

PCC GATHERS IN QUEBEC

Report of the Poplar Council of Canada Genetics Workshop and Annual Business Meeting, held August 21-23, 2012

Jim Richardson, Technical Director, Poplar Council of Canada

A small but enthusiastic group of Poplar Council members and others interested in poplars and willows participated in a workshop, field tour and annual business meeting in Quebec in August 2012. The event, skillfully organized and generously hosted by Pierre Périnet and colleagues from the Ministère des Ressources naturelles et de la faune du Québec (MRNF), was planned to be small-scale, and to focus on issues and challenges related to poplar and willow genetics and breeding. This focus helped to ensure good interaction and lively discussion among those who participated. In all, the group numbered about 18 people from the Canadian provinces of Quebec, Ontario, Saskatchewan, Alberta and British Columbia, as well as one member from the USA.

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Workshop participants at Ste-Foy, Québec.

The first day of the three-day event took place in the headquarters of the MRNF Forest Research Directorate in Ste-Foy and featured oral and poster presentations on national activities and issues in poplar and willow genetics, including challenges with genetic resource preservation, continuation of poplar research, certification and variety protection. Progress with the development of a national breeding strategy and action plan for native and exotic poplars, aspens and willows

was presented. Breeding techniques were discussed from the different perspectives of a new breeder in Western Canada, a seasoned breeder in the US, and a breeder working with willows.

The day also included a greenhouse tour, which featured breeding activities of the MRNF with hybrid poplars, including a novel double-container system for rooting of cuttings (see photo).

Highlights of the Council's annual business meeting included:

- Reports on the new website, on preparation of the Canadian national report for the International Poplar Commission, and on the very active <u>Pesticide Working</u> <u>Group</u>.
- Election of Hamid Naeem as Secretary-Treasurer and Raju Soolanayakanahally as a Member-at-large on the Board.



Double-container system for rooting of cuttings.

- 2013 annual meeting to be held in conjunction with the 13th North American Temperate Agroforestry meeting in Charlottetown, PEI in June, with PCC Board members Raju Soolanayakanahally and Bill Schroeder on the organizing committee.
- 2014 annual meeting to be held in conjunction with the International Poplar Symposium in Vancouver, with PCC Vice-Chair Cees van Oosten chairing the organizing committee.
- See reports presented at the annual meeting:
 - o <u>Chair</u>
 - o <u>Technical Director</u>
 - o <u>Executive Assistant</u>
 - o <u>Budgets</u>

The two-day workshop field-tour travelled east of Quebec City to the Bas-St.-Laurent region south of the St. Lawrence, with an overnight stop in Rivière-du-Loup. A scenic ferry crossing of the St. Lawrence on the second morning was followed by a visit to the dramatic Saguenay Fjord and an extended series of field stops at Shipshaw near the town of Chicoutimi north of the St. Lawrence. Field stops in the Bas-St.-Laurent region were all in the MRNF Ste.-Luce nursery, which is oriented primarily to production of conifer seedlings in containers in plastic-covered 'tunnels', but also features a number of field trials involving poplars. These include a progeny test of *Populus suaveolens*, a close relative of balsam poplar native to north-central China, Mongolia and eastern Siberia, established in 2008, as well as clonal tests of different hybrid poplars established in 2005 and in 2012. The nursery also hosts a demonstration planting of many of the poplar clones which have been developed and are commonly planted in Quebec as products of the long-standing successful poplar breeding program of the MRNF.



P. suaveolens progeny trial, Ste.-Luce nursery.



Demonstration planting of common poplar clones, Ste.-Luce nursery.

The Quebec program has also been investigating for many years the potential of another east Asian poplar species, *Populus maximowiczii*, for planting in Quebec. Commonly known as Japanese poplar, *P. maximowiczii* is native to northeastern China, eastern Russia and Korea as well as the northern islands of Japan. At Shipshaw, in the good growing conditions of the Saguenay River valley, the field tour visited impressive test plantings of *P. maximowiczii* established 15 to 20 years previously. The trials included a clonal test of hybrids with *P. maximowiczii* parentage, a progeny test of *P. maximowiczii* hybrid selections, and a very fine progeny collection of *P. maximowiczii*. Also visited in the same area was a 20-year-old progeny test of *Populus deltoides* selections.



