### Partners in Sustainable Forest Management

# FOREST WATCH

Western Newfoundland Model Forest Partnership

FALL 2004

### Efford pledges continued support for MF program

The federal government is committed to supporting Canada's Model Forest Program and the work it does to advance Sustainable Forest Management, according to the minister responsible for the Canadian Forest Service (CFS) and the national Model Forest program.



#### **INSIDE**

Collaborative SFM - P2

CFS students - P3

Monitoring buffers - P4

**ACCC customers - P6** 

Walking tour - P7

**Certified success - P8** 

Research chair - P10

On the barrens - P12

Sewage art - P14

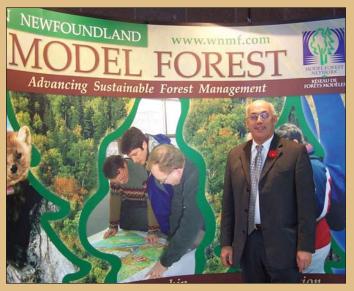
Swedish MF - P15

Fungal forage - P16

Natural Resources Canada Minister John Efford was in Corner Brook Nov. 8 to meet with partners of the Western Newfoundland Model Forest (WNMF) and CFS Corner Brook staff.

Following a presentation on the national Model Forest program and specifically, its work in Newfoundland and Labrador, Efford told the WNMF partnership that the Model Forest program is playing an essential role in helping manage the country's forests.

"It's not a matter of asking for the support of the federal government (to continue this program)," he said. "We can't afford not to have this type of program in place, not only in Canada but worldwide."



Natural Resources Canada Minister John Efford met with Western Newfoundland Model Forest partners Nov. 8 to discuss the program and work being done to advance sustainable forest management in Newfoundland and Labrador and throughout Canada.

Efford spoke of the downturn in the country's fishery due to poor management, and said the Model Forest program will help prevent the forest industry from meeting a similar fate.

"Where I live it's the fishery that's the problem – we messed that up. You're different. You're not sitting idly by. I just wish this type of program was in place for the fishery. The department's support (for the program) goes without saying."

Continued on Page 14



Ressources naturelles Canada



### A collaborative approach to SFM

The Western Newfoundland Model Forest is a partnership of diverse stakeholders dedicated to sustaining Newfoundland and Labrador's natural forest resources for the benefit and use of all residents, both now and in the future.

Our partners' vision is to manage our use of the forests to sustain biodiversity and provide benefits including employment, recreation and a healthy environment.

Our partners represent industry, government, academia, recreational, environmental and economic development groups. We all have a stake in the future of the forest and our environment. The Model Forest brings these stakeholders together to share their views and opinions, and to make good m a n a g e m e n t

Each Model Forest serves as a

unique demonstration of part-

ners who represent a diversity

of forest values working

together to advance sustain-

able forest management.

decisions. The Government of Canada launched Canada's Model Forest Network through Natural Resources Canada

Canadian Forest

Service in 1992 to address the challenge of balancing the extensive range of demands we place on our forests today, and the needs of tomorrow's generations.

Each Model Forest serves as a unique demonstration of partners who represent a diversity of forest values working together to advance sustainable forest management.

The Western Newfoundland Model Forest, representing the Province of Newfoundland and Labrador, is part of the national Model Forest Network. The WNMF is a snapshot of the





Partnerships in action.

Province of Newfoundland and Labrador and its stark beauty, abundant natural resources, and renowned hospitality.

Our geographic range includes nearly one million hectares of boreal forest bounded on the north by Gros Morne National Park, the east by the Buchans Plateau and Lloyds River, the south by the Burgeo Highway, and the west by the Gulf of St. Lawrence.

We bring our partners together to achieve balance in forest management planning – to allow them to reap social and economic benefits from the forest while protecting its

environmental sustainability and biological diversity. Since 1992, our partners have been actively involved in a wealth of projects spanning areas including wildlife protection and research, forest infrastructure mapping and inventories, environmental biodiversity, domestic and commercial wood harvesting, socio-economics, recreation, management planning, education and communications.

Our work has generated an impressive suite of research projects, forest management tools and models, and educational modules that have enhanced sustainable forest management in Newfoundland and Labrador.

#### **Our Partners**

Abitibi Consolidated Company of Canada, Aquatic Centre for Research and Education (ACRE). Natural Resources Canada - Canadian Forest Service, Canadian Institute of Forestry, City of Corner Brook, College of the North Atlantic, Corner Brook Pulp and Paper Ltd., Department of Fisheries and Oceans, Gros Morne National Park, ACAP Humber Arm, Humber Economic Development Board, Humber Natural History Society, Department of **Environment and Conservation (Inland** Fish and Wildlife, Lands, Parks and Natural Areas Divisions), Forest Resources - Department of Natural Resources, Newfoundland and Labrador Trappers Association, Western School District, Sir Wilfred Grenfell College, Sierra Club of Canada - Newfoundland and Labrador Forest Campaign.

For more information on the Model Forest program, please contact us:

Western Newfoundland Model Forest P.O. Box 68 Forest Centre, Sir Wilfred Grenfell College, University Drive, Corner Brook, NL. A2H 6C3 (Tel) 709-637-7300 (Fax) 709-634-0255

(Email) <a href="mailto:wnmf@wnmf.com">wnmf@wnmf.com</a> (Web site) <a href="mailto:www.wnmf.com">www.wnmf.com</a>

### Visiting students help CFS with research

Forestry research under way in Corner Brook is truly a global initiative.

