# The great st. LOUIS Tree hUnt of 2011 April 8-September 30, 2011





MISSOURI BOTANICAL GARDEN

# presented by





## The Great St. Louis Tree Hunt of 2011 – MORE CLUES!

While the Tree Hunt guide (available both in print and online at <u>www.mobot.org/treemendous</u>) contains a few clues regarding location, GPS coordinates and species, here are a few more helpful hints for your hunt:

#### Missouri Botanical Garden, St. Louis, MO

Tree #1 – near the Garden's historic Museum Building in the Victorian district; a national champion Tree #2 – near the Lehmann Rose Garden

#### Tower Grove Park, St. Louis, MO

Tree #3 – south of Flag Circle, east of Center Cross Drive; a short walk up the path Tree #4 – just northeast of Cypress North Shelter; right on the edge of Southeast Drive

#### Forest Park, St. Louis, MO

Tree #5 – near the intersection of Summit and Union Drive; just southeast from the Muny Tree #6 – in Kennedy Forest; along pathway west of St. Louis Art Museum

Lafayette Park, St. Louis, MO Tree #7 – located in northwest corner of park

## Bellerive Park, St. Louis, MO

Tree #8 – from park parking lot, this easy-to-spot large tree boasts a great view of Mississippi River

#### Bellefontaine Cemetery, St. Louis, MO

Tree #9 – follow the yellow line through this famous cemetery; tree located in southeast portion

#### Jefferson National Expansion Memorial, St. Louis, MO

Tree #10 – southeast corner of Arch grounds; great view of Poplar Street Bridge and river Tree #11 – northwest corner of Arch grounds; look for a circle of these majestic trees

#### Powder Valley Nature Center, Kirkwood, MO

Tree #12 - along the Broken Ridge Trail; northeast of main Visitors' Center

## Unger Park, Fenton, MO

Tree #13 - located along Yarnell Road; on north side of park's pond

## Larson Park, Webster Groves, MO

Tree #14 – From the south side of the Denver parking lot, take the trail across two bridges. After 2nd bridge, make a left and follow the creek to find this tree.

#### Deer Creek Park, Webster Groves, MO

Tree #15 – near the parking lot off of East Pacific Ave.; abuts creek on northeast end of parking lot

#### Faust Park, Chesterfield, MO

Tree #16 - located in Historic Village between Mertz Cabin and Conway House

**Tilles Park, Ladue, MO** Tree #17 – near semi-circle parking lot; just west of tennis courts

#### Blanchette Park, St. Charles, MO

Tree #18 – southwest of park's main parking lot; look for a trio of these trees

#### Near Matson Hill Park, Matson, MO

Tree #19 – Along the Katy Trail; road-side historic marker; interpretive panels tell unique story!

#### St. Charles Community College, St. Charles, MO

Tree #20 - along Ohmes Road; northeast of ball-field

#### Lindenwood University, St. Charles, MO

Tree #21 - on your left as you enter the university's main entrance; spectacular specimen

#### St. Peters City Centre, St. Peters, MO

Tree #22 – behind City Centre, follow path to your west; just past the ball-fields on your left

#### Jaycee Park, St. Charles, MO

Tree #23 - magnificent tree you'll see right near the park's main parking lot

#### Shaw Nature Reserve, Gray Summit, MO

Tree #24 – in southeast region of Reserve, along Trail House Loop Road; near Maritz Trail House Tree #25 – south of Pinetum Lake; in wooded area near Whitmire Wildflower Garden

#### The Gardens at SIUE, Edwardsville, IL

Tree #26 – located along the Delyte Morris Bike Trail, near The Gardens at SIUE Tree #27 – located in the SIUE Stratton Quad, just north of the Morris University Center

#### Pere Marquette State Park, Grafton, IL

Tree #28 – easy-to-spot tree adjacent to McAdams Peak Shelter

#### Lewis & Clark Community College, Godfrey, IL

Tree #29 – located by the enrollment center in a place commonly referred to as Sycamore Court Tree #30 – located in the Great Tree Lawn, between the Old Main Complex and Godfrey Road

#### Spring 2011

To our fellow St. Louisans,

Throughout 2011, we invite you to join us in shining a deserving spotlight on some of Earth's most important, iconic, and heroic organisms: trees.

To strengthen efforts to conserve and sustainably manage trees and forests worldwide, the United Nations has declared 2011 as the International Year of Forests. Their declaration provides an excellent platform to increase awareness of the connections between healthy forests, ecosystems, people, and economies and provides us all with an opportunity to become more aware, more inspired, and more committed to act.

Today, more than 8,000 tree species—about 10 percent of the world's total—are threatened with extinction, mostly driven by habitat destruction or overharvesting. Global climate change will certainly cause this number to increase significantly in the years to come.

Here at the Garden, we care for many individual at-risk trees (representing 48 species) within our diverse, global collection. Many of these species come from areas of the world where the Garden is working to restore forest ecosystems and the trees in them. Overall, we have nearly 6,000 individual trees in our main Garden, some dating from the time of founder Henry Shaw. Thousands more trees thrive at nearby Shaw Nature Reserve as part of the Garden's commitment to native habitat preservation, conservation, and restoration.

Regardless of where endangered trees are found—close to home or around the world—their survival requires action by all of us. The Great St. Louis Tree Hunt of 2011 is one such action, encouraging as many people as possible to get out and get connected with the spectacular trees of our region.

What else can you do? Take a tree census of your neighborhood. Brush up on your tree I.D. skills. Share your newfound knowledge with others. Plant at least one tree. Relax under the canopy of a favorite tree....

In recognition of the International Year of Forests, join us and others around the world in celebrating these extraordinary organisms and ecosystems, learn about the critical ecological and economic roles they play in our world, and help us protect them for generations to come.