Populus maximowiczii hybrid progeny test, Shipshaw, Saguenay region.



Members of the Poplar Council Genetics and Breeding Working Group at Shipshaw, Saguenay region: (left to right) Bill Schroeder, Raju Soolanayakanahally, Barb Thomas, Pierre Périnet.

The photos illustrating this article can be viewed in larger format in the website photo gallery at <u>http://www.poplar.ca/article/photo-gallery-quebec-2012-146.asp</u>, along with a number of other photos from the Quebec event. Some of the presentations given during the first day of the workshop can be also viewed on the website at <u>www.poplar.ca/upload/documents/quebec-12/quebec12pres.pdf</u>. Minutes of the annual business meeting are available to members on request to PCC Executive Assistant Deb Brenton (poplar@poplar.ca).

LINKS To Other Articles of Interest regarding the PCC AGM in Sainte Foy, Quebec

<u>Secretary Treasurer, Budgets – 2011, 2012, 2013</u>

Deborah Brenton, Executive Assistant's Report to the Annual General Meeting

Save the Date

- 13th North American Agroforestry Conference 2013 June 18-21, 2013-Charlottetown, Prince Edward Island. <u>http://2013naac.com</u>
- IPS VI meeting July 20-28, 2014 Vancouver, B.C. organized by Cees van Oosten and the University of British Columbia as the host organization. <u>www.2014ipsvi.com</u>

POPLARS AND PEOPLE IN INDIA The 24th Session of the International Poplar Commission

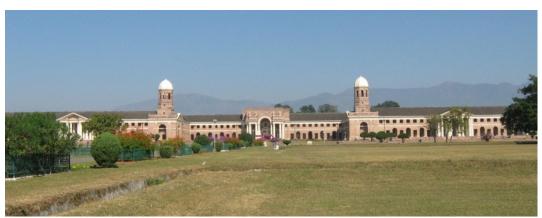
Jim Richardson, Technical Director, Poplar Council of Canada

India is a vast country with a very large population (1.1 billion). It is not widely known as a poplar-growing country, although in the north of the country in the foothills of the Himalayas, there are several native poplar species, most notably *Populus ciliata*, Himalayan poplar. However, in the last 20 years there has been very considerable planting of poplars, primarily in the northern states of India, and almost exclusively with *Populus deltoides*. There are now more than 3 million hectares of poplar plantings, either in block plantations or in agroforestry systems. Farmers have enthusiastically adopted interplanting of poplars with agricultural crops, recognizing the mutual benefits of such systems for crops and trees, particularly the economic benefits for their livelihoods. It is in this context that India recently hosted the 24th Session of the International Poplar Commission (IPC) under the theme of 'Improving Lives with Poplars and Willows'. IPC is a technical statutory body of the Food and Agriculture Organization (FAO) of the United Nations established in 1947. Its aim is to promote the cultivation, conservation and utilization of members of the family Salicaceae, which includes poplars and willows.

Over its 65 year history, IPC has grown to include 37 member countries, who become involved through their respective 'national poplar commissions'. The Poplar Council of Canada is recognized as the national poplar commission for Canada. IPC is the only international forum which brings together managers, users and researchers of poplars and willows to discuss topics of common interest. Full sessions of IPC

In an interesting link to Canada's poplar world, Dr. B.P. Bhojvaid, Director of FRI, Dehradun, was a student of the late Professor Louis Zsuffa, a previous chair of PCC, at the University of Toronto in the early 1980s.

are held every four years. Canada hosted the 17th Session in Ottawa in 1984 and jointly hosted the 20th Session with the USA in Portland, Oregon in 2000. The Executive Committee of IPC meets every two years, and held its 46th session in India immediately prior to the full Session.



Forest Research Institute, Dehradun, India, site of IPC 2012.