The Natural Resources
Canada – Canadian
Forest Service site in
Corner Brook has a
strong research capacity
in three primary areas –
forest ecology, insect
and disease ecology, and
landscape ecology.
Research is done on
local, national and international levels. One of
the international links
was established with the
Dresden University of
Technology in Germany.

Linda Kahnt and Henrik Western Star. Stark, who are currently

working in the city, bring the total number of students who have been here from the Tharandt Faculty of Forestry to seven, including five working to complete their master's and honours degrees.

Martin Moroni, a climate change scientist, and Paul Carter, an ecosystem productivity technologist, have continued the collaboration, and are now reaping the benefits of two additional members on their team. They are currently researching the carbon cycle in the forests of Newfoundland, including a study of the impact of forest clear cutting on soil and carbon.

Kahnt, a master's student, will be conducting research into the local forests, particularly examining the organic layer of the forest floor to try to determine if there is any increase in decomposition of that layer following harvesting. Stark is joining the team for the field work experience to complete his diploma course. Moroni said providing such resources as the use of



the international links was established with the Dresden University of Technology in Germany.

From left, Paul Carter, ecosystem productivity technologist, and MartinMoroni, climate change scientist with Natural Resources Canada - Canadian Forest Services (NRCan-CFS) in Corner Brook. They are working with Linda Kahnt and Henrik Stark, forestry students from the Tharandt Faculty of Forestry of the Dresden University of Technology in Germany. Photo by Cory Hurley, The Western Stark

CFS labs, equipment and transportation is a good trade-off for the work the two students will do.

"As a research organization, we are interested in getting some work done and completing some analyses," said Moroni. "Linda's work directly contributes to that, because she takes a portion of research and takes control of that to produce her master's thesis. It's another person working a project for a period of time, getting work done that we otherwise wouldn't be able to do."

Stark is in Corner Brook contributing to the projects at various levels, said Moroni.

"Henrik is going to visit the sites and can help carry out sampling and preparation of the samples for analysis. We've offered Henrik this work experience in return for his labour." Carter, who works closely with these students in the field, also sees the collaboration as mutually beneficial.

studying are research from an international perspective, both with regards to attracting funding to our projects, as well as attracting talented people who are interested in similar things," he said. "It is nice to have an international opinion, and to view the differences of forestry and forest practices, while having access to the expertise in Germany as well."

Stark said he had two reasons for coming to Corner Brook. "On one side, I'm very interested in the work that is done here and, on the other

hand, it is much better to gain a job later if I got some practical experience in a foreign country," he said.

Kahnt said the differences between the countries' forests are great. Here softwood trees – mainly balsam fir and black spruce – are much smaller than the valuable hardwood trees in Germany, like oak, beech and pine.

The forests of Germany have also been well cared for and maintained for more than 1,000 years, compared to 100 years of management in this province. A lot of that comes from Germany having more than 80 million people, compared to Newfoundland and Labrador's population of about 500,000, even though both regions are roughly the same geographical size.

Cory Hurley, The Western Star. Used with permission.

### Buffer zone monitoring program





Left: Crew setting up a sticky trap (on tree) and a pitfall trap (on ground) to be sampled the following day. Right: Inland Fish & Wildlife staff taking an aquatic sample. IFWD photos.

# Fantastic partner cooperation generates productive research

The Buffer Zone Working Group (BZWG) was established in 1999 to deal with buffer zone issues arising from five-year operating plans for Forest Management Districts in Newfoundland.

After three idle years, this group was reactivated by the Western Newfoundland Model Forest Partnership, acting on behalf of Corner Brook Pulp and Paper Ltd. (CBPPL). The company took on the lead role, with tremendous success. The Inland Fish & Wildlife Division (IFWD) of the Department of Environment and Conservation joined this group in 2002 in order to provide input from a wildlife perspective.

Discussions, on-going meetings, and respectful relationships among members have resulted in two very active years of work. The BZWG membership represents CBPPL, Abitibi Consolidated Company of Canada, Department of Natural Resources, Department of Environment and Conservation (Inland Fish and Wildlife Division), Fisheries and Oceans Canada, Forest Engineering Research Institute of Canada (FERIC), Noble's Lumber, and the WNMF.

The BZWG has been addressing issues such as the value of riparian zones to Newfoundland's paper industry and the lack of a riparian management plan for the province. Questions such as how and whether these buffers can be

FOREST WATCH Fall 2004 | 4 timber without

sacrificing their ecological integrity have been taken on. Current forestry regulations define uncut zones (buffers) around all water bodies greater than one metre in width or water bodies that are indicated on 1:50 000 topographic maps. Riparian buffers represent a considerable (four to six per cent) portion of the productive land base.

The group reviewed current forestry practices throughout Canada order to establish a baseline for a draft on riparian management. In the fall of 2003, CBPPL posed a selec- FERIC. tive harvesting



Graphic of a harvester implementing the "insertion" method. *Graphic courtesy of FERIC* 

technique for managing a 20m-buffer. This technique is called "insertion," where the harvester is permitted to enter the buffer approximately half the machine length (four to five meters) ideally every 15 to 20 meters.

The literature review did not reveal an ecological basis for removal of 30 per cent of the basal area, nor was there any indication of any long-term monitoring programs to assess potential impacts of selective harvesting on the ecological system that maintains the integrity of riparian systems. The goal of the IFWD is to analyze the kinds of impacts the proposed harvesting technique may have on the riparian system.

