

2013-2014 has been a year of change, renewal, activity, uncertainty, but not status quo. Planning can take us a long way but increasingly we have to plan to be flexible. We watch for new opportunities for partnerships and collaboration. And we undertake our work looking for success but also for successors and mentors.

As your 50 something coordinator this has increasingly been my focus. Read on to learn about how our many experienced partners and supporters have been working on this as well.



A special note regarding our long time member, supporter, director and friend, **Brian Swaile**. Brian is retiring from the Board this year. He has also retired as the Trees Ontario Seed & Stock Coordinator. I can't begin to tell you how FGCA has benefited from this smart, funny, practical, seedy, busy, busy guy. Thankfully retired is a concept that is not always black and white - and as much as he threatens he hasn't changed his phone #, yet.

He is helping us this year with seed orchard management and teaching our Certified Seed Collector Courses with **Ron Thayer**. As such we are taking every opportunity to have people shadow them to help pass along their unique expertise and perspectives.

As always I look forward to working with all FGCA members and associates in the coming year. This will be a year of review and revision for us as we revise our 5 year strategy. Looking back 5 years I am proud, and also excited to consider the future 5 years from now.

**Barb Boysen**, FGCA Coordinator

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The activities of the Forest Gene Conservation Association are presented here according to the 5 Goals of the FGCA 5 YEAR STRATEGIC PLAN 2010 -2014

## I. Biologically Appropriate Reforestation

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

- 4 Certified Seed Collector (CSC) workshops were held with 76 students, led by **Brian Swaile** and **Ron Thayer** in partnership with Trees Ontario and the Ontario Tree Seed Plant (OTSP) at the Seed Plant. Trees Ontario Field advisors began training to become future workshop leaders.
- Many SeedWhere analyses were completed to help direct use of source identified seed and stock to collectors, growers and forest industry and planting agencies.

### Seeds of Ontario Trees & Shrubs

- FGCA finalised this full colour, field manual for seed forecasting and collection manual for printing and distribution in spring 2014, and is available through the FGCA or the OTSP
- Special Thanks to the many contributors and supporters but most importantly the MNR OTSP, **Brian Swaile**, **Ron Thayer** and **Melissa Spearing and Kristen Sandvall**. A great example of mentors and successors!

### Trees Ontario (TO) and 50 million Tree Program

- Participated in TO's Trillium Foundation supported 5 year Program for Local Afforestation Network Training (PLANT) helping to train 3 forest program college graduates over a 6 month period. It was a success and FGCA continued to participate with the training and selection of 5 graduates for 2014. Once again FGCA will be assisting with opportunities in seed forecasting and collecting, seed orchard management, butternut archive management and assisted migration trial establishment and monitoring.
- Assisted TO with implementation of a comprehensive Seed and Stock Management Plan to support long term supply management including succession planning for expertise.

### Seed Collection Area Network - SCAN

- FGCA continued to collaborate and support this work with Trees Ontario and the 50 MTP seed management program and OMNR's Climate Change Initiative. Over 1,000 sites have been identified across all of southern Ontario's seed zones (28 to 38) with many of them ground-truthed. Future efforts will include working with landowners on seed crop forecasting, collection and site management and ensuring the data is housed in a maintained GIS program with MNR and or Trees Ontario.

### White pine seed orchard management

Project Funds were received from Trees Ontario and the 50 Million Tree Program's Seed management program:

- Seed Orchard Management:
  - Crown Management via remedial topping and pruning were continued in:
    - Cayuga (7E) by **Terry Schwan**, OMNR Guelph and the Haldimand and Area Woodlot Association,

- Glencairn by **Brian Swaile**,
  - Scugog (6E w) by FGCA during cone collection, assisted by Scugog Island First Nation
  - Taylor Lake (6E e) with local contractors
- 2013 Seed Collection - a poor crop year with no collections made.
- Climate Change Monitoring Project
- Efforts in Glencairn (6E w) and Cayuga (7E) orchards were continued and expanded to include Scugog (6E w) and Taylor Lake (6E e) orchards. The long term objective is to determine differences in phenology and seed production by origin of clones and to eventually inform clonal roguing and seed use strategies.
- Clone pruning and field labelling for ease of assessment

### Climate Change

- Assisted Migration and Seed Production Area Trials:
- FGCA worked with Trees Ontario, the OMNR Climate Change Initiative and local partners:
- Maintain a 2010 red and white oak trial with **Phil Host**, Oxford County (Seed Zone 37)
  - Maintained a 2011 bur oak trial with Oxford County, with plots of local hardwoods to diversify the site (SZ37).
  - Maintained a 2012 bur oak trial including plots of mixed hardwoods from SW Ontario for diversity. FGCA worked with Cataraqui Conservation Authority, Friends of Lemoine Pointe, MNR Kemptville District and Trees Ontario (SZ 36)
  - Established a 2013 bur oak trial with Simcoe County (SZ 34)
  - Planned a 2014 bur oak and other hardwood trial with South Nation Conservation Authority (SZ 36) for establishment in April 2014
- Used SeedWhere climate analysis program to guide questions from consumers and growers about seed movement under climate change
- Started work with **Dr Dan McKenney** NRCAN to adapt a web based Seedwhere tool for FGCA use.