**Dr. Peter Wysě Jackson** President Missouri Botanical Garden

Poter H. Raven

**Dr. Peter H. Raven** President Emeritus Missouri Botanical Garden



International Year of Forests www.un.org/forests

# A TREEmendous Year!

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**The Great St. Louis Tree Hunt** is made possible by the generous support of Gamma Tree Experts.

## Developed by:

Missouri Botanical Garden St. Louis, MO © 2011 Missouri Botanical Garden



## **A TREEmendous Year!**

While trees remain among our favorite life forms to celebrate every year, 2011 gives us an unprecedented excuse to tout trees and forests on a whole new level. In addition to *The Great St. Louis Tree Hunt*, the entire year offers opportunities for people of all ages, backgrounds, and abilities to rally around trees, experience them in new ways, take action, and make a difference.

#### **Extreme Tree Houses**

## Missouri Botanical Garden April 30–August 27

From forest-like and fantastic to sensory and serene, the themes brought to life in *Extreme Tree Houses* will solicit smiles, spark curiosity, spur discussion, and inspire the inner child in all of us. Comprising designs selected through a juried competition, these atypical tree houses can be found throughout the grounds at Missouri Botanical Garden near some of our most notable trees.

#### **TREEmendous Forest Festival, presented by Macy's**

# Missouri Botanical Garden

# April 30–May 1

What better way to celebrate National Arbor Day weekend than participating in the *TREEmendous Forest Festival* at the Missouri Botanical Garden?! Among the highlights of this 2-day event is the TREEmendous Canopy Climb experience, offering visitors ages 8 and older an unprecedented opportunity to ascend into the Garden's famous treetops and get a canopy-view of the world around them. In addition, professional arborists will showcase their skills during daily tree-climbing demonstrations. Festival-goers will experience forest-inspired music, food, and fun, including hands-on activities, exhibitors, forest animals, story telling, docent-led tree tours, expert speakers, and more. Several local organizations, tree experts, and foresters will be on hand to share expertise and answer questions. *The TREEmendous Forest Festival is included with Garden admission; some programs have an additional fee and require pre-registration. The Canopy Climb experience has a separate fee and will be walk-up registration only. Visit www.mobot.org/Treemendous for more information.* 

#### **TREEmendous Interactive Discovery Center**

#### *Missouri Botanical Garden, Brookings Interpretive Center April 1–January 1*

Inviting visitors of all ages to immerse themselves in the world of trees, the *TREEmendous Interactive Discovery Center* has been transformed into a forest of fun, discovery, and learning filled with hands-on, interactive experiences. Visitors will be able to create artwork out of tree parts, dress up as a tree, test their tree I.Q., and experience what life is like in a forest canopy. Curl up with a book under the canopy of our story tree, take in a forest film on our big screen, and even share your favorite tree stories and memories in the Tree Tales community journal. Whether stopping by for a few minutes or a few hours, visitors are invited to discover the many roles trees and forests play in our lives and get inspired to take action!

#### Tree Tours, Classes, and Sleepovers Year-round

Throughout 2011, the Garden is offering a variety of tree-themed classes and programs for learners of all ages at each of its three St. Louis area destinations— Missouri Botanical Garden, Shaw Nature Reserve, and the Sophia M. Sachs Butterfly House. From parent-and-child experiences to scout sleepovers to adult-focused workshops and clinics, these in-depth programs are designed to deepen understanding and inspire action. Visit www.mobot.org/classes to learn more and register.

## The Great St. Louis Tree Hunt of 2011, presented by Gamma Tree Experts *April 8–September 30*

Spanning the greater St. Louis bi-state region, The Great St. Louis Tree Hunt of 2011 aims to encourage people of all ages and abilities to get outdoors and get connected to trees in novel ways. The Hunt includes both high-tech and low-tech ways to explore and discover. But the challenge goes well beyond finding the 30 notable trees highlighted. Via Flickr, Facebook, and other means, the Hunt encourages everyone to submit and share their own favorites and the stories behind them, inviting all of St. Louis to help identify and celebrate our region's greatest trees.

# TREEmendous year supported by the following sponsors:









# Around the World and Close to Home

Many of us are aware of the much-publicized threats to tropical rainforests, which currently cover less than 6 percent of the Earth's surface but are home to more than half its known species. Less well-known are our planet's other forests, which cover 30 percent of Earth's total land area and are home to 80 percent of its terrestrial biodiversity.

But we're not just talking about forests in exotic locales. We're talking about the forests and trees among us: those shading our homes, lining our streets, and planted on purpose in our backyards. Did you know that the trees surrounding us, whether our favorites in our backyards or those in parking lots, actually constitute a forest? Yes, all these trees belong to the urban forest upon which we, and a diversity of species, rely. Thus, when we talk forests—we're talking *all* forests.

## **Trees at Risk**

Today, more than 8,000 tree species—about 10 percent of the world's total—are threatened with extinction, mostly because of habitat destruction and overharvesting of timber. Global climate change will certainly cause the number of tree species in danger of extinction to increase significantly in the years to come. In the U.S., diseases have come close to exterminating the noble American chestnut and greatly reduced the numbers of American elms both in nature and in cultivation. All native species of ash are threatened by the emerald ash borer, a beetle spreading across the country. The invasive bush honeysuckle is preventing many of our local trees and other plants from reproducing properly. These examples could and will, unfortunately, be multiplied as human movements around the world spread pests and diseases at an unprecedented rate.