In order to detect any changes from selective harvesting within a 20m-wide strip over a short period of time, terrestrial insect and aquatic invertebrate communities seem to be the most appropriate species to use in applying The "Before and After & Control and Impact" (BACI) design. This design is used to determine if selective harvesting changes these community structures and compositions.

In agreement with Environmental Monitoring and Assessment Network standardized monitoring protocols, a grid of 3 x 6 sampling stations was laid out in June 2004 at three treatment- and three control-buffers within CBPPL's current operating area of Black Lake on the Baie Verte

Peninsula. IFWD staff and students collected terrestrial and aquatic invertebrates in these buffers once a month over a period of five months.

Over the winter, IFWD staff and students from the College of the North Atlantic's Wildlife Technician Program will identify species composition and abundance. Preliminary results are expected in spring 2005. Our primary goal for this first sample season was to establish a suite of collection methods and to establish a baseline of local terrestrial and aquatic invertebrates' communities in accord with the Environmental Monitoring and Assessment Network standardized monitoring protocols.

This year's work revealed fantastic co-operation between CBPPL, the College of the North Atlantic (CNA), the IFWD and the Forestry Division. New buffers were established in October 2004 and sampling will start in May 2005, with projected harvesting to occur in 2006. This will provide a minimum of one year of preharvest data. Additional data on for-

est conditions pre- and post- harvest, water quality, soil conditions, ground disturbance, etc. will be collected by other members of the BZWG whenever possible to enhance the working group's assessment of ecological impacts.

The IFWD, in conjunction with Forest Resources, is developing proposals to contract full-time students to conduct the sampling and identification program next year. The IFWD sees this as an excellent opportunity for a master thesis and invites students to contact the IFWD of Newfoundland and Labrador. Further details can be obtained from Jana Fenske, IFWD BZ-Monitoring Project leader at (709) 637-2062 or via e-mail, janafenske@gov.nl.ca.

We would like to thank all participants who joined us to make this a very successful sampling season.

Jana Fenske Habitat Management Program Inland Fish & Wildlife Division

### Scientific research under way in protected areas of NL

Nineteen scientific research permits were issued in 2004 for wilderness and ecological reserves and provincial parks.

Collecting information on the natural features within Newfoundland and Labrador's protected areas is important when addressing management issues, according to Environment and Conservation Minister Tom Osborne.

"Researchers provide Parks and Natural Areas Division with important biophysical data and assist in the management of protected areas in the province," he said. The Inland Fish and Wildlife Division and numerous agencies, such as Environment Canada (Canadian Wildlife Service) and Memorial University conduct research in the provincial reserves and parks.

"Research is encouraged in our protected areas and new researchers are welcome to contact Parks and Natural Areas Division for more information." said Osborne. Permits to conduct scientific research and monitoring in the parks and reserves are mandatory and can be obtained by contacting Nicole Lights, biologist, Parks and Natural Areas Division at (709) 635-4529.

Twelve of the 19 permits issued in 2004 were for seabird reserves and of the 12, nine were for Witless Bay Islands Ecological Reserve.

In 2004, researchers studied seabird population dynamics, ecosystem dynamics, caribou, snowshoe hare, fossils and endangered plants. Dr. Guy Narbonne of Queen's University in

Ontario published several articles on some of the oldest complex life forms discovered at Mistaken Point Ecological Reserve. These fossils are gaining international attention as the reserve has been nominated for UNESCO World Heritage Site designation. Some research also focused on rare plants. A number of Memorial University students and professors monitored pathogens and effects of climate change on Long's Braya and Fernald's Braya, endangered and threatened plant species. These unique species are found only on the Northern Peninsula of Newfoundland.

> Department of Environment and Conservation, Parks and Natural Areas Division

FOREST WATCH Fall 2004 | 5



Abitibi Consolidated Company of Canada's Grand Falls Division hosted a business meeting for its customers representing the Time-Warner Book Group in the United Kingdom. Left photo: Don Brain, centre, of Abitibi Consolidated Company of Canada Woodlands Division, explains efforts under way to maintain habitat for



Newfoundland marten to customers Scott Barclay and Nick Ross. Right photo: Wooddale Provincial Tree Nursery manager Barry Linehan, left, gives the visitors a first-hand look at the tree seedlings used in the company's forest management program. Photos courtesy of

# First-hand look

### UK customers visit ACCC's Grand Falls operations

There has been a strong resurgence in pocketbook some moderate growth expected next year. readership in the UK of late, and this was part of discussions that took place when the mill recently hosted UK bulky book customers from Time-Warner.

Abitibi Consolidated Company of Canada's Grand Falls operation hosted Nick Ross (production director, Time-Warner, UK) and Scott Barclay (Hale Paper) to discuss some of the issues involved with the bulky book business in the United Kingdom.

The feedback concerning the performance of the company's bulky book paper at Time-Warner was positive, with a good runnability record in the printing plants and good print quality levels from copies presented.

One of the key issues raised was paper brightness/shade, and how this parameter was more important for the book business when compared to newspapers.

Any slight brightness variation can be seen on the side of books, and this will be a key quality parameter that will be monitored closely. It appears the pocket-book business is generally in a healthy state in the UK at the

FOREST WATCH Fall 2004 | 6 there will be

#### **Tonnage increasing**

The company has been supplying bulky product from No. 7 paper machine into this market for the last few years, and the tonnage has slowly been increasing. Local sheet has been well accepted, compared to some of the scan sheets containing recycle.

