Fall 2010

footnotes

the newsletter of the foothills research institute

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Institute offers
"Knowledge Central"
for a diverse and global audience

Foothills Research Institute is evolving into something that's much more than the sum of its parts.

Its 18 years of history and a portfolio of industry-respected research programs are proving to be the foundation for a knowledge hub whose utility stretches far beyond the confines of project and regional boundaries.

"Good science is our first priority," says Sean Kinney, Communications and Extension Program Lead. "But a very close second is finding ever-more effective ways to share that knowledge and capacity with an expanding community of citizens, practitioners and decision-makers."

This newsletter looks at ways the Institute is becoming "Knowledge Central" for more and more partners, to the benefit of sustainable land and resource management everywhere.

Annual Reports and project-specific Quicknotes summarize research highlights for partners and the public. Other channels include the Institute's multi-function website, its partnership with post-secondary educational institutions, hosting international observers, public lunch n'learn sessions, registration and promotion services for allied conferences, and more.

"We're constantly looking for new ways to help people connect and learn," says Kinney. "Building a central hub with industry-tested tools to support sustainable land management decisions is just a logical way to help everyone learn and work more effectively."

Landbase tours are just one way to share experience and knowledge

Rick Bonar takes helm

Although I'm new to the President's chair, I've been involved with Foothills Research Institute for almost two decades.

Rick Bonar

It was back in 1992 that I helped write the original proposal for our predecessor organization, the Foothills Model Forest, and today I'm honoured and very excited to have the opportunity to lead our dynamic organization into the future.

Over the years the Institute's partnership approach has proven itself as a successful way to generate new land management knowledge. As we begin the process of developing our next five-year business strategy, this organization has tremendous opportunities to continue to make a difference.

We have an outstanding portfolio of research expertise and projects, our partnership continues to expand, and our research is involved in today's land management issues. We're talking to our partners about their questions, which will be translated into cutting-edge research and knowledge transfer initiatives. Current new directions include developing projects on the ecological effects of climate change, recruiting a Lead for our Water Research Program, and scoping opportunities for a Reclamation Research Program.

Forest carbon group raises issue's profile

Foothills Research Institute provided administrative and marketing support this fall for the third in a unique series of forest carbon workshops.

Human-caused greenhouse gases, including carbon dioxide, are considered a factor in climate change, and considerable efforts are under way worldwide to identify ways to slow emissions and enhance storage, or sequestration. In fact, a whole new economy built around "carbon management" practices and opportunities is emerging.

Moriz Vohrer, chairman of the technical board of Germany's CarbonFix, was opening speaker at the October conference in Edmonton

The Alberta Forest Growth Organization partnered with the Institute to stage two workshops and a conference this year, exploring ways the forest might figure in this economy of carbon credits and offsets, especially in light of potential markets developing in the oil and gas sector.

Willi Fast, a member of the Alberta Forest Growth Organization executive, said sharing the benefits of the Institute's brand and capability helped raise general awareness for the relatively new organization. "At the same time they have partners of their own who would be interested in what AFGO is doing and might not otherwise know about us."

This is specifically true of the Institute's oil and gas partners, who at some point down the road might have a need to look into the carbon offsets that certain forest management practices could provide.

Field tour adds insight to the research

Government, academic and industry partners gathered in the forest this fall to take a look at the practical relationships between large woody debris and water.

Large woody debris is the term for larger material from downed or harvested trees. Foothills Research Institute, allied researchers and industry partners are interested in how this debris is important to riparian zones, erosion, aquatic habitat, soil and water nutrients, and more.

"This on-the-ground research opportunity was invaluable to all of our partners involved in the field tour," says Dave Andison, Natural Disturbance Program Lead for the Institute. "Getting out into the field and seeing the large woody debris helped confirm a number of theories, and also opened our eyes to things we hadn't previously considered."

The age of some of the debris sparked interest. "Some of the large woody debris in the waterways was over 100 years old," says Andison, who also examines the role of this debris in stream re-routing, trapping sediment and creating of new ecosystems for water species.

