

the newsletter of the foothills research institute $\ensuremath{\mathsf{PM}}\xspace\,42123525$

Looking Back, Moving Forward: 20 Years of Partnership and Research

In 2012, the Foothills Research Institute celebrates 20 years of conducting applied research on Alberta's forested landscape and beyond. It's been an exciting journey and one that FRI and its partners look forward to continuing as we grow knowledge, transfer technology, and inform decision making for the benefit of our partners, collaborators, and stakeholders. Here's a look at where we've been and where we're headed.

Modest beginnings

In 1991, the federal government announced the Model Forest Program, a Green Plan initiative, and invited proposals for "working models of sustainable forest management" in a nationwide competition. In Hinton, a project team co-chaired by Dennis Quintilio and Bob Udell, and including current FRI president Rick Bonar, was struck to develop a proposal. The initial partnership was Weldwood of Canada (now West Fraser Ltd.), the Forestry Technology School (now the Hinton Training Centre), and Alberta Forestry, Lands and Wildlife (now Sustainable Resource Development). From the 50 detailed submissions received, the Hinton proposal was reported as the best, and in 1992 the Foothills Model Forest (FMF) joined nine others in the Model Forest Network.

Bob Udell, who worked for Weldwood at the time, explains the motivation for taking part in the Model Forest Program. "Weldwood had embarked on a wildlife-forestry program. We saw the Model Forest Program as an opportunity to leverage our own resources as well as to bring other partners on board and work on a larger landscape to develop the tools and knowledge to make the program even better," says Udell.

With funding in place, the group had to establish how the model forest would work. "Our little group of folks sat down and brainstormed how to do it, and we came up with an organizational structure that's pretty much what we have today," says Bonar.

The group established a board of directors representing the partners, and a general manager and small staff were put in place with an office in the resource community of Hinton, AB, and focusing on a core study area in west-central Alberta. Processes for developing ideas into projects, securing funding, and achieving project goals were also created. Perhaps the biggest challenge in those early years was funding. Bonar says the original proposal envisioned a much more ambitious program than funding allowed for. "We had to match reality with expectations."

During the early years, FMF developed strong partnerships. In 1995 JNP was incorporated into the core study area, increasing the FMF land base to 2.3 million hectares, followed by Willmore Wilderness Park adding a further 450,000 ha. In 1997, the FMF approved a new logo and tag line ("a growing understanding") and began to expand knowledge transfer and provide opportunities for researchers to communicate their findings to the public, policy-makers, and forest and land managers. The Foothills Model Forest reached a turning point in 2007 when the name was changed to the Foothills Research Institute. The principal factor influencing the move was a growing partnership base.

"We were bringing on the energy sector as core partners, and to them, the old name reflected forest industry interests," says Don Podlubny, general manager at the time.

Jim LeLacheur, president in 2007, adds that the name change reflected the evolving geographical focus. "We were growing beyond our historic model forest boundary, by design. We wanted to be more inclusive to our partners who had interests on a far more diverse land base throughout Alberta and beyond."





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Evolving people, programs, and partners

People: The institute began with a couple of staff members and has grown to 15 permanent staff, secondments from government and consultants on contract. Over the past two decades there have been three presidents appointed from the sponsoring partners and four general managers, seconded from ASRD.

Presidents

General Managers

1996–2005 Bob Udell 2005–2010 Jim LeLacheur 2010 to present Rick Bonar

1992–1999 Rick Blackwood 2000–2002 Mark Storie 2003–2007 Don Podlubny 2008 to present Tom Archibald The Board of Directors began with representation from the three sponsoring partners Alberta Forestry Technology School, Alberta Environmental Protection and Environment Canada. Two additional members were elected from the numerous partner organizations. The Board of Directors has continued to grown over time to include representation from forestry, oil and gas, coal, municipal and provincial government, Jasper National Park, First Nations and academia.



FRI Board of Directors 2011

Programs: To date, the institute has run 25 programs and associations. Thirteen are active today.

"In many cases, the scope has broadened and changed quite a bit," says Tom Archibald, general manager. "Some programs evolved into new programs, just as the Fish and Watershed Program recently became part of the Water Program. Others no longer exist (Pileated Woodpecker research), either because the goals were accomplished or partners no longer required them."

FRI is always evolving and willing to adapt to new challenges. Recent initiatives—like the Land-use Knowledge Network, the Water Program, and Climate Project—illustrate this ability.



