BUILDING LEOPOLD'S LEGACY

AN ODD POCKET

ricul Forests

In Search of Giants

AN OLYMPIC UNDERTAKING

THE NATIONAL REGISTER OF BIG TREES 2006-2007

CHANGING THE PARADIGM



American Forests

FEATUR<u>ES</u>

AN ODD POCKET

This biological wonder and Global ReLeaf Forest site is an isolated refuge for species usually found much farther north. by Ethan Kearns

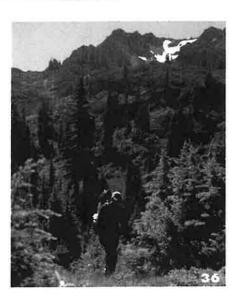
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The glory days of environmentalism are past. We need a new perspective that combines nature, commerce, and transportation. — by Peggy Ann Brown

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2006-2007 NATIONAL REGISTER OF BIG TREES SPECIAL CENTER INSERT: AMERICAN FORESTS' biennial guide to the biggest of some 826 species of trees.



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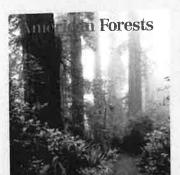
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Arid Advocate. Deserts, wildfires, amazing finds: such is the life of Arizona Big Tree Coordinator. — by Bob Zahner





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FORUM

the tax law to discourage large houses and second homes. However, I believe that a major change in our institutions, land ownership, and capitalist philosophy is needed.

Timberland in turmoil will continue as Woodland Investors own more, smaller parcels of timberland. Our real challenge is to encourage Woodland Investors to practice good forestland management for all the potential benefits coming from forestland.

Frank C. Shirley Vaughn, Washington

ARE LIVE OAKS THAT OLD?

editor: I enjoy American Forests. Not before the Winter 2006 issue have I wondered about the accuracy of the material therein. The article titled, "Southern Comfort" starts with a startlingly fine black and white photo of an old grove of live oaks. Unfortunately, the text heavily emphasizes the great age—to 1,200 years—that live oaks are purported to reach.

In Floral City, Citrus County, Florida (about 20 miles west of my home at "Towering Oaks"), there is a still-existent, beautiful live oak-lined street. This view was featured in the 1936 movie "Gone With the Wind." These mostly grandfather oaks were planted in 1884 or just 50 years before!

At the battleground where Major Dade and over 100 U.S. soldiers were murdered by Indians and escaped slaves in 1835, the detailed map made a few months later shows not a single oak. This is startling, because dozens are there today and one of them, just northwest of the museum, is an especially large and apparently very old one.

The oaks that live hundreds of years are neither southern nor live oaks. They are European or more northerly species. They are also very exceptional individuals.

It may be true that the ivory-billed woodpecker has survived in the swamps of Louisiana, Arkansas, or the mountains of Cuba, but the evidence, so far, doesn't support this hope. Still, having a Cornell University ornithologist supporting this position counts for something.

I have seen the woodpecker "evidence." The out-of-focus movie second

or two is far from convincing. I share [author Gary] Lantz's hope, but so far there is more convincing evidence for the Loch Ness Monster and several other nonexistent spirits than for living ivory-billed woodpeckers.

Richard Cary Paull via e-mail

While it is true that size should not be equated with age, it is a fact—as we said in the story—that the average age for live oaks is more than 200 years. The age of the Seven Sisters, the national co-champ live oak in Louisiana—estimated by foresters at more than 1200 years—was obtained from both the Live Oak Society and chairman Coleen Perilloux Landry.

LIVE OAKS ON LOCATION

editor: Thoroughly enjoyed Ethan Kearns' article on *Quercus virginiana*, my favorite tree. They are common where I grew up in southeastern Virginia. I doubt very much that they grow in southwestern Virginia, as stated on page 26. Much too cold there in hardiness zone 6. I have a three-year-old one growing in Fairfax County, Virginia, near the Potomac River, on the border between zones 6 & 7. Has survived two winters so far. I harvested the acorn from which it grew from a tree I planted in 1942 in Norfolk, Virginia. Maybe global warming will save it.

Stuart C. Nottingham Alexandria VA 22308-2602

Thanks for catching our directional typo. Live oaks do indeed grace southeastern Virginia, but not the hilly, cooler climes of the western portion of the Old Dominion.

