

Canadian Chestnut Council (CCC)

...on the Chestnut Trail

Rural Route # 2
Orangeville, Ontario L9W 2Y9

NEWSLETTER # 27
December 2001

The NEWSLETTER of the CANADIAN CHESTNUT COUNCIL (CCC)

The CCC is a scientific organization holding a charitable status with the important mission to restore a threatened species. Since the Council's inception in 1988 membership has quadrupled. In other areas it has shown evidence of strong growth and leadership.

The Newsletter has attempted to be a memory of the Council's activities and achievements. It also tries to keep readers informed of future plans.

Because the written word may not always be adequate, the CCC annual meeting held every autumn strives to arouse interest in why this once-important forest tree should be restored.

Hopefully, through these two publicity channels and the Internet web page, concerns and needs of the chestnut enthusiasts are met.

Let our motto be: alone each of us can do little; together we can do much more!

Colin D. McKeen, Editor

LETTERS to the EDITOR

I wish to join the Council and help preserve this majestic tree. Enclosed is a cheque for \$10.00, a year's membership. Next spring, I plan to start an American Chestnut plantation on some cleared land. I am 15 years old and have been interested in American Chestnuts for quite some time now. My mother recently visited the American Chestnut plantation in Ottawa (Dolman Ridge Plantation), and my family and I just visited a chestnut plantation at the Little Cataraqui Creek Conservation Area, Kingston, Ontario, planted by Mr. Richard Craig. I would like to purchase some seeds and/or seedlings. Can you advise me as to where I could purchase these and where I can purchase tree shelters. Thank you.

Hugh Metcalfe
Winchester, ON

This is a type of enquiry that the Editor likes to receive. It is youthful entrepreneurs like Hugh Metcalfe who will be carrying the chestnut restoration project forward in a few years. Let this be an inspiration to other teenagers and young people.

Seeds and seedlings can be obtained from commercial nurseries - Bruce Graham, Douglas Campbell and Ernie Grimo offer seeds, and other nurseries may have them. Tree shelters have advantages and disadvantages; you should consult the OMAFRA Extension Notes "Protecting Trees from Vole Damage," "Tree Guards Protect your Trees" and "Tree Shelters Help Hardwood Trees Grow Faster." One supplier is St. George Co. Ltd., P.O. Box 430, 20 Consolidated Dr., Paris, ON N3L 3T5.

- Editor.

The Canadian Chestnut Council

- Chair - Dr. Colin McKeen
62 Westmoreland Ave.
Orangeville, ON
L9W 3B6, 519-941-9513
- Vice Chair - Dr. Greg Boland
Environmental Biology
University of Guelph
Guelph, ON N1G 2W4
519-824-4120 Ext. 2755
- Secretary - Mr. Charles Hooker
RR # 2, Orangeville, ON
L9W 2Y9, 519-942-8085
- Treasurer - Mr. Douglas McKeen
RR # 1 Orangeville, ON
L9W 2Y8, 519-941-5765

Board of Directors (by county)

- Essex - Dr. Terry Anderson
888 Rd. 3 E., Kingsville, ON
N9Y 2E5, 519-733-3796
- Lincoln - Mr. Douglas Campbell
RR # 1 Niagara-on-the-Lake, ON
L0S 1J0, 905-262-4927
- York - Mr. Phil Careless
160 Briar Hill Rd., Toronto, ON
M4R 1H9, 416-482-6079
- Norfolk - Mr. Brett Hodgson
RR # 1 Walsingham, ON
N0E 1X0, 519-875-1003
Mr. Mike Nemerowski
RR # 3 Simcoe, ON
N3Y 4K2, 519-426-2174
Mr. Steven Scheers
RR # 1 Delhi, ON
N4B 2W4, 519-582-4934
- Elgin - Mr. Brad Rieve
RR # 2 West Lorne, ON
N0L 2P0, 519-768-1365
- Wellington - Dr. Lloyd Busch
55 Mary St., Guelph, ON
N1G 2A9

Honorary and Advisory Directors

- Dr. Ernie Kerr, Simcoe, ON
Dr. Arthur Langford, Simcoe, ON
Mr. Arthur Loughton, Vittoria, ON
Mr. Leslie Corkum, Falmouth, NS
Dr. Peter Rice, Hamilton, ON

LETTERS TO THE EDITOR (continued)

Am interested in seeing what the American Chestnut might do in eastern Newfoundland (Zone 5B). I have a variety of non-native trees doing well already, and would like to know more about the chestnut. Where might I obtain a sample of seed for stratification?

