



## Friends of the PRF Corporate Update

Your Board of Directors is currently reviewing and updating our By-laws and charter papers. As a charitable, not-for-profit federal corporation, The Friends of the Petawawa Research Forest is required to 'transition' to the new Not-for-Profit Corporations Act by October 17, 2014.

As the Board members have discussed, we do not want to make any changes as to how our organization operates. We are trying to make the necessary updates by adapting our existing By-laws to fit the new requirements. Corporations Canada has provided much help on their website, allowing us to do it ourselves. They are not charging a fee for this process, and a small corporation such as ours should be able to make this transition without having to hire legal help. We do have to be careful that our documents comply with Revenue Canada requirements for charities.

The Board of Directors has reviewed and accepted the documents we have drafted. They are being posted on our website: <http://friendsofthepf.com/>

We are inviting all members to a meeting at the Petawawa Research Forest on the evening of Tuesday, October 7<sup>th</sup> at 5:30 pm to get your formal approval of the new By-law.

We will start this meeting with a short walk in the new PRF Arboretum and have a slide show about trees.

We welcome your questions and comments. If you are unable to make it to the October 7<sup>th</sup> meeting, but wish to indicate your support (or disapproval) for our revised By-laws and Transition documents, please e-mail me or write. Your support is very valuable and appreciated. Thank you.



*Robin Cunningham*

*Friends of the Petawawa Research Forest*

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## Members Meeting Tuesday, October 7, 2014 at 5:30 pm

A WALK THROUGH THE NEW PRF  
ARBORETUM

Followed by a presentation on TREES  
FOR AN ARBORETUM by Robin  
Cunningham (FPRF Chair)

Members will be asked to vote on a Special  
Resolution to transition the Friends to the  
new Not-for-profit Corporation Act

See our website: [friendsofthepf.com](http://friendsofthepf.com)

Members and guests welcome

**MEET AT THE SILVICULTURE  
BUILDING**

**(CLOUTHIER ROAD, PAST THE PRF  
OFFICE)**

# 2014 Annual Teachers' Forestry Tour

August 5th to 8<sup>th</sup> was a great week for a forestry tour. The weather was beautiful and the enthusiasm high, making for a successful 14<sup>th</sup> annual CIF/IFC Teachers' Forestry Tour hosted at the Canadian Ecology Centre. The tour included the usual full day at the Petawawa Research Forest - where the teachers visited a number of key sites including the Meridian Road White Pine Study and the Biomass Research Site. Our own Robin Cunningham led a well-



*Fred Pinto presenting at Meridian Road in the PRF*

received tree identification exercise. The teachers left with an increased knowledge and appreciation of forest science and research, and the role forestry practitioners and professionals play in maintaining healthy forest ecosystems.

## Kitchissippi Run, October 11, 2014

On Saturday, October 11, 2014, Laurentian Hills is hosting the third annual Kitchissippi (Big River) Run in support of the North Renfrew Long Term Care Centre and the Deep River and District Hospital. Parts of the run will take place at the Petawawa Research Forest, as they did last year.

There will be a Full Marathon (42.2km), a Half Marathon (21.1km), a 10 km, a 5 km and a family fun 2 km route. All of the runs begin at the Chalk River Lions Hall. The 10 km run, Half Marathon and Full Marathon are on roads located within the Petawawa Research Forest. The race itself has something to offer all levels, from the experienced marathoner to a family wanting to enjoy the fall colours. Volunteers are needed to staff water stations or to act as marshalls - please contact one of the organizers if you'd like to help.



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[www.ag-creative.ca](http://www.ag-creative.ca)

The run website is found at  
<http://kitchissippirun.wordpress.com>.

