Addressing Regional Tree Supply Challenges and Opportunities

Final Report

Conducted by:

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Executive 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.
- Our virtual forum participants identified a sizable list of primarily native trees they would like to see available for planting in urban areas while confirming many of the barriers identified in our rapid response focus groups.
- Models for innovation exist across the country that others can emulate to improve the quality, diversity, and abundance of urban trees in their local markets.

Recommendations for the Project Sponsors

- Continue creating or supporting networking opportunities that connect growers, designers, and urban tree managers.
- Provide contract growing templates and training to facilitate long-term strategic purchasing programs.
- Explore opportunities with state nurseries to produce underutilized species as nursery liners, ensuring regional liner producers and other key stakeholders are included in discussions.
- Continue educational efforts across green industries and the broader tree-buying public on the importance of tree diversity, high-quality nursery stock, and proper post-planting care. Some initiatives should specifically focus on workers involved in production and installation.

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Part I: Project Overview and Rapid Assessment Findings

Background

Experience, conversations with consumers, searches of inventory lists from nursery websites and databases, and prior research all point to nursery availability as a major limiting factor for purchasing and planting a diverse set of trees. It is worthwhile to understand why this is the case. One way to begin to address this overarching question is to interview large-scale growers and purchasers of trees throughout the region, to gain insights into why there is a limited palette of tree species available and planted, and how key players in this supply chain might approach expanding the supply of quality, diverse, climate-ready tree species for use in urban areas in the Chesapeake Bay Watershed

Objective

To understand the constraints and opportunities for creating a sustainable supply of quality, diverse, climate-ready tree species for use in urban areas in the Chesapeake Bay Watershed.

Key Research Questions

- What factors limit the quantity and quality of commercially-grown trees in the region?
- What opportunities exist to allow growers to produce enough climate-ready, underutilized trees to meet consumer demands?

Challenges Limiting Tree Diversity, Quality, and Abundance

Market Demand

Market demand is by far the main driving factor for the nursery growers we spoke to during our rapid assessment. While growers may have preferred species they would like to sell, consumer demand—driven by trends in the design and home garden markets—ultimately dictates their inventory. As one grower explained,

"We're obviously in the business for profit, so we are trying to predict what the market is gonna demand. We're at the mercy of the landscape architects, and the contractors and our customers."

Beyond staying current with market trends, growers noted that they tend to rely on tree species and size classes that have consistently sold well to minimize the financial risks associated with their planting decisions. While some clients, such as municipalities, have specific requirements for species, size, and quality, these buyers represent a smaller portion of the overall market. The market is primarily driven by large commercial developers, who are generally perceived as more focused on price and availability and less concerned with species diversity and tree quality. As a result, there is little incentive to cater to clients seeking change through stricter specifications and contracts.

The pressure from developers to produce low-cost trees is further exacerbated by external market forces. Growers noted that their industry is highly competitive, and they were contending with large-scale nursery production operations outside the Chesapeake Bay area. Additionally, nursery closures and liquidation sales flood the market with a steady supply of cheap tree stock, priced below what a viable company can sustainably produce. These closures are sometimes linked to financial hardship but may also result from the retirement of nursery owners. One grower noted that in the latter scenario, there is often no succession plan, which can limit the availability of high-quality trees in the local market.

Native Trees

Many respondents favored native tree species, with some stating they exclusively purchased or used native plants. This preference was reflected in certain jurisdictions, which pushed for a high percentage (90-100%) of native trees. An increasing demand for native species was also noted, particularly in retail garden businesses. However, the preference for natives was not universal nor absolute. Some respondents continued to use non-native species, recognizing their value when they were non-invasive and well-suited to urban site conditions. Challenges associated

with relying solely on native species were also mentioned, including limited variety and sourcing difficulties. As one respondent noted,

"We have about a list of 12 trees that we plant, [laughs] and it seems to be because we're limiting ourselves to purely native trees."

This is not to say that there is a lack of local tree diversity in the Chesapeake Bay area to draw from; rather, it reflects the omission of many native species in nursery production, especially in larger sizes.

Cultivars

Cultivars in nursery production offer several benefits, including improved drought tolerance, winter hardiness, production consistency, and specific traits desired by homeowners. They also provide disease resistance, as seen with American elm cultivars. However, their use raises concerns about limited genetic diversity due to cloning and potential overuse of the same genetic material. The market for cultivars is largely demand-driven, with commercial services often preferring them over straight species and rarely inquiring about seed sources or liner origins. As one respondent noted,

"It's demand driven, and maybe it'll change, but right now what's crossing my desk [are requests for] mostly 'Red Sunset' maples and 'October Glory' maples.

This preference creates a challenge for nurseries trying to balance ecological considerations, as straight species are preferred for restoration projects and genetic diversity is important for overall ecosystem health. The production of cultivars also faces challenges in urban environments, where nurseries must balance the availability of disease-resistant varieties with site constraints.

Supply Chain Logistics

Seed and Liner Availability

Growers in our focus group highlighted a challenge they face when trying to grow new species: the availability and sourcing of seedlings and nursery liners. Many nurseries don't propagate their own trees from seeds or cuttings, instead relying on purchasing small trees, called liners, which they grow to a salable size. A significant portion of these liners comes from a relatively small group of large-scale producers in the Western United States, which can lead to supply bottlenecks. One grower mentioned that he had been trying to purchase 400 liners of a preferred

species for five years, but was only able to obtain a tenth of his request each year. Additionally, the centralization of liner production makes it difficult to source native species with local provenance, which is often desired by purchasers and even required by some local municipal ordinances.

Grant Cycles/Funding Timing

Another challenge that prevents many tree purchases from shaping the market is the fundamental mismatch between the multi-year growth cycle of trees and the shorter-term nature of most funding sources. Trees require many years to grow from seedlings to a size suitable for planting, particularly when targeting the larger caliper stock favored in urban environments. This natural timeline is poorly aligned with the annual or short-term cycles of most funding mechanisms. Local government budgets often fluctuate yearly, and planting grants—one of the main funding sources for state and federal initiatives—typically operate on similar short cycles. Even longer-term grants are generally limited to three years, which is insufficient time to influence nursery planting decisions.

