

Canadian Chestnut Council

... on the Chestnut Trail

Rural Route # 1
Orangeville, ON., L9W 2Y8

NEWSLETTER # 20
August 1999

EDITOR'S COMMENTS:

The Canadian Chestnut Council (CCC) Newsletter has been published twice a year - spring and fall - since the organization was formed in 1988.

Memories of the chestnut recounted by our older citizens have become a welcome feature of the newsletter. We look forward to more of them. These stories generate interest and nostalgic emotions about an era almost gone.

Newsletters try to give some highlights of what the American Chestnut Foundation is accomplishing in its noteworthy restoration program. Relevant items of international importance are also mentioned.

The CCC Annual Meeting strives to arouse interest in why we should endeavour to restore this once mighty forest monarch. The CCC directors are dedicated to moving the objectives of the organization forward. As well, the CCC counts on faithful members to share their talents and resources.

Let our motto be - alone each of us can do a little, together we can do much more. May our efforts ensure a return of this woodland bounty!

Colin D. McKeen

Charles Darwin once said, " A traveler should be a botanist, for in all views plants form the chief embellishment."

LETTERS to the EDITOR and OTHER ITEMS:

Dear Mr. McKeen:

Thank you for taking the time to talk about sweet chestnuts. On the personal side of things it will be an honour to help in the reforestation of this species. We will grow these nuts for this season for no charge. I would like to keep a few for myself and would like your group to cover shipping costs come the planting time. Business wise, it is my aspiration that our two nurseries will some day produce the yearly demand for this species. the nurseries are located in North Bay and Cochrane, combined they are producing 20 million seedlings this year. We are from a family of companies that is involved in reforestation of the plant. Our clients are primarily the forest industry but we also ship to smaller organizations including production of teak and rose wood to our Costa Rica plantations. Please feel free to call to discuss present or future opportunities at your convenience.

Best regards, Mark Sandiland, Nurseries Manager, Brinkman & Associates Forest Renewal Center Inc.
North Bay, Ontario.

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EDITOR'S RESPONSE:

Mr. Sandiland also telephoned me to suggest that he would like to grow *Castanea dentata* seedlings. I suggested that he would be out of the geographical range where chestnuts can be grown. He urged me to give his nursery a chance to see if he could grow chestnuts successfully. In late May, I mailed him 30 germinating nuts. I am waiting to learn of his success.

CCC ANNUAL MEETING:

The 12th CCC Annual Meeting will be held on Saturday September 25, 10:00am - 4:00pm, at the Horticultural Research Station, Blue Line Road, near Simcoe. The Station is located 4km east of Simcoe and one-half km north of #3 highway.

The forenoon program will be devoted to video-viewing and chestnut displays. A short field trip to see nut-bearing chestnut trees prior to harvest is included.

The afternoon program will feature Dr. Sandra Anagnostakis as guest speaker. Dr. Anagnostakis has conducted research on Chestnut blight at the Connecticut Agricultural Experimental Station, New Haven, CT. for many years. She has been a keen promoter of the chestnut restoration program. Adequate time will be available to ask questions of the guest speaker, and also raise questions about the CCC program. Be sure to set this date aside and plan to attend. It promises to be a feature event of the year.

An interest in restoration of the chestnut is growing. Attend the meeting and fill your mind with nuggets of information!

POLLINATION DEMONSTRATION:

On Saturday, June 26, at 10 am a group of about 30 chestnut enthusiasts assembled at the Grand River Conservation Authority Nursery near Burford to learn about pollination in chestnut. Nursery superintendent, Bruce Graham, provided the facilities. Colin McKeen talked about general characteristics of the oriental, European, and American chestnuts species and criteria used in their identification. Mike Nemerovski clearly and thoroughly outlined the pollination procedure, and displayed tools and other helps required for pollination.

