Urban Tree Selection...
...For a Changing Climate

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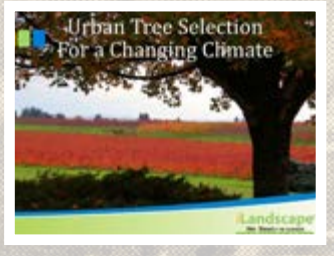
Long-range climate projections confirm what many urban tree managers already know. A general trend toward a hotter, drier climate will be accompanied by temperature extremes and severe weather events including windstorms, heavy rains and flooding, and periods of severe drought.

An important step in choosing climate-resilient trees is to identify species that have already proven adaptable across a wide range of growing conditions, and are said to demonstrate "phenotypic plasticity." Planting a diverse mix of adaptable, resilient species and cultivars is essential to future urban forest health.

Future urban forest health depends on identifying and planting these broadly adapted, climate resilient trees. Among promising species are Oak, Elm, Kentucky Coffee Tree, Tulip Tree, Maple and Bald Cypress.



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- Redpointe® Maple
- Flashfire® Maple
- Crimson Sunset® Maple
- Native Flame® Amer. Hornbeam
- Rising Fire™ Amer. Hornbeam
- Northern Catalpa
- Heartland® Catalpa
- Prairie Sentinel® Hackberry
- Yellowwood
- Turkish Hazel
- Presidential Gold® Ginkgo
- Espresso™ Kentucky Coffee Tree
- Emerald City® Tulip Tree
- White Shield Osage Orange
- Royal Raindrops® Crabapple
- Afterburner® Tupelo
- Vanessa Persian Parrotia
- Exclamation!® Planetree
- Swamp White Oak
- Crimson Spire™ Oak
- American Dream® Oak
- Urban Pinnacle® Oak
- Heritage® Oak
- Cobblestone® Oak
- Prairie Stature™ Oak
- Forest Knight® Oak
- Streetspire® Oak
- Skinny Genes® Oak
- Beacon® Oak
- Chestnut Oak
- Shawnee Brave™ Bald Cypress
- Emerald Sunshine® Elm
- Colonial Spirit® Elm
- Jefferson Elm
- Prairie Expedition® Elm

http://jfss.co/JFS_iLand_2017
Use this address to download this handout which includes links to photos and downloadable fact sheets for each of the featured trees and important resources on the reverse..

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Climate Change Resources and Tree Selection Information

Reference Guide
Our reference guide is available at this link: http://www.jfschmidt.com/rg

New Trees
Trees introduced since the publication of our most recent Reference Guide are available for download at this link: http://www.jfschmidt.com/newtrees

PDF Data Sheets
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Trees are the Answer
www.TreesAreTheAnswer.info is your go-to resource for helping you and your customers choose, grow and care for trees. Dozens of links posted here will guide you to sites that will help you leverage the value of trees and give you an inside track to news and information about trees.

Climate Change Resource Center (USFS)
USFS site focus is on forests, but general climate change information pertains to urban forest management.
http://www.fs.fed.us/climatechange/

Dr. Bert Cregg | Michigan State University
Ornamental and Landscape Ecology program research areas include urban forest species diversity, recommended ash replacements and urban tree selection for a changing climate.
http://www.hrt.msu.edu/bert-cregg

Urban Forests and Climate Change
Climate Change Resource Center (USFS)
Recommended reading, a roundup of USFS research, useful tools and links. https://www.fs.usda.gov/ccrc/topics/urban-forests-and-climate-change

Dr. Greg McPherson
Urban Ecosystems and Social Dynamics
See: Evaluation of seven drought tolerant tree species for central California http://www.fs.fed.us/psw/programs/uesd/uep/

Trees for 2050 | Chicago Botanic Garden
Urban Forest Adaptive Planting List results from Evaluation of CBG Collection (See Adaptive Tree List – Alternatives for the future)
http://www.chicagobotanic.org/plantinfo/tree_alternatives

The Center for Tree Science | Morton Arboretum
Collaborative study of the Chicago region oak ecosystem is underway.
http://www.mortonarb.org/science-conservation/center-tree-science-securing-future-trees

Trees for the 21st Century | Friends of Trees
Friends of Trees describes in a three-part blog series the Oregon non-profit's efforts to plant and evaluate trees for future resilience to climate change.
http://friendsoftrees.org/blog/2013/06/17/climate-trees-trees-for-the-21st-century-part-1/

Impact of Climate Change on Urban Tree Species Selection | Philadelphia
A case study in Philadelphia is the basis for research presented in the Journal of Forestry; suggests a method for assessing the suitability of urban tree species for predicted future climates.
https://www.researchgate.net/publication/233497862_Assessing_the_Impact_of_Climate_Change_on_Urban_Tree_Species_Selection_A_Case_Study_in_Philadelphia

PLANTS Database | Natural Resource Conservation Service (USDA/NRCS)
PLANTS Database provides standardized information about the vascular plants, mosses, liverworts, hornworts, and lichens of the U.S. and its territories.https://plants.usda.gov/java/

Variety Specific Websites
These widely planted cultivars are proving their adaptability and climate resilience by being planted across a wide range of climate zones and growing conditions. Photos, testimonials and local sources are featured.

Variety	website	Facebook
Redpointe® Maple	www.redpointemaple.com	facebook.com/redpointe
Crimson Sunset® Maple	www.crimsonsunsetmaple.com	facebook.com/crimsonsunsetmaple
Royal Raindrops® Crabapple	www.royalraindrops.com	facebook.com/royalraindrops
Crimson Spire™ Oak	www.crimsonspire.com	facebook.com/crimsonspire
Emerald Sunshine® Elm	www.emeraldsunshineelm.com	facebook.com/EmeraldSunshineElm

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