Canada's Model Forest Program – Bringing community forest values into the development of sustainable forest management in the Canadian context

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The purpose of this review is to provide a brief introduction to Canada's Model Forest Program with specific reference to the importance of both overall community involvement, and the active enhancement of this involvement.

Introduction

The need for incorporating the concept of sustainable development into resource management strategies was clearly established by the Brundtland Commission in 1987, and acknowledged globally at the United Nations Conference on the Environment and Development in 1992, but approaches that put into practice the principles of sustainable development are few. In the Canadian forestry context, the application of the concept of sustainable development has been termed sustainable forest management (SFM). SFM considers the need to:

- manage forests as ecosystems in order to maintain their natural processes,
- recognise that forests simultaneously provide a wide range of environmental, economic, and social benefits,
- recognise and support the view that an informed, aware, and participating public is important for promoting sustainable forest management,
- ensure that forest management evolves to reflect the best available knowledge and information and,
- demonstrate that management practices are having the desired effect on all the values that have been identified (adapted from the CCFM, March 1995).

Since ecological, social and economic conditions vary from place to place, there is

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no single, universal formula for SFM. SFM must consider and reflect the needs and knowledge of local constituents as well as those of society in general. In Canada, one of the most important steps in initiating sustainable forest management is considered to be the establishment of community-based, collaborative partnerships. Collaborative in this case implies the development of working relationships in which participants engage in cooperative dialogue. This process requires that participants are willing to explain their position and are also voluntarily motivated to listen to others, and to learn. In this way, participants improve their level of understanding of the broad range of values in their local forest area, and can better contribute to the development of consensus on how the forest should be used.

Canada's Model Forest Program was developed and initiated by Natural Resources Canada of the Canadian Forest Service in 1991, and has successfully encouraged the establishment of a network of collaborative partnerships representing a diversity of forest values. The term 'model' forest refers to the idea that the sites established under this program provide an example of sustainable forest management that others can look to for ideas and illustrations of how to achieve SFM in their own area.

The following list of attributes describes a model forest:

- The model forest is approved by participating landowners and land managers.
- The model forest organisation and its activities are managed by a partnership group of all interested stakeholders.
- Model forests consider all critical resource values incorporating the philosophy of sustainable forest management.
- The model forest land base must be of working scale and size.
- The model forest participants utilise ecologically sound forest practices and support research and development on the key issues related to sustainable forest management, including indicators of sustainable forest management.
- The model forest organisations support education and learning in the local communities.
- The model forest activities should emphasise the transfer of technology and knowledge to other areas outside the model forest.

- The model forest must be an active part of the model forest network and share experiences, successes, and failures with other model forest projects,

as well as participating in activities at the network level.

- Model forests support the dissemination of information among their membership.
- A model forest is able to define, measure and effectively inform others on indicators of sustainable forest management.

The Canadian network of model forests currently comprises 10 sites representing the major forest regions of Canada. In total, these sites cover over 8.3 million hectares of land, reflecting a variety of land ownerships – including private woodlots, large industrial forests, unprotected public land, and protected areas such as parks, wilderness areas and conservation areas. Table 1 provides a summary of the 10 model forests.

Each of the model forests is unique, but to provide an illustration of their diversity, a brief description of five of them – Lower St Lawrence, Manitoba, Prince Albert, McGregor and Long Beach – is provided below.

Lower St Lawrence Model Forest

Located amongst the rural municipalities of the Lower St Lawrence region and comprising mainly small and large private forests, this partnership is testing two different forest management formulas: forest tenant management and joint management. Forest tenant management is being tested on a large private forest. While each tenant harvests some timber on an individual basis, the tenants have also formed a cooperative among themselves to collaboratively develop and manage those resources and activities that are common to them all – including recreation and tourism, hunting, fishing, and reforestation. Joint management seeks to encourage private woodlot owners in a given territory to work together to develop or strengthen the local economic base through the exploitation of forest resources other than timber. Potential opportunities (while varying by region) include maple syrup production, recreational and tourism activities, hunting and fishing.