Furthermore, the uncertainty of future funding from grants and budgets makes it difficult to commit to long-term tree production contracts or plan for large-scale, multi-year planting initiatives. When organizations do secure grants, they often face pressure to act quickly to meet short deadlines, which may not align with optimal planting seasons or tree availability. Bureaucratic processes can further complicate matters, delaying fund distribution and making it challenging to meet seasonal planting windows. The inconsistent nature of grant funding also limits organizations' ability to leverage their purchasing power to influence tree nursery production. Without guaranteed future funds, it's risky to push for changes in tree availability or species diversity, as there is no assurance of resources for future purchases. This situation creates a cycle where the short-term focus of funding sources limits long-term impact on the tree market.

Staffing

One challenge that hadn’t been raised in our previous regional and national focus groups (Koeser et al., 2022, Hibert et al., 2023) is the shortage of qualified technical staff who understand the importance of tree quality and species diversity. This staffing issue affects various aspects of urban tree initiatives, from project planning to long-term care. Municipalities and non-profit organizations often struggle to build and maintain the internal capacity needed for effective tree management. The problem is worsened by non-competitive pay scales, making it difficult to attract and retain skilled professionals. Participants emphasized that these technical positions are crucial for ensuring the survival of newly planted trees. As one respondent stated,

“With technical expertise. I guess I really wanted to hit home that those positions need to be highly valued.”

Without knowledgeable personnel, the success and sustainability of urban forestry efforts are significantly undermined.

Opportunities for Increasing Tree Diversity, Quality, and Abundance

Contract Growing

Contract growing was the most discussed potential solution to address tree availability issues in urban forestry, offering benefits such as better alignment between grower production and end-user needs, securing specific species and qualities, and potential cost savings. Importantly, it also reduces the risk for growers when producing new species or trees to specific requirements, a factor viewed positively by nursery operators. As one grower explained,

"What would be most helpful for growers is more of a partnership with end users to find out what's in the pipeline, what they're going to need. Ideally, even some sort of contract grow situation where sizes, specs, and varieties are listed. Otherwise, as growers, we're taking the risk of trying to grow something we think will sell."

Some organizations have successfully implemented shorter-term contract grows for smaller materials, finding them particularly useful for larger projects, those funded in advance, and for sourcing hard-to-find or native species.

However, contract growing also presents challenges, especially for longer-term contracts needed for larger trees. Many participants expressed concerns about the 5 to 7 year timeframe required for large urban trees, noting that much could change during this period, including the possibility of business closures. As one grower noted,

"From a grower's perspective, it scares me a little, committing to grow these trees. And then something happens—weather, nature, [pests], or whatever."

Other challenges include short grant windows, funding uncertainties, and the long growth cycle of trees. Despite these concerns, both growers and buyers recognize the potential of contract growing to improve tree availability and quality while reducing financial risks for growers.

However, those who have experimented with contract growing tend to focus on shorter-term contracts for smaller plant material, reflecting a hesitancy to commit to extended time frames. All parties acknowledge the need for stable, long-term funding and careful planning to make such arrangements viable and beneficial, particularly for larger urban trees.

Partnerships

Partnerships with growers have emerged as a key strategy for improving tree availability and quality in urban forestry projects. Participants emphasized the importance of fostering closer relationships between end-users and nurseries to better align production with demand. These partnerships can take various forms, ranging from informal arrangements where urban foresters provide advance notice of their needs to more structured contract growing agreements. Some organizations have successfully collaborated with local nurseries by placing orders well in advance to ensure availability. Additionally, participants mentioned the benefits of working together or using brokers to secure a representative at the nursery to tag trees that met their quality requirements. Building strong relationships with growers was seen as essential to overcoming challenges, with one participant noting,

"Relationships help you smooth all these little bumps out."

Partnerships with industry, NGOs, and government entities were also highlighted as valuable resources for urban forestry initiatives. Collaborations with universities, botanical gardens, zoos, and local government agencies were cited as effective ways to expand resources and expertise. Respondents mentioned discussions with local universities to propagate desired species. One respondent, who worked for a municipality, noted that they provided temporary storage for local groups to hold stock after delivery and before planting.

State Nurseries

As noted earlier in our challenges section, many nurseries do not propagate seeds or cuttings in-house. Instead, they rely on companies specializing in seedling or liner production to source plant materials. Respondents noted that some state nurseries have been underfunded recently. They believe there is an opportunity to reinvest in these nurseries to produce seedlings and liners for desirable tree species that are currently seen as unprofitable by nurseries. Moreover, these nurseries could produce local provenances of species with broad ranges and provide greater detail about seed sources than is currently available for much commercial nursery stock.

Non-Profit Nurseries

Several participants shared their experiences or interest in developing small-scale, internal nursery capacities for hard-to-find tree species. These efforts typically involve cultivating

smaller-sized stock, ranging from propagation gardens to nurseries producing a few thousand trees annually. Motivations include growing rare species, reforesting former agricultural lands, and supporting local conservation efforts. Methods vary, from starting plants from seeds (sometimes collected locally) to purchasing and raising liner stock. There was also interest in investing in state tree nurseries as a means of producing less marketable species. This approach allows organizations to balance self-grown stock with purchases from established nurseries, providing greater control over species selection and local adaptation.

Increased Communication

Increased Communication Among Industry Associations

Many respondents emphasized the importance of increased communication between tree producers and purchasers to address the current availability of nursery trees. Trade shows and events—particularly the Mid-Atlantic Nursery Trade Show (MANTS)—were identified as crucial networking opportunities. MANTS was frequently mentioned as a premier event for both growers and buyers, with one participant even describing it as "heaven on earth" for industry connections. These shows provide valuable platforms for face-to-face meetings, relationship-building, and staying informed about market demands.

State-level organizations were also highlighted as important resources. Participants cited various state nursery and landscape associations, such as the Pennsylvania Landscape Nurserymen's Association and the Maryland Nursery and Greenhouse Association, as key players in addressing industry issues and facilitating connections within their respective states. Overall, these professional organizations and events were portrayed as essential for networking, assessing market needs, and fostering relationships between producers and purchasers in the tree industry. While designers, arborists, and urban foresters have numerous opportunities for networking and continuing education through their own organizations, efforts should be made to move beyond these meetings when addressing issues that cut across green industry sectors.

