Tree Nursery: Lessons Learned





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Community Greening Tree Nursery



PRESENTED BY:

Mark Cassini

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Community Greening Tree Nursery

- Located in Boca Raton, FL
 (Long-term lease w/ nonprofit property owner)
- Nursery started in 2021 (Community Greening founded in 2016)
- Nursery is primary operations hub; serves as Staff HQ and primary location for volunteer events.







Nursery History & Numbers

Founded in 2020 and first used as a "holding facility" due a large tree planting contract with Brightline

Volunteer events began in 2022

Avg. 50 volunteer nursery events per year.

14,000 trees of varying sizes from liners to 25-gallon (60 species)

Future Growth: *Tito's Urban Orchard, Tree Showcase, Mobile Office Trailer*



Volunteer Programming

Family-friendly volunteer events assisting on various nursery projects

Sowing seeds, potting-up saplings, weeding, staking, loading for events, general maintenance.

Tree Education

Discuss importance of tree planting.

Volunteer Groups

Schools, Corporations, Nonprofits, General Public.

50 Nursery Events Per Year

Approximately 1,600 volunteer hours.

Experiential Focus

All supplies and snacks/drinks provided. Music. Multiple activities. Heat precaution (shade/timing).





Funding Partners

- State Funding Florida Forest Service
- Corporate Grants
 Tito's Vodka Block-to-Block Urban Orchard
- Family Foundations
 Carl Angus DeSantis Foundation
- Nonprofit Supporters

Grass River Garden Club







"Planting trees and enriching communities"

"Forest ReLeaf Nursery and Arboretum utilizes volunteers to grow native trees for community based projects"



Jake Roeckle

Nursery Manager

Jake@moreleaf.org





Forest ReLeaf Nursery and Arboretum

- Founded in 1993
- At current location since 2007
 - 8 acres inside a St. Louis County Park
- 60+ unique species mostly MO natives
- Container grown trees from bare root stock
 - 3g, 7g, and 15g pots
- Experimenting with growing from seed







Infrastructure

- Hoop house
- Potting table
- Irrigation system
 - Overhead for smaller pots
 - Drip for 15g pot-in-pot

Forest ReLeaf Nursery and Arboretum





















Staff

- Full-time nursery manager
- Part-time nursery specialist
- Volunteer coordinator

Forest ReLeaf Nursery and Arboretum







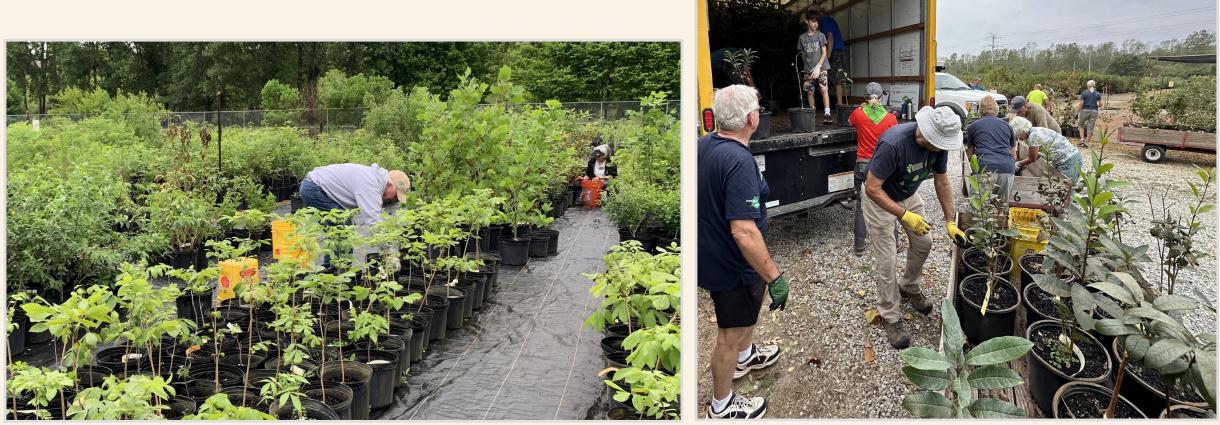
Volunteers!

- How we do what we do!
- "Regular" volunteer days twice a week 8:00 a.m. noon
- Group/ corporate volunteers













Funding

- Around \$180,000 per year in expenses
- Funded mostly by grants/ donations
- About \$20,000 per year in tree sales













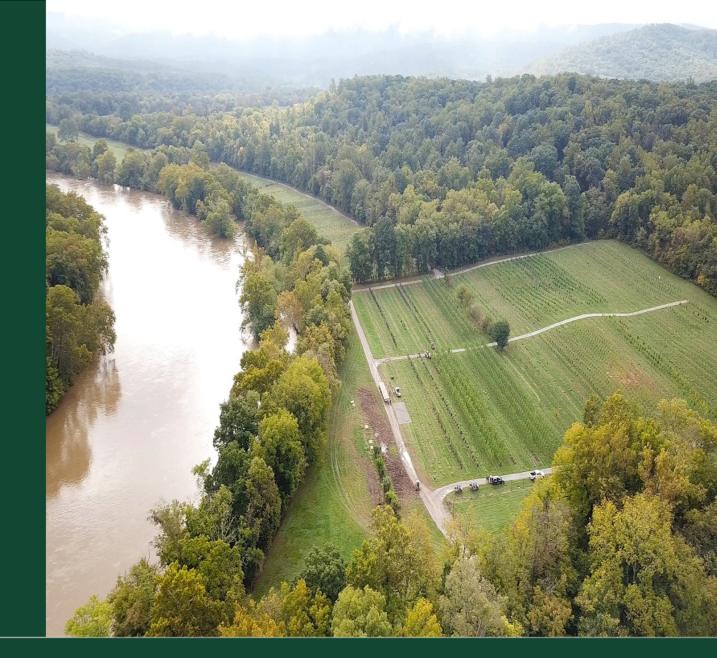






Casey Tree Farm

Berryville, Va Kyle Derr, Nursery Manager





Casey Tree Farm: Berryville, VA



Arbor Day Foundation

Restore, enhance, and protect the tree canopy of our nation's capital







- 100 acre production
- ~40k trees
- 7 Full-time staff
- 5 Seasonal staff
- ~45 species

