



Manitoba Model Forest



2006-2007 Annual Report

Table of Contents

Introduction	3
2006-07 Board of Directors	4
Projects	
Phase IV Development	6
Eastern Manitoba Woodland Caribou Research and Management	8
Natural Disturbance	11
Stream Monitoring Network and Database	12
Scenario Planning	14
Committee for Cooperative Moose Management	15
Landowner Education and Outreach	16
Education Coordinator, Youth Symposium, Educational Programs, and Grade 7 Curriculum	17
Community Opportunities Program and Education Fund	19
Community-based Joint Planning	22
Winnipeg River Economic Development Round Table	23
Climate Change Vulnerability	24
Local Indicators and Bio-Monitoring	25
Community Programs Officer	27
Trap Line / Forest Management Best Practice Manual	28
Manitoba Forest Rangers Program	29
Financial Statements	

Introduction

This report represents the final report of the Manitoba Model Forest (MBMF) under the Canadian Forest Service's Model Forest Program. Unlike previous annual reports, which cover individual fiscal years from April 1 to the following March 31, the present report covers not only the period from April 1, 2006 to March 31, 2007 (our normal fiscal year), but also the period from April 1, 2007 to September 30, 2007. The first time period constitutes the final whole fiscal year of Phase III under the former Model Forest Program. The latter time period covers the 6 month extension, a short-term bridge between the former Model Forest Program and the newly created Forest Communities Program. This report includes descriptions of projects undertaken by the MBMF as well as audited financial statements covering these periods.

The period of this report covers a period of significant change for the MBMF. After 15 years of successful partnership building, research projects and the development of innovative sustainable forest management tools, the Model Forest Program came to an end. However, it was also an opportunity to take a new, fresh direction under the newly created Forest Communities Program. The MBMF has made significant contributions to sustainable development and partnership building over the last 15 years. The fiscal 2006/07 year was also the first year without General Manager Mike Waldram at the helm. With his passing in January of 2006, the MBMF lost a dear friend and an ardent supporter of the Model Forest concept. The duties of Mike were taken over, very competently, by Beverley Dube, who became the Acting General Manager.

This report will fulfill the remainder of the reporting requirements for the Manitoba Model Forest to the Canadian Forest Service under the Phase III contribution agreement of the Model Forest Program.

Manitoba Model Forest Board of Directors (2006/07)

Officers

President, Carl Smith
 First Vice-President, John Dojack
 Secretary, Walter Tokar

Past President, Stan Kaczanowski
 Second Vice-President, Dr. David Punter
 Treasurer, Vince Keenan

Directors

Tembec, Pine Falls Paper Group – Vince Keenan	Alternate – Bob Yatkowsky
Time to Respect Earth’s Ecosystems – Dr. Peter Miller	Alternate – Dr. John Sinclair
Manitoba Conservation – John Dojack	Alternate – Alexandra Miller
Manitoba Conservation – Stan Kaczanowski	Alternate – Floyd Phillips
Manitoba Conservation – Tim Swanson	Alternate – Crystal Brown
Canadian Forest Service – Adam Wellstead	Alternate – Lorne West
Woodlot Association of Manitoba – Mike James	Alternate – David Howerter
University of Manitoba – Dr. David Walker	Alternate – Dr. Rick Baydack
University of Winnipeg – Dr. Ed Cloutis	Alternate – Dr. Alan Diduck
Northeast Sustainable Development Association – Jennifer Lidgett	
Manitoba Naturalist Society – Dr. David Punter	
Tembec Unions – Cam Sokoloski	Alternate – J.L. Papineau
R.M. of Lac du Bonnet – Robert Bruneau	Alternate – Gus Wruck
Town of Lac du Bonnet – Norm Plato	Alternate – Harvey Saunders
L.D.G of Pinawa – Mike Cavers	Alternate – Clayton McMurren
Community of Bissett – Doug McPherson	Alternate – Johnathan Friesen
R.M. of Victoria Beach – Dr. Rod Bollman	
R.M. of Alexander – Alvin Yosyk	Alternate – Jill Papineau
Manitoba Metis Federation – Marcelina Vezina	Alternate – Brenda Boulette
Manitoba Metis Federation – Mel Short	Alternate – Bruce Boulette
Community of Manigotagan – Dale Boulette	
Community of Seymourville – Chandler McLeod	
Winnipeg River Brokenhead Community Futures	
Development Corporation – Paul Chapman	Alternate – Rick Rusk
Manitoba Trappers Association – Stuart Jansson	Alternate – Cherry White
Wassaabiyaa Shining Waters	
Heritage Region – Walter Tokar	Alternate – Marianne Tokar
Brokenhead Ojibway First Nation – Carl Smith	Alternate – Remi Olson
Brokenhead Ojibway First Nation – Gordon Kern	Alternate – Allen Hocaluk
Black River First Nation – Charlie Black	Alternate – Russell Spence
Black River First Nation – Pamela Spence	Alternate – Dwayne Bird
Hollow Water First Nation – Hilda Bjork	Alternate – Geoff Bushie
Hollow Water First Nation – Garf Bushie	Alternate – Furlon Barker
Sagkeeng First Nation – none appointed	
Woodlot Association of Manitoba – Mike James	Alternate – David Howerter

Manitoba Model Forest Personnel

Acting General Manager – Beverly Dube
Community Programs Officer – Rene Barker
Education Coordinator – Bob Austman