Creation of a Centralized plant finder database

Several participants expressed a need for a centralized database of nursery trees for sale, highlighting the current challenges in finding up-to-date information on tree availability. They noted that while some resources claim to offer this service, the constantly changing inventory of nurseries makes it difficult to maintain accurate, real-time information. Participants envisioned a comprehensive system that would allow users to search for available trees within a specific radius, including details on sizes and quantities. This database was seen as a potential solution to streamline the tree-buying process and improve efficiency for both buyers and sellers. As one purchaser noted,

"...it'd be great to have some central database where you can see…what is available from the nurseries…Who has what? Of what size? It would make buying trees a lot easier"

However, the idea of a centralized database raised concerns among some nursery owners, particularly smaller operations. They expressed anxiety about the frequency of updates required to keep such a system current, noting that many nurseries only update their inventories a few times a year. Some participants recalled past attempts to create national directories, suggesting that modern technology could ease implementation. That said, nurseries vary in their willingness to embrace technology—some host online ordering systems and post on existing commercial plant-finder apps, while others still rely on traditional sales methods. The variation in how inventory data is recorded, stored, and updated poses significant challenges to a unified plant-finding effort.

Appendix A: Methods

Participant Selection

For this rapid assessment, we conducted a series of focus groups that included urban tree producers and purchasers from across the Chesapeake Bay watershed (Fig 1). Participants were selected to ensure representation from major stakeholder groups involved in the tree selection and planting process. These stakeholders included wholesale nursery growers who produce field, bare root, or container trees, landscape architects, designers, developers, and planners responsible for specifying trees for commercial developments, and municipal foresters or arborists who select trees for public plantings and influence private plantings. Additionally, industry associations, representing non-profit groups involved in key green industries such as landscapers, growers, arborists, and urban foresters, were included, along with non-governmental organization (NGO) technical advisors and government agency professionals who are actively involved in tree-related work or advise those who do.

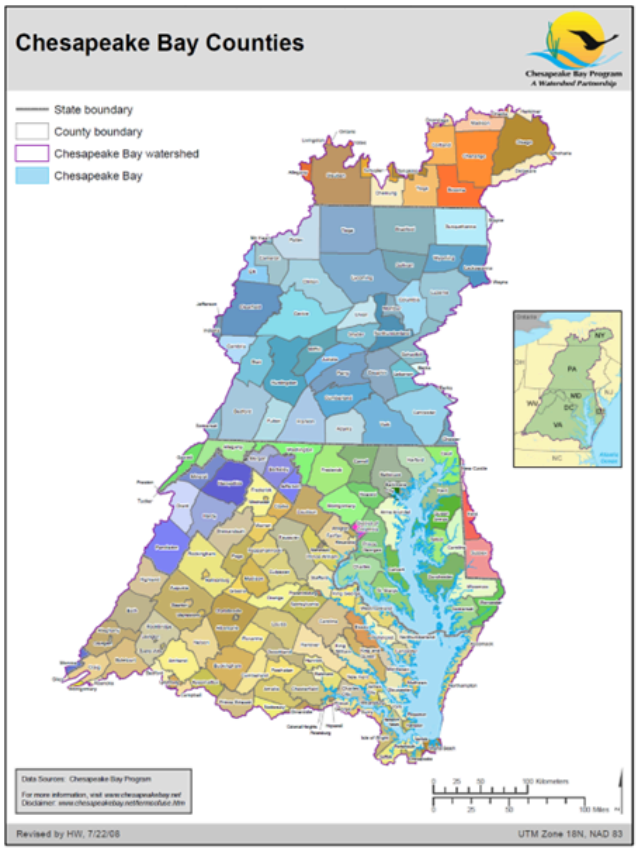


Figure 1. Map of Chesapeake Bay Watershed counties. Source: Chesapeake Bay Program, 2008.

Participants were chosen based on their professional involvement in the tree selection and planting process, with an emphasis on ensuring diversity across the key stakeholder categories. Recruitment efforts aimed to include representation from each of these categories to ensure a well-rounded perspective.

In an effort to secure a representative sample, we over-recruited by 20-50%. Participants were recruited from previous projects' stakeholders, regional organizations, and industry associations. Recommendations from partners, such as the Chesapeake Bay Trust (CBT), and colleagues were also used to identify suitable participants. When additional participants were required, "snowball sampling" was employed, allowing current participants to recommend others who might be interested.

Rapid Assessment Logistics

A total of three focus groups were held. Each meeting lasted approximately two hours, with subsequent meetings spaced two weeks apart to allow time for preliminary analysis and any necessary improvements. All meetings were conducted virtually using an online meeting service (Zoom), which facilitated recording and transcription. Zoom's chat feature also provided participants with the opportunity to write complex questions or responses. Each meeting group was composed of 5-9 participants, ensuring representation from growers (including those producing both field-grown and containerized trees), arborists or urban foresters, designers or developers, industry association representatives, and NGO or government agents.

Transcript Analysis Process

The transcripts were automatically downloaded from Zoom and cleaned through a multi-step process. Consecutive responses from the same speaker were consolidated into a single block of text, with the aid of AI, though manually reviewed for errors. During the first review, words emphasized by speakers that altered the meaning of their statements were italicized. Tags were inserted to indicate significant non-verbal actions, such as gestures or laughter, using square brackets. Verbal tics such as "um," "you know," and repeated words were removed without altering the original language or grammar. Fragmented or incomplete phrases that did not contribute meaning were also eliminated. Run-on sentences were broken up, and punctuation was added to improve readability. Instances of unintelligible speech were marked with a timestamp for reference.

The cleaned transcripts underwent an iterative review process, including a full listen-through to ensure accuracy. A second researcher independently reviewed the transcripts, adding comments and noting key responses that were particularly significant.

The finalized transcripts were uploaded into Quirkos for qualitative thematic analysis. A combination of inductive and deductive coding approaches was used. Deductive coding focused on responses that directly addressed the research questions, while inductive coding captured new themes that emerged during the discussions. The analysis was an iterative process, involving multiple rounds of reviewing and refining thematic groupings as patterns emerged. Annotations were added where relevant, and the coded themes were cross-referenced with feedback from the second researcher to ensure accuracy and consistency.

Throughout the analysis, a collaborative approach was maintained to ensure consistency in the coding process. Regular discussions between the primary researcher and the second researcher helped refine the analysis and thematic organization, validating emerging themes against the raw data. This iterative process ensured that key insights were accurately captured and reflected in the final interpretation of the findings.

