



## Information for Potential Landowner Partners

VATACF seeks landowners to partner with us to breed locally adapted, blight-resistant American chestnuts. This document describes the respective obligations of VATACF and its landowner partners in developing and maintaining a chestnut breeding orchard.

A chestnut breeding orchard is planted with 400-500 nuts in rows about 15 feet apart. Seedlings are grown until they reach about 2" in diameter, 4-5 years. Then they are tested for blight resistance by inoculating them with the blight fungus. The following season, the trees that did not inherit blight resistance are removed, as are trees that did not inherit American chestnut characteristics. The remaining trees, which may number a dozen or fewer are left to mature.

A breeding orchard is a significant financial and time commitment. As a virtually all-volunteer organization, VATACF is unable to grow trees across the state. This important work can only progress if people are willing and able to steward these orchards.

Land requirements. A chestnut breeding orchard should have the following characteristics—

- 2 acres open space.
- Acid well-drained, loose soil.
- Ideally fallow pasture or recently cleared woodland. Land cannot be too steep to mow.
- Deer fencing around 1.5 acres where the trees will be planted.
- On-site property management.
- Access to water.

Length of Partnership. From planting until the first harvest is approximately 10 years. VATACF will harvest seed produced in the orchard for continued breeding for as long as 5 years after the initial harvest in the orchard. All trees in the orchard and any seed produced by the orchard are subject to a germplasm agreement which must be signed by the landowner prior to orchard establishment.

What the Landowner Provides. The landowner is responsible for orchard installation and maintenance. Generally, that involves—

- Watering seedlings as needed. This is usually required only the first couple years.
- Upkeep of the orchards, including mowing, weeding, mulching, and fertilizing.
- Installing and maintaining the deer fence.
- Annual measurements.
- Pest management, if needed.

What VATACF Provides. The Chestnut Foundation is responsible for the following—

- Supplying the seed. Seed is harvested from wild surviving American chestnut trees in the vicinity of the planned orchard so the orchard trees are adapted to the soils and climate where they will grow.

- Developing the planting plan. Seed from different trees are planted randomly in the orchard to enable the survivors to wind pollinate. Detailed records of each tree's genetics are maintained.
- Periodic orchard visits to address questions and issues.
- Technical growing assistance.
- Record-keeping and analysis.

VATACF is unable to provide financial assistance for the cost of the orchard, and looks to its landowner partners to help support the regional scientist who provides the technical assistance.