National Champion Pinus longaeva (Nevada) Photo credit: Brian Kelley of the Gathering Growth Foundation, with permission from American Forests



Strategic Plan 2024

NATIONAL CHAMPION TREE PROGRAM



Mission

to protect, preserve, and keep record of the largest trees in the United States of America through public education and engagement.

National Champion Abies magnifica (California) Photo credit: Brian Kelley of the Gathering Growth Foundation, with permission from American Forests

Table of Contents

3	Letter from the National Director	Why it is the right
9	Challenges & Opportunities	Current challenges
H		and the oppo
12	Goals	Current and long-term priorit
16	Strategies: The Three Pillars	Specific strat
T		document
50	Quick-Reference	
54	Acknowledgements	





ght time for a National Champion Tree revival

facing the National Champion Tree Program ortunities arising alongside those challenges

ities for the National Champion Tree Program

tegies identified to help reach our mission to and preserve large trees across the country

Goals and Strategies listed without images

Gratitude to those who made this possible

National Champion *Nyssa aquatica* (Arkansas) Photo credit: Brian Kelley of the Gathering Growth Foundation, with permission from American Forests

Letter from the National Divector



This document is both a map for the immediate future of the Champion Tree Program and a visionary guide for the far-future. Many of the ideas contained within are ambitious and beyond the current capacity of the Champion Tree Program. It will address both the road immediately ahead and what the road might look like for future generations. An idea I reference frequently is the 200-year-window:

Imagine a timeline centered on the present moment, reaching 100 years into the future to the time of our grandchildren's grandchildren.



the path for what is to come.

Trees, some larger than any animal that has ever existed, with lifespans stretching into the thousands of years, are a through-line connecting the far-past to the present to the far-future, the steady heartbeat of the earth's natural processes cycling over millenia we, as short-lived individuals, are but temporary visitors in their world.



In this present moment, we are facing a myriad of ecological challenges: --

rapid urban expansion, as cities sprawl further and further into rural lands, large swaths of forest and farmland smashed flat and covered over with hard surfaces that reradiate heat and smear pollution into the fallen rain;



disconnection with nature, as people spend more time around screens than photosynthetic greens, hungry lawns devour water and spit out pesticides and fertilizer, and the urban air sits heavy on your tongue with the taste of gasoline;

mass extinction, as treetops that once thrived with song fall deathly silent, replaced with the humming of machinery and the incessant rhythm of tires on the pavement;



climate upheaval, as trees are too-slowly walking northwards as the southernmost reaches of their ranges become unsuitable for their biology, outpaced by the rapidly changing weather patterns.







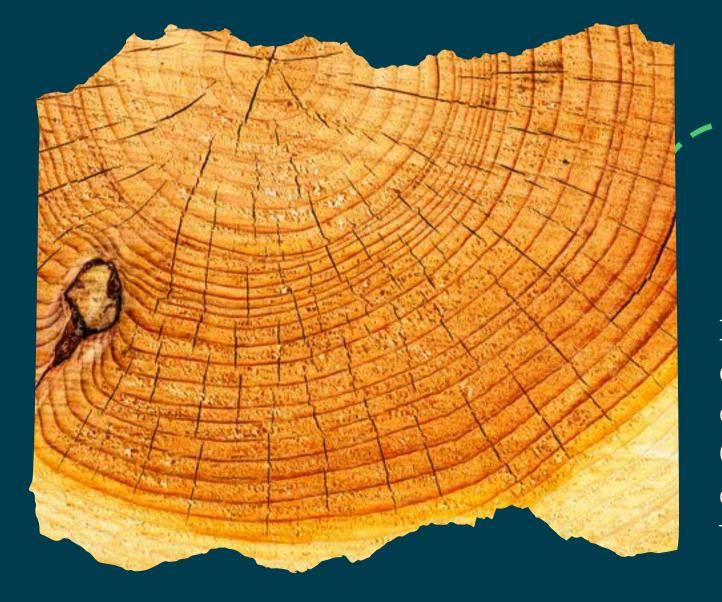
In order to address these challenges, a multifaceted approach is required. We are just one piece of the puzzle, but a piece that has been thus far unrepresented. There are many organizations promoting the planting of trees, organizing tree planting events, extolling the virtues of tree planting and slamming more young ones into the ground without thought paid to how those trees will be cared for, abandoning these children by the roadside and wishing them luck.

Approximately half of all urban trees planted will die in the first 15 years of their life - this is a waste of time, resources, energy, and money that could be spent elsewhere. These 15-year-old trees are much like human teenagers, in that they require more resources to grow than they are providing back to society/the ecosystem. They aren't old enough or mature enough to be independent, productive members of society yet - Oak trees can take 30 years to reach full maturity.



We must ensure that trees are not just planted, but also cared for and maintained. There are precious few organizations dedicated to this message - Champion Trees are a great way to fill that gap with engaging competition, evocative multimedia storytelling, scientific and cultural records of the trees, and outreach to communities that often fall outside of the traditional forestry audiences.

If we do not preserve these trees, they could be lost forever. Trees, of course, have a life cycle - there are times when human safety must take priority and a Champion may need to be removed. This, too, is part of the celebration of the life of Champions, and should be honored more fully. If we do not document these trees, there will be nothing remaining to tell future generations about the giants that stood before their time, and how they connected us to something greater than ourselves.



It is through the good grace and foresight of previous generations, and the historic efforts of American Forests, that we have this knowledge from decades past. We can ensure that future generations receive not only the measurements of these Champions, a repository of scientific data about how tree sizes and ranges have changed over time, but also that they receive the cultural information alongside it. The stories of these trees deserve to be told.





The first summer that I went out to measure Champion Trees was an awakening for me. Folks across the state of Tennessee lit up when they talked about how much they loved their tree and how tender it was to watch their kids play under it. They showed us grainy black-and-white photos of their tree from decades prior, proudly walking us out to these gentle giants and watching with interest as we used our tools and techniques to document their beloved friend. As we shared these moments of people and trees growing together, we reached broader audiences and engaged more members of the public of all ages. I see so much potential in this program to educate, to provide scientific information, and to directly impact the conservation of our trees across the county.



I'm thrilled beyond words to be standing at the helm of this great ship, and I hope that I can count on your help to spread the word, to build local and regional partnerships, and to change the focus of tree messaging from "plant more trees" to "protect more trees". The stakes are as high as they've ever been - one of the thrills of teetering on the edge of the cliff is that it matters where you stand. We have immense, undeniable power when we work together toward a shared goal.

I look forward to many years of gathering and sharing stories, documenting and preserving our treasured community members, and sustaining one note in the choir of voices crying out on behalf of our forests, our trees, and the vast and fragile web of interconnected life on our planet.

Long Live America's Champion Trees!

