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2023

SONG NEWS

The Newsletter of the Society of Ontario Nut Growers and
The Eastern Chapter of the Society of Ontario Nut Growers

WWW.SONGONLINE.CA

The **SONGNEWS** is published 3 - 4 times per year by: SONG/ECSONG.
Send submissions to the editor:
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RR # 2 Branchton, ON N0B 1L0
or b.thurston@silomail.com
or nut.trees@grimonut.com

Inside This Issue

Library Corner - Gordon Wilkinson
This part of the page is now open to members who would like reference information or articles written by NNGA or SONG/ECSONG members. Gordon has a nearly complete set of NNGA Annual Reports and a complete set of SONG News issues to research.

NUTS ABOUT HEARTNUT COOKING
This unique cookbook is the only book dedicated solely to the heartnut. The book is priced at $12. Please add $3.50 for mailing. For special quantity price, contact: Gordon Chinnick, Treasurer, 722 6th Concession Rd, Walsingham, ON N0E 1X0

SONG/ECSONG Archive
Have you visited ECSONG? Click the tab at the bottom of the SONG website to see the work that was done there? If you click on the SONGNEWS tab, you will be impressed to find all SONGNEWS issues from the beginning of SONG in 1972. Enthusiastic members of ECSONG did this for all members and visitors alike. There is plenty of reading there for the new as well as old members. Enjoy!

SONG Website: www.songonline.ca
Be sure to check it for updates on meetings, read about nut farming, post your nuts, or nut products to sell online.
Send your free posting to: Linda Grimo, President,
979 Lakeshore Rd, RR3, Niagara/Lake, ON L0S 1J0
or: nut.trees@grimonut.com

Have you renewed for 2023? Check your envelope for the year that you are paid up.
On your mailing label, "(exp: 20xx)" means your membership expires end of year 20xx.

SONG 2023 AUCTION MEETING

DATE: May 7, 2023 **TIME:** 12:30 - 4:00 p.m. Members and visitors are always welcome. No Fee.
Come early socialize, browse the auction items, and register for the auction.

AUCTION FEATURES: Nut trees galore and more. Trees being auctioned may include hazelnut, hardy Persian walnut, ultra-northern pecan, hickory, heartnut, sweet chestnut, pine nut, ginkgo, and hybrids including hicans and heartnut/butternut hybrids to name a few. As a change of pace, an assortment of unusual fruits and ornamentals may be auctioned.

Each year brings different items and always surprises.

Pay by: Cash or cheque to "SONG" or e-transfer to song.treasurer@yahoo.com (no credit/no debit)

Members are encouraged to bring things to auction off. This is a fund raiser for the SONG/ECSONG treasury. (SONG receives 30% of the proceeds/the donor keeps 70%.) If you plan to bring more than ten items then please email your planned list to song.treasurer@yahoo.com by May 1st. This will assist in planning. Bring your items and your final list early (close to 12:30) so we can organize the overall sale list.

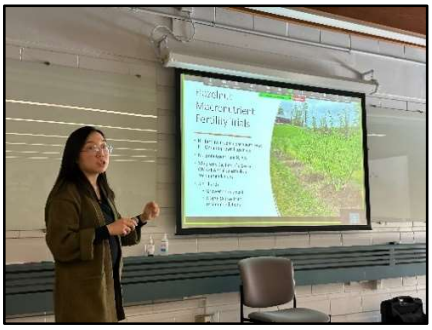
LOCATION: King Heritage and Cultural Centre, 2920 King Rd, King City, ON L7B 1L6
(Note that this is the same location as we used in 2019 and 2022.)

DIRECTIONS: Take Hwy 401 or Hwy 407 (toll road) to Highway 400 N. Exit King Rd E. Pass Jane St., **King Heritage & Cultural Centre** is on the left. 2920 King Rd has a cluster of buildings. Meet in Laskay Hall.
https://www.google.com/maps/place/King+Heritage+and+Cultural+Centre/@43.9241212,-79.5

Presidents Message

by Linda Grimo

The SONG Technical meeting in March was excellent. The presentations were outstanding and covered many topics of interest. Big thank you's to Melanie Filotas and Jenny Liu for helping to ensure the day went off without a hitch, and to Bruce Thurston who takes care of all the little details making sure we are fed well and have our coffee!



