

Canadian Chestnut Council (CCC)

... on the Chestnut Trail

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

NEWSLETTER # 22
March 2000

The NEWSLETTER of the CANADIAN CHESTNUT COUNCIL (CCC)

The CCC is a charitable organization concluding its twelfth year. Since its inception membership has tripled. In other areas it has shown evidence of strong growth.

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

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 web page on the internet the concerns and the needs of the chestnut enthusiasts are met.

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

Colin D. McKeen
Editor

LETTERS to the EDITOR

Dear Dr. McKeen:

Your letter of Jan. 9/91 to my brother Dennis has been passed along to me as I seem to be the one in the family most interested in the "Chestnut saga".

I read your letter with great interest as I too have been somewhat fascinated throughout my lifetime with the great and sad demise of the chestnut tree. I often sat and talked to my father about his recollections of the chestnut tree and how he had harvested its remains in the 1940 period.

The barn to which you refer was built in 1939 and served as a granary and livestock shelter for many years until it was dismantled about two years ago. It was no longer used for its original purpose and had fallen into disrepair hence the dismantling decision. We were able to salvage much of the contents and it has been stored for future use. I am a hobby woodworker and have made numerous items from desks to cedar lined chests to picture frames etc. from "wormy Chestnut". I am literally fascinated with every piece I use. My supply of Chestnut lumber actually predates the barn remains by several years as I also salvaged another small building which once stood at the sawmill and also a couple of other sources at our farm. While my hobby of working in Chestnut lumber may not be unique it is certainly at least an oddity.

I am always on the lookout for any signs of chestnut lore or anything being done to research their return. A couple of years ago my older brother Larry, (who has a stable of show horses) picked up a pamphlet from the American Chestnut Society at the Indiana State Fair. While watching T.V. just prior to Christmas I noticed that Dolly Parton's log cabin home in Tennessee is all paneled in wormy chestnut. Each year we vacation in that region of Tennessee (which is in the Smoky Mountain region) and I have noticed several places which have used chestnut lumber. I once talked to a local carver who remembered his father fattening the family hogs on fallen chestnuts. I have enclosed an excerpt from an old book on trees which is not a very scientific explanation but is rather amusing as it explains the chestnut fruit as a delicacy.

LETTERS to the EDITOR (cont'd)

Among my rather small repertoire of "chestnut" stories I was told of one man who lived in Gosfield South Township who sold enough chestnuts each year to pay his property taxes. I was told that his son once took a rather large quantity of nuts to school to treat his friends and the father came to school to retrieve the precious nuts.

The chestnut tree apparently flourished in areas of sandy soil. I was told the most of what I have, came from the area around the village of Arner, perhaps between Hwy #18 and Lake Erie. The last known standing chestnut tree was sawn at the mill in about 1960. It had stood for decades in the Arner bush located on the Arner town line. Once the outer bark and debris was removed the interior was sound and usable. F. Gerald Tofflemire, the mill's sawyer, used the lumber to side a small building on his property near the present John R. Park homestead, a well known tourist attraction centre in South Essex. I believe the small building is still there. I shudder to think that probably unknowing people have torn buildings down and burned the barn boards unaware of their never-ending usefulness.

I hope to be able to learn more about your experiences some time in the future. I would like to see a living chestnut tree.

Robert Smith
1226 Bainbridge Ave, Kingsville
519-733-4972

Editor's comments _____

The barn referred to in Smith's letter stood on the farm of Carl Smith at the northern limits of the town of Harrow. Mr Smith often talked to me about building the barn from chestnut lumber sawed at his mill. The sawmill stood in a woodlot near the west bank of Cedar Creek just off # 18 highway about one-half kilometre west of the tiny village of Arner. - - -

Interesting Descriptions of Chestnut:

The following paragraphs were taken from the old book mentioned in R. Smith's letter. The book entitled "Trees Worth Knowing" was published in 1925.

THE CHESTNUTS

Chestnut and Chinquapin

Castanea dentata, Borh., and *C. pumila*, Mill.

Our native chestnut and its little brother, the chinquapin, are the American cousins of the sweet chestnut of southern Europe. Japan has contributed to American horticulture a native species which bears large but not very sweet nuts, that are good when cooked. Our two trees bear sweet nuts, of a flavour that no mode of cooking improves. In truth, there is no finer nut; and the time to enjoy it to the highest degree is a few weeks after the frost opens the burs and lets the nuts fall. "Along about Thanksgiving," they have lost some of their moisture and are prime.