Today, Missouri Botanical Garden experts work close to home and around the world to help address threats to forest ecosystems. At our nearby Shaw Nature Reserve, restoration ecologists work diligently to control and monitor invasive species so native trees and other species can survive and thrive. Further away, in the montane (botanically underexplored forests of Bolivia), Garden researchers recently collected numerous plant specimens, which will serve as an important source of baseline information for conservation planning, distribution and diversity modeling, and global warming studies. These efforts, along with increased public awareness, sustainable forest management practices, and everyday conservation actions can help protect trees and forests – a worthy global goal in which we all play a role.

## **Forest Facts**

- Forests are home to 80% of the world's terrestrial biodiversity.
- Forests are home to 300 million people around the world.
- Today, forests cover about 30% of total land area.
- Forests store more than 1 trillion tons of carbon. Deforestation accounts for 12% to 20% of the global greenhouse gas emissions that contribute to global warming.
- Approximately 80% of people living in developing countries depend on non-wood forest products, such as fruits and berries, for their primary health and nutritional needs.
- Around 10 million people are employed in forest management and conservation.

## Pop Quiz: Why do we need trees?

- **They pump out oxygen and remove pollutants from the air.**
- □ They're home to animals.
- **They give us food and medicine.**
- **They provide us with wood.**
- □ Their leaves provide shade and make the air cooler.
- □ Their roots help prevent floods and landslides.
- **They protect people and other plants from wind.**
- $\mathbf{\overline{M}}$  All of the above.

## **Benefits of Trees**

In addition to the critical roles trees play in healthy ecosystems and a healthy planet, their value to us humans are too numerous to list.

*"The net cooling effect of a young, healthy tree is equivalent to 10 room-size air conditioners operating 20 hours a day."* —U.S. Department of Agriculture

"There are about 60 to 200 million spaces along our city streets where trees could be planted. This translates to the potential to absorb 33 million more tons of  $CO_2$  every year, and saving \$4 billion in energy costs." —National Wildlife Federation

"Healthy, mature trees add an average of 10 percent to a property's value." — USDA Forest Service

"The planting of trees means improved water quality, resulting in less runoff and erosion. This allows more recharging of the ground water supply. Wooded areas help prevent the transport of sediment and chemicals into streams." —USDA Forest Service

"In laboratory research, visual exposure to settings with trees has produced significant recovery from stress within five minutes, as indicated by changes in blood pressure and muscle tension." —Dr. Roger S. Ulrich, Texas A&M University

# The Great St. Louis Tree Hunt of 2011

Spanning the bi-state region, The Great St. Louis Tree Hunt of 2011 highlights 30 notable trees that captured our attention and, hopefully, yours as well. Our selection criteria varied: some, like the champion trees, were chosen for their impressive size; some for their historic significance; some simply because of their unique and unusual form. We also sought out a diversity of species as well as geographic range. Every tree is located in publicly accessible places including parks, state reserves, and urban environments. So go on...Get tree-hunting!

## The Challenge

Get out and find at least 15 of the 30 TREEmendous trees, but challenge yourself, your family, and friends to find as many as possible! Use the journal pages within this guide to document your discoveries. Upon finding at least 15, bring your completed Tree Hunt Clues and Journal pages (pages 13–18 of this guide) to the Missouri Botanical Garden by October 1, 2011, to claim your TREEmendous Prize Pack, which includes kid-friendly binoculars, a limited-edition signed art print, an activity journal for visiting local destinations, discounts from various local nurseries and retailers, one complimentary adult admission to the Garden, and one complimentary child's admission to the Children's Garden. *Due to limited supply, prize packs will be awarded to the first 1,000 submissions.* 

## Share Your Favorite Trees!

The greater St. Louis region is home to nearly 3 million people...and millions of extraordinary, beautiful trees. The 30 highlighted in the Hunt only scratch the surface. Throughout 2011, share your favorite trees and tree memories through the Garden's Facebook and Flickr sites. Together, let's have a community-wide conversation about our region's neatest and most notable trees. A select number of your photos and stories will be featured on our website and in our *TREEmendous Interactive Discovery Center*, our 2011 exhibit in the Brookings Interpretive Center on Garden grounds.

#### Win a Plants of Merit<sup>®</sup> tree, and we'll even come plant it for you!

By successfully locating and identifying at least 15 of the 30 TREEmendous trees and submitting your findings to us, you'll be automatically entered into a drawing to receive a complimentary fringe tree (*Chionanthus virginicus*), a Plants of Merit<sup>®</sup> species and Missouri native boasting beautiful, creamy white blooms. Horticulturists from the Missouri Botanical Garden will deliver a young fringe tree directly to you and plant it with care. *Site must be within a 45-mile radius of the Garden and tree delivery/planting will be in the fall.* 

#### Your Tree Hunt Participation = Carbon Offsets

Who knew using your phones or computers could actually clean the air? During The Great St. Louis Tree Hunt, they can. At each tree location, you'll find a TREEmendous sign that identifies the tree. Smartphone users can scan the code on each sign to visit a webpage to learn more about that specific tree and its surroundings. Visitors to www.mobot.org/ treemendous can learn more about each tree as well. For every Tree Hunt webpage visited, 10 lbs. of carbon dioxide will be offset courtesy of 3Degrees (www.3degreesinc.com; Ameren Missouri Pure Power's partner for renewable energy and carbon balancing services), up to a maximum of 390,000 lbs.—the environmental equivalent to taking 35 cars off the road for an entire year, or the amount of carbon absorbed annually by 38 acres of pine forest!

#### **TREEmendous Geocaching Series**

A select number of the trees highlighted are also part of the *TREEmendous Geocaching Series*, coordinated by the St. Louis Area Geocachers Association. Whether you're an experienced geocacher or a first-time novice, this is a great way to explore your world. Look for the "**GC**" symbol in the list of trees on pages 13–18, and learn more at www.geostl.com.