IPC 2012 was hosted jointly by the Forest Research Institute (FRI) and the Indian Council for Forestry Research and Education (ICFRE) in late October and early November. Four days of technical sessions took place on the 500 hectare, impressively landscaped campus of FRI, which is effectively a forestry university, in the foothills of the Himalayas in Dehradun, Uttarakhand, with plenary sessions held in the main building, constructed in 1929 and reputed to be 'bigger than Buckingham Palace.' Lavish and colourful social and cultural events took place every evening during the week of the session. A two-day pre-Session field tour started in the Indian capital, Delhi, and ended in Dehradun, enabling participants to see poplar growing and processing at first hand and to meet local farmers. Following the Session, a four-day field tour starting in Dehradun and ending in Delhi showed poplars in private agroforestry use, as well as in government block plantings, and featured demonstrations of poplar breeding techniques and trials. In all, 227 people from 23 countries participated in IPC 2012, with about 30 people on each of the field tours.



FRI university students present dance program.

representatives, including four PCC members (Barb Thomas, Bill Schroeder, Raju Soolanayakanahally and Jim Richardson) who all participated in the pre-Session field tour; Jim also took in the post-Session tour. Barb Thomas, PCC Chair, was elected to the IPC Executive Committee for a four-year term. Jim Richardson served as vice-chair of the closing plenary session. Along with other member countries, Canada contributed to the Session through the preparation of a national report on 'Poplar and Willow Cultivation and Utilization in Canada 2008-2011'. This invaluable source of current information was prepared by David Derbowka, Passive Remediation Systems, Inc. for the Poplar Council with generous support from the Canadian Forest Service, Natural Resources Canada. The report is available on the PCC website at

Canada was well represented at IPC 2012 with six

http://www.poplar.ca/upload/documents/ipccan2012.pdf.

The technical program included oral presentations in both plenary and concurrent sessions, as well as a poster session (held outdoors in a rose garden). Of the 14 keynote papers presented in the opening and closing plenary sessions, two were given by Canadians: 'Poplar plantations – a Canadian opportunity' by Barb Thomas, and 'A new poplar and willow publication for a global audience' by Jim Richardson. The concurrent sessions were organized around the themes of the IPC Working Parties: Poplar and Willow Diseases; Poplar and Willow Insects and Other Animal Pests; Harvesting and Utilization of Poplar and Willow Wood; Poplar and Willow Genetics, Conservation and Improvement; Poplar and Willow Production Systems; Environmental Applications of Poplars and Willows; and Nomenclature and Registration. In all, there was a total of 101 oral presentations and 51 posters. Abstracts of all presentations are available on the IPC website at http://www.fao.org/forestry/ipc2012/79776/en/, as well as a synthesis of all country progress reports prepared for the Session, and a complete list of publications.

The pre-Session study tour in Haryana State visited poplar plantations and poplar-based industries in and around the city of Yamunanagar. Stops included visits with forestry authorities, industry and local farmers, as well as to privately-owned factories producing plywood and other wood products from poplars and eucalyptus, a poplar clonal nursery producing planting stock of *Populus deltoides* for farmers, and operational poplar plantations involving different agro-forestry models. Many of the plantations in the region are part of a program of the Western India Match Company (Wimco) which, through its subsidiary Wimco Seedlings, provides poplar planting stock to local farmers who establish and manage the plantations and are guaranteed a market for the timber by Wimco. The farmers use efficient agro-forestry systems to grow poplars along with different agricultural (wheat, sugar-cane) and horticultural (mango, ginger, turmeric) crops, to the mutual benefit of trees and crops.

The post-Session study tour in Uttarakhand visited poplar nurseries, plantations and research trials in the area of Lalkuan, Rudrapur and Nainital. During field stops, poplar plantations under intensive management were visited in privately-owned, farmer-operated agro-forestry systems, as well as under lowintensity management in state-owned block plantings. Wimco Seedlings ably demonstrated its successful program of producing poplar planting stock for farmers who plant and manage the poplars in conjunction with agricultural and horticultural crops, benefiting both trees and agriculture crops, as well as the livelihood of rural families. The visit with Wimco highlighted all aspects of the company's research and development program to develop, test and promote new clones of *Populus deltoides* (as well as crosses with *P. ciliata* and *P. nigra*). While most of the poplar plantations were on the plains, interesting trials of crosses of native and exotic poplars (P. ciliata, P. yunnanensis, P. deltoides, P. nigra) were also visited in the more mountainous conditions of Nainital district.



