Chestnut Growers of America

THE CHESTNUT GROWER

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Growing Chestnuts
The Challenges Ahead

Part 2 of a 3-part article
by Bob Wallace
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It is important to have a grass cover in the orchard under the trees that can be mowed close to allow for easy harvest. Finish mowers or flail mowers are used that mow closer than Bush-hog style rotary mowers, and grass species should be chosen that have low growing profiles. Your local Extension Agent can make recommendations of different types available for your region.

Strips along the rows of trees on both sides can be kept clean with herbicides such as Roundup and pre-emergent herbicides to keep weed seed from sprouting, or the areas under the trees can be covered with nursery ground cloth (weed mats) for organic production.

If the area you are planting was not in field agriculture before (that has been plowed regularly and is relatively smooth), you will need to remove stumps and level the surface by plowing first as much as possible so that when grass is established it will be on a smooth surface that can be mowed for harvest.

Pruning

Chestnuts are grown in a central leader form, with the main trunk growing straight and branching beginning high enough off the ground to be able to mow

See *Growing Chestnuts*, p. 4

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There's a New CA Unit On the Market
Introducing the Janny MT

by Vincent Nicoletis
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A French company called Janny MT is changing the minds of several growers with its stackable module for controlled atmosphere storage. Patented in Europe and North America, this bin creates a low-oxygen environment (between 2% and 3% oxygen), that slows down the metabolism of the produce. In chestnuts, shelf life can be extended by 4 months depending on the varieties.

Thanks to the membrane in the lid, the module will release the carbon dioxide and allow the oxygen level to be maintained," says Vincent Nicoletis, Janny MT general manager. "The produce has to be cooled down and maintained in a cold room first before putting the lid on."

Using this system, growers have experienced only one per cent weight loss compared to more than six per cent in classic controlled-atmosphere rooms or cold storage. Chestnuts have to be stored bulk; the capacity of the bin is 600 lbs. Gas concentrations can be analyzed often with a gas analyzer and the atmosphere is maintained through six membranes that can be closed or opened according to the gas readings.

Chestnuts grower Mr Alain Degans from the "Ferme de L'Embucaïre" in France, is using 50 modules. Because the chestnut market is so unpredictable, he's keen on maintaining product integrity with less waste to extend his season and market. Degans' experience is that the bins provide flexibility. Chestnuts can be cooled and stored the day they are picked. The bins allow him to store during the production peak and to unpack bin by bin through December and January when chestnut harvest is over and the price is up.

Mr Degans is also using the same module to store the flour that he is producing from his chestnuts. Thanks to their airtightness, the bins prevent the contamination from insects and humidity.

Today, many farmers are using this equipment successfully in France, Spain, Italy and Portugal.

Vincent Nicoletis, Janny MT's general manager in Canada, points out that the same bins can be used throughout the season with different crops. For example, cherries or asparagus can be stored up to 25 days; and apples or pears for 240 to 270 days.

The modules are stackable to nine in height. According to European experience, the bins have longevity of 15 years or more. For more information, go to www.jannymtca.com or call 519-830-6472.

A MESSAGE FROM THE PRESIDENT

I hope your 2014 chestnut harvest was bountiful this year. I have had the good fortune to travel this year to both the East and West Coasts of our great country. It has been great to see chestnut orchards in Virginia, North Carolina, Washington, and Oregon. Each chestnut orchard has its own operation of harvesting, storing, packaging, selling, and making value-added chestnut products. Everyone is independent in their chestnut business. One of the issues I learned this year is how the chestnut business of these independent owners transfers when the owners retire or die? As a Chestnut Grower, do you have a succession plan to continue your orchard after you are no longer around? In asking this question of individual chestnut growers the answer was that no one was going to necessarily be there to take over the chestnut operation. This issue I think is something for all of us to consider in the future in growing our chestnut industry.

During our annual meeting this year the Board met and we discussed how we might improve our membership and grow CGA. One of our ideas is to improve our Website and develop additional information to help grow the best cultivars in the different regions of the United States. We have a diverse membership and each region of the country seems to have certain cultivars that grow the best and produce good quality and quantity of chestnuts per tree. CGA as an organization needs to provide the right information on growing chestnuts trees as a chestnut crop for the right region. Our focus for CGA will be working on upgrading the CGA Website. The Board has established a committee to work on the Website project. David English is the Chairperson on the committee. The committee is working on selecting a programmer to create a good and functional site that we can use for many years and at a reasonable cost to our association. As members of CGA, we are looking for any suggestions on what you think would be good content for CGA's website. What would you be looking for as information that would best benefit a chestnut grower? Please email David English or myself and we will try to incorporate your ideas in the plan.