There is a quality concern about too much recycle in the book-making sheets, and this could have a positive effect on the potential sales for Grand Falls' bulky products.

The Time-Warner customers took the time to visit the plant, and had the opportunity to see the various aspects of Abitibi's Grand Falls operation, including Number 7 paper machine.

The feedback was positive, with a good sense that they would like to expand the business relationship. This is good news for the mill, as it fits with the current strategy of selling more specialties on Number 7 paper machine and helps verify that this business decision was the right one.

> David Bradbury, Abitibi Consolidated Company of Canada

# Take a hike

More than 1,000 students, parents and teachers took to the trails of the Corner Brook Stream this fall to participate in the Western Newfoundland Model Forest Partnership's annual Urban Forest Ecology Walking Tour.

Forester Marg Brazil led students ranging from Kindergarten to Level 3 in the Humber Valley - Bay of Islands area on a tour of the forest in our backyard, bringing them to the urban forest environment of the Corner Brook Stream Trail and letting them see, smell and feel the forest around them.

There's no better way to learn about the forest than to spend some time exploring it. The boreal forest is the largest ecosystem in Canada, extending from British Columbia to Newfoundland and Labrador.

"We don't want to just tell students how important the forest is to our environment, our economy, and our lives – we want to share the forest with them," said Brazil, who has an extensive background in the field of forestry and experience as an instructor with Memorial University of Newfoundland's forestry program.

The tour highlighted the flora and fauna of the boreal forest, focusing on animals, plants, diseases, soils and ecology of the area, and identifying tree and plant species along the trail.

Participants had an opportunity to experience life within a forest ecosystem, learn about how different plant and animal species interact, and spend time outdoors to enjoy the forest at a beautiful, dynamic time of the year.

The WNMF has been offering walking tours every fall for the last six years. Providing an opportunity for students to explore a little bit of forest in the heart of the city is an important component of the Model Forest program

We all have a part to play in working towards sustainable forest management for the future. Whether it's government and industry leaders making management decisions, researchers and educators learning about our forests and sharing their knowledge with others, or students understanding how one tree in the forest interacts with the environment around it - we are all responsible for our forests. The WNMF walking tour is one way to encourage students to think about the forest around them.

Linda Skinner, WNMF communications coordinator



Top: Educator Marg Brazil led students on the Western Newfoundland Model Forest's annual walking tour of the boreal forest. Brazil helped students of all ages explore the forest ecology of the Corner Brook Stream Trail. *Photo by Linda Skinner*. Bottom: Students from Regina High School's Creative Writing Class took some inspiration from nature on the walking tour. *Photos by Paul Quigley*.





# Community, sustainability, achievement CBPP Woodlands celebrates certification success

How do you celebrate a significant milestone in your quest for sustainable forest management?

Corner Brook Pulp and Paper Woodlands did it by inviting those who helped make it possible to a forest site where you can see the essence of sustainable forest management firsthand. It was a celebration of community, sustainability and achievement.

Nearly 100 people gathered at Whitewash road Sept. 9, 2004 to participate in a ceremony recognizing Corner Brook Pulp and Paper Woodlands' success in achieving registration to the Canadian Standards Association Sustainable Forest Management Standard, CSA Z809-02 and re-registration to the ISO 14001 Environmental Management System standard.

Pierre Levac, the lead auditor with Quality Management ed certificates of registration to the two standards.

Patrick Tompkins, CBPP's Woodlands Manager, millionth tree seedling at the ceremony. explained the significance of the two certificates to the company and recognized the help of the Public Advisory Committee in this success.

the public advisory committee and who developed the Masters noted that "Kruger took over the operation in

30 MILLIONTH TREE

Michel Vachon and Allan Masters plant CBPP's 30 millionth tree.

sustainable forest management plan." Tompkins said.

"That was the key piece in terms of achieving the CSA certification. Thirty-three people from interested individuals to representatives of stakeholder groups and town councils make up the committee.

"These people put a tremendous amount of time into the process over the past two years and we really appreciate their efforts."



Accepting the certificates of registration: Bob Snyder, CBPPL Vice President and General Manage; George VanDusen, Forest Management Superintendent; Institute who conducted audits of the company's Anne Hollahan, Environmental Management Coordinator; Pierre Levac of QMI, harvest operations in the Sustainable Forest Management system in July, present- who presented the certificate; Michel Vachon, Kruger Inc.; and Patrick area in 1930; 45-year-old Tompkins, Woodlands Manager. Photos courtesy of CBPP.

To celebrate this milestone, the company planted its 30

Michel Vachon, Kruger Inc.'s Vice President of Manufacturing and Allan Masters, Deputy Minister and CEO of Newfoundland and Labrador Forest Resources, "I want to thank the hard work of the people who sat on Department of Natural Resources, planted the tree.

> Corner Brook 20 made a tremendous contribution Newfoundland, people and its comthey've made of this province."

years ago and in that time I think they've munities. In addition tremendous investment in terms of the proper management of the natural resources

The Whitewash Road site was chosen because you can see the results of more than 75 years of active forest management in the area from one

that have resulted from forest management activities in the area since 1930.