Photo credit: Tennessee Champion Tree Program



Photo credit: Tennessee Champion Tree Program





National Champion *Populus fremontii* (Arizona) Photo credit: Brian Kelley of the Gathering Growth Foundation, with permission from American Forests

Challenges & Opportunities



Public Awareness

- Few numbers of people involved, low engagement, and low awareness of the program
- Public focused primarily on tree planting, not tree preservation

Capacity

- Historic lack of investment, communication, and adequate training/ standards/equipment for accurate data collection across the board
- Volunteer-supported, little funding available
- Citizen Science limitations data quality, engagement, motivation

Ecology

- Urbanization and urban sprawl threatening more mature trees
- Climate change altering the ranges and growth patterns of tree species
- Relatively little research about the largest trees in our landscapes and their physiology, morphology, and contribution to the ecosystem



Public Awareness

- Competitive aspect of program is highly engaging
- Appeals to diverse audiences across socioeconomic boundaries
- Few programs do what this program does unfilled niche



• Cultural importance and historic value of trees provides meaning-making and storytelling for effective conservation

Capacity

- Passionate and dedicated volunteers, participants, and supporters
- Many new research and conservation initiatives arising, including funding opportunities and robust networks

Opportunities



Ecology

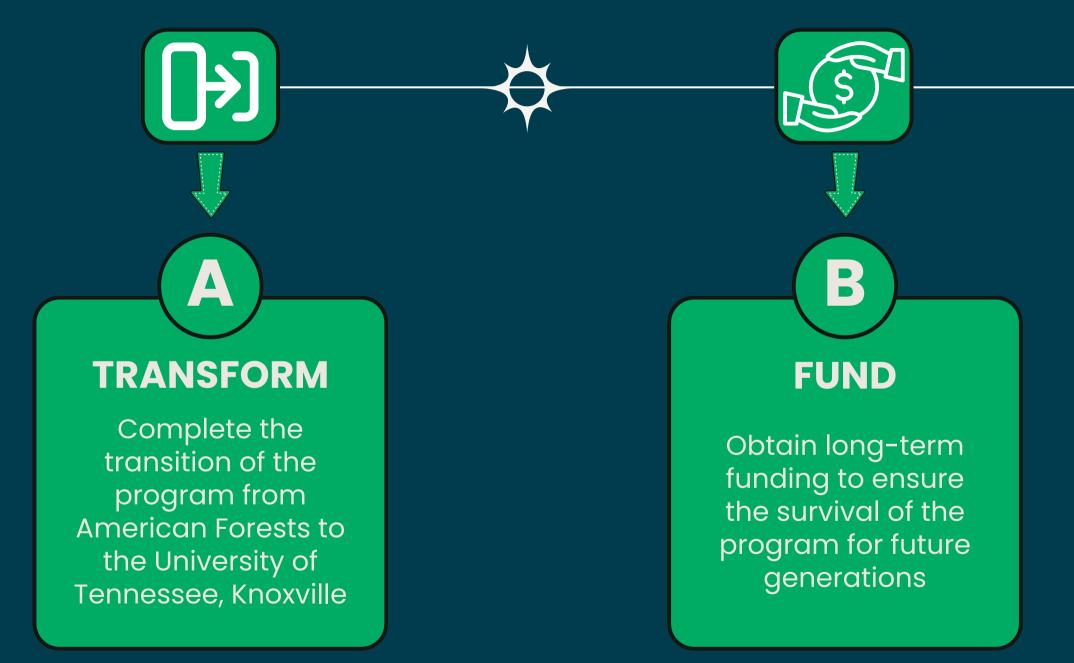
- Current research supports the immense impact of big trees on people and the environment
- Large, mature trees store more carbon annually than young trees (who store carbon faster but in much smaller amounts)
- Complex structures provide muchneeded habitat for wildlife and insects

Goals



National Champion *Sequoiadendron giganteum* (California) Photo credit: Brian Kelley of the Gathering Growth Foundation, with permission from American Forests





PRESERVE

C

Develop strategies to protect and preserve current and future Champion Trees





D EDUCATE

Educate the public on the importance of protecting large and mature trees in the landscape

ENGAGE

Ε

Engage the public in the search for and documentation of large and mature trees in the landscape CURATE

F

Curate a repository of scientific and cultural data about remarkably-sized trees in the United States





CONSERVE

G

Work with current conservation efforts to ensure genetic diversity in *ex-situ* collections and secure the survival of threatened and endangered tree species

REACH

Η

Bolster the reach and capacity of the State Champion Tree Programs to better tailor messaging to individual regions, states, counties, municipalities, and communities TRAIN

Standardize training and increase recruitment of the National Cadre of Tree Measurement Experts to improve the accuracy of tree measurements



Strategies: The Three Pillars



National Champion *Picea sitchensis* (Washington)

National Champion Fagus grandifolia (New York)

National Champion Carnegiea gigantea (Arizona)





Education

The Champion Tree Program is a vehicle for other messaging related to forestry, arboriculture, and the importance of our connection to the natural world outside ourselves. These charismatic trees are engaging, beloved, and awe-inducing.





Education 1: Content

Ideas for the content of educational programming. Content can be personalized and expanded upon for each state, region, community, client, school, organization, club, etc.

Youth-focused
Homeowner-focused
Public-focused
Arborist-focused





Youth-focused community programs, outreach & educational curricula

- Elementary age topics: benefits of trees, nature experiences, elementary-level math and natural resources
- Middle-school age topics: ecosystems, tree ecosystem services, the math of measuring trees, careers in forestry/ arboriculture (Who Takes Care of the Champions?)
- High-school age topics: tree ecosystem services, natural resource stewardship, planting and caring for trees, measuring trees (advanced theory and practice), career opportunities and pathways in forestry/arboriculture









Who Takes Care of the Champions?

An exploration into the varied careers of the arborists, urban foresters, forest managers, researchers, rural and urban landowners, and tree enthusiasts that maintain the health and well-being of Champion Trees.

Some of the topics covered:

- Career pathways
- Occupational training & academic programs
- Community connections





Homeowner/Property owner focused education and outreach materials

- Threats facing our Champions: pests, diseases, and the impacts of climate change
- Arborist Certification: promotion of Certified Arborists for tree healthcare
- Preservation of large trees: the importance of preserving large trees in the landscape, ecosystem services

Education 1.2 Homeowner-focused



Certified Arborists

These are arborists and horticulturalists who have completed the International Society of Arboriculture (ISA) Arborist Certification program, which requires knowledge, training, and following the ISA Code of Ethics.

Certified Arborists understand how trees work and are required to take yearly training to improve their knowledge of current best practices when it comes to tree care.

Other certifications exist for arborists through the American Society of Consulting Arborists (ASCA) and for foresters through the Society of American Foresters (SAF).





