

The

Canadian Sweet Chestnut

- Journal of the Canadian Chestnut Council

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In this issue: - Tree planting and resistance testing update, Outreach activities, MNR Grant, and more

New Director appointed to the CCC Board

The Directors of the CCC are pleased to welcome Melanie Sifton as the latest member of the CCC Board of Directors. Melanie is Director of Humber Arboretum & Centre for Urban Ecology in Toronto, and plant studies instructor in the Landscape Technology program at Humber College. After several years of work and education in the horticulture industry in Canada and the United States, she is enthusiastic about public horticulture and dedicated to promoting landscape sustainability and plant conservation. As a Cornell Plantations Fellow, she completed a Masters in Public Garden Leadership and Horticulture from Cornell University. Her work and research focus has been in sustainable landscape design and operations in public gardens, which is complimented by her participation in the development of the Sustainable Sites Initiative's new accreditation system for sustainable landscapes.

Melanie's fascination with the American chestnut can be traced back to her grandfather, who passed on a passion for Carolinian forest conservation and nut trees, and left the family with many fond stories of these beautiful trees with their bountiful crops.

Melanie has roots in the Ridgetown area in Kent County and her knowledge will contribute greatly to the expertise of the Board. She has already volunteered to be a member of a sub-committee to investigate future fund raising and stresses the need to do so sooner than later.

Welcome Melanie!



Melanie with her favorite oak tree.

The Canadian Chestnut Council

The CCC is a scientific and charitable organization with the mission to restore the American chestnut. All its officers volunteer their services both in the field and at the desk. The CCC annual meeting, the web site and this Newsletter dispense information to generate support for saving and restoring this once-important forest tree.

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Correspondence

The Ontario Ministry of Natural Resources recently issued the CCC a permit to work with American chestnuts for species protection or recovery under the Endangered Species Act. The permit is valid until December 31, 2012. The permit allows Ron Casier and associates to plant F2 trees at the CCC nurseries and to conduct greenhouse operations at the Simcoe Research Station. The permit also allows collection of softwood cuttings from a chestnut tree in the Niagara region that was slated for removal by developers. No other activities are permitted by the research team or individual CCC members such as collecting chestnuts in the wild or planting chestnuts in native areas. Written progress reports must be submitted to the MNR prior to the expiration of the permit. The permit must be carried or be present while any activities with chestnuts are being conducted.

While restrictions are placed on activities involving American chestnuts, the current permit will not affect activities at the CCC nurseries. At the present time, there is no need to collect more germplasm from trees growing in the wild. The original goal of the CCC was to collect germplasm from at least 20 trees growing in different areas of the Carolinian Zone and this has been accomplished. Breeding at the nurseries can continue as planned. Members of the Alymer Office of the MNR visited the Riverbend Farms location last year and were favourably impressed with the CCC program. They encouraged the CCC to continue with our current activities. There was discussion at the last Director's meeting to host a tour of the Onondaga Nursery for the MNR staff at the Guelph office in the near future. All agreed it was important to maintain close connections with MNR individuals. I understand that the Species at Risk Act is currently under review and it is important for the CCC to keep up with any changes that may affect activities involving American chestnuts.

Editorials

We have 7 chestnut trees growing on our property that range from 4 to 16 years in age. Five were obtained from the CCC when distribution was permitted, one was cloned from a tree in Windsor and one planted from a supermarket seed (Chinese or European) that was spared roasting. During the past 3-4 years I have noticed curled and stunted leaves on one tree in particular (see photo). This occurs in mid June and July. All trees have some symptoms. I was wondering if other members have seen the same problem.

I believe the damage is caused by potato leafhoppers. These are very small, wedge shaped, green insects about an 1/8" in length that can be found on the underside of the leaves. They move sideways as well as forward and backward.

Although there are many species of leafhoppers only a few cause leaves to turn colour and curl, referred to as "hopper burn". The potato leafhopper doesn't overwinter in our area and is probably blown in from the US each year. As a result our chestnuts have a chance for some normal growth before they arrive. Eventually the affected tree will resume normal growth. Perhaps the leafhoppers find other food as crops such as soybeans and potatoes begin to develop. They feed on many kinds of plants but legumes and potatoes are a favourite.

