

# The Canadian Sweet Chestnut

-Newsletter of the Canadian Chestnut Council-

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<http://www.canadianchestnutcouncil.org>

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**Council Mission** - to help restore the American Chestnut to the areas of Canada it once occupied.

## **Current Priorities**

- 1) Breeding resistance
- 2) Breaking Isolation / Establishing Gene Nods
- 3) DNA Analysis
- 4) Hypovirulence
- 5) Survey of existing Chestnuts in the wild

## **In this issue:**

- Ron Casier / Dr. Brian Husband provide updates on the DNA analysis project
- Dr. Dragan Galic on the 2017 C.C.C. Field Activities
- Thanks to Dr. Alan Dale as he steps down as C.C. C Principal Investigator
- Remembering Gil Henderson

## **DNA Analysis by Ron Casier / Dr. Brian Husband**

### **. Population Genetic Analysis**

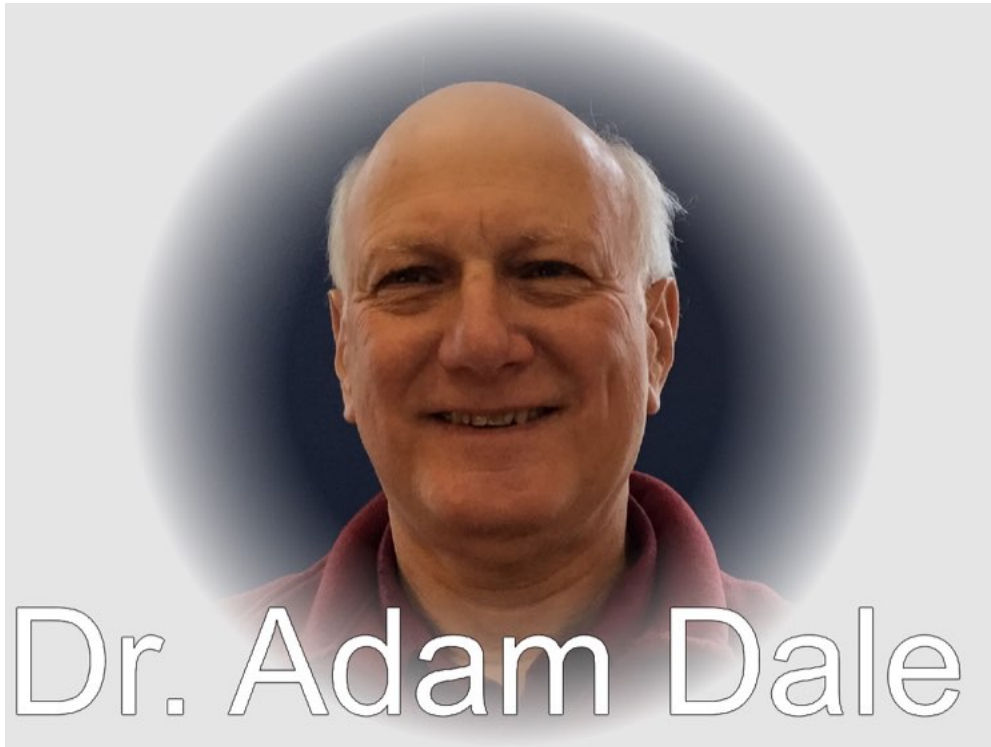
In this multiyear project, Dr. Brian Husband and his team have developed a diagnostic tool for confirming the identity of natural chestnut trees, testing for hybrids and evaluating geographic changes in genetic diversity. Several unique American Chestnut genetic identifier markers have verified the purity of the natural chestnuts. The Ontario gene pool appears not to be contaminated with other chestnut species. A few questionable trees are suspected as being planted and not native. Twelve regions of chestnut DNA are currently under investigation with indications that there may be sub-populations within the range. This exciting DNA analysis work will continue this year to add to our understanding of the biodiversity of our native chestnut. This important research will add to our knowledge of our native population and influence our future work of ecologically restoring the species to its former role in the forest.

