

Looking back, 2010-2011 was a relatively normal year. Though, in the context of the last few years, it could actually be considered abnormal. Our program delivery continued at a steady pace, and the weather, despite an early hot spring was refreshingly familiar from summer through winter. We made progress in most areas: butternut recovery with continued grafting operations and tree assessments; white pine seed orchard management with local partners; Seedwhere analyses to support seed movement for Trees Ontario and the 50 Million Tree Program; contributions to an updated SER-Ontario Native Plant Resource Guide and continued efforts in assisted migration. Even our new efforts to establish a Seed Collection Area Network were built on the 'normal' efforts of the old MNR program.

But an overarching question this year was how do we ensure that these normal FGCA efforts continue? How do we normalize gene conservation principles in our partners' and associates' programs? So this year, our 17th, the FGCA board started to address succession planning. We are not alone - given Canada's demographics and the last few decades of staff and program cuts many disciplines are facing a serious loss of experience and expertise. For example not only do we need to train more people to become seed collectors - we need to train people to become trainers!

Luckily, people with decades of experience are still active on the forest management and conservation landscape. And in our eyes - the 'seedier' they are the better. Some of them may be on the golf course but it's more likely they are checking out a seed crop, assessing a butternut or planting more native species.

So next year and beyond we will focus our efforts on matching the expertise and knowledge of long term FGCA supporters with the passion, energy and communication skills of the newer kids on the block. And I'll end this year by repeating my message from last year's annual report...



Ron Thayer & Brian Swaile assisting red oak migration, Oxford County

We all need to connect more than ever - formally and informally - to share and interpret observations, to develop strategies, and to build capacity to conserve and restore southern Ontario's biodiversity. I look forward to another year of forging connections - especially those made in the forest!

Barb Boysen, FGCA Coordinator

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

- I. Biologically Appropriate Reforestation** - Increase quality and 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 not for profit corporation and serve its membership.

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

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I. Biologically Appropriate Reforestation

Ontario's Natural Selections Seed Source Certification Program

- Certified Seed Collector (CSC) workshops were delivered to 46 participants by CSC instructors **Brian Swaile** and **Ron Thayer** in partnership with Trees Ontario (TO) and OMNR Ontario Tree Seed Plant, at the Seed Plant, and with Evergreen Foundation, Toronto.
- FGCA participated on the 50 million Tree Program's (50 MTP) OMNR/Trees Ontario advisory Committee regarding seed management, new afforestation approaches and climate change.
- Many SeedWhere analyses were completed for seed collectors, growers, the forest industry and planting agencies. Increasingly climate change trends were included in the analyses to help make the argument for better source identification of seed and strategic seed movement.

SCAN - building a Seed Collection Area Network

- Seed Collection Area Guidelines and Field Assessment forms were developed as part of TO and MNR's 50 MTP seed management plan. Local programs were managed by **Glenn McLeod** in Seed Zone 35 and by **Jim Hendry**, Dundas and Glengarry Stewardship Council and **Martin Streit**, Leeds & Grenville Stewardship Council in Seed Zone 36. The ongoing projects involve contacting landowners to locate, assess and map good seed collection areas for priority afforestation species. Once established the network will be the focus of seed forecasting and collection efforts. They can also serve as long term monitoring for climate change effects on tree health as well as flowering and seed set.



Jim Hendry & Cottonwood, Stormont, Dundas & Glengarry Cty

White pine seed orchard management

Funding for orchard management activities was provided by FGO (2007), and TO and the 50 Million Tree Program's Seed Management Program:

- Cone beetle management - this year was limited to **Terry Schwan's** efforts in Cayuga to assess the use of ground tarps in June/July to remove beetleed conelets to help reduce the population.
- Crown Management:
 - Remedial topping methods were continued to maintain crop accessibility in Cayuga (7E) managed by **Terry Schwan**, OMNR Guelph and the Haldimand and Area Woodlot Association, Conger (5E w) managed by **Ken Webb** of Westwind Forest Stewardship (SFL), and Gratton (5E e) managed by **Liz Cobb** of Ottawa Valley Forest.
 - A 25% thinning was completed in Taylor Lake (6E e) managed by **Jeff Ward**, Lanark County Stewardship
- 2010 Seed Collection:
 - Generally a poor year. *Cayuga cone cuts Aug 21, 2011 - T Schwan*
 - Ground tarps were again used by **Terry Schwan**, MNR Guelph under older trees in Cayuga to capture natural seed fall, as per methods used by USDA Forest Service, Wisconsin. This method has merit and more tarps have been purchased with the support of MNR Climate Change Program to use in other seed orchards.
- SO Seed & Stock Promotion
 - 1,000 SO stock was bought from Somerville Seedlings and given to TO PDA's to plant alongside their regular stock to start to monitor for differences in growth and survival. This will be repeated in 2011.



Climate Change

- Assisted migration and seed production area projects were undertaken with partners Oxford County Stewardship Council, TO and MNR Climate Change Initiative:
 - April 2010 red and white oak trial with Oxford County landowner, **Phil Holst**; stock was from local seed zone 37, Pennsylvania and Tennessee.
 - A bur oak trial was planned for April 2011 on an Oxford County property.



Seed Zone 37 red oak, Sept 9, 2011



↑ 2+0 Tennessee white oak, Apr 14, 2011

- Canadian Forest Service (CFS) SeedWhere climate analysis program was used to answer questions from consumers and growers about seed movement under current conditions and with climate change.
- FGCA participated in a Climate Change meeting with Credit Valley Conservation Authority staff interested in adaptation options such as seed collection area management and assisted migration.

II. Gene Conservation Principles Integrated in Forest Management Programs

- Presentations
 - OMNR Southern Regional Advisory Committee - *Forest Gene Conservation*
 - Grey Bruce County - *Sustainable Forests - Sustainable Us*
 - Fleming College Forest Renewal Class - **Gary Nielsen**, MNR Climate Change Project Coordinator and FGCA Director delivered the FGCA *Forest Genetic Diversity* presentation
- Publications
 - Contributed 'seed source matters' information to the new *Grow Me Instead* publication produced by the Ontario Invasive Plant Council (OIPC) and partners to help gardeners/landscapers choose non-invasive plants; available for download as a PDF from the OIPC website: www.ontarioinvasiveplants.ca
- Meetings:
 - FGCA Annual General Meeting in Oxford County

Presentations:

- 24 Years of Reforestation in the UTRCA Watershed - Challenges and Changes - **John Enright**
- Direct Seeding Results in SW Ontario - **Dave Depuydt**
- Ash Conservation Seed Collection - **Brian Swaile**
- Climate Change and Assisted Migration Planting - **Barb Boysen**
- Local Butternut Recovery Program experiences- **Steve Bowers**
- Flowering Dogwood & Anthracnose - **Richard Wilson**

Field Trip hosted by **John Enright** and Upper Thames River CA

- 2010 TO mixed species planting (top photo)
- 13 yr old mixed species planting
- 2010 Red and white oak assisted migration trial
- Direct Seeding Trial
- Arboretum - Carolinian species & Butternut &
- Direct Seeding Trial
- American Chestnut Underplanting (bottom photos)



III. Species Conservation & Restoration

CONFORGEN www.conforgen.ca

- Participated on Standing Technical Committee and Gene Conservation Guidelines subcommittee

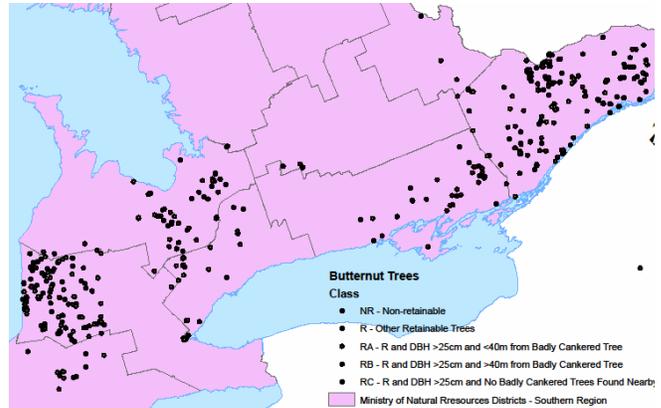
Ontario's Biodiversity Strategy (OBS) www.obsrenewal.cenet.ca