I find it interesting that only one tree is severely affected. The tree was from a seed of the Marshall tree, used in our breeding program, while an adjacent tree from another source has only slight symptoms. It is clear that the CCC nurseries contain trees with a range of genetic traits, some good and some bad. Some tree families grow at a much faster rate than others. Some individuals have very different branching patterns. Trees also differ in how early they produce male and female flowers. As we get closer to finding trees with more resistance to blight, we should also observe secondary characteristics that could help our selected trees survive. We have a valuable collection of chestnut diversity and should collect all information possible; however, at present we have only limited resources.

Submitted by Terry Anderson



New leaf growth with curling and "tip burn" caused by leafhoppers in Essex county, 2011.



Fertilizing F2 seedlings at Riverbend Farms

Outreach Activities

Congratulations to Kelly Schafer, Outreach Coordinator on the successful production of the CCC video, "A Legend in Crisis". The video won the Canadian Phytopathological Society Education Award for 2010. The video highlights the historical significance of the American chestnut, current efforts to save it and its importance to ecology in its native range. Kelly obtained a grant from the Toronto Dominion "Friends of the Environment Fund" and The Ontario Trillium Foundation to develop the video which has been viewed in a number of elementary classrooms as well as Dr Greg Boland's Introductory Plant Pathology class at U of Guelph. The award was accepted on Kelly's behalf by Dr Boland at the Annual Meeting of the Canadian Phytopathological Society, held in Halifax, NS.

Kelly has been developing programmes for children at the Ecocamp at Bigamen's Day Camp in Kitchener She is currently working on a Natural Discoveries Guide for kids.

March 26, 2011, Terry Anderson presented the CCC video and talk on CCC activities and goals at the Lambton County Woodlot Owners Association AGM at the Alvinston Arena. Approximately 35 people were in attendance and the audience had many questions regarding the recovery program. The southeast corner of Lambton County has a number of native chestnuts that grow in wooded areas. The woodlot owners are interested in selective harvest of woodlots for lumber and they recognize how valuable a disease resistant chestnut could be to the lumber industry. An article for the Ontario Farmer was arranged after the meeting in which the objectives and goals of the CCC Recovery Plan were outlined.

June 18, 2010, Terry Anderson set up the CCC mini-display at Equinox Festival hosted by Sanson's Winery near McGregor, Essex County. The festival was attended by more than 300 people including many children who were thrilled to hold a fox snake, view the raptor display and live show including a bald eagle.

A number of visitors had questions about the recovery program and "What is an American chestnut?"

There is still confusion between horse chestnut and American chestnut trees and why we are saving the American chestnut as opposed to the Canadian one. In any event a good time was had by all and Terry was brave enough to pet a 5' corn snake after a glass of wine.

MNR Grant Approved

The CCC recently was awarded a financial grant from the Species at Risk Stewardship Fund for \$23,506.00 for the 2010/2011 funding year. The grant is to assist the recovery efforts at the CCC nurseries and was conditional on receiving suitable permits from MNR to work with American chestnut trees. The grant funds are essential to continue the current recovery program. Thanks to Dr George Colin and Ron Casier for preparation and submission of the proposal and thanks to the MNR for supporting the CCC.



Research Activities

The spring of 2011 was busy for CCC volunteers. F2 or second generation trees were planted at both nurseries. Plastic mulch was used to help with weed control and conserve moisture. The Ontario spring weather was cool and wet so planting was delayed slightly but the new seedlings got off to a good start. The CCC planted 206 F2 trees at Tim Horton Onondaga Farms and 212 trees at Riverbend Farms. The trees represent 11 crosses made at Onondaga Farms in 2010 in addition to open pollinated seed from the nursery and some seed from the Grimo Nut Nursery that may have some blight resistance. Seedlings were produced at the Simcoe Research Station last winter.

Although the work is a little backbreaking at times, I never heard any complaints from the volunteers. I'm sure everyone slept well at night.

Blight inoculations to assess resistance took place in early June. Blight inoculum was produced from fungus cultures maintained by Melodie Melzer in Greg Boland's lab at U. of Guelph. The weather was quite warm but there was a breeze that allowed everyone to keep working. The volunteers inoculated 178 trees at Onondaga farms and 124 trees at Riverbend Farms all in the same day. The inoculation crews work in teams with members assigned specific tasks, such as selecting suitable trees, recording the selection, flagging the suitable branch, creating wounds with a cork borer, applying inoculum from cultures and sealing the wounds with parafilm, a stretchy, waxy tape that seals in moisture. It took from 10:00 am to 4:00 pm to complete the task. Measuring the resulting blight lesions will require a similar length of time in July and August. In August, inoculated branches will be cut off and burned to help reduce the number of blight spores in the nurseries.