From the site you can see virgin forest stands more than 100 years old that have never been cut; 75year-old stands that have grown after the earliest stands that originated from harvests in the early

1960s and were pre-commercially thinned in 1977; 15-year-old recently thinned stands that rep- Four generations of Reids - a testament of sustainability: Krista, Northwest and resent the third crop of forest on Nicholas and Craig, Guy and Eli Reid. the site, having regenerated after

1930s; and five-year-old stands, also a third generation of trees on the site that have regenerated from recent harvesting operations.

Silviculture and Fibre Quality Superintendent Wayne Patrick Tompkins noted, "While today's ceremony high-Brown pointed out the various stands that are visible from the site.

Maintaining a mosaic of forest stands of various ages and stand conditions across the landscape provides good wildlife habitat, a wide range of recreational opportunities, as well as sustainable employment for the future According to Brown, this is the essence of sustainable forest management.

#### All in the family

Community sustainability was also highlighted at the ceremony. Residents of the Town of Deer Lake have worked and played in the surrounding forests since the town was built. Several residents of the town who had worked in the The panoramic view looking north from the site forest around the site attended the ceremony, including contains a wide range of forest stand conditions four generations of the Reid family. Eli Reid is a retired

woods worker who spent 44 vears in the woods working for the company. Eli's sons, Guy and Doyle Reid, own Northwest Forest Resources Ltd. one of Corner Brook Pulp and Paper's major harvesting contractors.

Guy's son Craig is a foreman with attended the ceremony with his son

the harvest in 1989 of the 55-year-old second growth (Eli's great-grandson) Nicholas. Nicholas is only five stand that had originated after the first harvest in the early months old, but he will have the opportunity to enjoy the same benefits from the forest as Eli, Guy and Craig have enjoyed because the forest has been managed to provide a sustained flow of wood, habitat and recreational opportunities now and far into the future.

> lights the town of Deer Lake and its association with our forests, a similar story could be told in many other communities around our limits."

> > George VanDusen, Forest Management Superintendent, Corner Brook Pulp and Paper Ltd.

## "Enormous step forward"

### SWGC awarded Canada Research chair

Dr. John Ashton, principal of Sir Wilfred Grenfell College, is pleased to report that the college has been successful in its application for a Tier II Canada Research Chair in environmental economics. The proposal from the college was selected from a larger group of proposals from academic units across Memorial University system.

The chair will develop an integrated research program focusing primarily on economic issues facing environmental/resource develprogram will be developed in

the context of Canada's economic development and will take into account the demands of globalization and sustainable development.

"The awarding of this chair represents an enormous step forward for the college and the community," Dr. Ashton said. "It will allow us to bring into the area an individual with significant new research expertise. We can recruit for this person anywhere in the world and engage someone who will greatly enhance our reputation and credibility as a research community, as well as an educational one. Significantly the appointment brings with it at least half a million dollars in supporting funds.

"Moreover, the presence of the research chair will help us to lever further funding and appointments in the research domain from other agencies and programs," he said. "Having a Canada Research Chair on campus will help us to recruit new students and faculty from other parts of Canada and beyond. By adding to our research capacity in the Environmental Sector it will enhance our ability to lead the initiative to establish Corner Brook and vicinity as a Centre of Excellence for Environmental Education, Research and Development."

The appointment was also welcomed by Humber East M.H.A. and Justice Minister FOREST WATCH Fall 2004 | 10 Tom Marshall.



From left, Dr. Wade Bowers, Vice-principal Associate, Research, Dr. John Ashton, Principal, and Dr. Holly Pike, Vice-principal, gathered in Grenfell's Research Office to discuss the significance of the fact that strengthens opment in the province. This Grenfell College has been awarded a Canada Research Chair (Tier 2). case for the estab-Photo by Pamela Gill

"I am delighted that Sir Wilfred Grenfell College has been awarded Canada Research Chair in Environmental Economics," Marshall said. develop-"This ment adds significantly to the environmental research capacity available within the Corner Brook region and so lishment here of a

Centre for Environmental Excellence, an initiative to which I am firmly committed."

The Canada Research Chairs Program is part of a national strategy to make Canada one of the world's top five countries for research and development. In 2000, the Government of Canada allocated \$900 million to establish 2,000 research professorships - Canada Research Chairs – in universities across the country. Chairholders advance the frontiers of knowledge in their fields, not only through their own work, but also by teaching and supervising students and coordinating the work of other researchers.

The research chair assigned to the college is termed a "Tier 2 Research Chair." Such appointments are tenable for five years and renewable once and are for exceptional emerging researchers, acknowledged by their peers as having the potential to lead in their field. For each Tier 2 Chair, the university receives \$100,000 annually for five years.

Dr. Wade Bowers noted that "the chair will provide a strong platform on which Grenfell can build research capacity in support of Canada's Innovation Strategy."

Some of the goals set out for Grenfell's chair include the stimulation, enhancement and integration of applied economic research to the environment and research sectors; the development and co-ordination of collaborative research among researchers working in social and biophysical sciences and industrial partners; the mentoring of undergraduate and graduate students; and the augmentation of the university's competitiveness in attracting world-class researchers.

The chair in environmental economics at Grenfell will bring a leadership role that will champion environmental economics in support of decision-making, thereby placing the interdisciplinary capacities of the university at the disposal of local communities to enhance their educational, social, cultural, and economic development. The chair will also offer Memorial an excellent opportunity to exercise promoting leadership in Newfoundland's knowledge economy.

The next step, says Dr. Ashton, is to begin the search process by establishing a search committee.

"The primary criteria for the successful applicant for this chair relate to his or her demonstration of a record for academic excellence and accomplishment in the research domain," says Dr. Ashton.