- **Barb Boysen** and members contributed via meetings and online to the OBS Renewal

Butternut Conservation

- FGCA worked with MNR SAR Re the Endangered Species Act 2007 and exemptions for butternut (Section 5 of O. Reg. 242/08) to

- Support communications with MNR designated Butternut Health Assessors (BHA)
- update data forms and create a data base with MNR Southern Science Unit
- Produce a revised, expanded Butternut Health Assessment Manual
- Review tree removal permit conditions that would require planting or cloning to result in an over all benefit to the species (ESA 2007)
- Propose expansion of recovery activities eligible under Overall Benefit Permits



- FGCA received \$53,813 from MNR SAR Stewardship Fund to deliver a program with local recovery program partners Rideau Valley Conservation Authority, Stewardship Councils in Lennox & Addington, Northumberland, Peterborough, Victoria, Halton Peel, North Simcoe, Huron, Bruce and Grey Counties, Ferguson Forest Centre, MNR's Ontario Tree Seed Plant and MNR's Ontario Forest Research Institute:

- landowner education - revised and distributed the landowner butternut pamphlet
- private land health assessments to locate seed crops and putatively resistant trees.
- MNR On Forest Research Institute (OFRI) DNA tested good seed trees and putatively resistant trees
- Documented and photo recorded grafting workshop for grafting manual production
- **Rose Fleguel** maintained 300 grafts of 10 putatively resistant trees from eastern and central Ontario at Ferguson Forest Centre.
~150 grafts, FFC May 2010→
- Located 10 putatively resistant trees in eastern & central Ontario for 2011 grafting; prepared walnut rootstock.
- **Greg Bales** led the development of the Central Ontario grafting and archiving program in partnership with Ontario Tree Seed Plant including greenhouse and fenced archive facilities.



Other SAR

- FGCA reviewed the new Recovery Strategy for Flowering Dogwood
- FGCA assisted Chestnut Recovery Partners with interpretation of ESA Regulations
- FGCA worked with **Dr John McLaughlin**, MNR OFRI to fundraise for Beech and Beech Bark Disease awareness and monitoring efforts

IV. Communication of Gene Conservation Principles

Presentations - see Section II above for more detail

E-mail Distributions

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

Website:

➤ www.fgca.net and www.ontariosnaturalselections.org, were updated with plans for a major revision in 2011

V. Effective, responsive, fiscally viable organization

FGCA Annual General Meeting (AGM) was held in Oxford County on June 8 & 9th

FGCA Board

Elections held at the June 2010 AGM, along with renewed appointments from standing members resulted in the current Board:

Elected on June 8, 2010 at AGM:

Ed Patchell, Ferguson Forest Centre, representing seed & stock members, was acclaimed

Steve Smith, Society for Ecological Restoration - Ontario Chapter, re-elected

Brian Swaile, Forever Green Consulting/TO, re-elected

Glenn McLeod, Forest Consultant, Northumberland Cty, newly elected

Steve Bowers, Ontario Stewardship in Huron County, re-elected

Appointed Directors:

Gary Nielsen, MNR, Southern Region Climate Change Project Coordinator

Peter Mabee, MNR, Peterborough representing Ontario Stewardship

Steve Munro, Westwind Forest Stewardship, representing Southern Ontario's Sustainable Forest License Holders

John Enright, Upper Thames Region CA, representing Conservation Ontario

Board Officials:

Ed Patchell and **Glenn McLeod** were nominated and accepted as President and Secretary/Treasurer

FGCA Strategy:

The FGCA 5 YEAR STRATEGIC PLAN 2010 - 2014 was approved and adopted at the June 2010 Annual General Meeting.

FGCA Finances:

Refer to the 2010/11 Financial Statement in a separate document.

Forest Genetics Ontario

FGCA is 1 of 3 regional FGO members. Brian Swaile and Gary Nielsen sat on the FGO Board representing FGCA. The FGCA Board participated in a Situation Analysis of FGO and made recommendations for changes that would better reflect the members' diverse programs. Barb Boysen participated on the Provincial Technical Forum with staff from other FGO Members including MNR's OFRI.