Public engagement, education, and outreach materials

- Threats facing our Champions, ecosystem services of trees, physical and mental health benefits of trees, the importance of good natural resource stewardship, tree species identification and information
- Tree measurement for the public how to participate in citizen science efforts to catalogue the largest specimen of each tree species in the United States
- Tree protection advocacy: how to use charismatic trees like Champion Trees to encourage thoughtful local development and to preserve large, mature trees in the landscape when possible and safe to do so

Education 1.3 Public-focused





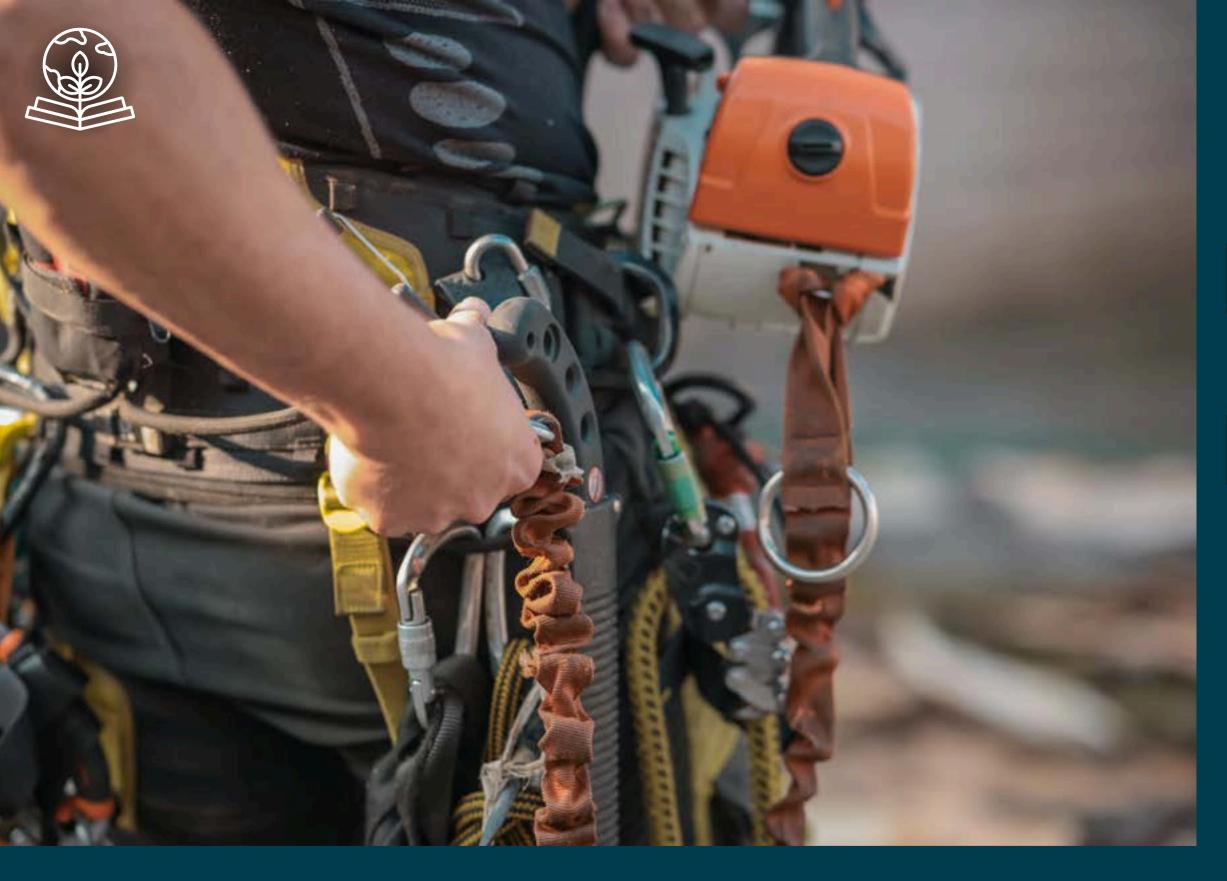






ENGAGE





Arborist-focused education materials

- Techniques and best practices for preserving historic and culturally important trees
- Materials and training for educating property owners/clients

Education 1.4 arborist-focused













Historic and Culturally Important Trees

There are many "witness trees" that were physically present during impactful historical events, such as the Oklahoma City Survivor. The Oklahoma City Survivor, and American Elm, survived the bombing of a nearby federal building in 1995, and even had glass and metal embedded into its bark from the explosion - it stands today as part of the Oklahoma City National Memorial, representing the resilience of the community and honoring the memory of the lives lost. Trees with such importance to the community, including Champion Trees deserve to be taken care of using the best available knowledge and technology.





Education 2: Methods

Ideas for putting these topics to work and building connections between trees and people. These methods will be informed by capacity, needs, and desired outcomes for each community.

> 1. Partnerships 2. Arts & Creative Expression 3. Materials & Curricula 4. Social Media & Internet Presence









Build partnerships with organizations of all sizes and capacity across the country

- Ease the burden of responsibility on other organizations by working together to share resources, connect with communities, bolster our mutual credibility, and advocate for conservation with a collective voice and influence
- Potential partners may include but are not limited to NGOs, grassroots organizations, governmental bodies, non-profits, private companies, schools, libraries, managed parks and forests, spokespeople (celebrities, legislators, influencers, etc)

Education 2.1 Partnerships













y o share resources, connect with h a collective voice and influence ations, governmental bodies, non-profits, e (celebrities, legislators, influencers, etc)





Storytelling and meaning-making through creative expression

- Work with artists, filmmakers, podcasters, poets, sculptors and more to tell the story of Champion Trees in ways that weave together art and science
- Seek collaborations with artists of all mediums
 - Champion Trees of Arkansas: An Artist's Journey by Linda Williams Palmer
 - Exquisite drawings of Arkansas' Champion Trees done in colored pencil
 - Gathering Growth Foundation, Brian Kelley
 - Breathtaking and impactful archival photography & recordings

Education 2.2 Orts & Creative Expression









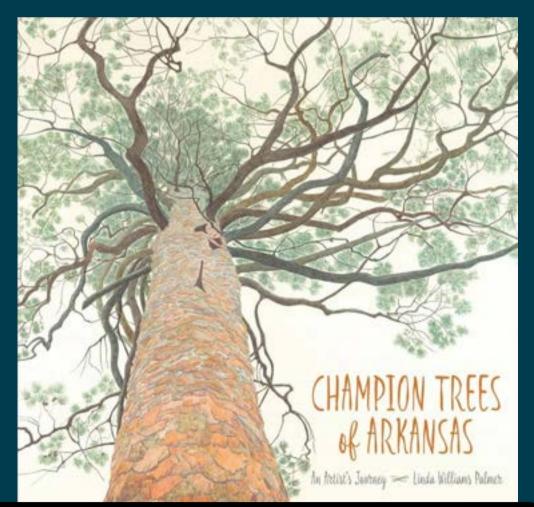


Photo credit: University of Arkansas Press, Linda Williams Palmer





Create and share educational materials and curricula

- Customizable and shareable media covering the content in Education 1
- Programs for youth and adults
 - Measurement training for adults through the National Cadre of Tree Measurement Experts
 - Activities for children covering math, science, art, and other topics in relation to Champion Trees

Education 2.3 Materials & Curricula











National Cadre of Tree Measurement Experts

This organization was started by American Forests in 2014 to help insure that the National Champion Tree Registry was as technically sound as possible and to provide expert input on tricky and complicated tree measurements. Trees often grow in ways that are not easy to measure - multiple stems, growing around obstacles and fences, growing in an area that cannot be safely accessed, etc. Figuring out a fair way to compare those unique trees to others of their species is a monumental task!

rement Experts on to Champion Trees





Bolster the presence of the NCTP on social media

- Posts that meet educational goals while expanding the audience reached
- Highlight stories of individual trees, sharing cultural data collected about them, telling their stories to new audiences

Education 2.4 Social Media 8 Internet Presence







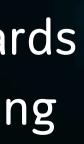




Information 1: Content

Ideas for some of the types of information the NCTP can provide support for. This covers a broad range of topics, from our scientific understanding of trees to documenting the relationships between humans and trees over time.