Wimco Seedlings research manager R.C. Dhiman in 2year-old *P. deltoides* interplanted with sugar cane.



Poplar veneer production, Yamunanagar.



Turmeric growing under 4-year-old *P*. *deltoides*.

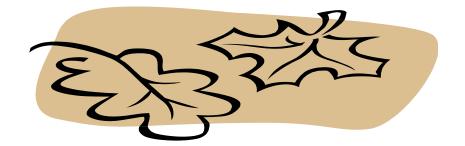


Planting poplar whips in farm field. (Sugar cane in background)



Farmers and field tour participants mingle in 5-year-old *P. deltoides*.

Despite the undoubted success of the 24th Session of IPC in highlighting India's progress in growing poplars for the benefit of its people, the future of IPC is in some doubt. The number of members has been stagnant for some time, the focus of IPC is not attractive to potential sponsors, and institutional, administrative and reporting procedures make it difficult for membership to increase. The Session endorsed a move to initiate a reform process within the organization. This would seek to resolve the administrative issues. More importantly, it would see IPC evolve to consider a broader geographic area, a wider socio-economic and technical context, and an even stronger attention to worldwide concerns about climate, biodiversity and sustainability. The incoming Executive Committee will pursue these reforms under the leadership of its new chair, Martin Weih of Sweden, and with the support of Walter Kollert of FAO who is Secretary of IPC.



Advice from a Tree

Stand Tall and Proud Go out on a Limb Remember your Roots Drink Plenty of Water Be Content with your Natural Beauty Enjoy the View Annual Report to the Business Meeting Barb Thomas, Chair, Poplar Council Sainte Foy, Quebec, August 21, 2012



The 2011-2012 year for the Poplar Council has been busy and productive. We held a successful annual general meeting in September 2011 in conjunction with the International Poplar Commission Environmental Applications working party and the Poplar Council of the United States (PCUS). We had many sponsors of the meeting including the PCUS and all can be viewed on our web-site @ www.poplar.ca. All talks from the meeting are also available on the web-site for public viewing. I would like to thank all the sponsors for their contributions as well the participants for their active participation and many discussions held over the conference and field tour days. Field tour reports were prepared by Jim Richardson and are presented in our fall 2011 newsletter put together by Ms. Deb Brenton, our Executive Assistant. The 2013 PCC meeting will be held in Charlottetown, PEI in June 19-21, in conjunction with the Association for Temperate Agroforestry.

This year saw the production of the 2008-2011 International Poplar Commission (IPC) report for Canada which was produced for the PCC by Dave Derbowka and his team at Passive Remediation Systems. These reports are challenging to produce and are often required to be undertaken with very tight time-lines, this year's being no different. The final report is available on our web-site and I encourage you to take a look. I would also like to thank the Canadian Forest Service for financial support to the PCC and ensuring we were able to undertake the production of this national report for the IPC. Our Canadian report, along with all other participating nations will be presented at the IPC 24th Session in Dehradun, India in October 2012.

The Pesticide Working Group continues to be a very active team in the council, and its Chair, Cees van Oosten, commits many hours to ensure the delivery of both information and coordination in the research plans required to gain approval for chemicals and their use with aspens, poplars and willows. Please see Cees's report on the web-site for more details on recent accomplishments.

The Genetics Working Group (GWG), co-Chaired by Bill Schroeder and Pierre Périnet, has produced several new fact sheets on commercially available poplar clones for the prairies. A standard template was developed by the working group and is now available to be populated with information for additional clones from across Canada.

Our Strategic Planning Committee, which meets every few months, has produced, with the initiative of Jaconette Mirck, a fact sheet outlining the environmental applications, services and challenges of using poplars and willows in the landscape. In addition, the new web-site will be launched in conjunction with our 2012 AGM with many new components and a membership

drive. On the genetics front, Pierre Périnet has been rejuvenating several of the IUFRO tree collections which he maintains, making the material available for archiving across the country. Development of a national breeding strategy document is also well underway under the guidance of the GWG.

