



## Annual Report 2015-2016

In many ways it was a status quo year. The major changes we expected arrived yet our programs of Butternut Recovery, the Seed Collection Area Network, Assisted Migration Trials and promotion of Gene Conservation principles and practices continued with the help of members and associates.

We participated in several meetings with the Ministry of Natural Resources and Forestry (MNR) which resulted in funding being made available to the FGCA from the Forestry Futures Trust Fund (FFT) to assist our members, the Sustainable Forest License Holders who manage central Ontario's Crown Forests. With the assistance of Melissa Spearing, Gary Nielsen and long time collaborators at NRCAN, we undertook several projects with our SFL partners which we will continue this year. Climate change is a driving force and they are more than willing to engage with us in determining how this will affect their forest management.

Unfortunately, there is yet no similar MNR support for gene conservation programs in the southern private landscape. We will continue to meet with MNR to find ways to support gene conservation for all Ontario forests that is necessary if we are to meet the challenge of climate change.

At the Forests Ontario annual meeting in February I was honoured to accept the *Forests Ontario's Ontario Forestry Association Award* which is presented annually to an individual in recognition of their continued practice of the highest principles of professional forestry in education, forest management, research, land use or public forestry awareness. I accepted on behalf of FGCA members and associates, the great landowners we have worked with, the experienced colleagues who still serve to mentor us all, and the young professionals whose passion keeps me going. The future will be brighter under their watch.

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

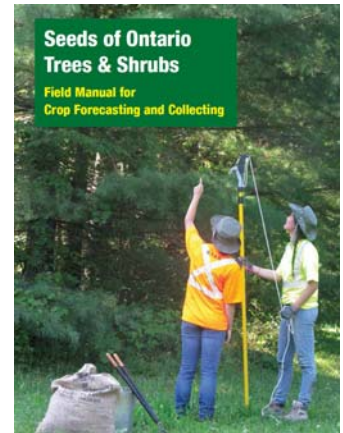
- I. Biologically Appropriate Reforestation:** Increase quality/quantity of source-identified, native species seed
- II. Gene Conservation Principles Integrated in Forest Management Programs** - Increase awareness and use of genetic resource management principles to help conserve and improve existing 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.

## I. Biologically Appropriate Reforestation

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

- The new manual, *Seeds of Ontario Trees & Shrubs* was widely distributed with the help of the staff at the MNR Ontario Tree Seed Plant and Forests Ontario.
- 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.
- **Melissa Spearing** continued with CSC curriculum revisions supported by the manual, as well as an online version - both to be completed by fall 2016.



### Forests Ontario (FO) and 50 Million Tree Program

We continued to participate in the Trillium Foundation supported, 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 workshop at Fleming College.

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 & SeedWhere

FGCA collaborated with Forests Ontario and the 50 MTP seed management program and **Gary Nielsen**, MNR Climate Change Project Coordinator. The now over 1000 sites in seed zones 28 to 38 were mapped in a digital layer with help from MNR data analysts.

Funded by FFT, **Gary Nielsen** and **Melissa Spearing** introduced SCAN to more SFL staff who have agreed to help fill the gaps in their areas. Melissa also worked with NRCAN climate specialists on an enhanced SeedWhere program that enables us to work with current climate analyses as well as climate change projections. An example of the synergy of SCAN, SeedWhere and SFLs is the analyses Melissa undertook to determine, under climate change, where an SLF should look for seed. Cross referencing with SCAN sites, she was able to develop a list of appropriate SCAN sites. Check out our website for examples of these analyses posted there.

