



November 25 & 26, 2008 Battle River Ag Hall Manning, Alberta

### Working together in our boreal forest

"Forest Explorers is a hands-on event Scientists and students all under one tent Researchers, teachers, foresters and more Presentations, displays, interactions galore"

# **Final Report**



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# Forest Explorers 2008 – Overview

The 6<sup>th</sup> biennial Forest Explorers research show returned to its roots in Manning, Alberta on November 25<sup>th</sup> & 26<sup>th</sup>, 2008. Having first been held in Manning in 1997 and 1999, the show has since been held in Peace River.

Approximately 300 students attended the event from several northwestern Alberta communities, including High Level, Manning and Peace River. Over 25 researchers, biologists, foresters, and educators provided hands-on opportunities for students to experience the many careers and activities available in the natural resources field.

Janet McKnight, Forest Educator with the Mackenzie Forest Education Society notes, "Forest Explorers opens the doors for students to get a more realistic view of what future jobs might entail". "It offers the opportunity to interact with environmental professionals who will support the school curriculum", adds Deb Lucas, Forest Educator for Grande Prairie & Area.

It was certainly a hands-on event where students were able to touch the soft feathers of the live burrowing owl, the rough coat of the grizzly bear mount, the silky fur of the mink pelt and the cool, moist skin of the salamanders. In addition to the many displays, students had the opportunity to listen to presentations on amphibians, nocturnal owl monitoring, bird banding and grizzly bear research.

When students were asked, "What did you learn at Forest Explorers?" Responses ranged from interesting, "Frogs can be frozen and still live" to entertaining, "Grizzly bears have huge skulls and you can find information in their poop" to passionate, "I love the environment!"

Another popular interactive display gave students the opportunity to operate the controls of a Feller-Buncher simulator. They felled trees, de-limbed trunks and stacked logs while in the comfort of a real seat with real controls without the real cost and real risk of the <sup>1</sup>/<sub>2</sub> million dollar piece of heavy equipment. The state of the art training tool is owned by the Woodland Operations Learning Foundation.

Following the event, a community Luncheon was held for researchers, invited guests and local dignitaries. MC Berry Heinen, President of the Mackenzie Forest Education Society, gave special recognition to Kim Arsenault for her generous efforts as luncheon and raffle organizer and to Jill Mattock, Principal of Paul Rowe Jr/Sr High school, for her assistance on the planning committee and in ensuring a steady flow of students.

As well, Carl Leary, founder of the Mackenzie Forest Education Society was presented with a gift in recognition of his retirement. Guest speaker for the luncheon was Dr. Gord Stenhouse of the Foothills Research Institute speaking on Grizzly bear research in Alberta.

The Forest Explorers event is sponsored in part by the Manning Forest Research Fund, Alberta Forestry Research Institute, and Alberta Sustainable Resource Development.









# Forest Explorers is a hands-on event...



(Left) Students of High Level Public School squeamishly meet a tigersalamander from the amphibian collection of Dr. Brian Eaton.

(Right) Bevan Davidson, of Northern Lakes College coaches a student on how to operate the feller-buncher simulator,





(*Left*) Students were able to touch the rough coat of a grizzly bear provided by ASRD.

(*Right*) Amber Tecomba of High Level Public School pets Nappy, a burrowing owl mascot for the Nocturnal Owl Monitoring Program.





(Left) Suzanne Abele, University of Alberta graduate student researcher, shares her passion for forest snail and slug research conducted at EMEND.

(*Right*) Ashley Lawson, NAIT Forest Technology program, helps a student how to see 3D images of land features through a stereoscope



### **Forest Explorers Exhibitors 2008**

**Riparian Zones & Amphibians** Brian Eaton, Alberta Research Council-Sustainable Ecosystems

> Virtual Bird Banding Tour Cori Klassen, Boreal Centre for Bird Conservation

Alberta Forest Research Institute Ted Szabo & Steve Price, Advanced Education and Technology

> **Nocturnal Owl Monitoring Program** Lisa Priestley, Beaverhill Bird Observatory

Forest Harvesting Technician - Simulator Tool Monica Schuhmacher, Woodland Operations Learning Foundation (WOLF)

Genetics & Tree Improvement in NW Boreal Region Leonard Barnhardt, ASRD-Alberta Tree Improvement and Seed Centre

> Alberta Conservation Association Jennifer Straub, Alberta Conservation Association