THE TREE DOCTOR IS IN

Have questions about trees, growing seasons, diseases? E-mail our Tree Doctor at treedoctor@amfor.org.

WRITE US!

Compliments? Complaints? Questions? E-mail your Letters to the Editor to mrobbins@amfor.org or write to us c/o Editor, *American Forests*, PO Box 2000, Washington, DC 20013. We reserve the right to edit letters.



DEBORAH GANGLOFF EXECUTIVE DIRECTOR

ll

Nature's Tipping Point

Combating global climate change must include trees.

lobal climate change is once again making headlines, but this time with a difference. It used to be those who were talking about the reality of global warming who were marginalized; now that stigma belongs to those who don't. *Time* magazine recently cited a Time/ABC News/Stanford University poll that "85% of respondents agree that global warming probably is happening. Moreover, most respondents say they want some action taken."

There have been some improvements, but the changes to date are not enough. Climate change has brought rapidly receding glaciers, melting polar ice caps, thawing permafrost in Alaska, species migration, and increasing storm frequency and intensity. The practical reality is that the costs of climate change to businesses will continue to rise.

It's clear that environment, energy, and economics are inextricably entwined; you can't care for one while ignoring the others. Trees and managed forests can help us address these issues simultaneously.

Of the eight greenhouse gases, carbon dioxide (CO₂) is the most abundant, constituting over half of the total heat-trapping gases in the atmosphere. The planetary counterbalance to this build-up has been the oceans, which absorb the gas, and the trees and forests, which "fix" carbon dioxide into their structure during photosynthesis. Ninety percent of the carbon that is fixed in solid form on the Earth's surface is held in the world's forests. Forest trees take in 26 pounds of atmospheric carbon dioxide a year and release about 13 pounds of oxygen, enough to keep a family of four breathing for one year.

American Forests began addressing climate change with tree planting nearly 20 years ago. It was a difficult sell at that time, and we lost some sponsors over what was then considered a radical stand on global climate change. Today corporations are planting trees to sequester carbon and offset their business's contribution to global climate change. Everyone from Oprah Winfrey to Seventeen magazine to myspace.com is "talking trees" for mitigating carbon dioxide. Calculate your carbon debt with our on-line calculator: http://www.american

forests.org/resources/ccc. The average is about 30 trees per year per person to be debt-free.

Our corporate partner IKEA is going carbon-neutral by challenging its customers to offset greenhouse gas emissions by planting trees with American Forests; IKEA is matching those contributions. Green Mountain Energy, a leading clean-electricity provider, has a portfolio of carbon-reduction services for businesses that includes tree planting with American Forests. Boisset's French Rabbit wine, sold in recyclable ePods, plants trees with American Forests to reinforce its environmental commitment. It's good business for major companies to actively promote paperless communications, pollution reduction strategies, and environmental restoration programs.

Business, commerce, transportation, and the environment are all part of our first look at regional perspectives that tie together the environment and economics (see Changing the Paradigm, pg. 30). Together they present this country's number one challenge for the future: How do we stay a force in global commerce if we cannot grow sustainably?

Protecting and restoring the nation's urban tree canopy, now being lost at an alarming rate, is a crucial part of sustainable growth and an effective way to counteract excess carbon. Trees in cities reduce energy use, a major cause of atmospheric carbon.

As you ponder what trees do for our environment, peruse our National Register of Big Trees, the definitive listing of the largest tree of each species in the U.S. While big trees don't sequester carbon as fast as young, growing trees, they are carbon sinks that store tremendous amounts of terrestrial carbon. They are symbols of good conservation and what it takes to grow a tree to its full potential.

As you celebrate spring, take another look at the trees around you and think about planting some more (www.americanforeststore.org). Unless we take immediate steps to deal with atmospheric carbon, we humans may find ourselves strangers in a strange land. Like the coyote found in New York's Central Park or the whale that swam up the Thames River in London, we may find ourselves out of place—and perhaps out of time. **AF**

It's clear that
environment,
energy, and
economics are
inextricably
entwined; you can't
care for one while
ignoring the others.