06-1-07 Phase IV Development

With the announcement by the Canadian Forest Service (CFS) that Model Forest Program was to come to an end on March 1, 2007 and that a new program (called the Forest Communities Program) was to begin on April 1, 2007, the MBMF directed considerable effort towards the development of a proposal for the new program. Based on the MBMF philosophy of being inclusive and with a strong desire to ensure that our proposal reflected the desires of our diverse partnership, workshops were held in 2006 to review the proposal criteria of the Forest Communities Program and to solicit ideas of what programs, projects and activities our partnership wished to see here in Manitoba. The process to develop a proposal to the Forest Communities Program occurred over a 10 month period, and included the input and assistance of a very large and diverse group of organizations and partners. The breadth of the proposed



program demonstrated the commitment of those involved to the vision and objectives of the MBMF, the objectives of the Forest Communities Program, and their willingness to work collaboratively and cooperatively together across cultures, sectors and points of view to work to achieve them. In order to ensure that the resulting program would have relevance and benefit to as broad a cross section of interests in the forest as possible, we invited our current MBMF partners and Board members, as well as new potential

partners and others with an interest in the forest, to participate in program development workshops. In total, 56 individuals, representing 27 organizations, companies, governments and communities were involved.

In addition to the workshops, presentations were made to existing funding partners and potential funding partners. These presentations focused on the accomplishments of the Manitoba Model Forest over the life of the Model Forest Program and new potential directions. The meetings and presentations reinforced existing funding relationships and created new funding partnerships, including core funding agreements with Manitoba Conservation, Manitoba Hydro, Louisiana Pacific Canada, Tembec, the Local Government District of Pinawa and the Rural Municipality of Lac du Bonnet. Although a participant with the MBMF on projects in the past, the proposed new partnership with Louisiana Pacific also afforded the opportunity to make a more concerted effort to work on projects of joint interest in western Manitoba. This also helped pave a path for a new partnership between the MBMF and the West Region Tribal Council.

In September, 2006 the MBMF submitted a letter of intent along with letters of support from our partners, to the CFS for the new Forest Communities Program. Our proposal was approved by

the MBMF Board of Directors on October 18, 2006 and the proposal was submitted in late October, 2006.

06-2-33 Eastern Manitoba Woodland Caribou Research and Management

Through the Eastern Manitoba Woodland Caribou Advisory Committee (EMWCAC), a committee of the MBMF, a considerable effort has been directed towards understanding the life cycle requirements of this Threatened species. Over the years of this program, more than 50 woodland caribou in 5 separate caribou ranges in and north of the MBMF area have been fitted with GPS and VHF collars to track movements of animals. Using this information, the EMWCAC has assessed habitat use and preferences, developed and revised habitat suitability



index models and created woodland caribou management zones. In Phase III, the research and monitoring of animals in the Owl Lake herd (located in the middle of the MBMF area and the Tembec Forest Management License Area) has resulted in the creation of a landmark report “Determining Woodland Caribou Home Range and Habitat Use in Eastern Manitoba” as well as the undertaking of a major revision of an integrated forestry/caribou management strategy, the first of

its kind in Manitoba. The “Landscape Management Strategy for the Owl Lake Woodland Caribou Herd” sets habitat objectives for the herd, establishes an overall management zone and a winter core use zone and principles of forestry use in these zones. The strategy also incorporates consideration for other wildlife (predators such as wolves, alternate prey species such as moose and whitetail deer) and diseases such as brain worm. In 2005, an elaborate landscape-scale forest harvesting experiment was designed and implemented to test the assumptions in the Owl Lake strategy. This landscape-scale experiment is testing alternate forest harvest planning, harvesting and renewal prescriptions for 1) creating future high value habitat in areas currently not used by caribou, and 2) maintaining high quality habitat and current habitat use by caribou. Harvesting is currently underway in this area of the MBMF, as are various aspects of wildlife (caribou, wolf, moose) and vegetation monitoring.

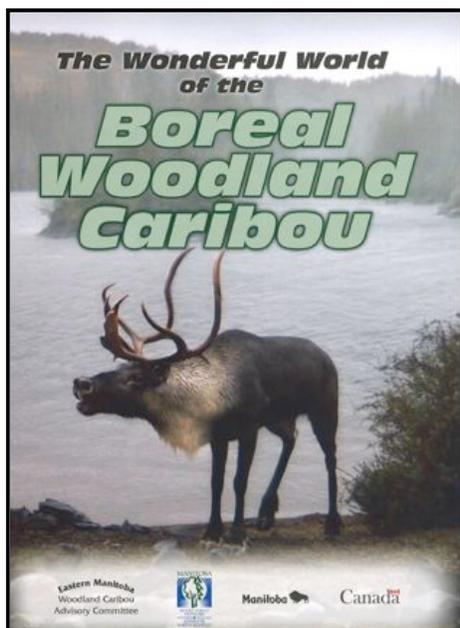
The work of the EMWCAC has played a significant role in policy development concerning species at risk in Manitoba. For example, the EMWCAC has become one of the key mechanisms that the Government of Manitoba uses for the review and approval of Tembec’s Annual Operating and Renewal Plans. Requirements suggested by the committee with respect to Tembec’s operations in the Owl Lake herd management zone and in other areas of the MBMF where caribou management strategies are being developed, are incorporated directly into Tembec’s forestry plans and work permits. In addition, the Government of Manitoba released a provincial strategy for woodland caribou in 2006, a strategy which was based significantly on the concepts and principles developed by the EMWCAC and those in the Owl Lake herd strategy. The multi stakeholder EMWCAC model is also now being pursued in other regions of Manitoba.

