

American Chestnut Cooperators' Foundation

August 2023

Dear Friends and Cooperators,

Thanks to all who have sent in Grower's Reports since January. There is an impressive set of reports for the 2023 year so far!

We are compiling a list and more in-depth documentation of the larger chestnuts you all are growing. If you have large ACCF chestnuts (30+ feet tall), we are asking you for a special report. (Here is an easy way to estimate if you are not sure: Is your chestnut taller than a two-story house's roof line? This is typically 25-30 feet.)

Please send us the following information for each tree over 30 feet. (If you have many large trees, please send a few photos/reports of your best.):

1. **Name/label** (per tree) - provide unique identification- the name, number, or combination that you use to reference this specific tree in your growing area so we can use it for reference in the future.
2. **Photo** (per tree) - showing full tree from ground to crown - Tips: don't zoom or crop. An item placed next to your chestnut (long-handled garden tool, yardstick or obliging human volunteer) will help for scale.
3. **Document canker(s)** - measurement (length and width) and closeup photo of canker(s)
4. **Additional history** - any other information you have recorded about the specific tree(s), such as date planted, notes of storm or other damage, etc.
5. **Tree measurements** - DBH (diameter at breast height) in inches and approximate height in feet.
6. **Does the tree(s) produce nuts?** - if so, note approximately how many years.

As usual, we welcome your reports at any time.

Send your large tree photo records / regular Grower's Report to:

ACCF, P.O. Box 102, Ridgecrest, NC 28770

Email to: Reports@accf-online.org

2023 Harvest

Harvest this year will be closed again. Apologies to those of you who enjoy collecting your own chestnuts and participating in the harvest work. Thanks for your understanding.

These closed harvests are allowing us to monitor natural timing of nut release among our trees as well as examine the effects of a different harvest method.

We are interested in assessing overall health of our chestnuts after collection of nuts solely from the ground (rather than cutting burs out of the trees). Though bur removal is a

common practice for harvesting from fruiting trees, special considerations related to the biological and physiological effects of this practice should be given to important trees, like those in our breeding orchard.

Trees form a natural barrier before releasing leaves or burs, to prevent an open wound. Because not all burs will be ready to separate from a tree at the same time, using a fruit picking tool would need to be done daily in order to take only burs with stems that have formed a complete barrier. Ripping off a bur without a fully formed barrier, is likely to tear or peel bark on the branch. This has the same effect as storm damage, forming a jagged wound that is difficult for a tree to heal quickly, leaving time for pathogens or insects to move in.

Any method of removing burs from trees often includes removing leaves and buds as well. This presents several issues: Cutting off buds will eliminate the potential growth (shoots, leaves and burs) those buds would have produced the following year. Additionally, buds on the tips of branches (apical buds), are responsible for chemical signaling to the rest of the tree. Removal of an apical bud confuses the tree and inhibits the growth of buds behind it on a branch, reducing growth, resource harnessing ability (through leaves) and ultimately reducing nut production. Forcing a tree to waste its store of energy to regenerate leaves, etc. also makes it more vulnerable to pathogens, or at least less equipped to isolate them from its major transport systems.

In the interest of maximizing nut production and ensuring the health of our trees, majority of nuts this year will be collected daily from the ground. The rest we will gently knock out of the open burs still affixed to the trees. 2024 spring growth will show evidence of the ground harvest method's effect on our orchard tree health, and next autumn we will be able to compare nut yields.

2023 Nut Request Information

Chestnuts vary in their nut-release timing, so the full harvest window will most likely extend from the beginning of September into the middle of October.

We will send *treated nuts* out as available during the month of October. Nuts will be sent out to growers in the same order as Nut Request Forms are received by us.

PLEASE REMEMBER TO PREPARE YOUR PLANTING SITES AHEAD OF HARVEST! Spaces should be ready by the end of September at the latest in order to allow soil to settle. Chestnuts should be planted as soon as possible after you receive them.

If you are a new Cooperator interested in growing all-American ACCF chestnuts, we ask you to please take a year to familiarize yourself with the *Castanea dentata* species, the ACCF's goals and approaches and to prepare the site you have selected for growing. Please read through the following materials included with your newsletter: ACCF Program Summary, 2023 Cooperating Grower Agreement, Planting Information and the Grower's Report Form (which should be completed annually after your seedlings have begun to grow.)