**Forest Harvest Technician Program** Peter Haggerty & Bevan Davidson, Northern Lakes College

**Envirothon Science Fair** Deb Lucas, Grande Prairie & Area Forest Education

Mackenzie Forest Education Society Janet McKnight, Mackenzie Forest Education Society

> **Graduate student research at EMEND** Suzanne Abele, University of Alberta

**EMEND Research Project** Jason Edwards, University of Alberta

Renewable Resources Program at U of A Alex Drummond, University of Alberta

NAIT Forest Technology Program Ashley Lawson, NAIT

Junior Forest Rangers Program Brett Spady, Junior Forest Rangers

Wildfires Crystal Burrows, Norm Brownlee, ASRD – Peace River

Forestry

Al Benson, Owen Cook, Mark Crowley, Jerrad Schroeder, Derek Bakker, Patrick McIllwaine, & Mike Williamson ASRD – Peace River

> **Public Lands - Respect the Land program** Todd Lemire & Trevor Holtz, ASRD - Manning

> > **Fish & Wildlife** Lori Backen, ASRD - Manning

Forest Health: Mountain Pine Beetles Mike Maximchuk, Alberta Sustainable Resource Development

Grizzly Bear Research Project Gord Stenhouse, Karen Graham & Joan Simonton, Foothills Research Institute

## Scientists and Students all under one tent



(Left) Deb Lucas, Forest Educator from Grande Prairie, talks to students about the "Envirothon" science fair.

(*Right*) ASRD Foresters provide helpful tips on using the two-person Swede saw..





(Left) Leonard Barnhardt, of the Alberta Tree Improvement & Seed Centre, explains genetic research on conifers.

(Right) Dr. Brian Eaton, research scientist with Alberta Research Council, delivers a presentation on Amphibians.

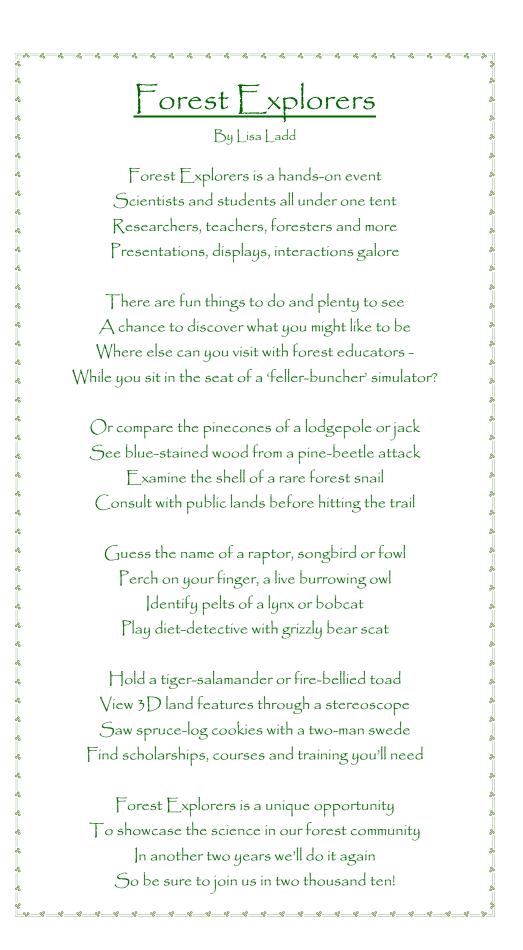




(Left) Cori Klassen, of the Boreal Centre for Bird Conservation, challenges students to identify a variety of bird mounts.

(*Right*) Forest Explorers coordinators, Lesli Rentz and Lisa Ladd.





## **Forest Explorers and Beyond**

By David Holehouse (article sponsored by Alberta Forestry Research Institute)

More than 300 high-school students experienced the "wow factor" of forestry at a hands-on science and research forum in northern Alberta in late November. The show was sponsored by the Boreal Forest Research Centre; a partnership of NAIT, industry, and government.

The two-day Forest Explorers exposition at Manning, north of Peace River, brought students face to face with diverse topics such as tree genetics, grizzly bear research, forestry schools, and amphibians.

"We had 325 students from grade 9 to 12 students from Peace River, High Level and Manning," said Hugh Seaton, manager of the Boreal Forest Research Centre in Peace River. "The theme was working together in the boreal forest, and the takehome message for the students was the importance of wildlife habitat, and how that ties in to all our activities on the land."