The Next big event is our SONG auction. The auction is a great opportunity to meet fellow SONG members in an informal setting while learning about the products that are up for sale….all grown or produced in Ontario. This usually includes nut trees, fruit trees, fruiting bushes and small plants, unusual or unique plants, seeds, nutty snacks, and any other locally grown plant or food item.

SONG also hosts a fall tour. Each year we venture off to visit a farm whereby the host has the opportunity to showcase their farm to fellow nut enthusiasts.

We are looking for a host for the September tour. If you would like to host, or you would like to recommend a great site please contact me at song.president@yahoo.com and we can select a date and work on the details. Perhaps you know of a local park or gem of a location that would be a valuable site to visit as well.

Also, please **join SONG on Facebook** and add to the great discussions. This is a great place to ask questions and show everyone your photos.

Keeping squirrels out

by Bill Klomps

Hello fellow nut growers,

After frost I consider squirrels the next biggest problem with my heart nut trees. The location of our 9-acre orchard here has not exactly been a deterrent to squirrels as we are close to a housing subdivision, a seasonal RV park, numerous small residential holdings plus we are surrounded by several hundred acres of wood lots.
My trees were planted in the spring of 2014 and each year we have always been able to pick at least a few handfuls of nuts. In 2022 we harvested a few hundred pounds. Since the start I have tried various methods to control the rodents, from trapping, to tin cones mounted high on tree trunks, to high-speed lead, to cow electric fence wire strung around trees, all these methods had very limited success.
In 2022 I decided to get more serious and ordered enough 24" x 1" chicken wire to go around the perimeter of the orchard. Problem was availability of the wire. My local Peavey store helped out with some of the supply (I ordered the wire June 1) but the remainder I needed came from a US Ebay seller. I wanted the wire to be here by August 1 which was about the earliest time I had previously noticed the squirrels start picking. This past year they started harvesting even earlier. By time I got the fence up at the end of the first week of August the squirrels had already cleaned off the first and second tree rows in from the perimeter of the orchard. It was frustrating to watch knowing since the end of June I had already trapped and removed at least 4 dozen or so of the critters.

However, the combination of chicken wire and the cow fence wire on top worked. The majority of the squirrels stayed out. The dozen or so that got in were met with lead from a heavy pellet gun.
My fence construction consisted of 2" x 2" wood stakes every 8' or so mixed with some steel cow electric fence stakes, the 24" chicken wire was attached to the posts. Then I installed 2" plastic electric fence insulators to the posts just above the chicken wire. To the insulators I attached poly electric fence wire which in turn was hooked to a Gallagher M360 cow fencer. The single wire was not enough of a deterrent so by early September I added and installed 5" insulators just above the 2" insulators.
The only refinement I will do this year is add a second Gallagher cow fencer so the wire on the 2" insulators and the top wire on the 5"
insulators are charged separately. The fencer seems to strike every second sending out an 8000-volt jolt but it appears some squirrels have figured out if they go fast enough over the fence, they can avoid getting shocked. The second fencer would be set to send out a jolt between meaning there would be a shock every half second.
Why did I decide on 24" chicken wire? It is cheap compared to many other fence wires, it's easy to work with, 36" would be better, 48" even better yet. The black squirrels all seem to want to climb over top (always at a post because the wire is so flimsy), the little red ones want to crawl under the chicken wire. I made up some 4" wire staples to pin the wire to the ground where the red squirrels wanted to go under.
Chipmunks don't seem to be problem here, I guess the neighbourhood cats are doing their job.

Keep it challenging,
Bill Klomps Bayfield ON.

Fall Grafting

by Ernie Grimo, photos by Armando

In fall grafting we are taking advantage of the fact that the trees are just entering their period of dormancy for the winter. It is an adaptation that northern trees have made to escape the chance that a warm fall or early winter period would bring them out of dormancy where they would die from the cold winter following. Each temperate climate species has a dormancy period that lasts 8 to 12 weeks where they resist coming out of dormancy. However, the tree's cambium layer just under the inner bark remains active even when the buds on the tree won't open. The cambium, a pencil thin layer like skin, is responsible for adding tissue to the sapwood and the inner bark. It is also responsible for healing damage caused by nature and human grafting efforts. In grafting we can take advantage of the fact that the cambium does not have a dormancy rest.