Remember the purpose of CGA is to promote chestnuts, to disseminate information to growers of chestnuts, to improve communications between growers within the industry, to support research and breeding work and generally to further the interests and knowledge of Chestnut Growers.

I hope you all had a wonderful holiday season and many chestnut roastings. Regards,

Roger V. Blackwell

EDITOR'S NOTES

We've got lots of good stuff for you in this issue. Bob Wallace presents us with part 2 of his series on the challenges of growing chestnuts. For those interested in controlled atmosphere units you'll find information on a French firm selling a new concept unit available in Canada. David English gives us a first-hand look at using his new FACMA harvester and his praise of the manufacturer for their excellent customer service. Another article on our lack of consistency will reassure you that we continue to be a pretty independent bunch.

Information about how you may be inviting a lawsuit with your website may come as a surprise to some of you but it's not something we can avoid, and Information about your directory listing should be well-received and should offer better opportunities for our growers.

Marina Ferguson talks about the problems in establishing her orchard.

Carolyn

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Business card (4 issues)	$15.00

One classified ad per member per year is free (max 6 lines, $2.50 ea add'l 6 lines). Ad space may be reserved with full payment but must meet established deadlines. If ad is cancelled, money may be refunded if space is resold. Make checks payable to Chestnut Growers of America, Inc.

All ads and other copy preferred in PC format. Email to Carolyn@ChestnutsOnLine.com. Ads must adhere to published ad sizes for space purchased. Call for specifics. Layout of ads will not be done until payment is received. Send materials to P.O. Box 841, Ridgefield, WA 98642, or Fedex/Express Mail to 29112 NW 41st Ave., Ridgefield, WA 98642. Call for further info.

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Using a FACMA Harvester for Chestnuts

by David English
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I currently own the FACMA C120 T trailed harvester from an Italian company that specializes in tree nut harvesting equipment. This machine is designed for all types of tree nuts and the various adjustments make it possible to get clean chestnuts into the bags of your choice.

This season represents my third year using the machine for harvesting chestnuts in my 27 acre orchard. I have over 2500 trees, in various stages of maturity, many of which are over 20 years old and heavy producers. (I know I need to thin out quite a few trees, as these were planted on 20 foot centers based on professional advice available at the time.)

Prior to acquiring this machine I had tried another mechanical harvester, most notably the Savage brand trailed harvester, designed primarily for pecans. I have used and continue to use hand picking since we started harvesting in 1994 and that had worked well until nut production and consequent labor costs started spiraling upward! The Savage could be pulled by small lawn tractor as it had its own engine for harvesting. It quickly became apparent that something bigger was needed!

The FACMA 120 is the smallest trailed harvester suggested for chestnuts. They make larger models as well as self- propelled models. The 120 uses suction hoses to pull the burrs and nuts off the ground into the machine, where various fans and separators bag clean nuts into two discharge bags. (There is a third bag which typically contains debris.) The vacuum hoses are 40 to 60 feet long. There are two forty foot four inch hoses and one sixty foot six inch hose. Maximum efficiency is with both four inch hoses used on either side of the machine. The one six inch hose can get heavy and difficult to use after several hours use. The most efficient use of the machine is with three people; one driving the tractor and one on each four inch hose. Each hose comes with an ingenious handle design that helps prevent the hoses from getting twisted as one moves under and around the trees. This machine will pick up anything that it touches, including small sticks and empty burrs as well as dirt, leaves, etc. It is important the orchard floor be as clean as possible to avoid clogging the machine with debris, although it is easy to clean as needed. It is also important to use the machine in dry conditions as moisture will cause dirt build up in the hoses as well as the fan blades.

The design of the bagging system allows for continuous use, filling bags alternately. We also use a trailer attached to the harvester, as 50 pounds of nuts will quickly fill a bag and it needs to go somewhere! It does not take long to fill the trailer so some bags have to be set aside until they can be brought to the shed.

I have a 34 hp Kubota and despite factory recommendations for running the PTO at a full 540 rpm, it proved too much for my tractor causing overheating. After a review the factory eventually agreed my tractor could run at much less than 540 and still perform effectively, with which I would absolutely agree! It runs much cooler, saves fuel and still functions very well. (Various tractors have different torque at the PTO as that is where all the action is for any trailed machine. I would suggest at least 30-35 hp, but I believe it runs very well at less than 540).

I must say that the FACMA company has been an incredible resource for all my concerns with the 120. I was very impressed with how they responded. If I was having problems with dried burs jamming one of the separators, or if too much debris was ending up in the bags, no matter what was going on, they would send detailed photos with specific instructions on how to fix the issue! I was very impressed with their desire that I be fully satisfied with the machine. And I can say that I am much happier than when I first got it, as things were not so good. I had a problem with various fasteners coming loose, causing one fan blade to move through the machine as well as a bearing bolt and two nuts falling off. These problems, though scary, were resolved using lock washers and lock nuts where needed.

