

2nd **World** **Forum on** **Urban** **Forests**

2023



**World Forum on
Urban Forests**



Jessica Sanders
International Society of Arboriculture



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Beatra Wilson
Assistant Director for Urban
and Community Forestry
U.S. Forest Service



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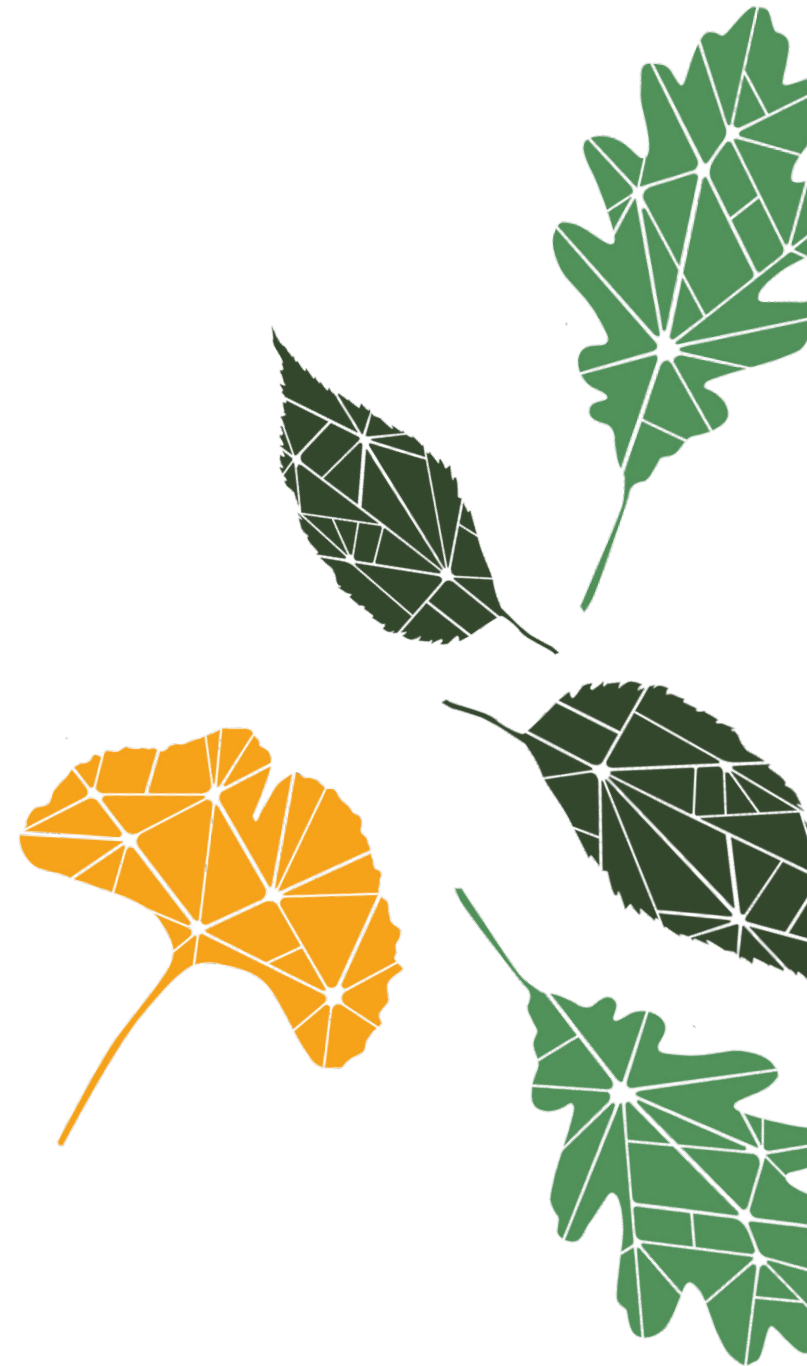
Washington DC, 2023

How We Can Turn Urban Forestry into Tree Equity & Climate Justice



Presented by

Jad Daley
President and CEO
American Forests





Many Reasons Urban Forests Are Important



Benefits of Urban Trees

Research has linked the presence of urban trees to...