With many temperate climate species like black walnut, the cambium will only be responsive during the dormancy period when the temperatures are warm enough. Black walnut cambium becomes active at 26°C (80°F.). Outdoor fall grafting would not work because a warm period like this of 3-4 weeks does not occur outdoors in a temperate zone. For fall grafting, the trees need to be brought indoors where the temperature and humidity can be controlled.

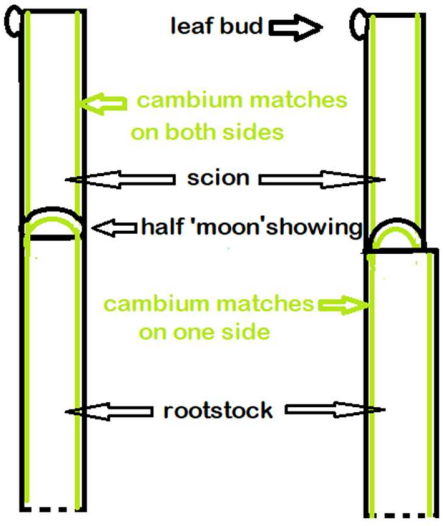
Shortly after the trees lose their leaves in fall is a good time to start. The trees can be bare root or potted stock. Bare root trees need to have the roots protected from drying out by either potting them or bedding them in sawdust or peat moss in boxes or tubs before or after grafting. At the Grimo Nut Nursery, we do both. To get the trees large enough in caliper, our potted trees are one year old black walnut trees potted and grown for one year to get them established in pots. Two-year-old bare root trees are used for the bedded trees.

A few days ahead scion wood is cut from our orchard trees and trees especially grown to produce scion wood ahead of time and protected in cold storage. The rootstocks are only watered lightly and brought into room temperature conditions for a day or two to prevent bleeding that may occur from sudden temperature changes.

Grafting begins by cutting off the rootstock at the point where the graft is to be made. At the Grimo Nut Nursery, we use the Grimo Grafting machine to make the 'V' on the scion. A cleft is cut into the rootstock with a knife to match the length of the 'V'. The scion with one or two buds is inserted into the cut and positioned so that the cambium is matched on one or both sides of the rootstock. The graft cut areas are covered with a strip of Buddy Tape™ to seal the cut surfaces. Grafting wax, no warmer than 175°F. (70°C) is used to seal the top cut of the scion.

Grafting wax is also painted on the scion surfaces to help seal it from drying out. A small tubular plastic bag is placed over the scion and left open to help keep the scion from drying out while it is healing in place. The whole container of trees is covered with plastic to seal them in and to maintain high humidity.

A Completed Cleft Graft Showing the Cambium Meeting



The trees are moved to a room where the temperature can be maintained at 26°C (80°F.). To keep the scion alive during the critical 2-3 weeks while the cambium creates a union, water needs to be sprayed almost daily inside the plastic to keep the humidity above 80%.

Continued Pg.6

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After 28 days, the trees can be removed from the callusing room and first lowered to room temperature and then into storage at 3°C - 7°C (36 - 43°F.) for the winter to complete the dormancy period.

Our first attempt at fall grafting was in early November 2021. We grafted black walnut and ginkgo cultivars and kept them in the callous room for 28 days. We covered the trees with plastic, but we did not use the tubular bags over the scions. Our success rate was high and there was very little movement on the scion or rootstock buds. However, we did not record the results.

In mid-November 2022, we grafted black walnut, butternut, and northern walnut (Persian) and covered the scions with the small tubular plastic bags. The trees were removed from the room after 28 days and examined. We noticed more callusing with the bags over the scions, so we will continue doing this with our fall grafting. One of our butternut selections started budding out after the 28 days so we left it in storage at 7˚C. The buds continued to hold but we decided to raise the temperature to 15˚C (60˚F.) and let them continue at a slow pace.

