Addressing Regional Tree Supply Challenges and Opportunities

Andrew Koeser, Deborah Hilbert, Dexter Locke, Chris Riley, and Nancy Sonti

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Overall Goal:

Identifying barriers and solutions to existing market constraints that limit the availability, diversity, and quality of nursery trees.

3 Key Steps for Addressing Main Goal

- Conduct a Rapid Assessment (Focus Group Series) within Chesapeake Bay Watershed
- Host an online virtual forum featuring industry experts/leaders
- Catalog solution pathways through a series of case studies.

Focus Groups - Methods

- Range of professionals from the region
- Explore connections in the production and procurement of trees
- Specifically asked for constraints and opportunities for creating a sustainable supply of urban trees
- 3 groups, 16 total
  - 4 growers
  - 3 municipal arborists/foresters
  - 2 landscape install/commercial reps
  - 5 gov’t reps
  - 1 NGO employee
  - 1 landscape designer

Results – factors influencing production

Demand and sales

Customer demand

Historic demand

LA trends

Avoid new, untested trees

Availability (of liners)

Growing time

Tree success and reliability

Hardiness, soils

Pests and pathogens

Invasiveness

Successful cultivars

…we're really trying to look forward on what trees we think are going to be in demand…for us that mostly gets back to trying to choose really the good trees. Not the newest and the latest, but the trees that are kind of proven and we think are gonna be around for a while…

- Grower

Results – factors influencing purchasing

Tree performance

Site suitability

Tree function

Tree size at planting

Climate change

Pests and pathogens

Availability

Quality

Native

Maintenance requirements

Limit cultivars

Historic landscape

Local provenance

Diversity

Costs/Funding

Timing

Right tree, right place

- *City Urban Forester*

Why are you planting?

- *Arborist, Associate Director*

Results – challenges in urban tree supply
Growers' perspective

Availability

- Liner availability
- Seed availability

Demand-driven

- Smal… pu… plant… don'… market
- Liner growers guide market

Timing

- …s
- Grant cycle and purchasers' timing

Environment, Biology

- Climate
- Climate change
- Weather events
- Soils

Loss of nurseries

[Referencing large-scale propagation nurseries]

…those guys pretty much own the chain of all of that stuff…

- Grower

Results – challenges in urban tree supply
Consumers' perspective

Availability

Quality stock

Variety of stock sizes

Native, not cultivars

Competing with other purchasers

Timing

Grant cycle and purchasers' timing vs. growers' timing

Funding, Program Capacity

Staffing

Policy and lawmakers

Environment, Biology

Climate

Climate change

Pests and pathogens

Urban sites

I think that the challenge is having, the right tree at the right size and the right quantity at the right time when these projects come up.

- Grower

Results – opportunities for expanding selection

Partnership

Contract growing

State assistance

Brokers and staging nurseries

Communication

Education

Visit the farm

Expert recommendations and technical assistance

Professional organizations and meetings

Funding and resources

Staffing and workforce development

Nonprofit nurseries

Policy and lawmakers

[A successful tree supply relationship involves] everybody coming to the table, and discussing this, and not bullying each other around