REDUCING RATES

of cardiac disease, strokes, and asthma due to improved air quality



PROTECTING BIODIVERSITY

including habitat for migrating birds and pollinators



REDUCING OBESITY LEVELS

by increasing physical activity including walking and cycling



MANAGING STORMWATER,

keeping pollutants out of waterways, and reducing urban flooding



COOLING city streets by 2-4° F, reducing deaths from heat and cutting energy use



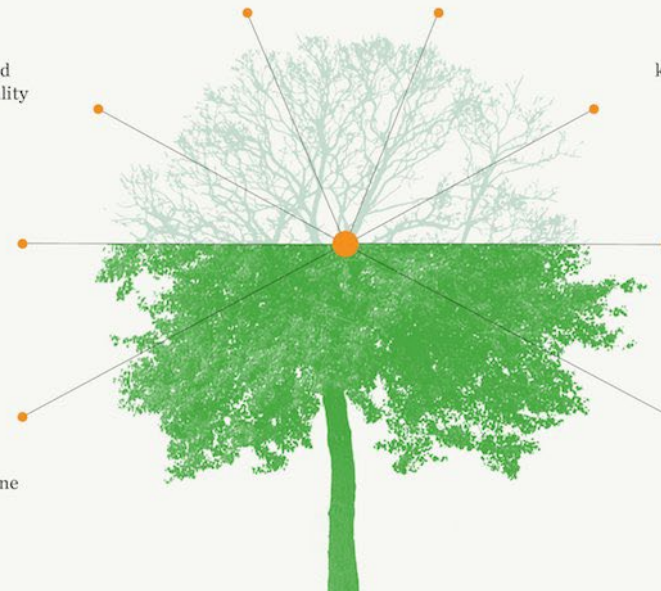
FILTERING up to a third of fine particle pollutants within 300 yards of a tree