AS SEEN ON RADIO

People who saw it first on the radio can now hear it whenever they like—the webcast "Seeing Green with Trees: The Economic and Environmental Benefits of Urban Forests" is now available on CD. This toolkit of good information includes a Windows Media (audio/video file) recording of the original webcast together with individual PowerPoint presenta-

tions from each speaker and fact sheets and Internet links outlining the benefits of urban forests. The International City/County Management Association sponsored the project, which was produced by the Local Government Environmental Assistance Network in association with American Forests and supported by a grant from the US Forest Service. More info: aseth@icma.org

TRANSITIONS

Saluting: Tree lover and Pulitzer-prize winning poet W.S. Merwin, who won the 2005 National Book Award for Poetry for Migration: New and Selected Poems. Merwin was profiled as an Earthkeeper in the Winter 2005 issue of



American
Forests for his
work in preserving rare
palms at his
home in Hawaii.

The state of Maryland, which this year is celebrating its

100th year of forest conservation.

AMERICAN FORESTS' National Register of
Big Trees, begun in 1940 and featured in
this issue, originally was styled on
Maryland's "noted tree list," first compiled in 1925.

AMERICAN FORESTS for receiving an award of excellence for tree stewardship from the city of Salisbury, North Carolina's Tree Board for our CITYgreen Tree Canopy Project.

Honoring: Charles Burditt, president of Burditt Consultants, the 2005 winner of the prestigious Laurence C. Walker Distinguished Service to Forestry Award. The award goes to foresters who have made an outstanding contribution to forestry in Texas and to the Society of American Foresters.

George Frame, of Bristol, New Hampshire, a member of that state's Tree Farm Committee, recipient of the American Tree Farm System's 2006 National Field Leadership Award. The tree farm program is run by the American Forest Foundation, which cited Frame for his "unwaning enthusiasm, his ability to motivate volunteers, and his commitment to New Hampshire's forest owners..."

Artist and Life member **Bob Timberlake**, who was awarded the Order of the Long Leaf Pine by North Carolina governor Mike Easley. The Order of the Long Leaf Pine, one of the state's highest honors, is given to individuals who have a record of more than 30 years service to North Carolina.

Mourning: The first Earth Day without its founder, three-term Democratic senator and former Wisconsin governor Gaylord Nelson. Nelson died last July



at age 89 from cardiopulmonary disease. His obituary in the Washington Post cited his involvement in legislation creating the Wilderness Act, protecting the

Appalachian Trail, and banning DDT and Agent Orange.

Robert E. Wolf, 84, who during his 30-year career worked for the U.S. Forest Service, the Bureau of Land Management, the Congressional Research Service, and what is now the Office of Management and Budget. During that time, Wolf was involved in revising or enhancing nearly every significant piece of federal public lands legislation, according to *The Forestry Source*.

NEWS OF NOTE

- In an effort to curb waste of scarce timber resources, China has announced it is imposing a 5 percent tax on disposable chopsticks, according to the *Taipei Times*. China makes about 15 billion pairs of the popular, throwaway chopsticks every year.
- Thousands of Christmas trees are getting a second life thanks to the Army Corps of Engineers, which is turning the stripped and discarded trees into reefs for freshwater fish, according to Reuters News Service. The Corps drills holes in the tree trunks and wires a few trees to a concrete block to create underwater forests near fishing piers. "The little fish will go in there for cover and to feed and the big fish will follow them," Missouri park ranger Eric Lemons told Reuters. The reefs are considered prime fishing spots for crappie, bass, bluegill and catfish.
- · A 25,660-acre swath of green in the Washington metropolitan region will go on being the area's "green lungs" after an agreement was signed to protect the land and form a comprehensive Forest Stewardship Plan. The agreement between the Agricultural Research Service, the state of Maryland, and adjacent agency owners creates Baltimore-Washington Partners for Forest Stewardship. The woods has been used to develop a theory that determines how much forest is needed for various species to survive. National and international bird-count techniques have also been developed there. Located in the Chesapeake Bay watershed, the land has been considered a historic forest in Maryland.
- Minnesota Governor Tim Pawlenty has accepted documents of certification for more than 4.8 million acres of state lands. Third-party certification of forests is becoming more widespread, ensuring the land is managed in a sustainable fashion that allows trees to be grown and cut while protecting the health and habitat of wildlife, plants, soil and water. The certification was awarded through both the Sustainable Forestry Initiative (SFI), developed by the American Forest & Paper Association, and the nonprofit Forest Stewardship Council.

CENTENNIAL CELEBRATES PATRIARCH TREES

Stately old pioneers with roots firmly entrenched in centennial soil will be honored when the state of Oklahoma celebrates its 100th birthday in 2007.