-Grower

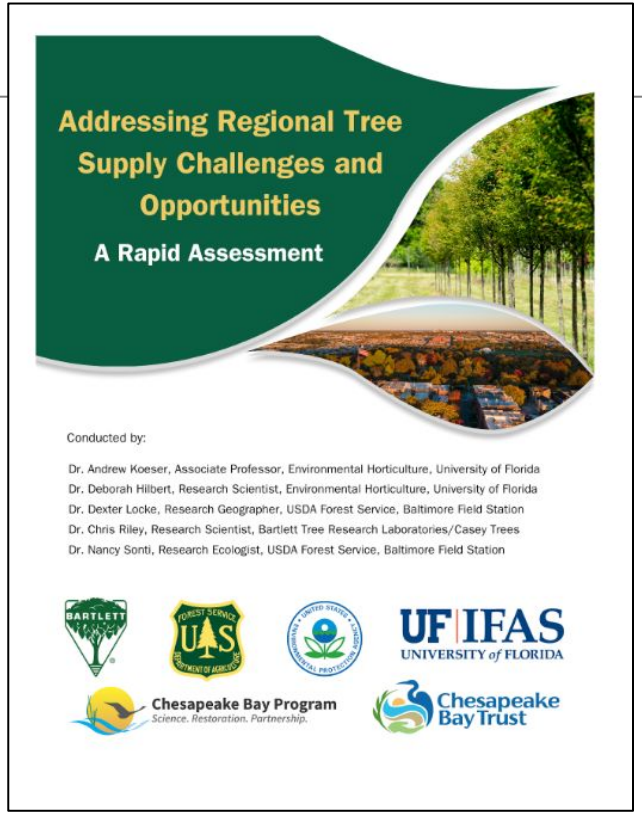
[We have a successful tree supply] because I really believe in relationships. Relationships help you smooth all these little bumps out.

-Contractor

Key Summary

- Market demand, driven by consumer trends and developer preferences, limits tree diversity and quality, while external market forces create unsustainable price competition.
- Supply chain logistics, including limited availability of seedlings and liners, hinder the production of diverse and locally-adapted tree species.
- The mismatch between multi-year tree growth cycles and short-term funding sources impedes long-term planning and market influence.
- A shortage of qualified technical staff and non-competitive pay scales in municipalities and non-profits undermines urban forestry efforts.
- Contract growing presents an opportunity to align grower production with end-user needs and reduce risks for nurseries producing new or uncommon species.
- Partnerships among growers, end-users, and institutions offer potential for improving tree availability and quality while expanding resources and expertise.
- Partnerships with non-profit organizations, local governments, or state nurseries may provide a viable solution for producing seedlings, liners, and finished trees of species that are not commercially viable in the nursery industry but are highly desirable in urban areas.
- Increased communication through industry events and the development of a centralized plant finder database could streamline tree-buying processes, though challenges in implementation remain.

Final Report



Supply Chain Virtual Forum

Program at a Glance

Time	Program
9:00 AM	**Kesha Braunskill**, Forest Service Urban and Community Forestry Specialist *Welcome*
9:15 AM	**Jehane Samaha**, Forest Service National Urban Nursery Specialist *Introduction to the US Urban Tree Supply, Resources, and Updates*
10:00 AM	10-min. break
10:10 AM	**Deb Hilbert**, Urban Forestry Researcher, University of Florida *An Assessment of Regional Urban Tree Stakeholders' Experiences*
10:55 AM	10-min. break
11:05 AM	**Earl Eutsler**, Associate Director/State Forester, District DOT **Andrew Schichtel**, Chief Operating Officer, Casey Trees *Innovative Nursery Production Partnerships*
12:00 PM	Lunch
1:00 PM	**Lianna Gomori-Ruben**, Urban Trees Senior Program Officer, Chesapeake Bay Trust *The Chesapeake Bay Trust's Nursery Project: Diversifying Native Trees for the Urban Trees Grant Program*
1:20 PM	**Trinity Pierce**, Chicago Region Trees Initiative Senior Stewardship Manager, Morton Arboretum *Tree Industry Innovations through Contract Growing*
1:40 PM	**Grant L. Thompson**, Landscape Architect, RDG Planning and Design *Permitting, size requirements, and management familiarity drive landscape architects' tree specification choices for public clients*
2:00 PM	**Q&A with Speakers**
2:20 PM	10-min. break
2:30 PM	**Mike Marshall**, Marshall Tree Farm *Nursery Grades and Standards and the Roots Plus Growers Project*
2:50 PM	**Kelly Lewis**, Ruppert Nursery *Tree Nursery Workforce Development*
3:10 PM	**James Kaechele**, Tree Time Manager, NYC Parks *Growing Partnerships for Urban Forest Resilience*
3:30 PM	**Q&A with Speakers**
3:50 PM	**Kesha Braunskill**, Forest Service Urban and Community Forestry Specialist *Closing Remarks*

