Chico, Calif., Here We Come!

Plans are nearly fully in place for the 2008 Chestnut Growers of America meeting. The annual get-together will be July 25-26, Chico, Calif.

Activities will include a welcome party Friday from 6-10 p.m. at the Best Western Heritage, Chico, which is also the meeting headquarters. Saturday will be a full day of presentations, on drying chestnuts and shipping chestnuts, for example; and tours of both equipment manufacturer and orchards. Chestnut snacks and a chestnut-themed raffle are also part of the festivities. Finishing out the day will be dinner at the Black Crow Restaurant.

The northern California setting lends itself well to a family vacation combined with CGA events, as Chico and the surrounding area does not lack for things to see and do. An historic park, nature center, pioneer museum, art center, brewing company and covered bridge are all close by.

See page 10 for more information about the annual meeting. In addition, registration opportunities, links to hotels, a map of Chico and from the Sacramento International Airport and area attractions are available on the CGA Web site at http://www.wcga.net/annmtg.htm

See you in July! CGA

Periodical Cicadas: A Spectacular Catastrophe

by Greg Miller, Empire Chestnut Company

Remember the day that JFK was shot? Remember when the Twin Towers fell? The years 1965, 1982 and 1999 are similarly etched in my memory. If you grow chestnut trees within a range of periodical cicadas you, too, have had or will have emergence years indelibly etched in your memory.

The sound is like nothing else. It’s not the eerie trill – it’s the millions of eerie trills coming from all directions. Your instinct to look in the direction of a sound gets confused. It’s an omni-directional, omni-distant sound experience that can’t even be had through a set of headphones. (cont. pg. 8)
A Message from the President

MIKE GOLD
UNIVERSITY OF MISSOURI
CENTER FOR AGROFORESTRY

Coming to you from soaking wet Missouri! If we can only keep this up to some extent during the heat of summer everyone involved in chestnut production will be happy.

Stimulating research to support the CGA. In the Fall 2007 Issue I indicated that U.S. chestnut growers represent an industry in its infancy. However, with foresight and financial support, Land Grant Universities could help growers to develop our industry at a much more rapid pace. Money talks in the Land Grant System, either in the form of available grant dollars and/or in response to requests (pressure) from grower groups with financial clout. In the same issue of the Chestnut Grower I also raised the question: “Where else might growers and Universities look for financial support?”

In addition to USDA SARE, another opportunity with promise is the USDA Specialty Crop Block Grant Program (SCBGP). This is administered by the Department of Agriculture in each individual state. This program is slated to have increased funding in the coming years. I encourage each of you to get in touch with your Land Grant University or other potential collaborators and your state’s department of agriculture who administer this program to see if grant money can be awarded to help support the growth of chestnut production and marketing in your part of the country. Here in Missouri, we did exactly this and were awarded our first Specialty Crop Block Grant in December of 2007. It is a three-year grant jointly developed with Missouri wine and grape growers.

In our case, there are two main foci for this grant. First, we are trying to develop a cluster of chestnut producers in a particular region of the Missouri River Hills located about an hour east of Kansas City, Mo. (Lexington, Mo., region). We hope to draw in potential growers from a region that has long produced apple and peach crops. We also will be linking up with the FFA instructors in that same region to try and educate potential future farmers about chestnut culture as a viable specialty crop for the future. We hope that we can establish a successful model in this region and expand to other regions in the future.

The CGA Board has organized a Summer 2008 annual meeting on the west coast. Full details are available in this Spring Issue of the Chestnut Grower. Stay dry, enjoy Spring, hope to see you in July.
A U-Pick How-To: Green Valley Chestnut Ranch

by Greg Dabel, Green Valley Chestnut Ranch

“T”here is no local market for chestnuts.”

That was my answer when my son suggested joining the local Farm Trails and listing our chestnut ranch as a u-pick farm. The Farm Trails local guide booklet lists dozens of local farms providing u-pick and fresh products including blueberries, apples, flowers, Christmas trees, pumpkins, etc.