All in all, this machine does everything it is designed to do. I wish the chestnuts did not get scuffed so much, but that seems to be more the result of them flying through the hose than any part of the machine itself. If the nuts are still in the burr, less scuffing is noted. Immature green burrs should be avoided as they will simply be kicked out of the machine.

This machine can be an effective part of the overall harvesting process. It is not all I use as the size of my orchard and with the way the nuts drop over time, I still need/use a hand picking crew. If I had my dreams fulfilled, I could use another trailed machine plus a self propelled machine as well as hand harvesting by the crew of that I now use. There is no single effective process for our operation. Where we are in the panhandle of Florida, I have to harvest every day for about 50-60 days. Between the deer, the squirrels and the heat, the nuts need to be picked up quickly!

Feel free to call/email me if you have any questions about this harvester. I highly recommend it!

Growing Chestnuts, cont'd from p. 1

and allow machinery access underneath (6'+). Getting hit by a low hanging branch with a chestnut burr while mowing is not pleasant! The trees grow in this pattern somewhat naturally, but some limited pruning to remove branches that get crossed or hang down may be necessary. Do not over prune – they are not like peaches that require annual heaving pruning.

Pest Control

Chestnuts have relatively few pests and require spraying only for Chestnut Weevil. Grasshoppers can be a problem in orchard establishment but can be controlled by keeping the orchard floor mowed – they like old field situations.

Japanese Beetles can be a severe problem in certain areas.

Chestnut Gall Wasp was introduced by accident on budwood brought in illegally from China. This small wasp lays its eggs in the growing shoots of the tree, causing a red colored gall to form and contorts the growth of the shoots. It can dramatically affect nut production. However, there is a predator wasp of the native Oak Gall Wasp that also preys on Chestnut Gall Wasp, and the population rise in Chestnut Gall Wasp usually triggers a rise in the predator wasp, and eventually the Chestnut Gall Wasp population declines and gets back into ecological balance.

The best prevention is to never buy trees from nurseries that are in Gall Wasp territory (essentially all of the eastern U.S. except Florida). You cannot tell if budwood or trees are infected because the larvae are microscopic and not visible to the eye.

Chestnut Weevil is spread throughout much of the eastern U.S. It is a small insect that lays its egg in the forming nuts on the tree, resulting in a worm inside the nut. The nuts fall to the ground, the worms crawl out of the nut and burrow underground, emerging the next summer as adults to repeat the cycle. Prevention is by spraying an insecticide (such as Sevin) during adult emergence, usually 1-2 sprays in August across most of the nation, and clean harvesting the orchard to break the cycle. Wormy nuts are separated in post harvest treatment. These prevention techniques are very effective unless there are old trees nearby that are not treated and serve as a reservoir for re-infection.

Harvest

Chestnuts ripen beginning in early September in the deep South, in mid September in the central states and October in northern states. Harvest lasts 4-6 weeks depending on varieties and climate. Most of the growth in the size of the nuts occurs in the last month before harvest, so if conditions are not optimum (enough moisture or an early freeze) the crop can be affected.

Chestnuts are borne in spiny husks called burrs. These burrs open naturally when the nuts ripen and both nuts and burrs fall to the ground.

Traditional harvest is done by hand. We call this a U-Prick operation! Heavy gloves are a necessity. Pickers can be paid by the pound or by the bucket to incentivize them to work quickly, and to control costs. Some growers offer this as a fund-raiser to schools or church groups, etc.

In warmer climates nuts should be harvested daily if possible to lower desiccation and spoilage of the nuts in the field. In northern areas nuts can be harvested less frequently, however, without fencing, predation by deer and other animals can dramatically lower harvest quantities.

Nuts and burrs are brought into the barn and separated by hand or by using a machine called a Pecan Cleaner.This has a rotating drum that rubs the burrs off the nuts and a separates them.

Commercial nut harvesting machinery used in California for almonds and walnuts will work on chestnuts, but the orchard floor must be smooth and flat for this to be effective. The nuts are swept into a windrow between the orchard rows, and picked up with a machine and deposited into bins for hauling to the barn.

Alternatively, suction harvesters made in Italy by FACMA that work like a giant vacuum cleaner are available that suck the nuts and burrs off the ground, separate the nuts from the burrs and put the nuts into bags . These machines are run off the tractor PTO and can pick up as many nuts per hour as 10 workers with only 2-3 people to run it.