Appendix B: Rapid Response Moderator Script and Questions

Hour:Minute	Action	Script
10 minutes early	Log in & check screen share & host designations	N/A
5 minutes early	Start letting participants in. Change to first names	"Hello, welcome. We're going to wait for the last few folks to join before getting started."
0:00	Mute all participants.	"Welcome everyone. My name is Dr. Deborah Hilbert. You may call me Deb. I am an urban tree research scientist with the University of Florida and a consulting urban forester. I will be facilitating this meeting today with the help of my co-facilitator, Dr. Andrew Koeser. Andrew, would you like to introduce yourself? And here to observe and assist are our fellow researchers Drs. Chris Riley, Dexter Locke, and Nancy Sonti. XX, would you introduce yourselves? As facilitators, we are here to moderate the discussion and keep the group on topic, but not to give our own perspectives on the discussion itself. We want to hear from you. We're also here to help if you have technical issues. Before we get started, I want to show you some of the features on Zoom. First off, you can change the display on your screen by … We changed your names so that only your first name is displayed. You may change it to a different name by clicking on the three little dots next to your thumbnail. I encourage you to leave your video on so that we can all be invested. If you find looking at yourself uncomfortable or distracting, you can go to Gallery mode (the *Brady Bunch*–style view), right-click your video to display the menu and choose "Hide Self View." You can raise your hands by going to… Does anyone have any questions about how to use Zoom?"
0:05	HIT RECORD TO CLOUD (Deb)	"Great. We will proceed."
0:06	Share Agenda Slide	"Here is the agenda for the day. Today, we will spend time discussing your experiences with growing and purchasing trees in the Chesapeake Bay Watershed region. Specifically, we want to hear your views about the constraints and opportunities for creating a sustainable supply of quality, diverse, climate-ready tree species for use in urban areas. During this meeting, I'm going to ask you several questions. Please share your honest opinions and thoughts on each of the questions. Your input is an important part of our effort to better understand what your strategies are for growing or procuring trees, and how this may affect the overall supply of trees for the urban forests in the Chesapeake Bay Watershed."
0:07	Share Ground Rules Slide	"We want to hear from everyone, and this is your conversation. With that in mind, let's set some ground rules that will help maximize our time together. First off, silence your mobile phones. Close competing

		windows, Jump in or raise your hand if you haven't been able to share. Do not be critical or judgemental of others. You may address each other if you'd like to follow up on something during the discussion. Everything that is said in this meeting should remain here." "Everyone's experiences and opinions are important. I may call on you if I haven't heard from you in a while. I also want to remind you that your participation is voluntary. You do not have to answer any question you do not wish to answer. You may leave at any time you wish." "This session is being recorded so that I can obtain a transcript of what is said when I summarize information later. This recording will not be posted anywhere. The information which you give will only be used by the researchers involved in this study and their partners at the Chesapeake Bay Trust. The final report and publication will not identify the views of any specific participant. Everyone's comments will be kept confidential. Any quotes that are used will not be attributed to anyone by name." Are there any questions? Let's get started…"
0:10	Share Ice Breaker slide Call on participants alphabetically Jam Board: *Favorite species*	"We are going to go around by alphabetical order to hear your answer to the ice breaker question: 'Tell us your first name, location, which sector of the landscape industry you work in, and your favorite tree species." "Thanks for sharing. We're going to delve into some more detailed questions. Some of these questions will be directed towards certain participants, but it's important that we all understand their experiences. Others will get a chance to respond."
0:15	Put question in chat Put answers on Jam Board: *Grower factors*	"Could those of you who **grow trees** share with us what factors you consider when deciding which trees to grow?" "Which factor would rank as the most important to your decision-making? "What do those of you who purchase or plant trees think about these responses? Any surprises? Any questions for the growers?"
0:30	Put answers on Jam Board: *Purchaser factors*	"Could those of you who **purchase or plant trees** share with us what factors you consider when deciding which trees to choose?" "Which factor would rank as the most important to your decision-making?" "What do those of you who grow trees think about these responses? Any surprises? Any questions for the group?
0:45	Put answers on Jam Board: *Species Wishlist*	"Pretend you can grow or procure any regionally-appropriate species you want. What **tree species** would you choose to use in the region's urban areas?" "Can you explain why you chose XX species? What attributes are important?"

		"Climate change projections indicate that by the 2080s, most parts of the Watershed will experience an average of 4.5 to 10 degrees warming with more extreme drought and precipitation events. In light of climate change, would any of your answers above change? Do you have additional suggestions?"
1:00	Share Break Slide	Thanks so much for sharing your experiences and ideas so far. We're going to take a 10-min break. Please be back promptly at XX:XX.
1:10	Come back from break Restart Recording Jam board: *Barriers*	"Welcome back. We've discussed the factors that influence the selection of tree species and your experiences with this process. Let's talk about challenges in urban tree supply. "For those who **purchase or plant trees,** what do you think are **barriers** that prevent you from purchasing the trees you desire for urban use?" "Could those of you who **grow** trees share with us the **barriers** that prevent you from growing more trees for urban use?"
1:20	Jam board: *Solutions*	"Now let's talk about what would need to happen **to overcome the challenges** to sourcing trees in the quantity and quality needed for urban landscapes: What is something your industry could do differently? What is something another industry could do to support your efforts? Are there examples of **successful tree procurement contracts or other arrangements** through which tree supply goals were met?"
1:40	Share summary slide	"We've covered the main questions and are at a good stopping point. Based on this discussion, we think the major points that were brought up were XX, XX, XX." (Share a slide that has these points typed up.)" How well does this summary capture what was said here? Remember, the purpose of this study is to understand the constraints and opportunities for creating a sustainable supply of quality, diverse, climate-ready tree species for use in urban areas in the Chesapeake Bay Watershed. Regarding the purpose of the study, is there anything that we should have talked about but didn't? Is there anything that you have thought of that we didn't discuss?"
1:50	Thank you slide	"Thank you all again for your time and input. This is so helpful as we move forward in understanding this topic. We have a few more groups to conduct. We are organizing a 1-day virtual forum in August to discuss the findings of these focus groups and to hear talks from others on this topic. Please let me know if you would like to be invited to the forum or if you know of others who may want to attend or be a speaker. If there are no more questions from you, then I'll call this meeting adjourned."
2:00	Stop Record. Save chat.	

	Save Jam Boards. End meeting.	
2:00	Debrief between facilitators	1) What were the themes? 2) What are the most important points that we've learned from this group? 3) What was surprising or unexpected? 4) What quotes were particularly helpful? 5) How was this group similar to or different from earlier groups? 6) Does anything need to be changed before the next group?
2:15	Save all data!	Any lists, ratings, chat dialogue, or other important notes will be organized and labeled immediately after the group.

