Dear Friends & Cooperating Growers:

Like the spring that makes our chestnuts grow, we greet you! Thank you to all who have returned their 2020 annual grower reports. Reporting rates have been strong especially for PA, VA and TN cooperators. No matter when they may arrive, we welcome your reports. They assist our progress by highlighting growers' problems. They suggest the topics to be covered in each newsletter: solutions to common grower problems, ways & means for new growers to avoid these problems and for established growers to overcome them. Over the years, most of our cooperators have reported setbacks and often the solution is suggested by their site description or time of planting. I have been on the job long enough to make most possible mistakes, learned that mistakes are the best teachers, and thus, our reporters are bound to become our best growers. This newsletter includes a focus on grower reporting as well as my 2021 case study on tackling potential gall wasp setbacks, plus plans for our 2021 Harvest.

**Gall Wasp Report**

The last week in March, we applied the experimental treatment to deter gall wasps that was OK'd by our tree service professionals, Frank Lloyd and James Raitmaier, last winter: We used Hi-Yield Systemic Insect Granules, (0.22% Imidacloprid), available at our local Feed & Seed farm supply store. We dug with a hand trowel, 2 or 3 holes about 5 inches deep on the uphill side of each chestnut, just outside the cages, filled halfway with the granules and covered with loose soil We treated both our yard and the Big Field; both places in 2020 were heavily infested with this pest. It rained & rained the following week, exactly the conditions prescribed for success, and field examinations through May have verified this. I did not carefully measure
tree diameters or product doses. But it appears that precision isn't necessary and our time is worth much more than any amount of 'wasted' Imidacloprid.

I didn't treat the Airport because we have had no gall wasps there for many years, or so thought. While checking the progress of catkin growth in May, an exercise necessary for guessing when harvest should start, on one graft I found 52 pinkish galls on deformed leaves among the branches within reach, plus the black remains of the parent galls on higher branches out of reach; they must have developed last August, their presence must have been hidden by dense foliage. Next 2 days we returned with ladders & pruning poles, to remove the galls by hand or the infested branches. We could only reach within 10 feet of the top of the tree. To apply Hi-Yield, I made 4 holes 10 inches apart outside the cage, halfway around the graft, by driving a rebar stake 4 inches deep, on the way down pausing several times to circle the rebar to enlarge the hole to 1.5 inch wide. The Airport soil is mostly clay, hard as cement when dry. I put 3 inches of Hi-Yield in each hole, loosely covered. That same day, we found a few galls on another graft. I returned several days later, following a few days of rain and finished treating it in no time at all. Our volunteer harvesters will see the results. All growers take note: an early spring gall wasp examination may not tell the whole story. Check again in July & August for a chance to nip at the bud any late arrivals.

Grafting & Mapping - My Yard

On April 10, I made the first graft of the season in our yard, and relearned how many things must be on hand for timely completion of a graft and its protection from outside elements. For example, besides grafting tools, supplies include Diatomaceous earth, Imidacloprid, tree shelters, cloth bonnets, hammer, flagging, labels. Later in April and through May, I made 10 more grafts, several of which I felt certain must grow. Alas, all died except my first bumbling try, which is 28 inches tall, with many big leaves, some of which were longer than 8 inches on June 8. My brand new (JEB & A4-3) is most welcome to join our plantation.

Years ago, on the highway side of our yard we planted a row of (NCC x JEB) nursery seedlings from which we kept 3 trees, and made one JEB graft. Just below that row in our lower side yard, over the years I planted two columns by direct seeding when I was still learning this business. I put identification labels on the cages or the rebar stake that held the cage in place. Chestnuts grow at different rates, a combination of genetics and available sunshine. Now & then, I switched the cages (because
some were taller than others) to better protect the leaders of the fast growers from browsing deer. Sometimes I also moved the stakes because I didn't have enough rebar, to hold the taller cages in place. Thus, I lost some labels. Over the years, as trees with blight cankers failed to pass resistance inspection, we cut those chestnuts at the base and grafted onto a chosen stump sprout. The ID information for the tallest chestnut at the bottom of each column was lost. Most of the others are related to (NCC x JEB), and bring genetics from additional ACCF original survivors into the pollen mix.

Last year we had a very big nut crop we couldn't harvest in time on one of the Highway side trees. The birds & squirrels got so many nuts they couldn't eat them all. Last month I discovered a squirrel cache of 7 chestnuts growing in a tub I usually plant with flowers, located just below that chestnut. These seedlings would be open pollinated, but most likely they are second generation NCC x JEB. I transplanted 2 of them above our first column. Also discovered was a nursery bed of seedlings growing vigorously from the last chestnuts to drop at the Airport in 2020. I transplanted two of these the evening before a rainy week was predicted.

**UPDATE GRIFFN YARD MAP**

**2021 Grower Report - My Yard**

I planted my 2020 ACCF chestnuts in October 2020.

From the 2020 nuts planted, 22 survive; the tallest is 10 inches.

Total number of surviving ACCF chestnuts (from all years) 49.
My biggest ACCF chestnut is 70 feet tall and 8.5 inches in Diameter at Breast Height.

I have 11 ACCF chestnuts that bloom, 8 ACCF chestnuts producing nuts.

For ACCF chestnuts **over 1.5 inches in Diameter at Breast Height:**

Number of trees with sunken cankers 9, flat cankers 9, swollen cankers 9*

**Land:** a mountain slope **Approximate altitude of planting:** 2,500 ft. **Soil:** acid, sandy-loam

**Sun Exposure:** morning sun, afternoon sun till 3 pm **Daily hours of sun:** 7 or 8

My ACCF chestnuts are protected with wire cages. Comments: *All types of cankers are on each of 9 blooming chestnuts. My surviving total number includes 2 (Floyd x MacDaniels), an original selection killed in the Big Field by Ambrosia beetle, but also planted by Gary in our yard. Years of grafts have failed on their stump sprouts. As I write, I realize I must choose the strongest sprout on each & destroy all others for the chance of another second-generation Floyd x MacDaniels intercross.

**2021 Harvest** Late each spring, I visit the Airport often, looking for the beige catkins and tiny emerging flowers that will turn into chestnut burs to make my best guess when harvest should start. You will find this year's open harvest dates listed on the loose page enclosed. As usual, first priority was a schedule to avoid football home game dates for best access to the Airport and less traffic on the roads. Then, considering many work schedules have been altered, we chose as many different days of the week as possible, hoping this might attract the highest number of volunteer harvesters, including some newcomers. Please respond by August 14, using only the enclosed request form. We cannot accept harvest requests by email or with later postmarks. We need your information in hand early enough to be able to organize the harvest. We are handicapped by an unreliable computer network. Every day in every way we try to get better & better and hope to see you this coming fall.

Respectfully submitted,

Lucille
Lucille Griffin, Executive Director

Other ACCF Directors

Gary Griffin, President, Plant Pathology, Virginia Tech

Ed Greenwell, Vice President & Director of Breeding, Electrical Engineer, New Johnsonville, TN

Phillip N. Martin, Treasurer, CPA, Christiansburg, VA

Joyce G. Foster, Director, Research Biochemist, Beaver, WV.

Dave McCurdy, Director & Nursery Superintendent Emeritus, Raleigh, NC

_Dedicated to the restoration of American chestnuts_