- 1. Research
- 2. Best Practices
- 3. Cultural Records
- 4. Measurement Standards
- 5. Data Storage & Sharing







Learn more about the physiology, biology, ecology, and impact of large, mature trees

- Collaborations with scientific and academic institutions
- Possible topics of interest:
 - Recorded maximum sizes of tree species in relation to climate, soil conditions, and historical native ranges and management practices
 - Carbon sequestration, climate change, and Champion Trees
 - Structural complexity in the canopy of large trees
 - Urban ecology, city planning, and large urban trees
 - Tree microbiomes, longevity, and size

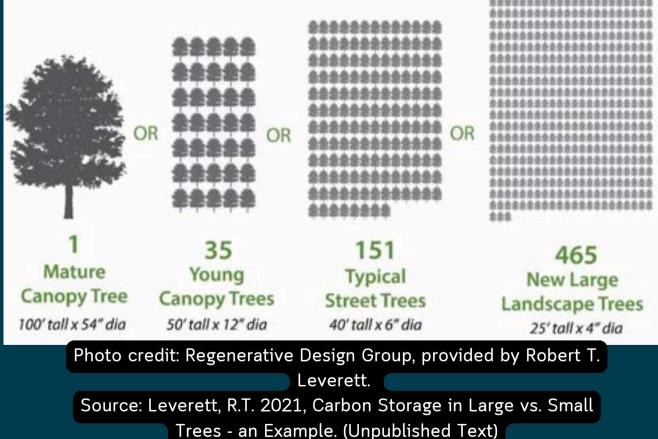
Information I.I Research







How many oak trees does it take to store 8 tons of carbon?







Improve, document, and share best practices for the care and stewardship of culturally-important trees such as legacy, historic and Champion Trees

- Sustainable landscaping around significant trees to reduce the negative impacts of human behavior while still allowing full appreciation of the tree
- Preservation of trees to ensure longevity, including effective management regimes and supportive techniques such as cabling and bracing



PRESERVE



EDUCATE

Sustainable landscaping is designing an landscape to be in harmony with the natural environment, the local climate and culture, and to require minimal inputs. This can involve the thoughtful use of water resources and utilizing native plants in the design to benefit the local ecosystem.

CONSERVE



The Location and Measurement of the Largest Specimens of the Following American Tree Species

Ash Mountain White	Elm American	Larch Eastern Western	Pine Digger Jack Jeffery
Aspen, trembling Basswood Beech, American Birch Black Paper Yellow Buckeye	Slippery Fir Alpine Balsam Dougles Lowland white Red Silver Western white	Locust Black Honey Maple Bigleaf Red Silver Sugar	Jettery Limber Loblolly Lodgepole Longleaf Northern white Pinon Pitch Pond Ponderosa
Butternut Catalpa Cadar Eastern red Eastern white Incense Port Orford Western red	Gum Black Red Hackberry Hemlock Carolina Eastern Mountain Western	Magnolia, laurel Oak Bur California white Chestnut Eastern live Oregon white Pin	Red Shortleaf Slash Sugar Virginia Western white White bark Sassefras
Cherry, black Chestnut, American Cottonwood Eastern Western Cucumber Cypress	Western Hickory Bitternut Pignut Shagbark Holly, American Horse Chestnut Juniper Allingtor	Post Red Scarlet Swamp white White Willow Osage orange Pacan	Spruce Black Blue Engelmann Red Sitka White Sycamore, American Tulio



All that remains of the world's largest tulip, or yellow poplar. Located near Weaverville. North Carolina, it was killed by fire in 1934

Increase the volume of cultural data stored alongside measurement records

- Archive more cultural information including (but not limited to):
 - newspaper and magazine articles referencing recorded Champion Trees
 - historical pictures and media
 - personal accounts through recorded and transcribed interviews (from tree owners, tree nominators, tree measurers, and other relevant parties)
 - clips from news programs, documentaries, and other audio-visual recordings
 - "The Sounds of Champions" audio recordings captured at the Champion Tree (originally recorded and produced by Brian Kelley of the Gathering Growth Foundation with American Forests)

Information 1.3 Cultural Records

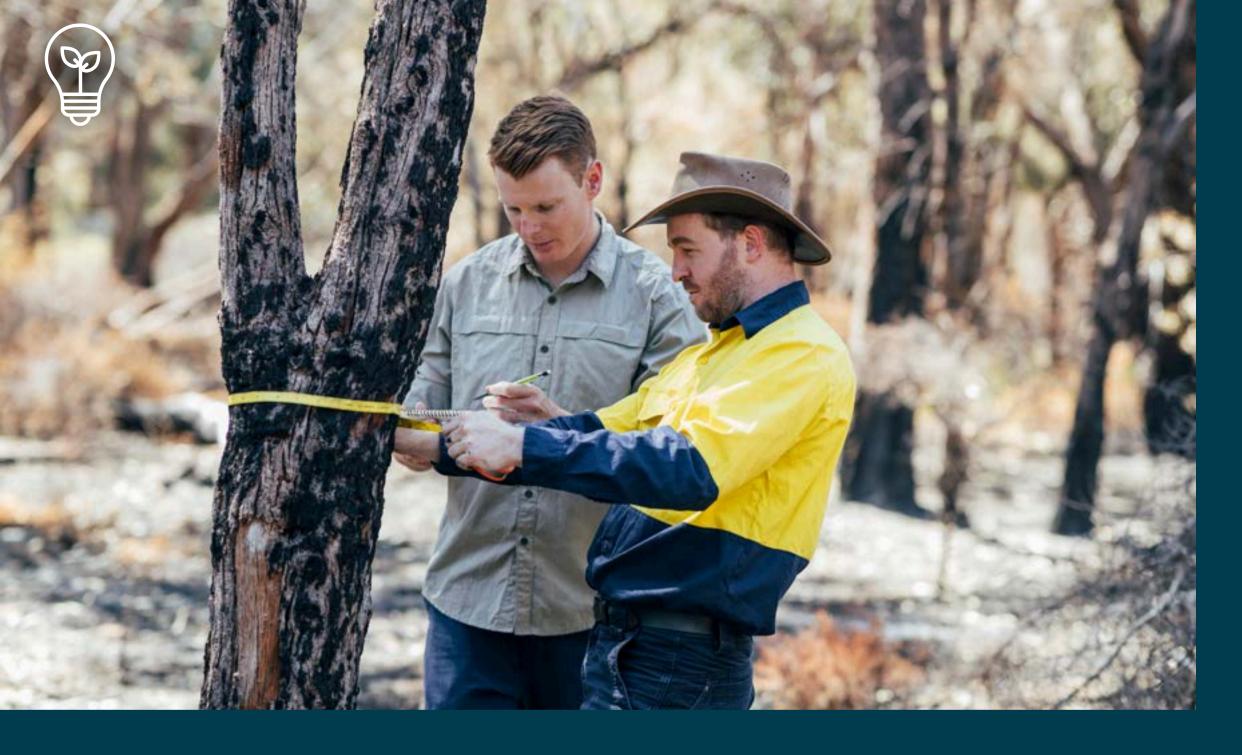












Improve and standardize measurement methods

- Increase accuracy and reliability of measurement data
- Ensure that methodology is replicable between measurers and over time to better track historical changes
- Enable scientists, researchers, arborists, and forest managers to make better comparisons between tree specimens and species
- Provide clear guidelines for public and for expert tree measurers