Post Harvest and Storage

Once the nuts have been removed from their burrs, they are washed in a water bath. If you have a weevil infection, the nuts must be soaked in hot water (122° F) for 30 minutes and immediately cooled to 32-35° F in a cooler. This kills weevil eggs before they hatch. Nuts with worms (young weevils) float to the surface and are removed and destroyed.

After washing, nuts are run on a sorting line for inspection and then through a sizer. The sizer is a rolling drum with different sized holes, allowing the nuts to fall through to bins below. Nuts are sized by diameter and number of nuts per pound.

Once sized, nuts are placed in a woven breathable polyethylene bag (the type used for rice), typically in 26 pound increments, to allow for desiccation and net 25 lbs/bag.

Because chestnuts are living seeds, if they dry out the embryo dies and the high levels of carbohydrate allow mold to infect the nuts. The nuts must be stored under refrigeration as soon after harvest as possible. Traditionally in Europe they were stored in caves, or under chestnut leaves on the north side of a building in the shade.

Store the nuts at 32-33° F in a walk-in cooler. These may be purchased from restaurant supply houses (those specializing in used equipment) or a reefer shipping container can be outfitted with an electric cooling unit (instead of the diesel).

The cooler should be sterilized with Zeritol or other cleaner and kept clean. The bags of nuts should be rotated regularly as this decreases the spread of mold between nuts and bags. Nuts stored this way should last 2-3 months through the selling season.

Don't Forget

CGA's 2015 Annual Meeting will be held in Stockton, CA June 12-14.

Headquarters Hotel will be the Holiday Inn Express 1-800-315-2621

A special rate of $99 is available for CGA members.

Contact Karri Ridard at the hotel.

Starting a Chestnut Orchard

A Retelling of the Story of Job

by Marina Ferguson
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The plan to have a chestnut orchard solidified when we visited Ray and Carolyn Young, of Allen Creek Farm. Their orchard is orderly, healthy, and productive. When I asked how they did it, Carolyn said "It is a learning process, a surprise every day." That was four years ago…… And every word of that statement has come true.

A Surprise Every Day Indeed

A novice grower trusts sources that claim time in the industry translates into expertise. The following experiences taught me otherwise.

The Purchase Story

Here in the Pacific Northwest, we are limited in our source for chestnut trees. Historically this region has had no chestnut blight or weevils. Ethical nurseries in other parts of the country will not ship to us in an effort to not contaminate this area with the diseases prevalent in other parts of the country.

Patterned on the Young's orchard, we chose to grow Colossals. We felt lucky to find a nursery, (Source A), in Oregon that was experimenting with growing chestnut trees and had some ready to sell. We rented a large truck and drove a distance to pick them up. We found them bundled in groups of ten and twenty in a large warehouse along with hundreds of other bare rooted plants.

Not being sure when they were pulled out of the ground, I specifically asked the owner if I should soak the bare rooted trees for a day or so before planting them. He said "absolutely not, chestnuts do not like wet feet." He had no other chestnut varieties to sell and, confident that we could find pollinators elsewhere, we brought home 205 trees. I assumed he was an expert.

Our land is close to Fort Lewis, 86,000 acres of forest with many deer. We had already put up a deer fence around the designated four acres. Holes had been spaced and dug in wonderful sandy loam. For the few days that it took to round up a work force we kept the bare rooted trees misted and wrapped in large plastic tarps. On the day of planting, all the trees were unbundled and placed in a large watering trough. It took three days to plant 205 trees. We started with Row 1, on the west side of the orchard, and proceeded to plant through row 13 on the east. There were 18 to 19 trees per row, leaving spaces for pollinators and 20 more colossals from whatever new source we could find.

When spring came, the orchard began to look strange. The west side, rows one through six had been planted the first day with about 100 trees. Those trees were putting out a lot of suckers but the central leader appeared to be dormant. It took until almost May for me to realize that all the grafts had died. At first, I blamed the land. Perhaps the soil was too wet on that side of the orchard or the sandy loam contained streaks of clay. But I was confused because 10 trees in the second row looked fine. As did another two trees in rows three and a few in rows five and six. Their central leader was fine and full of green leaves. And the east side of the orchard, rows 7 through 13 was thriving. I spent hours researching and puzzling over the possibilities of soil, wet, wind, sun, etc.

Figure 1 illustrates the size of an ungrafted seedling in the west side of the field in comparison to the twice replaced trees in the background.

I dutifully cut back all suckers in early spring. But almost immediately new suckers appeared and I just could not understand what had caused the graft failure. Finally, the light bulb came on: I remembered my guilt at leaving the bare rooted unplanted trees in the water trough for over a day; I also remembered one of the workmen shouting across the field near the end of planting, on the third day, that someone had left 10 spaces empty in the second row. Another worker had grabbed a bundle of soaked trees and those were planted in row two. Those trees thrived and are now over 12 feet tall. (Fig 1) The grafts of the non-soaked (as per the nurseryman's adamant instruction) trees had died and would need to be grafted on a second set of suckers.