## **II. Forest Conservation & Management**

- Participated on OMNR's Southern Ontario Forest Task Team until it was disbanded in late 2013 as part of the MNR transformation.

## **III. Species Conservation**

### OMNR Species at Risk Branch & Endangered Species Act 2007

- Supported Butternut Program:
- Reviewed proposed amendments to streamline overall benefit activities.
  - Supported communications with hundreds of OMNR designated Butternut Health Assessors (BHA) regarding assessment protocol
  - 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 over all benefit to the species (ESA, 2007, Section 17 - 2c)

- Proposed expansion of grafting/archiving as an option for Overall Benefit Permits
- Facilitated several Overall Benefit Permits re grafting/archiving and seed and stock acquisition.

#### Butternut Conservation & Recovery:

- FGCA Butternut Recovery Program
  - Received funding from ESA Permit holders to archive 4 putatively resistant trees. This funding covers the 5 years of more intensive activity involved in cloning a tree and establishing it in the archives. As such we are building a long term fund to maintain the efforts made to date.
  - Received a 60,000 grant from OMNR Species at Risk Stewardship Fund to continue a program to build ex-situ recovery efforts with Central Ontario and Eastern Ontario partners and potential new provincial partner, Trees Ontario.
  - Received support from local partners in central and eastern Ontario including OMNR Partnership Specialists Greg Bales and John Osmok, Couchiching Conservancy, Ontario Tree Seed Plant, Ferguson Forest Centre, Rideau Valley Conservation Authority and **Rose Fleguel**, Recovery specialist/consultant, as well as from OMNR OFRI staff **John McLaughlin**, **Sylvia Greifenhagen** and **Glenna Halicki Hayden**
    - Re-assessed retainable trees for seed crops and putative resistance.
    - DNA tested trees selected for seed crops and putative resistance
    - Seed Collection from retainable trees, DNA tested, kept separate by seed tree.
    - Collected Scions and grafted 10 putatively resistant trees from eastern and central Ontario at Ferguson Forest Centre **Rose Fleguel** helped train new grafters including FFC staff, **Karen Dykxhoorn** and **Kristen Sandvall**.
    - Located 12+ putatively resistant trees in eastern and central Ontario to be grafted in 2014; prepared black walnut rootstock for grafts
    - Planted and tended grafts in the Eastern Ontario Butternut Archive and Central Ontario Archive.
    - Established a partnership with **John Enright** and the Upper Thames River CA to host a third large archive in Southwestern Ontario, with site preparation and deer fencing to be installed in 2014.

#### Other SAR and Trees in Trouble

- Assisted Chestnut Recovery Partners with interpretation of ESA Regulations
- Continued discussions with Trees Ontario re a long term Trees in Trouble foundation.
- Circulated information re ash conservation and management in the face of the Emerald Ash Borer, along with information on the Elm Recovery Program at The Arboretum, University of Guelph.
- Facilitated and funded ash seed collections with independent seed collectors, Trees Ontario, the MNR's OTSP and the National Tree Seed Centre.

## **IV. Promotion:**

### Presentations & Displays:

- Barb Boysen manned the FGCA display at the October 90th anniversary of the Ontario Tree Seed Plant
- Gary Nielsen manned the FGCA Display at the November Trenton Woodlot Conference

### E-mail Distributions

- Dozens of articles and news items were distributed to FGCA members and associates

### Website

- maintained and started revision of [www.fgca.net](http://www.fgca.net) and [www.ontariosnaturalselections.org](http://www.ontariosnaturalselections.org)

### Meetings:

- June 2013 FGCA AGM in Woodstock with a field tour of
  - 4 yr old Oak Assisted Migration Trial - red and white oak planting (5 year old trees)
  - Mixed Ash Plantation Management under threat of EAB
  - TO 50 MTP 2010 Planting Site, 3 year old plantation we first saw in 2010
  - Ash woodlot management & EAB effects - a good stand to watch for seed collection for ex-situ conservation.
  - 3 yr old Oak Assisted Migration Trial, Oxford County - bur oak and other hardwoods trial (4 year old trees)
  - SCAN - Seed Collection Area Network. A bur and swamp white oak area on private land. Discussed flowering and seed forecasting, respecting and building relationships with landowners, volunteers and local community organizations to produce seed for reforestation.

## **V. Administration**

### FGCA Board

- Meetings and decisions were made via conference call and email

### FGO

- FGCA FGO Directors Gary Nielsen, Brian Swaile and then Steve Munro participated in FGO meetings and calls
- Barb Boysen participated on the Provincial Technical Forum via conference calls
- This was largely a year on hold as the MNR FGO agreement ended in December 2012 and an extension to allow continued funding was not implemented.

### NFP Corporation

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