5. What is Sustainable Forestry?

By Peter Smallidge

While many organizations and agencies have defined sustainable forestry to emphasize their desired attributes, all definitions share the essential elements of striving to ensure that the forest resources (with "resources" broadly defined) we as a society enjoy today are available for use now and in the future.

Understanding the intricacy of this long-term availability requires an understanding of a number of factors that together make the fabric of sustainable forestry discussions. Foresters, loggers, and landowners have long had the capacity to maintain the productivity of the forest for current and future needs. Historically, the extent to which sustainable forestry was practiced depended on a complex inter-mingling factors, such as owner attitudes

and needs, work force potential, market or regulatory forces, governmental incentives, and local or regional input. These factors remain important, and stakeholders are increasingly recognizing the need to address all aspects of sustainable forestry and not a simplified subset of the issues.

What do we sustain?

People usually think first about sustaining the value of the forest that is most important to them. This might be the value of hardwood timber or softwood fiber growing, it might be the diversity of native species present, it might be recreational opportunities provided in the region, or it might be the socio-economic culture that has developed

around a local wood using industry. Sustainable forestry addresses all the resources provided by the forest. Someone probably advised you at some point to "not burn your bridges", and this advice is at the heart of sustainable forestry where you strive to retain current options into the future. Retention for the future includes the option for timber or fiber production, the option for certain species or a variety of species, the

option for jobs, the option for clean water, the option for recreational resources, and the option for aesthetic qualities. Because forests change, measures of sustainability emphasize the need to keep viable all the options and opportunities and de-emphasize specific qualities of the forest on a specific acre.



Sustainable forestry manages forests for the present and the future.

Does sustainability happen on every acre?

Sustainable forestry can happen on every acre, but every acre managed under sustainable forestry won't look the same. Part of the explanation for this is

look the same. Part of the explanation for this is the dynamic nature of forests. As forests mature, a landowner's decision to manage the forest and extract certain resources may change the way the forest looks. In addition to extractions there are also occasions for inputs or investments. Extraction often includes timber or pulpwood harvesting that will remove some or all stems from an area as part of a silvicultural prescription. As juvenile forests grow into maturity, investments are often appropriate to ensure the forest produces the desired levels of resources. Sometimes this will include pruning for high-quality hardwoods, trail building for

recreational access, thinning to create specific forest structures, thinning for optimal timber production, or habitat enhancements to stabilize or expand desired wildlife populations. Change is often viewed with resistance, but we know with certainty forests will change even if we don't take any action. A reasonable goal then is to use management activities in appropriate areas and at appropriate times to ensure we retain all our options while producing our desired resources.

Who must be involved in sustainable forestry?

The short answer is everyone. If you recall the factors that influence sustainable forestry, then you can start to generate a list of people, organizations, and agencies that affect the way our forests are managed. Quickly you see that sustainable forestry starts with the landowner and moves through everyone who enjoys the



outputs of forests, such as clean water, and everyone who buys forest products, such as paper. Thus, everyone is affected by the way our forests are managed.

The direct or first tier of decision makers usually involves a forest owner, forester, and logger. The landowner defines the management

objectives, the forester prescribes activities that help the forest owner achieve the ownership objective, and the logger implements the prescribed activities. The decisions made by the landowner and the recommendations and practices applied by the forester and logger reflect a second tier of influence. The second tier is more complex and intertwined. Tier two includes the educational institutions available to practitioners and stakeholders, the markets where forest products are sold, the attitudes of owner and family, the local and regional culture forestry practices, governmental about regulations or incentives that affect which and how forest management practices can be applied, and governmental regulations and incentives that affect business practices. The United States holds a belief system in the rights of private property owners that differs from attitudes in other countries that embrace a more significant role of the community in deciding the desired actions on private lands. Even so, the variety of people and stakeholders who influence the social, economic, and political climate around forestry can have a substantial influence on if and how it is practiced.

How do we know if sustainable forestry is happening?

Knowing if sustainable forestry is happening on the ground depends on knowing the condition of the forest and the forest community, the plan for managing the forest, and an acceptable standard of what the forest should look like under sustainable forestry practices. Recognition of these three components is the starting point. Ultimately though, certification of sustainable forestry practices is usually sought through a group that provides or authorizes reviewers. Knowledge of the reviewer and their process permits others a known level of confidence in how thoroughly sustainable forestry practices were achieved. These three components, together with verification, provide a logical arrangement of information, but the devil is in the details, and

different systems view these components in different ways.

Describing the condition of the forest and forest community involves data collection by approved techniques to document the character of the forest, features and habitats of the forest, management policies of the owner/manager, economic and cultural characteristics of the local community, and the political climate of the management area. Traditionally, foresters would focus their data collection just on the characteristics of the forest, but with sustainable forestry data collection now often include input from wildlife biologists, sociologists, community economic development, and other stakeholders.

The plan for managing the forest will necessarily include a broader array of features than were found in more traditional forest management plans. In addition to characterizing forest and wildlife habitats, the sustainable forestry plan may also address, for example, health and safety for forest workers, education programs for practitioners, landscape-level awareness of unique species or habitat, or local/state ordinances that affect certain forestry practices.

The "look" of a sustainably managed forest is more difficult to define. As a basis for considering the criteria of sustainability we must first reject the human tendency to equate visual appeal with the sustainability of ecological or biological health. The experiences that shaped our attitudes of "what's pretty" have no bearing on the health, productivity, or sustainability of the forest. While the visual impacts of forestry practices are a component of sustainability, they should not drive the evaluation.

What then defines success in sustainability? The organizations that endorse and validate sustainability each have their own set of criteria to evaluate properties, owners, or managers on

their efforts. Because each forest is different, and thus functions somewhat differently, the criteria include a combination of forest characteristics like biodiversity or forest productivity plus the processes to manage sustainably. The process might include how to measure and inventory soils, vegetation, and insect; the involvement of owners or principles in stakeholder groups; or how to document the acceptable level of change, at a property or landscape scale, in a species that will respond to changes in a forest habitat through time.

Sustainable forestry is a valuable tool and management posture to help ensure we retain for the future the forest resource opportunities we have today. The debate on sustainable forestry is intense, yet those involved usually share a common sense of the value and beauty of the forest.



Clean water and forest products are just two of the many resources provided through sustainable forestry.