Outdoor classroom

NAIT field studies head west

Twenty Edmonton-based post-secondary students hit the books in the great outdoors this fall as west-central Alberta's boreal forest became their classroom.

Second year students from the Biological Sciences Technology – Renewable Resources program at the Northern Alberta Institute of Technology spent time in September learning from aquatic ecosystems researcher Ngaio Baril and Grizzly Bear Progam biologist Karen Graham.

The session came after a week in the the Slave Lake region, and allowed the students to learn about the principles and practicalities of the stream crossing and grizzly bear programs. The learning opportunity was a perfect complement to what the students are discovering in the classroom, and a glimpse into their future as working bioscience technologists.

Visiting students saw the impact and challenges of multiple land uses

A taste of Alberta hospitality

Students from Lakehead University in Thunder Bay added a hands-on learning opportunity to their trip to the Canadian Institute of Forestry annual conference in Jasper this fall.

The fourth-year forestry students stayed on after the conference for two days of field trips into the Hinton region's working forests, examining the issues and challenges in one of Canada`s largest forest management areas.

``Canada`s forestry community is diverse, so it`s great to offer students from across the country the chance to get some hands-on learning in our beautiful foothills and boreal forests," says Joan Simonton, Extension Specialist with the Foothills Research Institute. "You can learn so much more when you combine your traditional classroom learning with a practical environment."

It's all part of the research institute's commitment to informing the next generation of Canada's natural resource managers and technical specialists.

"This tour was an opportunity for Ontario-based students to gain better understanding of current approaches to industrial forest management, oil and gas exploration, coal mining and reclamation, wildlife management, water and fisheries conservation," says Simonton. "The contribution of research, including that of the Foothills Research Institute, to meeting these challenges will help these students meet the challenges of the forestry industry head-on."

Foothills Research Institute helps CIF host national success

Foothills Research Institute provided some key support to the Edmonton-based Rocky Mountain Section of the Canadian Institute of Forestry in September.

The Section was responsible for hosting and managing this year's national CIF conference, which focused on regional land use planning. Delegates attended from the United Kingdom, the United States and from across the continent and included universities from eight provinces, municipalities, government agencies and practitioners interested in the challenges and solutions relating to land use conflicts.

Registration was facilitated through the Institute's website, and with a strong companion program and a subsidy for post-secondary students to attend, the event drew near record numbers of more than 325. Leaders in industry and protected areas management headed up technical aspects of field tours through the West Fraser FMA and Jasper National Park.

Geraint Richards, Head Forester for the Duchy of Cornwall in England, spoke at the CIF conference in Jasper

Research and practice on the landscape gave participants a real-world look at the multiple, often conflicting, land management values and priorities. Attendees went home with a wealth of information on specific situations in Canada, the U.S. and Great Britain.

Keith McClain, chair of the organizing committee for the Rocky Mountain Section, said it was very beneficial to tap into the global credibility of the Foothills Research Institute, as well as its administrative capacity and the obvious passion and flair of the researchers who contributed to tours and sessions.

Brown Bag Lunch n'Learn

Kids have electrifying experience

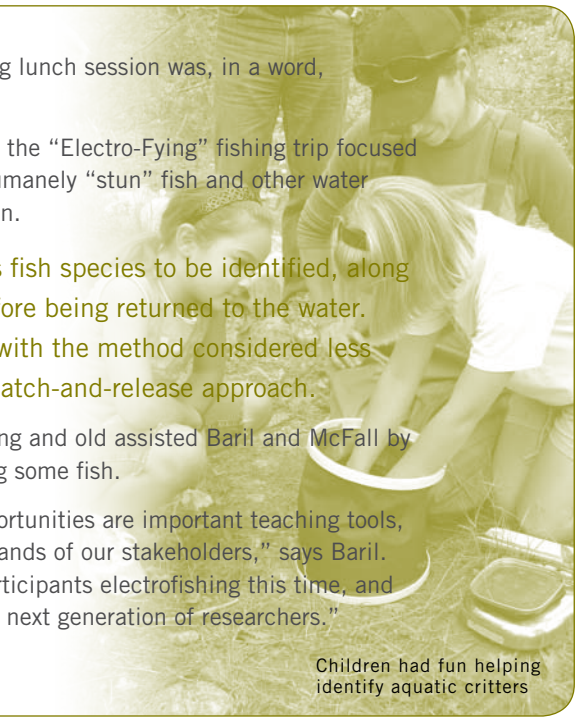
July's edition of the Foothills Research Institute brown bag lunch session was, in a word, stunning.