## **Tree Hunt Tips and Etiquette**

As you prepare for the Hunt, please keep in mind the following tree-friendly tips to ensure your adventure goes smoothly and safely—for both you and the trees!

- **Plan, prepare, and bring a buddy.** Be sure to check out the operating dates, hours, and regulations for each site. Experiences like camping, picnicking, pets, and other considerations vary by site. Websites for each participating location can be found on page 21 of this guide. Also, explore in groups for companionship and safety.
- **Consider tree-friendly transportation.** Many of the trees selected are in popular destinations, accessible via walking/biking trails, Metro, and bus stations. Between April and September, plan your tree-hunt trips efficiently and creatively; consider carpool with friends and family, plan a group bike ride, or experience our region's public transportation system. Whichever mode you choose, get out and enjoy the great outdoors!
- **Respect privacy**. All of the trees highlighted in the Hunt are on public property. If a unique tree in someone's yard or private property catches your eye, take a photo but don't trespass.
- **Be kind to trees.** Some trees may look inviting to climb, touch, and otherwise explore. But, use caution and common sense. Never pull off healthy leaves from a tree or peel its bark, even the unique peeling bark of some birches. Trees need their leaves and bark to survive and thrive.

# **Quick Guide to Leaves and Seeds**

To help you identify trees throughout your Hunt, here's a quick visual guide to leaves and seeds of common trees across the Midwest. Some of these species are part of the Hunt, while others you might find along the way!



White Oak Quercus alba



Sassafras Laurus sassafras



Large Magnolia or Big Laurel Magnolia grandiflora



Over Cup White Oak Quercus macrocarpa



Poplar or Tulip Tree Lyriodendrum tulipifera



Eastern Black Oak Quercus velutina



Flowering Dogwood Cornus florida



Heart Leaved Cucumber Tree Magnolia cordata



Small Magnolia or White Bay Magnolia glauca



Umbrella Tree Magnolia tripetala



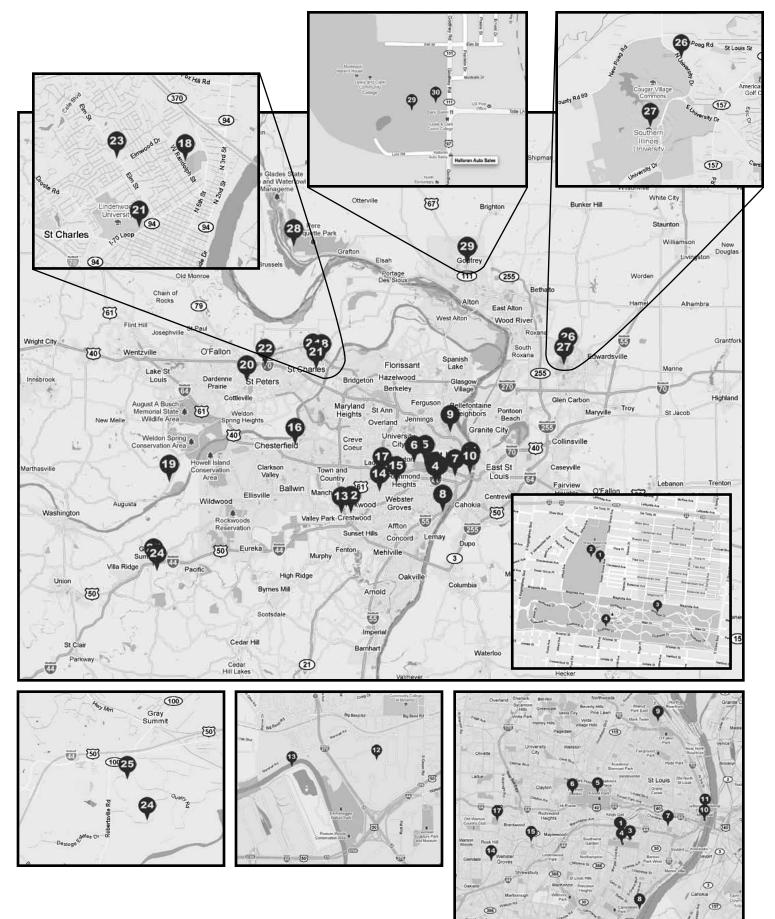
White Elm Ulmus americana



Sweet Locust Gleditsia triacanthos

More comprehensive tree ID and leaf ID resources can be found on page 22 of this guide.

# Great St. Louis Tree Hunt of 2011 - Region Map



## **Destinations**

Before you commence your hunt, be sure to learn more about the destinations, their hours of operation, restrictions, and other considerations.

#### St. Louis City – MO

Bellefontaine Cemetery – www.bellefontainecemetery.org Forest Park – www.forestpark.org Jefferson National Expansion Memorial – www.nps.gov/jeff Lafayette Park – http://stlouis.missouri.org/citygov/parks/parks\_div/lafayette.html Missouri Botanical Garden – www.mobot.org Bellerive Park – http://stlouis.missouri.org/citygov/parks/parks\_div/bellerive.html Tower Grove Park – www.towergrovepark.org

#### St. Louis County – MO

#### Deer Creek Park, Webster Groves -

http://mo-webstergroves2.civicplus.com/index.aspx?NID=172 Faust Park, Chesterfield – www.stlouisco.com/ParksandRecreation Larson Park, Webster Groves – http://mo-webstergroves2.civicplus.com/index.aspx?NID=177andART=1217andadmin=1 Powder Valley Nature Center, Kirkwood – www.mdc.mo.gov Unger Park, Fenton – www.stlouisco.com/ParksandRecreation Tilles Park, Ladue – ww5.stlouisco.com/parks/tilles/html

