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FOREST CO-OP SCIENCE DAY WEDNESDAY, SEPTEMBER 30, 2009

The 4th Annual **Forest Co-op Science Day** will be held at the Water Tower Inn, Sault Ste. Marie, Ontario, on **Wednesday, September 30, 2009**. This full day event (8:00 a.m. – 4:30 p.m. with lunch included) will feature the lead researchers and science delivery agents of current Forest Co-op projects providing overviews of the status and recent findings of these on-going initiatives. A detailed agenda will be circulated closer to the date. We look forward to seeing you at this event and encourage you to bring a colleague or two. Confirm your attendance by contacting Janece Arella at the Forest Co-op office (807) 346-2860 or email: office@forestco-op.ca.

Other events being held in conjunction with the Forest Co-op Science Day at the Water Tower Inn include:

Same Day – Wednesday, September 30, 2009

4:30 – 5:00 p.m.

Forest Co-op Annual General Meeting

– *this is a meeting for designated representatives or alternates of Forest Co-op members, but interested parties are welcome to attend.*

4:30 – 7:00 p.m.

Forest Co-op Reception

– *this will directly follow Forest Co-op Science Day and all are welcome to join us for finger foods and a cash bar.*

Tuesday, September 29, 2009

8:30 – 4:30 p.m.

Forest Co-op Growth & Yield Science Unit (GYSU)

Thursday, October 1, 2009

8:30 – 4:30 p.m.

Forest Co-op Fish & Wildlife Science Unit (FWSU)

Again, we request that you confirm your attendance by contacting Janece as noted above.

FORESTRY FUTURES TRUST (FFT) ENHANCED FOREST PRODUCTIVITY SCIENCE PROGRAM (EFPS)

This past spring the Forest Co-op completed the last 3 (three) of 5 (five) collaborative projects that received financial support from the Forestry Futures Trust's Enhanced Forest Productivity Science Program. Final reports have been approved for the **Forest Co-op Imagery Project** (led by John MacGillivray, AbitibiBowater), the **Forest Co-op MOSSY Project** (led by Al Stinson and Fred Pinto, OMNR) and the **Forest Co-op NEBIE Boreal Project** (led by Wayne Bell, OMNR). Many thanks are extended to all Forest Co-op partners and FFT's EFPS for their support of these initiatives and congratulations to the science delivery teams on the success of these projects.



FOREST CO-OP FISH & WILDLIFE SCIENCE UNIT (FWSU)

The Forest Co-op FWSU met by conference call on March 31, 2009, in anticipation of the field season to come. Fish and wildlife enthusiasts from the Ontario Ministry of Natural Resources (OMNR), Natural Resources Canada (CFS), AbitibiBowater Inc., Domtar Inc., the Forest Co-op, Wagner Ontario Forest Management Ltd., and Weyerhaeuser Company Limited were represented. After a long, cold winter, it was time to talk about the field work that Forest Co-op members would soon be initiating, supporting, reporting on, or doing, in Boreal and Great Lakes-St. Lawrence forests, streams, and wetlands.

Forest Co-op Bio-indicators of Forest Stream Health — Dr. Dave Kreutzweiser (CFS; 705-541-5648) explained that this new Forest Co-op project proceeds this summer with a CFS team conducting field measurements. The work will compare aspects of water quality and the decomposition of organic matter by microbes and invertebrates in headwater streams located in unharvested, harvested, and burned watersheds with similar age, topography and other landscape attributes. The comparison will shed new light on how natural disturbances and forest harvesting influence stream communities and aquatic processes. According to OMNR, it will be “extremely helpful for testing effectiveness of the direction in the Landscape Guide and Stand and Site Guide”. The multi-partner, multi-faceted project has experimental and mensurative aspects.

Forest Co-op Wetlands and Waterbirds — Waterbirds tend to be secretive, relatively poorly sampled in the field by standard bird surveys, and not well represented in studies attempting to assess the effects of forest management. This Forest Co-op project was initiated to help to fill those gaps. Led by Dr. Tom Nudds (University of Guelph; 519-824-4120 ext. 53074), it considers herons, rails, ducks, geese, eagles, songbirds nesting on shorelines, and other wetland birds. The work has attracted other partners and developed a broader suite of objectives since first proposed, but the objectives most relevant to the Forest Co-op are: (i) to compare waterbird communities in burned and managed landscapes to test the effectiveness of the Landscape Guide, and (ii) to model use of individual wetlands in terms of shoreline disturbance and other factors to test the effectiveness of the Stand and Site Guide. The role of beavers in creating conditions for waterbirds is also of great interest. In phase 1 of this 2-phase project, post-doctoral fellow Dr. Luca Borger assembled a vast amount of data from existing databases: the Ontario Breeding Bird Atlas, Breeding Bird Survey routes, USFWS waterfowl transects, and the CWS black duck plots. In Phase 2, predictions developed from the analysis will be tested in the field.



