

## Backcross Breeding Program Distribution recommendations committee August 31, 2021

This sub committee of the restoration committee was tasked with the objective to make a recommendation to the board of directors at the 2021 fall meeting about what to do with the GPA as the Meadowview backcross breeding program moves to the next step of utilizing the nuts produced from the seed orchards after rouging is completed. The Meadowview nuts that would be produced this summer and distributed this winter would represent the completion of the originally designed back cross breeding program and these nuts were to represent the beginning of restoration trials and chestnut restoration. The GPA was for the protection of these trees from miss use during development and testing. If we are going to eliminate or replace the GPA, at this point, we first need to determine how these nuts will be used and distributed, and then make sure we have a document or documents in place to match the needs created by that usage.

I see the task of this committee as follows. (1) Determine how we want these Meadowview BC3F3 nuts to be used, (2) how they will be distributed, (3) and then what will we replace the GPA with.

(1) Use - The best guess I have been given as to how many BC3F3 nuts Meadowview might produce this year is 30,000. Determining how to use these nuts will be complicated by the fact the trees they produce will not be as blight resistant as originally hoped. In general, the more blight resistant they are the less American like they will be, and the more American like the less resistant they will be. It is unlikely that any will be as blight resistant as Chinese. We do not know how long these trees will live, how competitive they will be in the forest, or how much they will look and grow like pure American. We need to get answers to these questions, which is one reason to get these nuts out planted in performance trials. Other reasons for making these seedlings available for out planting is to full fill the needs of our members to be involved in a constructive way. The recommendation of this committee is to produce seedlings from these nuts and make them available to TACF cooperators and member for the establishment of performance trials. This recommendation will be reevaluated each year as the number of nuts produced grows, demand for seedlings changes, and the future of the transgenic trees becomes clearer. The TACF Seed Level Membership Program has been an important membership and fund-raising program. These seeds should also be made available to continue that program along with newly developed paperwork, for as long as appropriate.

(2) Distribution – In addition to the TACF Seed Level Membership Program, TACF would develop a contract with and provide BC3F3 nuts to private nurseries to grow into seedlings. Each nursery would receive nuts by mother tree and keep each line separated in the nursery beds. Quality standards would be set by TACF. The nurseries would lift, bundle, package, sell, and ship seedlings to cooperators, and members. TACF would receive an agreed upon payment from nurseries for each seedling sold, which would be based on production and shipping cost. The lines of trees mixed into each bundle sold would be handled at the nursery, based on the objective of each planting project. The number of seeds made available to each nursery would be determined by TACF. Cooperators with access to their own nursery would be provided nuts.

(3) Paperwork – Because these breeding program trees are not as good as originally hoped, we do not recommend them for full restoration release to the public. They need to be used for restoration trials or some form of performance trials so we can learn what we do have, and how to best use and improve them. We therefore recommend working with cooperators to establish performance trials. using recently updated planting protocols when appropriate. We recommend replacing the current

GPA with a material transfer agreement that would include a very clear explanation of what these trees are and the purpose for the performance trials. We need to maintain some form of access to these trees. We will need to work closely with our IP advisors on the drafting of a new document. It should be renamed so that it is not confused with the current GPA. Recipients of these trees need to fully understand what they are getting. Members who receive seeds or seedlings for personal plantings need this same information. We recommend a clear name for these trees such as “TACF 2021 backcross trees”.