"We will be recruiting widely within social and/or biophysical sciences. We will also be looking for a leader with an established and prestigious record who can build partnerships and alliances."

The college will have one year to conduct an international search and identify and appoint a candidate with the appropriate credentials. For more information on the Canada Chairs program, visit <a href="http://www.chairs.gc.ca">http://www.chairs.gc.ca</a>.

Pamela Gill, SWGC Communications Coordinator



### WNMF Out and About

Left: We hosted a Social Sustainability workshop in cooperation with Tom Beckley of UNB in August. Participants involved in a project to define, measure and manage social sustainability visited the community of Hampton.

Right: Our Board **Directors** and **Management Group part**ner representatives gathered for a planning retreat at Killdevil Camp in September. Partners discussed their goals and objectives as we reach the mid-way point of Phase 3. New member Catherine Boyd of the Sierra Club gave a presentation.





Left: The WNMF display was a popular attraction at the Greater Corner Brook Board of Trade fair at the Pepsi Centre in October. We gave away spruce seedlings provided by the Department of Natural Resources' provincial tree nursery at Wooddale. GM Jim Taylor and communications coordinator Linda Skinner greeted visitors at the WNMF

Right: Endangered species biologist Joe Brazil of the **Environment and** Conservation Wildlife Dept's Division spoke about Endangered legisla-Species tion during Species at Risk Act legislation workshop hosted by the WNMF in October.



## Survival, adaptation and fragility

# Limestone Barrens Project raises awareness of valuable rare species

Local residents are learning how important the limestone barrens habitat of the Great Northern Peninsula is on a global scale.

In an effort to protect this unique habitat, many parthave nerships been formed including government agencies, community groups and individuals working together under the Limestone Barrens Stewardship Habitat Program (LBSHP).

national program to preserve the habitats of endangered and threatened

species of plants and animals. The program was developed to help residents and landowners take on the responsibility of caring for the fragile habitat and rare plant species of the Great Northern Peninsula. To ensure their protection, the commitment of people who live and work in this environment is essential.

Dulcie House, program coordinator for the LBHSP explains, "The LBHSP emphasizes community education to increase awareness in the local communities and encourages residents to become custodians of this exceptional resource they have in their backyards."

"The goal of the program is to enhance local and regional knowledge and preservation of limestone barrens ecology and rare plants, to instil local pride, and to promote responsible use, including eco-tourism opportunities on the limestone barrens from Port au Choix National Historic Site in the south to Burnt Cape Ecological Reserve in the north," she said.

The LBSHP is part of a Artist Liam O'Callaghan, curator Stuart Reid, artist Har Prakash Khalsa, and Dulcie House, program coordinator for the Limestone Barrens Habitat Stewardship Program, visit the limestone barrens at Port au Choix National Historic Site. All photos courtesy of Dulcie House.

LBSHP are creating opportunities people to learn about this special feature of the Newfoundland landscape, said House. One of the opportunities refers to includes the converging of the LBHSP and Limestone Barrens Project.

The Limestone Barrens Project is a creative exchange between Canadian and Irish writers. composer, and artists working in lensbased media in part-

nership with scientists and conservationists. The project uses as its basis the limestone barrens of the Great Northern Peninsula, Newfoundland; the Bruce Peninsula, Ontario; and the Burren in County Clare, Ireland.

Charlotte Jones, one of the curators of the Limestone Barrens Project explains, "The limestone barrens as habitats or ecosystems are globally rare and at risk from both natural and human intervention; therefore plants found there may be common in those locations but rare or endangered because the habitat is rare."

Jones said all three areas are important as their systems and inhabitants are valuable indicators of climate change. Thus these three regions stand as metaphors for survival and adaptation on the one hand, and, on the other, fragility.

The limestone barrens of the Great Northern Peninsula (GNP) are globally significant because they are home to the world's total population of Long's braya, Fernald's braya and the Barren's willow.

Partners of the FOREST WATCH Fall 2004 | 12

The coastal limestone barrens of the GNP are located in the Strait of Belle Isle Ecoregion. The area from Port aux Choix National Historic Site to Burnt Cape Ecological Reserve is considered the "hotspot" of vascular plant diversity on the island. Out of the 298 species of vascular plants considered rare in Newfoundland – 104 occur in this region – 22 are found only in the Strait of Belle Isle Ecoregion.

Between July and November of 2003 artists, writers and composers walked the limestone barrens in at least one of the three regions. Based on these walks and briefings by scientists and conservationists, they produced original artwork for an international touring exhibition.

An international symposium, *Limestone barrens: a land-scape under stress* was held during the first week of July 2004 at the Sir Wilfred Grenfell College campus of Memorial University of Newfoundland in Corner Brook. Its focus was on appreciation and understanding of the fragile nature of the limestone barrens and on issues surrounding stewardship and conservation worldwide. Other components of the project include a publication and schools projects.

The touring exhibition opened July 2, 2004 at the Sir Wilfred Grenfell College Art Gallery in Corner Brook. On Nov. 17, the exhibition opened at the Tom Thomson Memorial Art Gallery in Owen Sound, Ontario. In March 2005 the exhibition begins its tour of Ireland. The first exhibition venue there will be the Model Arts and Niland Gallery in Sligo.

Following the tour of Ireland the exhibition will return to Newfoundland, where it will be on view at the Art Gallery of Newfoundland and Labrador.