The prices and starting times for the runs are as follows:

Full Marathon \$75 - 8:00am

1/2 Marathon \$65 - 8:30am

10km \$55 - 9:00am

5km \$45 - 9:30am

2km Family Walk \$25 (without t-shirt)

\$35 (with t-shirt) 10:30am (stroller free with registered adult)

If you need more race or volunteer information, please contact organizers through their [Facebook page](#) or send a email to: [kitchissippirun@hotmail.com](mailto:kitchissippirun@hotmail.com)

# Draw for Nature Print by Neil Vokes

This is a framed, signed and numbered print from Ottawa Valley artist, Neil Vokes, well known for his detailed renderings of landscapes and wildlife. Print 194/200 is signed and dated January 1998. It measures approximately 28" X 23" (including frame), and has been double-matted and framed by Purvis Gallery of Pembroke. Neil has generously donated this print to the Friends of the Petawawa Research Forest for their fundraising work.

Each raffle ticket (**priced at \$2 each or 3 for \$5**) enters you into the draw to win Neil's print, valued at \$625. The draw will take place on November 18, 2014.



*Blue Heron on James Lake by Neil Vokes*

For tickets, contact:

[Joan Kalechstein](#)

[John Muff](#)

[Lara Griffiths](#)

[Tom Moore](#)

[Frank Knaapen](#)

# Red Pine Study Passes its Diamond Anniversary

Atomic Energy of Canada Ltd. (AECL) is the country's premiere nuclear science and technology organization. Its sprawling property near Chalk River, Ontario may seem like an odd location for applied forestry research, but considering its close proximity to the Petawawa Research Forest (PRF), it immediately becomes logical and all makes sense. The Red Pine study was established in 1953 when AECL requested the PRF's assistance with afforesting recently acquired farmland and has provided a wealth of data information and knowledge for over 60 years.

Red Pine (*Pinus resinosa* Ait.) is commercially important in Canada, and is often the species of choice for afforestation projects throughout its



*Al Stinson, PRF Forest Science Specialist, at AECL Red Pine Thinning Study*

range. It is a relatively pest-free and fast-growing native conifer. Although it can be used for a variety of purposes including pulp, it is capable of producing high-quality products such as sawlogs and utility poles if managed properly. It is characterized as tall and

straight, and grows in a variety of habitats. The bark is thick and gray-brown at the base but thin and flaky with a reddish hue in the upper crown. The tree's common name derives from this distinctive characteristic. Red Pine are self-pruning when established at high

densities and in these conditions there tends to be few dead branches the trunks; in fact older trees often have long lengths of clear bole below the canopy. The needles are in fascicles of two, 12–18 cm. long. The species is noted for its low genetic variation throughout its range, suggesting it may have been near extinction during its evolutionary history. It is intolerant of shade and does well on windy sites and on well-drained soils. Mature Red Pine forests provide habitat for a number of wildlife species including Cooper's hawk, red-breasted nuthatch and pine warbler.

“When the AECL study was established, Red Pine was precision-planted at various spacings in anticipation of future research”, says Peter Arbour, PRF Operations Manager. “In addition, an extensive Al Stinson, Forest Science Specialist, with some of the sawlogs and pulpwood thinnings. Series of permanent sample plots (PSPs) were established in 1962 to monitor growth relative to these spacings.”

Beginning in 1981, various thinning regimes were applied on the initial spacings, with different volumes removed in each regime. All in all there were five thinning regimes, with an average of 130 m<sup>3</sup> removed over all the trial area. Most of the product was sawlog material and some 15% bolt or pulpwood. The heaviest thinning regime was some 180 m<sup>3</sup> /ha and the lightest about 60 m<sup>3</sup> /ha. As a result of great foresight, dedication and scientific rigor, the AECL Red Pine Study has produced one of the best datasets on spacing and thinning for Red Pine in Canada, and it has become one of the PRF's most prolific studies in terms of scientific papers and information reports. Its contribution to Red Pine research has included the development of growth and yield models, informing guidelines for best management practices, including establishment spacing and optimum thinning regimes. It has also spawned several additional studies, one that included the establishment of plots that have provided long-term trends-through-time data relating to the monitoring of drought conditions and their effects on Red Pine growth. According to Will Stiel, the PRF researcher who established the study in

1953, it was the first fully replicated field forestry experiment in the world.

