

# American Chestnut Cooperators' Foundation

<https://accf-online.org>

<https://accf-chestnut.org>

August 2022

Dear Friends & Cooperators:

Jenny Abla here, composing the newsletter for the first time while my Grandmother, Lucille, is focused on tending to her Chestnuts.

We recently re-organized the Board of Directors and want to keep you all informed and assured that we remain committed to the goals of the ACCF. Due to health considerations, Lucille and Gary have decided to step away from executive roles and concentrate on maintaining ACCF orchards. Their decades of leadership are essential to the scientific advancement and organizational foundation of the ACCF. Lucille's work in the past included such a diverse and involved set of tasks that we have decided to delegate them among the Board members. The new Board continues work to ensure that the ACCF remains committed to the restoration of the all-American chestnut to its native range.

Thanks again for your Grower's Reports. Whether it is your first attempt planting nuts or you are an experienced grower with maturing trees, your reports provide invaluable data. We welcome Reports at any time. Please report annually at minimum. Form enclosed.

**Send Grower's Report to:** Jenny Abla, 20 Lookout Terrace Road, Black Mountain, NC 28711

Many thanks to Ed and Denise Greenwell who created the new website and continue to update posted information. <https://accf-chestnut.org>

## **2022 HARVEST:**

This year we will have a closed nut harvest. Rather than signing up volunteers, our Board members and family will collect and distribute nuts. Holding a closed harvest will give the Griffins and board members time to reassess the ACCF harvest process. We thank you for your understanding and will once again welcome volunteers for harvest in 2023. We are keeping a list of all Cooperators who express interest in receiving unprocessed nuts from us this September. **If you are interested and have been a Cooperator for longer than a year, please complete the enclosed harvest nut request form and mail to:** Jenny Abla, 20 Lookout Terrace Road, Black Mountain, NC 28711

If you are a new Cooperator, we ask that you please read through the following materials included with your newsletter: Cooperating Grower Agreement, Nut Request form, Planting Information and the Grower's Report form (which you will need after your seedlings have begun to grow.)

We suggest that new cooperators who are interested in growing all-American chestnuts take a year to familiarize yourselves with the *Castanea dentata* species, the ACCF, its goals and approaches, and to prepare the site you have selected for growing.

If you do not have a site selected already, do not fret! The included growing instructions will help you choose and prepare a site appropriate for giving your all-American chestnuts the full advantage they need. Eliminating resource competition and ensuring high-quality soil at your site are two important jobs you can do a year ahead of your first planting. Taking this time to prepare the most desirable

growing environment possible will help allow the all-American chestnuts' blight-resistant qualities to manifest and give your chestnuts the best chance of surviving to maturity and passing on blight-resistant genes through nuts of their own.

### **FIELD NOTES:**

There is always proactive work that can be done for your chestnuts. This time of year it is a good idea to make sure your chestnuts are receiving enough water and are in well-draining soil. If you notice the soil is not draining, take notice of any surrounding features that may direct water to your site during a downpour (such as paved area, bedrock, or a slope). If there is a feature directing water towards your site, you might want to install a drainage system.

One drainage solution is to dig a trench to capture water from this runoff and divert it to another area. (In extreme cases, you might want to fill the drain with gravel and maybe even bury a perforated pipe in the bottom of the drain underneath gravel.)

If you dig a drain, be sure it is positioned outside of your closest tree's Critical Root Zone. The Critical root Zone is an estimated area of important roots surrounding a tree. This Zone can be calculated by multiplying the diameter of the tree in inches by 1.25 and converting that number into feet. The resulting measurement is for the *radius* of the Zone. If your trees are too close for you to dig, you can try adding a berm, or formed mound of soil or brush, to divert the water instead. Permaculture resources will have more in-depth instructions for these applications. If your site is not draining well and these applications are not possible, be sure to select a more suitable site for future chestnut plantings.

Clearing and preparing space for new nuts to be planted is never premature. See the included Planting and Growing Instructions to get started.

### **PRUNING:**

As an arborist and ecologist with pruning expertise, I have some specific recommendations to help maximize your all-American chestnuts' survival potential.

**During the fall, young trees and transplants continue to grow and establish woody roots. For this reason, I recommend *not* pruning *young* chestnuts (less than 0.5" in diameter) or transplants until they reach full dormancy (late winter)** so that they may have a full, uninterrupted initial growing season to build their underground support.

***Seedlings, even if transplants, should not be pruned at all***, as they are at great risk of shock from disproportionate underground and above ground systems. Because of seedlings' small size, their leaves are few, so shoots and stems compensate by holding large quantities of chlorophyll. Pruning these shoots back on a seedling reduces nutrient production and reserves. The resulting stress can decrease a seedling's ability to respond effectively to environmental changes, diseases and pathogens.

Many large orchards do prune seedlings back, but their goals for pruning are to fit many trees in an area and to maximize nut production. Most production orchards grow hybrid or non-native chestnut species which have entirely different growing habits and functional form, are more tolerant of extreme pruning regimens, and have fewer disadvantages from pathogens and invasive pests. Production orchards often dig up trees with spade attachments on tractors and thus expect root loss during transplantation. Hopefully your all-American chestnut transplants are seedlings, dug by hand, and are treated much more delicately than this, so should not call for above-ground reduction to match root loss.