I was so focused on the first disaster that I failed to notice another peculiar phenomena among the trees that were doing well. Two thirds definitely looked like colossals but the remaining third had leaves that stood upright. I took pictures and sent them to a seasoned chestnut grower who told me that those were seedlings and would need to be grafted. But I had purchased grafted trees! Of 205 trees, one hundred would need to be field grafted. Who would teach me and where would I get scions?

The Pollinator Story

After buying the Colossals, I began the search for a source of pollinators. One established nursery, Source B, said they only sold pollinators to customers who bought other chestnut trees from them. I needed twenty pollinators. I finally found a chestnut grower, Source C, that had no Nevada pollinators but did have other trees that should produce pollen. He wanted payment up front or else would not be able to reserve the trees for me for a week until I could collect them. I bought, sight unseen,: ten Marigoule; three Marsol; two Maraval; two Precoce Migoule; four grafted American Chestnuts; 15 grafted Colossals; and some American seedlings. A total of 42 trees and $598.83. I asked if I should bring a truck, but after asking what kind of car I drove, he assured me that we would be able to fit all 42 in my SUV. I put the back seats down, packed some tarps, and drove to pick them up. On arrival I was handed a

Figure 2. The arrow points to the split in the canker

Continued on next page

Starting a Chestnut Orchard, cont'd from p. 5

Figure 4. The arrow points to a cluster of roots suffering from rot.

cardboard box with 42 trees ranging from four to eight inches tall. Good thing I hadn't rented a truck!

I planted the tiny, bare-rooted trees in the orchard. By July most had died. I returned to the grower and bought another set for $573.97. This time they were in tiny pots and had leaves. I planted them in excellent soil near the house. The trees grew two to three inches over the summer. The next spring I transplanted them into the orchard. The little trees put out leaves in the spring and then the graft died. Suckers came up but as I selected two of the suckers to graft I hesitated. My knowledge about chestnuts had grown exponentially and I was understandably concerned about graft/host incompatibility. I called the grower and asked the embarrassing question of rootstock and graft compatibility. He assured me that all had been matched carefully, and as to why the majority of the grafts in all but one pollinator had died he could not understand. When I suggested that perhaps he should replace the trees, he said that since the root stock was still alive it meant that the tree had not died, so he did not feel responsible for the failure. (I did graft two Precoce Migoule suckers from the second batch. The graft took, they appeared to do well for a year and then the graft turned black and died). I dug up the unknown root stock.

Desperate for pollinators on the third year I returned to Source B, (the nursery that only provided pollinators to customers who bought Colossals). They now had 20 Nevadas for sale. I bought all the Nevadas, several Colossals and also one or two of every other grafted chestnut tree they sold -- $612.00! The trees looked good, each three or four feet tall. I was thrilled and planted them in the spaces reserved for pollinators. The other trees were planted throughout the orchard as needed.

Novice Grafting

The fact remained that 100 of my trees needed grafting. I had never held a grafting knife. I watched a lot of videos, asked everyone for advice, and practiced on twigs and branches in my kitchen. Carolyn Young kindly mailed a large batch of scions each year. By the third year I had grafted over 90 trees, each with two or three grafts, just to make sure. Sucker grafting was easy and successful but large branch grafting was a challenge. I was afraid to cut into the main trunk so I climbed on the tractor and grafted smaller branches. Some of those trees now look a bit like a poodle's tail. A kind neighbor watched me through binoculars ready to call 911 should I fall.

In the spring and summer of the third year we congratulated ourselves over a job well done. The grafts took. I had pollinators. I now had an orchard that, although lopsided, had trees in almost all of the allotted spaces. And my garden nursery, started with the very first 27 nuts of the first year and some from the Young's, had 140 trees meant to expand the orchard. I never wanted to be at the mercy of tree suppliers again. All was well.

Figure 5 This is the only pollinator that survived from the two purchases of approximately 45 pollinators from Source C.

The Fourth Year

As this last spring turned into summer, I noticed that some of the pollinators from Source C, planted the previous year, had dark spots on the leaves and black streaks on the trunks which split open. And some of the new colossals from Source C wilted as soon as the weather turned warm. I dug them up. Some had crown gall and others appeared to have root rot (figure 4). In addition, potted trees in my garden nursery were turning yellow.

