



Annual Report 2014-2015

In most ways 2014-2015 was a status quo year. Programs such as Butternut Recovery, Seed Management and the Seed Collection Area Network, Assisted Migration Trials and general promotion of gene conservation continued with the help of our members and associates. It was also the year that a long standing item on our to-do list, the revision of the Ontario Seed Manual, became a great reality. If you don't yet have a copy of this amazing new resource contact us to get one, or get two and give one on to a colleague! Read on to get details on all of our programs.

2014-2015 also saw the beginning of the end of status quo. Our provincial organization, Forest Genetics Ontario determined that it needed to disband; its form of governance no longer being effective. There was also significant transformation within our long time supporting partner, the Ministry of Natural Resources and Forestry (MNRF). Two aspects of this transformation especially affected our FGCA program. Firstly, and similar to the demise of the Ontario Stewardship program, MNRF staff cannot be directly be involved in non MNRF program delivery. Secondly the MNRF is not supporting private land forest management beyond management of the Managed Forest Tax Incentive Program and funding of the 50 Million Tree Program. This resulted in the loss of southern Ontario District forester positions, support for local Stewardship Councils and the FGCA Coordinator position.

This change coincides with our 5 year strategy renewal and my retirement from MNRF, though I will stay on with the FGCA as a part time coordinator. 2015-16 will be a transition year in which we maintain core programs, as our Board considers challenges and the opportunities to make a difference. The Board's long term focus and fiscal management has provided us the time and resources to take a measured approach. We look forward to collaborating with all of our you, because even as resources and leadership are dwindling, the gene conservation challenges are not.

Barb Boysen, FGCA Coordinator

This report is presented as per the Goals in the *FGCA 5 year Strategic Plan 2010-2014*:

- I. Biologically Appropriate Reforestation:** Increase quality/quantity of source-identified, native species seed
- II. Gene Conservation Principles Integrated in Forest Management Programs** - Increase awareness and use of genetic resource management principles to help conserve and improve existing native forests
- III. Species Conservation & Restoration** - Increase awareness of native species diversity and threats to their status, and develop programs for recovery
- IV. Communication of Gene Conservation Principles** - Increase awareness of FGCA program among forest management and conservation sectors.
- V. Effective, responsive, fiscally viable organization** - Maintain a NFP corporation and serve its membership.

Our programs could not succeed without our many partners; these **people** are bolded and their organizations underlined. Contact Barb Boysen if you want more detail on any of the programs described briefly below.

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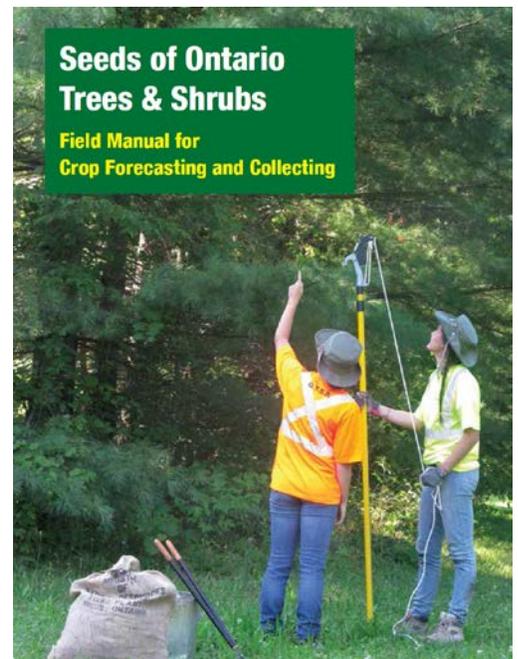
www.fgca.net

www.ontariosnaturalselections.org

I. Biologically Appropriate Reforestation

Ontario's Natural Selections (ONS) Seed Source Certification Program

- The new manual, *Seeds of Ontario Trees & Shrubs* was produced this year and widely distributed, thanks especially to **Melissa Spearing, Ron Thayer, Brian Swaile** and the staff at the MNRF Ontario Tree Seed Plant.
- It can be purchased from the FGCA or the Ontario Tree Seed Plant. If you are a Certified Seed Collector one copy is available to you at reduced price.
- The manual will be the text for the ONS Certified Seed Collector workshop and curriculum revisions are being led by **Brian Swaile, Ron Thayer, Kerry McLaven** of Forests Ontario and **Melissa Spearing**. Early versions were tested with Forests Ontario Field Advisors who are being trained as workshop instructors.
- Several SeedWhere analyses were completed to help direct use of source identified seed and stock to collectors, growers and forest industry and planting agencies. Clients were especially interested in climate change strategies.



