22 million hectares of productive forest land. The Finnish forest industry places a large emphasis on education and has major campaigns in schools, which likely contribute greatly to the overall public approval of forestry. While Finland is a small, culturally homogenous country and very distinct from Canada, forest managers may wish to consider the influence that education has on public perceptions of forestry.

In Britain, by comparison, more than half of the adults surveyed by the government believe that forest cover is shrinking even though it has actually increased by 25% over the past two decades. It seems that environmental campaigns may have led to a negative image despite actual improvements in forest management in that country. This underlines the power of the media, and highlights that media support of the forest industry is critical for influencing public perceptions.

In the United States, the public has been slow to accept fire as a forest management tool due to decades of very effective fire suppression messages (such as Smokey the Bear). These campaigns resulted in unanimous support for the immediate suppression of wildfires. When ecologists began to call for a

renewed look at fire and its benefit in forest ecosystems, the public became confused. More recently, surveys show that with increasing public awareness about the importance of wildfires, support for fire as a management tool has increased. While the U.S. fire awareness effort is an ongoing activity, the loss of life and property due to forest fires could quickly turn public perception once again.

## Public involvement in forest management decisions

How the public are involved in forest management decisions can greatly influence their perceptions of forestry. Results from a survey of residents of British Columbia's northern interior communities suggest that forest management decisions made by only industry or government are not well perceived. This was particularly true for management options related to forest recreation and habitat conservation. The same survey found, however, that when local citizens were able to provide an advisory role, acceptance of industry or government management increased substantially.

Public outreach is critical, but meaningful outreach is not just the provision of information. Careful consideration is required of how, by whom and the rationale behind decisions is presented. The public need to feel that their views, concerns and their knowledge are valued, respected and given fair consideration. The perception of fair public consultation and engagement processes is necessary to ensure that the outcomes of these processes are seen as acceptable. When fairness is lacking, the science behind a decision has little value in the eyes of the stakeholders. The same holds true if the source of the information is not trusted.

Public involvement can come in many forms. While public meetings are often the most common, they are not necessarily the best venues for learning. Field-based presentations and one-on-one discussions can, in contrast, be very helpful in gaining trust and fostering a true feeling of engagement. Any venues that seek local knowledge, provide stakeholders with equal footing, and offer a forum for voicing concerns, present an opportunity to build community support.



**Figure 2.** When local citizens are involved in forest management decisions, industry or government management is more likely to be accepted. Photo courtesy of J. Stewart.

## Managing public perceptions

To be pro-active, forest managers should be aware of public perceptions of forest practices and policies, and consider these perceptions in their management strategies and communication tools. Given the influence of the mass media on public perception, the media should be engaged in any communication strategy. Existing structures that promote awareness and discussion between decision-makers, key interest groups and the general public (such as public advisory groups) should also be enhanced and supported.



Public perception of forest management and the public's values of forests are dynamic and are likely to become increasingly complex. Demographic and educational changes mean that citizens are increasingly aware of environmental and resource management issues. Therefore, the need for public engagement in forest management will only increase.

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## Management Recommendations

- **Engage the public.** A clear process and fair consideration of stakeholder opinion are essential if forest management decisions are to be accepted by stakeholders, particularly if they do not personally agree with the decision.
- **Manage visual impacts.** Forest management activities that are more favourably perceived by the public, such as dispersed partial retention, should be considered, particularly in recreation and high-visibility areas.
- **Get people on-side.** Residents of forestry-dependent communities usually have a more positive perception of forest management than those from urban centres. This presents an opportunity for joint fact-finding and building long-term community support.
- **Education programs can be important but they are not the only solution.** Field-based presentations and one-on-one discussions can be useful for gaining trust and fostering a true feeling of engagement.
- **Provide balanced information.** Changes in forestry practices may be more positively perceived by the public if accompanied by credible information about the benefits of the new practice.
- **Stay in touch.** Continual monitoring of the public's attitude is necessary if the forest industry and forestry policy makers seek to be favourably perceived, and want to better develop their management plans and public awareness programs.



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The views, conclusions and recommendations contained in this publication are those of the authors and should not be construed as endorsement by the Sustainable Forest Management Network.

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