- This FFT funded work by Melissa Spearing and Gary Nielsen, is reported in the *FGCA 15-16 Forestry Futures Trust Report: March 31 2016 Report*:
  - *E-system for Crown SCAN sites*
  - *Gap Analysis re Crown Forests Needs*
  - *NRCAN SeedWhere Enhancement*
  - *Seed source tracking under revised MNR Seed Zone policy*
  - *Promote strategic seed banking*

## White Pine Seed Orchard Management

- Project Funds from the 50 Million Tree Program's Seed Management Program and FFT supported work in the orchards as well as tending and assessment in 2 of the 3 Realized Gain Trials (established 2009). Though there was no collectable crop in 2015 we undertook site tending, tree labelling and pruning which are increasingly necessary to maintain access, productive crowns and to reduce cone beetle populations:  
Glencairn Seed Orchard (6E west) - **Brian Swaile** managed crews to complete tree labeling.  
Conger Seed Orchard (5E west) - Westwind Forest Stewardship managed 2015 operations including inventory, brushsaw tending, and file updates.  
Gratton (5E) - Ottawa Valley Forest operations included brushcutting and labelling
- The FFT funded work undertaken by the SFLs is reported in the FGCA 15-16 Forestry Futures Trust Report: March 31 2016 Report:
  - *White Pine Realized Gain Trials Tending & Assessment*
  - *Enhance Orchard seed production and stock use*

## Climate Change

- Assisted Migration and Seed Production Area Trials - FGCA worked with Forests Ontario and local partners:
  - Maintained and assessed the following trials:
    - 2010 red and white oak trial with Oxford County landowner **Phil Holst**.
    - 2011 bur oak trial with Oxford County, with plots of local hardwoods to diversify the site.
    - 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
    - 2014 bur oak trial with **Gary Nielsen** MNRF Climate Change Project Coordinator, Plantagenet Township and the South Nation Conservation Authority.
  - The 2013 bur oak trial with Simcoe County was unfortunately removed due to very high mortality suspected to be a result of frost and white grubs.
  - Stock purchase (red and swamp white oak) and trial design was done with **Gary Nielsen** MNRF Climate Change Project Coordinator, and **Steve Shaw** of the St Clair Region Conservation Authority near Sarnia.
- FFT funds supported work by **Barb Boysen**, **Melissa Spearing** and **Gary Nielsen**, based on meetings with SFL staff, to develop these draft reports included in the *FGCA 15-16 Forestry Futures Trust Report: March 31 2016 Report*)
  - *I. Assisted Migration (AM) Strategy for Central Ontario SFLs*
  - *II. SFL Assisted Migration Trial Plan*

## II. Forest Conservation & Management

- FFT funding supported work on a report to aid the SFLs in adopting forest genetic resource management: ***Developing a Checklist of Forest Genetic Resource Management Principles for the Great Lakes-St. Lawrence Forest***, part of the *FGCA 15-16 Forestry Futures Trust Report: March 31 2016 Report*
- Otherwise activity in this program was limited to new webpages on the revised [www.fgca.net](http://www.fgca.net) and presentations at the Kemptville Woodlot Day in February.

### III. Species Conservation

#### Support for Endangered Species Act 2007

- FGCA provided support to ESA regulation implementation to increase Permit efforts to achieve overall benefit for the butternut.
  - 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 archiving 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.
  - Proposed a comprehensive expanded approach to achieve overall benefit based on Recovery Strategy supported activities including archive capacity expansion, crown release, landowner outreach and landowner plantings.
  - Undertook an MNRF contract for Butternut Health Assessor (BHA) Training via a series of 4 workshops from June to early July 2015, with contract BHA instructors **Terry Schwan, John McLaughlin, Steve Pitt** and **Rose Fleguel**.
  - Undertook an MNRF contract to review an electronic Field Guide with **Terry Schwan, Steve Pitt** and **Rose Fleguel**.

#### Butternut Conservation & Recovery:

- Butternut Archive Program:
  - Funding - FGCA managed all Archiving funds on a minimum 5-year basis to sustain the program.
    - ESA Permit holders funded the archiving of 10 putatively resistant trees, some of which were to be removed from development sites, while others were non-threatened Recovery Program trees.
  - Butternut Grafting and Graft Care at the Ferguson Forest Centre (FFC) Grafting Centre

Grafting was managed by **Rose Fleguel** and **Virginia Gordon** with assistance from **Greg Bales, John Osmok,** and **Karen Dykxhoorn**. Per a long term agreement, the FFC provided dedicated grafting and storage facilities, where again we produced 30 grafts each of 10 trees in April 2015. The agreement also provides operational support in the Eastern Ontario Butternut Archive (EOBA - mowing, mulching, insect control, irrigation).