Forest Co-op Caribou PVA Modeling Project — Population viability analysis (PVA) can be a useful tool for illuminating potential outcomes of approaches to the management of habitats or populations of wildlife, providing that detailed data on population vital rates are available. In this project, led by Dr. John Fryxell (University of Guelph; 519-824-4120 ext. 53630), existing OMNR data on caribou population dynamics, movements, and other attributes collected over an 11,000,000 hectare study area in northwestern Ontario were used to develop a spatially explicit PVA model. A specific objective of the PVA is to “assess the probability of caribou population persistence and the maintenance of range occupancy under various policy options”. Dr. Fryxell is preparing a report on the outcome of the work, which project supporters are keenly awaiting. OMNR will use the PVA to guide the development of new caribou research projects.

Forest Co-op Lichens and Woodland Caribou VMAP Project — Dr. Steve Newmaster (University of Guelph; 519-824-4120 ext. 56002) leads this project, but Troy McMullin is charged with doing the fieldwork and data analysis for his Ph.D. thesis. This is “an integrated project that explores caribou diet and habitat with a focus on lichens”. The science team hypothesized that stands treated with post-harvest silviculture may develop conditions suitable for caribou more rapidly than stands developing naturally after fire, but that this may be affected by the application of herbicides and the possible interaction of herbicides with other post-harvest treatments. In 2008, 60 upland conifer stands were assessed for lichen communities in NE Ontario. In 2009, Troy will assess sites in the NW and revisit his NE sites as well. Troy has discovered that the taxonomy of the most abundant arboreal lichens is poorly resolved. It is taking much more effort to classify lichens than anticipated. Field work is often full of surprises!

FOREST CO-OP FISH & WILDLIFE SCIENCE UNIT (FWSU) CONTINUED...

Forest Co-op Ontario Forest Birds Workshop — We invite you to visit the Forest Co-op web site to view: (i) the presentations from this very successful workshop (April 8-10, 2008), and (ii) the links to workshop papers published in the March-April 2009 special issue of the Forestry Chronicle and other journals http://www.forestco-op.ca/forest_birds_workshop_2.htm. These materials, representing distillations of huge amounts of data and literature from many years of monitoring and experiment, are where you should look for objective, insightful information on the status, management, and monitoring of forest birds in Ontario. Lynn Landriault and Stephen Mills (OMNR Science and Information) have thoughtfully reviewed the workshop results and other material to provide advice to 2011 Forest Management Planning Teams on birds that may require additional consideration in the development of FMPs. For more information, contact Lynn Landriault (705-966-0038) or Stephen Mills (705-235-1235).

Other News — Steve Holmes (705-541-5661) and Dr. Lisa Venier (both of CFS, Sault Ste. Marie) are undertaking a comprehensive review of what is known about the relationship between spruce budworm and bird dynamics. Many Ontario birds whose populations have declined are thought to respond to budworm outbreaks, and one of them (Canada Warbler) has recently been listed as “threatened” by COSEWIC (the federal listing body). This is not a Forest Co-op project but will be of great interest to our members.

Next Meeting — The Forest Co-op FWSU will develop a framework for establishing priorities for future research projects undertaken through the unit. This will be the focus of a face-to-face meeting of the Forest Co-op FWSU in Sault Ste. Marie on October 1, 2009, the day after Forest Co-op Science Day. Please join us!

FOREST CO-OP FIBRE OPTIMIZATION PROJECT

A partnership involving the Canadian Wood Fibre Centre, Confederation College, Domtar Inc., Ontario Ministry of Natural Resources, Sumac Forest Information Services Ltd., and Timberline Natural Resources Group aims to test and demonstrate an operational stand-level inventory and fibre allocation system. The purpose of the **Forest Co-op Fibre Optimization Project** is to develop a decision-support system that allows both the forest industry and government regulators to increase the certainty around wood supply and product mix forecasting. The system will provide value to clients by lowering costs and/or increasing revenue through better decision-making as it relates to harvesting, silviculture, transportation, milling and marketing.

This 3-year, \$830,000 pilot project is focused on the Trout Lake Forest and Domtar’s Ear Falls Sawmill in Northwestern Ontario. The project will see the commercialization of a seamless, integrated suite of tools ranging from sample design, data collection, and data processing, through to integration with planning and fibre optimization models, a first for a Forest Co-op project. External financial support for this collaborative initiative has been secured from the Ontario Centres of Excellence (OCE), the Northern Ontario Heritage Fund Corporation (NOHFC), and the Industrial Research Assistance Program (IRAP).

MEMBERSHIP NEWS

The Forest Co-op is pleased to welcome the University of Guelph as our newest Associate Member. The Forest Co-op has had a long, ongoing relationship with the University of Guelph as a significant delivery agent of quality science. We look forward to working with John Fryxell, the University’s appointed representative.