“I can’t imagine enough interest in chestnuts,” I repeated to my son who persisted with the u-pick Farm Trails suggestion.

Our Green Valley Chestnut Ranch began as an experiment in 1983. The property had been a commercial apple ranch since 1854. Some of our trees are over 100 years old – and still producing delicious fruit. Unfortunately the price of apples had declined significantly and local apple processing plants had closed. What do you do with 30 acres of apples?

The Farm Advisor suggested several options: wine grapes, Christmas trees, vegetables, and… chestnuts. We removed 3 acres of the ancient Gravenstein apple trees and planted Colossal variety chestnuts. A year later we had enough chestnuts to flavor our Thanksgiving turkey stuffing.

The following year we put a classified advertisement in Sunset Magazine and sold 200 pounds by direct mail. In the third year we began using a brand-new media called ‘the Internet.’ Sales were good. There were no other Internet sites offering fresh chestnuts grown in the USA. Always looking for new markets and marketing techniques I begrudgingly agreed to try Farm Trails and u-pick.

“We will try u-pick, but we will only be open two weekends in October.” I was emphatic and an unbeliever. “And we will be open only from 1-4 p.m.” We chose the two weekends selected by the Chestnut Growers Association as ‘National Chestnut Week.’ I was still not convinced this was a worthy effort.

At 10 a.m. on the first opening day my son urgently called me on the two-way radio. “Dad you gotta get down here to the barn. There are already eight carloads of people waiting.”

A ‘Hairy’ Idea: New Use for Chestnut Shells

Anew idea for chestnut shells – hair conditioner! This tip is from the Dec. 28, 2007, issue of Haaretz Magazine, Israel, via Mike Gold’s sister.

Following is the “recipe” for softer hair:

“After shelling the chestnuts, place shells in a pot, cover with mineral water, bring to a boil and cook for about 10 minutes. The water will turn the color of tea. Turn off the heat, strain the water into a pitcher and throw away the shells.

“Wash your hair, rinse, pour the chestnut water on your rinsed hair, wait for about 5 minutes and rinse. How soft!”

We just thought you (and your customers) might be interested in this new idea that makes use of an oft-discarded portion of the chestnut! CGA
Chestnut Galls May Harbor Beneficial Insects, Too

Researchers at the University of Kentucky have found that removing chestnut galls by pruning and burning may be counterproductive, according to the Fall 2007 issue of the Journal of the American Chestnut Foundation.

The Asian Chestnut gall wasp (ACGW) is an exotic insect that infests all Castanea species. The gall wasp hijacks the physiology of its host plant to form abnormal plant growths (galls) in which the immature wasps develop. These galls provide the developing larvae with protection and nutrition. Galls prevent normal shoot growth and flowering and eliminate nut production. Severe infestations can kill smaller trees.

Many of the galls though can harbor parasites of the gall wasp – pruning them then can also kill the natural enemies.

“In spite of their unsightly appearance and initial damage,” write William Rodney Cooper and Lynne Rieske-Kinney, “leaving galls on the tree could help promote parasitism...and potentially offer sustainable, long-term control of ACGW.”

For more information, see the Fall 2007 issue of the Journal of The American Chestnut Foundation. The journal is online at http://www.acf.org/journal.php

American Chestnuts Were ‘Like Manna from God’

It’s been close to a century since American chestnut trees produced anything but futility. 2004 marked the centennial of the arrival of the chestnut blight and the “onset of the greatest ecological disaster to strike the forests of North America in historical times.”

The biology of the blight and its ecological effects are well known. What isn’t as well documented is the social and economic tragedy of losing this king of the forest.

In the article “Like Manna From God: the American Chestnut Trade in Southwestern Virginia,” (Environmental History, Vol. 9, Issue 3), Ralph H. Lutts illustrates the “boom and bust” of the chestnut trade in early 20th-century America.

Most trades go through a boom and a bust, Lutts said. What was different about this scenario, however, is that the resource didn’t become over-exploited, as is the case in many trades. It simply died out as the cause of a fungus and the trade died out with the tree.

