

NEW APPROACHES TO FOREST SUSTAINABILITY

Dr. Said Abubakr
USDA Forest Service
Forest Products Laboratory¹
Madison, WI 53705

Dr. Alan Haney
College of Natural Resources
University of Wisconsin
Stevens Point, WI 54481

Michael A. Kilgore
Forest Resources Council
St. Paul, MN 55108

Betsy Daub
National Audubon Society
St. Paul, MN 55101

Kim Chapman
The Nature Conservancy
Minneapolis, MN 55414

Eric Bloomquist
Colonial Craft
St. Paul, MN 55113

ABSTRACT

Partnership between academia government, the environmental community, and industry is one of the new successful approaches to forest sustainability. Many more such partnerships are needed to accomplish better forest practices that involve diverse points of view. Actual projects of partnerships among academia, government, the environmental community, and industry are presented and discussed.

INTRODUCTION

In the 1930s and 1940s, Aldo Leopold, forester and professor of wildlife management at the University of Wisconsin, articulated the principles for natural resource management that form the basis for ecosystem-based management in North America. The principles were first and most fully employed in North America by individuals and groups charged with managing natural lands for their inherent biological diversity.

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At the same time, foresters considered some of those same principles in managing forests, although their aim was the sustainable yield of forest products. In contrast, natural areas managers sought to mimic and reinstate natural conditions and processes that were associated with native habitats and species.

Natural areas management, as it was called coalesced as a discipline in the 1960s and by 1980, had developed into a profession that employed thousands of people nationwide. While natural areas management focuses on lands reserved from human use, ecosystem-based management is applied where resources are utilized to meet people's material needs. We are now in a period where natural areas management is being influenced by the idea of utilization implicit in ecosystem-based management. At the same time, ecosystem-based management is being influenced by natural areas management. In short the goals of ecosystem sustainability and yield sustainability are converging. Natural areas constitute benchmarks of natural conditions against which our success at achieving sustainability on heavily utilized lands can be measured.

The following discusses partnerships of forest sustainability among academia, government, the environmental community, and industry.

ACADEMIA

Sustainable forestry will be achieved when the needs of land owners and managers are balanced with the ecological capability of the forest ecosystem. Because of the complexity and dynamic nature of social and natural systems, sustainable forestry must be flexible and adaptable necessitating adaptive management. Academic institutions must prepare graduates who understand and can operate effectively and comfortably in this dynamic work environment. University researchers, industry, and natural resource agencies will have unlimited opportunities to develop long-term partnerships for evaluating the condition of forest ecosystems, responses to management treatments, and public awareness.

GOVERNMENT

During the 1980s, Minnesota experienced substantial increases in timber harvesting. Responding to public concern about the long-term impacts associated with expanded timber harvesting, the state commissioned a first-of-its-kind generic environmental impact statement (GEIS) on timber harvesting and forest management. With a focus on cumulative impacts, the GEIS assessed the long-term affect that timber harvesting has on a wide range of forest resource values and uses and identified various mitigation measures. When completed a roundtable representing a broad cross-section of forest

resource interests was assembled to develop a comprehensive strategy for implementing the major recommendations contained in the GEIS. After 7 months of intense deliberations, the GEIS Implementation Strategy Roundtable submitted a consensus-based report that ultimately became the basis for one of Minnesota's most significant pieces of forest resources legislation—the Sustainable Forest Resources Act (SFRA) of 1995.

The SFRA established a number of policies, programs and administrative structures to ensure the long-term sustainability of the state's forest resources through a comprehensive, yet nonregulatory, approach to forest resources management. It does so by empowering local communities of both place and interest to design effective approaches when addressing forest management concerns. Notable among these is the Minnesota Forest Resources Council, a 13-member, governor-appointed body that represents a wide range of state forest resource interests. Although the Council has major responsibility for implementing the Act, effective implementation requires active participation by a number of partnerships. Among these are the Minnesota Forest Resources Partnership, a coalition of forest land managers and loggers with responsibility for securing coordinated and timely implementation of forest management practices, and the Minnesota Interagency Cooperative a forum to better coordinate development and access to state forest resource data. Although implementation has only recently begun, the SFRA holds great promise for ensuring the long-term sustainability of Minnesota's forests.

ENVIRONMENTAL

The National Audubon society is committed to the conservation and restoration of natural ecosystems for the benefit of humanity and the earth's biological diversity. The Society's focus is the conservation of birds, other wildlife, and their habitats through the protection and sustainable management of ecosystems. When possible, Audubon welcomes the creation of partnerships that build upon common ground, from which these goals may be realized.

Audubon is currently involved in a variety of cooperative projects with industries. Recently, the organization launched a Landscape Level Forest Research Partnership with International Paper Company in South Carolina. The purpose of the project is to conduct research on industrial private lands to learn how to maximize their value as wildlife habitat. Of the 730 million acres of forest land in the United States, approximately 488 million acres are privately owned. Industrial forest companies own and manage about 70.5 million

acres nationwide. Audubon believes that to fully protect our nation's forest resources, we must identify ways to improve the wildlife habitat value of private lands, while working to protect public forest resources. Study sites in the Audubon-International Paper venture were selected to represent much of the southeastern coastal plain, so that research results can be accepted and implemented across the landscape.

Audubon has also forged a partnership in Pennsylvania with the Proctor and Gamble Company. The goal of the project is to develop and implement scientifically based guidelines for improving the wildlife habitat value of nonindustrial private forested lands in the region. The guidelines will be used to generate educational tools for loggers and landowners, assisting them in finding more sustainable approaches to land management and timber harvesting. Proctor and Gamble will assist in getting the guidelines adopted within the logging community and the remainder of the paper and pulp industry in Pennsylvania. In Georgia, the National Audubon Society and Georgia-Pacific Corporation are working together to jointly manage a 1,500 acre tract of loblolly pine. The goal of this venture is to develop a model of timber management that enhances biodiversity, an example that could influence the management of Georgia-Pacific's 500,000 acres of timberland in southern Georgia.

INDUSTRY

The tools to engage in the debate or discussion over forest management and harvesting methods have typically been limited to boycotts, protests, or increased government regulation and restrictions. The process of an independent third party, "green certification," offers a voluntary market-driven approach to developing and evaluating sustainable forestry practices. Colonial Craft has been an industry advocate of this process and has participated in the development of the certification concept. A major benefit of the certification process is that it changes the forestry debate from if there will be harvesting to how the harvesting will be done. Colonial Craft now offers Smartwood certified products in the retail and wholesale building material markets as well as in the picture frame industry. Research indicates significant awareness and support of the certification process in some markets. Colonial Craft believes this independent evaluation will improve the credibility of the forest products industry and provide a market advantage to those companies that choose to participate.

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TAPPI

Technology Park/Atlanta
P.O. Box 105113
Atlanta, GA 30348-5113, USA


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