The surviving 2-year old grafts (grafted April 2013) were shipped to the other 2 archives (COBA and SOBA) for planting. Unfortunately, there were widespread frosts in late May in all 3 archives and some mortality resulted; but this is why we start with 30 grafts per tree. The goal is to have at least 10 well established in 2 archives. The 1-year old 2014 grafts (from 10 trees) along with the newly produced grafts were tended over the summer and placed in cold storage at FFC.

Scion collection was done in late March from 10 trees via tree climbing by professional arborists. In an effort to increase representation from across butternuts range, we entered into an agreement with Parks Canada and **Nicole Paleczny** to archive a protected healthy tree from Point Pelee National Park, now our most southern tree.

- Butternut Archives:

- Eastern Ontario Butternut Archive - contract manager **Rose Fleguel**.

- It is early days to expect any amount of seed production in the archives but **the first seed** produced on several of the oldest grafts were protected, monitored, collected, sown in pots and protected overwinter. Any resulting seedlings will also be planted in the archives and monitored closely for canker infection.



- Central Ontario Butternut Archive - managed by **Greg Bales**.
- Southern Ontario Butternut Archive - managed by **John Enright** and the Upper Valley Thames CA. The first grafts were planted in the archive in the spring of 2015 with the help of **Greg Bales** and **Karen Dykxhoorn**, MNRF Midhurst District.

- Recovery Partner support and collaboration included:

- **Glenna Halicki-Hayden**, MNRF 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 (BBD) based on **Dr John McLaughlin's** expertise and survey work in southcentral Ontario.
- FFT funds supported work by **Barb Boysen**, based on meetings with SFL staff, in particular Barry Davidson who has initiated efforts to manage the BBD threat to the species and forest productivity. These early efforts were reported in the *FGCA 15-16 Forestry Futures Trust Report: March 31 2016 Report*. To initiate a:
  - *Beech & Beech Bark Disease Management Proposal for Crown Forests*

## IV. Promotion:

### E-mail Distributions

- Articles and news items were distributed to FGCA members and associates
- Presentation at the February 2016 Kemptonville Woodlot Conference - **Shooting a Moving Target - Restoring Forests in a Changing Climate**
- Promotion of Seed Manual during acceptance of award at Forests Ontario annual general meeting

### Website

- Maintained [www.ontariosnaturalselections.org](http://www.ontariosnaturalselections.org) and [www.fgca.net](http://www.fgca.net)

### Meetings:

- Annual General Meeting - June 17th & 18th, 2015, Sheraton Hotel, Richmond Hill Ontario
  - Evening business meeting was followed by an FGCA Strategy Revision Session.

## V. Administration:

### FGCA Board

- Meetings and decisions were made via conference call and email and face to face meetings
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|----------------------|---|
| <b>Gary Nielsen</b>  | Board member appointed by MNRF, now independent: <ul style="list-style-type: none"><li>• appointed to be FGCA/FGO Director, now on FGCA Executive Committee</li></ul> |
| <b>John Enright</b>  | Board member appointed by Conservation Ontario  |
| <b>Steve Munro</b>   | Board member appointed by SFL members <ul style="list-style-type: none"><li>• appointed to be FGCA/FGO Director, now on FGCA Executive Committee</li></ul>            |
| <b>Kerry McLaven</b> | Elected June 2014   |
| <b>Terry Schwan</b>  | Elected June 2014   |
| <b>Aron Fazekas</b>  | Elected June 2014   |
| <b>Glenn McLeod</b>  | Elected: FGCA Secretary/Treasurer, FGCA Executive Committee   |
| <b>Ed Patchell</b>   | Elected; FGCA President, FGCA Executive Committee   |

Note - Peter Mabee, a long time FGCA member and Board member appointed by MNRF, had to step down due to changes in MNRF. We thank him for his great service linking us to Ontario Stewardship and other District programs.

### 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.

### NFP Corporation

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