Urban & Community Forestry Engagement

Community-based outreach and goal alignment

Chicago Region Trees Initiative ChicagoRTI.org

Trinity Pierce (Guest)

CR Chris Riley
KB Braunskil...
EE Eutsler, E...
JS Samaha, ...
LG Lianna G...
BS John Sn...
G Gabriela ...
WP Perry, Wi...
WZ Wei Zhang
JR Roos, Ja...
Koeser,A...
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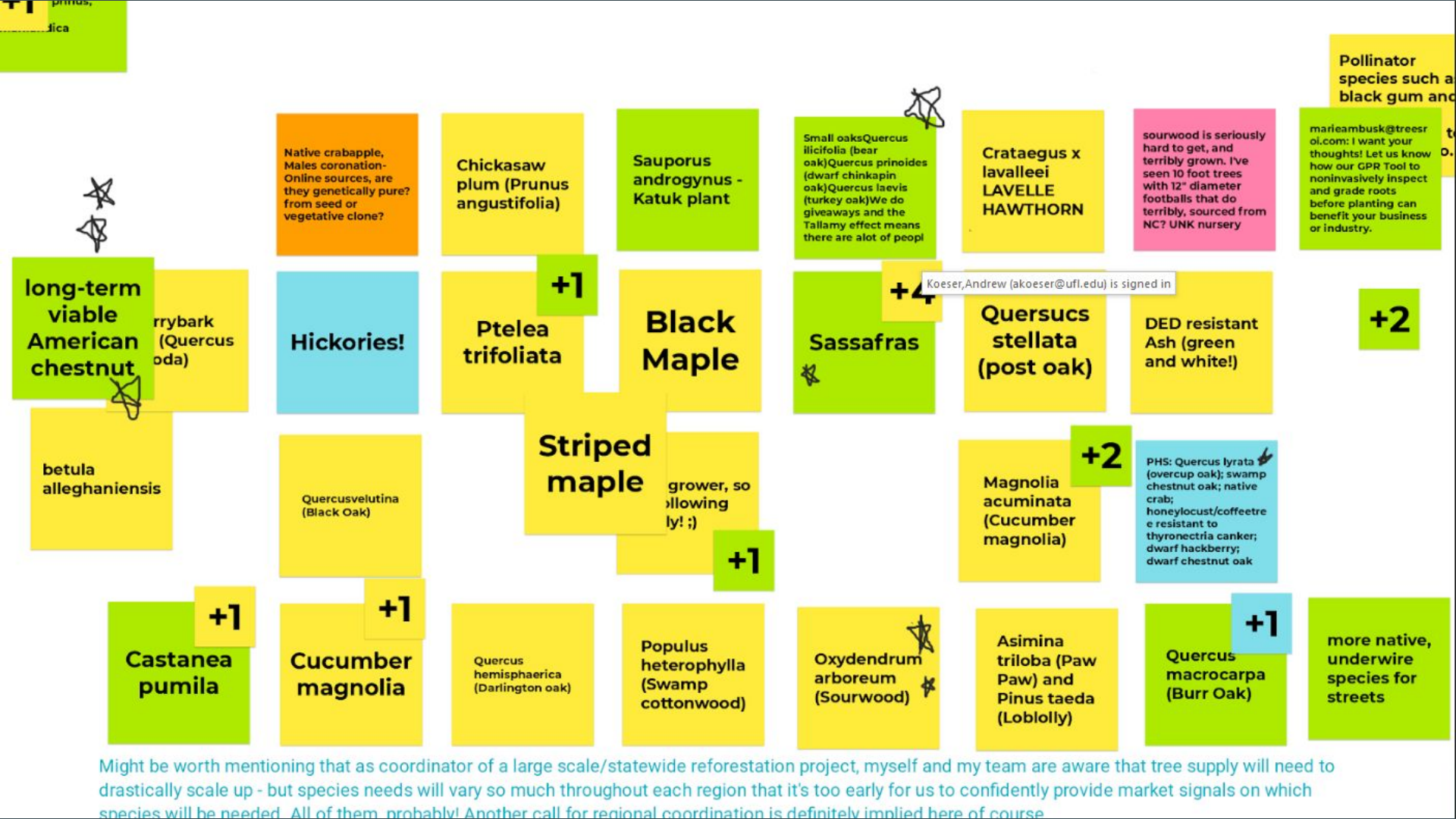