In foreign countries the chestnut is a rich, nourishing food, comparable to the potato. Who could go into ecstasies over a vegetable that is a staple food for the peasants of Europe, Asia, and North Africa? Our chestnut is no staple. It is a delicacy. It is treasure trove from the autumn woods, and the gathering of the crop is a game in which boys and squirrels are rivals.

Ernest Thompson Seton, always a boy, knows the impatience with which the opening of the burs is watched for, as the belated frost keep off, and the burs hang tantalizingly closed. The cruel wounds made by the spines and the raw taste of the immature nuts are poor recompense for the labour of nutting before Nature gives the sign that all's ready.

LETTERS to the EDITOR (cont'd)

Here is Mr. Seton's estimate of the chestnut of "brown October's woods."

"Whenever you see something kept under lock and key, bars and bolts, guarded and double-guarded, you may be sure it is very precious, greatly coveted. The nut of this tree is hung high aloft, wrapped in a silk wrapper, which is enclosed in a case of sole leather, which again is packed in a mass of shock absorbing, vermin-proof pulp, sealed up in a waterproof, iron-wood case, and finally cased in a vegetable porcupine of spines, almost impregnable. There is no nut so protected; there is no nut in our woods to compare with it as food."

What a disaster then is the newly arisen bark disease that has already killed every chestnut tree throughout large areas in the Eastern states. Scientists have thus far struggled with it in vain and it is probable that all chestnuts east of the Rockies are doomed.

Chinquapins grow to be medium-sized trees in Texas and Arkansas, but east of the Mississippi they are smaller, and east of the Alleghanies, mere shrubby undergrowth, covering rocky banks or crouching along swamp borders. They are smaller throughout, but resemble in leaf, flowers, and fruit. The bur contains a single nut.

The chestnut tree grows large and attains great age, its sturdy, rough gray trunk crowned with an oblong head of irregular branches, hidden in summer by the abundant foliage mass. (*See illustration, page 23.*) The ugly cripple that lightning has maimed covers its wounds when May wakes the late-opening buds and the leaves attain full size.

Each leaf tapers at both ends, its length three or four times its width. Strong-ribbed and sharp-toothed, and wavy on the midrib, dark, polished, like leather, these units form a wonderful dome, lightened in midsummer by the pencil-like plumes of the staminate flowers, with the fertile ones at their bases. As autumn comes on the leaf crown turns to gold, and the mature fruits are still green spiny balls. The first frost and the time to drop the nuts are dates that every schoolboy knows come close together.

When a chestnut tree falls by the axe, the roots restore the loss by sending up sprouts around the stump. The mouldering pile nourishes a circle of young trees, full of vigour, because they have the large tree's roots gathering food for them. No wonder their growth is rapid.

Besides this mode of reproduction, chestnut trees, growing here and there throughout a mixed forest, are off-spring of trees whose nuts were put away, or dropped and lost by squirrels. When spring relieves the danger of famine, many of the rodent class abandon their winter stores before they are all devoured. Such caches add many nut trees to our native woods.

Important news items and statements extracted from a letter written to the Sec-Treas. of the CCC in 1999 and from a follow-up visit to his home and workshop.

Dr. Goodman grew up on a farm with mixed agriculture (cattle, hogs and cereals). He recalls the dry summers 1931-34 and the poor harvests of wheat with light shrunken kernels of low feed quality. Rust was also present and it took its toll. He remembers when a rust-resistant wheat was first introduced.

Dr. Goodman reported that he was fortunate in being able to purchase a few hundred board feet of chestnut lumber (some of which is now for sale) from Mr. Doug Gundry of Simcoe Ont. a few years ago. From the lumber he recently constructed a very attractive communion table which he donated to Forest Hill United Church in Toronto. He stated, "It was very well received."

Dr. Goodman tendered his thanks to Mr. Gundry and Mike Nemerovski for identifying the pieces of chestnut in the loose-leaf dining table and in the old chestnut cabinet in his home.

Dr. Goodman closed his letter encouragingly as follows: "Yes, we have landed men on the moon, we transplant human hearts, kidneys, and liver, etc. etc. So there is no reason why we cannot develop blight-resistant chestnut trees -- one of the great monarchs of the forest."