Appendix C: Rapid Assessment Meeting Summaries

At the conclusion of each Rapid Assessment focus group, the research team presented a list of talking points that emerged as key themes from the session. Participants were invited to review, modify, add, or delete items as they deemed necessary. The final points are listed below:

Focus Group 1:

- It is difficult to plan ahead, as money fluctuates quickly, creating instability and sudden increases in demand.
- Diversity is not often an issue in smaller tree sizes, but it becomes a challenge with larger sizes.
- Contract growing has potential to reduce risk and increase supply, provided the funding can be secured.
- Technical expertise is essential for selecting the right trees, maintaining plantings, and setting up contracts. This expertise needs long-term financial support and recognition.
- More communication is needed—connecting growers with buyers, and politicians with technical experts.

Focus Group 2:

- Nurseries serve a variety of clients with differing tree needs. However, demand and availability are often driven by large purchasers, such as developers.
- Diversity is a challenge not only in species but also in stock type and size.
- While some buyers demand high-quality trees, there will always be others who are less selective or unable to be picky.
- More partnerships are needed, including collaborations with state forest service nurseries, nursery and landscape associations, better communication, resource sharing (e.g., brokers), and a centralized plant finder database.
- Climate change is a pressing issue—planning ahead for the Bay Area's shifting climate and helping manage this transition.

Focus Group 3:

- Growing choices are primarily determined by what can grow well and what sells.
- Producing and transporting trees involves logistical challenges, such as long production cycles, busy planting seasons, and external market factors (e.g., out-of-state liquidation sales).
- Long-term relationships and ongoing communication can help address these issues. Repeat bids and continuous dialogue can shape availability and future contracts.
- Educating contractors and the public is key to overcoming these challenges. There is a general lack of awareness about the logistics needed for successful plantings, where to source trees, and which nurseries are available.

Part II: Virtual Forum Report

Summary:

This report summarizes the Virtual Forum on Urban Tree Supply, hosted as a key deliverable for the project "Scope of Work 4: Addressing Regional Tree Supply Challenges and Opportunities." The forum took place on August 6, 2024, and aimed to showcase the results of rapid response focus groups while highlighting key local initiatives for professionals in the Chesapeake Bay watershed and across the nation.

The event featured 11 leading experts from the nursery industry, municipal forestry, nonprofit sector, and government agencies.

Included in this report:

1. Roles and responsibilities
2. Registration and attendance numbers
3. A copy of the attendee program, including the agenda, talk summaries, and speaker biographies
4. Summarized findings from two attendee discussion sessions

Roles & Responsibilities

- **Introduction & Wrap-Up**: Kesha Braunskill
- **Session Moderator**: Andrew Koeser
- **Chat/Q&A Moderation**: Chris Riley
- **Jam Board Introduction & Management**: Andrew Koeser
- **Technical Support**: Joel Parlin

Registrants and Attendees

Registrants: 267
Attendees: 115+

Attendee Program

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*

About the Talks

9:00 AM **Kesha Braunskill**, Forest Service Urban and Community Forestry Specialist
Welcome
A short welcome address and overview of the project “Addressing Regional Tree Supply Challenges and Opportunities.”

9:15 AM **Jehane Samaha**, Forest Service National Urban Nursery Specialist
Introduction to the US Urban Tree Supply, Resources, and Updates
As the new Forest Service National Urban Nursery Specialist, Jehane will introduce herself and goals for the new position. She will also provide a summary of the current urban tree supply challenges and opportunities, as well as resources and actionable steps stakeholders can take to find the trees they need.

10:10 AM **Deb Hilbert**, Urban Forestry Researcher, University of Florida
An Assessment of Regional Urban Tree Stakeholders’ Experiences
Prior to this forum, researchers from the University Florida, USDA Forest Service, and Bartlett Tree Labs/Casey Trees worked on a rapid assessment to understand the constraints and opportunities for creating a sustainable supply of quality, diverse, climate-ready tree species for use in urban areas in the Chesapeake Bay watershed. Deb will provide a summary of their findings from a series of focus groups of regional urban tree stakeholders, including both growers and purchasers.

11:05 AM **Earl Eustler**, Associate Director/State Forester, District DOT
Andrew Schichtel, Chief Operating Officer, Casey Trees
Innovative Nursery Production Partnerships

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
Maryland has set the ambitious goal to plant five million native trees across the state by 2031. The Chesapeake Bay Trust (the Trust) manages the Urban Trees Grant Program to ensure that 500,000 of those trees are planted in urban underserved areas. To provide a more diverse tree stock for the grantees’ projects, the Chesapeake Bay Trust launched the Nursery Project in 2023. The first phase of the Project focused on identifying existing native tree inventory to help applicants, particularly those with lower-capacity, access information on tree prices and species to prepare project budgets. The second phase focused on increasing the production of native tree species that are not commonly grown by nurseries. This presentation will explain the outcomes of that Project.

1:20 PM **Trinity Pierce**, Chicago Region Trees Initiative Senior Stewardship Manager, Morton Arboretum
Tree Industry Innovations through Contract Growing
CRTI has coordinated tree industry roundtables to best understand challenges and opportunities in the Chicago region nursery pipeline. Continuing to build partnerships and solicit grower feedback is essential. Given the increased funding in urban and community forestry, contract growing programs have proven crucial to

providing high quality, diverse species at guaranteed pricing while helping to mitigate risk for growers. A review of the roundtable content and budget models for contract growing will be included.

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
Landscape architects who specify trees face challenges to deliver diverse, appropriate, and climate-aware selections for public clients such as municipalities, states, or regional entities. Offering consulting services profitably requires meeting permitting requirements which may include approved tree lists, minimum tree sizes, and staff familiarity with management. Tree lists may be mismatched with what is available in the nursery trade. Tree lists may also reflect currently appropriate trees without considering future climate trajectories.

2:00 PM **Q&A with Speakers**
In this moderated Q&A, attendees will be able to ask Lianna, Trinity and Grant questions about their presentations.

2:30 PM **Mike Marshall**, Marshall Tree Farm
Tree Quality and the Florida Grades and Standards
The Florida Grades and Standards have dramatically changed the quality of Florida tree production by applying known quality standards in a voluntary program for nursery grown trees. Michael will present on the history, usage and impact of the Florida Grades and Standards on the tree and landscape industry in Florida. He will also discuss how Florida growers have embraced quality and sustainable practices as the industry has matured over the last 30 years.