While we all hope for the high yields of nuts achieved in production orchards, I believe the most prudent goal for care of seedlings and *young* all-American chestnut plantings is to achieve overall health. Depending on your specific trees' size and qualities, pruning may not be required. Once chestnuts are more mature, they can withstand more loss from above-ground pruning, and making proper cuts on a healthy, *established* tree can result in high yields of nuts.

The onset of fall, indicated by leaf senescence, is an appropriate time to prune ***established chestnuts (2.5" or 1-3 years.)*** Waiting for this time will minimize spread of disease and protect delicate tissues while they are still active. I believe the best goals for pruning an established chestnut are to prompt desirable form and to maintain optimal health. An established tree or transplant showing taper at its base should have the structure and underground resources to respond effectively to the first cuts for promoting ideal form (such as reducing a competing lead to promote upward growth by a single leader). Pruning for health maintenance would include cuts to ensure adequate air circulation and to eliminate contact between leaves, branches and the ground. Making proper, clean cuts will prompt a natural response from the tree to grow new, healthy wood over wounds. Pruning initially for overall health, and then for good form will lead to a healthy young tree with a strong root system. A healthy, effectively pollinated tree should yield high amounts of nuts on strong branches.

**Be sure to use sharpened, sterilized tools when pruning to avoid future insect and disease introduction.**

Pruning is a somewhat subjective practice, and the "best way to prune" truly depends on an individual's goals for their growing space or orchard. At minimum, pruning methods should follow ANSI A300 standards which can be found on the **Tree Care Industry Association** website ([tcia.org](http://tcia.org)) These are the Best Management Practices used by certified arborists in the tree care industry.

#### GALL WASP INFORMATION UPDATE

Studies have shown that pruning off used galls is unnecessary, as the new generation of gall wasps do *not* inhabit the used gall. There is another wasp species that *does* use these old galls, rather than inducing its own, and it *feeds on the gall wasp we hope to eliminate*. This parasitoid wasp is beneficial! Best to leave old galls and let the parasitoid wasp have a chance at helping control your gall wasp population. **Pruning old galls off will not reduce the number of galls or the wasp population for the next year, but can inhibit bud growth for the current year and potentially shock your trees' communication system.**

While the galls themselves damage buds and can reduce fruiting, pruning a gall off completely oftentimes requires removing apical meristem (necessary for communication between roots and canopy). Removal of apical meristem is more damaging than the gall itself. Removal of galls also means unsystematic pruning and canopy imbalance, which can instigate poor growth habits.

Unfortunately, **spraying for gall wasps has been ruled generally ineffective** and counterproductive, as most insecticides are non-discriminate and will kill the parasitoid wasp as well as other pollinators which reduces the pollinator population and in turn, reduces nut production.

In the instance of a *severely* infested tree, *precisely-timed* and *appropriately applied* insecticide spray treatment *may* help control the gall wasp but it can still reduce pollination potential and nut yields for the year. *Timing of this treatment is critical and will vary according to altitude and exposure of trees'*

*location, or the application will be ineffective for its purpose, and harmful overall.* It is important to note that Gall wasp ‘infestations’ occur mostly in large orchards and are a result of monoculture (growth of only one species within an area).

Insecticide treatment is *not* recommended. **If you do use *any* insecticide or pesticide, please abide by all precautions on the label. Even widely available and/or “natural” pesticides can be extremely harmful to humans, plants and animals. Insecticides and pesticides should be used with discrimination and treated with the utmost precaution.**

## **BACK TO THE ROOTS**

Projects and research by our founders began in the 60s, the roots of our heirloom program, built on the identification of existing blight-resistant all-American chestnut specimens and the examination of their blight-resistant qualities.

In 1985, the ACCF was organized and established to form the network of Cooperators dedicated to continuing pursuance of a research-based restoration program that serves this grand, native species.

True to nature, there are always new factors introduced to our field of interest, including setbacks and challenges, which as scientists and stewards of native ecology, we embrace and integrate into our program.

With belief in the inherent strength of the American chestnut, the ACCF continues in its goal of restoring the American chestnut as a pure, significant species to its native range.

This is only accomplished by keeping a long-term perspective, continuing our work with patience and dedication, and through the continued efforts of our Cooperators.

Respectfully submitted,

Jenny Abla, Vice President

[jenny@accf-online.org](mailto:jenny@accf-online.org)

### **ACCF Board of Directors:**

**Ed Greenwell**, President, Electrical Engineer, New Johnsonville, TN

**Jenny Abla**, Vice President, Arborist, Black Mountain, NC

**Joyce Foster**, Secretary, Research Biochemist, Beaver, WV

**Phillip Martin**, Treasurer, CPA, MartinArthur CPAs, Christiansburg, VA

**Denise Greenwell**, Webmaster, Computer Engineer, New Johnsonville, TN

**Gary Griffin**, President Emeritus, Professor of Plant Pathology, Newport, VA **Lucille**

**Griffin**, Executive Director Emeritus, Newport, VA

### **Donations - ACCF is a 501(c)(3) organization. Send donations to:**

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

[Back](#)