(Dr. Goodman's closing sentence marks the kind of optimistic enthusiasm needed in the Canadian Chestnut Council to advance its goal. ----- The Editor)

LETTERS to the EDITOR (cont'd)

'A Rich Chestnut Harvest' is a story related in the section 'Just For Kids' of the small Farmer's Journal, Winter, Vol.24; 1999.

(A fine bedtime story to be read to children and grandchildren ----- The Editor)

CCC DIRECTOR RECEIVES an AWARD

Bruce Graham, Superintendent of the GRCA's Burford Tree Nursery, was recently honoured with a Conservancy Award by the Township of Burford Heritage and Tourism Committee.

The award, presented on November 25th, recognizes Bruce and GRCA's the establishment of a replica pioneer building and log cabin - known locally as the Chestnut Museum - at the Burford Nursery.

The award certificate states that the log cabin "graces the lands surveyed by Augustus Jones in 1792". The log cabin and museum was established to show members of the public visiting the Nursery what living accommodations were like in pioneer days, and to display artifacts made of Chestnut wood. The American chestnut is a species of Carolinian tree, earlier threatened by the chestnut blight. It is being reintroduced to Ontario through the Burford Tree Nursery program.

This news item was extracted from Grand Actions newsletter, Vol. 5, January 2000.

INVENTORY of PUBLIC BUILDINGS FEATURING CHESTNUT

Enquirers are asking where they might see public buildings featuring chestnut wood. Unfortunately, in many buildings the chestnut wood has been painted or stained heavily so that the grain in the wood is not readily discernible. In a few buildings the trim and finishes have been stripped to reveal the original wood so that the chestnut can be identified.

The former CCC director, Margaret Lang, has relinquished the role of gathering the information. The duties are now being carried on by Bruce Graham. Please send your information with as many details as possible to him at:

GRCA Nursery
25 Wight Road, Burford , ON.
N0E 1A0.
Tel. (519)449-2265.

BREEDING to OBTAIN BLIGHT RESISTANCE in CHESTNUT

As scientific results unfold, it is becoming increasingly clear that breeding for blight resistance offers the best hope of conquering this dreadful chestnut scourge. This approach was not always considered in this light. As with many kinds of biological and medical research, false starts have not been uncommon. Nevertheless, many have been stepping stones - so it is with chestnut breeding.

In 1922, Gravatt and Clapper, scientists at the Department of Agriculture in Washington D. C., started to breed a forest tree with the characteristics of the American chestnut plus the trait of resistance. In 1929 professor Arthur Graves of the Yale University also started a breeding program. A lack of early promising results combined with exceedingly high expectations jeopardized the efforts. In the 1950's an overwhelming feeling of doom for the native chestnut with no real glimmer of public enthusiasm to spur research, the program almost flickered out. However, it is of interest to note that some of the starting stock used in current day blight resistance programs in the U.S. originated from the Graves and Clapper breeding lines.

In the early decades of this century the procedures for disease resistance breeding had not been well worked out. Much was to be learned. Because of the regeneration time factor, mistakes made in breeding forest crops were very costly. Since much shorter generation times characterized agricultural crops, they received most of the attention. Little time was lost in correcting mistakes. Great strides in the breeding of cereals, flax and vegetables yielded valuable procedures and results.

BREEDING to OBTAIN BLIGHT RESISTANCE in CHESTNUT (cont'd)

Also, early chestnut breeding suffered from several other major handicaps. There did not exist a reliable means for screening seedlings for blight resistance. Populations of hybrids had been too small to obtain the desired segregation. When and how to inoculate young trees to obtain reliable results was not known. Now, chestnut breeders in the U.S. believe they have ironed out most of these problems.

Our technical know-how hasn't come cheap, nor will its implementation in the years ahead! Yet, herein lies genuine hope. Adequate money and human resources for research will move the program forward.

The directorate of the CCC is busily engaged in trying to set up a chestnut breeding program in Ontario that will provide blight-resistant germplasm adapted to our climatic conditions. Much planning is yet to be done.

13th ANNUAL MEETING of the CANADIAN CHESTNUT COUNCIL

The meeting date has been set for Saturday November 4. Mark this date on your calendar. The guest speaker will be Dr. Sandra Anagnostakis of the Connecticut Experiment Station, New Haven, CT. The location of the meeting will be given in the next newsletter. You will not want to miss this important event.

