

## What I Wouldn't Do Again

*Archive, from 'The Chestnut Grower,' newsletter of the Chestnut Growers of America  
Provided by the University of Missouri Center for Agroforestry*

*Winter 2009:*

"For us it was our drain tile system. We didn't realize how important good drainage was and how marginal some of our land was. We put it in the year after we planted the trees so it wasn't the easiest project, but it's really paid off.

"Another thing we should have done differently was our processing line. We had been told that we should plan for full production and while we thought we were doing that, we didn't. It meant the initial system just couldn't handle the volume and we had to build another line to handle it."

*Spring 2009:*

"A couple of things I wouldn't do again would be to aggressively prune bottom limbs off grafted trees and use bamboo stakes.

"I tried to save money using eight-foot bamboo stakes. They were, at best, good only for one growing season and were more just a security blanket by the second year, because the stakes were mostly rotted below ground.

"Since I had the 'security' of the bamboo stakes, I also pruned off too aggressively the lower limbs of the young grafted chestnut trees. Then, in the second year we had a windstorm and we ended up with 22 trees with the main trunk snapped in the wind.

"Now trees are allowed to build thicker trunk caliper by keeping the lower limbs on the trees a couple of extra years to provide better wind resistance and we spend the money on stronger 10-foot steel conduit stakes."

*Summer 2009:*

"The weed-eater. When I began planting lots of trees in the 1980s, I had the problem of grass and weeds growing around them that I couldn't get with the brush hog mower. So, I bought what was then a top-of-the-line Echo trimmer, both with string head and steel blades. The string didn't do much with the big weeds and woody weeds (brambles, multiflora rose, etc), so I resorted to the steel brush blade. It was really good at zinging off weeds. And no matter how careful I was, it was also good at zinging off chestnut trees. The trimmer is now enjoying a comfortable retirement hanging in my shop. I now use herbicides to control vegetation around my planted trees – but this is a topic for "What I *would* do again."

*Fall 2009:*

"Plant my trees at the wrong spacing. My first planting of Chinese chestnut seedlings was about 500 trees in 1972 (seeds planted in 1972). The seedlings were planted in an orchard with a spacing of 35-40 ft. in accordance with my dad's direction. Measurement was approximate; done by pacing. Little or no

care was given to the trees for their first decade, not even mowing. By the mid 1980s the trees looked widely scattered in a sea of grass to be mowed. Production was 1,000 lbs. or less per year for the whole planting; per acre yields were too embarrassing to even think about. I vowed to never again make the mistake of planting trees that far apart. So, I planted my next orchard of 1,000 trees at a spacing of 6x8 meters (equivalent to 20x25 ft.). The seedlings planted at 6x8 meters began producing reasonably nice crops just before canopy closure at age 15-20; subsequently production has leveled or declined at something around 1,000 lbs per acre. Meanwhile, the old widely-spaced planting has fully developed tree crowns that nearly fill the orchard space but with comfortable spaces between adjacent crowns. Production is around 2,000 lbs. per acre. So, I've vowed to never again make the mistake of planting trees closer than 35 ft. If you want to grow seedling Chinese chestnuts, or grafted Chinese chestnuts without a lot of pruning, they need to end up at a spacing of about 40 ft."

*Winter 2010:*

"It has long been my belief that we plant trees for our great-grand children to enjoy. Trees are generational. Especially chestnuts trees, that when taken care of, can out live several generations. They can supply enjoyment through beauty, environmental enhancement, economic return and a sense of pride that a person has contributed something back to this earth. My biggest fear is that when I'm gone, there will be no one there to nurture and care for my trees as I have. What I wouldn't do again is wait for so late in my life to plant trees, so I would have more of my life to enjoy them."

*Spring 2010:*

"I would never again lay out drip irrigation using well water – at least not without prior testing and expert consultation. Apparently, drip emitters works well enough with chlorinated city or rural water so long as you use particle filters. My well water was clear and had tested OK to drink. But I was naïve and overconfident when I home-designed and installed a drip irrigation grid for about 1,000 chestnut trees. My system clogged after the first few weeks. If I had consulted information available through the cooperative extension service, I would have known that certain parts per million (ppm) concentrations of any of four dissolved minerals: iron, sulfur, manganese and calcium, pose either a slight, intermediate, or severe limitation for drip irrigation. Minerals in solution are not removed by filters. When exposed to oxygen, bacteria or heat the minerals precipitate as slimes and scale. Too late, I had my water tested by a commercial lab. My water scored "severe" in three minerals. The fixes involve acids or other chemicals, which need injection systems, or aeration and settlement tanks, second stage pumps and sand filters. The necessary chemicals cannot be used in organic agriculture, the technology requires expertise, and the money is budget-busting. Our chestnut trees survived, regardless of the irrigation failure. I'm still searching for an economical way to salvage my investment and make some use of the buried pipe and miles of poly drip tubing which is now rolled up and leaning against my trees."

*Summer 2010:*

"Years ago I planted shade intolerant trees (including chestnuts) in small openings in existing forest. My idea was to gradually expand the openings by clearing trees and brush around the planted trees. I spent years of work and thousands of dollars on this project, and I have nothing to show for it. Shade intolerant trees just won't grow under those conditions."

*Winter 2011:*

"I needed to topwork 36 older Willamette chestnut trees to another cultivar due to poor performance and crop load limb breakage. I used bark inlays on stubs as big as 3-4 inches. Normally I use aluminum foil and sandwich baggies to seal up the grafts but this time decided to use Doc Farwell's grafting compound to do the sealing, figuring it would be an overall time saver with less aftercare of the graft. While putting on the mustard colored compound, I decided that more is better and covered the entire cut area of the stub with the compound. Well, the effects of sealing the entire stub became evident over the growing season. I started noticing small scarab beetles feeding on the stubs. On close inspection of the feeding areas, I could smell fermentation and the area being overly wet. My over enthusiasm of sealing the stubs basically had sealed in all the moisture accumulating at the stub with no way for it to evaporate. I didn't lose any of the grafts, but fear I may end up with some hollow trunks due to allowing a site for fungus to get a toe hold. I now pretty much stick with my original foil and sandwich baggie, and if I use the Doc Farwell's compound, it only goes on less than half of the overall stub to allow for the stub to breath."