Forests Ontario (FO) and 50 Million Tree Program

We continued to participate in the Trillium Foundation supported, 5 year Program for Local Afforestation Network Training (PLANT) which provides graduating Forest Technician students with strategic hands-on training opportunities and includes an intensive training course, a minimum six month co-op placement, and a series of mentoring sessions led by experienced forestry practitioners. FGCA assisted with the introductory winter workshops at Fleming College and provided opportunities in seed forecasting and assisted migration trial establishment and monitoring.

Much of our work is also linked to Forests Ontario's Seed and Stock Management Plan, a comprehensive document that links all aspects from the forest producing the seed to the growers shipping the seedlings and the significant planning that is required to ensure that the Right Tree is planted in the Right Place.

Seed Collection Area Network - SCAN

FGCA collaborated with Forests Ontario and the 50 MTP seed management program and **Gary Nielsen**, MNRF Climate Change Project Coordinator. The now over 1000 sites in seed zones 28 to 38 were mapped in a digital layer with help from MNRF data analysts. Future efforts will include gap analysis re species and number of sites by seed zone as well as working with landowners on seed crop forecasting, collection and site management.

White Pine Seed Orchard Management

Project Funds from the 50 Million Tree Program's Seed Management Program and FGCA orchard cone sales supported the following:

- 2014 Orchard Management and Seed Collection

Scugog Seed Orchard (6E west) - A light to medium cone crop with relatively high seed counts (~ 16 to 20/half cone) was collected in late August via tree thinning and topping. 46 hectolitres of cones were collected by contract collectors. The Ontario Tree Seed Plant noted that this crop broke records for highest # seed per hectolitre of cones. This is one promising measure of quality but germination test results will give better information. The Mississauga's of Scugog Island provided great support in orchard mowing and thinning cleanup.

Cayuga Seed Orchard (7E) - **Dan Romanoski** of Haldimand and Area Woodlot Owners Association led the tending and cone collection in the seed orchard. 34.4 hectolitres of cones were collected.

Glencairn Seed Orchard (6E west) - **Brian Swaile** managed tree marking, mapping and pruning operations. There was no collectable crop in 2014.

Conger Seed Orchard (5E west) - Westwind Forest Stewardship managed 2014 operations including inventory, brushsaw tending, and file updates. There was no crop collectable crop in 2014.

- Climate Change Monitoring Project - to monitor tree health and seed production by clone

Monitoring was done in Glencairn by **Brian Swaile**, **Don Gummer** and **Melissa Spearing** and in Cayuga by **Dan Romanoski** and **Denise Hart**. Tree health, size, flowering and conelet information was collected.

Climate Change

- Assisted Migration and Seed Production Area Trials - FGCA worked with Forests Ontario, the OMNR Climate Change Initiative and local partners:

- Maintained the following trials:

- 2010 red and white oak trial with Oxford County landowner **Phil Holst** assisted by **Dave Depuydt**, OMNRF Aylmer.

- 2011 bur oak trial with Oxford County, with plots of local hardwoods to diversify the site, assisted by Dave Depuydt, OMNR Aylmer.

- 2012 bur oak trial including plots of mixed hardwoods from SW Ontario for diversity. FGCA worked with **Rick Knapton** of Cataraqui Conservation Authority, Friends of Lemoine Pointe,

- 2013 bur oak trial with Simcoe County

- Established a bur oak trial in eastern Ontario with **Gary Nielsen** MNRF Climate Change Project Coordinator, Plantagenet Township and the South Nation Conservation Authority

II. Forest Conservation & Management

- Activity in this program was limited to new webpages on the revised www.fgca.net.
- Previous forest management networking within the MNRF was lost following the loss of MNRF District Foresters and the Southern Ontario Forest Task Team.