Information 1.4 Measurement Standards







ter track historical changes omparisons between tree specimens and





Curate repository of reliable data that can be shared with partners and researchers

- Rebuild and house the Champion Tree Database at the University of Tennessee, Knoxville
- Connect data with those able to use it
- Community-focused, bringing newly discovered/collected information directly to the people who will benefit most from this knowledge

Information 1.4 Data Storage Sharing







Information 2: Methods

Pathways for the NCTP to build this repository of information and bring it more fully into the world.

- 1. Academic Institutions
- 2. Training & Certification
- 3. Information Sharing
- 4. Data-focused Partnerships





Leverage the networks, opportunities, and people within universities, schools, and other hubs of academia

- Empower land-grant universities and their Extension organizations to use the program to connect with communities and put the information and data to work on the state and local level
- Provide opportunities for regional/state/local internships through a collaboration between state agencies and academic institutions
- Engage the next generation of scientists, researchers, foresters, and natural resource educators for creative, relevant, and exciting ideas
- Connect scientists studying relevant topics with the information housed within the Champion Tree database and archives







Build and maintain training and certification programs

- Standardized measurement training and certification through the National Cadre of Tree Measurement Experts
 - Online and in-person components
 - Connected with Education 1.3: Public-focused education
- Training and certification for arborists focused on culturally-important tree preservation, protection, and maintenance
 - Theoretical, practical, and useful knowledge that could improve an arborist's ability to work with historic, legacy, and Champion trees
 - Connected with Education 1.4: Arborist-focused education

Information 2.2 Training & Certification



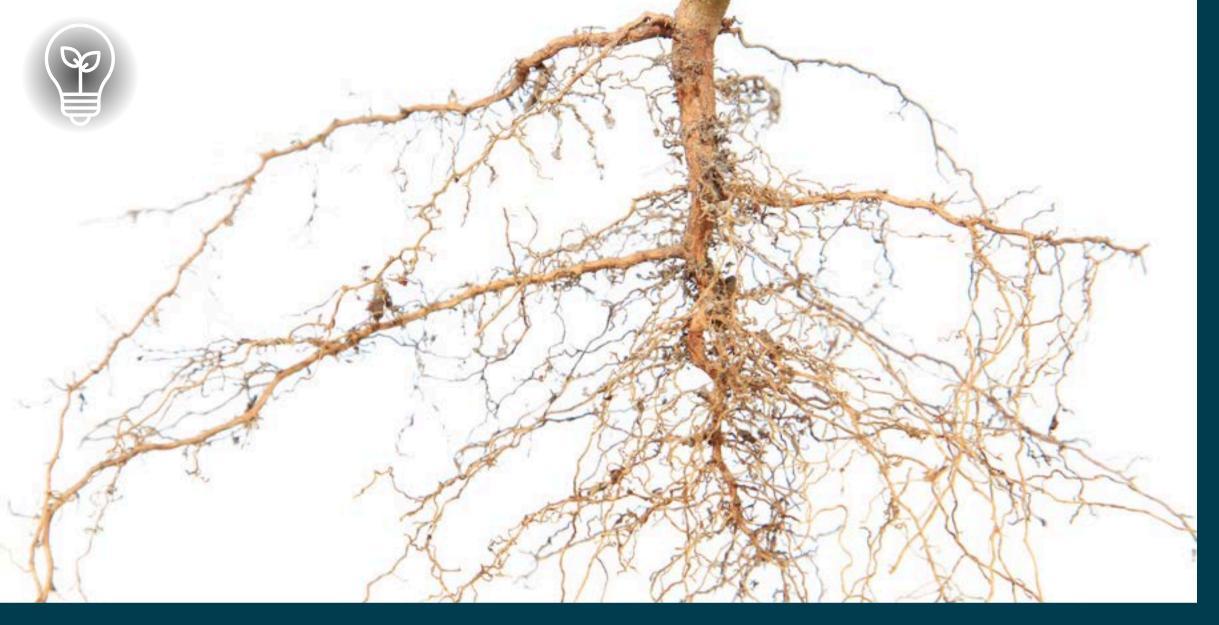






TRAIN





Develop new pathways to share the information gathered by the Champion **Tree Program**

- Build and continuously improve the CT Database to ensure high-quality data is being stored for future generations
 - Utilize available technology to reduce errors present in records (for example, misspellings, misidentified trees, and erroneous measurements)
- Create shareable spreadsheets of de-identified data about the Champions for use by scientists, researchers, and other interested parties
- Curate remarkable, interesting, and engaging facts in ways that are easily shareable online (through social media and other bite-sized platforms)

Information 2.3 Information Sharing



EDUCATE





PRESERVE





De-identified Data

The Champion Tree database contains not only the specific locations of these unique and remarkable trees, but the private contact information of nominators, property owners, and participants in the program. In order to protect both the trees and the people, we can provide researchers and members of the public with a list of "de-identified data" where those specific identifying parts have been removed.





Contribute to current efforts already underway to improve our collective understanding of our forests and trees

- Work with other data-collecting organizations such as the USDA Forest Service's Forest Inventory and Analysis, the Tree-Ring Society, and the NCEI International Tree-Ring Databank to build a more comprehensive picture of the forests and trees in the U.S.
- Seek out and develop intentional and thoughtful partnerships with organizations to assist in the collection of data, such as local community groups that can track individual Champions over time with ease, and individual tree measurers who have been collecting their own data about the trees they measure (sometimes going back decades)

Information 2.4 Data-focused Partnerships



Tree-Ring Society

The Tree Ring Society is dedicated to promoting dendrochronology research and sharing knowledge about such studies with other disciplines and with the public. Dendrochronology is the study of tree rings and how they relate to other historical, climatological, and cultural events. **DendroHub**, an online community for dendrochronologists, contains a map of the dendrochronology labs worldwide. Many of our Champion Trees are also among the elders of their kind, although there is not always a connection between tree size and age. Gathering dendrochronology data from our Champions could help illuminate that relationship as well as help tell the stories of our Champions and the events that they witnessed.





Conservation

The Champion Tree Program maintains records including species and location for a wide variety of tree species in the United States.



