Leading the Way

Communication and Extension (CE) Program
Geographic Information Systems (GIS) Program

Foothills Research Institute Annual General Meeting
June 2nd, 2010 - Edmonton, Alberta

Sean P. Kinney
Communications & Extension Program Lead

Katie Yalte
GIS Technician
What are we supporting?

• A safe place to conduct research and test new ideas
• FRI’s reputation as the trusted and honest broker
• An expanding diverse and dynamic partnership
• Cutting edge research programs
  – knowledge **AND** tools
• The application of the knowledge and tools…
  – “research **growing** into practice”
What does CE do? (3 staff)

- Brand Awareness
- Website, Website Channels, & SharePoint administration
- Footnotes, eNotes, Quicknotes, Integration Notes
- Annual Reporting & Work Plan Process Development
- Workshops, Short Courses, Tours, Open Houses, Presentations
- Extension, Outreach, and Environmental Education
- Earned and Reactive Media Relations
- Multimedia Development
- Program Support including Communications & Extension Planning
CE drivers:

- Partnership
- Knowledge Transfer
- Informing Policy
- Communications & Outreach
What did C&E tell you last year?

• Expanding our sphere of influence
• Developing information and knowledge delivery mechanisms
• **Enhancing Internet-based information**
• Communications & Extension Planning Process and Templates
• FRI Work Planning Process
• Knowledge Management (KM) implications
• Identifying opportunities to integrate future research activities.
Annual Reports
Semi-annual newsletter

Beetle rearranges researchers' study plans
But highly-productive field season rated another success

New system helps match forestland operations to stream type

Leading the Way...
... in science, communication and collaboration

Open House and AGM set for June 1 and 2

Footnotes
Regular Partner Perspectives

Foothills Stream Crossing Program

Overview
Foothills Stream Crossing Program was created to bring one major forestry company and eight oil & gas companies together, along with regulatory and conservation stakeholders, to prioritize stream crossing (ablation) problems within watersheds, and improve approaches to rehabilitation and construction. Regulatory and social considerations make this work essential for productive aquatic habitat as well as supplies of clean drinking water for downstream communities including Edmonton.

Challenge
Program Lead Jerry Bauer says an early lack of coordination and cooperation reduced the effectiveness of stream crossing remediation in the Foothills region. West Fraser was responsible for a huge management area including numerous watersheds, but thousands of culverts and crossings were being installed by energy and municipal players as new roads were built into the area. One stakeholder might improve an aging culvert, but that did not help overall habitat if some other entity’s culvert upstream was not functioning properly. Companies that naturally compete with each other in the marketplace did not have a good way to talk to each other about the environmental situation.

Solution
“We thought – let’s get everyone together, evaluate each of the crossings by watershed, prioritize remediation work according to the needs of fish populations, and share information about best practices to get the job done,” says Bauer. The approach promised savings on inspections, planning and report, as well as better relations with government agencies responsible for water and fish. These agencies themselves benefit because instead of receiving plans and proposals from multiple companies, they now receive consolidated plans for complete waterbodies, making inspection and approvals much-easier. Foothills Crossing Program, a component of the Foothills Research Institute, meanwhile, provides independent and affordable sedimentation control planning and fish production simulation systems, along with data management. “Foothills Research Institute is very good at collecting and storing large amounts of information. This allows us to focus our resources on improving habitat,” says Bauer.

Results
Among the tangible results – In 2018, sedimentation issues caused by impoundments to water flow or erosion were addressed on 47 of 51 crossings in two watersheds (New and Russell Creek). Five crossings were mitigated for fish-passage issues and 28 km of blocked stream habitat was opened up. In 2010, the partners plan to address the remaining sedimentation problems and to open an additional 15 km of habitat. Three more remediation projects will be submitted to the provincial government and work will begin on a remediation plan for the Eton River last. But not least, new companies plus regulators at the provincial and federal levels are talking to each other about the best way to look after Alberta’s water and fish resources.

Learn more at www.foothillsresearchinstitute.ca

Foothills Landscape Management Forum

Overview
Foothills Landscape Management Forum was created in 2005 to lay the foundation for ways to reduce the human “ecotrope” and improve habitat values for caribou on a million ha in west central Alberta. Today, the government and industry partnership has grown significantly, along with the size of the landbase under study. Values of interest to the Forum now include two bands of so-called caribou, rightly bear, Athabasca headwaters and overall watershed health.