2:50 PM **Kelly Lewis**, Ruppert Nursery
Tree Nursery Workforce Development
What We Do at Ruppert Nurseries to Find, Train, and Retain the People Necessary to Grow Great Trees

3:10 PM **James Kaechele**, Tree Time Manager, NYC Parks
Growing Partnerships for Urban Forest Resilience
Resilient urban forests begin with planting high quality nursery stock that represent a diverse mix of tree species. While this is a great planned starting point, the reality of nursery availability and project timelines often forces compromise. NYC Parks contracts directly with multiple nurseries so that trees are grown to our specifications and ready when we need them. These types of tree planter-nursery partnerships are scalable across municipality size and planting campaign duration. Consider replicating our success for your organization.

3:30 PM **Q&A with Speakers**
In this moderated Q&A, attendees will be able to ask Mike, Kelly and James questions about their presentations.

3:50 PM **Kesha Braunskill**, Forest Service Urban and Community Forestry Specialist
Closing Remarks

About the Speakers

Kesha Braunskill, Forest Service Urban and Community Forestry Specialist
Kesha Braunskill is the head of Delaware's Urban and Community Forestry Program. She holds a Master's in Ecology from Delaware State University and has successfully fostered collaboration between state forestry programs, local municipalities, and communities. Kesha's dedication to making a real-time and long-term impact through tree planting and community engagement highlights her passion for the natural world and urban forestry.

Jehane Samaha, Forest Service National Urban Nursery Specialist
After working in tree phenology research and woody plant propagation at the Arnold and Morris arboreta, I was fascinated by the disconnects I observed (of information and plant material) between the nursery industry, urban foresters, and public gardens. This led me to complete a multi-disciplinary Masters' thesis at the University of British Columbia (UBC) School of Forestry on urban tree species selection. I then returned to the Morris Arboretum as an urban forestry consultant, before diving into community driven tree planting and care via the Tree Tenders program at the Pennsylvania Horticultural Society (PHS). At PHS I coordinated the planting of 3,500 urban trees over 3 years in cooperation with city partners and local volunteers. I love teaching, and through all my work I remain committed to communicating environmental information in relatable and engaging ways. I enjoy biking around the city, touching plants and dirt, making art, cooking meals for friends, and sharing ideas and skills for a better future.

Deb Hilbert, Urban Forestry Researcher, University of Florida
Dr. Deborah "Deb" Hilbert is an urban tree scientist, strategist, and educator. She is the owner of Many Trees Consulting, a collaborator at the University of Florida's Urban Tree and Landscape Management Lab, and the new Assistant Professor of Arboriculture and Urban Forestry at SUNY ESF (beginning in late August). She conducts research on many topics, including urban forest tree diversity, urban tree establishment and survival, tree planting space recommendations, and urban forest canopy assessments. She is the past president of the Arboricultural Research and Education Academy, and is an ISA Certified Arborist, is Tree Risk Assessment Qualified (TRAQ), and is trained in the Quantified Tree Risk Assessment system. If she is not thinking about trees, she is probably reading science fiction, gardening, or trying out a new cuisine.

Earl Eustler, Associate Director/State Forester, District DOT
Earl is the Associate Director of DDOT's Urban Forestry Division, where has been caring for the District's urban forests for more than 20 years. He works alongside nearly 50 dedicated professionals who work everyday to improve the lives of DC residents through urban forestry.

He holds degrees from St Mary's College of MD and the Johns Hopkins University; he also serves as the State Forester for Washington, DC.

Andrew Schichtel, Chief Operating Officer, Casey Trees
Andrew is a committed leader in the non-profit urban forestry space with deep ties to the tree production and arboricultural industry. Andrew has been at Casey Trees for 14 years, shepherding the organization's growth from four department areas and 25 staff planting a few hundred trees a year to six department areas and 70 staff planting over 6,500 a year. He oversees all aspects of CT's leadership team, ensuring their efforts remain on track toward achieving DC's 40 percent tree canopy goal through execution of CT's mission: To restore, enhance and protect the tree canopy of our nation's capital. Andrew is a graduate of Catholic University of America and a member of Leadership Greater Washington and several local boards.

Lianna Gomori-Ruben, Urban Trees Senior Program Officer, Chesapeake Bay Trust
Lianna works at the intersections of urban forestry, urban agriculture, and grant management. Lianna has been a founding teacher of two green middle schools, a grant writer for gender equity in STEM, and a research consultant on projects related to financing sustainable food systems. Lianna holds a Master of Environmental Management, a Master of Arts in Teaching, and a graduate certificate of Labor Studies. She seeks to develop sustainable communities in which everyone thrives.

Trinity Pierce, Chicago Region Trees Initiative Senior Stewardship Manager, Morton Arboretum
Trinity Pierce is the Chicago Region Trees Initiative senior stewardship manager at The Morton Arboretum. She collaborates with community organizations and members to increase awareness and foster action through plantings and ongoing care in order to grow a more diverse, more abundant, and more equitably distributed urban forest. A Certified Arborist, she holds a Master of Landscape Architecture from the University of Michigan with a background in history, ecological restoration, and urban green space reconciliation.

Grant L. Thompson, Landscape Architect, RDG Planning and Design
Grant is a landscape architect with RDG Planning & Design. His has conducted urban tree diversity research at Iowa State University and studied land-use change and soil ecology in the greater Baltimore area. His professional involvement supports the advancement of sustainable urban landscapes and includes serving on the board of trustees for Trees Forever, as a member of the Iowa Urban Tree Council, the International Society of Arboriculture, and the American Society of Landscape Architects.

Mike Marshall, Marshall Tree Farm
Michael Marshall is Vice President at Marshall Tree Farm a 650-acre landscape tree farm in North Central Florida. He studied horticulture at the University of Florida and is an active volunteer in the Florida green industry. He has served the Florida Nursery Growers and Landscape Association, National Horticulture Foundation and Florida Chapter ISA as President. Michael serves on the Florida Grades and Standards committee and has co-chaired the tree committee for the 2015 and 2022 revisions.

Kelly Lewis, Ruppert Nursery
Kelly Lewis is the General Manager at Ruppert Nurseries. In this capacity, he oversees day-to-day operations, large tree moving, and long-term planning activities. Kelly started with Ruppert Nurseries in 1994. He is a Certified Professional Horticulturist and holds a Texas A&M Certificate of Applied Business Management.