#### St. Charles County – MO

Blanchette Park, St. Charles – www.parks.sccmo.org Jaycee Park, St. Charles – www.stcharlescitymo.gov Lindenwood University, St. Charles – www.lindenwood.edu St. Charles Community College – www.stchas.edu St. Peters City Centre – www.stpetersmo.net

## Franklin County – MO

Shaw Nature Reserve, Gray Summit – www.shawnature.org

#### Madison County – IL

Southern Illinois University Edwardsville – www.siue.edu/gardens

#### Jersey County – IL

Pere Marquette State Park, Grafton – http://dnr.state.il.us/lands/landmgt/parks/r4/peremarq.htm Lewis & Clark Community College, Godfrey – www.lc.edu

## **Tree Hunt Clues and Journal**

GPS COORDINATES: N 38° 36.756' W 90° 15.540'

Here they are: The Great St. Louis Tree Hunt clues, grouped by location, with coordinates to help you find your way. Challenge yourself, your family, and friends to find and correctly identify as many as possible! Along the way, be sure to take lots of photos, notes, and sketches to document your discoveries. Once you find at least 15, bring your completed Tree Hunt Journal pages (pages 13–18) to the Missouri Botanical Garden to receive a TREEmendous Prize Pack!

## 🗆 TREE #1 😳

**CLUES:** Missouri Botanical Garden; state champion; leaf is sharply toothed and looks like a lopsided heart; nicknamed "the bee tree" because bees make excellent honey from its flowers. **GPS COORDINATES:** N 38° 36.720' W 90° 15.467'

Species:	Date found:
Notes:	

# 🗆 TREE #2 😳

**CLUES:** Missouri Botanical Garden; the pulp of this tree's fruit has been used to make soap; native range is southwestern Texas and Mexico.

Species:	Date found:
Notes:	

## 🗆 TREE #3 💽

**CLUES:** Tower Grove Park; south of Flag Circle, east of Center Cross Drive; fantastic trunk; leaves are heart-shaped; flowers are trumpet-shaped; fruit is long, thin, bean-like pod. **GPS COORDINATES:** N 38° 36.305' W 90° 15.488'

Species:	Date found:
Notes:	

# 🗆 TREE #4 😳

**CLUES:** Tower Grove Park; large tree just northeast of Cypress North Shelter; species nicknamed a "living fossil," believed to have been growing on Earth for 150 million years; also called maidenhair tree; leaf is shaped like a fan; seeds look like tiny, apricot-colored plums. **GPS COORDINATES:** N 38° 36.411' W 90° 14.905'

Species:	Date found:
Notes <sup>.</sup>	

# 🗆 TREE #5 💿

**CLUES:** Forest Park; state champion; flowers are attractive to ruby-throated hummingbirds and bloom at about the same time the birds return for spring migration; seeds are poisonous and avoided by most wildlife.

#### GPS COORDINATES: N 38° 38.351' W 90° 16.664'

Species:	Date found:
Notes:	

# 

**CLUES:** Forest Park, Kennedy Forest; tree is growing inside the shell of a black oak, to symbolize the rejuvenation of nature; also known as hedge tree; early French explorers called the tree "bois d'arc," meaning wood of the bows.

**GPS COORDINATES:** N 38° 38.301' W 90° 17.962'

So	ecies:	

\_\_\_\_\_ Date found: \_\_\_\_\_

\_\_\_\_\_ Date found: \_\_\_\_\_

Notes: \_\_\_\_\_

# 🗆 TREE #7 💁

**CLUES:** Lafayette Park; species is one of the largest native trees of the eastern U.S.; flowers are large, brilliant, and often numerous; this tree species is a major honey plant in the Eastern U.S. **GPS COORDINATES:** N 38° 37.011' W 90° 13.041'

Species:	Date found:
Notes:	

# 

**CLUES:** Bellerive Park, view of the Mississippi River; the small berries of this tree are eaten by birds and mammals; its wood is soft and rots easily; Missouri native.

<b>GPS COORDINATES:</b> N	38° 33.0	662'W 90°	14.498'
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Species:_	
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Notes: \_\_\_\_\_

# 🗆 TREE #9 💽

**CLUES:** Bellefontaine Cemetery; state champion; leaf is dark green and shiny, with serrated edges; once among the most best-known trees in the U.S., now rare due to invasive disease. **GPS COORDINATES:** N 38° 41.246' W 90° 13.557'

Species:	Date found:
Notes:	

## □ TREE #10

**CLUES:** Arch grounds, SE corner; fruit is called a samara; survival is threatened by invasive pest that was first found in Michigan in 2002 and has since spread to nine states and resulted in the death of millions of these trees.

<b>GPS COORDINATES:</b>	N 38° 37	7.255'	W 90° 11.171'

~	
S'n	00100'
υU	ecies:

\_\_\_\_\_ Date found: \_\_\_\_\_

Notes: \_\_\_\_\_

#### □ TREE #11

**CLUES:** Arch grounds; naturally occurs in swamps and wet bottomland forests; wood used for barrels, caskets, boats, and fence posts; largest remaining old-growth stand of these trees in Missouri can be found near the Allred Lake Natural Area in Butler County.

GPS COORDINATES: N 38° 37.691' W 90° 11.118'

Species:	Date found:
Notes:	

## 

**CLUES:** Powder Valley Nature Center; can grow up to 100 feet tall; simple leaf with pointed lobes and bristle-pointed teeth; turns red in fall; species grows further north than any other eastern oak species.

**GPS COORDINATES:** N 38° 33.548' W 90° 25.611'

Species: \_\_\_\_\_ Date found: \_\_\_\_\_

Notes: \_\_\_\_\_

## □ TREE #13 GG

**CLUES:** Unger Park, Fenton; state champion; fast-growing tree with peeling, papery bark; occurs in moist ground along streams and gravel bars; Native Americans and European settlers made beer from this tree by boiling down the sap, adding honey, then fermenting.