The boom came with the transportation systems (steamboats, roads and railroads) – now families were able to collect chestnuts and send them to cities, where others enjoyed them as a seasonal treat. Chestnuts had value to be exchanged for merchandise or store credit; it’s the way some families made a living in the fall and winter, in addition to helping to feed their families and fatten their hogs.

When the tree and the trade died, those who counted on the nuts for food and money – the poorest of the poor – were devastated. Many were forced to seek wage labor, leaving their homes for months of the year, if not permanently. A “semi-subsistence economy” was destroyed. The landscape of the Appalachian mountains was changed in more ways than just the literal.

Lutts talks to those who lived through the disaster, combs store book records to find out how big the trade had gotten before the bust, and studies census records to show the effects.

See the article online at http://www.historycooperative.org/journals/eh/9.3/lutts.html
Are you taking some time this spring to prepare or update publications for your chestnut customers? Giving them literature about chestnuts is a great way to introduce them to this wonderful food – and makes sure they don’t get home and have no idea HOW to (or that they HAVE to) score their new purchase prior to cooking.

Chestnuts aren’t familiar to everyone you may sell to – we field numerous questions from customers when we sell our chestnuts at the local farmers’ market and other fall events. We have found that a one-page information sheet, folded into fourths with different topics on each side, is the way to go. We have shelling instructions inside, nutrient facts on the back, and, when the brochure is unfolded completely, four recipes showcasing chestnuts’ versatility. (I have to admit – my first foray into cooking with chestnuts at Thanksgiving this year included consulting our brochure extensively!)

We’d be happy to send you a copy of our unique four-fold chestnut consumer brochure to help get your creative juices flowing. Just send a quick e-mail to hallmich@missouri.edu with your name and address as a request.

But to help you get started on your own in the meantime, here are a few thoughts:

**A new, better way to score chestnuts**

It’s true, you must score – or slit the shells of – chestnuts before cooking or they can explode. Chestnuts contain a high percentage of water, which turns to steam as it cooks and then must escape the shells somehow. This is similar to piercing the skin of a potato before cooking.

Conventional chestnut wisdom suggests making an “X” in the shell on the flat side of the chestnut.

However, the University of Missouri Center for Agroforestry now recommends a new method – via Italy – over the “X” technique. Instead, make a single 1/8th-inch deep slit across the center (equator) on the rounded side of the nut. This creates a hinge that opens much like a clamshell when cooked. The chestnut meat easily pops out of the opening and is ready to eat or use for a recipe.

This technique was adopted from Dennis Fulbright, who observed it in use by Italian street vendors for its nice “presentation” of the roasted chestnuts.

**Nutritional facts**

Nutrient composition of 1 oz. (3 chestnuts/oz.) roasted chestnuts:

- Protein: 1.2 grams
- Fat: 0.3 grams
- Carbohydrate: 14.4 grams
- Fiber: 1.4 grams
- Vitamin C: 11 milligrams
- Calories: 68
- Cholesterol: 0
- Sodium: 23 milligrams
- Potassium: 608 milligrams

Also a source of magnesium and phytonutrients. CGA
A U-Pick How-To (cont. from page 3)

for the ranch to open.” I ran out of the house. Folks were milling around and wondering why we were not yet open.

For three years the Green Valley Chestnut Ranch has been open for u-pick on two weekends in October. Business is brisk. Last year over 50 percent of our sales were u-pick. We offer already picked chestnuts for sale at the barn but most people want to pick themselves. We provide leather gloves and plastic 5-gallon buckets. Families will wander through the 3 acres picking chestnuts. When they return we weigh their bucket and charge $4 per pound.

During the 2007 harvest we counted nearly 300 visitors. They came to pick chestnuts, sample our chestnut puree and chestnut honey. We offered a table of samples, crackers, chestnut muffins, etc. We sold dozens of chestnut splitters (designed and produced on our ranch), chestnut cookbooks, chestnut honey, hot cider, and … 2,000 pounds of chestnuts.