James Kaechele, Tree Time Manager, NYC Parks
For the past 16 years James Kaechele has worked alongside a dedicated team growing and caring for New York City's urban forest. He now leads a citywide program dedicated to fostering public-private partnerships to realize fully greened streetscapes. Throughout his time at NYC Parks, James has built relationships throughout the nursery industry to supply the many thousands of trees planted across the city.

About this Project

The Chesapeake Bay Trust has been designated to receive federal funds from the U.S. Environmental Protection Agency (EPA) as part of the Chesapeake Bay Program (CBP) Goal Implementation Team (GIT) Funding Program. The work to be supported will advance specific outcomes from the 2014 Chesapeake Bay Watershed Agreement (and the 2022 Amendment) that have been identified as top priorities to address. The funding is supplied by the EPA to the University of Florida to complete the project titled "**Scope of Work 4: Addressing Regional Tree Supply Challenges and Opportunities.**"

The goals of "**Scope of Work 4: Addressing Regional Tree Supply Challenges and Opportunities**" are to identify existing market constraints that limit the availability, diversity, and quality of nursery trees for urban plantings in the Chesapeake Bay watershed, and to identify opportunities to create a sustainable, equitable supply of trees for urban use. The project established a regional steering committee and hosted a series of focus groups across the Chesapeake Bay watershed. A virtual forum was held to highlight the findings of this work and bring industry experts together to discuss the issue.

A final report will summarize findings from the focus groups, forum, and steering committee meetings. It will also provide case studies of scenarios through which tree supply was met (e.g., contract growing, government-NPO-nursery partnerships, etc.) that can serve as models. It will also provide recommendations to the Chesapeake Bay Trust and stakeholders. It will be made **available on the CBT website and distributed via the project team's network.** A 1-hour webinar will be hosted by project partners to showcase the project and its findings, provide a Q&A opportunity, and direct attendees to the Final Report and additional resources on the topic. The webinar and final report are expected to be available to the public in late 2024/early 2025.

Rapid Assessment Researchers
Dr. Andrew Koeser, Associate Professor, Environmental Horticulture, University of Florida
Dr. Deborah Hilbert, Research Scientist, Environmental Horticulture, University of Florida
Dr. Dexter Locke, Research Geographer, USDA Forest Service, Baltimore Field Station
Dr. Chris Riley, Research Scientist, Bartlett Tree Research Laboratories/Casey Trees

Dr. Nancy Sonti, Research Ecologist, USDA Forest Service, Baltimore Field Station

Technical Lead
Julie Mawhorter, Mid-Atlantic Urban and Community Forestry Coordinator, USDA Forest Service

Thanks for Attending!

[End Attendee Program]

Tree Supply Forum Discussion Question 1.

The following is a list of responses to the question: "*What species would you like to see more commonly available?*" We received over 30 responses to this question. It is interesting to note that, aside from the last entry on the list, every species mentioned is native to North America. Additionally, one in every three species listed belongs to the *Quercus* (oak) genus—highlighting the importance of considering species diversity at multiple taxonomic levels when making production and purchasing decisions.

Desired Species List

Acer pensylvanicum (Striped maple)
Asimina triloba (Pawpaw)
Betula alleghaniensis (Yellow birch)
Carya spp.
Castanea dentata (American chestnut) – Disease resistant (mentioned 4 times)
Castanea pumila (Dwarf chestnut) (mentioned 3 times)
Celtis tenuifolia (Dwarf hackberry)
Crataegus × *lavallei* (Lavelle hawthorn)
Gleditsia triacanthos (Honey locust) – Canker-resistant
Gymnocladus dioicus (Kentucky coffeetree) – Canker-resistant
Magnolia acuminata (Cucumber magnolia) (mentioned 5 times)
Malus coronaria (Sweet crabapple) (mentioned 2 times)
Nyssa aquatica (Water tupelo)
Nyssa sylvatica (Black gum)
Oxydendrum arboreum (Sourwood) (mentioned 4 times)
Pinus taeda (Loblolly pine)
Populus heterophylla (Swamp cottonwood)
Prunus angustifolia (Chickasaw plum)
Ptelea trifoliata (Hoptree)
Quercus hemispherica (Darlington oak)
Quercus ilicifolia (Bear oak) (mentioned 2 times)
Quercus laevis (Turkey oak) (mentioned 2 times)
Quercus lyrata (Overcup oak)
Quercus macrocarpa (Bur oak)
Quercus michauxii (Swamp chestnut oak)
Quercus pagoda (Cherrybark oak)
Quercus prinoides (Dwarf chinkapin oak) (mentioned 2 times)
Quercus stellata (Post oak)
Quercus velutina (Black oak)
Sassafras albidum (Sassafras) (mentioned 5 times)
Sauropus androgynus (Katuk plant)

Tree Supply Forum Discussion 2.

We received fewer responses (*n*=16) to our question: *"What changes are needed in your industry or others to overcome the challenges of sourcing high-quality, climate-ready trees for urban landscapes?"*

One respondent noted challenges in working with their organization's business office. They sought contract language and justification to explain why they were selecting alternatives to the lowest bids, considering the quality and species of the plants, as well as the standard of planting and care provided. Another participant echoed this concern.

Another respondent highlighted difficulties in finding local growers that produced high-quality trees and a diverse range of species, a concern that was also seconded by another participant. Additionally, one respondent noted that while their state had a wide diversity of bare-root species, these were limited to smaller sizes (seedlings), which were not suitable for urban planting sites. In contrast, another respondent pointed out that an unwillingness to use smaller stock sizes was itself a barrier.

Two respondents emphasized the need for greater communication between growers and purchasers—rather than placing blame solely on nurseries. One noted that clearly communicating which species are desired is a crucial step in changing the status quo.

Three respondents identified the need for better training and education for nursery workers, landscapers, arborists, and homeowners. This included training on tree care, regulations, professionalism, and the latest applied research. Respondents noted that improving education and training would lead to better-quality nursery stock and increased wages and benefits for those in the industry.

Regarding quality concerns, two respondents focused primarily on root health as a major challenge. One highlighted issues related to deep planting in nurseries, which can lead to the formation of stem-girdling roots. The other noted that poor root quality often prevents trees from reaching their full mature potential.