### **2017 Spring Field Activities (Dr. Dragon Galic)**

This spring at Tim Horton's Onondaga Farms we will be planting about 1200 seedlings. The blight lesion growth on last year's inoculated trees of F<sub>2</sub> generation will be measured and new trees inoculated. The pollination season will start in mid-June and finish by the end of July.

We will also continue work to maintain, conserve and enhance the genetic diversity project. The project objectives were to break isolation of existing mature American chestnuts by planting grafted trees (7-12 different families) within pollen dispersal distance and establish seed producing genepool nodes of American chestnut seedlings of different families. For this purpose, last year we planted 261 grafted trees around 31 isolated trees and established four genepool nodes with minimum 25 seedlings per node. We will continue monitoring for survival, blight presence and measure growth rate and development of grafted trees and seedlings. Site maintenance will be performed as needed to ensure sites are weed free, provide sufficient sunlight and have deer protection. Dead trees will be replaced. New sites will be added this spring.





**Dr. Adam Dale steps down - A letter from Tom Welacky**

**Greetings Adam,**

On this last day in your role (March 31, 2017) as Principle Investigator of the breeding program for the Canadian Chestnut Council, on behalf of all of us, I want to thank you sincerely for your devotion, support and benevolent leadership of the American Chestnut breeding program since its inception back in 2001-02.

For the past 15+ years you have provided the Canadian Chestnut Council with your knowledge, skills and patience to develop a very real hybrid and conventional American Chestnut breeding program that is enduring and acknowledged by many national and international government environmental institutions, universities, local community groups and members of the CCC. I admire your persistence and guidance in keeping us in line with your breeding project planning phases especially for such an endangered and challenging long term perennial plant species. We look forward to your help and future guiding support and wish you the very best but most of all we wish to "Thank You".

Yours in the continuing of the preservation of the American Chestnut in Canada,

Tom Welacky, Science Committee of the CCC.

(\* Dr. Brian Husband has assumed the position of Interim Principal Investigator)

## **Gil Henderson remembered**

Gil Henderson was raised in the Lakeshore area of Toronto. During his youth Gil spent some



summers on a family friend's farm in Woodstock. This is where the "city boy" grew to love the land and outdoor activities. Gil served in the Canadian Infantry Battalion in World War II. After he returned from service, he started a Mechanical Contracting business. Gil had a passion for shooting and competed in the 1960 August/September Olympic Games in Rome, Italy. If that wasn't enough he later attended a trap shooting event in Vandalia, Ohio and he beat the famous American movie cowboy "Roy Rogers" in a shootout winning the title. In 1965 Gil and his wife Molly purchased Onondaga Farms in St. George, ON. They formed an association with Ducks Unlimited in 1967. Just before Molly passed away early in 1999 they had a discussion with their close friend Ron Joyce (co-founder of Tim Hortons) and it was decided they transition Onondaga Farms to the Tim Horton Children's Foundation. Gil and Molly felt this would ensure their environmental efforts would continue while also providing an "opportunity for teaching children about the importance of caring for nature". In 2003 the Canadian Chestnut Council planted the first row of trees for the test plot. Gil was a fervent supporter of the C.C.C with his time and resources. Gil was devoted to the environment and conservation in many ways and his legacy will be recognized and remembered in perpetuity. Gil always said to "Leave the land better than you found it" and he did just that.

**Thank-you Gil. (September 5th, 1926 - January 30th, 2017)**

### **Want more information:**

**Website** - [www.canadianchestnutcouncil.org](http://www.canadianchestnutcouncil.org)

**Contact** - Mr. Ron Casier - 519-631-5279 <[ron@amtelcom.net](mailto:ron@amtelcom.net)>

**Council Directors** – Chuck Beach, Ron Casier, Tim Casson, Gord Chinnick, Adam Dale, Doug Fagan, Beth Fraser, Stan Furman, Dragan Galic, Kathryn Harrison, John Hill, Adam Kozoil, Ali Rahemi,, Christine Vey. Rylan Zimny

**Save the Date: 2017 Annual General Meeting – Saturday, October 21st, 2017.** Tim Horton Children's Foundation - Onondaga Farms St. George, Ontario (Science/Ecocentre). Registration: 11:00am Meeting: 12:pm