After a short break for coffee and sweets, the group went to the field to observe a practical demonstration of pollination. This hands-on effort was very well received by the group. While at the nursery a number of the group visited the chestnut museum on the nursery grounds. Others visited a two-year-old planting of American chestnut trees on Bob Edgeworth's property.

INTERNATIONAL YEAR of OLDER PERSONS:

The United Nations has declared 1999 the International Year of Older Persons. The objective of the year is to recognize the contributions of older people to society. The CCC is well aware of the contributions made by older people to bring a focus to the objective of restoring the American chestnut to the woodlands of eastern North America. In the CCC as well as in the American Chestnut Foundation (TACF) it has been senior citizens who have been prime movers in focusing attention on this once previous hardwood tree. They have been highly successful in developing both the Canadian and US organizations. Childhood and early memories would not let them forget this great monarch of the eastern hardwood forest.

Let us take our hats off to these valiant stalwarts!

FUTURE PLANS for ONTARIO'S FORESTS:

Caroline Mach, Ontario's first full-time county forest manager, has completed a comprehensive management plan to cover her second five years in office.

When hired by Dufferin County in 1995, she became the first person to fill such a post in the province. This county is among the smallest of the counties in the province, but from a forestry viewpoint, it may be one of the most important.

Much of the county lies in the cold hardiness zones 4b and 5a --- the coldest in Southern Ontario.

Ms. Mach's first document " Our Forest, Our Future" outlined the goals, objectives, strategies and management activities for the period 1995 - 2015. Her new document includes an exhaustive inventory of 2500 acres of Dufferin's forest, including identification and quantities of trees and wildlife.

She states that the forest is not a real source of revenue for the county. Neither is it an expense to the taxpayers. The expenses of managing the 12 tracts, including salaries, totalled a budget of \$75,000 in 1999. Total revenue from harvesting timber and other activities were estimated at \$87,000 for the year. The Ontario government would be happy with such a favourable balance (editor's comment).

The forested area includes 90% (888 hectares) of 'production forest'.

Much of the forest has a trail system for recreational activities including hiking, wildlife viewing, nature appreciation along with several summer and winter sports.

Ms. Mach says that her plan, simply stated, has been to protect the quality and integrity of the ecosystems in Dufferin County Forest including air, water, land, and biota, while providing a variety of social and economic benefits for the public.

(Extracted from the Orangeville Citizen Weekly Newspaper July 24, 1999)

[Comment: Ms Mach and Dufferin County officials are to be congratulated on their efforts - especially for recognizing the value of our southern forests. Hopefully, other counties will develop similar creative plans.
the editor]

PLANTINGS of AMERICAN CHESTNUTS in DUFFERIN COUNTY:

In 1997, Caroline Mach and the CCC chairman planted 32 one-year-old American chestnut seedlings in one of the forest tracts in Dufferin County. Most of these seedlings have become established and are growing well despite exposure to two dry summers with no supplemental irrigation. The deep sandy soil is ideal for chestnut growth.

In a private woodlot a few kilometers away there is an older, smaller planting of chestnut that is thriving.

PLANTINGS of AMERICAN CHESTNUTS in DUFFERIN COUNTY (cont'd):

Further south in the county near Camilla is a planting of about 100 chestnut trees ranging in age from six to ten years. A few of the largest trees growing in the eastern lee of a shelter belt have attained a height in excess of eight meters (25 feet or more).

The largest chestnut trees in the county are in the Orangeville Island Lake Conservation Area (under the control of the Credit River Conservation Authority). They range up to 9 metres in height and are now bearing an annual crop of nuts. This planting was established in 1980 by the efforts of the Ontario Nut Growers Association.

(The results of chestnut growth in Dufferin County have convinced the Newsletter editor that there are probably several other areas in the province beyond the "Old Chestnut Belt" that should be suitable for chestnut production).

TACF ANNUAL MEETING:

The 16th Annual Meeting of the American Chestnut Foundation (TACF) will be held at Atwood Lake Resort & Conference Center, Allegheny Plateau, Ohio, October 15 -17, 1999.