The Witness Tree Project, sponsored



by state foresters and the Tree Bank Foundation, hopes to ID woodland patriarchs growing when Oklahoma became a state in 1907, along with those planted by an influx of land-run pioneers.

Among the honorees is a broadcanopied bur oak along the banks of the North Canadian River in Oklahoma City. According to core samples it is more than 200 years old and was therefore a witness to Indian encampments, the region's early cattle drive era, and eventually the birth of the state capital city.

"Just think what that tree has seen," marveled David Yost, a member of the Tree Bank's board of directors. Yost points out the oak will eventually shade a Native American Cultural Center planned for the banks of the North Canadian.

Although often stereotyped as a treeless prairie state, Oklahoma contains a diverse forest environment ranging from mountainous mixed hardwoods and pine in the southeast to pinion-juniper plateaus in the northwest corner of the panhandle. Commercial logging remains an economic staple in southeast counties, where oxbow lakes harbor alligators. Mountain lions are more at home in the arid northwest, where ponderosa pines reach their eastern limit.

Oklahoma's state champion baldcypress resides in the southeast's McCurtain County. At more than 1,000 years old, it is still dwarfed by a cypress more than 2,000 years old killed by lightning several years ago.

The Cross Timbers, a thickly timbered forest belt pushing north from Texas across Oklahoma and into Kansas,

contains gnarled post oaks, blackjack oaks, and eastern redcedars more than 400 years old. And the state once harbored three national champion trees, although all three eventually literally lost their crowns.

Oklahoma Urban Forestry Coordinator Mark Bays says that trees deserve special recognition for the role they've played

in the region's social and cultural development. He points out studies show trees have a calming effect on neighborhoods, resulting in reduced crime.

Among Oklahoma's favorite witness trees is the Council Oak, protected in a small park near downtown Tulsa. This spreading post oak overlooks the Arkansas River and was a mature tree in 1836 when Creek Indians stopped here at the end of their forced removal on the Trail of Tears from ancestral homelands in Alabama.

According to the Tulsa Preservation Commission, the area around the oak was chosen as a "busk ground" by the Lochapoka clan at the end of their exodus. A busk is a ritual featuring ceremonial cleansing, fasting, and purification, a time when grievances are resolved, special meals are served, and then ceremonial embers are distributed to rekindle hearths throughout scattered villages.

Suffering from exhaustion, ill health, and the loss of 161 kinsmen from among the 630 clan members forced to accept a military eviction from Alabama, the Tulsa-Lochapoka Creeks deposited ashes carried from their final homeland fires and redistributed them around the Council Oak, thus establishing a new town in an alien territory.

The oak has symbolized the plight of the Creeks for nearly 150 years and will be replaced by a seedling grown from the tree's acorns when it dies. For now, however, it remains a silent witness to the turbulent history of a state that's still not much more than a sapling, especially if measured in arboreal time.—Gary Lantz

Bayer Advanced won the Queens Award in the 2006 Rose Bowl Parade for its float, Jack and the Queen Stalk. The company handed out seeds from AMERICAN FORESTS' Famous & Historic Trees program's Betsy Ross Sycamore and John James Audubon Sycamore to those attending the Queens Award program.



HOWARD BU RNETT REFE OCTO

Q: How can I tell if a bush is a male or female holly when I buy it?

Scott & Suzanne Wahl, via e-mail

A: As far as I know there is no way, short of microscopic gene analysis, to tell the sex of a young holly. However, most nurseries that sell hollies produce cultivars that are seed bearing, as the red berries are what make holly attractive, desirable, and a symbol of Christmas. The purveyor should be able to advise you if efforts are made to assure you get the female. Of course, you still won't get any berries if there is not a male in the neighborhood somewhere, too. Perhaps a good strategy might be to plant several trees and hope you get a matched pair sooner or later. My experience is that the male tree can be quite far away, several hundred yards at least, and still provide the pollen necessary to get the berries.

Q: Our honeylocust is not nearly as big as your national champion, but I am curious about its appoximate age. It measures 144 inches at 4.5 feet. I don't know the tree's height. We know it must be at least 100 years old and has been home to raccoons and bees.