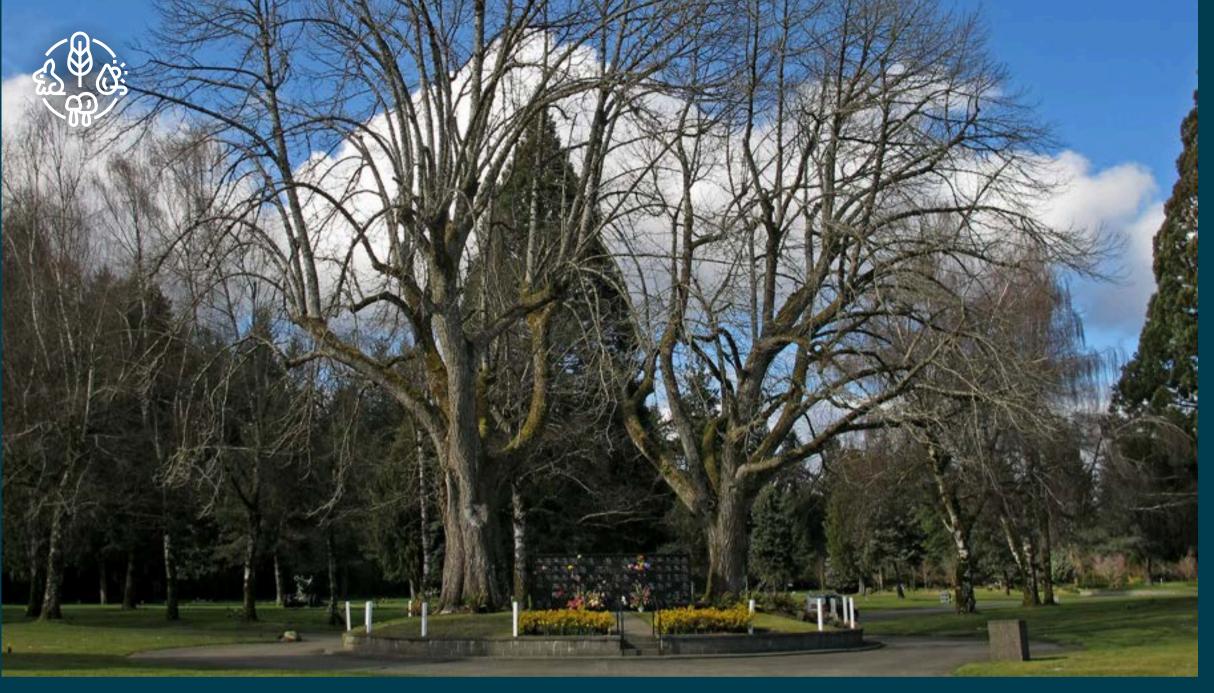


Conservation I: Content

Ideas for the NCTP to directly and indirectly support tree, forest, and ecosystem conservation across the country.

> 1. Current Initiatives 2. Combat Ecological Nihilism 3. Influence Development 4. Genetic Preservation





Participate in regional, state, and local conservation initiatives

- Partner with organizations that are working toward conservation of individual species and ecosystems
- Ease burdens on local organizations whenever possible, building their capacity to focus on the core mission of tree and forest conservation
- Work with community members in their area who already have expertise and understanding of the needs and problems facing localized conservation work
- Provide engaging, informative messaging about the need for and purpose of conservation that is tailored to the region's specific environment, needs, and desires

Conservation 1.1 Current Initiatives











National Co-Champions Castanea dentata (Washington) Photo credit: Robert Van Pelt





Fight the growing wave of ecological nihilism by sharing good news and the efforts of people to preserve threatened species

- Providing individuals with ways to personally contribute to local and national conservation efforts is empowering - the opposite of depression isn't happiness, it's purpose
- Good news and the opportunity to act on that news gives people hope, a necessary quality for overcoming nihilistic tendencies
- Creating intentional community around conservation activities helps with place-making, meaning-making, and other aspects of participation in a strong local community which leads to improved mental and physical health

Conservation 1.2 Combat Ecological Nihilism



Ecological Nihilism

Ecological nihilism is the feeling that humans are powerless in the face of ecological destruction and that there's no point in trying to do anything about it. A strong feeling of hopelessness arises when our "radius of awareness" is larger than our "sphere of influence" with modern technology and the rise of social media, we are able to bear witness to tragedies great and small unfolding across the planet. We are limited in our individual ability to change things on the other side of the world. However, by working together within our own communities, we are able to greatly impact our local areas and regain a sense of purpose, connection, power, and hope.





Directly influence development on the local level through highlighting the importance of National, State, and local **Champion Trees**

- Development plans have historically been interrupted, stopped entirely, or altered to accommodate Champion Trees and other culturally important trees
- Encourage the shift from "plant more trees" to "protect more trees" as land use changes and urban sprawl threaten our large, mature trees in rural and suburban landscapes
- Build local capacity and grassroots support to advocate for tree conservation, utilizing individual charismatic trees to garner public support and galvanize community to act

Conservation 1.3 Influence Development

















Preservation of the genetics of the largest trees in the United States & propagating "Future Champions"

- Ensure that *ex-situ* collections have appropriate amounts of genetic diversity for all tree species
- Participate in tree planting initiatives with an eye toward the Champion Trees that our great-great-great-grandchildren will witness and steward
- When appropriate and safe for the tree, propagate Champion Tree seed or vegetation to improve available tree nursery stock by including some of the largest, hardiest parent specimens
 - University of Tennessee Tree Improvement Program (and other similar programs)

Conservation 1.4 Genetic Preservation



University of Tennessee Tree Improvement Program (UT-TIP) The mission of the UT-TIP is "to improve the productivity and health of Tennessee forested lands in a changing climate, through the planting of high quality, locally adapted, and genetically improved seedlings by Tennessee landowners." More information can be found at https://treeimprovement.tennessee.edu/





Conservation 2: Methods

Strategies for how the NCTP can directly and indirectly support tree, forest, and ecosystem conservation across the country.