Hydrology research (Mountain Pine Beetle Ecology Program)

Partners: Over 20 years, the number of partners has grown from three to more than 140. Today they include companies in forestry, oil and gas, and coal; Parks Canada and other government agencies; environmental non-government organizations; Aboriginal communities; and educational institutions.

Archibald says the number of partners has increased significantly in the last 10 years. He attributes the growth to increased knowledge about the benefits of FRI and to the fact that the institute has moved from having a regional focus to doing projects provincially, nationally, and internationally.

Partnership is the lifeblood of FRI. Our sponsoring partners include Alberta Sustainable Resource Development, ConocoPhillips Canada, Encana Corporation, Jasper National Park of Canada, Suncor Energy Inc., Talisman Energy Inc., and West Fraser Mills Ltd.

Why FRI works: A partner's perspective

From inception, FRI has been a partnership initiative, and its activities have been driven by the real challenges and needs of partners.

"The impetus at the outset that holds true today and that still brings the partners to the table to work together is the desire to share ecosystem-based information and supporting science that will assist in decision making towards ecosystem management," says Greg Fenton, superintendent of Jasper National Park and member of FRI's executive.

The governance model ensures that partners are supporting relevant applied research. Research generates new tools, and knowledge that is transferred to partners and beyond so that a broad base of knowledge about ecosystem pressures can be used to protect ecosystems and ensure the sustainability of industry partners on the land base.

Moving forward

FRI's Business Strategy 2012–2017 will guide work over the next five years. "We develop our five-year strategies by asking our partners what they are interested in. Then we review our existing programs to see if they are still fitting partner interests and try to develop and bring on new programs," says Bonar.

The most recent strategy includes a comprehensive business portfolio. "There won't be active programs in every part of the portfolio, but we wanted to ensure that there is a place there so that if partners are interested we can get something going," Bonar explains.

New programs include the Water Program and a caribou program. The institute is also exploring the possibility of a reclamation program. New associations are also being brought on to work with FRI.

Celebrate 20 years with us, **October 1–4**

FRI's 2012 annual general meeting and open house will be extra special this year as we celebrate our 20th anniversary. This year's event will be held over four days, October 1-4, in Hinton, Alberta. The events will include an open house, tours, a barbecue, the annual meeting, and a board of directors meeting. Stay tuned for more information.

Updates

New lead for Mountain Pine Beetle Ecology Program

Dr. Keith McClain (pictured) is the new lead for the mountain pine beetle ecology program at the Foothills Research Institute (FRI).

McClain was a member of FRI's board of directors and executive team and until recently was director of Science Policy and Strategy for Alberta Sustainable Resource Development. He is replacing retiring Don Podlubny, who spent five years contributing to a better understanding of mountain pine beetle infestation.



mountain pine beene mestation.

McClain says: "Assuming the role as program lead provides an exciting opportunity to continue the excellent work of Don Podlubny and to ensure that the Foothills Research Institute remains in a leadership role in providing insight and solutions to the province in its battle against the beetle. The province is deeply concerned about the competitiveness of the forest industry and the Institute intends to bring the best science to bear on the situation."

Podlubny says he enjoyed his time with the program: "I had a very good activity team, and there were many good discussions. Researchers were very cooperative and provided the information needed by the forest industry and the government. I believe we were very successful." "I'd like to thank everybody for all their support, from board members right through to partners, researchers, and staff. I appreciated all my time with them as general manager and program lead and I wish them the greatest success."

Caribou workshop

More than 90 people gathered on January 12 and 13 at the Nexen Centre in Calgary to talk caribou at a workshop hosted by FRI. Participants hailed from the governments of Alberta, B.C., and Canada as well as from academia, industry, consultants, and NGOs.

The goal of the workshop was to gather information to inform decisions as FRI sets up a caribou program. "Researchers shared what we know and what we are working on, and government and industry partners told us what they need to know to support caribou recovery," explains Rick Bonar, FRI president.

The impetus for a caribou program came from partners who identified the need for solutions-oriented caribou-related research in the province.



Updates continued on next page

Updates (continued)

"We're shifting from an era of trying to find out about caribou into trying to recover caribou," says Bonar. "We need research to tell us if we are accomplishing our goals."

Results from the workshop are available on the Alberta Land-use Knowledge Network at landusekn.ca.

Grizzly Bear Program

On February 27 and 28, FRI, with the support of Alberta Innovates – Bio Solutions, Parks Canada, and Alberta Fish and Wildlife, hosted the second International Grizzly Bear Trend Monitoring Workshop in Waterton. The event provided updates on grizzly bear trend monitoring work done in the past six years and direction on next steps for future work in Alberta. A report on the results is being prepared.