I would like to recognize and thank Jim Richardson for his continued commitment and dedicated work for the PCC. Jim provides us with reports from all conferences he attends, answers questions from the public and has been instrumental in the development and launch of our new web-site.

This year's AGM, a poplar breeding technical workshop, the first to be held, is being hosted by Pierre Périnet of the Quebec Ministry of Forests and should go a long way in supporting our need for training in the area of tree breeding in Canada. I believe this is crucial even in light of the announcements and recent closures of poplar programs in western Canada. The utility of poplars from an economic perspective continues to oscillate as it does with many breeding programs across the county regardless of species. As such, a major area of interest and a component of our Strategic Plan is to recognize and act on ensuring the preservation of our long established and recently acquired, genetic resources. Without a long-term vision for preservation, when the commercial interests again return, Canadians will be decades behind with great efforts needed to rebuild.

I look forward to another productive year with the PCC, engaging our new members in our activities and continuing to promote poplars and willows across the country. I would like to thank my Executive Committee, Board of Directors, working party Chairs and the Strategic Planning Committee for their support and hours of volunteer work on council. Lastly, but by no means least! I thank Deborah Brenton for her work and commitment to keeping the PCC running smoothly and efficiently, producing the newsletters and helping me to keep on track – thank you Deb.

Technical Director's Report to the Annual Meeting Sainte Foy, Quebec, August 21, 2012 By Jim Richardson

This is the 16th annual report to the Poplar Council membership from the Technical Director, a position created by the Executive Committee in April 1997. The general objectives of the Technical Director are to supply technical services and advice to the Council, to promote awareness and support for the Council and to increase membership. More specifically, the responsibilities of the technical director include maintaining and updating the Council's website; responding to technical enquiries using E-mail, phone, fax and mail; providing an international dimension to the Council through participation in the International Poplar Commission; contributing to the PCC Newsletter and supporting technical aspects of the organization of the PCC Annual meeting; and providing services to members and the Board of Directors of a technical rather than purely administrative nature. The specific responsibilities continue to change somewhat, reflecting the changing ways in which the Council operates and new directions and initiatives of the Council.

Recognizing the limited budget of the Council, the services of the technical director are provided for a minimal level of compensation. I work out of my home office in Ottawa, devoting on average about four to five days a month to Poplar Council business. However, the actual time commitment varies greatly depending on the tasks at hand.

Website

Management and maintenance of the Poplar Council website (<u>www.poplar.ca</u>) continues to be the most significant on-going responsibility of the technical director. The 'What's New' pages and the 'Events' page are reviewed and updated regularly, as well as 'Links'. Information about individual and corporate members is updated once a year. The site has been an important source for the electronic newsletter, which is normally uploaded to the site soon after each new issue is sent to members by the Executive Assistant by E-mail. The website is a key resource for information about the annual meeting, particularly the Edmonton conference in 2011. Site usage in the past year reached an outstanding peak of 60,000 hits per month in September, with more regular levels of 2300 to 2400 visits in fall and spring months. Visitors to the site come from all over the world, but those that can be identified are mostly from Canada and the US. The most popular documents visited have been the hybrid poplar crop manual, a presentation on poplar and aspen breeding in Canada given by our Chair to the IPS Symposium in China in 2006, and, somewhat strangely perhaps, a presentation on 'Poplar in Canada: information and research – 2005' given at our annual meeting in 2005.

The primary website activity in the past year has been the development of a new, fresh site with the help of Sencia Canada Ltd., a professional web design company based in Thunder Bay, ON. With input from the Board Executive, a relatively simple, clean design has been selected with easy navigation. Considerable content has been added to the new site and it is hoped to launch it by mid-August. At that point, it will replace the present site, using the same URL (www.poplar.ca). From the Home page, visitors will be able to access pages such as 'What's New', 'Events', 'About PCC' and 'Information', as well as link to the Council's new Facebook page. Information available includes a variety of PCC and IPC-related publications, as well as statistics about poplars and willows in Canada, tips for growers in a 'Growers' Corner' and a picture gallery. Members, particularly corporate members, will be well-served with the display of corporate logos and links to members' own sites. Online membership application and renewal will be offered and, although online payment will not be offered regularly, the option will be retained to offer PayPal for such payment in future; it proved very useful for last year's major conference in Edmonton, but is not justified on an ongoing basis.