Localized Initiatives
Equipping Communities
Future Champions Program





Connect data, information, and educational materials with regional, state, and local conservation initiatives

- Provide the location of prioritized species with localized conservation initiatives and organizations
 - Careful, thoughtful, and limited releases of tree locations with full permission of property owners following all applicable laws and best practices
- Ensure that information shared is relevant to the area and the community involved with local conservation efforts

Conservation 2.1 Localized Initiatives











ENGAGE

PRESERVE





Influence local development through equipping communities with knowledge and proven methods for preserving Champion Trees and the surrounding land

- Encourage the development of city, community, and neighborhood Champion Tree Programs
- Provide locals with the materials and best practices to help build the capacity and knowledge needed for community advocacy
 - Examples of successful Champion Tree advocacy: Kansas's first State Forest (the One Tree Forest), The Tuckahoe Oak in Tuckahoe State Park, Maryland
- Possible outlets: podcast, newsletter, social media, community events
 - Podcast: This Old Tree by Doug Still an award-winning exploration of the stories of individual trees, fully produced by an expert in the field utilizing atmospheric sound design and musical accompaniment

Conservation 2.2 Equipping Communities















"The Future Champions Program": propagate Champion Tree seeds and, when appropriate and safe for the tree, cuttings and tissue cultures

- Seedlings could be sold or donated to support tree-planting initiatives
- Build partnerships with organizations that are currently propagating large, old, and/or endangered trees
- Participate in tree planting initiatives with the 200-year-window in mind, encouraging long-term maintenance plans and municipal budgets including the maintenance of local trees as a necessary and beneficial investment in our shared future

Conservation 2.3 Future Champions Program









Goals:

- A: Transition the program from American Forests to the University of Tennessee, Knoxville
- B: Obtain long-term funding to ensure the survival of the program for future generations
- C: Protect and preserve current and future Champion Trees
- D: Educate the public on the importance of protecting large and mature trees in the landscape
- E: Engage the public in the search for and documentation of large and mature trees in the landscape
- F: Curate a repository of scientific and cultural data about remarkably-sized trees in the United States
- G: Work with current conservation efforts to ensure genetic diversity in *ex-situ* collections and secure the survival of threatened and endangered tree species
- H: Bolster the reach and capacity of the State Champion Tree Programs to better tailor messaging to individual regions, states, counties, municipalities, and communities
- I: Increase the training and recruitment of the National Cadre of Tree Measurement Experts to improve the accuracy of tree measurements

Strategies:

EDUCATION

- Content
 - 1.1 Youth-focused
 - a.Youth-focused community programs, outreach & educational curricula
 - i.Elementary age topics: benefits of trees, nature experiences, elementary-level math and natural resources
 - ii.Middle-school age topics: ecosystems, tree ecosystem services, the math of measuring trees, careers in forestry/arboriculture (Who Takes Care of the Champions?)
 - iii.High-school age topics: tree ecosystem services, natural resource stewardship, planting and caring for trees, measuring trees (advanced theory and practice), career opportunities and pathways in forestry/arboriculture
 - 1.2.Homeowner-focused
 - a.Homeowner/Property owner focused education and outreach materials
 - i.Threats facing our Champions: pests, diseases, and the impacts of climate change
 - ii.Arborist Certification: promotion of Certified Arborists for tree healthcare
 - iii.Preservation of large trees: the importance of preserving large trees in the landscape, ecosystem services
 - 1.3.Public-focused
 - a.Public engagement, education, and outreach materials

- Methods
 - 2.1.Partnerships

 - 2.2.Art and Creative Expression
 - 2.3.Materials and Curricula

• i.Threats facing our Champions, ecosystem services of trees, physical and mental health benefits of trees, the importance of good natural resource stewardship, tree species identification and information

• ii.Tree measurement for the public - how to participate in citizen science efforts to catalogue the largest specimen of each tree species in the United States

• iii.Tree protection advocacy: how to use charismatic trees like Champion Trees to encourage thoughtful local development and to preserve large, mature trees in the landscape when possible and safe to do so

• 1.4. Arborist-focused education materials

 a.Techniques and best practices for preserving historic and culturally important trees b.Materials and training for educating property owners/clients

a.Build partnerships with organizations of all sizes and capacity across the country

• i.Ease the burden of responsibility on other organizations by working together to share resources, connect with communities, bolster our mutual credibility, and advocate for conservation with a collective voice and influence

• ii.Potential partners may include but are not limited to NGOs, grassroots organizations, governmental bodies, non-profits, private companies, schools, libraries, managed parks and forests, spokespeople (celebrities, legislators, influencers, etc)

a.Storytelling and meaning-making through creative expression

b.Work with artists, filmmakers, podcasters, poets, sculptors and more to tell the story of

Champion Trees in ways that weave together art and science

c.Seek collaborations with artists of all mediums

• i.Champion Trees of Arkansas: An Artist's Journey by Linda Palmer

• A.Exquisite drawings of Arkansas' Champion Trees done in colored pencil

• ii.Gathering Growth Foundation, Brian Kelley

• A.Breathtaking and impactful archival photography & recordings

a.Create and share educational materials and curricula

• i.Customizable and shareable media covering the content in Education 1

• ii.Programs for youth and adults



- A.Measurement training for adults through the National Cadre of Tree Measurement Experts
- B.Activities for children covering math, science, art, and other topics in relation to Champion Trees
- 2.4.Social media/internet presence
 - a.Bolster the presence of the NCTP on social media
 - i.Posts that meet educational goals while expanding the audience reached
 - ii.Highlight stories of individual trees, sharing cultural data collected about them, telling their stories to new audiences

INFORMATION

- Content
 - 1.1.Research
 - a.Learn more about the physiology, biology, ecology, and impact of large, mature trees
 - i.Collaborations with scientific and academic institutions
 - ii.Possible topics of interest:
 - A.Recorded maximum sizes of tree species in relation to climate, soil conditions, and historical management practices
 - B.Carbon sequestration, climate change, and Champion Trees
 - C.Structural complexity in the canopy of large trees
 - D.Urban ecology, city planning, and large urban trees
 - E.Tree microbiomes, longevity, and size
 - <u>1.2.Best Practices</u>
 - a.Improve, document, and share best practices for the care and stewardship of culturallyimportant trees such as legacy, historic and Champion Trees
 - i.Sustainable landscaping around significant trees to reduce the negative impacts of human behavior while still allowing full appreciation of the tree
 - ii.Preservation of trees to ensure longevity, including effective management regimes and supportive techniques such as cabling and bracing
 - 1.3.Cultural records
 - a.Increase the volume of cultural data stored alongside measurement records
 - i.Archive more cultural information including (but not limited to):
 - A.newspaper and magazine articles referencing recorded Champion Trees
 - B.personal accounts through recorded and transcribed interviews (from tree owners, tree nominators, tree measurers, and other relevant parties)

- D.clips from news programs, documentaries, and other audio-visual recordings
- E."The Sounds of Champions" audio recordings captured at the Champion Tree (originally
 - recorded and produced by Brian Kelley of the Gathering Growth Foundation with
 - American Forests)
- 1.4.Measurement standards
 - a.Improve and standardize measurement methods
 - i.Increase accuracy and reliability of measurement data
 - ii.Ensure that methodology is replicable between measurers and over time to better track historical changes
- 1.5.Data storage & sharing
 - a.Curate repository of reliable data that can be shared with partners and researchers
 - i.Rebuild and house the Champion Tree Database at the University of Tennessee, Knoxville • ii.Connect data with those able to use it

 - iii.Community-focused, bringing newly discovered/collected information directly to the people who will benefit most from this knowledge
- Methods
 - 2.1.Academic Institutions
 - academia
 - i.Empower land-grant universities and their Extension organizations to use the program to connect with communities and put the information and data to work on the state and local level
 - ii.Provide opportunities for regional/state/local internships through a collaboration between state agencies and academic institutions
 - iii.Engage the next generation of scientists, researchers, foresters, and natural resource educators for creative, relevant, and exciting ideas
 - iv.Connect scientists studying relevant topics with the information housed within the Champion Tree database and archives
 - 2.2.Training & Certification
 - a.Build and maintain training and certification programs