Manitoba Model Forest

This forest includes recreation and wilderness parks, private woodlots, First Nation (indigenous peoples) reserves, provincial forest, and a large Forest Management Area licensed to a major newsprint company. Within it live several First Nations

communities, several small communities including Pine Falls which is dependent upon the pulp and paper industry, and a small Metis population; in addition, the area receives a large seasonal influx of recreational visitors. The high socio-cultural diversity combined with wildlife issues (such as the management of a migratory herd of woodland caribou) represents a complex challenge to management decision makers.

Table 1: The Canadian model forests

Name	Province	Area in ha	Forest type	Number of participants on the Board
Western Newfoundland Model Forest	Newfoundland	707,060 ha	Boreal	14
Fundy Model Forest	New Brunswick	419,266 ha	Acadian	8
Lower St Lawrence Model Forest	Quebec	112,634 ha	Great Lakes: St Lawrence	5
Eastern Ontario Model Forest	Ontario	1,534,115 ha	Great Lakes: St Lawrence	10
Lake Abitibi Model Forest	Ontario	1,094,690 ha	Boreal	14
Manitoba Model Forest	Manitoba	1,047,069 ha	Boreal	14
Prince Albert Model Forest	Saskatchewan	314,649 ha	Boreal	7
Foothills Model Forest	Alberta	2,500,000 ha	Boreal, Montane, Subalpine	11
McGregor Model Forest	British Columbia	181,000 ha	Montane, Subalpine	8
Long Beach Model Forest	British Columbia	400,000 ha	Coastal	14

Prince Albert Model Forest

The Prince Albert Model Forest (PAMF) Association believes that a process of broad-based decision-making is enabling forest companies, First Nations, and

government agencies to chart a course towards sustainable forest management. Three types of research are conducted by the PAMF Association: inventory, ecosystem, and socio-economic studies. The inventory studies are designed to give resource managers good baseline data on the forest ecosystem. The ecosystem studies examine the impacts of fire and of various forest harvesting and silvicultural practices on parameters such as wildlife populations, soil fertility levels, rooting patterns, energy and water exchange, and the diversity of tree and bird species. The socio-economic studies have included an examination of the cultural history of local First Nations and the socio-economic impact of forest resource management decisions within the PAMF. Steps taken to promote extensive stakeholder involvement in decision-making include the creation of a Consultative Committee and consensus-development training for the Board of Directors.

McGregor Model Forest

More than 88% of the area of this model forest is forested. Timber management has been a primary focus of the area, and its production drives the economy of the surrounding region. The model forest partners represent all levels of government, First Nations, academia, private sector groups, and environmental groups. They direct an array of projects, focused on developing an advanced computerised decision support system which will model key ecological processes and human-induced disturbances. The system design is user-friendly, with an open framework that will provide forest planners and users with the capability to generate, assess, and demonstrate compliance to integrated resource management plans that are acceptable to the general public. Retrospective studies of fire history, forest insects and disease, hydrology and geomorphology, vegetation succession and soil processes, clear-cutting and partial cutting practices, and socio-economic processes, represent valuable inputs for developing and calibrating the model forest's computer decision support planning system.

Long Beach Model Forest

Debates about forest land use and management have been especially passionate in this area, and the positions of environmental groups, aboriginal interests and the forest industry were becoming polarised. This model forest has invested significant time and effort in establishing a representative and participatory organisational structure. The diverse interests surrounding the forests of Vancouver Island's west coast are now at a point of discussing and attempting to find mutually agreeable solutions. The Long Beach Model Forest (LBMF) Society, is organised into 14

sectors, each sector sharing common concerns and values and being responsible for its own internal organisation. The sectors include Conservation Science, Education, First Nations, Labour, Local Government, Major Manufacturers, Social and Economic Sustainability, and Youth. The board incorporates the various views of the sectors through consensus based decisions.

A Foundation of Partnerships

For the past five years the Model Forest Program has encouraged local partners to work together to develop innovative approaches towards sustainable forest management that integrate economic, environmental, and social objectives and sustain the forest values they have identified as important for their area. Each site has specific objectives relating to the conservation of biodiversity, cross-cultural awareness, economic diversification, public education, and agricultural improvements, to name but a few issues.

