

American Chestnut Cooperators' Foundation

2661 Forest Service Road 708, Newport, Virginia 24128

<https://accf-online.org>

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Dear Friends & Cooperating Growers:

Since March 13, the safety and solace of our chestnut groves has been my harbor. The human pandemic freed up extra time and focus to spend on ACCF chestnuts. The resulting aches and pains remind me of the days well spent.

We have taken down all online reporting; you may send the enclosed 2020 Growers Report via US Postal whenever convenient; reports are never too late, always welcome. Please note the address change, a new house number for the same house on the corner of FSR 708 & US 460. The Growers Report form is on the back page of this newsletter.

2020 Harvest: Harvest is currently scheduled to proceed with compliance to CDC Covid-19 precautions concerning small group size, masks and 6 foot distancing. Volunteers will meet on the mountain 9 a.m. at the Big Field, to tour and harvest. Next, following about 1/2 hour travel & snack break, we meet at the locked Airport gate. This second part of our tour/harvest is in a much smaller plot on flat land where harvesting is easier. Here we will observe the effects of climate stress among many large & small grafts of the same mother trees that thrive in the Big Field. **Open harvest dates** from which to choose are September 12, 19, 26, & October 2, 9, 12. Only burs collected on the first 3 dates can be mailed to our growers who are unable to attend harvest. More specific information will be mailed, *upon receipt by August 14*, of your Grower Agreement & Harvest Request form.

I believe all our growers can learn how to process their chestnuts to kill weevil larvae that could otherwise ruin seeds. It is simple, but a little tricky for beginners, and the right equipment tested ahead of time will solve that. You need a water thermometer calibrated for easily reading 120F, a big & deep pot with capacity for

4.5 quarts of water plus chestnuts, and bag(s) made from nylon netting to contain the chestnuts, so they can be quickly moved out of the hot-water bath and into a sink of cold water to stop the treatment. You also need a reliable timer. No matter how small the chestnut batch, you need the big pot for water to hold a constant temperature of 120F for 20 minutes. The thermometer should not be attached to the pot, or touch its bottom, but dangle in the water, as may be accomplished with a string tying it to the hand-pull on a cabinet above the stove top (the tricky part). You find chestnut bags in the grocery store, laundry section: the bags used to protect delicate clothing in the washing machine or a double-mesh nylon scrub cloth (cut open to make a bag) will serve. To kill weevil larvae, treat chestnuts in water bath at 120F for 20 minutes, followed by a half hour in a sink of cold water to stop the treatment, and an hour of drip-dry in a colander or strainer. Now your chestnuts are ready to plant. *Never store chestnut seed in the refrigerator*, where easily lost and ruined by desiccation or mold. If you were unable to prepare sufficient planting holes; *make a nursery bed. for planting the extra chestnuts before you give them their hot water bath.* “How to make a nursery bed” will be included among the details we mail in August to harvest participants.

Correction: In January’s Newsletter, I used “resistance” to describe the contribution the A4-3 tree could make to our breeding program, where “adaptability to climate stress” more precisely describes the value it adds to the Airport pollen mix. This spring again I thought A4-3 was dead, till green leaves started on April 29, over all but the lowest limb.

Fall is the safest time to **prune chestnuts**, when the blight fungus doesn’t release spores into the air, thus blight is unlikely to enter a fresh wound in the bark. Unless you are an expert, consider pruning only seedlings that measure no more than 1/2 inch in diameter *at the base*. Before transplanting nursery seedlings to their permanent site, prune all branches. Thereafter, prune branches growing at an acute angle to the stem, challenging the leader and slowing upward growth. Branches that get more sunlight than their leader or receive sunshine before the leader does can overtake the leader unless you prune them. Two competing leaders slows upward seedling growth.

American chestnuts should grow straight upward, doubling their size each year until they slow down to annual 10 foot increments. Chestnuts grow up only as fast

as the taproot can go down. Tulip poplars 100 ft tall and their stumps mark the deepest sandy loam areas where best growth is possible. I learned this by watching them grow in the Hotine, or "H" plot. We chose this place where USDA-FS crews from Blacksburg Ranger Station made a clearing for us in 2003. Several years after planting, frost damage at the bottom of the plot suggested we might have chosen a better site a little higher up the mountain. Many "H" chestnuts planted 2004 through 2006 are over 50 ft tall, but flowering on them is rare and chestnuts are rarer. I used to attribute this to a predominant mother tree known to mature later than all others. Now I think late frost damage may be a contributing factor. I don't visit Hotine nearly as often as the Big Field or Airport, I just happened to notice the tops of the tallest trees blackened May 28, while checking for trouble on the A4-3 graft.

My Report: From the lost & found rehydrated chestnuts I started indoors and mentioned in last January's newsletter, 10 survive in our yard in individual cages on their permanent sites, where I planted them with several layers of protection, on warm evenings March 28 through Easter. They are not nearly as good looking as my other chestnuts harvested on the same mother tree, also on the last day of 2019 harvest, and planted in yard nurseries on November 4. I shall never repeat the indoor experiment; it is too much fussy work, besides an inferior product. It demonstrated that chestnuts that float in water for up to 24 hours may still grow, but far better, if planted in the yard nursery.

Most fine mornings from March 28, through April 27, I was **grafting**. I made 15 grafts of which 4 grow vigorously to my amazement and delight. This was unexpected because of numerous technical blunders during graft execution and my need for double the usual time to complete a graft and give it full protection. I finished all grafts anyway, to stay outdoors longer and for practice. Two successful grafts were first attempts on sprouts from recently culled large chestnuts in our yard. The first graft to an established large root system always has the best chance for strong growth. The other successes across 460 and in the Hotine plot could be attributed to better scion collecting, at exactly the right time, when buds are only beginning to swell but remain tight and brown, or to having made preparations for grafting in January instead of March. This gave extra time for various applications to have their intended effect, to strengthen roots and deter insects and rodents. Other possible factors include good luck in choosing the stocks and timing of the

days I happened to be able to check grafts to pinch off competing buds (on the stock below the scion) before they could prevent graft union. John Elkins taught me to graft in 1991; since then, it has been my favorite pass-time. Up to five years ago, I used to make as many as 50 grafts per spring but rarely saw this many grow. My percentage of takes was too embarrassing to report. Lessons learned: perfect grafting technique is not necessary, old clumsy fingers do not preclude successful grafting. Scion collection and grafting preparations are more important than execution, and every grafter can use a dose of luck. Now I believe many more of our successful growers can become successful grafters.

This fall, I wish we may do a better job of sharing the coming harvest with Growers who are unable to attend. To pull this off, I need everyone's earliest and closest attention to the 2020 Harvest Request form (enclosed). I shall assign harvest dates daily in early August, as your Request forms arrive in our mail box. I look forward to meeting many old friends and as many new growers as possible.

Respectfully submitted,

Lucille Griffin, Executive Director

Other ACCF Directors:

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Dedicated to the restoration of American chestnuts