They came from miles. We had busloads from around the San Francisco Bay Area. Some folks came 100+ miles just to pick chestnuts. Lots of Italians and Asians. And a lot of people have come every year.

Last year we set up a picnic area next to the barn and a self-guided tour of the orchard. Signs were posted throughout the chestnut orchard giving visitors the history of chestnuts, cooking ideas, harvesting information and storage tips.

By the end of our two u-pick weekends we are exhausted – and out of chestnuts. 

Visit Green Valley Chestnut Ranch online at http://www.chestnutranch.com/
UMCA Research Update: Thinning Secondary Burs is Best to Enhance Nut Yield

The University of Missouri Center for Agroforestry has performed extensive research on the issue of secondary chestnut burs. Following is a summary of the project, led by Michele Warmund, MU professor of plant sciences, for 2007.

The scoop: Some chestnut cultivars produce two sets of flowers, one much later in the season. These secondary flowers may not have adequate time to mature but still compete with primary nuts for plant nutrients. In addition, two sets of burs can contribute to limb breakage due to extra weight loads.

The study: UMCA researchers found that removing these secondary burs enhanced the nut weight per shoot in the primary burs as well as the number of shoots bearing primary burs in the subsequent growing season.

The good news: a group of trees whose primary burs were killed by freeze during the study had secondary burs with marketable nuts. A natural “back-up” plan of sorts.

The results suggest retaining either primary or secondary burs, but not both, is the best bet for a good harvest.

The next step: Researchers will see if certain cultivars produce secondary burs more often and if there is a way to control or remove secondary bur formation chemically (compared to the conventional by-hand method). CGA
Fortunately, they shut up at night. The visual experience is less spectacular, but the sight of millions of large insects clumsily flying until they accidentally hit something does conjure up visions of Biblical plagues. This audio-visual display is worth experiencing – unless you are a chestnut grower.

Here in my part of Ohio we are in the domain of Brood V. There are 13 broods of 17-year cicadas, and in the South there are closely related 13-year cicadas. Somebody, somewhere is getting hammered just about every year. The adults emerge from the ground in June here in Ohio, and incredibly, they all emerge within a week or two. They climb up tree trunks, pop out of their shells, dry off, crawl and fly away. The males begin singing, females respond to the serenade, and shortly thereafter, the trouble begins when the females start cutting slits in tree branches where they lay eggs. They do their egg-laying in one or two-year-old wood, on large and small trees alike. It’s fascinating to watch how fast a female can cut a slit with her proboscis. The proboscis is a two-part drilling rig that wiggles from side-to-side, pulling itself into the wood. She doesn’t have to push or peck like a woodpecker. The slit ends up wider than the proboscis, so withdrawal is easy. Then she uses her other end to lay eggs. If you’re curious, you can find lots more information about periodical cicadas on the Internet.

What you don’t find on the Internet is what periodical cicadas do to chestnuts. So, I’ll tell you – they devastate them. Cicadas attack essentially all broadleaf trees, but the damage to chestnuts seems to be more severe than on other trees. I don’t know if the cicadas are attracted more to chestnuts or if chestnuts are just more susceptible to the damage. Within a day or two of a branch being slit, the leaves begin to wilt. Some branches that sustain multiple attacks will snap and hang down. From late June to early July (flowering time), the vast majority of the most vigorous shoots will turn brown and die. The cicadas essentially prune off two years’ growth. In 1999, they even attacked little trees in my nursery, lopping them over like a rampaging Weed-Eater.