**GPS COORDINATES:** N 38° 33.480' W 90° 26.731'

Species:	Date found:
Notes:	

## □ TREE #14 GO

CLUES: Larson Park, Webster Groves; nicknamed "Centennial Tree;" leaves are the largest of any native oak, up to one foot long and very wide; may live up to 600 years; its very large acorn is reflected in its scientific name, which means "big seed."

**GPS COORDINATES:** N 38° 35.604' W 90° 22.154'

Species:	Date found:	
Notes:		

## □ TREE #15 GO

**CLUES:** Deer Creek Park, Webster Groves; boasts white, showy, fragrant flowers; its wood is ranked as the 7th hardest of any tree in North America; its nectar, leaves, twigs, seeds, and seedpods are food for a diversity of wildlife, but its inner bark can be lethal to livestock. GPS COORDINATES: N 38° 36.384' W 90° 20.074'

Species:	Date found:

Notes: \_\_\_\_\_

# □ TREE #16 GC

**CLUES:** Faust Park, Chesterfield; its simple leaves come in three different shapes—three-lobed, two-lobed, and oval with no lobes; small, dark-blue fruit; aromatic bark; traditionally, tea was made from the roots of this tree; later, the oil found in this tree was found to be carcinogenic and banned for commercial sale.

<b>GPS COORDINATES</b>	: N 38°	39.979'	W 90°	32.414
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Species:	Date found:
Notes:	

## □ TREE #17 GC

**CLUES:** Tilles Park, Ladue; known as "Natural Heritage Tree;" long-lived, hardwood species, with some specimens known for living more than 600 years.

**GPS COORDINATES:** N 38° 37.224' W 90° 21.841'

Sp	ec	ies
v٣	00	

Species:\_\_\_\_\_ Date found: \_\_\_\_\_

Notes: \_\_\_\_\_

# □ TREE #18 😳

**CLUES:** Blanchette Park; Missouri State Tree; among the most beautiful of native American flowering trees; has been used in the production of inks, scarlet dyes, and as a quinine substitute; its hard, dense wood has been used for products such as golf club heads, mallets, and butcher's blocks.

**GPS COORDINATES:** N 38° 47.900' W 90° 29.143'

Species:	Date found:
Notes:	

## □ TREE #19 GC

**CLUES:** near Matson Hill Park, Daniel Boone Historic District; young tree planted in 1999; known as the "Judgment Tree," marking where Boone held court as territorial commandant. **GPS COORDINATES:** N 38° 36.457' W 90° 47.636'

Species:	Date found:
Notes:	

## 

**CLUES:** St. Charles Community College; belongs to the walnut family; each leaf is made up of five leaflets, known as a compound leaf; named for its shaggy bark; chips of its wood are often used to barbecue meat.

<b>GPS COORDINATES</b>	: N 38°	45.912'	W 90°	38.220
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Species: \_\_\_\_\_ Date found: \_\_\_\_\_

Notes:

## □ TREE #21 😳

**CLUES:** Lindenwood University; large heart-shaped and three-lobed leaves; showy white or yellow flowers; long fruits resemble slender bean pods; great shade tree; popular habitat for many birds. **GPS COORDINATES:** N 38° 47.105' W 90° 29.865'

Species:	Date found:
Notes:	

#### □ TREE #22 GC

**CLUES:** St. Peters City Centre; slow-growing, medium-sized tree; nuts are contained in leatherlike spiny husks containing a mahogany-colored seed; people have carried this tree's seeds in their pockets for good luck and to prevent rheumatism, but these seeds are actually toxic to humans and livestock.

GPS COORDINATES: N 38° 47.459' W 90° 36.033'

Species:	Date found:
Notes:	

## □ TREE #23 😳

**CLUES:** Jaycee Park, St. Charles city; also known as wych elm; native to Great Britain but widely planted in the U.S. as shade trees for large lawns and parks.

GPS COORDINATES: N 38° 47.936'	W 90° 30.218'	
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Species:	Date found:
Notos	

## □ TREE #24 GC

**CLUES:** Shaw Nature Reserve, Gray Summit; occurs in bottomland forests along streams, moist woods, and the bases of bluffs; its leaves are the largest of any native Missouri tree; fruits are large, long, leathery pods; seeds have been used as a coffee substitute.

GPS COORDINATES: N 38° 28.034' W 90° 49.145'

Species:	Date found:
Notes:	

## □ TREE #25 GC

**CLUES:** Shaw Nature Reserve, Gray Summit; slow-growing, small tree; grows in shade along moist ravines and valleys; extract from this tree has been used experimentally in cancer therapy and has been rated 300 times as potent as taxol, the other, better-known plant extract; fruit also known as the "Ozark banana."

GPS COORDINATES: N 38° 28.601' W 90° 49.481'

Species: \_\_\_\_\_\_ Date found: \_\_\_\_\_

Notes: \_\_\_\_\_

## 🗆 TREE #26 😳

**CLUES:** The Gardens at SIUE on the campus of Southern Illinois University Edwardsville along the Delyte Morris Bike Trail; member of the red oak group; in the past, the wood was important for making shingles, from which the name derives.

**GPS COORDINATES:** N 38° 48.088 W 089° 59.516

Species:	Date found:
Notes:	

## □ TREE #27 GC

**CLUES:** The Southern Illinois University Edwardsville campus (Stratton) Quad; fun swings; fastgrowing tree; occurs in bottomland forests, edges of swamps, and along streams and rivers; its acorns are an important food source for waterfowl.

