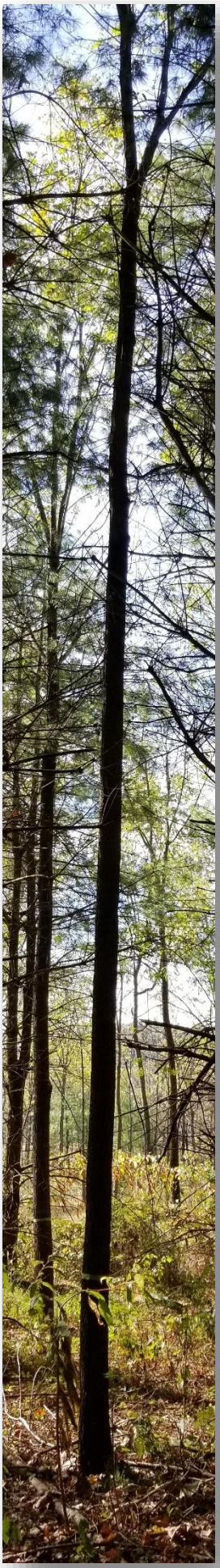


Blennerhassett Island State Park Experimental Black Walnut Planting

Information Sheet

The planting here is an experimental tree farm. The objective of the experiment is to determine the best practice for using conifers as trainers to grow veneer quality black walnut. The black walnut crop trees will be left in place as a demonstration of the trainer-assisted growing method. The trainer tree will be culled when their trainer function is complete and they start to become competitive with the crop trees. The culled trees are left to decay in place for wildlife habitat and eventually soil enrichment.

The job of the trainer trees is twofold. One job is to urge the black walnut crop trees to stretch upward and straight. The second trainer job is to heavily shade the lower black walnut branches so they are abandoned while small leaving no knots or bark scars on the crop tree stems.

The trainer trees were planted in March 2021. The trainers need to be in place and nearby when the black walnut crop trees are planted. The black walnut crop trees are planted with various delays as the trainer shading approaches.

During the early growing years, it is necessary to exclude the island's deer herd. Young trees are a deer favorite. A 3-D electric fence was chosen as the deer exclusion method. It is also necessary to control invasive sod-forming grasses to obtain transplanted tree survival and reasonable early growth rates.

Many organizations have contributed to make this project possible:

The **West Virginia Department of Natural Resources – State Park Service** has not only provided the site, but also has been fully cooperative in the difficult logistics and maintenance of the planting area.

A generous grant from The **Walnut Council Foundation** provided for the project's direct expenses.

The **Hardwood Tree Improvement and Regeneration Center** provided the select black walnut crop tree seedlings.

The **West Virginia Division of Forestry – Clements State Tree Nursery** provided the trainer seedlings.

The **U. S. Department of Agriculture – Soil Resource Conservation Service** has provided site suitability testing and water table measurement.

The **U. S. Forest Service** has assisted with the project detailed experimental design.

West Virginia University – Extension Service has provided guidance and direction for the project.

Finally, **many volunteers** generously provided their time and effort to make the project plan become a reality.

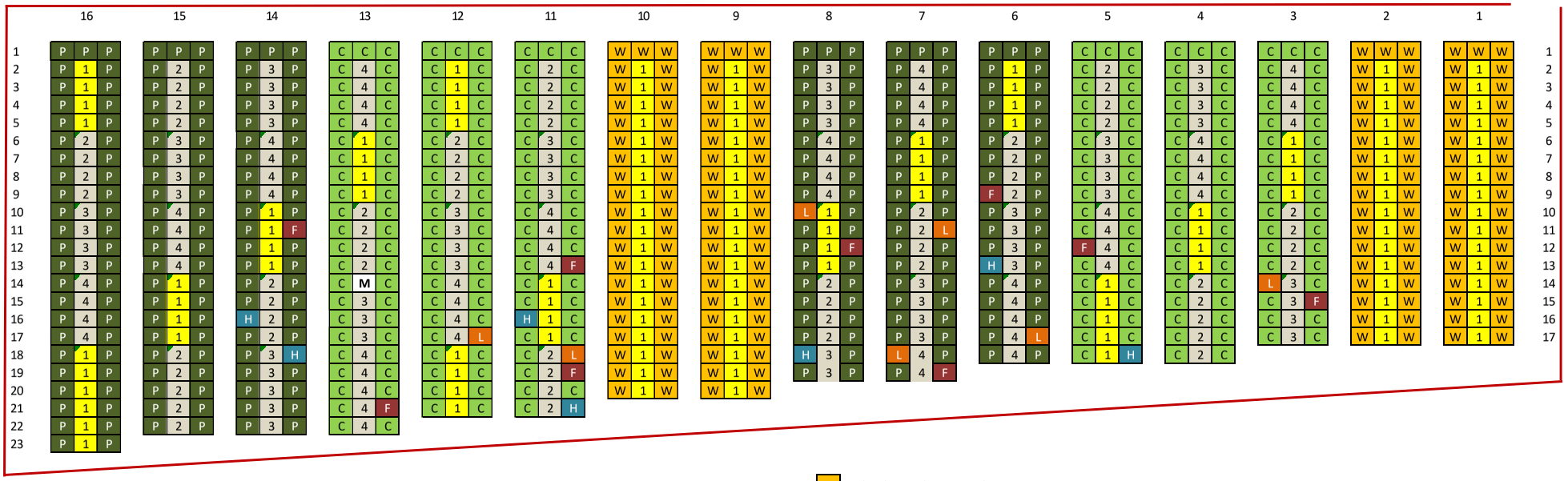
Blennerhassett Experimental Black Walnut Planting

Plot Layout

8 foot x 8 foot grid

North

gate



M Water Table Monitor

3-D Electric Fence

Inner fence from tree blocks 14.5 feet
Inner fence post spacing 32 feet
Add one steel post midway on long runs
Inner fence lower wire 17 inches
Inner fence upper wire 40 inches
Outer fence separation from inner fence 3 feet
Outer fence wire 24 inches

W	Black Walnut Bed-Run Trainer	*Juglans nigra*
C	Bald Cypress Trainer	*Taxodium distichum*
P	White Pine Trainer	*Pinus strobus*
H	Eastern Hemlock Trainer	*Tsuga canadensis*
F	Douglas Fir Trainer	*Pseudotsuga menziesii*
L	European Larch Trainer	*Larix decidua*
R	Dawn Redwood Trainer	*Metasequoia glyptostroboides*

1	Select Black Walnut Crop Tree planted year 0 (no delay)
2	Select Black Walnut Crop Tree planted when aisles close to 8 feet
3	Select Black Walnut Crop Tree planted when aisles close to 5 feet
4	Select Black Walnut Crop Tree planted when aisles close to 2 feet