2024 PARTNERS IN COMMUNITY FORESTRY CONFERENCE | ALLIANCE FOR COMMUNITY TREES DAY





- Began in 2010 as a B&B Nursery with around 3,000 trees
- Transitioned to 18" in ground fabric rootbags in 2018
- Currently around 40k in production in 2024





- 2" Caliper (+/- 0.5")
- In ground fabric bags
- Native soil
- Finer root system with less circling roots











- Over 200 trees on a tractor trailer load
- Harvesting ~8.5k trees annually
 (~5k internally, ~3.5k externally)
- Bobcat skid steer digs, pickup, and loads all trees





Tree Pittsburgh Heritage Nursery



Pittsburgh, Pa Megan Palomo, Nursery Director







About:

- Program of Tree Pittsburgh
- Started in 2010
- 2.5 acre production site on urban brownfield
- Containerized trees and shrubs
- 30,000 2-3 gallon finished plants produced per year
- 110 species of trees and shrubs grown from locally collected seed.





















































Current Operations:

- 4 full-time staff
- 1 seasonal
- Internships
- Job Corp training
- 200+ volunteers engaged
- 20+ workshops/ tours per year
- 50,000+ seedlings grown per year

Funding Model:

Annual operating budget: \$400,000.00 Grants: \$220,000.00 Tree Sales: \$260,000.00 Total Revenue: \$80,000.00 13% of organization ops budget



















Seed-Transfer Guidelines for Important Tree Species in the Eastern United States

CLIMATE CHANGE PROJECTIONS FOR INDIVIDUAL TREE SPECIES WESTERN ALLEGHENY PLATEAU (SUBREGION 1)



changing climate and other stressors during this century. A team of managers and researchers created an assessment that describes the vulnerability of forests in the region (*Butler-Leopold et al.* 2018). This report includes information on observed and future climate trends, and also summarizes key vulnerabilities for forested natural communities. The Landscape Change Research Group recently updated the Climate Change Tree

This region's forests will be affected by a

Atlas, and this handout summarizes that information. Full Tree Atlas results are available online at <u>www.fs.fed.us/nrs/atlas/</u>. Two climate scenarios are presented to "bracket" a range of possible futures. These future climate projections (2070 to 2099) provide information about how individual tree species may respond to a changing climate. Results for "low" and "high" emissions scenarios can be compared on the reverse side of this handout.

The updated Tree Atlas presents additional information helpful to interpret tree species changes:

- Suitable habitat calculated based on 39 variables that explain where
 optimum conditions exist for a species, including soils, landforms, and
 climate variables.
- Adaptability based on life-history traits that might increase or decrease tolerance of expected changes, such as the ability to withstand different forms of disturbance.
- Capability a rating of the species' ability to cope or persist with climate change in this region based on suitable habitat change (statistical modeling), adaptability (literature review and expert opinion), and abundance (FIA data). The capability rating is modified by abundance



POOR CAPABILITY	
American holly	Pin cherry
Balsam poplar	Pin oak
Bigtooth aspen	Pitch pine
Black ash	Quaking aspen
Black maple	Red pine
Black willow	Serviceberry
Bur oak	Shingle oak
Cucumbertree	Striped maple
Eastern hemlock	Swamp whi
Eastern white pine	Sweet birch
Flowering dogwood	White spruc
Jack pine	Yellow birch
Paper birch	
FAIR CAPABILITY	
American beech	Sycamore

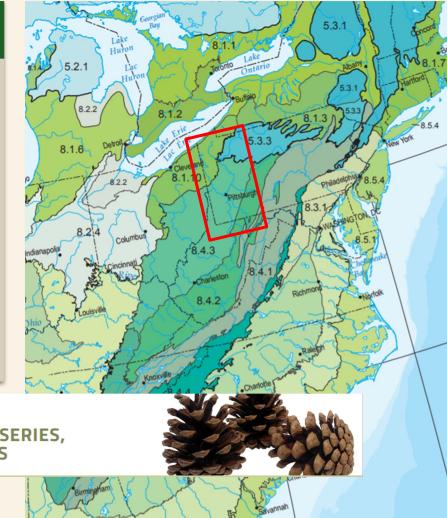


American elmo Pignut hickory Bitternut hickory Red maple Black locust Sassafras Black oak Shagbark hickory Black walnut Slippervelm





USFS Reforestation Nursery and Genetic Resource (RNGR) https://rngr.net/



Roo Day Foundation



Megan Palomo megan@treepittsburgh.org









Non-Profit Nursery Network



First meeting: Dec. 19th 2:00pm EST Monthly on 3rd Thursday

Zoom meeting code: 851 8808 3367 Pass: Trees email: megan@treepittsburgh.org for meeting link

All are welcome!

SCAN FOR REGISTRATION LINK





THANK YOU

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