Shirley Johansson, via e-mail

A: There is no real good way to determine the age of a tree, other than actually counting the annual rings on the stump, but even that assumes solid wood all the way to the core. Although a ring count is impossible, a little arithmetical exercise might give something better than a "wild" guess. Over the course of a tree's life, the width of each annual ring decreases. Honeylocust requires a lot of sunlight for maximum growth and, considering that your tree has survived this long, it has probably grown as rapidly as possible over most of its life. In the very early years it might grow an average of three to five rings per inch, 15 or 20 to the inch in later years, considering limb loss, disease, hollowing, and other adverse influences. Assuming it's an open-grown tree that gets plenty of water and is in good soil, we might guess the average growth at 8 or 10 rings per inch. Assuming your tree has only one trunk that you measured, the tree

is over 45 inches in diameter, which would give us a radial ring count of almost 23 inches. At eight rings, or years, to the inch, an age of 184 years would result. I would have no problem with saying the tree seems to be at least 150 years old, based on all the assumptions I made along this way.

Q: What do you recommend for a Crimson King maple that was struck by lightning? It blew off a large chunk of bark on the base of the tree, which at this point seems very healthy and shows no outward signs of stress or disease I do not want to lose this tree to insects or stress if it can be saved.

Scott Wheeler, via e-mail

A: Sometimes a lightning strike can kill a tree, while other times trees seem to be not too affected. At this point, I would recommend you clean off any loose bark from the wound area. The objective is to prevent small pockets where rainwater might collect. If necessary, at the bottom of a wound, cut out a very small tear-drop shape to facilitate drainage. Do not paint the wound with any kind of dressing; the latest research indicates the tree will handle the dead tissue on the wound surface by itself. Sealing the wound seals in moisture, encouraging insects or disease. From there on, it is a policy of watchful waiting to see how your maple does in the future. Usually a tree hit by a strong bolt of lightning exhibits browned leaves very soon, so it sounds like your tree is a likely survivor.

Q: Please give me some advice on saving my liquid amber (sweetgum) tree, A couple of years ago the leaves, instead of being healthy green, became yellow-green and burn black from the edges until the entire leaf shrivels and drops. A liquid amber in the back yard is unaffected. Can you suggest someone I could talk to or a course of action? I'd really like to save the tree.

Matthew Sanders, Via e-mail

A: Sweetgum trees are susceptible to a

blight that seems somehow related to soil moisture, as well-irrigated trees are hit less severely. Trees planted close to buildings, driveways, streets, and so forth might have limited root systems, and thus be more subject to drought. Other root or soil conditions also may affect the tree. From the photos you provided, it seems as if some root disease may be at work. My best advice is that you procure the services of a certified arborist to have a look at your tree, and prescribe a course of action. Contact the International Society of Arborists at www.isa-arbor.com/ findArborist/findarborist.aspx, and by entering your zip code get a list of local certified arborists for your area. The arborist should be able to give you a definitive answer to your concerns.

Q: I collected a pod from a tree in our yard (thornless common honeylocust); and put the seeds in a clay pot indoors with potting soil/water. I would like to get some starts and transplant to another area of mid Indiana). Am I doing this right, and if so, how long before I can expect some results?

Jerry Mace, Noblesville, IN

A: In the case of honeylocust, the seed pods fall and may not disentegrate until late winter or early spring. The seed itself is very hard and seems to take a long time to soften up to the point where it can germinate. It sounds like you are doing the right thing by keeping the seeds moist so the seed coats can eventually absorb enough water to soften. Since the natural seeds fall on top of the ground, I would not recommend planting more than 1/4 to 1/2 inch deep. In time they should start to swell, and then germinate. The one variable you may have overlooked is the possibility of some freezing being needed, but that may not be important. I assume the pod you collected was ripe, with mature seeds, collected sometime in mid- to late autumn. Germination should occur in late spring, maybe even June, so don't get discouraged too soon.

Email your arboreal questions to: treedoctor@amfor.org.

National Register of BIG TREES 06 2006-2007

For us,

Tall,

Jark!

and handsome

has a whole other meaning.

We're searching for the biggest of 826 species of trees for America's National Register of Big Trees.

Join the search.

Help champion America's biggest.

The National Register of Big Trees is online at http://www.americanforests.org/resources/bigtrees

AMERICAN FORESTS

Big stories. Big controversies. Big trees. American Forests' National Register of Big Trees. PO Box 2000 Washington, DC 20013



Championing All Our Trees 2

R. Douglas Cowan and Deborah Gangloff

How to Nominate a Big Tree 3 Step-by-step to potential Big Tree fame.