George Brinson
Carmanville, NF

Recently I spoke with Mr. John McLaughlin of the local Forest research Institute about American Chestnuts growing this far north. Quite by accident I spotted one here in town, and Mr. McLaughlin provided some information and history about the species. He also gave me your mailing address.

I am writing to ask if you can provide me with information about chestnut propagation possibilities in our local climate, soil type, etc. I have a couple of adjoining old remote homesteads (mostly bush now) and am keen to see if I can make some successful plantings. Perhaps you can give me some advice on planting, the availability of seed or seedlings and how best to proceed.

Am enclosing membership fee. Thanks.

Ron Bridge
Sault Ste. Marie, ON

Advice on planting and growing American Chestnut trees could fill a book. I recommend the handbook "Growing American Chestnuts," available for US\$5 from The American Chestnut Foundation, 469 Main Street, P.O. Box 4044, Bennington, Vermont, U.S.A. 05201-4044. More details will be sent in a separate letter, Ron. - Editor.

NEW CCC MEMBERS

- Nick Barbieri - Toronto, ON
George Brinson - Carmanville, NF
Robert Edgeworth - Burford, ON
John LaRose - Ancaster, ON
Michael Margetts - Dundas, ON
Brian Young - Cambridge, ON

FOURTEENTH ANNUAL MEETING OF THE CANADIAN CHESTNUT COUNCIL

The fourteenth annual meeting of the CCC was held at the OMAFRA office at Woodstock, ON and attracted 45 people.

The late forenoon business session disclosed that the CCC had its financial business in order. An audited account balance of \$5871.56 was reported.

A highlight of the Secretary's Report was that a blight-resistance breeding program was begun in 2001. Pollen from the advanced blight-resistance breeding program in Connecticut (via Dr. Sandra Anagnostakis) was used to pollinate several "mother" American Chestnut trees in Ontario. More than 300 nuts were harvested from these pollinations. (See Dr. Adam Dale's report elsewhere in this issue.)

To fill vacancies in the Directorate, Charles Hooker was elected Director for a three-year term with the added role to serve as the CCC Secretary. Douglas McKeen was named the interim Treasurer. Dr. Lloyd Busch volunteered his name to fill the remaining vacancy on the Directorate. He received unanimous support and was elected for a three-year term.

The afternoon program featured scientific presentations by Drs. Greg Boland, John Ambrose and Adam Dale, and Mr. Skye Campbell. Dr. Boland presented an overview of Activities and Progress in the American Chestnut program in Canada (2000-2002). Dr. Ambrose explained the Current Status of the Chestnut Recovery Plan. Dr. Dale summarized the current plan for developing a blight-resistant

chestnut for Canada. Skye Campbell presented a well-illustrated slide talk on the process of pollination in chestnut.

After a short break for refreshments and an opportunity to view exhibits, other chestnut information and artefacts, Doug McKeen spoke briefly about the role of volunteers in publicizing the CCC program. The role of teamwork in modern science was emphasized. He also pointed out that press releases on the chestnut program appeared in daily newspapers in Windsor and Sault Ste. Marie, ON, and also in two weeklies in Orangeville and one in Strathroy. He urged others to put a shoulder to the wheel and use local publicity channels to promote the work of the CCC.

The attendees were informed that continuation of the financial grant from the Trillium Foundation for the next two years of the award was contingent upon recruiting up to 100 participating volunteers. Chestnut enthusiasts were urged to get behind this first-of-kind forest tree program in Canada.