Native crabapple, Males coronation- Online sources, are they genetically pure? from seed or vegetative clone?
Chickasaw plum (Prunus angustifolia)
Sauporus androgynus - Katuk plant
Small oaksQuercus ilicifolia (bear oak)Quercus prinoides (dwarf chinkapin oak)Quercus laevis (turkey oak)We do giveaways and the Tallamy effect means there are alot of peopl
Crataegus x lavalleei LAVELLE HAWTHORN
sourwood is seriously hard to get, and terribly grown. I've seen 10 foot trees with 12" diameter footballs that do terribly, sourced from NC? UNK nursery
marieambusk@treesroi.com: I want your thoughts! Let us know how our GPR Tool to noninvasively inspect and grade roots before planting can benefit your business or industry.
Pollinator species such a black gum and
long-term viable American chestnut
rrybark (Quercus oda)
Hickories!
Ptelea trifoliata
+1
Black Maple
Sassafras
+4
Koeser,Andrew (akoeser@ufl.edu) is signed in
Quersucs stellata (post oak)
DED resistant Ash (green and white!)
+2
betula alleghaniensis
Quercusvelutina (Black Oak)
Striped maple
grower, so llowing ly! ;)
+1
Magnolia acuminata (Cucumber magnolia)
+2
PHS: Quercus lyrata (overcup oak); swamp chestnut oak; native crab; honeylocust/coffeetree resistant to thyronectria canker; dwarf hackberry; dwarf chestnut oak
Castanea pumila
+1
Cucumber magnolia
+1
Quercus hemisphaerica (Darlington oak)
Populus heterophylla (Swamp cottonwood)
Oxydendrum arboreum (Sourwood)
Asimina triloba (Paw Paw) and Pinus taeda (Loblolly)
Quercus macrocarpa (Burr Oak)
+1
more native, underwire species for streets
Might be worth mentioning that as coordinator of a large scale/statewide reforestation project, myself and my team are aware that tree supply will need to drastically scale up - but species needs will vary so much throughout each region that it's too early for us to confidently provide market signals on which species will be needed. All of them, probably! Another call for regional coordination is definitely implied here of course

What changes are needed in your industry and others to overcome challenges in sourcing high-quality, climate-ready trees for urban landscapes?

Willingness to use smaller-size stock

Better communication between buyers and growers on what species are actually preferred

More training for nursery personnel. I think if personnel had a better understanding of proper tree care the quality issue would improve

Where to start... More training/education for nursery staff, arborists/landscapers, and homeowners. Regulation, increased wages/benefits, professionalism, applied research

Researcher - nursery stock ROOT QUALITY is critical to GROW trees to maturity. Our tool can help, BUT tree order specs must include root Q! Who can help? Let's talk!

more trialing and funding of new climate adaptive selections for urban areas

Increased focus on quality: buried root flares in nursery stock lead to trees being planted to deep in the field. And girdling root issues.

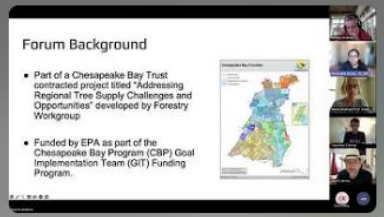
Grower: Willingness of tree planters to pay a premium for seed grown stock which takes more time and resources to produce compared to conventional stock.