INCREASING neighborhood property values

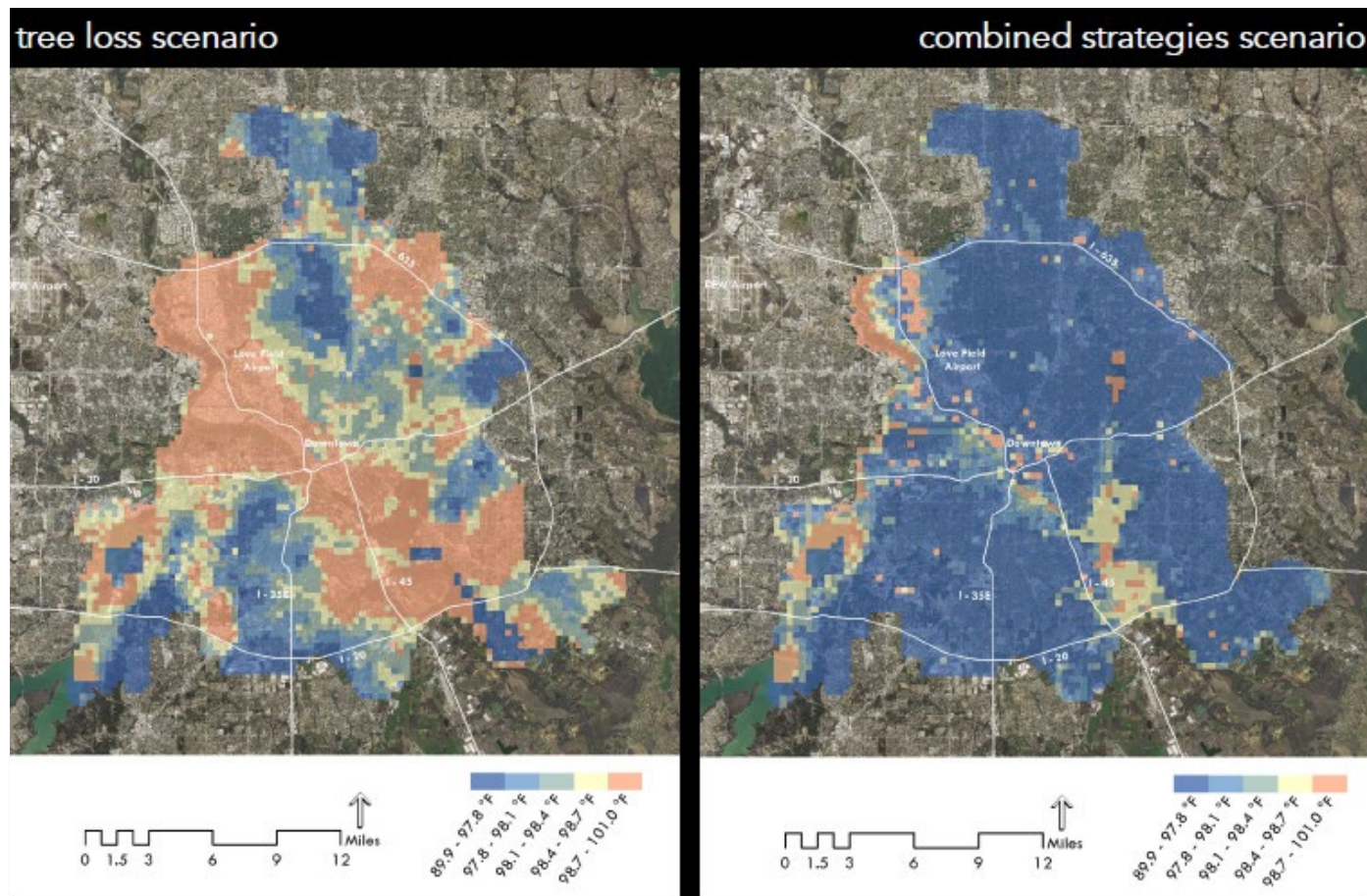


REDUCING STRESS by helping interrupt thought patterns that lead to anxiety and depression





In Our Changing Climate, Natural Cooling Is a Life Saver



Heat Related Deaths: U.S. heat related deaths are >12,000 annually today and projected to be nearly 100,000 by 2030.

Heat Risk Is Not Equal: 12 percent of U.S. homes do not have air conditioning, and many more cannot afford to run it full-time or face barriers to energy access.

Efficacy: As one example, our study with Georgia Tech projects potential to reduce heat-related deaths in Dallas by 22% with tree cover gains.



Carbon Negative and Cost-Effective Cooling



Sequestration: Trees in U.S. cities & towns capture nearly 130 Million Mt/CO₂e/Year.

Energy Savings: Trees in U.S. cities & towns save 38.8 Million MWh & 246 MMBtus of energy use for heating and cooling.



While Also Lowering Air Pollution





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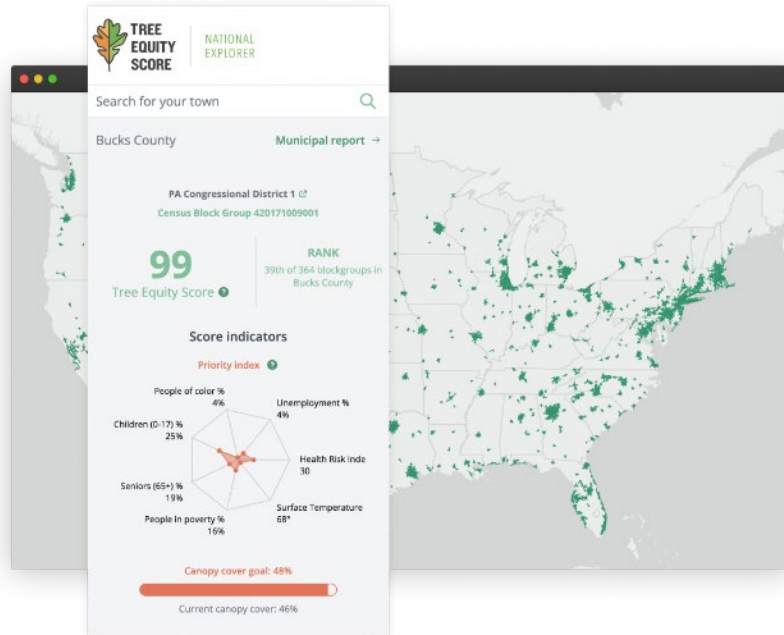
But Only If You Have Trees in Your Neighborhood..





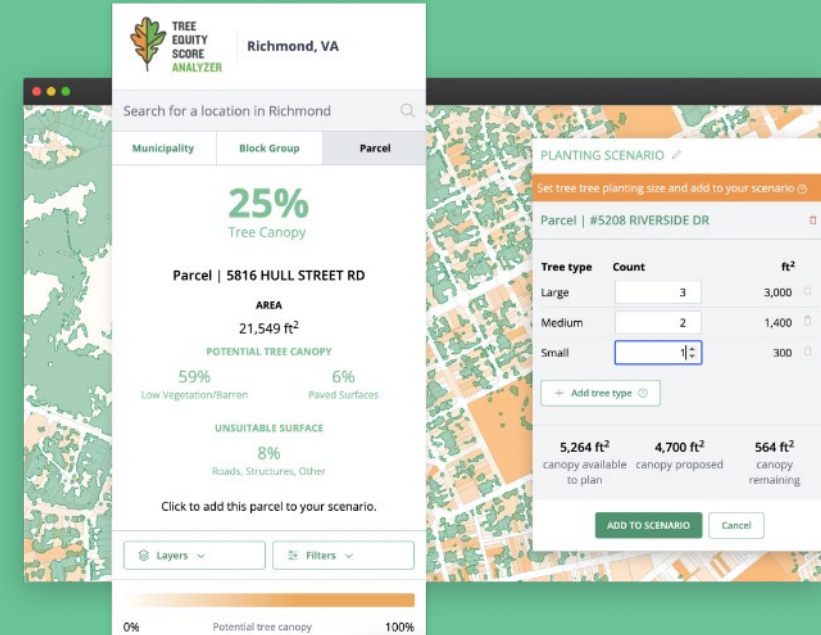
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Our flagship National Explorer makes Tree Equity Score available to all.