The science show was sponsored by Manning Forest Research Fund, Alberta Forestry Research Institute, and Alberta Sustainable Resource Development. One of the main goals of the event, held every two years, is to show students that the forest offers many fascinating, high-tech career paths that all lead to the social benefit of a productive and sustainable forest environment.

The show was followed by a community banquet, co-hosted by the Mackenzie Forest Education Society. The Society President, Berry Heinen, recognized the founding role and more than 20 years of service by Carl Leary into forest education. Manning Diversified Forest Products Ltd. kindly sponsored the banquet.

"We are very positive about the impact this event has on students' career choices," said Seaton. "It goes hand in hand with our overall educational program at the research centre, with our scholarships, with our work in the schools." This is the sixth time Forest Explorers has been held, providing enough time for organizers to see a direct relationship between students showing an early interest in the forest and later going on to



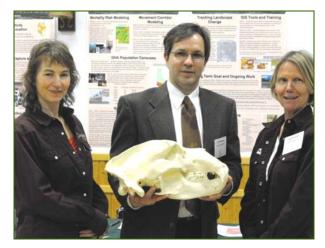
tech school or university programs. Carl Leary accepts a gift upon his retirement from the Mackenzie Forest Education Society from Society President, Berry Heinen.

"We know the event has had an impact on student decisions, especially with grade 10's-12's," said Seaton. "By January 30 grade 12 students are starting to apply for post secondary programs, and we can see the results of what we've been doing."

Another funder of the event this year was the Alberta Forestry Research Institute. Managing Director Steve Price said the event supports AFRI's aims of building highly qualified personnel in the sector, and encouraging the exploration of innovative thinking and practices.

"A lot of these students live in or near the forest and have a strong interest in contributing to its long-term value to the community and to the environment," Price said. "They are potentially ideal candidates for the kind of science and innovation we want to see as part of Alberta's leadership role in sustainable forest management." Continued....

The show involved a multitude of displays and speakers, all of whom were encouraged to bring hands-on materials that would engage the interest of the students. Keynote speaker was Gordon Stenhouse, program lead of the grizzly bear program at Foothills Research Institute in Hinton.



Karen Graham, Dr. Gord Stenhouse, and Joan Simonton (l to r) of the Foothills Research Institute, pose with the skull of a grizzly bear.

"It's an ideal opportunity for students to see that forestry has gone way beyond the low-tech stereotype," said Seaton. "Today it's the domain of people who use GPS units, helicopters, satellites, microscopes . . . and people who care about a broad range of landscape values, not just timber."

The 2008 show was a return to its roots, as the Manning Research Trust Fund was originally created as part of the timber agreement when

Manning Diversified Forest Products was opened.

"A key goal of the research fund and the Boreal Forest Research Centre is to maintain a link between what's happening in research and forest management at the field level, and the researchers and students," Seaton said.

The area is a research hub, with about \$250,000worth of work going on each year under the trust fund's sponsorship alone. Industry and government research projects boost this many times over with a multitude of other projects in the area.

The trust fund research focuses on practical forest management issues, habitat, silviculture, harvesting techniques, ecological goods and services such as water, and value-added products. "It's all based on the wise use of forest products, value adding and community stability," Seaton said.

The Boreal Forest Research Centre has administered about \$155,000 in scholarships to post-secondary programs over the years, attracting almost as much in matching funding from provincial sources.

And while some parts of the forestry sector are in an economic tailspin at present, the demand for well-trained forestry professionals is relatively steady in forest management, and is increasing in the oil and gas sector where issues such as reclamation and timber salvage are on the rise.

For more information, check <u>http://www.borealcentre.com</u> and <u>http://www.advancededucation.gov.ab.ca</u> under "Institutes."

### Thank you to our participating schools!

High Level Public School, Grades 10-12 Rosary School (Manning), Grade 9 Paul Rowe (Manning), Grade 7-12 Peace River High School, Biology 20 Peace River Outreach Program, Grades 10-12

"I would just like to thank you and everyone at the Boreal Forest Research Centre for all your hard work in Forest Explorers. The students really enjoyed the program and many had asked to have more time with the displays. It was a wonderful educational experience for our students! " - Jill Mattock, Principal Paul Rowe Jr/Sr High School (Manning)