Grower: More workforce training and educational opportunities for this specific type of nursery production.

Home
Shorts
Subscriptions

You
History
Playlists
Your videos
Your movies & TV
Your podcasts
Watch later
Liked videos
Your clips

Subscriptions
Lofi Girl
Coffee Shop Vibes
Relaxing White N...
Rogue Hobbies
ASMR With Victo...
Tabletop Minions
Ozzy Man Reviews



Urban Tree Supply Virtual Forum

by Urban Tree Supply Virtual Forum

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1 

01 - Welcome

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02 - Introduction to the US Urban Tree Supply, Resources, and Updates

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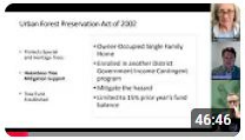
3 

03 - An Assessment of Regional Urban Tree Stakeholders' Experiences

Urban Tree Supply Virtual Forum • 11 views • 3 months ago

4 

04 - Innovative Nursery Production Partnerships

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05 - Chesapeake Bay Trust's Nursery Project: Diversifying Native Trees for Urban Trees Grant Program

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06 - Tree Industry Innovations through Contract Growing

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07 - Permitting, size requirements, and management familiarity drive landscape architects' tree

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Solution Pathway Case Studies

Matching Underused Native Trees with Underserved Communities - The Chesapeake Bay Trust's Nursery Project

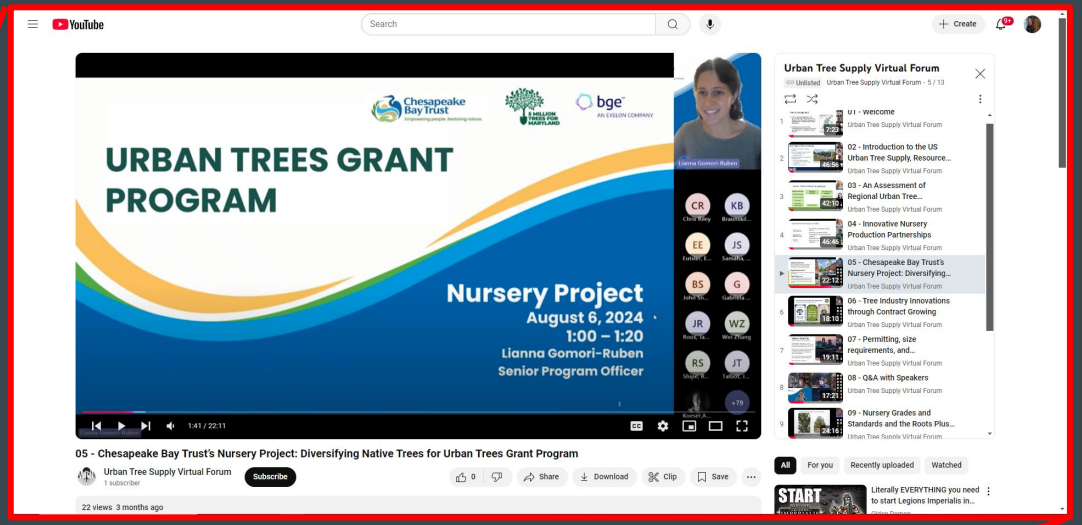
In response to Maryland's Tree Solutions Now Act of 2021, which established the 5 Million Trees for Maryland Initiative, the Chesapeake Bay Trust (CBT) was tasked with planting 500,000 native trees in underserved areas by 2031. This ambitious goal recognizes the vital role of trees in nature-based solutions, particularly in addressing environmental disparities in historically marginalized, low-income, and high-unemployment areas.