• C.historical pictures and media

- iii.Enable scientists, researchers, arborists, and forest managers to make better comparisons between tree specimens and species
- iv.Provide clear guidelines for public and for expert tree measurers

• a.Leverage the networks, opportunities, and people within universities, schools, and other hubs of



- i.Standardized measurement training and certification through the National Cadre of Tree Measurement Experts
 - A.Online and in-person components
 - B.Connected with Education 1.3: Public-focused education
- ii.Training and certification for arborists focused on culturally-important tree preservation, protection, and maintenance
 - A.Theoretical, practical, and useful knowledge that could improve an arborist's ability to work with historic, legacy, and Champion trees
 - B.Connected with Education 1.4: Arborist-focused education
- 2.3.Information Sharing
 - a.Develop new pathways to share the information gathered by the Champion Tree Program
 - i.Build and continuously improve the CT Database to ensure high-quality data is being stored for future generations
 - A.Utilize available technology to reduce errors present in records (for example, misspellings, misidentified trees, and erroneous measurements)
 - ii.Create shareable spreadsheets of de-identified data about the Champions for use by scientists, researchers, and other interested parties
 - iii.Curate remarkable, interesting, and engaging facts in ways that are easily shareable online (through social media and other bite-sized platforms)
- 2.4.Data-focused Partnerships
 - a.Contribute to current efforts already underway to improve our collective understanding of our forests and trees
 - i.Work with other data-collecting organizations such as the USDA Forest Service's Forest Inventory and Analysis and the NCEI International Tree-Ring Databank to build a more comprehensive picture of the forests and trees in the U.S.
 - ii.Seek out and develop intentional and thoughtful partnerships with organizations to assist in the collection of data, such as local community groups that can track individual Champions over time with ease, and individual tree measurers who have been collecting their own data about the trees they measure (sometimes going back decades)

CONSERVATION

- Content
 - 1.1.Current Initiatives
 - a.Participate in regional, state, and local conservation initiatives
 - i.Connect data, information, and educational materials with regional, state, and local conservation initiatives

- ecosystems
- iii.Ease burdens on local organizations whenever possible, building their capacity to focus on the core mission of tree and forest conservation
- iv.Work with community members in their area who already have expertise and understanding of the needs and problems facing localized conservation work
- v.Provide engaging, informative messaging about the need for and purpose of conservation that is tailored to the region's specific environment, needs, and desires
- 1.2.Combat Ecological Nihilism
 - a.Fight the growing wave of ecological nihilism by sharing good news and the efforts of people to preserve threatened species
- 1.3.Influence Development
 - a.Directly influence development on the local level through highlighting the importance of National, State, and local Champion Trees

 - iii.Build local capacity and grassroots support to advocate for tree conservation, utilizing individual charismatic trees to garner public support and galvanize community to act
- 1.4.Genetic Preservation
 - Champions"
 - species

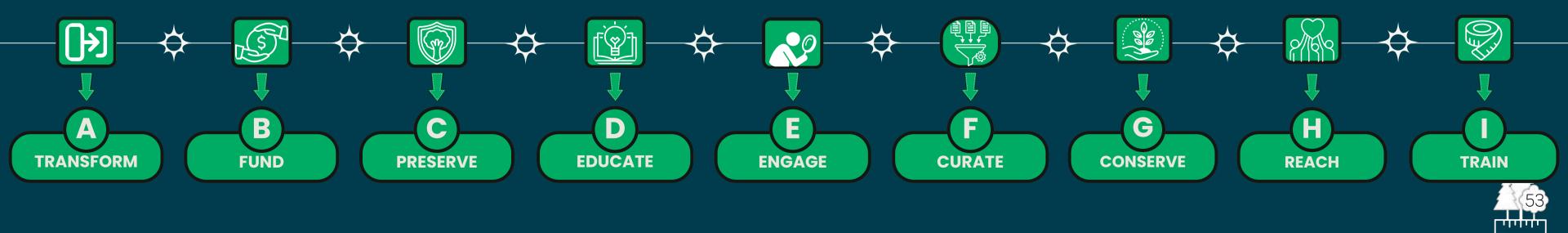
• ii.Partner with organizations that are working toward conservation of individual species and

- i.Providing individuals with ways to personally contribute to local and national conservation efforts is empowering - the opposite of depression isn't happiness, it's purpose
- ii.Good news and the opportunity to act on that news provides hope, a necessary quality for overcoming nihilistic tendencies
- iii.Creating intentional community around conservation activities helps with place-making,
- meaning-making, and other aspects of participation in a strong local community which leads to improved mental and physical health
- i.Development plans have been altered, stopped entirely, or adjusted to accommodate Champion Trees and other culturally important trees
- ii.Encourage the shift from "plant more trees" to "protect more trees" as land use changes and urban sprawl threaten our large, mature trees in rural and suburban landscapes
- a.Preservation of the genetics of the largest trees in the United States & propagating "Future

• i.Ensure that ex-situ collections have appropriate amounts of genetic diversity for all tree



- ii.Participate in tree planting initiatives with an eye toward the Champion Trees that our great-great-great-grandchildren will witness and steward
- iii.When appropriate and safe for the tree, propagate Champion Tree seed or vegetation to improve available tree nursery stock by including some of the largest, hardiest parent specimens
- iv.Tree Improvement Program at the University of Tennessee, Knoxville (and other similar programs)
- Methods
 - 2.1.Localized Initiatives
 - a.Connect data, information, and educational materials with regional, state, and local conservation initiatives
 - i.Provide the location of prioritized species with localized conservation initiatives and organizations
 - A.Careful, thoughtful, and limited releases of tree locations with full permission of property owners following all applicable laws and best practices
 - ii.Ensure that information shared is relevant to the area and the community involved with local conservation efforts
 - 2.2.Equipping Communities
 - a.Influence local development through equipping communities with the knowledge and tested methods for preserving Champion Trees and the surrounding land
 - i.Encourage the development of city, community, and neighborhood Champion Tree Programs
 - ii.Examples of successful Champion Tree advocacy:
 - A.Kansas's first State Forest (the One Tree Forest)
 - B.The Tuckahoe Oak
 - iii.Possible outlets: podcast, newsletter, social media, community events
 - A.Podcast: This Old Tree by Doug Still an award-winning exploration of the stories of individual trees, fully produced by an expert in the field utilizing atmospheric sound design and musical accompaniment
 - 2.3.Future Champions Program
 - a."The Future Champions Program": propagate Champion Tree seeds and, when appropriate and safe for the tree, cuttings and tissue cultures
 - i.Seedlings could be sold or donated to support tree-planting initiatives
 - ii.Build partnerships with organizations that are currently propagating large, old, and/or endangered trees
 - iii.Participate in tree planting initiatives with the 200-year-window in mind, encouraging long-term maintenance plans and municipal budgets including the maintenance of local trees as a necessary and beneficial investment in our shared future



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LONG LIVE AMERICA'S CHAMPION TREES!