I sent pictures of the problem to Sandra Anagnostakis at the CT Agricultural Experiment Station. Her reply was chilling. The root rot might be phytophthora ramorum, the highly infectious fungus of sudden oak death. She suggested I take samples to the regional extension office. Washington State University has a plant disease office in Puyallup. One person mans the clinic, which serves almost all of western Washington. The clinic requests that, if possible, a whole plant be submitted. I took two potted trees from the nursery. And then waited, and waited. In the field, I noticed that some trees adjacent to the extracted ones looked poorly. I worried.

In the meantime, I researched test kits for phytophthora ramorum. I discovered that the kits could only identify the genus phytophthora, which consists of about 100 species of which ramorum is but one. Two weeks passed and the plant pathologist told me that she was unable to definitively identify the organism, and also told me the clinic was closing for a few weeks. I rushed up the day before closure with new samples of leaves, trunks and roots from uprooted trees from the orchard. Although the pathologist is not familiar with chestnut trees, she is experienced and competent. She showed me the results of the earlier samples taken with the kit I had thought to buy. The results were negative. She looked at the new leaf samples, and at the rotting roots, and thought this set might produce better results. She promised to plate the samples and incubate them for a more sophisticated test while she was gone.

By fall, I had removed 30 trees from the field, mainly the Nevada pollinators and Colossals from Source C. Another 20 trees appeared to be affected based on leaf and trunk spots. A fifth of my orchard! The garden nursery fared even worse. More than half of 140 two year old trees were removed.

See Starting a Chestnut Orchard, p. 8

A Marketing Opportunity You Can't Afford to Miss

As the CGA website is being redesigned it has become possible to do it in such a way that it offers greater marketing opportunities for growers. Those of you who sell retail know that your customers want to know that they are dealing with "real" people, people who take pride in their orchards, and people they can trust. And that means you need to let them know who you really are.

Using a photo and telling a little bit about your orchard gives you an opportunity not available in our original website, put up in about 2000. Debbie Milks was willing to write something about their orchard for a sample we might use. Her example is outstanding. It gives you a little about their background, about their philosophy and describes a bit about how they work. These are all the things customers enjoy learning. From the listing they can click on a link to your website and/or contact you by a link to your email.

In addition to offering marketing opportunities for growers, it will serve as a site where "wannabe growers" can locate someone who might be willing to help them get started.

The listings will be organized as they currently are -- northwest to southeast and there will be a submenu along one side that allows the user to click on a hyperlink and be taken to the state within the region.

The paid directory listings are still $25.00 and can be paid for at the time you renew your membership. You can submit your photo and text by email to the webmaster at Carolyn@ChestnutsOnLine.com. The photo needs to be one of you in your orchard. Text needs to belimited to 150-200 words, and the photo needs to be in a JPG format no less than 200x200 pixels. If you need help contact the webmaster.

Your renewal form is included with this issue.

Free listings are still available and will appear as shown beneath the paid listing sample.

SAMPLE PAID LISTING

Chestnut Charlie's Organic Nuts

PO Box 1166, Lawrence, KS 66044
(Website) (Email) Phone: 785-841-8505

Charlie NovoGradac, like his father before him, has been driven to plant trees all his life. Whether talking about soil erosion, water quality, air quality, or global warming, he believes that trees are part of the solution. Inspired by the visionary economist J. Russell Smith, author of Tree Crops, a Permanent Agriculture, Charlie understands that returning to tree crops can help heal the planet and, at the same time, produce healthy food.

As a trial project, Charlie started planting chestnut trees in 1995 on old farm ground north of Lawrence, Kansas. Over 20 years we have learned that Chinese and Chinese-American hybrid trees thrive better than other chestnuts in the soil and climate of eastern Kansas. We now have about 1500 nut trees on 20 acres. We are naturally free of chestnut weevils. We have been certified organic since 1998

Charlie and his wife, Debbie, hire local people to gather chestnuts by hand daily through September and October. We float-test, inspect, sort for size, and refrigerate all chestnuts promptly as they fall in order to maintain the highest quality. Our customers, including people from the "old country" who grew up using chestnuts, reassure us that our fresh chestnuts are excellent.

SAMPLE FREE LISTING

Chauncey's Chestnuts

1234 Honey Bucket Lane, Barrow, AK, 99723, Phone: 907-478-8520

Living Up to Our Reputation

Consistently Inconsistent

We had a number of members comment on the article last year that showed the inconsistencies in how we describe our nuts for sale. As growers we were described as inconsistent. I can assure you that we haven't changed though it seems prices have increased. Thirty one websites were reviewed for prices and size descriptions. Each of the websites represented members of CGA.

Only one member described nuts as "mini", between 0.6" and 1" and sold them for $4.25/lb.

Small nuts were described as anything less than 1.125" and various descriptions within with two growers giving no dimensions.