Technical Enquiries

The technical director responds to technical enquiries, most of which are received as a result of contact through the website to the Secretariat and are dealt with by E-mail. The vast majority of such enquiries come from non-members, including from outside Canada. The number of enquiries from individual homeowners regarding poplars on their property has declined in recent years. When I am unable to provide the information requested myself, I involve other Council members who are experts in the particular field of interest of the enquirer, or who are closer to the geographic location of the enquirer. Cees van Oosten has been particularly helpful in that regard. Whenever possible, advantage is taken of the opportunity to promote Council membership in responding to enquiries from non-members.

International Dimension

Together with my colleague, J.G. Isebrands of Wisconsin, I have spent a considerable amount of time in the past year on the final stages towards publication of a completely rewritten and updated edition of the FAO-IPC book on poplars and willows. This book is entitled 'Poplars and Willows: trees for society and the environment'. An international team of 'lead chapter authors', supported by nearly 60 individual contributing authors, including 8 Canadians, has prepared the content of the book's 13 chapters. FAO has entered into a co-publication agreement with the UK-

based international scientific publisher CABI, which specializes in agricultural topics, to publish the book. The complete manuscript was finally submitted to the publisher in June. The expectation is that it will appear in print early in 2013. Although the really intensive work is now over, the editors' work continues during the publication process and will include a presentation on the forthcoming book at the 24th Session of the International Poplar Commission (IPC) in India in late October.

The 24th Session of the IPC will include field tours before and after the technical presentations in Dehradun. The Chair of PCC and the Technical Director will participate in the session, the latter also in his capacity as a member of the IPC Executive Committee, which will meet immediately prior to the 24th Session. A full report of the events in India, including field tours, will be prepared for the Council and made available on the website.

Newsletters and Other Publications

The technical director makes regular contributions to the Council's newsletter, including reports from meetings and other events. A report, featuring the field tours associated with the international conference organized by the Council in Edmonton in 2011, was prepared and published. While the future of the electronic newsletter is under review by the Board, such reports and information notes will continue to be made available on the website in one form or another. Editorial review and advice have been provided in the preparation of a PCC technical note on environmental services of poplars and willows, and also for an English translation of a Quebec information brochure on forest certification implications.

Annual Meeting

Following the 2011 Edmonton conference and annual meeting of the PCC, I collated the technical presentations and posters given there and uploaded them to the website. I have provided support to the 2012 Genetics Workshop and annual meeting of the PCC in Quebec through the use of the website for announcements, program information and registration, and will prepare a report on the event, including the field tour, for the website.

As a member of the organizing committee for the workshop of the US Short Rotation Woody Crops Operations Working Group to be held in Oak Ridge, Tennessee in early November 2012, I have provided some Canadian perspectives to the planning, and made workshop information available on the website. However, I am not aware of any Canadians who will participate in this event. PCC has held joint meetings with this group in the past.

Acknowledgements

I would like to thank Barb Thomas and the Executive Committee for their continued support and confidence throughout the year. It is a pleasure to work under Barb's leadership of the Executive. I also appreciate very much the efficiency and hard work of Deb Brenton, the Council's Executive Assistant.

STUDENT HIGHLIGHTS

This year the Poplar Council decided to introduce a new initiative – a supplement to the newsletter highlighting the work done by students across Canada. Here is the link for those of you interested in their research: www.poplar.ca/upload/documents/n201212e.pdf.



Jake Eaton

It is with regret and deep sorrow that the Poplar Council of Canada was informed of the death of Jake Eaton on January 15th, 2013. Jake was well known in the poplar community and worked as the Managing Director of European Operations at Greenwood Resources, prior to that he was with Potlatch Corp. for 21 years. Jake passed away following a nearly two-year battle with liver cancer. It was a battle he fought with inspiring courage and faith, while never losing his commitment and focus on the importance of family, friends, and colleagues. He will be missed greatly.