The Atwood Lake Resort and Conference Center is 25 miles southwest of Canton, Ohio and about 45 minutes from the Akron/Canton Airport.

A good program has been arranged. Registration is 7 - 9:00 p.m. on Friday night. On Saturday afternoon there will be a tour of the chestnut orchards of the Empire Chestnut Company in Carrollton, Ohio, where the owner has been evaluating six species and several hybrids since 1980. Technical presentations and the business meeting will be on Sunday A.M. October 16.

Those wishing to attend are asked to make their reservations before September 15th by telephoning 1-800-362-6406.

INVENTORY of PUBLIC BUILDINGS in ONTARIO featuring CHESTNUT:

CCC Director, Margaret (Peggy) Lang is gathering information on the existence of churches and other public buildings featuring construction an/or furnishings with chestnut.

Across southern Ontario there stand several buildings framed with chestnut timbers. A few churches have chestnut pews. Other buildings have staircase railings, newel posts and balustrades made from chestnut.

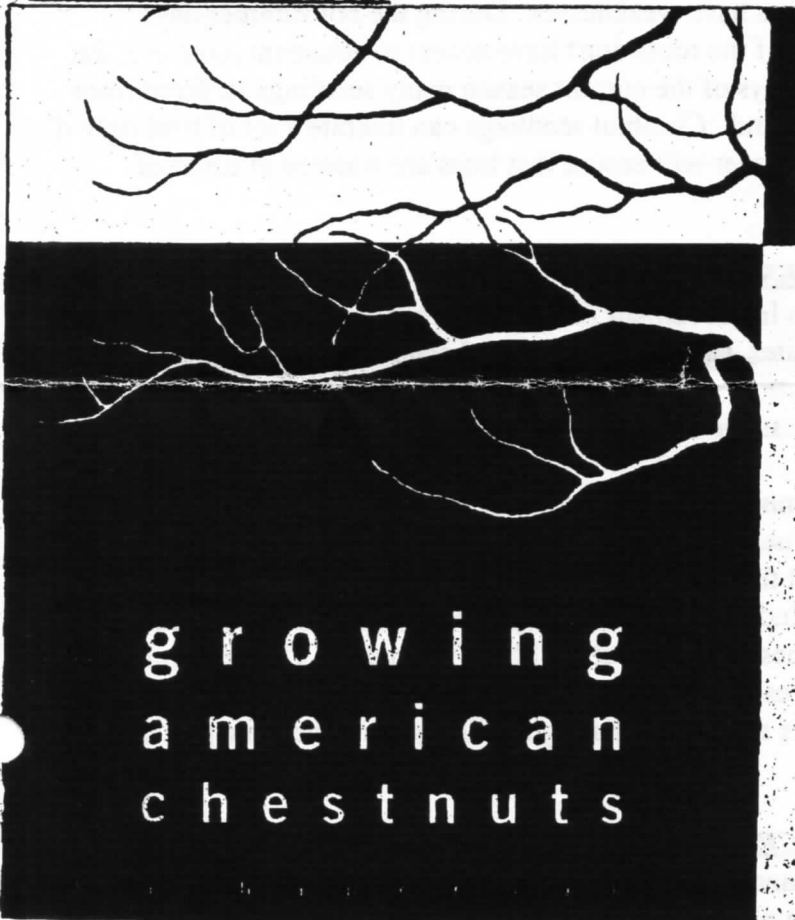
An interesting history is unfolding. Please help Peggy with her project. Send your information to her with as much detail as possible to 16 Devon St., Brantford, ON., N0R 1L6, Tel (519)769-3491, or to the Secretary-Treasure, Ross Pamenter, R.R.#1 Orangeville, ON., L9W 2Y8, (519)941-3383.