Seven growers listed medium nuts for sale ranging from 0.875" to 1.25" in diameter. Two labeled the nuts medium, but gave no dimensions.

One grower listed "standard" as a size but gave no indication what that might mean.

Nearly everyone had large nuts and they were described as anything from 1" to 1.5" in diameter.

It was interesting to see that the two growers who advertised extra large nuts described them as either 1.125" to 1.25" or as anything greater than 1.25".

Pity the poor consumer who is trying to figure out just what it is that the grower is selling and how it will fit their needs.

Then there are the jumbo nuts. They are described by various growers as being between 1.0 and 1.5" and by others as anything greater than 1.5".

The websites surveyed this year may or may not have been among those viewed last year so an exact comparison isn't possible. What we have seen though, is that the average price has either increased or at least not decreased.

The average price for jumbos last year was $6.50. This year it increased to $6.58, while the average price of extra large decreased to $5.13 from $6.17, obviously different orchards were involved.

We saw the average price of nuts described as large increase from $4.70 last year to $5.89 this year. This group represented the largest number of growers and is encouraging. Medium size nuts also increased from $4.11 to $4.93.

A couple of the growers who did not indicate a size range for their nuts did describe how many nuts per pound there were for each size described. For most customers that suffices.

The good news is that in general we see prices that show growers are paying more attention to their net. The bad news, unless you don't consider it bad, is that we're not playing fair with our customers. We are not only in the business of earning a profit; we're also in the business of providing a service and providing it well. If we're not adequately describing what we're selling are we really doing that?

Starting a Chestnut Orchard, cont'd from p. 6

The Nevadas appeared to be most affected. Based on a Michigan State University 2012 website article I began to worry that perhaps the newly purchased trees might have brought in Cryphonectria Parasitica.

MSU Chestnuts 2012

In the 'Colossal' orchard, one or maybe two 'Colossal' trees were infected, but most of the infections in this 'Colossal' orchard were in the pollinizing cultivar 'Nevada', a European X Japanese hybrid we don't plant any longer because it was so winter sensitive. This cultivar, where it can survive, is an excellent pollinizer for 'Colossal'. But of all the trees in this orchard, most of the trees that contracted the blight were actually the pollinizers 'Nevada', probably due to the winter creating wounds on the trunks that invited in the chestnut blight fungus.

Perhaps this was the reason that the Nevada tree was so hard to come by?

When the plant disease clinic reopens I hope to get a clearer picture of what organisms are infecting the orchard. In the meantime we are removing more dirt from the planting holes. Fresh dirt from another part of the property will be added to the holes. All equipment, shoes and even the tractor tires are sprayed with Clorox before we move to a healthy part of the orchard. We are careful that our clothing does not brush against any tree. And now that the leaves have dropped we will begin a major clean up.

In Conclusion

The title of this article came from a friend, who after listening to my woes, asked if I didn't feel a bit like Job? Yes and No. I moved from feeling victimized by the ignorance of "experts" and lack of industry regulation, to appreciating the physical work, clean air and healthy trees. And to having a tremendous respect for farmers who strive to make a living in spite of ignorance, greed and weather.

Harvest: The first year, 80 trees had beautiful female flowers. A friend a mile away had two chestnut trees in her yard. For several days I went to her house, cut branches with pollen, tied the branches to the end of a long bamboo pole, got on my tractor, and pollinated my trees. Harvest the first year was a delightful 27 nuts. The second year pollination was still by hand and my harvest was 56 nuts. Some day we would count the harvest in pounds but for now, a harvest was a harvest! The third year harvest was 149 nuts. The fourth year, the three foot tall new Nevada pollinators and the only surviving pollinator from Source C, a Marsol, produced a harvest of 600 nuts!

Weed Control: Ours is an organic orchard, weeding is done by hand. The first two years all 241 trees were weeded. The third year we decided that the larger trees (now over 12 feet tall) could fend for themselves and concentrated on the small and new. We applied spent mushroom compost, composted manure, and added a layer of hog fuel over the top (our attempt at weed control). And since I think the orchard grass needs to be healthy, organic composted chicken manure is broadcast over the four acres twice a year.

Watering: After dragging 100 foot hoses and five gallon buckets around for a few months in the first year, we rented a ditch digger and laid 9,000 feet of PVC pipe. Seven main lines, 450 feet long, were placed between each two rows with 12 foot secondary lines at 90 degrees going to each tree. We bought seven regulators and several thousand feet of drip line to surround each tree and rigged up a system that allowed for the addition of fish fertilizer to the water as needed. The only drawback to the whole system was that the holes of the emitter lines plugged up easily so each line has to be checked every few weeks all summer. Every year we have replaced all the emitters. Cumbersome though it is, the arrangement allows us to dispense water to each tree according to size and water requirement, as we still have trees ranging from one to 14 feet tall.

