

# INNOVATIONS

THE CANADIAN MODEL FOREST NETWORK NEWSLETTER



August 2005

## CANADA'S MODEL FORESTS ON THE WORLD STAGE

### MEASURING CARBON AND MEETING CANADA'S INTERNATIONAL COMMITMENTS

*Global climate change is one of the most important environmental challenges facing society today. Currently, 149 states and regional economic integration organizations, including Canada, have ratified the Kyoto Protocol to the United Nations Framework Convention on Climate Change. It commits 55 industrialized countries to make significant cuts in greenhouse gas emissions by 2012.*

Under Kyoto, Canada is required to account for changes in forest carbon stocks resulting from afforestation, reforestation and deforestation activities since 1990. As such, on-the-ground forest management decisions at the stand level will assume a more critical role in Canada's carbon budget balance. Determining and monitoring carbon stocks is increasingly important.

For three years the Canadian Model Forest Network and the Canadian Forest Service's Carbon Accounting Team (CFS-CAT) have been working hard to develop a user-friendly, freely available, operational-scale carbon accounting model that may be applied anywhere in the country. Building on earlier work, the new model will help forest managers and analysts determine the amount of carbon stored in the nation's forests, as well as the impact forest operations have on current and future carbon stocks.

The model will allow industry and government decision makers to measure the impact of different operational forest management options on the carbon



budget of their management area. For example, the model allows foresters to assess the short- and long-term impact of the choice of species during reforestation operations.

The Western Newfoundland Model Forest and the Lake Abitibi Model Forest acted as pilot sites by providing a landbase with associated inventories to help develop and test the carbon accounting prototype. While testing occurred within these sites, the model is generic and can apply to any forest management planning process area in Canada.

Workshops, held in several locations in Canada over the past year, attracted participants from Russia, Japan and the United States, in addition to Canadian industry and government foresters. Public release of the model and supporting documentation is expected September 2005.

*For more information, contact: Stephen Kull, Carbon Accounting Liaison Officer, NRCan at [skull@nrcan.gc.ca](mailto:skull@nrcan.gc.ca) or visit <http://www.carbon.cfs.nrcan.gc.ca>.*

### INTERNATIONAL MODEL FOREST NETWORK CELEBRATES 10 YEARS

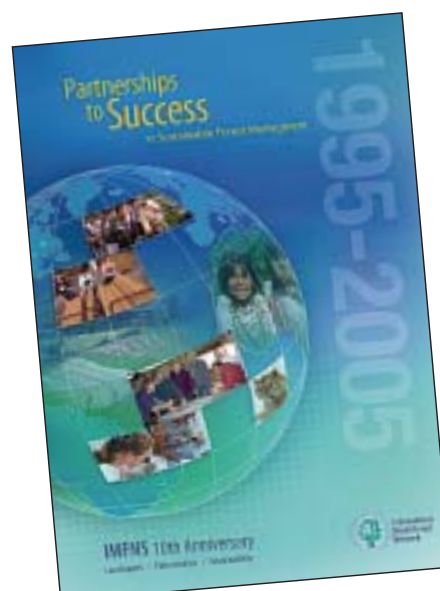
BY PETER BESSEAU, EXECUTIVE DIRECTOR AND CHRISTA MOONEY, COMMUNICATIONS OFFICER, INTERNATIONAL MODEL FOREST NETWORK

*When the model forest approach was proposed as an international initiative by Canada at the UNCED Conference in 1992, it resonated with people and institutions from a great variety of cultures, political affiliations and values. It was innovative, practical, and do-able. And, also, ahead of its time. It represented a philosophy of inclusive partnerships based on large landscapes, and focused on translating the policies of sustainable forest management (SFM) into practice.*

#### **From Canadian seeds...**

Following a period of program development and pilot project selection, the International Model Forest Network Secretariat (IMFNS) was established at the International Development Research Centre (IDRC) in 1995. Its goal was to support the development of a global network of model forests that would:

- Foster an international exchange of ideas on the concept of SFM,
- Facilitate international cooperation in the application of SFM at the field-level,
- Use these concepts and applications to support ongoing international discussion on the principles, criteria and policies related to SFM.



#### **...to dynamic global network**

Ten years later, these objectives remain as important as they were the first day, but the Network itself has changed enormously. From pilot projects in two countries, the International Network has grown to more than 35 sites in 17 countries across five continents.