- Scores for 190,000+ urban block groups in the
- A national standard to support equity-first tree planting and investment.
- Neighborhood-level data; municipal and regional goal-setting.
- Communicate the positive impacts of trees.



Local Analyzers serve a single city or region to help users *shift* Tree Equity Scores.

- Data for all public and private properties.
- For each block group (neighborhood), set Tree Equity Score goals and estimate planting needs.
- Build property-level plans to shift scores. Track progress. Communicate the benefits of new and existing trees.
- Co-created with stakeholders; locally-tailored.



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National Explorer

detroit, mi



Census Block Group 261635240012

Population: 961

Detroit, MI

MI Congressional District 13

66

Tree Equity Score

Ranked 576th of 619 block groups in Detroit

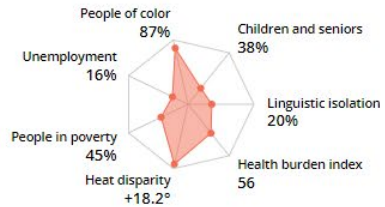
Priority: HIGHEST

Current canopy cover: 11%

Canopy cover goal: 40%

Score indicators

Priority index



Layers

Filters

<70 100

Tree Equity Score

Get all block groups to a Tree Equity Score of 75

144 of 619 have a Tree Equity Score below 75



Drag to adjust target score

133,287 trees will be needed to get all block groups to a score of 75. See the significant benefits to the community this will create.

Total canopy added

2.1%

Annual ecosystem service value

\$1.1 million

Jobs supported

969

CARBON

Carbon sequestered

1,801,767.0

tons

Carbon sequestered equal to:

352,271

gas-powered cars offset

Carbon sequestered equal to:

205,861

homes' energy use offset

WATER

Stormwater runoff prevented

33.4

million gallons

Stormwater runoff equal to:

1,670

standard swimming pools

Rainfall intercepted

98.8

million gallons

AIR

Pm2.5 pollution removed

3,474.2

lbs

Pm2.5 pollution equal to:

1,601

gas-powered cars offset

Pm10* pollution removed

8.9

tons

Nitrogen dioxide removed

5.5

tons

Sulfur dioxide removed

9,156.4

lbs

Ozone removed

36.2

tons



Our Tree Equity Program Model



Tree Protection

Action Plan

Tree Equity Commitment

Data-Driven Priorities

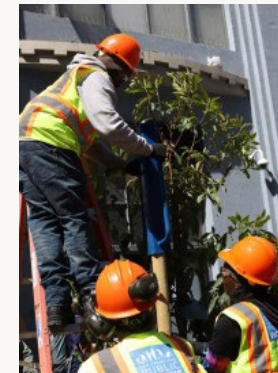
Community Engagement

Inclusive Partnership



Tree Nurseries

Tree Planting



Tree Care

Urban Wood





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Critical Success Factor: When & How We Collaborate



Access interactive, hands-on exercises for team building!

VIBRANT CITIES LAB
American Forests

RESEARCH, CASE STUDIES, GUIDES URBAN FORESTRY TOOLKIT RESOURCES LOGIN

Community Action Guide

Build a community-driven process to advance Tree Equity.

GET STARTED →



Critical Success Factor: Climate & Health-Smart Forestry

CLIMATE ADAPTATION ACTIONS FOR URBAN FORESTS AND HUMAN HEALTH



Table 5.—Tree species list developed to aid Rhode Island community forestry practitioners in selecting trees to reduce climate change vulnerability, reduce carbon dioxide in the atmosphere, and provide benefits to human health. It is meant to be a complement to other tree selection resources. Other factors may also need to be considered, such as aesthetics, local site conditions, wildlife value, or nursery availability. Some species may have climate and health benefits but may not be suitable for planting for other reasons, such as having invasive potential or susceptibility to pests or pathogens.