Capture events were undertaken in 2006 and 2007 to replace existing GPS and VHF collars on woodland caribou in the Owl Lake range and in caribou ranges to the north, and to place additional collars on new animals. The additional collars, placed on caribou in the Owl Lake range, will not only help to better understand habitat use and movement patterns of woodland caribou, but also initiates a new study on examining caribou survival, mortality and recruitment (birth). The collars in the Owl Lake range also are used to monitor the response of caribou to timber harvesting operations under an experimental timber harvest trial. In conjunction with the experimental harvest trial, permanent sample plots were established and monitored in both harvested and control (un-harvested) areas in order to assess vegetation (and in particular, lichen) response to the experimental timber harvest.

In the winter of 2006-2007, an aerial survey was undertaken on a large portion of the Model Forest area north of the Winnipeg River to study the distribution of wolves in relation to caribou and moose. This information will help improve our understanding of predator-prey relationships and the degree of influence wolf predation has on woodland caribou populations.

While the EMWCAC has focused more research and monitoring attention on the Owl Lake caribou range, work began in earnest in 2007 to compile all available information for the Atiko and Bloodvein caribou ranges, located to the north of the Owl Lake range. Historical caribou distribution data (including GPS and VHF data already being collected by the EWCAC as well as earlier data collected by Manitoba Conservation) was compiled, along with other relevant landscape information such as roads, transmission lines, forest cover types, soils and geology, fire and harvest history, etc. With this information in hand, the EMWCA initiated the process of developing a conservation strategy for the Atiko and Bloodvein ranges. This conservation strategy is expected to be completed in 2008.

In order to gain a deeper knowledge of the historical patterns of woodland caribou distribution in eastern Manitoba and the importance to local First Nation communities, traditional knowledge workshops were held in Bloodvein First Nation and Poplar River First Nation. This information is being used to complement existing western-based scientific information on caribou.



Finally, the EMWCAC continued efforts on public education through the development of two initiatives. This included the development of a provincially-accredited science unit on woodland caribou for use in high schools. The curriculum was first piloted with a few schools and then the MBMF held a training workshop with science teachers from across the province at the annual Manitoba Education's Special Area Group conference in the fall of 2006. The caribou curriculum unit also contains classroom activities and exercises, as well as several educational games. A French version of the curriculum has subsequently been produced.

The EMWCAC also developed an educational kiosk for the Black Lake campground in Nopiming Provincial Park. The grand opening of the kiosk is scheduled for the summer of 2008. The woodland caribou cows commonly give birth to and raise their calves on islands on the lake. The islands afford protection to the calves from predators.

06-2-49 Natural Disturbance Project

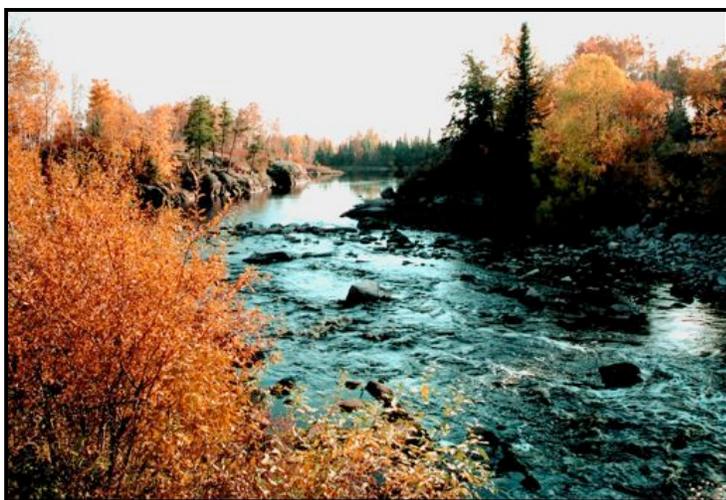
In Phase II of the Model Forest Program, the MBMF initiated a project to examine wildfire behaviour and forest recovery following fire with the intent of developing forest harvesting templates based on a natural disturbance model. Harvesting guidelines were also designed and



implemented at both a landscape and site level scale in Phase II. In Phase III, monitoring of regeneration success and soils began in the four experimental trial areas. Preliminary results obtained from monitoring of permanent sample plots in 2002 indicate that forest regeneration in harvested areas was considerably lower than in areas following fire. Further, regeneration success was also lower in the “wildfire cut” than in a more conventional cut harvest template, and may be related to slash loading and distance to slash piles. Further monitoring of the plots was undertaken in the summer of 2007 to further assess both stand and landscape level indicators of regeneration. A project report will be available in 2008. The project will assess the applicability of a natural disturbance template for forest operations in Manitoba. Currently, forest policy is not consistent with a natural disturbance template at several spatial and temporal scales.

06-2-63 Stream Monitoring Network and Database

In Phase III of the Model Forest Program, the MBMF initiated a project to address water quality concerns in rivers and streams as they relate to forest management. The project objectives are: 1) to understand the influence of natural watershed features (forest and soil type), natural (forest fire, beaver activity) and anthropogenic disturbances (logging, hydro transmission corridors, agriculture) on water quality in the MBMF, 2) to contribute towards a long-term database on water quality in the region (which is lacking), 3) to provide educational and training opportunities for First Nation youth, and 4) to develop watershed management tools for Tembec, so that water quality values could be incorporated into forest management planning. Water quality was monitored in 2005 and 2006 in 22 rivers, streams and creeks. Monitoring continued in 2007. However, the number of monitoring sites was reduced to 7.