Partners of the LBHSP include Environment Canada "Species at Risk" Program, Memorial University of Newfoundland (MUN), Parks Canada, Department of Environment and Conservation (Inland Fish & Wildlife and Parks & Natural Areas Divisions), Newfoundland and Labrador Legacy Nature Trust (NLLNT), Newfoundland and Labrador Hydro, local community groups, schools and individuals.

For more information on the Limestone Barrens Habitat Stewardship Program please contact Dulcie House at lbhsp@yahoo.ca or (709) 225-3126.

Dulcie House, program coordinator, Limestone Barrens Habitat Stewardship Program



Liam O'Callaghan, an artist from Ireland, talks to students at Straits Elementary School, Flower's Cove about how the limestone barrens are a thriving place of growth in contrast to the general view of these landscapes as barren places.



In September, prior to the closing of the exhibition at Corner Brook, members of the Limestone Barrens Project travelled to communities on the Great Northern Peninsula to present their work. Attending a presentation at Raleigh were, from left, Gerry Yetman, senior biologist, Inland Fish & Wildlife Division, Corner Brook; Charlotte Jones, NL curator; Greg Staats, visual artist, from Toronto; Liam O'Callaghan, artist in residence at the Irish Museum of Modern Art, Ireland; Elizabeth Smith and Jackie Bessey, interperters; and Wavey Greenham, park ranger with Parks & Natural Areas Division, Raleigh.

#### CONTRIBUTE TO FOREST WATCH

To contribute to Forest Watch, or for questions or comments, please contact Linda Skinner at 709-637-7304 or email wnmf@wnmf.com

### Art contest - you can make a difference!

Did you know that more than NINE MILLION LITRES of raw, untreated sewage are discharged into the Bay of Islands **EVERY DAY?** 

ACAP Humber Arm is offering an art challenge to students in the Humber Arm area to design a sign on the importance of cleaning up the Bay of Islands. Your work may be displayed on a billboard in the Corner Brook area. This contest is not just open to art students, but to any student who is creative and has an active imagination. There is no set medium for creating your poster. You can use crayons, leads, markers, paint or computer - just make sure it brings home the idea that our bay is in trouble and needs some TLC to get it back on track!

Your artwork will be reviewed by a panel of judges and the winning design will give you local recognition with your artwork featured on an ACAP-sponsored billboard.

The winner will also receive a 2004 Trek mountain bike. Other contributions may also be displayed on ACAP Humber Arm material and our Web site at www.acaphumberarm.com.. After you complete your poster, please give it to your teacher, who will then drop it off to the ACAP office.

For more information, contact ACAP executive director Sheldon Peddle at 637-7309 or email info@acaphumber-

### Do you have any information on the Bay of Islands?

Would you like to contribute to the ACAP Humber Arm community library?

The ACAP Humber Arm Environmental Association is updating and expanding its library resources and we need **your** help! If you have access to, or are aware of, any information (in any form) on the Bay of Islands please contact Tara Martin.

Phone: 637-7305 or email tmartin@acaphumberarm.com.

We are looking for information in the following categories: Physical/Natural Environment, Water Quality, Coastal Use and Development, Traditional Ecological Knowledge, Environmental Concerns, Socio-Economic, History

### Minister pledges support for MF program

Continued from Page 1

The Model Forest program focuses on national issues, but each site also faces its own unique problems in forest management. For example, in Newfoundland and Labrador the Model Forest is working with researchers to prevent infestations of the balsam fir sawfly.

While this pest is a unique problem in Natural Resources Canada Newfoundland and Labrador, insect management of pests affecting other areas is an important mandate of the CFS.

"Everyone is more aware of the need for more research into infestations," said Efford. "We need to put more money into insect research. I'm telling you this to give you the confidence that NRCan (supports the MF concept) – we have to put more resources into a national program to



Minister John Efford.

Efford discussed his commitment to environmental issues his department is involved in, noting that in the past he has often been labeled as an industrialist more so than an environmentalist. However, he claims this is not an accurate depiction. "I am an environmentalist, but one can't be done at the expense of the other."

Efford said he was impressed by the team approach that makes the Model Forest pro-

gram a success story.

"We've got more natural resources in Newfoundland and Labrador per capita than any other province," he said. "The Model Forest program is playing a major role in managing those resources. I would like to see a similar project to manage our oceans as you are doing for forestry."

move your agen-FOREST WATCH Fall 2004 | 14 da forward."

Linda Skinner, WNMF

### IMFN launches Europe's first Model Forest

When the countries of the Barents Region of northern Scandinavia and north-western Russia were looking at innovative approaches to enhance regional cooperation and achieve sustainable use of their forest resources - among the oldest and richest in Europe - they decided that the model forest approach to sustainable forest management (SFM), in use in 12 countries around the world, offered the combination of elements they wanted to help them address these challenges.