III. Species Conservation

OMNR & Endangered Species Act 2007

- Provided support to MNRF Species at Risk staff re butternut and ESA regulation implementation:
 - Promoted a process to ensure use of source identified, non-hybrid butternut seed and stock for ESA permit and landowner stewardship plantings.
 - Reviewed tree removal permit conditions that would require planting or cloning of trees to result in an overall benefit to the species (ESA, 2007, Section 17 - 2c)
 - Facilitated several Overall Benefit Permits re potentially archivable tree inspection and archiving agreements.
 - Reviewed Butternut Health Assessment Guidelines which inform the MNRF's Butternut Health Assessor (BHA) Program.
 - Undertook an MNRF contract for Butternut Health Assessor (BHA) Training via a series of 12 workshops from June to early August 2014, with contract BHA instructors **Terry Schwan, Steve Bowers, John McLaughlin, Steve Pitt and Rose Fleguel** (see photo).
 - Undertook an MNRF contract to revise the BHA training program and develop an electronic Field Guide with **Terry Schwan, John McLaughlin, Steve Pitt and Rose Fleguel**.



Butternut Conservation & Recovery:

- Butternut Archive Program:
 - Funding - FGCA funds were augmented by other sources; all managed in a long term fund to sustain the program.
 - ESA Permit holders funded the archiving of 8 putatively resistant trees, some of which were to be removed from development sites, while others were non-threatened Recovery Program trees.
 - Recovery Program tree archiving was further supported by a \$5,000 grant from OMNR Species at Risk Stewardship Fund and COBA seedling sales (see below).

- Butternut Grafting and Graft Care at the Ferguson Forest Centre (FFC) Grafting Centre

Grafting was managed by **Rose Fleguel** with assistance from **Nancy Wehlau, Kristen Sandvall, Greg Bales, John Osmok** and **Karen Dykxhoorn**. A long term agreement was drafted with the FFC re access to dedicated grafting and storage facilities, where annually we produce 30 grafts each of 10 to 12 trees. The agreement also provides operational support in the Eastern Ontario Butternut Archive (mowing, mulching, insect control, irrigation).

Scion collection was done in late March from 11 trees mostly via tree climbing by professional arborists. The photos here shows the method of shooting scions from an archivable butternut tree on Otonabee Region Conservation Authority land with **John Williams**, ORCA forester, **Rose Fleguel**, and **Fraser Smith** (see top 2 photos - J Williams).

There are 137 2-year old potted grafts (grafted April 2013) of 9 trees that will be planted in 3 archives in May 2015. And there are 285 1-year old potted grafts (grafted April 2014) of 11 trees that will be tended for one more season at FFC before being planted in the archives. Some losses are expected at each stage of graft care.



- Butternut Archives:

- Eastern Ontario Butternut Archive - contract manager **Rose Fleguel**. As of March 2015 there are 97 grafts in the archive that are 3 to 7 years old representing 18 trees
- Central Ontario Butternut Archive - managed by MNRF Partnership Specialist **Greg Bales**. As of March 2015 129 grafts in the archive are 3 to 5 years old representing 24 trees
- Southern Ontario Butternut Archive - managed by **John Enright** and the Upper Valley Thames CA. The archive was fenced and site prepared in 2014 in preparation for the May 2015 planting (see bottom photo).
- Humber Arboretum established a small archive where they continue to tend several grafts planted in 2013.



- Recovery Partner support and collaboration included:
 - **Glenna Halicki-Hayden**, OMNR OFRI DNA-tested trees selected for seed crops and putative resistance to help us concentrate our resources on the native gene pool and avoid working with hybrid trees.
 - **Sylvia Grefenhagen**, MNRF OFRI provided technical support re grafting and graft care and canker screening technique development.
 - Central Ontario Butternut Program, supported by **Greg Bales** and **John Osmok** who collect seed, contract grow it and sell it to ESA permit holders and landowners with revenues supporting continued butternut archiving work.
 - **Rose Fleguel** and the Rideau Valley Conservation Authority Recovery Program assess trees for private landowners, forecast and collect seed crops and contract grow it and sell it to ESA permit holders and landowners with revenues supporting continued butternut archiving work.