The effects of watershed features and disturbances on water quality were examined by combining the water quality information with GIS-based information on each watershed. A preliminary report on the results from 2004 and 2005 was produced. Based on this information, watershed planning tools are currently being developed (expected in 2008), which will assist Tembec in accounting for water quality in their planning and provide guidance for a suite of indicators for assessing the success of

sustainable forest management under Tembec's Criteria and Indicators program.

Results to date have demonstrated that the effects of harvesting and/or fire are not always similar, but are significantly smaller than even low intensity agriculture. In addition, beaver activity had a substantial effect on water quality in creeks, streams and even small rivers. This project has allowed us to put potential forestry impacts on water quality into perspective compared to those cause by other human disturbances (agriculture) and natural disturbances (fire, beaver). Throughout the project, 15 youth from Black River First Nation were trained and participated in the collection of the water quality data.



In 2007 a companion study was added to the project. Water quality in the Brokenhead River, which originates south of the MBMF area and flows into Lake Winnipeg, was monitored at several locations along the length of the river with the assistance of youth from Brokenhead Ojibway Nation. Water quality in the Brokenhead River has been monitored periodically since the 1970s, but not in recent years. The information collected in 2007 will help provide more contemporary data, will allow for an assessment of the changes

in water quality over time and is being combined with GIS information to examine the effects of land use patterns on water quality, in this agriculture-dominated watershed.

All data produced from both projects is being provided to Manitoba Water Stewardship to add to their provincial water quality database.

06-2-66 Scenario Planning

Long-term forest management planning requires a variety of tools and databases in order to predict what the long-term consequences of present day natural resource management decisions are on future forests. Equally important was to answer the question “what did our forests look like prior to settlement and resource extraction?” An understanding of the “pre-industrial” condition of the forest was a requirement of Tembec’s Forest Stewardship Council (FSC) certification, and this assessment was included in the Scenario Planning project. To assess what the pre-industrial condition of the forest was, the MBMF undertook a project in 2006 and 2007 using the landscape computer model known as LANDIS. In order to use the model, a series of expert workshops were held to provide guidance into the model inputs. This included parameters such as tree species establishment, death age, dispersal ability, fire interval, fuel accumulation, fire severity, etc. The model has provided the MBMF and Tembec with a description of the natural range of variability of the forest in the region. A draft visualization (computer) tool has also been developed, which allows for the public to understand the implications of various forest management decisions and scenarios on forest values, in a visual format. Using the visualization tool, the user can see on a computer screen the current landscape in a portion of the MBMF from an aerial view of a small plane. The images of computer-generated images mature trees, roads, forest harvest areas, re-generating harvest areas, water features and terrain on the computer screen are all based on actual forest inventory information, and thus, accurately represent what is actually out there on the landscape. A second module to the visualization tool allows the user to see how a forest re-grows following timber harvesting.

06-2-68 Committee for Cooperative Moose Management

Moose represent a highly valued ecosystem component in the MBMF area. Since 1992, the Committee for Moose Management (a multi-stakeholder committee of the MBMF) has conducted research, monitoring and educational outreach on issues related to the management of this species. In Phase III of the Model Forest Program, the committee has undertaken surveys to assess population status in various parts of the MBMF, and has conducted surveys to assess the effects of hunting closures and access restrictions, as part of a large experiment initiated in Phase

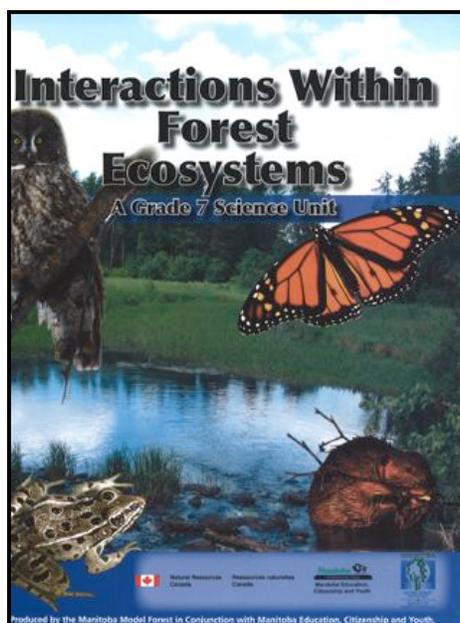


II, on local moose populations. Through this work, the committee provides direct input into legislation as it relates to road closures and hunting regulations in the MBMF area. The moose committee also acts as a review body for Tembec's annual forestry plans, thus providing advice to the government on issues relating to moose management in eastern Manitoba.

Over the last 5 years, First Nation communities in the MBMF have taken an increasing interest in forms of co-management of natural resources. In 2006, a small pilot project, funded jointly between the MBMF and Indian and Northern Affairs Canada, with Hollow Water First Nation and Black River First Nation was initiated to identify options for First Nation co-management of moose in the MBMF area. Based on several workshops in the communities, a larger proposal is currently being developed to select two pilot areas in which to develop and test co-management models. This represents an important first step for First Nations to take a more active role in the management of natural resources in Manitoba. In order for the co-management to be effective, accurate estimates of current moose populations must be obtained. In 2006, the moose committee, with funding from the MBMF, Manitoba Conservation, Brokenhead River Game and Fish Association and the Manitoba Species Conservation Fund, undertook a large-scale wildlife survey in parts of the MBMF area to assess the distribution and population of moose, deer, wolves and caribou.