Led by Institute biologists Ngaio Baril and Megan McFall, the "Electro-Fying" fishing trip focused on how the Institute integrates the latest technology to humanely "stun" fish and other water species found in the streams and waterways around Hinton.

The process allows the various fish species to be identified, along with their size and weight, before being returned to the water. The fish is no worse for wear, with the method considered less stressful than the traditional catch-and-release approach.

Lunch-and-learn participants young and old assisted Baril and McFall by catching, measuring and weighing some fish.

"These hands-on, interactive opportunities are important teaching tools, and help us put nature into the hands of our stakeholders," says Baril. "We had a number of younger participants electrofishing this time, and they could very well grow into the next generation of researchers."



Children had fun helping identify aquatic critters

Brown Bag Lunch n'Learn

Beaver Boardwalk showcases watery ecosystem

It's not Park Place, but the Beaver Boardwalk does offer a monopoly on some of the best views of Hinton's furry dam builders.

"The Beaver Boardwalk is a fantastic way for anyone to catch a glimpse of the beavers in their natural, undisturbed landscape," says Rick Bonar, President of the Institute and leader of a lunch-and-learn at the site.

An attractive wooden pathway that winds its way through three km of wetlands and a living, fully functioning beaver pond in Hinton. There are seating areas, an outdoor classroom, 12 interpretive signs and two observation towers. It's a great experience and opportunity for people to experience Mother Nature up close.

The September brown bag lunch session offered citizens and visitors the chance to learn more about local habitats and ecosystems, and the animals and plants living within them.

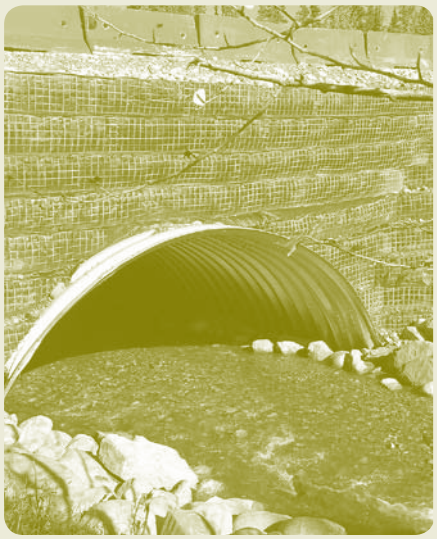
"These natural, uninterrupted interactions with nature are so valuable as both a teaching tool and a point of interest for all of our stakeholders," says Bonar. "Allowing our stakeholders to come right into the beavers' home, to see how they live their daily life, is such a unique and rich experience."

The Boardwalk is also a tribute to the cooperative spirit of the community. It was constructed by volunteers using materials and funding provided by West Fraser Mills and other partner organizations, including the Forest Resource Improvement Association of Alberta, Teck Coal Ltd., the Alberta Lottery Fund and the Town of Hinton.

Brown bag topics and locales vary monthly. For more information visit www.foothillsresearchinstitute.ca

Beaver Boardwalk allows a close-up view of nature

Updates



Crossing signage in the works

Interpretive signage will soon appear at a Stream Crossing Demonstration Site along Hardisty Creek southwest of Hinton. The new signs will inform the public and practitioners about the innovative stream crossing structure and stream ecology, as well as the Foothills Stream Crossing Program.

2010 Field Season

Researchers continued to collect data and analyze the vegetation and sub-surface hydrologic response to stands treated to simulate a mountain pine beetle infestation.

Biologists with the Foothills Stream Crossing Program continued with stream crossing inspections within the original study area and also expanded the work into the Grande Cache area.