In 1999, I made a valiant effort to control the cicadas with an insecticide (a contact insecticide labeled for cicadas, but not for chestnut trees). I sprayed my orchard trees once or twice and sprayed my nursery daily. The spraying offered little benefit. Even though it rained dead cicadas, more just flew in. Cicadas fly every day; they don’t do all their egg-laying in one spot. Apparently, cicadas don’t pick up enough insecticide from the stem during egg-laying to stop them. In the nursery, it was a 70 percent loss – only the smallest trees escaped damage, those that were too small for the cicadas to drill into. In the orchard, my expected crop was reduced by 80 percent and all trees were set back two years in growth. (cont. pg. 9)
The mid-Atlantic/southern Appalachian area of the country will soon have some very noisy visitors. One brood of 17-year cicadas will be appearing this year in portions of Kentucky, Georgia, Indiana, Massachusetts, Maryland, North Carolina, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia.

The visitors will arrive in late May or early June. Only the males “sing,” while each female lays about 400-600 eggs using a knife-like organ to pierce small twigs (typically between 3/16” and 7/16” in diameter) on trees. The eggs hatch in about six weeks, the nymphs fall to the ground, burrow and feed on tree roots for about 17 years, when the process repeats.

“From the newsletter of the American Chestnut Foundation.”

What little production I did get was from 27-year-old trees, and mostly from trees in the interior of the orchard (not along the edges). I think my spraying did do some good in this large block of old trees. The cicadas in the orchard were killed on the day I sprayed, and new arrivals tended to land on the outside edges of the orchard.

I have lived through three emergences of periodical cicadas and watched them devastate chestnut trees each time.

My experience is that cicadas are a highly predictable calamity and there is nothing that can be done to prevent their damage. However, being a chestnut grower requires a certain amount of irrational optimism. Cicadas need to maintain huge populations to survive and they need to feed on tree roots continuously for 17 years between emergences. Destruction of forest cover (farming, strip-mining, development, etc.) and/or increasing populations of cicada predators (like wild turkeys or robins) can lead to local cicada extinctions. I’ve seen it happen in suburban areas, but not in the mostly forested rural setting of my orchards. It was interesting to drive around Ohio in 1999 and listen to how spotty the cicada populations were. Due to the stable forested areas around me, I’m not too optimistic about my 2016 chestnut crop, but who knows, maybe something will happen to them between now and then. CGA

Coming Soon (Possibly) to a Tree Near You

The mid-Atlantic/southern Appalachian area of the country will soon have some very noisy visitors. One brood of 17-year cicadas will be appearing this year in portions of Kentucky, Georgia, Indiana, Massachusetts, Maryland, North Carolina, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia.

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“From the newsletter of the American Chestnut Foundation.”

Download the registration form at www.wcga.net/annmtg.htm and mail with conference fee to:
Ray Young, Secretary/Treasurer
PO Box 841
Ridgefield, WA 98642

Registrations must be received by Monday, July 21. Conference fees are $35 for members and $60 for non-members (includes one-year CGA membership.) Make checks payable to Chestnut Growers of America, Inc.

Friday Evening
Welcome Party (Wine, cheese, snacks)
6-10 p.m. Best Western Heritage Inn, Chico. Everyone welcome!

Saturday
8 a.m. Registration, coffee, tea, pastries
8:30-11
   Business Meeting
   Update on Chestnuts in Missouri – Mike Gold
   Chestnut Drying – Lee Williams
   Storing and Shipping Fresh Chestnuts – Harvey Correia
   Unique Value-Added Products – Lee Williams

No-host lunch at the Sierra Nevada Brewing Company

   Weiss-McNair Factory Tour
   Jessee Equipment Factory Tour
   Orchard Tour – Paul and Sandy Harrison
   Orchard Tour and Processing Line

No-host dinner at the Black Crow Restaurant

Lots to See and Do
Find links to the attractions at http://www.wcga.net/annmtg.htm

Bidwell Mansion State Historic Park
Home of Chico’s founder, John Bidwell, a farmer, statesman, politician and philanthropist, and his wife.

Bidwell Park and Chico Creek Nature Center
A 2,238 acre park deeded to the city of Chico by Annie Bidwell

Butte County Pioneer Museum
Houses an impressive collection of artifacts and memorabilia dating from the Gold Rush era to the early part of the 20th Century.