06-3-04 Landowner Education and Outreach

The Landowner Education and Outreach program is an initiative of the Manitoba Forestry Association, and is financially supported by the MBMF. The purpose of the program is to promote sustainable woodlot management practices on private lands. This is accomplished through provision of bus tours to various privately managed woodlots in Manitoba, field days, skill-based training workshops and landowner information seminars. In 2006, numerous woodlot management seminars were held in communities around the province, including Arborg, Stonewall, Arnes and Steinbach. On July 15, 2006 a “Ride the Wind – St. Leon’s Windmill Farm and Salamander Museum” bus tour included 55 participants. The tour visited a near-by hybrid poplar plantation which was planted as part of the Forest 2020 Plantation Demonstration and Assessment Initiative. On August 25, 2006 a bus tour called “Sandilands Sampler-Seeds, Soil and Sustainable Forests” was offered in south eastern Manitoba. More than 40 landowners participated in a tour of the Pineland Forest Nursery and Manitoba Forestry Association’s Sandilands Forest Discovery Centre. Numerous skills-based workshops were also conducted by the Manitoba Forestry Association. These included a field day at the Duck Mountain Forest Centre (which demonstrated proper tree planting techniques, horse logging, sawmilling using a portable circular mill), and several seminars and demonstrations on chainsaw use and maintenance, non-timber forest product (mushroom) production and portable sawmill use at Black River First Nation. In addition, a Manitoba Maple Syrup Field Day was held in Swan River to demonstrate the entire process of Manitoba maple syrup production.

06 – 4 – 06 Education Coordinator**06 – 4 – 12 Youth Symposium****06 – 4- 13 Education Programs****06 – 4 – 14 Grade 7 Curriculum**

Since 2003, the Manitoba Model Forest Education Coordinator, Bob Austman has provided a bridge for the knowledge gained through MBMF research and the general public, schools and public interest groups. Due to his contagious enthusiasm and passion for all things related to the forest, the demands for presentations and field tours given by the Education Coordinator have grown exponentially. This is also due in part to the formal introduction of provincially-accredited curricula, authored by Bob Austman, in schools across the province. In 2004, Bob created a Grade 10 Science Unit on Sustainable Forest Ecosystems. In 2006, a Grade 7 curriculum called Interactions Within Ecosystems was developed. This new curriculum was rolled out to teachers in the province through annual teacher conferences known as Special Area Groups. In 2007, Bob Austman produced a curriculum unit on woodland caribou, complete with classroom activities and educational games focused on woodland caribou ecology and management. The caribou curriculum is now also available in French, and includes a popular MBMF video on woodland caribou, called Shadows of the Forest.

As a complement to the curriculum packages, Bob Austman has also produced a video on sustainable forest ecosystems called Our Boreal Forest: A Sustainable Resource for All.

To broaden the awareness of students in the MBMF to opportunities for careers in natural resource management, and to enhance student's knowledge of the boreal forest, the MBMF has



organized and hosted a Forest Youth Symposium each year since 2004. In 2006, more than 200 students participated in a one day event which included presentations on sustainable ecosystems, careers and a tour of previous forest management practices along the Pine Creek Trail, north of Powerview, Manitoba. Through the tour, the students learned about forest ecology, forest insects and disease, riparian areas and water quality, aboriginal use of the

forest, wildlife and sustainable forest management. The Forest Youth Symposium was held again in 2007.

In 2006, the Manitoba Model Forest assisted in the planning and hosting of the Manitoba Envirothon (an environmental “Olympics” competition) at the International Peace Gardens in southern Manitoba. The Manitoba Envirothon, spear-headed by the Manitoba Forestry Association, includes teams of high school students from around the province, which after several months of study and preparation, compete against each other in field trials and an oral presentation. The field trials test the students knowledge in the areas of forests, aquatics, soils and wildlife, and includes the use of field equipment such as GPS. Twenty four schools participated in the Envirothon in 2006. The winners of the Manitoba Envirothon competition then went on to compete in the Canon International Envirothon. In 2006, this large event was held at the University of Manitoba, with representation of schools from all over North America. Again, the Manitoba Forestry Association and the MBMF were instrumental in the planning for this event. The MBMF provided funding for the Manitoba Envirothon through our Community Opportunities and Education Fund.

In 2006, the significant efforts of Bob Austman in the field of forest education was acknowledged by Wildlife Habitat Canada through a Forest Stewardship Award. The award recognizes excellence in the promotion of the stewardship of the forest and forest resources.

6 – 5 – 02 Community Opportunities Program and Education Fund

On an annual basis, the MBMF solicits proposals from MBMF area communities for local, community-led projects that improve forest education and/or the local environment. Since 1999, the MBMF has provided partial funding to more than 40 projects from communities and organizations. This program is viewed by the communities and our partners as one of the ways in which the MBMF has made a significant impact to community well being and education. As part of our community outreach program, the MBMF has also organized and hosted an annual Funding and Resource Forum that brings together all major funding agencies (federal, provincial, regional) into one location, usually a community hall in one of the MBMF communities. This venue provides communities, organizations, and individuals with a “one stop shopping” opportunity to access various funding sources for community projects. The funding agencies also provide guidance on how to fill out their application forms.

In 2006, the following projects were funded by the MBMF:



- name a few of the teachings and activities.
- Victoria Beach Senior Scene – the creation and maintenance of an interpretive trail on land located by the Senior Scene Centre.