New Champs in Height and Breath

The latest from the world of really big trees.-Whit Bronaugh



Championing Changes in the Forest Time for a species check-up.-Whit Bronaugh

The Big Tree Register List 2006 The new monarchy: 826 species, 870 champs and co-champs.

Empty Thrones

Long live the King, wherever it is.-Whit Bronaugh

Key to Abbreviations

Co-champion: * Naturalized: Δ

Champ that must be remeasured before 2008 to remain as champ: *

Year listed after Latin name: Year champ was first nominated. Years separated by a slash means a double stint as champ

County: Co.

National Conservation Area: NCA

National Forest: NF National Monument: NM National Park: NP

National Recreation Area: NRA National Wildlife Refuge: NWR

State Forest: SF State Natural Area: SNA

State Park: SP

State Recreation Area: SRA

Wilderness Area: WA

Wildlife Management Area: WMA

Circumference measurements are in inches; height and crown spread are in feet.

For a list of Champs by state, see Search the Register, Advanced Search at our website: www.americanforests.org

On the cover: national champion Great Basin Bristlecone Pine, Humboldt-Toiyaba National Forest, Nevada At right: Nominator Loren Ross with the national champion Digger Pine, Kern County, California





R. Douglas Cowan, Chairman and CEO, The Davey Tree Expert Company

Champion! That word signifies the best of the best. And national champion Big Trees don't disappoint. They are vivid reminders of the wonder that is nature's gift.

We identify and protect the giants because of their iconic significance, but we need to protect their smaller neighbors, too. Every tree, no matter how ordinary, adds to the value that trees bring to our lives, and the giants can thrive only when they exist as a part of a healthy ecosystem. That is the real message of the Big Tree program.

All trees contribute to a healthy environment and all trees are important in shading our homes, sheltering wildlife, and purifying water and air. Without our attention to the health of trees now, our grandchildren's lives will be grim indeed. Only if we can balance the sometime competing needs of development and the preservation of natural resources will we be able to guarantee that future generations will have the opportunity that we have had to enjoy the giants.

Davey's affiliation with American Forests, our sponsorship of the National Register of Big Trees, and our partnership in the Global ReLeaf campaign all signal our commitment to America's trees. We are pleased to be part of a movement that recognizes that maintaining a healthy forest during our time is how we keep our promise to the future.



Deborah Gangloff, Executive Director,

AMERICAN FORESTS

Richard St. Barbe Baker, noted British conservationist and founder of Men of the Trees, said that "a nation's wealth, its real wealth, can be gauged by its tree cover." At American Forests we wholeheartedly agree. Abundant tree cover indicates that a country has protected its precious resources and cares enough about its people to ensure that they are shaded by cooling trees, quenched by pure water, and sheltered by forests. When tree cover is lost, people and animals suffer.

Big Trees. Since 1940 American Forests has championed these champions—not because they are necessarily the most deserving, but because they are symbols of what can result when people work in conjunction with nature. When we stop to marvel at the wonder of a champion tree—the largest known of its species in the entire U.S.—we begin to see trees in a new light. We can begin a discussion of the value of trees to an ecosystem and take that discussion further to recognize the collective benefits of a forest to a city or a landscape.

Nowhere is that benefit more apparent—and glaringly lacking—than in the Gulf Coast region, where thousands of trees were lost to Hurricane Katrina and where American Forests is working with donors and local groups to replant that longed-for tree cover.

Among the trees that survived Katrina was our national co-champion live oak, the Seven Sisters of Lewisburg, Louisiana. When hurricanes hit, live oaks twist and bend and lose their leaves, and many will forever carry hurricane scars, but they survive to set new buds and push forth new leaves. It is a fitting metaphor for the resiliency of one of our most precious assets. When we truly appreciate and care for our nation's trees—our real wealth, as St. Barbe Baker put it—then we will be a rich nation indeed.