Master's student Terry Larsen is in the final stages of completing his thesis, which looks at grizzly bear response to mountain pine beetle harvesting and management in the Kakwa area. Partners will receive reports and manuscripts in the coming months.

Karine Pigeon, a PhD student at Laval University, is completing a project with Alberta Ecotrust and industry partners that provides new maps and models to identify potential grizzly bear denning areas. A report and analysis will be available in April.



Natural Disturbance Program

The Fire, Water, and Climate Project is a new project that will look at how climate impacts the fire regime and how the fire regime impacts water quality. The goal is to develop a baseline understanding that will allow for the development of models to predict how these three factors might interact in the future. The Natural Disturbance Program has partnered with four universities and will start sampling in two areas one inside Jasper National Park and one outside the park—this summer.

The online version of NEPTUNE will be available this spring. For the first time, landscape managers will be able to use NEPTUNE from any computer to see how closely and in what ways human disturbance activities match natural disturbances that have taken place in the past.

Tourism group to feature EcoTour

The Northern Rockies EcoTour, a travellers' guide for the Northern Rockies tourist region, will be promoted at an annual tourism event in Edmonton in early May.

Rendez-vous Canada promotes unique Canadian experiences to international leaders in the tourism industry. Local communities, along with Jasper Tourism, the Grand Alberta Economic Region, and Community Futures, have formed a committee to promote this region and will use The Northern Rockies EcoTour as their primary product. It is the only guidebook that encompasses the full region represented by this partnership.

"Your ultimate guidebook to the landscapes, ecology, culture, and history of the Northern Rockies Region."

~ Bob Udell, Program Lead

Available in print at the end of April, EcoTour will be converted to an e-book and modified into a smartphone app in the future.

News and Events

Projects are gearing up for a busy field season with new hires

Megan McFall and Kevin Myles have returned to conduct stream crossing inspections (roads, pipelines) for the Foothills Stream Crossing Partnership over the spring and summer. Kevin will soon travel to southwest Alberta while Megan will be working in the Hinton and Edson area. Two additional crew members have been hired to assist them.

The Grizzly Bear Program has hired several seasonal staff to assist with a project looking at the potential impacts of pipeline development on grizzly bears. Based on GPS location data collected from collared bears, the team will head out to these sites along pipelines to collect information about abundance/ percent cover of bear foods, canopy cover, presence of beds, kill site evidence, and evidence of other bear activities (e.g., browsing, anting, digging).

FRI's Communications and Extension Program has hired a Library Technician to design and develop a resources library system over the summer. The system will include administrative, web, and electronic resources. A large portion of the job will entail organizing, categorizing, and cataloguing resource materials from 1992 on.

Watch for further information about a "field day" for partners and practitioners to learn about the natural disturbance program's fire scar field sampling project. Remember to check the FRI website for details on upcoming FRI workshops currently in the early planning stages: to explore key land-use issues, large woody debris, and long-term hydrology research.

New publications available

Visit **foothillsresearchinstitute.ca** to learn more about the following new publications:

Peer-reviewed publication: *Diet and environment shape fecal bacterial microbiota composition and enteric pathogen load of grizzly bears*

Peer-reviewed publication: A history of habitat dynamics: Characterizing 35 years of stand replacing disturbance

Peer-reviewed publication: *Biweekly disturbance capture and attribution: Case study in western Alberta grizzly bear habitat*

Mountain Pine Beetle Ecology Program Quicknote #5: *Fire Project – Mountain Pine Beetles in post-burn lodgepole pine forests*

Mountain Pine Beetle Ecology Program Quicknote #6: *Phenology – Determining the threat of mountain pine beetle range expansion: The impact of phenology and survival and the potential for spread*

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Reading material

Visit **foothillsresearchinstitute.ca** to read these and other publications.







The Foothills Research Institute core landbase is located in west-central Alberta, and is based in the resource community of Hniton, some three hours west of Edmonton. It covers roughly 2.75 million hectares (27,500 square kilometres), and encompasses Jasper National Park of Canada, Willmore Wilderness Park, William A. Switzer Provincial Park, and the Forest Management Area of Hinton Wood Products, a division of West Fraser Mills Ltd. It also includes some provincial "crown forest management units" and the HintonT raining Centre's Cache Percotte Training Forest. Within its boundaries are three forest areas—boreal, montane, and subalpine—and many forest uses, including timber, petroleum, and coal extraction, tourism, and recreation.