The differing activities and philosophies of the five model forests outlined above clearly illustrate the diversity and complexity of global forest systems and management issues. The concept of building partnerships is not new. People have been coming together to help each other for a very long time. However, it is not all that common in the resource management field to bring together highly diverse and often opposing interests to work cooperatively with each other in resolving conflict. After all, if we are opposed to each other, how can we help each other? The answer is simple and is summed up by an interviewee of the Brundtland Commission, 'We now know that what unites us is vastly more important than what divides us'. In Canada, a common goal that has united many people is sustainable forest management. The wise and sustainable management of our forest resources to conserve their biodiversity, productive capacity, and ecological integrity while, at the same time, maintaining the social, cultural, and economic benefits we derive from them is a concept that has brought many to work together who might not have otherwise done so. This also means that we must look well beyond our present needs and think about future generations.

The Model Forest Network is built upon a foundation of partnerships. Partnerships exist both within and among the model forests. Within each model forest partnerships consist of a broad range of interest groups that may include educational institutions; industry; aboriginal groups; environmentalists; recreational

interests; labour; and local, provincial, and federal governments. Model forests provide a forum for those with an interest in natural resource management to come together as a community and voice their opinion, knowing that it will be considered in the decision-making of the model forest. Through the partnerships, strategies towards sustainable forest management at each site have been developed.

Sustainable forest management requires effective communication and collaboration between agencies and individuals. Each model forest conducts the following activities to actively provide opportunities for people to become as involved as possible.

1) Partnership building and networking

This important aspect of SFM is facilitated by providing opportunities for on-going, proactive associations:

- at the local level among interested parties within the program,
- among peer groups not directly involved with the program,
- regionally among peer groups, and
- at the national level among other model forests and national institutions.

2) Knowledge and technology transfer

The results and knowledge gained through the model forest activities are disseminated through local, regional and national workshops. These workshops focus on investigating key issues of common concern to participants.

3) Communication activities

The model forests generate awareness and public interest in the program through various mechanisms including the press, school programs, special public tours, lectures and brochures and interpretive centres.

Model forest partnerships work at building a balance of respect, equity, and empowerment between the diverse groups that become involved in the decision making process. The partnerships have developed strong network ties with all stakeholders and mechanisms for meaningful two-way communication between the partners. This structure will go a long way towards enabling forest managers to design and implement the kind of management planning processes required to

provide a sustainable supply of goods and services from the forest without jeopardising the forests' biodiversity, ecosystem integrity, or productive capacity.

Looking to the Future

During the past year, an evaluation of the current five-year Program was carried out by an independent committee comprised of representatives from across the Canadian forest community. The committee found the Model Forest Program to be an effective initiative in furthering SFM, and recommended its continuation. It identified the establishment of working partnerships of participants reflecting a diversity of forest values as one of the key successes of the Model Forest Program. In looking to the future, the challenge to these experienced groups will be to focus their talents on providing leadership to implement activities that contribute to the shift towards sustainable forest management practices.

Phase II of the Model Forest Program has been designed by the Canadian Forest Service to support the development of strategies for implementing sustainable forest management in Canada that might also be of interest beyond Canada's borders. The emphasis will be on ensuring that the knowledge and experience gained during Phase I, and the overall changes in global and Canadian forest management issues that have occurred since the Program began, are recognised and addressed in model forest activities. The partnerships will be advancing sustainable forest management in a collaborative and cooperative context. They will establish acceptable measuring and reporting mechanisms that can show their advancement towards sustainable forest management.

First Nations and other aboriginal groups have had an enormous influence in many of Canada's model forests. Therefore, a process to select an aboriginal model forest is to be put in place. This will allow aboriginal people the opportunity to develop approaches to sustainably managing forest resources based on their values, beliefs, knowledge and traditions. In addition, special funding will be made available to the other model forests to support projects aimed at further exploring traditional aboriginal approaches to forestry.

International Model Forest Program

Canada's model forest concept is being adopted outside Canada through the

International Model Forest Program. Sites have been established in Mexico and Russia. Numerous countries have expressed an interest in applying the model forest concept, and in becoming involved with the network of model forests. The International Model Forest program is managed by the International Model Forest Secretariat located at the International Development Research Centre in Ottawa, Canada.

Further Information

Readers with access to the Internet are invited to visit Canada's Model Forest Program world wide web site, the address of which is http://mf.ncr.forestry.ca. Canada's Model Forest Secretariat may also be contacted at the address given at the beginning of this paper.

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