If you have been a Cooperator for longer than a year and are interested in growing American chestnuts from the 2023 Harvest, please *print* and complete both the attached Nut Request Form and the 2023 Cooperating Grower Agreement.

Mail to: ACCF, P.O. Box 102, Ridgecrest, NC 28770.

REMINDER ABOUT THE ACCF COOPERATING GROWER AGREEMENT:

It is exciting to have so many Cooperators reporting nut-producing chestnuts! Applause and appreciation for your dedication, stewardship and great work.

Please note that “American chestnuts grown from the ACCF breeding program” include those grown from nuts produced on the ACCF chestnuts grown by Cooperators.

If your ACCF chestnuts are producing their own nuts and you distribute those nuts, we require a list of recipients and a signed 2023 Cooperating Grower Agreement from each of those individuals. Each will be considered a new Cooperator and will need to know how to properly plant, care for and record/report on their ACCF chestnuts. Please also provide your nut recipients information about the parent trees of nuts you distribute.

If you distribute nuts from your trees, it is important to provide treated nuts to recipients (and to treat your nuts that you plant yourself). Temperature and treatment time are critical to viability of the nuts. To properly treat nuts harvested from your own trees, refer to the attached Nut Processing Instructions.

Field Notes

This time of year, it is a good idea to make sure your chestnuts are receiving enough water. If you notice dried or stressed looking leaves, or if your area is experiencing a drought, you may need to water your chestnuts. Chestnuts over three feet tall will appreciate one gallon weekly. For smaller seedlings, one quart weekly should be sufficient. Water no more than once a week.

Remember that **pruning should be done in the fall or winter, after leaf senescence.** Waiting for this time will minimize spread of disease and protect delicate tissues while they are still active.

If you have not already prepared your planting sites for the fall, now is the time to do so. It is important to do this ahead of time so that the chestnuts you receive at harvest can be planted right away. Maintaining the optimal temperature and moisture for chestnuts in storage is difficult to achieve for extended periods of time. We do not recommend storing chestnuts for more than a few days as they are likely to expire.

Preparing holes ahead of time will also allow the soil to settle after digging and/or amending. This creates a rooting environment that provides a more desirable balance of soil particles, air, and water, key to supporting initial root growth.

There are two appropriate methods for planting your ACCF chestnuts: direct-seeding each nut in its permanent site OR creating a nursery bed to host multiple nuts during their first

year, and transplanting them the following year. Refer to the attached Planting Instructions for more information.

Be sure to acquire your wire fencing and make cages now as well. Nuts need protection even pre-germination. American chestnuts are choice meals for many woodland animals. Two years ago, I left a batch of unopened burrs on my porch overnight and in the morning, I found the bag torn open, opened burrs in a pile on the ground with all nuts removed, and a few telling footprints- The work of a black bear.

Applied Resistance Workshop

Last month, ACCF sent a representative to the Applied Disease and Pest Resistance Breeding Programs Workshop hosted by the United States Forest Service (USFS) at the Dorena Genetic Resource Center in Cottage Grove, Oregon. Goals for the workshop included “sharing experiences to learn what new programs are being started, what has worked, and share progress/success stories/barriers/funding resources- how to fast-track programs and to continue establishing a resistance network to actively share ideas, tools and proposals.”

This was the first national workshop on this subject since 1982. Almost all tree resistance breeding programs in the U.S. were represented, and individuals from British Columbia also participated. This was an excellent experience and networking opportunity, and we are thankful for the invitation to the workshop. The ACCF focus on purity in our efforts to restore American chestnut is unique, and our progress is recognized in the resistance breeding community. Perspectives and information acquired at the workshop will help to guide ACCF strategies and future program endeavors.

Respectfully submitted,

Jenny Abla, Vice President
jenny@accf-online.org

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Phillip Martin, ACCF Treasurer, 405 N Franklin Street, Suite B, Christiansburg VA 24073

Mailing address for all other correspondence: ACCF, P.O. Box 102, Ridgecrest, NC 28770