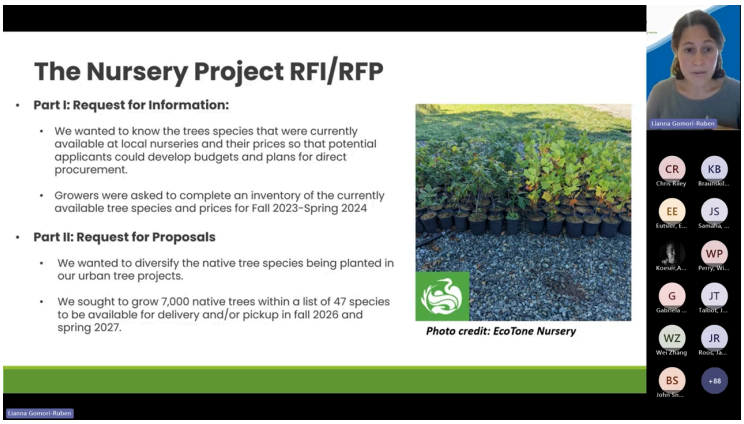
Two respondents identified themselves as growers. One reiterated the need for training and educational opportunities for nursery workers. The other noted that the market does not currently reward practices that enhance diversity and quality—such as using seed-grown stock—since these practices slow down production time and increase costs.

Finally, one respondent emphasized the need for more research and funding to support trials of underused species and climate-adapted selections.

Part III: 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.

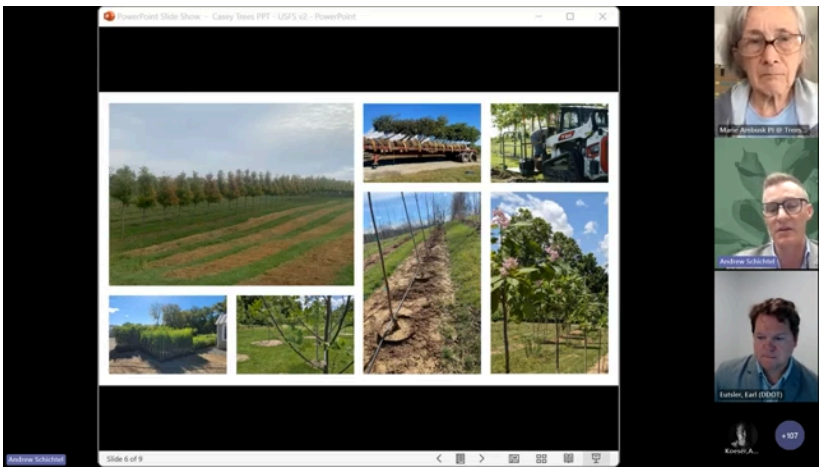
Based on these findings, CBT issued a Request for Proposals (RFP) to produce 7,000 native trees from the identified list over a three-year period. Seven nurseries responded, and four were selected to cultivate these underutilized species. To date, these nurseries have successfully grown 20,030 trees, 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 allowed both organizations to engage in ongoing dialogue, providing essential feedback when challenges such as inflation affect production costs. This proactive communication ensures that the trees being cultivated meet the necessary standards required for the planting projects across the city.

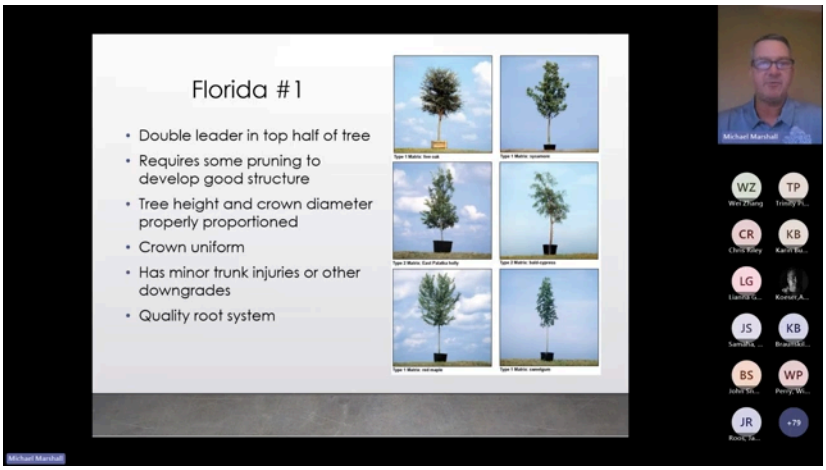
Moreover, the nursery not only serves as a vital resource for urban reforestation but also enhances local biodiversity and ecological resilience in the D.C. area. The partnership exemplifies how strategic collaboration can enhance urban greening efforts, ensuring that Washington, D.C.'s future urban forest is robust, diverse, and reflective of the city's commitment to environmental stewardship. Through their continued work together, Casey Trees and the DDOT are effectively cultivating a greener, healthier city for generations to come.

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

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 consistent tree quality in the landscape.



These standards serve as a common language among industry stakeholders, clarifying specifications for nursery trees. They define attributes like trunk structure, branch distribution, root health, and absence of pests or disease. By following these guidelines, nurseries can produce trees that are more likely to establish successfully and contribute long-term benefits to urban areas.

The adoption of these grades and standards not only enhances communication but also improves tree performance across urban landscapes, aligning nursery practices with the objectives of urban forest management. These quality standards ultimately support sustainable urban greening efforts and amplify the ecological services that trees provide in Florida's cities.

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

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.

When contracted trees reach maturity and are ready for planting, NYC Parks collaborates closely with planting contractors to schedule installation and set up long-term maintenance plans. By establishing direct partnerships with local growers and committing to work with them from germination through to delivery, NYC Parks has not only improved tree quality and diversity but also strengthened local nursery businesses. These long-term contracts have become a model for enhancing both urban forest health and local economies, showcasing the value of sustained investment and collaboration in public green space initiatives.

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

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.

Within the green industry, effective communication is essential for linking those who produce trees with those who plant and maintain them. CRTI facilitates conversations among nurseries, planting contractors, and workforce development organizations, helping to create a collaborative network. This communication can lead to discoveries that optimize planting efforts, such as identifying the best tree stock type and size to engage community volunteers effectively.

Furthermore, maintaining an open dialogue with growers is crucial for aligning their production schedules with CRTI's planting plans. By keeping growers informed about upcoming projects, CRTI allows them to provide valuable feedback, which can lead to improved practices and outcomes. These ongoing communications serve as the foundation for more formal agreements, such as contract growing, ensuring that the initiative can source the right trees for community needs.

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

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