The afternoon session closed with a panel discussion of questions and concerns raised by the audience. An excellent participation was offered by the panelists and contributors from the audience.

A lucky draw favoured one member of the audience. The prize was an electric clock mounted on a nicely-crafted chestnut-wood case donated by Mr. Brad Rieve, an Elgin County director.

TACF ANNUAL MEETING

The TACF Annual Meeting was held this year at Chattanooga, Tennessee, on October 26-28. A full report on the meeting is not yet available.

For those who do not receive The BARK, highlights of the TACF meeting will be summarized in the next

CCC Newsletter. Suffice it to say that there are now nine state chapters involved in support of TACF's mission to restore the American Chestnut as an important component of the American forests.

DR. KERR RECEIVES HIGH HONOURS

ERNEST A. KERR, BA, MSc, PhD, FAIC, PAg.

Dr. Ernie Kerr is unquestionably the most successful vegetable breeder that Canada has ever had. By inducting him into the Ontario Agricultural Hall of Fame, society formally recognized a highly skilled scientist and an eminent plant geneticist. Over his total professional career, Ernie Kerr devoted his considerable talents and energies toward development of several genetic traits into a diverse and commercially valuable assortment of new vegetable cultivars that have affected - and will continue to affect - the horticultural industry of Canada and the world for many years to come.

From 1942-52 he was employed as a scientist with what eventually became the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) Horticultural Research Institute of Ontario, at both Vineland Station and Simcoe. Dr. Kerr gained the respect of the scientific community around the world for his achievements. An impressive list of scientific publications and new cultivars only partially reflect his prolific contributions to genetics, plant breeding and plant disease resistance. Although his major contributions were in tomatoes and sweet corn, other vegetable crops were not ignored.

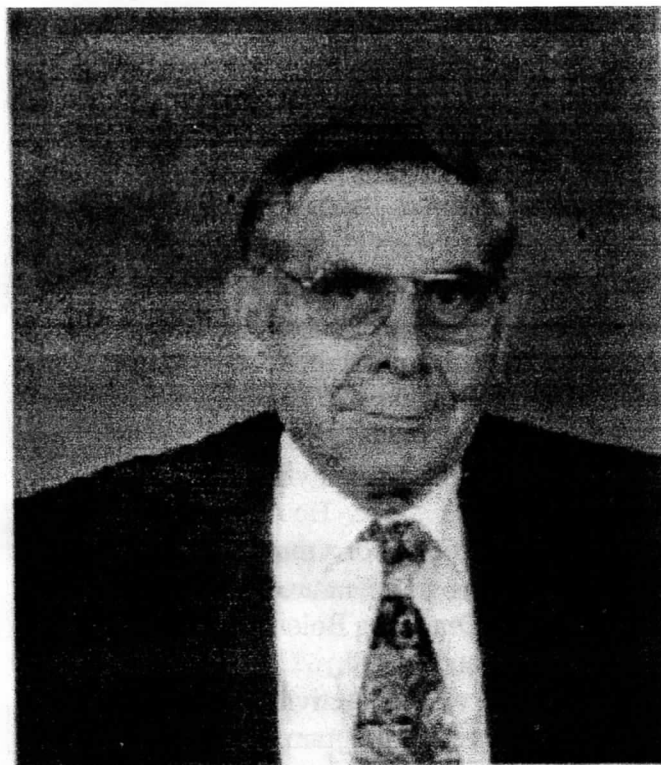
The impact of Dr. Kerr's lifelong work on the agricultural industry is reflected by widespread use of his cultivars and other genetic material, and the benefits they continue to provide for the processing industry, the fresh-food market and the growers.

His selection for the "Man of the Year" award by the Canadian Seed Trade Association in 1980 is a landmark indication of this prestigious organization's appreciation of his contributions. This was the first time that the award has gone to a horticulturist.

After his official retirement from the Government of Ontario in 1982, Ernie was appointed by Stokes Seeds Ltd., in St. Catharines, Ontario as their first-ever Director of Research. His accomplishments with Stokes were perhaps even more impressive, being directed more toward commercial applications.