17th ANNUAL MEETING of the AMERICAN CHESTNUT FOUNDATION (TACF):

The meeting will be held on October 19-22, 2000 near the Meadowview Research Farms, Abingdon, VA. These farms have been the Headquarters for TACF breeding program. This will be a unique opportunity to learn much about the Chestnut breeding efforts - past, present, and future. Future announcements will provide more details.

DRAFT RECOVERY PLAN for AMERICAN CHESTNUT

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has been instrumental in promoting Recovery Plans for Canada's Endangered and Threatened species.

A draft of the Recovery Plan for the American Chestnut has been prepared for the Endangered Species Recovery Plan of the World Wildlife Fund. The draft has been circulated to all members of the Advisory Committee and other individuals interested in American chestnut as part of the public consultation and review process. A final draft is expected to be completed in July 2000.

This document will go far in giving administrators of government and other funding agencies a picture, past and present, of the native chestnut and potential for its restoration.

GROWING CHESTNUTS

It is the time of year when individuals with a 'green thumb' turn to growing plants. You may have stratified some chestnut seeds. If they are still in the refrigerator, you may observe that they have started to sprout. Some seeds sprout early, others late. After sprouting, the rate of growth varies from seedling to seedling.

With careful planting, sprouted seeds can be transplanted to containers of soil for further indoor growth or planted outdoors to avoid the late spring frosts. The August Newsletter mentioned the availability of a good booklet "Growing America Chestnuts". It is available from;

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

The booklet contains a few do's and don'ts and a lot of distilled wisdom.

CHESTNUT SITES in SOUTHERN ONTARIO

Existing chestnut sites, blighted or non-blighted, should not be destroyed. Many of them may contain valuable germplasm that can be used in a breeding program.

The following table shows recognizable differences between Chinese and American species. Even in the absence of burrs and nuts--- twigs, buds, leaves and stipules show characteristic differences that will enable you and members of the Canadian Chestnut Council to make valuable assessments.

TABLE
Morphological differences between Chinese & American chestnut. *

Organ	Chinese	American
LEAVES	<ol style="list-style-type: none">1) shiny (waxy)2) leaves growing in full sun are hairy; underneath have a whitish cast3) leaves are ovate4) teeth not pronounced5) angle between leaf base & petiole can be acute6) leaves leathery	<ol style="list-style-type: none">dullleaves not hairy; green underneathleaves lanceolateteeth pronouncedangle between leaf base & petiole never acuteleaves not leathery
STIPULES	<ol style="list-style-type: none">1) 0.5-1 cm broad at base triangular2) persistent on stem	<ol style="list-style-type: none">0.1-0.2 cm broad at base narrow from tip to basedrop soon after leaf expands
TWIGS	<ol style="list-style-type: none">1) tan or pea green2) hairy3) lenticels (white spots) large, 0.5mm	<ol style="list-style-type: none">reddish brown to brownish greennot hairylenticels small, 0.1 mm
BUDS	<ol style="list-style-type: none">1) tan to dull brown2) rounded: almost as wide as they are long3) closely appressed to stem4) main axis parallel to stem	<ol style="list-style-type: none">reddish brown to yellowish brownpointed, only half as wide as longstick out from stemmain axis not parallel to stem
NUTS	<ol style="list-style-type: none">1) tips tend to be rounded2) hairs generally only around tip3) in white part (base), vascular bundles frequently not visible	<ol style="list-style-type: none">tips pointedhairy down $\frac{1}{3}$ to $\frac{2}{3}$ of lengthvascular bundles clearly visible, arranged in a sunburst pattern
BURS	<ol style="list-style-type: none">1) spines about 1 mm in diameter, 1-2 cm long	<ol style="list-style-type: none">spines about 0.5 mm in diameter, 2-3 cm long

* Extracted from

Journal of the American Chestnut Foundation Vol. VII No. 2, 1994-1995.

CCC WEBSITE

A website for the CCC mentioned above has been virtually completed. It has been posted at the following site --- <http://www.uoguelph.ca/~chestnut>. Chestnut enthusiasts are invited to visit the site.

CCC MEMBERSHIP RENEWAL and APPEAL for NEW MEMBERS

The Canadian Chestnut Council needs your help. Your enquiries, suggestions, and presence at annual meetings don't go unnoticed. If you haven't submitted your annual dues or made a financial contribution, please do so at your earliest convenience.

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 _____

Do you know of any unrecorded chestnut trees? _____

Address _____

If yes, please give location, size and condition.

Telephone _____

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