The original Red Pine study design had the plantation established at eight spacings that ranged between 1.2 m 1.2m and 6.5m 6.5m. The 30 PSPs that were established have allowed the capture of growth rates within all eight of these spacings. Some of the plots also serve as controls where no trees have been removed while others are maintained at specific post-harvest basal areas of 37.9 m<sup>2</sup>/ha, 32.1 m<sup>2</sup>/ha, and 25.9 m<sup>2</sup>/ha.

“The Red Pine Thinning Study is a wonderful example of long-term cooperation between our organization and the PRF”, says Annie Morin, Environmental Specialist with AECL. “The science that continues to be undertaken and maintained for over 60 years has helped us to better understand how to effectively manage Red Pine. It has also been very useful for other related studies focusing on wildlife habitat and bio-diversity in a managed forest.”

During the autumn of 2013, in preparation for a series of thinning treatments, another comprehensive data collection was undertaken in an area that included re-measurement of diameters, heights and mortality. Stem quality assessments and crown measurements were also made in all 30 of the PSPs. Using diameter measurements; trees were selected for removal so as to achieve desired basal area targets. As an additional data collection initiative, digital photos from standardized photo points were taken to better describe plot conditions. Once the data collection was complete and subsequent analysis finished, trees marked for removal were harvested and forwarded to roadside for scaling. Finally, tree cookies were cut from each treatment for use in knowledge exchange and demonstration purposes.

“Harvesting over the fall and winter went very well”, says Al Stinson, Forest Science Specialist working at PRF. “The actual volume harvested through the various thinning regimes very closely matched what we predicted in our estimates, and there was very little

damage to residual trees. The harvesting was completed by a local logging company, Lavern Heideman and Sons, and they did an excellent job ensuring all phases of the operation went smoothly. The harvest prepared the Red Pine Study site itself for many more years of data collection and active research.”

The AECL Red Pine Study is certainly uniquely located, but it is also a unique model for applied research. Its legacy is an invaluable and rich dataset of how to manage this important species. Hopefully there will be, at the very least, 60 more years of effective cooperation, good science, and the fore- thought and dedication that has been manifest to date.

*Reprinted courtesy of the Canadian Institute of Forestry*

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# Sugarbush Report, 2014

The Petawawa Research Forest Sugarbush Tour program invites students from schools in Renfrew County to attend educational programs during the maple sap run season. They are provided with demonstrations and workshops on the history, collection and production of maple syrup. The students also learn about the forest, with the PRF as the centrepiece of their tour, and gain an insight into the Canadian syrup industry. The program is run by three super volunteers: Ian Miller, Michelle Stein and Tom Stein.

The Friends of the Petawawa Research Forest were very fortunate to receive funding this year from two sources to support the PRF Sugarbush Tour program. One was the result of a contribution agreement between the Canadian Wood Fibre Centre of Natural Resources Canada and the Friends of the PRF. The agreement funded repairs to the Sugarbush

evaporator and pipeline. Joanne Côté-Pilon of the Fibre Centre worked very hard to ensure that the contribution agreement was in place early so that repairs could be made before the start of the program. The other source of funding was a grant from the Deep River and District Community Association (DRDCA). The Association was established in 2002 to ensure a consistent source of funds for providing long-term benefits for an area that includes Deep River, Laurentian Hills, the United Townships of Head, Clara and Maria, and Rapides des Joachims. The generous grant from the DRDCA was used to purchase supplies for the Sugarbush building and for promotional material for the program.

The repairs covered by the NRCan Contribution Agreement and supplies funded by the DRDCA ensured that the Sugarbush programs at the Petawawa Research Forest could run smoothly and safely this spring.

Ian, Michelle and Tom and the Friends of the Petawawa Research Forest sincerely appreciate the generous contributions from the Canadian Wood Fibre Centre DRDCA to this year's successful programs. There were as many as 100 visitors per day during the sap run and over 1200 visitors throughout the season. Among the groups that visited were the Veterans' Support Group (OSI), the NATO Veterans (Ottawa Valley) Group and the Military Youth Mental Health Group. In addition, the support of Peter Arbour, Dan Turcotte and the staff of the Petawawa Research Forest is sincerely appreciated. Thanks to the Sugarbush program, the PRF has received positive publicity as a site for environmental education among students, parents, and teachers.