GPS COORDINATES: N 38° 47.580' W 89° 59.847'

Species:	Date found:
Notes <sup>,</sup>	

# □ TREE #28 GC

**CLUES:** Pere Marquette State Park, Grafton; adjacent to McAdams Peak shelter; slow-growing, long-lived evergreen juniper; when its seed cones are pollinated, they grow into a round blue cone that looks like a tiny berry.

GPS COORDINATES: N 38° 58.729' W 90° 32.568'

Species:	Date found:
Notes:	

## 🗆 TREE #29 ઉ

**CLUES:** Lewis & Clark Community College, Godfrey; species can grow to massive size; mottled exfoliating bark; leaves grow sticky, green buds; Native Americans used this species for a variety of medicinal purposes, including cold and cough remedies; species today threatened by invasive pests and air pollution.

GPS COORDINATES: N 38° 57.053' W 90° 11.573'

Species:	Date found:	
Notes:		

## □ TREE #30 😳

**CLUES:** Lewis & Clark Community College, Godfrey; smooth, grey bark; triangular, beechnut seeds are a favorite food of deer, mice, and squirrels; pollen dating suggests this species has been around since the last Ice Age.

a 3 000110111A1 20. 11 00 07.070	W 50 11.000	
Species:	Date found:	

Notes: \_\_\_\_\_

## Activities for at Home and in Your Neighborhood

Some of these activities are ideal for younger children while others are great for people of all ages and abilities. Whatever age you are, get out there...

#### Tree Census and Logbook

Sharpening spatial skills and tree identification prowess, this activity, helped along with available technology, can broaden perspectives and increase awareness of our everyday surroundings. Map out on grid paper, to scale, the area you wish to inventory, or reference Google Earth or Google Maps as great online resources for a bird's eye view of your site. Walk the site, note every tree, and identify the species. If you have a GPS-enabled device, keep track of coordinates. Keep your notes, images, and sketches in a logbook and continue to make updates throughout the year. Share your findings with friends and family and encourage them to help you. Beyond your backyard, how far can you go?

#### How Tall is That Tree?

There are many high-tech and low-tech ways to measure the height of trees. Some of the tactics used by highly skilled arborists involve climbing to the very tops of trees to get an accurate measurement. Leave that to the professionals—check out some easier and safer ways here. http://www.wikihow.com/Measure-the-Height-of-a-Tree

#### **Tree Walks and Talks**

Sometimes the simplest activities are the most enriching. Explore your yard, take a walk in your neighborhood, or visit a nearby park with a child. Find a tree you both find interesting. Encourage the child to relate parts of trees to their own body parts (roots are like feet, branches are like arms, trunk is like a stomach, bark is like skin, etc.). Encourage them to observe closely, compare, and contrast. When caring adults explore the outdoors alongside children, it can help develop a sense of wonder and a lifelong appreciation of nature.

## Bark Art

Make a "bark art" poster montage by collecting bark rubbings from several different trees. Things you'll need:

- Thin drawing or tracing paper
- 4 thumbtacks
- Assorted crayon stubs with paper peeled off
- Any mature trees with healthy bark

Use thumbtacks\* to pin a piece of paper against the tree trunk at eye level. Rub the flat length of the crayon across the paper, changing crayon colors whenever you like.

\* Bark can be hurt, so thumbtack your paper just deep enough to hold it in place. When you're done, be sure to remove the thumbtacks and take them home with you.

# **Take Action!**

Perhaps the best way to participate in the International Year of Forests is to plant trees. Across the greater St. Louis region, many neighborhoods, municipalities, and communities offer great resources for initiating or participating in seasonal tree plantings. Among our favorites is **Forest ReLeaf of Missouri** (www.moreleaf.org).

Forest ReLeaf was founded in 1993 as the local response to Global ReLeaf, an international project of American Forests to increase tree planting. Today, Forest ReLeaf of Missouri is an independent, nonprofit organization dedicated to inspiring volunteer efforts in planning and caring for our trees and forests, particularly those in urban areas. The mission of Forest ReLeaf of Missouri is to provide trees for public and nonprofit plantings and increase stewardship of community trees and forests across Missouri and surrounding regions.



In addition to participating in local tree plantings, everyone can help protect trees and forests in simple, everyday ways:

- Take care of mature trees. Don't top your trees, and hire only professional arborists for your tree-care needs. Tree topping—the drastic removal of large branches in mature trees—leaves large, open wounds which subject the tree to disease and decay.
- **Get tree-wise.** Sharpen your tree I.D. skills. Familiarize yourself with local native and non-native trees, their seasonal cycles, and the biodiversity they support. If planting new trees, always remember to plant the "right tree for the right place."
- Use less and recycle. It can't be said enough: recycle all wood and paper.
- Be a smart, sustainable consumer. Be sure that any wood you buy comes from a sustainable source, certified by the Forest Stewardship Council (FSC) or similar agency.
- **Speak up.** Campaign for better international legislation to curb forest destruction. There have been many tentative pledges by governments to curb illegal logging, but by keeping the pressure on, these pledges will hopefully be put into action.

# Thank you to Gamma Tree Experts for their support of The Great St. Louis Tree Hunt of 2011.



# **Organizational Partners**

Many thanks to the following partner organizations that helped identify the extraordinary trees highlighted in The Great St. Louis Tree Hunt of 2011, and whose mission and work help ensure these trees and their habitats survive and thrive for generations to come.