With the launch of the Vilhelmina Model Forest (VMF) in northern Sweden's Västerbotten county Sept. 1, 2004, Sweden has become the first country in Europe to adopt the model forest approach - a unique and innovative forum that tackles a wide variety of SFM issues. The model forest approach to SFM was pioneered by Canada in the early 1990s and has since expanded to South America, the

Country	Model Forest	Size (ha)
Argentina	Formoseño	800,000
	Futaleufú	738,000
	Jujuy	130,000
Brazil	site under development	N/A
Cameroon	site selection underway	N/A
Canada	Western Newfoundland	923,000
	Foothills	2,750,000
	Waswanipi Cree	3,300,000
	Lake Abitibi	1,200,000
	Prince Albert	360,000
	Nova Forest Alliance	458,000
	Fundy	420,000
	Eastern Ontario	1,530,000
	McGregor	7,700,000
	Bas St-Laurent	113,100
	Manitoba	1,048,000
Chile	Chiloé	918,000
	Araucarias del Alto Malleco	360,000
	Panguipulli*	N/A
China	Lin'an	312,000
Costa Rica	Río Revantazón*	150,000
Dominican Republic	Upper Sabana Yegua Watershed*	166,000
France	feasibility study underway	N/A
Indonesia	Berau	165,930
	Margowitan	N/A
Mexico	Mariposa Monarca	795,000
	Sierra de Quila*	15,192
Philippines	Ulot Watershed	86,514
Russia	Gassinski	400,000
Sweden	Vilhelmina	120,000
Thailand	Ngao	175,159

Russian Far East and Asia. The VMF has become the first of a planned network of model forests within the Barents Region, an interconnected geographical area covering 755,600 square km that encompasses the northern parts of Sweden, Norway, Finland and Russia. As large-scale geographic areas that focus on the environmental and the socioeconomic values of the forest, model forests emphasize the formation of partnerships in which stakeholders have opportunities to participate in developing local solutions to their SFM and land use issues. As members of an international network of some 30 model forests, they can draw on the knowledge and experiences of others facing similar SFM challenges.

"The model forest concept facilitates a broad society dialogue to promote SFM, with respect to economical, ecological and social values," says Håkan Wirtén, Deputy Director

General of the Swedish National Board of Forestry. "The Vilhelmina Model Forest is tailored specifically to the Swedish forest policy and the specific conditions in the boreal and mountainous forests. We expect that model forest outcomes, channeled through the Swedish Forest Administration and the International Model Forest Network, will have substantial impact on the development of SFM."

The choice of the Vilhelmina area for a model forest is a natural extension of the Vilhelmina project that began in 1995 to help resolve competing land-use interests involving the region's aboriginal Saamí reindeer herders and private landholders, forest companies and the Vilhelmina Municipality.

Karin Baer, Saamí leader of the Vilhelmina North Saamivillage feels positive about applying the model forest approach. "Reindeer husbandry depends on the presence of continuous areas of natural forests something that can not easily be combined with modern forestry. The activities within the model forest should provide good examples for the future of how forestry can be adjusted to meet the viewpoints and needs of indigenous land users."

The Vilhelmina Model Forest (VMF) covers 120 000 ha that include 58 000 ha of forested land, northern eco-systems and a number of indigenous communities.

International Model Forest Network

# Mushroom madness





Mushroom hunters

Left: Dr. Gary Warren proves to the world that all mycologists are definitely not tree huggers! *Photo by Roger Smith*. Right: The happy foragers smiling in a light drizzle, thankful for their sou'westers, except for a few holdouts to whom good looks are more important than dry heads. *Photo Urve Voitk*.

he North American Mycological Association (NAMA) Regional Foray in Newfoundland took place at Killdevil Lodge Sept 17-19, 2004. Fortysix mushroom enthusiasts from the USA, Canada, and Newfoundland and Labrador foraged the autumn woods of spectacular Gros Morne National Park and identified 199 species, bringing the two-year cumulative list to 296.

The foray opened with a reception by the Department of Environment and Conservation and a presentation of Newfoundland memorabilia to the out-of-province expert faculty. Registrants received a handsome registration package containing, among other things, a yellow sou'wester embroidered with foray name and logo. The

woods were full of life, mycologic and otherwise. This year's big game encounter was a mother caribou nursing her calf in the morning mist. In addition to lectures by expert faculty, the evening program included a mushroom cook-up and a play.

The latter proved to be the program highlight – a dramatization of an award winning essay by Diane Pleninger, a NAMA member from Anchorage, Alaska, depicting a radio interview with the dungdwelling *Pilobilus crystallinus* holding forth on his view of the role of mankind (none) in the biosphere. Photography proved to be another popular addition to the program. Canadian nature photographer Roger Smith gave a slide presentation of mushroom photography and led a photography foray. After that his team entered all collections into a database, photographed each species, and prepared representative voucher specimens.

Reports and species lists for Newfoundland Foray 2003 and 2004 can be viewed or down-

loaded from the Humber Natural History Society's Web site at http://www.swgc.mun.ca/hnhs/>.

Plans for 2005 are already under way for a three-day event at Killdevil Lodge over the Labour Day weekend, Sept 2-5, 2005. The combination of enthusiastic foragers, Newfoundland hospitality, a stellar group of experts, a longer duration and an earlier date should produce an exciting foray and several more new species!

The foray was hosted by the HNHS and jointly sponsored by the Department of Environment and Conservation, Gros Morne National Park and the WNMF..

Andrus Voitk, Humber Natural History Society





The expert faculty. Left photo, back row: American amanitologist Dr. Rod Tulloss, back for a second year; Prof. Greg Thorn, UWO; Roger Smith, nature photographer, UNB; Andrus Voitk, organizer; and boletologist Ken Harrison from NB. Front row: Prof. Faye Murrin of MUN and Dr. Lorelei Norvell from Oregon, joined by Alan Bennett. *Photo by Ed Andrews*. Right photo: Lorelei Norvell demonstrating to her foray group the finer points of an utterly, totally and hopelessly forgettable *Cortinarius sp. Photo by Michael Burzynski*.