This year, the occasion of the Network's 10th anniversary has provided the opportunity for Network partners to share information on some of the successes and lessons learned in key SFM areas — governance, sustainable economic development, conservation and protection, forest science and best practices, networking and sharing experience

*(continued on page 4)*



Canadian Model Forest  
Network Secretariat  
580 Booth St., 7th Floor  
Ottawa, Ontario K1A 0E4

Telephone: (613) 992-5874  
Fax: (613) 992-5390  
E-mail: [modelforest@nrcan.gc.ca](mailto:modelforest@nrcan.gc.ca)

[www.modelforest.net](http://www.modelforest.net)



Natural Resources  
Canada

Ressources naturelles  
Canada

Canada

## A FUTURE MODEL FOREST IN FRANCE?

Is the model forest approach to sustainable forest management right for France? Four third-year students in the Forestry Engineering Program at the *École Nationale du Génie Rural, des Eaux et des Forêts*, (ENGREF) in Nancy, France, spent six weeks in Canada in 2004 doing preliminary research to find out.

As part of their studies, the students spent three weeks at the Bas-Saint-Laurent Model Forest, near Rimouski, Quebec, and three weeks at the Eastern Ontario Model Forest, near Kemptville, Ontario, shadowing the daily activities of foresters, biologists



The students of ENGREF, from left to right: Gwénaëlle Gibaud, Camille Garin, Éric Bottin and Sophie Pitocchi.

and other technicians and learning about the types of projects and activities undertaken by Canadian model forests. The goal? Obtain information to help determine whether the creation of a model forest in the Lorraine region (Nancy) is feasible.

"Before coming to Canada, we had only heard negative stories about how Canada's forests were managed," said visiting student Camille Garin. "This visit was a real eye-opener."

The students noted that while the two model forests were very different, both staffs shared a strong commitment and motivation to better manage their regions' forests. As a follow-up the students organized a symposium at ENGREF in January 2005 to discuss model forest challenges in greater detail.

Adapted from Newsletter, Bas-Saint-Laurent Model Forest, March 2005



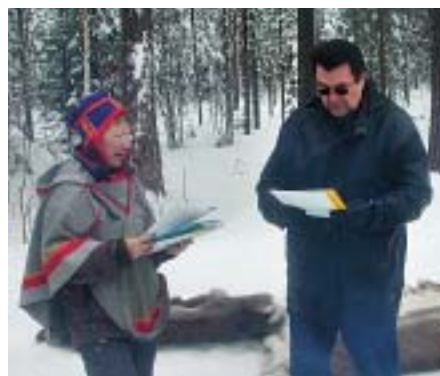
Reindeer in the Vilhelmina Model Forest

## LINKING INDIGENOUS PEOPLES THROUGH MODEL FORESTS

In September 2004, representatives of Prince Albert Model Forest's (PAMF) Aboriginal partners along with the North and South Vilhelmina Saamí village peoples and the Fatmomaakke Saamí Association in Sweden signed a Letter of Intent to Cooperate.

The agreement, which will see the exchange of people, ideas and experiences, followed the launch of the Vilhelmina Model Forest in Sweden on September 1, 2004. Vilhelmina is Europe's first model forest.

"It was fitting our two indigenous groups signed an agreement on the 100th anniversary of the formation of the Fatmomaakke Saamí Association," said Gene Kimbley, General Manager, PAMF, who signed the Letter on behalf of the PAMF partners. "As indigenous peoples, we want to keep a foot in the past by maintaining our culture and traditions, yet we also want to move ahead in the 21st century by undertaking, using and sharing the latest SFM research."



Karin Baer and Gene Kimbley

Indigenous groups in Canada and Sweden depend on the forest for their livelihoods and way of life. PAMF's Aboriginal partners are involved in sawmill ventures and the production and sale of arts and crafts, such as birch-bark baskets and tanned moose

hides; while the Saamí have a tradition of reindeer herding, producing and selling reindeer meat and hides, and creating well-known arts and crafts from reindeer antlers and bones.

"The Letter of Intent to Cooperate was a wonderful 100th anniversary gift from our indigenous brothers and sisters in Canada," said Karin Baer, Leader of the Vilhelmina North Saamí Village and one of the agreement's signatories. "We hope that we will be able to contact each other in times of trouble as well as joy."

For more information please contact the Prince Albert Model Forest at [pamf@sasktel.net](mailto:pamf@sasktel.net)

## CANADA/EUROPE STUDENT EXCHANGE PROMOTES SUSTAINABLE DEVELOPMENT IN FORESTS

A new educational exchange program is linking university students in Canada and European countries. Called *Transatlantic Education for Globally Sustainable Forests*, or TRANSFOR, it is providing students and faculty with an opportunity to understand the immense pressures and changes taking place within the world's forests and the types of management approaches being used to sustain and grow forests within Canada and the European Union.