In 1994, his crowning award came as the H.R.

MacMillan Laureate in Agriculture, which recognizes the most significant contribution to Canadian agriculture in the preceding five years. Again, this was the first time the award had gone to a horticulturist.



Although Ernie's second retirement came in 1994, he never gave up on the challenges of plant breeding. His home garden in Simcoe, Ontario became the testing ground for his hobby, the examination of the genetics of the genus *Trillium*, Ontario's provincial flower.

In the summer of 2000, his huge collection of *Trillium* clones, varieties and breeding lines was transferred to the University of Guelph at the Simcoe Research Station, where it will continue to be under his watchful eye.

In 1996 Dr. Kerr was appointed an Honorary Advisory Director of the Canadian Chestnut Council. His profound knowledge of genetics and plant breeding have been of immense value to the CCC.

PROGRESS REPORT ON BREEDING BLIGHT-RESISTANT AMERICAN CHESTNUT

by Dr. Adam Dale, Plant Breeder

In April 2000 the Canadian Chestnut Council was awarded a grant of \$79,600 over three years by the Ontario Trillium Foundation. The aim of the breeding project for which the grant was awarded is to develop self-sustaining populations of American Chestnut, resistant to chestnut blight caused by *Chryphonectria Parasitica*, which are generally of Canadian origin. (The entire project may take up to twenty years to complete.) In the first phase the grant will be used to obtain a population of trees containing genes for resistance to chestnut blight and are 50% Canadian in their germplasm content.

Currently our aim is to cross-pollinate Canadian trees with pollen of known resistant trees. In 2001 the CCC selected twelve "mother" trees in five different counties of southern Ontario. The selected trees were crossed with pollen from three resistant trees; the pollen was supplied by Dr. Sandra Anagnostakis, at the Connecticut Agricultural Experimental Station, USA. Pollen from other Canadian trees was also used

to act as susceptible control trees. The Connecticut trees were Sandy's Tree (American x {Chinese x [Japanese x European] x American}) and two third-backcross trees (R2T10 and R2T8 (American x [American x {American x ([Japanese x European] x American)}])). In October, volunteers collected 373 nuts, of which 289 were from Dr. Anagnostakis's pollen and 84 were from Canadian sources. The average nut weight per tree was highly variable, ranging from 0.68 to 4.84 grams. Also, we collected nuts from parent Canadian trees and will use them as rootstocks to graft scions from all the parent trees used.

In 2002 we plan to expand the number of mother trees to forty. They will be selected from the inventory being done by Dr. Greg Boland and his co-workers and from new trees sampled by volunteers. Eventually we hope that we will have 50 F1 trees from each Canadian mother tree to be inoculated with chestnut blight in five to seven years' time.

NE-140 CHESTNUT MEETING

The NE-140 Chestnut Meeting was held at a beautiful campsite near New Haven, Connecticut, on October 19-21. The meeting was well attended. It was hosted by Dr. Sandra Anagnostakis, whom several CCC members know. They will recall that she was our guest speaker at two recent CCC annual meetings.

This research group has expanded since its formation twenty years ago. As well as several participants from the northeastern U.S., there were attendees from Alabama and California. The CCC was represented by Drs. Adam Dale and Colin McKeen. Dr. Dale gave a brief summary of the CCC's blight resistance-breeding plan that was started in April 2001. Dr. McKeen presented an update on

field observations of fungal hypovirulence in southern Ontario.

Over two days, participants representing several university and other U.S. research groups presented their findings on topics related to the spread and control of the blight fungus and environmental factors affecting the chestnut tree. Reports on a variety of field and laboratory experiments involving the use of costly and sophisticated equipment shed new light on the challenging task of overcoming chestnut blight. It was most encouraging to see the large amount of teamwork involved in melding applied and theoretical research. While no outstanding breakthroughs were reported, increments of valuable information were brought to light.

NEW CCC TREASURER

Douglas McKeen, a CCC Director for more than three years, has assumed the responsibilities of Interim Treasurer.