Other SAR and Trees in Trouble

- FGCA circulated information re ash conservation and management in the face of the Emerald Ash Borer, information on the Elm Recovery Program at The Arboretum, University of Guelph, and information on beech and Beech Bark Disease based on **Dr John McLaughlin's** expertise and survey work in southcentral Ontario.

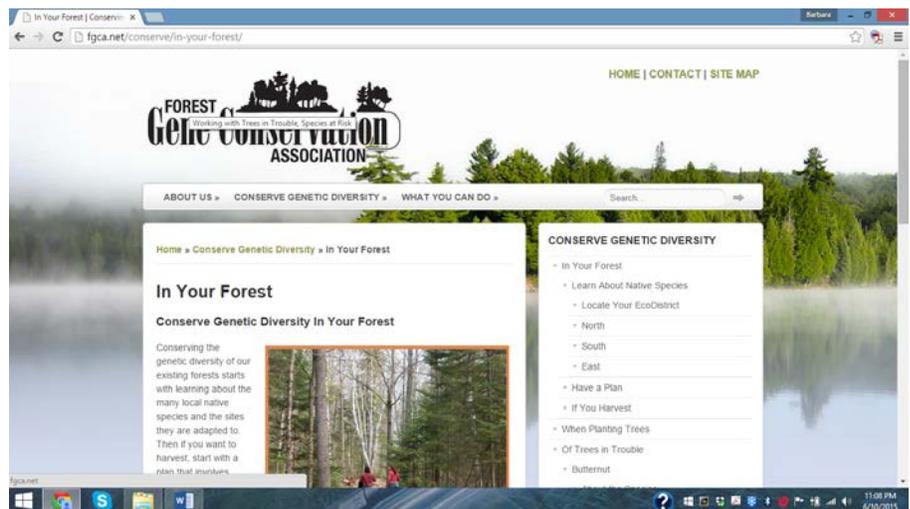
IV. Promotion:

E-mail Distributions

- Articles and news items were distributed to FGCA members and associates

Website

- Maintained www.ontariosnaturalselections.org
- Released the new www.fgca.net



Meetings:

- Annual General Meeting - June 24th & 25th, 2014
 - Evening business meeting at the Oshawa Quality Hotel.

A Board Election was held and the following were reappointed and elected to the Board for 2 years:

Appointed from designated organizations who have confirmed their representatives for 2014 to 2016:

MNRF - **Gary Nielsen**, Southern Region Climate Change Project Coordinator

- **Peter Mabee**, Peterborough District (Note Peter Mabee has stepped down as of March 2015)

Sustainable Forest License Holders - **Steve Munro**, Westwind Forest Stewardship, Parry Sound

Conservation Ontario - **John Enright**, Upper Thames River Conservation Authority, London

5 FGCA Elected Directors

Ed Patchell - Ferguson Forest Centre, nominated/acclaimed as FGCA President

Aron Fasekas, The Arboretum, University of Guelph, current Director

Glenn McLeod, Forest Consultant, Northumberland Cty, nominated/acclaimed as Secretary/Treasurer

Kerry McLaven, Forest Consultant, Central Ontario

Terry Schwan, Forest Consultant, Guelph

- The AGM field tour June 25th was hosted by **Darren Allen & Dan McKenney**, NRCAN at the Claremont Federal Trial Site where we toured and discussed:
 - Hardwoods Assisted Migration Trial - 5 years later (photo at right)
 - White Spruce Genetics Trial & More
 - Seed Collection Area Identification & Management
 - Seed Crop Forecasting with new Seeds of Ontario Trees & Shrubs Manual



V. Administration

FGCA Board

- Meetings and decisions were made via conference call and email

FGO

- FGCA Directors **Gary Nielsen** and **Steve Munro** participated in FGO meetings and calls, and facilitated Board responses to determinations of the future of FGO. In January there was consensus from FGO members that FGO be disbanded given the MNRF transformation.
- Barb Boysen participated on the Provincial Technical Forum via conference calls

NFP Corporation

- Minutes were kept; Financial Reports reviewed, and Insurance maintained.