Our plan is to hold the bare root trees dormant until mid-May when they will be planted in the nursery to grow out another year or two.

Plastic tents had to be removed by mid-winter since mold started to form on the soil and some grafts. Some of the potted trees will be planted in the nursery and others will be repotted in larger pots to be grown another year.

We will not know until late spring what the survival rate will be. Callusing does not guarantee that a union has been established. It is possible that the rootstock produced all the callous and the scion or the bud on the scion has died. If some of the callusing was not advanced enough the scion may die from drying out. An option is to pot the trees that have leafed out and let them continue growing in a greenhouse. This will allow the callusing to complete the union.

Fall grafted 'Iroquois' butternut Feb. 15

Hot Callous Pipe Grafting

by Ernie Grimo, photos by Armando

Hot callous pipe grafting is based on the premise that the cambium of most trees is easily awakened from dormancy even in the winter. Cambium is a cloak as thin as a plastic sheet that surrounds the trunk and every branch on trees, but it is not on the tree surface. It is located between the inner bark and the sapwood. This thin tissue of stem cells is responsible for adding new thin layers of cells on the inner bark and a thicker layer on the sapwood. Once set the inner bark and sapwood are unable to divide and produce new cells, only the cambium can do that, and it continues to do so provided its needs of moisture and warmth are met. The cambium produces all new diameter growth and healing from tree damage and cuts that takes place, grafting included.

Since the cambium can be activated on any part of the tree without affecting the rest of it, we can set the proper temperature and humidity to meet the needs of the cambium on only the portion needed. In our case it would be the place where we want the union to form. For the buds on the scion to remain dormant as well as the rest of the rootstock, they must not be in the heated pipe.

My hot callous pipe was made from a 3" x 12' drainpipe that is cut in half lengthwise. Both halves of the pipe were covered with 3" pipe insulation also cut in half lengthwise. A heating cable that can reach 26°C (80°F) was positioned on the bottom of the pipe half. It was difficult to find a heating cable that would go up to 26°C. Most heating cables for de-icing roofing and preventing water pipes from freezing shut off when they reach 10°C. I was able to get 12' heating cables that would shut off at 70°C, and so with a thermostat they could be set to turn off when 26°C is met and then turn on again when the inside of the pipe cooled to 25°C. I found these cables at a business called Canstal Heat Trace Solutions.

Since a heating cable expands and contracts from the heating and cooling cycle, it should not be fastened down to the pipe. We covered the pipe with a mixture of sand and Perlite as a heat sink and to hold moisture to maintain high humidity inside the pipe. We decided that sand can act as an abrasive too, so we decided to use a mixture of Perlite and Vermiculite to cover the cable and ¾ of the bottom half pipe. A cloth sheet about 12" inches wide and 12 feet long was used to cover the mixture and prevent other material from mixing with it.

We placed the prepared pipe on the barn floor where it was about 4°C (40°F.). 120 trees were grafted 1-24 hours sooner and stored in the barn with the roots in boxes, covered with peat moss to prevent drying out until they could be placed on the pipe. The trees were arranged crosswise on the pipe from both sides almost touching with only the grafted portion centred on the pipe. The roots and scion bud(s) would be outside of the pipe where it was cold. Grafts were made with this in mind. Any buds that were too close to the graft area were removed.

The pipe can accommodate both bare root and trees potted in small pots up to 4" x 4" in size. For larger pots, the pipe would need to be raised up.

To control the temperature, an Inkbird thermostat sensor was placed inside the pipe among the trees but protected from free water touching it. The temperature was set to 27°C (80°F.) with a one degree differential. An improperly placed temperature sensor could allow the cable temperature to go higher than the set temperature and that could cause the graft to die from overheating. That can happen if the sensor gets wet or is placed by accident outside of the pipe. A wet sensor will not sense the correct temperature.

There is a chance that a cable fire will take place, so precautions need to be taken. A normal circuit breaker may not trip in time. A GFCI circuit interuter can be used to prevent possible cable fires but it can false trip when a 5 miliamp differential occurs. To prevent a false trip situation a GFEP circuit interupter will trip when 35 milliamps is detected. A GFEP circuit breaker can be installed in your electric panel or a plug in unit like the one pictured can be used with the thermostat plugged into it and the GFEP plugged into the power source.