Scientific name	Common name	Climate vulnerability	Carbon benefit	Health benefit	Health disservices	Notes
<i>Abies balsamea</i>	Balsam fir	moderate-high	moderate	moderate-high	moderate	
<i>Acer campestre</i>	Hedge maple	low	low	low	moderate	can be invasive
<i>Acer ginnala</i>	Amur maple	moderate-high	low-moderate	moderate-high	moderate	can be invasive
<i>Acer griseum</i>	Paperbark maple	moderate	low	low-moderate	moderate-high	
<i>Acer negundo</i>	Boxelder	moderate-high	moderate	moderate	moderate	can be invasive
<i>Acer rubrum</i>	Red maple	moderate	high	high	moderate-high	
<i>Acer saccharinum</i>	Silver maple	moderate	moderate	moderate-high	moderate-high	
<i>Acer saccharum</i>	Sugar maple	low-moderate	moderate-high	high	moderate-high	
<i>Acer tartaricum</i>	Tatarian maple	moderate-high	n/a	n/a	moderate	
<i>Acer truncatum</i>	Shantung maple	low-moderate	low	low	moderate-high	
<i>Acer x freemanii</i>	Freeman maple	low-moderate	n/a	n/a	moderate	
<i>Aesculus hippocastanum</i>	Horse chestnut	low-moderate	moderate-high	high	low	can be invasive



Critical Success Factor: Take an Intersectional Approach





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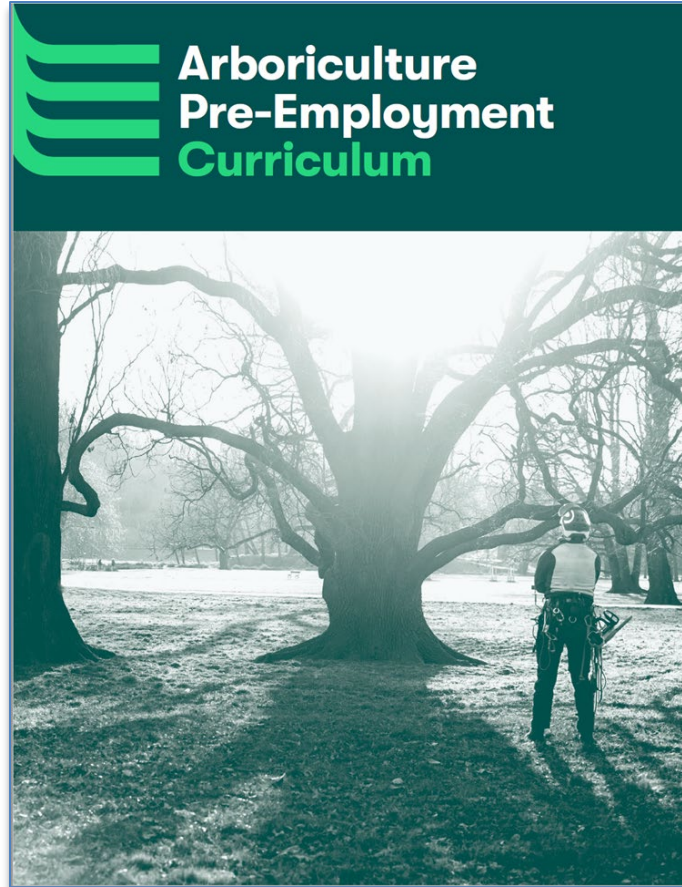
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Critical Success Factor: Career Pathways for Those in Need





By Removing Key Barriers to Career Opportunities





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Critical Success Factor: Ask for Funding at Scale of Need

+\$1.5 Billion
for more trees
in cities

**Creating green jobs
and cooling communities**

American Forests



SZA
@SZA

If u know me u know sustainability n climate justice MATTERS. Today I'm launching the #TAZOTreeCorps w @TAZO + @AmericanForests to plant trees in BIPOC communities hit hardest by climate change . Apply by 3/12 at bit.ly/TAZOTreeCorps - let's get more 🌲🌲🌲 in our cities !! 🙏

9:15 AM · Feb 17, 2021




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 VIBRANT CITIES LAB



 American Forests

RESEARCH, CASE STUDIES, GUIDES URBAN FORESTRY TOOLKIT RESOURCES LOGIN 

<https://www.vibrantcitieslab.com/>

Vibrant cities put people first to cultivate thriving trees and equitable urban forests that boost public health, safety, and sustainability.