Requirements }

For each nomination American Forests needs the following information:

- 1. Correct name of the species or variety (only U.S. native and naturalized species are eligible). If you need help with identification, call your state big tree coordinator or your local Parks, Forest Service, or Extension office.
- 2. Circumference of the tree in inches at 4 1/2 feet above the ground. If there is a fork at or below 4 1/2 feet, measure the smallest circumference below the fork.
- 3. Vertical height of the tree to the nearest foot. The most reliable tools for this purpose are a clinometer, Abney hand level, hypsometer, or transit. Lacking those, you can use a straight stick. Hold the stick at its base vertically after making certain the length of the stick above your hand equals the distance from your hand to your eye. This is done by holding the stick between your thumb and index finger with your arm parallel to the ground and with the stick just touching the side of your face, then swinging it vertical. Staying on ground level (or on the same contour as the tree base) move away from the tree while sighting the trunk base above your hand. Stop when the top of the stick is level with the top of the tree. You should be looking over your hand at the base of the tree and, moving only your eyes, looking over the top of the stick at the top of the tree. Measure how far you are standing from the tree, and that measurement—in feet—is the tree's height.
- 4. Average diameter of the crown to the nearest foot. Measure the widest spread of the crown and the perpendicular measurement, then add them together and divide by two.
- 5. Location.
- 6. Date measured and by whom.
- 7. Name and address of owner.
- 8. Clear photograph with date taken.
- 9. Description of the tree's physical condition.
- 10. Name and address of nominator.

Send to: National Register of Big Trees, American Forests, P.O. Box 2000, Washington, DC 20013.

Eligible Species }

To be eligible for listing in the National Register of Big Trees, a species must be recognized as native or naturalized in the continental United States, including Alaska but not Hawaii. (Species found only in Hawaii are not included.) Hybrids and minor varieties are excluded. There are 826 eligible species and varieties: 747 native and 79 naturalized. To determine eligibility, American FORESTS uses Elbert L. Little Jr.'s Checklist of United States Trees (Native and Naturalized), published in 1979 as U.S. Department of Agriculture Agricultural Handbook 541.

"Tree" Defined }

As defined in the Checklist, trees are woody plants with one erect perennial stem or trunk at least 9 1/2 inches in circumference (3 inches in diameter) at 4 1/2 feet above the ground (breast height), a definitely formed crown of foliage, and a height of at least 13 feet. In contrast, shrubs are small woody plants, usually with several perennial stems branching at the base.

- Native tree species (also called indigenous) are wild and grew naturally or spontaneously in the undisturbed forest vegetation before the arrival of Columbus or other Europeans.
- Introduced tree species have been brought into the United States. A naturalized tree is an introduced species that has become common and established itself as though wild, reproducing naturally and spreading. Species accepted as naturalized are designated in the Register by the symbol (Δ)

How Trees Are Compared }

o find a tree's total points, AMERICAN Forests uses the following calculation: Trunk circumference (in inches) + Height (in feet) + 1/4 of its average crown spread (in feet) = Total points

Champions must be remeasured within 10 years of the current Register to maintain Champion status. For example, national champions last measured before 1998 must be remeasured for the 2008 Register.

· A nominee will replace a registered champion if it has more points. When two trees have scores that fall within 5 points of each other, they are listed as co-champions.



NEW CHAMPS IN

HEIGHT AND BREATH

General Sherman gets smaller, mega-trees switch places, people are one with trees. Read on for the latest from the world of really big trees.

—Story and photos by Whit Bronaugh

You are a big tree. Well, part of you is anyway. No, really. This is not some flaky New Age crystal thing. This is science. Allow me to demonstrate.

First, take a breath. It doesn't have to be particularly deep or meaningful, and you can do it with or without meditation. You can think about trees, dessert, petunias, or nothing at all. Doesn't matter. Just breathe.

Don't be alarmed, but something on the order of oh, about 10 sextillion (10,000,000,000,000,000,000,000) air molecules just entered your lungs. From that and a few other educated guesses mathematicians have calculated that there is a 98 percent chance that your one breath contains about 5 molecules from the last breath of Julius Caesar. And the last breath of Leonardo da Vinci. And of Shakespeare.

Now, here comes the tree part. The world's biggest tree, the General Sherman giant sequoia, adds about 40 cubic feet of wood to itself every year. Wood cells grow at a rate that produces 4 million or 5 million oxygen molecules per second. By my back-of-the-envelope calculation, that means General Sherman produces about 75 sextillion molecules of oxygen annually. So, along with 5 molecules from Julius Caesar's last breath, you also breathed in about 15 oxygen molecules produced by General Sherman last year. Congratulations! You are part national champion giant sequoia.