Recognizing that current nursery supply may not be sufficient to meet the increased demand, CBT held a listening session with local nursery producers and the University of Maryland Extension. The goal was to identify native tree species desired for urban greening projects that are currently underrepresented in Maryland's nursery trade. Through these discussions, CBT identified 47 native species that planting organizations preferred but found to be either underproduced or unavailable. This scarcity was largely due to the species' slower growth rates and higher production costs, which often make them less attractive in the current nursery market.

Based on these findings, CBT issued a Request for Proposals (RFP) to produce 7,000 native trees from the identified list over a three-year period. Seven nurseries responded, and four were selected to cultivate these underutilized species. To date, these nurseries have successfully grown 20,030 trees, with 9,180 allocated to support CBT's Underserved Greening Initiative.

CBT is now developing a matching program to connect these trees with projects in local communities, focusing on aligning trees with community goals, location, aesthetics, and wildlife benefits. This initiative demonstrates how CBT integrates scientific insights and strong community partnerships to fulfill Maryland's legislative goals, ultimately enhancing environmental resilience and equity across the state.

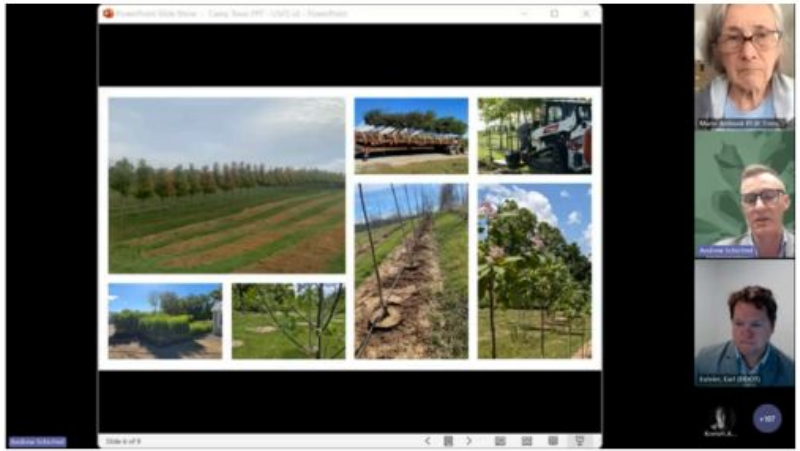
Interested in learning more? See a full presentation on this project using this QR Code!



Growing The Future Urban Forest Together - Casey Trees and The District Department of Transportation

Washington, D.C., boasts a long and rich history of urban planning, highlighted by significant investment in public trees. Building on this legacy, the city has established a durable and well-funded Tree Fund aimed at countering the impacts of tree removal. This fund not only supports tree planting initiatives throughout Washington but has also been instrumental in the establishment of the DC State Nursery at Casey Trees Farm. This partnership was initiated with limited production capacity but was designed with an eye toward responsible growth, prioritizing tree quality above all else.

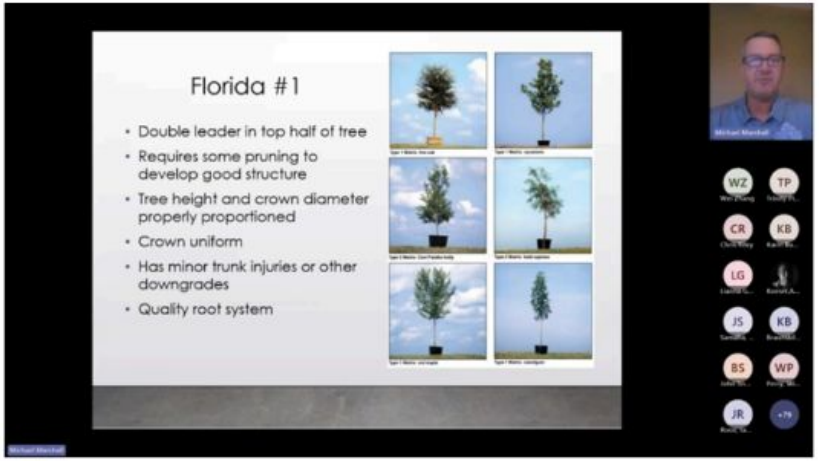
Over the past five years, the collaboration between the District Department of Transportation (DDOT) and Casey Trees has flourished, resulting in the nursery now producing more than 2,000 high-quality trees annually. This achievement underscores the effectiveness of their joint efforts in nurturing a sustainable urban forest. The partnership has