Rooting Cuttings of Chestnut Workshop

The Midwest Nut Producers Council and Michigan State University's Rogers Reserve will sponsor the Rooting Cuttings of Chestnut Workshop, June 20, 2015 on the MSU campus in East Lansing, Michigan.

Dr. Beatric Cuenca, of TRAGSA, at the Universidad de Valladolid will be one of our special guests to help describe the methods used in Spain for rooting cuttings of certain cultivars of chestnut. The University of Valladolid is a public university in the city of Valladolid, in the autonomous region of Castile-Leon, Spain. Established in the 13th century, it is one of the oldest universities in the world. TRAGSA stands for Transformación Agraria, S.A. and it is a large public company that promotes rural development services, as well as environmental conservation and emergency relief operations. Dr. Cuenca works in the research and development department for that part of the company that deals with forest nurseries.

Dr. Cuenca began working with TRAGSA in 2000, after finishing her Ph.D in Santiago de Compostela University, on somatic embryogenesis and caulogenesis in Fagacea species. At that time, TRAGSA needed a researcher to start the R&D section, dealing with selection, breeding and propagation of chestnut and cork oak. Dr. Cuenca states that there is a big gap between science and industry in forestry in Spain and her goal is to connect them as she works closer to the final user so she will k now better the problems and needs of the user. Her group searches for solutions with the help of a research institution. She states, "This is one the advantages of my job, I keep in touch both with growers, forestry services, as well as with the researchers."

Since chestnut is so important in Galicia, the Spanish region where the nursery is located, her group uses micropropagation to produce large amounts of chestnuts. Her research has been focused on new more efficient systems of micropropagation for European X Japanese hybrid cultivars and more.

Plans for the workshop are still being formalized. Currently, the plans are to hold a day-long meeting on Saturday, June 20. The meeting will begin at 10:00 am, include lunch and finish in the late afternoon. Presentations will be made by Dr. Cuenca and others. Additional workshops will be held on Thursday and Friday, June 18 and 19 for professionals involved with nurseries and tissue culture. Meeting infotion including registration will soon be up on the MSU website www.chestnuts.msu.edu.

Are You Inviting a Lawsuit?

In a recent article in the Wall Street Journal it is cautioned that businesses should prepare themselves for a new group of "accessibility" lawsuits claiming that their websites do not comply with federal disability laws. Last June, a federal district judge in Massachusetts became the first to rule that the ADA's accessibility requirements apply to website-only businesses as well as brick and mortar businesses. The case involved a suit brought by the National Association of the Deaf against Netflix. It demanded the company provide closed captioning for its Internet video subscribers.

The Department of Justice hasn't posted official compliance standards for websites yet but the lawsuits have started without them. Those standards should be made available in 2015, we're told.

If you have a website, as the majority of growers do, you need to find out if your site is compliant. This may not prevent a lawsuit, but could substantially decrease the odds.

Is your website in compliance?

- Does every image, video or audio file have an alt tag (alternative description) to describe it?
- Do videos have text description available either as subtitles or as a transcript?
- Do decorative graphics have (alt="") definitions?
- Would you be better served by creating a link to a video rather than embedding it in your site?
- Does the software used to create the site support the use of screen readers for those with impaired vision?
- How will you enable a visually impaired person to use captcha software? Is there an alternative?
- . . . and the list goes on.

Think about the needs of someone whose vision or hearing is impaired. What do they need to access your site? The list above is but a smidgen of the standards that your website will be required to meet. A number of sites offer ADA compliance tests for websites. A Google search should provide them if you're interested.

The Cook's Corner

Chestnut Dip

from The Guardian

Ingredients:

1/2 lb fresh chestnuts
1/3 C parsnips, chopped
1 garlic clove, very finely chopped
juice of 1 lemon
4 tbsp olive oil
2 tsp ground cumin
2 tsp paprika
2 tbsp tahini
salt

Instructions:

Roast or boil nuts and remove nut meat. Simmer the peeled chestnuts and chopped parsnips in lightly salted water in a medium saucepan for about 20 minutes. Drain, reserving 2 to 3 tablespoons of cooking liquid.

Tip the chestnuts, parsnips, garlic, lemon juice, olive oil and spices into a food processor. Blend until creamy. If the mixture is particularly thick, add 1 to 2 tablespoons of the cooking liquid to loosen.

Add the tahini. Blend again and then check the seasoning.Serve at room temperature. Very nice on crackers, absolutely delicious with hot sausages!

Chef image courtesy of Grant Cochrane, FreeDigitalPhotos.net".