Challenge
Wayne Thorp, Program Lead for the Forum, speaks of multiple high-level challenges that can only be tackled by a collaborative partnership focused on a common vision. First was the need to develop accurate and consistent data sets for the entire program area, to give all parties the same knowledge base. Before this, the data resided in 15 different places, and was recorded in many different ways, says Thorp. Another layer of complexity is added by the frequent changes required, as roads are built or closed, and vegetation patterns evolve over time. Any plans developed by the Forum need to fit with the “top-down” regional plans now being created under the provincial land use framework.

Solution
Operating under the umbrella of the Foothills Research Institute is the reason the Forum has been successful, says Thorp. It provides support in administration, accounting, and Geographic Information Systems, which otherwise would be an enormous burden for a self-funded group. The US office has been instrumental in developing the accurate data for the Forum partners require. “It has taken us five years to accomplish, but having this data has provided the most value,” says Thorp. “It is the reason we have just taken on three new industry partners – they are expanding despite the economic downturn.” The Institute also provides “instant credibility” and a sense of being independent of specific government and industry entities. “That is very important if you want to collaborate with 16 different companies,” says Thorp. “One individual company could never do this on its own, because of trust issues and the need for some level of business confidentiality.”

Results
This fits the up-to-date and accurate dataset for access roads and trails at a prime benefit of the Forum’s work. There’s also been completion of an integrated access plan for primary corridors, and a task of a caribou mother-and-calf survival project – to prove a particular success. The first-ever vegetation inventory of these disturbances within one caribou herd’s range will be completed this spring, providing information critical to habitat renewal and restoration planning. Future work will use secondary road restoration projects, and a landscape-level restoration plan. “This project is allowing the partners to file new ways to both raise human and landscape values through responsible management and a planned approach, rather than an ad-hoc disposition-by-dispositional approach,” says Thorp. “It’s an approach that could well be replicated elsewhere.”

Learn more at www.foothillsresearchinstitute.ca
FRI Open House to set the Stage for an Informative AGM

June 1 and 2 are the dates. The Lister Centre at the U of A is the place.

The Open House on June 1 is a relaxed and informal event and it’s a great opportunity to talk with researchers about their programs. Everyone is welcome to pop in between 2 p.m. and 8 p.m. At 5:30 p.m. Gordy Klassen will be giving a presentation on Integrated Land Management. Gordy has operated his own oilfield company for more than 26 years. He is also an experienced trapper and...
Foothills Research Institute Names New President

Dr. Rick Bonar brings extensive scientific, interdisciplinary, and administrative experience.
Custom News RSS “Pipes”

Sources:
- Fetch CSV
- Feed Auto-Discover
- Fetch Feed
- Fetch Data
- Fetch Page
- Fetch Site Feed
- Flickr
- Google Base
- Item Builder
- Yahoo! Local
- YQL
- Yahoo! Search

User inputs:
- Operators
- URL
- String
- Date
- Location
- Number
- Favorites
- My pipes
- Deprecated
Content Sharing (pages, publications, news, etc.)

**Daily Shares**

- **89 Total shares**

**Top Content**

<table>
<thead>
<tr>
<th>URL</th>
<th>Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foothills Research Institute <a href="http://foothillsresearchinstitute.ca/pages/Education_Events/Conferences.asp">http://foothillsresearchinstitute.ca/pages/Education_Events/Conferences.asp</a></td>
<td>3</td>
</tr>
<tr>
<td>Foothills Research Institute <a href="http://foothillsresearchinstitute.ca/pages/home/cif2010jasper.asp">http://foothillsresearchinstitute.ca/pages/home/cif2010jasper.asp</a></td>
<td>3</td>
</tr>
<tr>
<td>Foothills Research Institute</td>
<td>3</td>
</tr>
</tbody>
</table>

**Top Services**

- **Services with most usage:**
  - Facebook: 34%
  - Email: 26%
  - Print: 18%
  - Delicious: 4%
  - StumbleUpon: 3%
  - Google: 3%
  - Twitter: 3%
  - Blip: 3%
  - Blogger: 1%
  - Other: 2%
Foothills Research Institute is on Facebook
Sign up for Facebook to connect with Foothills Research Institute.

The Foothills Research Institute is committed to communications and knowledge transfer. We want our knowledge and tools integrated into forest and land management policy, planning and practice.

Information
Founded:
November 1, 1992

101 People Like This
Get short, timely messages from FoothillsRI.
Twitter is a rich source of instantly updated information. It's easy to stay updated on an incredibly wide variety of topics. Join today and follow @FoothillsRI.