Chico Art Center
A community-based, non-profit art center housed in the old train station.

Chico Museum
Housed in a former Carnegie Library building in downtown Chico, the museum has hosted more than 90 exhibits celebrating the distinct heritage of Chico since it opened in February 1986.

Honey Run Covered Bridge
Built in 1894.

Sierra Nevada Brewing Company
An analysis of local brews is very educational!

Snacks
Bring your favorite chestnut cookies, chestnut snacks, or whatever to share at break time and bring copies of your recipes to share with others. E-mail Ray Young at Ray@ChestnutsOnLine.com if you’re willing to contribute.

Raffle
There will be a surprise raffle that you won’t want to miss. If you have something that you’d like to donate to the raffle, bring it with you and add to the fun. E-mail Ray@ChestnutsOnLine.com and let him know what you’re planning to donate.

Sunday Church Services
See a list of churches in the area at http://www.usachurch.com/california/chico/churches.htm

Accommodations
See more at http://www.wcga.net/annmtg.htm

ANNUAL MEETING HEADQUARTERS
Best Western Heritage Inn
25 Heritage Lane
Chico, CA 95926-1368
Phone: 530-894-8600
To get the $80 room rate, call and make sure to tell them you’re with CGA and that “Rick gave that rate to all CGA attendees.”
Did You Know?

“...The original ‘Colossal’ tree is still standing in Nevada City [California]. It was planted by Benjamin Tonella, a Swiss-Italian immigrant who also planted apples, pears, and walnuts on the property, which he purchased from Felix Gillet, owner of Barren Hill Nursery. C.E. Parsons bought the nursery in 1908 after Gillet died, renamed it the Felix Gillet Nursery, and introduced seedling and grafted chestnuts from the original ‘Colossal’ tree. The tree today is 70 feet (21 m) tall with a trunk circumference of 14 feet (4.3 m) and an annual production of 300 pounds (136 kg) of nuts. Numerous small ‘Colossal’ seedling-tree orchards have also been planted that have produced several named selections.”


Stay up to Date

Please add the following members to your current membership directory:

Jerry Berney  
11129 Little Cove Road  
Mercersburg, PA 17236  
717-328-9148  
E-mail: gerald.berney@usda.gov

Michelle Hall  
203 ABNR  
Columbia, MO 65203  
573-882-9866  
E-mail: hallmich@missouri.edu

K. Van Alfen & Pam Kazmierczak  
CA & ES UC Davis  
33323 Merganser Court  
Woodland, CA 95695  
530-750-2362  
E-mail: nkvanalfen@ucdavis.edu

Please note: Dates are still in flux... the 4th International Chestnut Symposium – September 2008, Beijing, China

On behalf of the 4th International Chestnut Symposium of the International Society for Horticultural Sciences (ISHS), you are invited to participate in the 4th International Chestnut Symposium. The Symposium is tentatively scheduled for Sept. 15-18, 2008, in Beijing. The soon-to-be-held Olympics have been pushing the dates back and may still, according to conference organizers. The Chestnut Grower will provide final details as soon as they are known. Contact chestnut2008@126.com to receive details directly from the organizers.

Program Information: Presentations will cover all aspects of chestnuts, including basic and applied research in the areas of: genetics and germplasm, physiology, production systems, plant and soil nutrition, pests and diseases, post-harvest, nut quality, health benefits and marketing.

Important Dates:

May 15, 2008  
Manuscripts due for publication in Acta Horticulture  
Early registration ends (fee increase after this date)

July 15, 2008  
Deadline to pre-conference tours

We look forward to seeing you!

– Feng Yong-qing (convener)  
Department of Plant Science and Technology  
Beijing University of Agriculture

For more information about the symposium, please visit the International Society for Horticultural Sciences Web site at http://www.ishs.org/ or e-mail conference organizers at chestnut2008@126.com
Dunstan American X Chinese hybrid Chestnuts

Larger nuts than almost all Chinese chestnut varieties; Blight resistant and better tasting than European Hybrids!

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