Foothills Land Management Forum hired seasonal help to capture and update new roads and barriers using GPS (Global Positioning System) in Weyerhaeuser's FMA south of Grand Prairie.

The Grizzly Bear Program field work focused on collecting data to support its research into understanding not only where bear foods are found but also the relationships between bear food, its energy value and weather patterns.

Willmore Wilderness Park user surveys were undertaken to determine user numbers through trail cameras, the mapping of user patterns through Global Positioning System (GPS) Tracksticks, and conducting interviews with individual users.

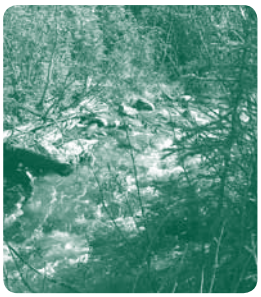
Interpreters busy

Another busy interpretive summer came to a close this past Thanksgiving. The Institute's Electr-O-fying Fish Interpretive program successfully delivered 15 shows from June 4 to October 18 by Jasper National Park interpreters at the Whistler Campground. More than 1,400 people attended, learning about key threats to aquatic species and the principles of watershed management.

The very successful Within Growling Distance interpretive program was delivered twice at Gregg Lake Amphitheatre in W. A. Switzer Provincial Park by Institute staffer Joan Simonton. The second show included an interpreter from Switzer Park who engaged the audience with information on bear safety.

News and Events

Water Program seeks Lead



The Institute seeks a Lead for its Water Program to work with partners on developing a five-year vision document that will be the foundation for a new Water Program.

Strong linkages with existing Institute programs are anticipated. The new staffer will lead multi-disciplinary teams of managers and scientists, and establish relationships with universities and other water research programs. Building and expanding partnerships, stakeholder relations and fundraising activities contributing to the long-term sustainability of the program will be important aspects of the work.

Upcoming info sessions

The Institute is hosting information sessions in Peace River, Alberta on two particular FRI initiatives either on the cusp of delivery, or that have delivered management tools through collaboration & investment from northwest Alberta companies – the Grizzly Bear Research program (Chinchaga area work), and the Natural Disturbance program (wildfire patterns work).

The first session is a half-day information session on Wednesday, December 1, 2010 from 1-4 p.m. Gord Stenhouse, Grizzly Bear Program Lead will provide an update on grizzly bear research in Alberta's north west boreal region. Topics include the history of the project over the past 12 years, DNA population inventory work, designation of core and secondary grizzly bear conservations areas, tools for land management planning, data and products for Chinchaga area, gaps in local knowledge, feedback and discussion.

The second information session is planned for Thursday January 13, 2011, on a Wildfire Pattern study recently completed by David Andison, Natural Disturbance Program Lead. This will be a full day session, details forthcoming.

Please RSVP via e-mail at events@foothillsri.ca.

New publications available

The following reports have been posted to our website www.foothillsresearchinstitute.ca under "Publications."

- Grizzly Bear Program Quicknotes #1-3 on Why we need to Understand Grizzly Bear Health March, June & July 2010
- MPBEP Quicknote #3 Effects of simulated Mountain Pine Beetle attack on vegetation and below-ground dynamics in lodgepole pine stands July 2010
- FSCP Quicknote #1 Sustainability of Fish Stocks and their Habitat

FRI earns national award

Foothills Research Institute is the recipient of the Canadian Institute of Forestry's 2010 Forest Management Group Achievement Award. The award recognizes outstanding achievement by teams and groups of natural resource managers, researchers and NGO groups. Its objective is to encourage excellence in collaborative contributions to Canadian forest management.

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foothills RESEARCH INSTITUTE
research growing into practice.

The Foothills Research Institute core landbase is located in west-central Alberta, and is based in the resource community of Hinton, some three hours west of Edmonton. It covers roughly 2.75 million hectares (27,500 square kilometres), and embodies 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 Hinton Training Centre's Cache Percotte Training Forest. Within its boundaries are three forest areas – boreal, montane, and sub-alpine – and many forest uses including timber, petroleum, and coal extraction, tourism, and recreation.