Murray Alward demonstrates the correct way to dig a hole.



2011 planting crew, left to right: Dragan Galic, Dianlong Chen, Ron Casier, Murray Alward, Shawn Smith, Jennifer Teichrob, Emily Slood, Lisa Harder, Terry Anderson, and Carol Singleton. Not shown, Derek Lauszus, Wade Kirby, Chris Reale, John Hill and Wes Horley.



2011 Inoculation crew, left to right, Carol Singleton, Tom Welacky, Dragan Galic, Emily Slood, Dianlong Chen, Laura Barbison, Melanie Melzer, Greg Boland and Joshua Cowan. Not Shown, Terry Anderson



John Hill (left) and Wes Horley (right) take a break during planting at Onondaga Farms

Do you wish to receive your Newsletter by e-mail ?

Some members have expressed an interest in receiving their Newsletters via e-mail rather than a paper copy. In electronic format the Newsletter is in colour and will arrive more quickly than a paper copy. From the CCC's point of view, e-mail will save financial resources that can be used elsewhere in the CCC budget.

If you wish to receive an electronic copy of the Newsletter send your name and e-mail address to the Editor : terry.anderson4497@yahoo.ca

AMERICAN CHESTNUT SITE RECORD

The CCC wants to know where the chestnut trees are. You can help by submitting any of the listed information you can provide.

Owner's name, telephone, e-mail:

Street or rural address, township, county, province:

GPS or other location data:

Number of American chestnut trees:

Other environmental data:

November 18, 2010. The Board meeting was held at the Simcoe Research Station. The group discussed recent communications, nursery management reports from the farm managers and Dragan Galic. Dr Dale reviewed research results and 2011 plans. Funding and grant applications were discussed and planned.

May 2, 2011. The meeting planned for February 25 was cancelled because of an ice storm. The Board welcomed Melanie Sifton as a new Director. It was noted that a number of individuals and groups had requested seedlings but at present the CCC is not permitted to distribute seed or seedlings. Public relations and funding were discussed at length and a subcommittee was formed to investigate new sources of revenue. The Outreach program was also discussed and application for a new OTF grant was considered.

Next Meeting: Wednesday, August 17, 2011

Note: Those interested in receiving their newsletter via e-mail please notify the secretary. terry.anderson4497@yahoo.ca

The CCC will hold an AGM on Saturday, October 22, 2011 at Tim Horton Onondaga Farms, 10 am - 4:00 pm. All CCC members, family and friends as well as anyone interested in chestnut recovery are welcome to attend.

This year's program will include bucket draws, children's program, business meeting, lunch at the Molly Henderson Building, nursery tours and research updates. Our guest speaker will be Dr Tom Nudds, University of Guelph, who will address the group on concepts for the creation of effective habitats for endangered species, with emphasis on private properties.

Please keep this date open. To facilitate planning and meal logistics an RSVP will be necessary. Please contact Kelly Schafer by phone or e-mail to register. This is a great opportunity to see the chestnut nursery and have a day of fun and conversation.

A poster/invitation is included with this newsletter. The invitation can be extended to all those that might be interested in chestnuts or the environment.

Acknowledgements: The following photographers contributed to this newsletter: Candace Anderson, Terry Anderson, Wes Horley, Kelly Schafer and a friend of Melanie.

Membership

Membership fees and donations are tax deductible. Please make cheques payable to the Canadian Chestnut Council

Membership Renewal:

Annual subscription = \$20.00 \$ _____

Donations in excess of the annual subscription will be recognized in the Newsletter in the following categories. (Requests for anonymity will be honoured.)

- Gold Leaf: \$1,000 or more
- Silver Leaf: \$500-\$999
- Bronze Leaf: \$250-\$499
- Green Leaf: \$100-\$249
- White Leaf: Less than \$100

Donation: \$ _____

Total enclosed: \$ _____

Note: Memberships can be sent to the Secretary or the Treasurer at the addresses listed on page 2