Of other note, Brian Campbell has left Buchanan Forest Products Ltd. to pursue new initiatives and, therefore, he has also resigned from the Forest Co-op Board of Directors. We thank Brian for his brief, but valued engagement with the Forest Co-op and wish him success in his new endeavours.



Forest Co-op Membership

Active Members

AbitibiBowater Inc. —

John Lawson

Domtar Inc.—

Kandyd Szuba / *Janet Lane

FERIC —

Mark Ryans /*Brad Sutherland

FPInnovations (Forintek Division) —

Tony Zhang

Natural Resources Canada (CFS) —

Art Groot / Peter Newton

Rod Smith / Ted Van Lunen

Ontario Ministry of Natural Resources—

Wayne Fiset / * Bill Cole

Tricia Greer / *Bill Towill

Ed Iwachewski / *Dan Duckert

Joe Kapron

Eva Kennedy / *Brian Batchelor

Al King / *Taylor Scarr

Rob McAlpine

Mary-Ellen Stoll / *Bob Watt

Tim Sullivan /* Steve Kingston

Frank Kennedy

Wagner Ontario Forest Management Ltd

Jiska Westbroek / *Mike O'Neill

Weyerhaeuser Company Limited —

Matt Wilkie / *Bob Boyce

Associate Members

Confederation College of Applied Arts & Technology —

Brian Kurikka / * Dave Archibald

Timberline Natural Resource Group Ltd.

Craig Robinson /

* Geordie Robere-McGugan

Sumac Forest Information Services Ltd.

Dave Carr / * Todd Domney

University of Guelph —

John Fryxell

FOREST CO-OP GROWTH & YIELD SCIENCE UNIT (GYSU)

While there has been a very slow start to summer weather, the field season for the Forest Co-op GYSU Permanent Growth Plot (PGP) Program is well underway for this year. The forest industry is currently facing very challenging financial times which in turn places significant added pressures on the partner organizations and science delivery teams of the Forest Co-op GYSU PGP Program. Despite the less than ideal forecasts being faced, both financially and weather-wise, the partners of the Forest Co-op GYSU PGP Program are committed to maintaining the integrity of the program.

A significant milestone will be reached this year when the the original 80 PGPs established in 1999, the first year of the Forest Co-op PGP Program, will receive their third measurement. Additionally for 2009, a further 300 PGPs are available for re-measurement in the boreal region and 45 PGPs are available for re-measurement in the south-central region. Efforts are being taken to ensure that as many of the available plots as possible are re-measured. To-date over 70 percent of the plots established through the Forest Co-op GYSU PGP Program have received at least two measurements with the goal being at least three measurements for each plot before they are returned to the allowable harvest rotation.

Data collected through the Forest Co-op GYSU PGP Program continues to be a vital source of information for additional projects. The Forest Co-op NW Yield Curves Project is one such project. This project, led by Dr. Margaret Penner, focused on the development of yield curve coefficients for standard northwest forest units. Results of the project have already been incorporated into the OMNR's new Modeling and Inventory Support Tool (MIST) for use in forest management planning exercises. Both the topics of yield curves and the Forest Co-op GYSU PGP Program will be highlighted as part of the Canadian Institute of Forestry's (CIF) Electronic Lecture Series. On Wednesday, September 23, 2009 at 1:30 pm, Margaret Penner will deliver a half hour talk on yield curves followed by Ken Lennon delivering a talk on the Forest Co-op GYSU PGP Program. Further details about the CIF's eLecture series can be found at www.cif-ifc.org/site/electure.

Members of the Forest Co-op GYSU gathered in Thunder Bay at the end of May to participate in a half day field trip and a full day business meeting. Included in the field trip were discussions about the use of growth intercept methods to estimate site productivity in young stands as well as gathering information on cedar stands. The next meeting of the Forest Co-op GYSU is scheduled for Tuesday, September 29, 2009 in Sault Ste. Marie, Ontario in conjunction with the Forest Co-op Science Day and Annual General Meeting.

Mark Your Calendars! In addition to the September meeting, members of the Forest Co-op GYSU have also set aside **Tuesday, November 3 and Wednesday, November 4, 2009** for a special **"Forest Co-op PGP Program Strategic Review"**. The meeting, to be held in Thunder Bay, will provide an opportunity to formally review the program and manual through the first 10 years and identify strategic direction for the years to come.

New Project Partner! The members of the Forest Co-op GYSU welcome the Canadian Wood Fibre Centre (CWFC) as a partner in the Forest Co-op GYSU PGP Program. The CWFC joins on-going partners and supporters AbitibiBowater Inc., Domtar Inc., Nagagami Forest Management Inc., Ontario Ministry of Natural Resources, Tembec Enterprises Inc., and Weyerhaeuser Company Limited.

* Denotes—Alternate