Continued Pg.7

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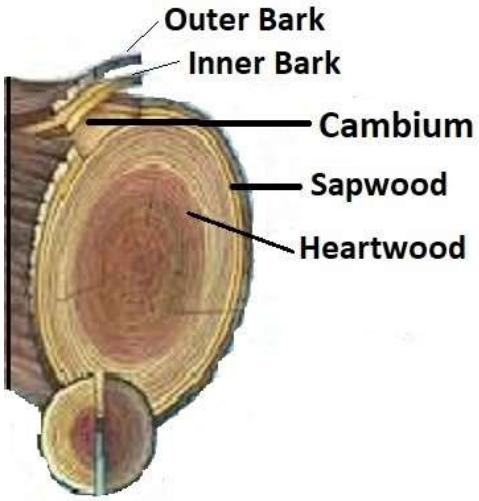
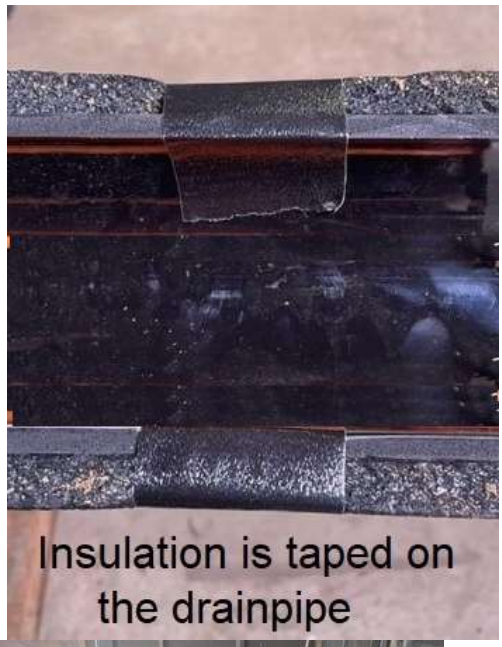
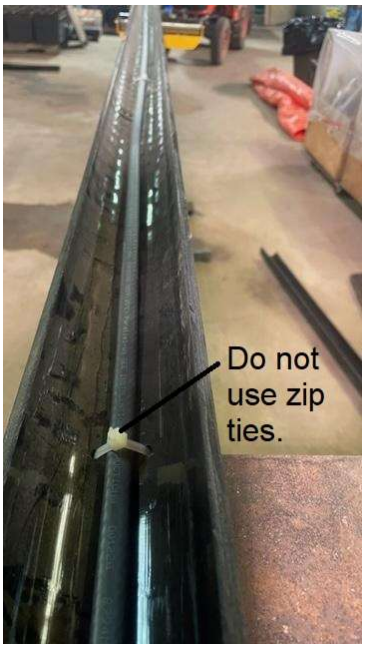
After 21-25 days the trees are removed from the pipe and either potted and placed in a greenhouse to continue into growth or stored in mass beds of peat moss or sawdust at cold above freezing condition (4-8°C) to be planted in spring after frost danger is passed.

This system is suitable for grafting many species of temperate fruit and nut plants, including hard to graft species like beech.







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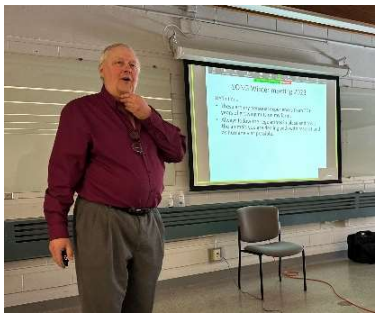
GFEP ground fault protector

Photos from SONG and ECSONG Events





1,2,3 - Fall nut orchard tours 2022 Oct 2 – Thank you to Simon de Boer and Victor Schmidt.

5,6 - ECSONG Winter Meeting in Ottawa 2023 Jan 21

4,7 - SONG Winter Technical meeting in Simcoe. 2023 Mar 16

PUBLIC EVENT

GENETICALY MODIFIED SEEDS & FOOD
WHAT'S NEXT?