"In order to learn about forests, students will learn in forests, so the forests become the classroom," says Dr. David MacLean, Dean of Forestry at the University of New Brunswick and President of the Fundy Model Forest. "Many of those forests are part of the Canadian Model Forest Network."

Program activities include joint curriculum development, student exchanges, field courses, and international work internships. A total of 144 students will participate in the program, half from Canadian and half from European Union universities. Experiences range from one-semester exchanges with full academic credit at partner universities, to exchange internships of varying lengths, to shorter-term field courses.

A number of Canadian Model Forests are making in-kind donations of staff time to the preparation and undertaking of field courses and other field-based opportunities for participating exchange students and interns. Canadian Forest Service staff are providing liaison, coordination and in-kind support.

The University of New Brunswick and Albert-Ludwigs University in Germany are leading the project along with partners from the Universities of Joensuu, Wales, British Columbia, Toronto, Alberta,



Foothills Model Forest

and the Swedish University of Agricultural Sciences. Human Resources and Skills Development Canada and the European Commission provide funding.

For more information please contact Dr. David MacLean at [macleand@unb.ca](mailto:macleand@unb.ca) or Dr. John Spence at [john.spence@ualberta.ca](mailto:john.spence@ualberta.ca)

## McGREGOR MODEL FOREST CONTINUES WORK IN RUSSIAN FAR EAST

The McGregor Model Forest Association (MMFA) has received \$1 million in funding, over the next two years, from the Canadian International Development Agency (CIDA) to continue its work in the Russian far-eastern state of Khabarovsk, located approximately 800 kilometres north of Vladivostok.

The collaborative project brings together MMFA staff, the College of New Caledonia (CNC) and University of Northern British Columbia (UNBC). Instructors from CNC will train state-level teachers in the technology of wood-frame building construction and entrepreneurial development while instructors from UNBC will provide training in local governance. Model Forest staff will provide project management and administration.

This is the third major project MMFA has conducted in the Russian Far East. The Association has been involved in the area since 1995, when it received \$3 million in funding for work establishing the Gassinski Model Forest. This was followed in 1999 by a \$3.4-million economic development project funded by CIDA focusing on wood frame housing and entrepreneurial development.

For more information please contact Rick Heathman at [Rick.Heathman@mcgregor.bc.ca](mailto:Rick.Heathman@mcgregor.bc.ca).



CIDA funded wood frame houses.



## FORESTRY ACROSS BORDERS

Canada shares not only a 9000-kilometre border with the United States, but also similar sustainable forest management challenges. Several Canadian Model Forests have moved well beyond their boundaries to engage in conversations with US-based organizations.

### Networking Across Borders

In 2003, the Nova Forest Alliance and the Fundy Model Forest joined an informal network composed of communications, extension and outreach representatives from forest sector organizations throughout the Maritime Provinces and the northeastern United States.

The group, *Networking Across Borders* (NAB), is dedicated to creating opportunities to collaborate and share resources which promote family forest owner education and communication.

### Common Goals, Common Landscape: Forest Convergence

In September 2004, the Eastern Ontario Model Forest (EOMF), in partnership with Domtar Inc. and the State University of New York (SUNY), brought together a diverse spectrum of people from government, parks, academia, industry and interest groups as well as landowners, from both sides of the international border.

This "Forest Convergence" provided an opportunity for organizations to make, refresh and renew connections with their counterparts across the U.S./Canada border. Despite the diversity, the group quickly agreed they shared two common values: a common landscape and congru-

ent and complimentary goals about how to manage it.

EOMF is continuing to facilitate cross-border discussions. Recently, the EOMF Board of Directors met at the Wanakena Ranger School in New York State to discuss a report by students of the Maxwell School of Business. Supervised by Professor Don Floyd of the SUNY-College of Environmental Science and Forestry, the students examined the possible ways a model forest initiative might be structured in upper New York State.

For more information please visit <http://convergence.eomf.on.ca>.



## THE BUTTERFLY CONNECTION

Each year, hundreds of thousands of monarch butterflies migrate between Mexico and Canada. Some will summer in the Boreal forests of the Manitoba Model Forest (MMF), located on the eastern shores of Lake Winnipeg and others will winter in the pine woods of the Bosque Modelo Mariposa Monarca, the Monarch Butterfly Model Forest (MBMF), located in the Monarch Butterfly Reserves in Mexico.

The MBMF is also located in an area with numerous *ejido*, or common land, communities. These *ejidos* have placed significant pressure on the forests of the Monarch Butterfly habitat.

For over a decade, the MMF has been working with the MBMF in a successful international partnership that has seen real impacts on the landscape and people of this region of Mexico. MMF is focused on assisting the Mexican people in restoring their forests through activities that satisfy their environmental, socio-economic and educational needs.