- Pinawa Play Spaces – creation of a bike path and upgrades to children’s play structures.
- Community of Seymourville – maintenance of ATV trails and the clean up of beaches along Lake Winnipeg.
- Hollow Water First Nation Ningo Gikinonwin (four seasons) Cultural Project – a series of cultural gatherings of Elders and youth to promote Anishinaabek language and culture, environmental awareness and conservation. The gatherings were held throughout the year and included deer hide preparation and tanning, language instruction, building of sweat lodges, the duties of a fire keeper, and the clan system, to



in education. More than 24,000 students in Manitoba and British Columbia saw their performances in 2006. To date, they have performed to more than 800,000 students.

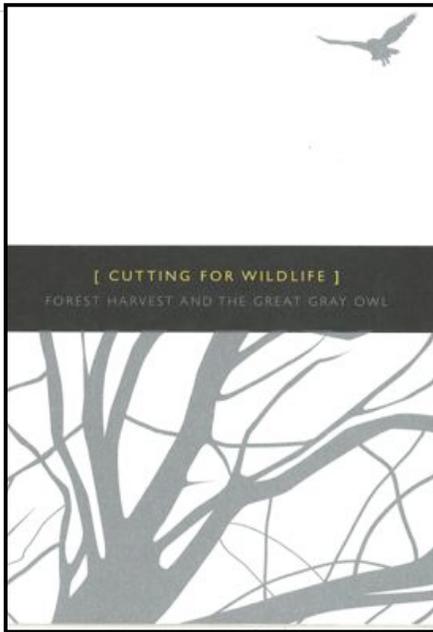
- Green Kids – Using theatre, the Green Kids, a travelling band of young actors, educated school children about environmental issues (climate change, recycling, pollution, organic farming). In 2006, the theatre troupe focused on the United Nations decade for teaching sustainability



- Manitoba Trapper's Association "Responsible Stewardship" DVD – An educational video highlighting the responsible natural resource stewardship role of trappers, the significance of trapping today, its role in traditional lifestyles, changes in the industry, and the importance of beaver to the economy and boreal forest ecosystem.
- Woodlot Association of Manitoba – Pioneer Days and Field Day in the Forest
- Legends Campground Historic Values Booklet – creation of a booklet describing Treaty 5, which was signed by Chief John

Hardisty in 1874 and a youth workshop held by Hollow Water First Nation on Black Island

- Great Falls Community Beautification – "Plant a Tree Day". This included tilling 3,000 square feet of ground and adding new soil. Trees and shrubs that were planted included aspen, white spruce, dogwood, wild rose, cherry and cranberry.
- Local Government District of Pinawa - Hosting of a Fire Smart workshop and the survey and evaluation of all residential developments using Red Zone software
- Manitoba Forestry Association "Manitoba Envirothon" - see previous description under Education programs.
- Manitoba Forestry Association "Forest Ed Program" – Hands on training and instruction for high school teachers in forest ecosystem sustainability. Teachers attend a 2 day session in the field to learn about forest ecosystems and methods of measuring forest ecosystem structure and processes. Activities are designed so that they can be used by the teachers in the classroom or in forests near their schools.



- South East Quota Holders Association “Cutting For Wildlife: Forest Harvest and the Great Grey Owl” – this booklet describes the ecology of the Great Grey Owl, Manitoba’s provincial bird, and describes how proper forest management techniques can assist in the conservation of this species.
- Manitoba Forestry Association “Forest in the Classroom” – Presentations and hands-on activities for students from Kindergarten to Grade 3.

06 – 5 – 03 Community-based Joint Planning

In order to further communications between their community, governments and industries on matters relating to natural resource management in their traditional area, Hollow Water First Nation developed the concept of a Traditional Area Advisory Committee (TAAC). The Hollow Water TAAC raises awareness of natural resource management issues with community members, and provides a conduit of communication between governments, industry and the Chief and Council. The Hollow Water TAAC is comprised of community members who represent different forest users (traditional foods and medicines, loggers, fishermen, etc),



representatives from the provincial government (i.e., Manitoba Conservation) and the forest industry (Tembec). The TAAC reviews forestry plans and also hosts meetings between community Elders and began the development of a Joint Planning Protocol, to be used for activities within their traditional area. The committee was very active in 2006, meeting almost every two weeks. The Hollow Water TAAC also met regularly in 2007 and discussions were initiated with three other First Nations in the MBMF area regarding the establishment of TAACs in their communities.