Featuring Lucy Sharratt, Coordinator, Canadian Biotechnology Action Network (CBAN).
Join us to discuss the reality of genetically modified organisms (GMOs) and their possible future.
What GM crops are in the ground now and what seeds, animals, and trees could be next? Everyone's talking about CRISPR gene editing technology but what is it, and could it be used to genetically modify everything?

Bring your questions.

SATURDAY, APRIL 15 / 7:00PM
Free admission: Everyone's welcome.
Rotary Hall in the Town of Saugeen Shores Plex
600 Tomlinson Drive,
Port Elgin, Ontario

Snacks & refreshments provided (from Rabbit Dash)
Presented by:
the National Farmers Union-Ontario Bruce Local 320
local320@nfuontario.ca
(Please RSVP so they gauge numbers)
and
the Canadian Biotechnology Action Network (CBAN)
www.cban.ca/events

PUBLIC EVENT

GENETICALLY ENGINEERED TREES IN ONTARIO?
A DISCUSSION OF THE ENVIRONMENTAL RISKS

Genetically engineered (GE or genetically modified) trees are no longer far-fetched. US researchers want approval to plant a GE American chestnut tree in the wild, in the US and Canada.
Speaker: Dr. Ricarda Stienbrecher, UK
Dr. Ricarda Steinbrecher is a biologist and molecular geneticist. She has been examining the risks and impacts of genetically modified organisms (GMOs) on agriculture and the environment since 1995. She is involved in UN-led processes and has been appointed to international expert groups on the risk assessment of GMOs, as well as synthetic biology

SATURDAY, APRIL 29 / 2:00PM
Free admission: Everyone's welcome.
Bruce County Museum & Cultural Centre
33 Victoria Street North (in the town of Saugeen Shores) Southampton, Ontario

Snacks & refreshments provided (from Rabbit Dash)
Presented by:
the National Farmers Union-Ontario Bruce Local 320
local320@nfuontario.ca
(Please RSVP so they gauge numbers)
and
the Canadian Biotechnology Action Network (CBAN)
www.cban.ca/events

SUNDAY, APRIL 30 / 2:00PM
Free admission: Everyone's welcome.
Simcoe Research Station
1283 Blueline Rd, Simcoe, Ontario

Refreshments provided.
Presented by:
the Canadian Chestnut Council
http://www.canadianchestnutcouncil.ca/
song.treasurer@yahoo.com
(Please RSVP so they gauge numbers)
and
the Canadian Biotechnology Action Network (CBAN)
www.cban.ca/events

Wanted

I have been the editor for well over 20 years and I would like to find a replacement to take this position over. You will have 4 newsletters to produce per year. If anyone is interested, please contact myself.
Bruce W. Thurston H. 519-740-6220, C. 226-922-9764, brewster113@yahoo.ca

CLASSIFIEDS

...**MEMBERSHIP** benefits in the Society of Ontario Nut Growers (SONG) & ECSONG (Eastern Chapter of SONG) include three yearly newsletters, along with 3 annual meetings in two regions, set to satisfy the needs of both the commercial growers and the hobbyists. For a bonus, **new three-year membership**, will receive SONG'S own nut growing manual, ***Nut Tree Ontario, A Practical Guide***, a $20 value, for **free**. Simply ask for your free copy when joining SONG.

Fill out the tear off form below and send to:

SONG/ECSONG, Gordon Chinnick, Treasurer, 722 6th Concession Rd, Walsingham, ON N0E 1X0

Dues can also be paid by e-transfer to: song.treasurer@yahoo.com

For added information, view the ECSONG handbook at: http://www.songonline.ca/ecsong/

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Date: ____________________ ☐ Renewal ☐ New membership

Name: ____

Address: ____

City: _________________________________ Prov: __________

Postal Code: _________ Phone#: _______________________

Email: ____

Prefer to receive newsletter by: ☐ Email ☐ Letter mail

Payment enclosed: ☐ 3 Years $45.00
☐ One year $17.00
☐ Other_________

Nut Tree Ontario, A Practical Guide:

☐ Please send my free copy with **new 3yr membership**.

☐ I would like to purchase my copy for $26.00 ($29 US).