**Bellefontaine Cemetery** – *www.bellefontainecemetery.org* **Deer Creek Watershed Alliance** – www.deercreekalliance.org **Forest Park Forever** – *www.forestparkforever.org* Forest ReLeaf of Missouri – www.moreleaf.org Jefferson National Expansion Memorial – www.nps.gov/jeff Illinois Department of Natural Resources – www.dnr.illinois.gov International Society of Arboriculture – Midwest Chapter – www.mwisa.org Lewis & Clark Community College – *www.lc.edu* Lindenwood University – www.lindenwood.edu Missouri Department of Conservation – www.mdc.mo.gov **Missouri Community Forestry Council** – www.mocommunitytrees.com **Pere Marquette State Park** – http://dnr.state.il.us/lands/landmgt/parks/r4/peremarq.htm Shaw Nature Reserve – www.shawnature.org St. Charles Community College – www.stchas.edu St. Charles County Parks and Recreation Dept. – www.parks.sccmo.org St. Louis Arborists Association – www.stlouisarborists.com St. Louis City Dept. of Parks, Recreation and Forestry - http://stlouis.missouri.org/citygov/parks **St. Louis County Parks and Recreation** – *www.stlouisco.com/ParksandRecreation* St. Louis Area Geocachers Association – www.slaga.com **St. Peters Parks, Recreation and Arts** – *www.stpetersmo.net/parks-recreation.aspx* Southern Illinois University Edwardsville – www.siue.edu The Gardens at SIUE – www.siue.edu/gardens TrailNet – www.trailnet.org **Tower Grove Park** – *www.towergrovepark.org* 

## Books for children and families:

**A Tree is Growing** By Arthur Dorros, Scholastic Press, 1997

**The Busy Tree** By Jennifer Ward, Marshall Cavendish Children, 2009

**The Great Kapok Tree: A Tale of the Amazon Rain Forest** *By Lynne Cherry, Harcourt, 1990* 

**The Tree Book for Kids and Their Grown-ups** *By Gina Ingoglia, Brooklyn Botanic Garden, 2009* 

**Trees (Fandex Family Field Guides)** By Steven Aronson. Workman. 1998

What Good Is a Tree? By Larry Dane Brimner, Children's Press, 1998

## **Books for adults:**

**Dirr's Hardy Trees and Shrubs: An Illustrated Encyclopedia** By Michael A. Dirr, Timber Press, 1997

Manual of Woody Landscape Plants By Michael A. Dirr, Stipes Publishing, 2009

#### Plant

By Janet Marinelli, DK Adult, 2005

**The Urban Tree Book: An Uncommon Field Guide for City and Town** *By Arthur Plotnik, Three Rivers Press, 2000* 

**The Tree: A Natural History of What Trees Are, How They Live, and Why They Matter** *By Colin Tudge, Three Rivers Press, 2007* 

**The Wild Trees – A Story of Passion and Daring** *By Richard Preston, Random House, 2007* 

**Trees of Missouri** *By Don Kurz, Missouri Department of Conservation, 2006* 

## **Resources for educators:**

#### Missouri Botanical Garden

Exploring the Tropics and Tropical Feast, *www.mobot.org/education/web.asp* What's It Like Where You Live, *www.mbgnet.net* 

Project Learning Tree – www.plt.org

The Tallest, Biggest and Oldest Trees – www.bio.ilstu.edu/armstrong/bigtree/fieldtrip.htm Trees for the Future – www.treesftf.org World Land Trust – www.focusonforests.org

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## Organizations, initiatives, and websites:

American Forests – www.americanforests.org Arbor Day Foundation – www.arborday.org Botanic Gardens Conservation International and Flora and Fauna International – Global Trees Campaign, www.globaltrees.org Deer Creek Watershed Alliance – www.deercreekalliance.org International Society of Arboriculture – www.isa-arbor.org International Year of Forests – www.un.org/forests Missouri Botanical Garden – PlantFinder, www.mobot.org/gardeninghelp/plantfinder Missouri Botanical Garden – Trees of the Garden, www.mobot.org/press/Assets/FP/trees\_of\_MBG.asp Missouri Community Forestry Council – www.mocommunitytrees.com Rainforest International – www.rainforest.org Spirit of Trees – www.spiritoftrees.org TED talks: Nalini Nadkarni on Conserving the Canopy – www.ted.com/talks/lang/eng/nalini\_nadkani\_on\_conserving\_the\_canopy.html United Nations Billion Tree Campaign – www.unep.org/billiontreecampaign

## Mobile applications:

What Tree is That?™ – www.arborday.org/smarttree Audubon Trees – A Field Guide to North American Trees, www.audubonguides.com/field-guides TreeID – www.medImobile.com MyNature Treeguide – www.mynaturesite.com

# Thank you for participating in The Great St. Louis Tree Hunt of 2011!

## Win a Free Tree!

By successfully locating and identifying at least 15 of the 30 TREEmendous trees and submitting your findings to us, you'll be automatically entered into a drawing to receive a complimentary fringe tree (*Chionanthus virginicus*), a Plants of Merit® species and Missouri native. Horticulturists from the Missouri Botanical Garden will deliver a young fringe tree directly to you and plant it with care. *Site must be within a 45-mile radius of the Garden and tree delivery/planting will be in the fall. To be entered into this drawing, please complete the following information:* 

Name:		
Party size of your Tree Hunt team:		
Contact e-mail:		
Contact phone number:		
Mailing address:		
City:	State <sup>.</sup>	Zip:
		=
Your feedback is important to us! Ple		-
Your feedback is important to us! Ple	ease share your thoughts about	the Hunt below:
	ease share your thoughts about	the Hunt below:
	ease share your thoughts about	the Hunt below:
	ease share your thoughts about	the Hunt below:



To the great tree-loving fraternity we belong. We love trees with universal and unfeigned love, and all things that do grow under them or around them - the whole leaf and root tribe. ~Henry Ward Beecher



Missouri Botanical Garden 4344 Shaw Blvd. • St. Louis, MO 63110 (314) 577-5100 • www.mobot.org