06 – 5 – 04 Winnipeg River Economic Development Round Table

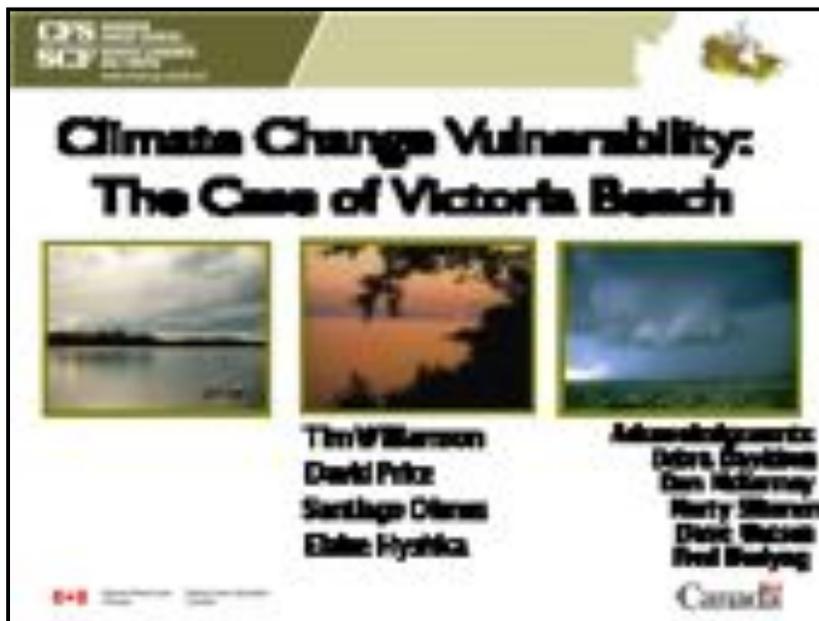
The WRED Round Table is one of many ‘Round Tables’ established around the province through the Manitoba Intergovernmental Affairs Community Choices Program. The Round Tables are a collection of communities with common goals and opportunities for working on a regional basis. The MBMF is a member of the WRED Round Table. In 2006, the WRED Round Table made significant progress in the planning for a regional trade school, called the Winnipeg River Learning Centre.

The Winnipeg River Learning Centre (WRLC) Trades School idea grew out of a 2004 priority setting exercise of the WRED Round Table, and from a regional training needs assessment underwritten by Little Black River First Nation in 2005. Surveys conducted in each First Nation (and non-First Nation) community in the region, as well as major businesses (MB Hydro, Tembec, mining, etc.) documented the keen interest and need for a regional trades school. In 2006/07, the WRRRT completed a comprehensive feasibility study, building on the regional interest in post-secondary education and trades training. The Sunrise School Division is providing use of its recently decommissioned Pine Falls Public School as home to the WRLC. As of August 2007, the WRLC has the use of three fully furnished classrooms, an office and a staff room. As WRLC programs grow, so will the space used by WRLC.

The WRRRT feasibility studies, and the MBMF start-up funding, have begun to generate interest in the potential and in the opportunities possible through adult training and education in the Winnipeg River region. The surveys clearly identified the interest and the need for post-secondary training and education within the region; identified the training needs and interests of adults, especially in First Nations Communities; and determined the support of industry and business in the region. The WRLC will be able to provide training programs that address diversification needs relevant to the region, as well as a training facility that is located close to the communities in the region. This latter point is an important aspect of the initiative, as many First Nation community members can not access training centers located in urban area (e.g., in the City of Winnipeg).

06 – 5 – 05 Climate Change Vulnerability

To improve understanding of the potential impacts of climate change on local communities and associated risks, the MBMF held a series of workshops from 2003 to 2005 in and outside the Model Forest area. The workshops brought together not only scientific experts, but also First Nation Elders and other land users, to discuss trends that have already been observed in the environment and how communities can adapt to the changing climate conditions. A larger workshop, hosted by the MBMF and held in Winnipeg, attracted more than 200 industry,



government, NGO and youth participants. Several community workshops specifically addressed wild fire risk as it relates to climate change, and what communities can do to “Fire Smart” themselves. As a result of these workshops, the MBMF was chosen as a test location to be part of a Climate Change Strategic Initiative of the Canadian Model Forest Network on assessing the vulnerability to climate change. In 2005/06, the community of Victoria Beach participated in this network-

wide initiative. The assessment for Victoria Beach involved the collaboration of the Canadian Forest Service (Edmonton), University of British Columbia, the University of Alberta and the Manitoba Climate Change Action Fund. As part of the larger Climate Change Strategic Initiative, a framework for community vulnerability assessment was developed by the Canadian Forest Service, and a community-based guidebook to assist communities in conducting local vulnerability assessments was created. The integrated assessment approach linked climate scenarios to biophysical impacts, and the human dimensions of adaptive capacity, social capital, community ranking of damages, and risk perceptions. The assessment was shared with the MBMF Board of Directors and representatives from the Rural Municipality of Victoria Beach at the MBMF Annual General Meeting in June 2007.

06 – 5 – 06 Local Indicators and Bio-monitoring



Since 2005 the MBMF has established long-term forest monitoring plots in the MBMF in order to assess the potential impacts of climate changes on aspects of forest ecosystem structure and function. In addition, classes from high schools in the MBMF have participated in the collection of data, providing the students with valuable hands-on experience in field research and to expose the students to future career pathways. In 2006, forest monitoring study plots were established near the community of Hollow Water First Nation in 88, 23, 14 and 6 year old jack

pine stands. The four younger stands were of timber harvest origin, while the 88 year old stand was of fire origin. Additional plots were established in Nopiming Provincial Park, in 106 and 13 year old black spruce stands of fire origin and in one 86 year old jack pine stand of fire origin. The City of Winnipeg became interested in our project, and as a result, a training session was held for city employees and members of the public, and initial work began in 2006 to establish study plots in the Assiniboine Forest in Winnipeg, one of the largest urban forests in North America. In 2007, study plots were completed in oak and aspen stands in the Assiniboine Forest. In addition, in 2007 a new partnership was formed between the MBMF and a French school in Winnipeg, and establishment of new study plots in the Bois des Esprit (a newly created protected area in a river bottom forest in the City of Winnipeg) was started. Additional study plots were also established in riparian areas along lakes in the MBMF to begin to examine the ecological consequences of leaving forested buffer strips along water bodies. The study plots were established using monitoring protocols developed by the Ecological Monitoring and Assessment Network (EMAN), and included assessments of vegetation species composition, measurements of tree density, basal area, crown class, tree health, crown rating, tree height and age, and light transmission. Vegetation assessments were also undertaken for the shrub and ground (herb) layer.