Doug is a secondary-school teacher with the Peel Board of Education. He owns a 25-acre farm on the Niagara Escarpment, just north of Orangeville, ON. For more than seven years he has owned and driven a heavy-horse team of Belgians as a hobby.

Growing on his farm are about 100 American Chestnut trees. The oldest were planted in 1989 as one-year-old seedlings. Four of these trees are now 25 to 30 feet in height, with a trunk diameter of 5-6 inches. The oldest trees were planted within and near a coniferous windbreak and are exposed to a variety of sunlight conditions. Other plantings receive full sunlight exposure. For the last two years several of the trees have produced staminate catkins. He hopes that 2002 may be the year when female catkins will appear and start nut production.

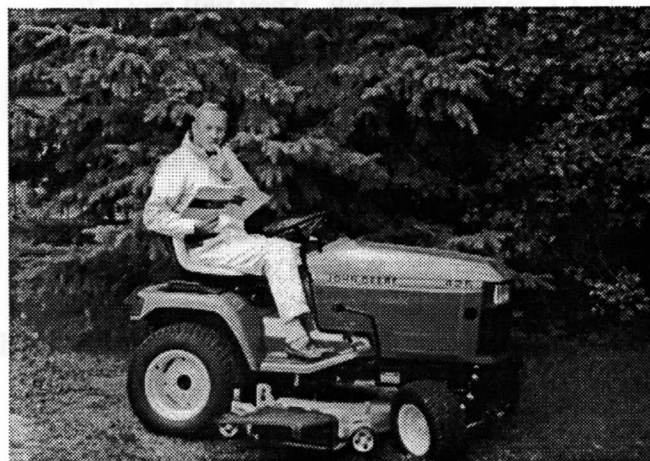
The Island Lake Conservation Area stand of American and hybrid chestnuts (now 21 years of age) is located about six miles south of the McKeen planting. No blight has been observed at either stand. Both of these stands are growing in the cold-hardiness Zone 5a-4b and are doing remarkably well. The old chestnut belt in southern Ontario was confined to Zones 6a, 6b and 7a.

NEW CCC SECRETARY

Charles Hooker is commencing his third career. He grew up in Toronto, attended Royal Roads in Victoria and Royal Military College in Kingston, then spent 30 years in the Canadian Army as a Signal officer. He served in Canada, Germany and the United States, and visited many other countries in Europe and the Pacific. Never a peacekeeper, he engaged mostly in field and staff exercises in preparation for a war that never happened. On retirement, he devoted six years to the high-tech industry in Ottawa, conducting studies for the military services.

Having recently discovered his real vocation, Chuck bought a former hay farm near Orangeville in 1996, where he has planted some 40 acres with about 14,000 mostly hardwood trees. So far two dozen are American Chestnut, with another 25 or so varieties as well. He joined the CCC a few years ago and pestered the Chairman to give him something to do, eventually becoming Secretary.

Chuck says he selected tree planting as a leisurely retirement pastime in preference to mowing grass, but discovered that tree farming ain't that easy. In addition to hand-planting seedlings, he devotes some time to carpentry and amateur radio.



CCC MEMBERSHIP RENEWAL and an APPEAL for NEW MEMBERS

Your suggestions and enquiries are appreciated. You may have some particular talent to help our project on its way. Let us know.

If you have not submitted your annual dues or made a financial contribution, please do so at your earliest convenience. Your membership status is shown beside your name on the address label on the mailing envelope in which you received this Newsletter. The two digits following your name are the last two numbers of the last year of your prepaid subscription.

For example, -

John Smith, 02
123 Chestnut Street
Ourtown, ON

means that John is paid up until 31 December, 2002.

The Canadian Chestnut Council

Membership: Regular \$10.00 _____ Contributing \$25.00+ _____

Make cheques payable to: **Canadian Chestnut Council**, c/o Douglas McKeen, RR # 1 Orangeville, ON L9W 2Y8.

NAME: _____

ADDRESS: _____

TELEPHONE: _____

Comments and suggestions regarding aiding and promoting the Council's objectives: _____