With the direction of foresters from MMF, local people in two *ejidos* planted a total of 124,000 locally grown trees. The people of the communities have a well-developed awareness of the project and have demonstrated a keen desire to continue the reforestation.

They were also introduced to the Lorena stove. The stoves not only reduce fuel wood use, they also improve the health of women and children using them by reducing the amount of smoke inhaled. Almost 500 families now benefit from the use of these stoves and fuel wood demand has been reduced by 50 percent.

The production of pine needle crafts by local women was encouraged and supported through instruction, materials and marketing support. As well, teachers in area elementary schools were provided with an environmental education program including teaching kits, manuals and workshops.

Through community consultation, education and diversification, the *ejidos* of the Monarch Butterfly Model Forest are improving their quality of life as they move to live more sustainably and in greater harmony with the forest around them.



Replanting (above) and pine needle crafts (picture at top).

For more information, please contact the Manitoba Model Forest at [dube@manitobamodelforest.net](mailto:dube@manitobamodelforest.net)

(continued from page 1)

and expertise, and leveraging resources. The information from each model forest will be shared through an anniversary publication, due for release later this year. From the data reviewed so far, one thing is clear: model forests work.

As pioneers of the model forest approach, Canada has been at the forefront of this effort by pursuing, among others: Aboriginal involvement in natural resource management, the development and

**Model forests are unique in several ways: a comprehensive and flexible approach, scale of operation, the breadth of their partnerships, the level of policy they aim to affect, and the importance placed upon networking at all levels.**

application of criteria and indicators for SFM, the contribution of private woodlot owners to SFM, and building links between industry and others, including environmental non-governmental organizations.

Some Canadian model forests have also shared their knowledge and expertise globally, for example by partnering



Ngao Model Forest (Thailand)

with the Gassinski Model Forest in Russia and the Mariposa Monarca Model Forest in Mexico. Others have provided targeted and very cost-effective support and knowledge-sharing with Network partners as diverse as Sweden, China, Argentina and Thailand.

**Looking forward**

The Network has grown quickly in recent years — regional hubs are well developed in Asia and Latin America and the Caribbean, Canada's 11 sites constitute an important sub-network of the IMFN. In Africa, there is great need and potential to operationalize the pilot sites now being nurtured in Cameroon, and to look at the Congo Basin to see if model forest

successes in other parts of the world in areas of governance, economic opportunity, and conservation can be replicated under the very challenging circumstances there.

With Sweden, Norway, Finland, and Russia agreeing to form a Regional Model Forest Network for the Barents Sea area, there are opportunities to extend linkages to include Canada and other countries with strong, mature infrastructure on issues of shared importance — such as the circumboreal forest — or in other ways that can accelerate learning and change in support of SFM.

With ten years of building and learning, the Network can look forward to making maximum use of what has been built over the next decade. Future success will lie in ensuring individual achievements in areas such as governance, sustainable economic opportunity, and conservation and protection are made available efficiently, effectively and productively to others so that we can continue to accelerate learning and innovation across the Network and make tangible progress in support of SFM. Successful partnerships are the key.

For more information or to order a copy of the IMFN 10-Year anniversary publication, Partnerships to Success in Sustainable Forest Management, please write to [cmooney@idrc.ca](mailto:cmooney@idrc.ca).

# CANADA'S MODEL FOREST PROGRAM

Each of the 11 model forests in the Canadian Model Forest Network provides a unique forum where partners can gain an understanding of other stakeholders' views, share their knowledge, and combine their expertise and resources to develop innovative techniques, tools and approaches to sustainable forest management. Model forests act as giant, hands-on laboratories in which leading-edge techniques are researched, developed, applied and monitored. The network also has the mandate to transfer the knowledge and techniques it develops so the benefits derived from its work can be shared with other forest stakeholders.

This newsletter contains just a small sampling of the activities undertaken by Canada's Model Forests. For more information:



please visit our Web site at [www.modelforest.net](http://www.modelforest.net)

or contact:  
Canadian Model Forest Network Secretariat  
580 Booth St., 7-C4  
Ottawa, Ontario  
K1A 0E4

Telephone: (613) 992-5874  
Fax: (613) 992-5390  
E-mail: [modelforest@nrcan.gc.ca](mailto:modelforest@nrcan.gc.ca)



Ulot Model Forest (Philippines)



A new poster celebrates the 10<sup>th</sup> anniversary of the International Model Forest Network. The colourful poster features selected drawings from children around the world answering the question "What does the forest mean to me?" To obtain a copy please contact the Canadian Model Forest Secretariat at [modelforest@nrcan.gc.ca](mailto:modelforest@nrcan.gc.ca).