Online Registration Delayed - 2010 CIF-IFC AGM and Conference: Due to unforeseen technical issues, online registration... http://bit.ly/brZRHy
9:26 PM May 30th via twitterfeed

REMINDER: FRI moves to new IT provider May 31 - back online June 4. The Foothills Research Institute will be without...
9:26 PM May 30th via twitterfeed
Website Performance Analytics

Dashboard

May 31, 2009 - May 31, 2010

Site Usage

- 13,428 Visits
- 53,625 Pageviews
- 3.99 Pages/Visit
- 42.31% Bounce Rate
- 00:03:51 Avg. Time on Site
- 53.03% % New Visits

Visitors Overview

Map Overlay
This web site is designed to help the Foothills Research Institute connect with colleagues, share information, manage projects, and collaborate on documents. For information on getting started, view document below or visit the Help library.
What does GIS do? (3 staff)

• We are not a map shop…
• Maps are a component of GIS
• Focus on DATA
  – analyzing, modeling, storing, retrieving, and management of data
• Introduced work request form and map request form
• Research, plan, and evaluate GIS technology, software, and hardware
GIS drivers:

- Provide exceptional GIS and data management support services for FRI program areas
- Efficient data sharing, data management & knowledge transfer
What did GIS tell you last year?

• Looking to expand beyond boundaries in information and data sharing through projects such as GeoConnections… improve trans-boundary sharing of data

• Demand is increasing rapidly!
  – This includes GIS, GPS, and data management
Where could we collaborate?

• Internet mapping & internet based information
• Efficient data sharing & data management
• Knowledge transfer
• Knowledge management best practices
• Decision support tools
• Software evaluation & implementation
• Demonstration & user training
• Ecotour
Where we are going...
Knowledge Management for FRI:

• FRI acquires, produces and disseminates knowledge

• “Knowledge Management is the process through which we generate value for our partners from our intellectual and knowledge-based assets.”

• Generating value from such assets involves sharing processes and tacit knowledge to devise best practices!
Need for Knowledge Management:

• Global and geographically dispersed operations.
  – FRI is a perfect example.

• Staff have limited methods of sharing new solutions.

• Volume of information has increased.

• Pace of organizational change has increased.
Questions we are exploring:

• Who has knowledge? Where do they keep it?
• Who else needs it?
• How can we persuade them to share it?
• How is it communicated?
• How is it kept up to date?
• Where is it stored? How to access?
• Which knowledge is relevant?
Future:

• Communities of practice
  – for common problems & solutions

• GLOBAL
  – distribution of knowledge

• Employee education
  – on knowledge creation, sharing, and use

• Value networks
  – complex, interdependent, dynamic relationships
Current Collaborations (1):

- “Cloud” IT infrastructure
  - Inter-program data sharing and “one file” collaboration
  - Data management

- TransCanada EcoTour
  - Historical database management
  - Web based dissemination of additional information
  - GPS based tools
  - iPhone and iPod application development
Current Collaborations (2):

- Demonstration of tools (captivate)
- RSS & KML (Google earth integration)
- Meta-data storage and dissemination
- Website development plan & enhancements

GeoConnections
What is GeoConnections?

GeoConnections is a national partnership initiative, led by Natural Resources Canada (NRCan) to develop the Canadian Geospatial Data Infrastructure (CGDI) and make Canada’s geospatial data, tools, services and applications available through the Internet.
GeoConnections Partners:

- Foothills Research Institute (FRI)
- GeoConnections (GCs)
- Alberta Sustainable Resource Development (ASRD)
- Jasper National Park (JNP)
- The Town of Hinton (TOH)
- Hinton Wood Products (A division of West Fraser Mills Ltd.) (WF)
- IMAGINE
GeoConnections Objectives (1):

• Beyond boundary data exchange
• Standardized data and information products
• Regional system promoting collaboration of partners (government, industry, municipalities) in landscape level resource development plans
• A system to assess multiple values; caribou, grizzly bears, fish, wetlands and water
GeoConnections Objectives (2):

• Serve as a pilot project ➔ Alberta or other provinces
• Help raise the profile of ILM and build cross-sectoral relationships e.g., Government and industry
• Participate in the Canadian Integrated Land Management
Density Calculator

1. Area Inputs  2. Linear Inputs  3. Results

Area Layer:
- FRI Core Area

Pick features from the multi-select list below or by clicking on the map:

Area Features:
- [23] Luscar - Sterco Mine - FMU E3
- [26] Watson Creek
- [27] Lovett River
- [28] Fairfax Lake
- [34] Rock Lake - Solomon Creek

(Add)  (Add-All)  (Remove)  (Remove-All)  (Remove)

Selected Area Inputs:
A Partnership That Produces Results!
Thank you... any last questions?