MAKE THE CASE

Evidence keeps growing — see research data and real examples of the impact of trees.

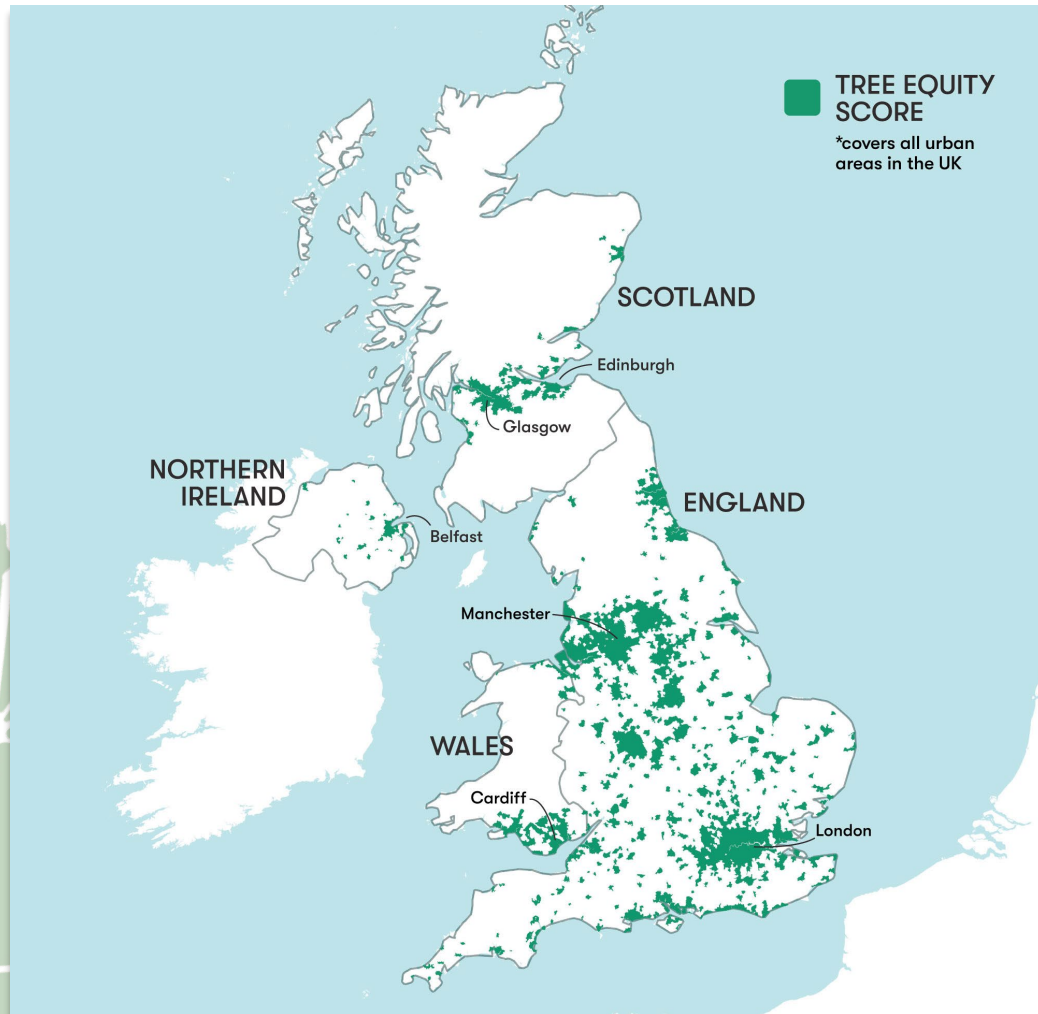
MAKE IT HAPPEN

Get started in your own community with the Urban Forestry Toolkit.





We Need A Global Tree Equity Movement



Let's Learn & Innovate Together!

- Tree Equity Score is going global; You in?
- How we collaborate with our communities
- Next generation urban forestry
- Finding new intersectional solutions
- Opening new career pathways for those facing the highest barriers
- Public + private finance strategies
- **1t.org** offers a pathway to global collaboration



Thank you

Jad Daley | American Forests

@JadDaley or 

 **Jdaley@AmericanForests.org**



Food and Agriculture
Organization of the
United Nations



Arbor Day
Foundation



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Memory Forests - Rooted in Racial Equity

Brenda Richardson



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Green Obsession: Trees Towards Cities, Humans Towards Forests

Stefano Boeri



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