Creating a Common Language For Tree Quality - Florida Grades and Standards

In Florida, developing grades and standards for tree quality has become essential for green industry professionals seeking to ensure that urban trees thrive and maximize their environmental benefits. Urban trees provide beauty, shade, carbon sequestration, air filtration, and stormwater control, but these benefits are fully realized only when trees survive, grow, and remain healthy over time. Poor-quality nursery stock can hinder urban trees' ability to reach their full potential, often leading to early decline or failure.

A quality nursery tree is healthy and free from significant crown or root defects that could limit its long-term growth and longevity. Defining and conveying this "quality" to buyers, growers, and urban forestry professionals is challenging without standardized criteria. To address this, Florida's Grades and Standards for Nursery Trees provide a set of benchmarks that guide nursery production and promote



Communication is Key - The Chicago Regional Trees Initiative

The Morton Arboretum's Chicago Regional Trees Initiative (CRTI) is dedicated to creating a tree canopy that is more diverse, abundant, and equitable for all communities in the Chicago region. Acknowledging that communication is key to making meaningful impacts, CRTI emphasizes the importance of connecting with communities and stakeholders across various sectors of the green industry.

At the community level, CRTI recognizes the need to engage with populations that are often hardest to reach, including those facing language barriers or juggling demanding work schedules. By prioritizing these connections, CRTI works to ensure that all residents have a voice in urban greening efforts, ultimately leading to a more inclusive approach to tree planting and maintenance.

Getting What We Want Through Growing Contracts - New York City Parks

New York City Parks has transformed its approach to urban forestry by establishing growing contracts with local nurseries, specifically designed to supply both smaller native trees for restoration efforts and larger trees for urban development projects. Previously, NYC Parks sourced planting materials indirectly through landscape contractors, which created a barrier between NYC Parks and local growers. This arrangement limited direct communication, making it difficult to source specific species, tree sizes, and quality standards that aligned with the city's urban forestry goals. Last-minute changes to planting plans were common, and tree quality varied significantly from one project to the next.

To address these challenges, NYC Parks implemented nine-year growing contracts with local nurseries, allowing for custom-grown trees specifically tailored to the city's future projects and long-term planting goals. These contracts ensure that NYC Parks can source native-grown trees from local seed sources while providing clear specifications on cultivation practices, fostering more predictable quality and improved suitability for the urban environment. This proactive approach also empowers NYC Parks to request species that contribute to greater biodiversity and climate resilience in their landscapes.

Steering Committee

Project Leads

- Julie Mawhorter - Forest Service, Project Technical Lead
- Andrew Koeser - UF/IFAS, Project PI
- Deb Hilbert - UF/IFAS, Researcher
- Nancy Sonti - Forest Service, Researcher
- Dexter Locke - Forest Service, Researcher
- Chris Riley - Bartlett Tree Research Laboratories / Casey Trees, Researcher

Steering Committee

- Ned Brockmeyer - PA Bureau of Forestry
- Mark Buscaino - Casey Trees (NPO)
- Taryn Davidson - DE Forest Service
- Earl Eutsler - DC/DDOT Urban Forestry
- Lianna Gomori-Ruben - Chesapeake Bay Trust
- Lara Johnson - VA Dept. of Forestry
- JJ Käthe - NY DEC
- Frank Rogers - Cacapon Institute/WV
- Jehane Samaha - USFS Nursery Specialist
- Anna Twigg - MD Forest Service