As with previous years, high school students were involved in the collection of some of the data. In 2006, students from Lac du Bonnet, Oak Park and Wanipigow High Schools were brought for a field trip to a study site. Miette Environmental and the Manitoba Model Forest provided students with training required to establish and monitor a 20 x 20 m stand-alone quadrat. This was the third year of participation for the Lac du Bonnet and Wanipigow schools. In 2007, Lac du Bonnet, Wanipigow, and Powerview High Schools participated in the program, as well as Centre Scolaire Leo Remillard (a French school in Winnipeg). During the sessions with the schools, students learned how to set up a twenty-by-twenty metres plot, use a GPS, identify tree species, measure dbh of trees and assess tree health, crown class and crown rating. In addition students learned how to use a clinometer to estimate tree height, an increment borer to estimate



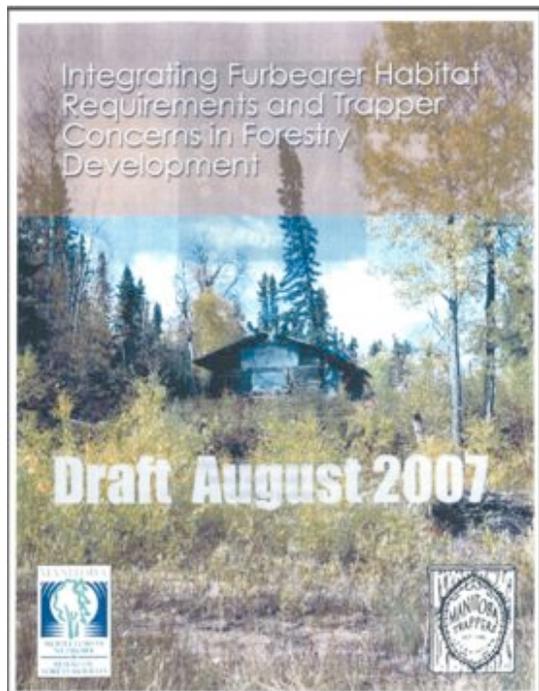
tree age, a sling
psycrometer to measure
relative humidity and a
hand held digital
thermometer to measure air
and soil temperature. The
students also learned how to
measure light transmission
in forests using a light
meter.

06 – 5 – 08 Community Programs Officer

During Phase III of the Model Forest program, the MBMF hired Rene Barker, a local First Nations person as our Community Programs Officer. The Community Programs Officer functions to be a visible presence of the MBMF in all of the MBMF area First Nations communities. Rene Barker helps to raise awareness of the various projects and programs of the MBMF, and engages those communities in our programming. In this respect, Rene facilitates direct involvement and local participation in the MBMF program. For example, the Community Programs Officer has been instrumental in the establishment of a Traditional Area Advisory Committee in the community of Hollow Water First Nation. The TAAC functions as a vehicle of communication between the community and the provincial government and resource industries on issues relating to land use in Hollow Water First Nation's traditional area. Rene has started discussions in three other First Nation communities regarding the establishment of more community-based TAACs. In addition, the community programs officer sits on many of the MBMFs more science-based projects such as the caribou committee and committee for cooperative moose management. He brings a First Nation perspective to the discussions. Rene Barker was instrumental in helping Hollow Water and Black River First Nation receive funding from Indian and Northern Affairs Canada to conduct community workshops on the concept of a moose co-management pilot project. He also led an initiative to document traditional ecological knowledge about woodland caribou north of the MBMF area. Finally, Rene Barker has helped to work with our local communities and administer the Community Opportunities Program. Rene assists with every step of the process from helping to define projects, proposal writing, to tracking progress on individual projects.

06 – 5 – 10 Trap Line / Forest Management Best Management Practices (BMPs)

The Manitoba Model Forest has a long history of increasing the development and adoption of innovative tools for sustainable development. This has included the development of Best Management Practice manuals. In 2005, the Manitoba Trapper's Association, in partnership



with the Tembec, the Manitoba Model Forest, and Manitoba Conservation began the development of a manual that would help advance forest management planning with respect to forestry operations on trap lines. After more than a year of conducting literature reviews and expert advice and workshops with the trapping community, the Manitoba Trapper's Association developed a draft manual in 2006/07 that acts as a tool to assist forest management planning, with consideration for trap lines and trappers. The BMP manual is intended to be a user-friendly tool, with plenty of diagrams, drawings and photographs. A final version of the manual will be available in 2008.

06 – 5 – 11 Manitoba Forest Rangers Program

In Phase II of the Model Forest Program, the MBMF has held a Junior Ranger camp during the summer of 2003. The training camp was designed to provide training opportunities for First Nation youth in different areas of natural resource management. The youth attended a 6 week course at a remote camp in the MBMF area. Youth would gain experience and training in a variety of areas including orienteering, chainsaw safety, ATV safety, boating safety, fire fighting, first aid, forest management, regeneration surveys, and tree planting, to name only a few. However, the Junior Ranger program hasn't been held since 2003. As a considerable of time had elapsed since the last camp, the MBMF spent part of 2006 and 2007 working with various agencies and partners to develop a new program and get funding in place. Thus, the period covered by this report was used to re-develop the Junior Ranger program. The program is scheduled to take place during the summer of 2008, and annually thereafter.