AMERICAN CHESTNUTS at OTTAWA:

The 24-yr-old, 8-tree stand of *C. dentata* at the Anderson Rd. site is showing good growth. Most of the trees have two to four trunks and range in height from 9 to 13 metres. A few of the stems are currently carrying a light crop of burrs. Two of the trunks are slanted almost at a 45° angle because of damage from the January 1998 ice storm. It is remarkable that these trees withstood serious bending under the weight of the ice, but didn't break. This characteristic bodes well for a species that may be used in the future to reforest woodlands in southern Ontario.

Judged by morphological features, this stand represents a pure line of *C. dentata*.

GROWING CHESTNUTS:



g r o w i n g a m e r i c a n c h e s t n u t s

c o n t e n t s

Thank You / 3

Preplanting: Seedlings / 4

Preplanting: Nuts / 4
Storing Chestnut Seed / 5

Planting and Growing Seed / 7
Planting Basics / 9
Seed Planting Options / 11
Containers / 11
Seedbeds / 13
Direct Seeding / 14

Planting and Growing Trees / 17
Planting Basics / 18
Site Selection / 18
Spacing / 19
Controlling Herbivores / 19
Caring for Your Transplants / 21

Record Keeping / 24

Short Notes

Chestnut Potting Mix / 8
Growing Seeds: In a Nutshell / 12
Fertilizing / 20
The Meadowview Method / 22
Growing Seedlings: In a Nutshell / 23

The staff of The American Chestnut Foundation thanks Dr. Greg Miller, proprietor of the Empire Chestnut Company in Carrollton, Ohio and artist Fred Pallat for their very generous contributions to this handbook.

A number of chestnut enthusiasts have gained considerable experience from their efforts at growing seedlings. A few have enjoyed good success. Others have had great difficulties in getting the plants to grow.

The American Chestnut Foundation has produced a handbook entitled "Growing American Chestnuts". This is a 24-page booklet that will slip conveniently into your shirt pocket. It touches upon issues covered from time to time in our newsletter.

Experience gained at TACF Meadowview Research Farm, Virginia, have shown how chestnuts can benefit immensely from regular applications of highly soluble fertilizers (10-10-10) and even (20-20-20) from the start to the middle of the growing season.

To reinforce what has been said many times in our newsletter, the following short paragraph is quoted from the handbook.

"Be a good gardener. Remember that water, light and nutrients are essential to vigorous plant growth - that goes for trees too. Remember that competition from weeds can overwhelm even the most energetically growing thing. Provide what your plant needs at the right time and be vigilant in your on-going care of them."

Copies of the handbook may be obtained for \$5 US, from:

The American Chestnut Foundation
409 Main St., P.O. Box 4044
Bennington, VT. 05201-4044, U.S.A.

USE of TREE SHELTERS:

Tree shelters (plastic and other protective cylinders) are excellent deterrents against rodent and deer damage. However, it is recognized that plastic cylinders have weaknesses. During the hot summer days temperatures may rise very high within these shelters. If the roots don't have access to abundant moisture, the leaves may suffer scorching. During the hot summer days of the current season many seedlings suffered from severe scorching, and some were killed back to the ground. Chestnut seedlings can tolerate a lot of heat only if the plant roots are not devoid of moisture. A good gardener will ensure that trees are watered at times of moisture stress.

CHESTNUT DEMONSTRATION PLANTING SITES:

A plan organized by the Ontario Soil and Crop Improvement Association involves the selection of 24 chestnut planting sites in Southern Ontario. Twelve sites, each containing 50 chestnut trees, were planted in the spring of 1999. Plans to plant another 12 sites this autumn are underway. Two-year-old chestnut seedlings are being planted along with other native trees and shrubs in the stream buffer, windbreak and reforestation plantings.

Several other agricultural, forestry, and environmental organizations and coalitions have had an input into the planning and organization of the project. Actually, a total of nine organizations have participated.

Sites have been carefully chosen to ensure that they are at least two miles distance from any known source of the blight. Other chestnut requirements including suitable soil types have been carefully observed.