## U.K. Forester Visits PRF

Mr. Geraint Richards, the Head Forester of the Duchy of Cornwall and a member of the Institute of Chartered Foresters in the United Kingdom, visited the PRF in May as part of a tour organized by the Canadian Institute of Forestry (CIF/IFC). Mr. Richards was recently recognized by the CIF/IFC for his outstanding contribution to international forest knowledge exchange and partnership.

“Geraint has been a stalwart partner, colleague and a great friend,” said Mr. Al Stinson, CIF/IFC Vice President. “He has championed a strong and fruitful collaboration between the UK and Canada in recent years and we are grateful for his interest and time in working together to advance good forestry. It is fitting that the Institute



*Geraint Richards (far left) and other PRF enthusiasts at the Biomass Study*

recognizes his outstanding effort on behalf of sustainable forestry.”

Mr. Richards reported positively and

directly to His Royal Highness – The Prince of Wales, on the many sites he visited in Canada including PSP 1, the Meridian Road White Pine Study and Biomass Research sites at the PRF.

## Maplefest, 2014

Maplefest has been a fundraiser for the Chalk River Lions Club for many of the past 30 years. This year the popular event was held at the sugar bush at the Petawawa Research Forest on Sunday, April 13th. Twelve volunteers served 325 people delicious pancakes with syrup and sausages. Attendance was down about half of normal due to the very rainy day. Watch the notices for Maplefest 2015.

## 3rd Annual Forest Bird Workshop

May 28th proved to be a great day for a walk in the woods. Despite a humid day with plenty of bugs, the songbirds were plentiful, making for a successful bird watching/identification exercise that started off the daylong workshop held at the Petawawa Research Forest (PRF). Sponsored by Biodiversity Education and Awareness Network (BEAN) and the Friends of the Petawawa Research Forest, this year's workshop focused on the practice and importance of managers and landowners integrating bird habitat with forest management. Designed to present the latest procedures for conserving forest birds in woodlands, the day included various speakers covering current Chimney Swift research projects, prime habitat identification tips to encourage nesting and conservation techniques used throughout Ontario. Highlights of the day included a morning and an afternoon field excursion where delegates identified common forest birds by both sight and song, along with



*Robin Cunningham (far right) leading participants through a bird identification exercise*

identification of some common raptor stick nests found in the PRF. One group of participants even managed to spot a Swainson's thrush (*Cartharus ustulatus*) perched atop a tree branch. A lunchtime charity BBQ for Forests without Borders raised over \$450 thanks to the generosity of the day's speakers and participants. Response was positive throughout the day about the different components of bird

habitats and monitoring, as well as their relationship with natural and manmade environments. Participants went away with an increased knowledge of forest bird habitats and biodiversity, how to identify feeding cavities, stick nests, good-bad-okay habitats, and who to contact for more information.

## Winter Students' Tour includes PRF

Late in February, the Canadian Institute of Forestry welcomed a group of university students for their annual Winter Forestry Field Tour - based at the Canadian Ecology Centre near Mattawa. The group, consisting of the University of Toronto's Master of

Forest Conservation class and several Université du Québec en Abitibi-Témiscamingue forestry students, enjoyed a four-day snow-filled tour of Nipissing Forest sites and the Petawawa Research Forest. The PRF component

of the tour included a visit to historic Permanent Sample Plot (PSP) One, and a review of fire ecology research with Peter Arbour and Robin Cunningham, as well as visits to the PRF's red pine plantations, and the more recently added biomass study plots. The students also enjoyed some delicious baked beans, maple taffy and hot chocolate around a lunchtime campfire at the PRF's sugar shack!



*Students from U of T and UQAT enjoy the PRF Sugar Shack experience!*

Want more information of any of the above-mentioned articles?

Interested in submitting an article in the next FPRF Newsletter?

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