It is not expected that trees planted at any of these sites will show blight resistance. Consequently, all sites will be monitored annually for disease occurrences.

By establishing these plantings Ontario farmers are demonstrating a willingness to become part of the chestnut restoration program.

BREEDING CHESTNUT for BLIGHT RESISTANCE:

The directorship of the Canadian Chestnut Council is in the early stage for its launch of a blight-resistant breeding program. It will require a long-term plan necessitating much hard work and patient endurance.

The breeding of forest trees has been virtually ignored in Canada because of its high cost and long term requirement. The occurrence of the devastating blight fungus in chestnut this century has forced scientist to change their attitude.

In Canadian agriculture, several cereal and other crops have been returned to bounteous, high yielding, disease-resistant types through plant breeding. One has only to recall the ominous threat caused by rusts early in this century in prairie cereals to realize what plant breeder/pathologist teams have accomplished. The same scientific mechanisms for restoration can be applied to chestnut.

Whereas one or two generations of cereals such as wheat can be produced in a breeding program in a single year, it takes a minimum of four to five years to produce a single generation in chestnut breeding.

This brings up the question of sustainable funding!

Because chestnut blight had almost completely thwarted the efforts of scientists to bring the devastating blight under control, the U.S. government terminated nearly all its funding on the control of the blight in the early 1950's. In hindsight, this was not a good time to close down the research effort. For within two decades there were new promises of blight control.

BREEDING CHESTNUT for BLIGHT RESISTANCE (cont'd):

When TACF was established in 1983, the founders showed wisdom in that they were adamant that a more secure source of funding was necessary to carry the thrust of a blight-resistant breeding program. They turned to a receptive public audience that responded. In large measure it has been this public response that has centered the promising breeding program at Meadowview, Virginia.

About a decade ago the Wagner sisters bequeathed an 80-acre farm to TACF for the chestnut project. Five or so years later, the nearby Glen C. Price family donated a 100-acre farm to the effort. On these two farms TACF administrators and research staff are advancing their blight-resistant breeding program. Other benefactors have donated monies, farm equipment, etc. This is the kind of dedication that is required today to return a threatened hardwood tree species to the biosphere.

The CCC is now at a point where it requires secure funding to advance its program. We hope that Canada may be as successful as its TACF counterpart in obtaining the required financial support and enthusiasm.

The CCC is looking for property in the 'Old Chestnut Belt' that would serve as a suitable site for growing resistant chestnut hybrids and advancing them to promising germplasm lines that will eventually restock our woodlands.

CCC members and chestnut enthusiasts can help us reach our goal. No effort is too small to be of value. Keep the needs of the CCC at the forefront of your thoughts!

CCC WEBSITE:

A website for the CCC is being developed. A preliminary version has been posted at <http://www.uoguelph.ca/~chestnut>. Members of the CCC are invited to visit this site and send suggestions for additions and/or improvements to Greg Boland, University of Guelph, at, gboland@uoguelph.ca.

CCC MEMBERSHIP RENEWAL and APPEAL for NEW MEMBERS:

The Canadian Chestnut Council needs your help. Your presence at meetings doesn't go unnoticed. If you haven't submitted your annual dues or made a financial contribution, please do so at your earliest convenience. (We would be pleased to talk to members and others regarding their philanthropic interests including major gifts, endowments, etc. In 1998, single donations ranged from \$10.00 to more than \$600.00)

The Canadian Chestnut Council

Membership Regular \$10.00 _____ , Contributing \$25.00 _____ .

Make cheque payable to; Canadian Chestnut Council, c/o R. Pamenter, RR# 1, Orangeville, ON., L9W 2Y8.

Name _____
Address _____
Telephone _____

Do you know of any unrecorded chestnut trees? _____
If yes, please give location, size and condition.

Other comments and suggestions re; aiding and promoting the Council's objectives. _____