And you are also part champion black walnut, part champion sycamore, and part champion bristlecone pine. Some fraction of your life, however small, owes its existence to the oxygen produced by each champion tree in the 2006 National Register of Big Trees, from the 1,321-point giant sequoia in the Sierra Nevadas of California to the 25-point corkwood of Waccasassa Bay, Florida. But there have been some changes in the roster. Since you have this new-found connection to champion trees, you might want to pay attention.

AMERICAN FORESTS now recognizes 870 champs and co-champs representing 826 species and varieties of native and naturalized trees in the continental United States. The last two years have seen the crowning of 119 new champions, not quite replacing the 130 that lost their royal status.

In the megatree category (more than 650 points) the 11 member species stayed the same, but a few switched rank and there is one new co-champion. The biggest Monterey cypress has grown to 683 points, taking the No. 9 rank from a fellow Californian, the California-laurel.

The remeasured common baldcypress of Cat Island, Louisiana, now at 762 points, nudged 3 points ahead of the bluegum eucalyptus of Petrolia, California, to take the No. 6 position. Challenging them both is the biggest new titleholder, a 758-point common baldcypress (see pg. 38) in Holmes County, Mississippi. This tree, which because it is within 5 points of the Cat Island tree becomes the species co-champ, has an amazing girth of 55 feet! Thirty people, shoulder to shoulder, could lean against it. Only the champion giant sequoia, coast redwood, western redcedar, and Sitka spruce have a larger circumference.

Last January, a storm broke a 2-foot diameter limb, the second largest, off the General Sherman giant sequoia. Not to





worry, the champion of champions has lost bigger limbs before, including one in 1978 that was more than 6 feet in diameter and 140 feet long. It is unlikely that any tree will catch up to General Sherman, but the 1,290-point Lost Monarch champion coast redwood, discovered in 1998 in Jedediah Smith Redwoods State Park, is only 31 points behind on American Forests' scale.

General Sherman's top is dead, so the lost limb would affect the champ's score only in crown spread measurement. And since only one-quarter of General Sherman's 107-foot crown spread is used in American Forests' formula, its number one position is secure. However, the northwestern corner of California, where the Lost Monarch grows, provides more rain and growing days than the Sierra Nevadas, so stay tuned for a megatree rivalry.

The second and third biggest new champions are also conifers: a 486-point Engelmann spruce near Loman, Idaho, and a 485-point Jeffrey pine in Yosemite National Park. They are also the tallest new champions, each topping 180 feet. Big tree hunters Byron Carmean and Gary Williamson, who have nominated trees since 1986, found the biggest new broadleaf champs, a pair of water tupelos in Southampton County, Virginia, more than 10 feet thick. They also found a new cochampion American elm, 421 points, in Greensville County, Virginia, and the new

biggest black ash and biggest green hawthorn.

Other additions this year to the list of over-400 pointers are an Arizona sycamore located in Coconino National Forest, Arizona; a Shumard oak in Anna, Illinois; the

reinstated black oak of East Granby, Connecticut; and an alligator juniper in Prescott National Forest, Arizona.

Fifteen new champs scored in the 300s, 26 in the 200s, 33 in the 100s, and 32 below 100 points. I am always amazed at the new recordholders for familiar trees: a new 376-point American chestnut in Clarkston, Washington; a 348-point scarlet oak with an incredible 179-foot crown spread in Middlesboro, Kentucky; a 316-point black cherry in West Portsmouth, Ohio; a 301-

Two views of the

newly crowned

national

champion big

manzanita, which

hails from Chico,

California. A total

of 119 new

champs appear in

this Register; 130

lost their crowns.

point shagbark hickory in Cedartown, Georgia; a 222-point common apple in Burke's Garden, Virginia; and a 148-point eastern redbud in Wayne, Michigan.

Nominator Jimmy Mock found the three smallest new champs: 32- and 31-point shrub althea hibiscus and a 30-point pinckneya, all in Georgia. With a 10-inch girth, the pinckneya just makes the 3-inch-diameter requirement to be a tree but soars 5 feet above the 13-foot height minimum.

The top seven states all retain their rankings: Florida still far ahead with 160 champs followed by California (101), Arizona (82), Texas (78), Virginia (54), Michigan (48), and Washington (39). The lucky folks of these states probably have a few more big tree molecules in them than the rest of us. Georgia, with 37 champs, moved ahead of Oregon (36) and Tennessee (31) to the No. 8 position. Arizona continues to be the most active big tree hunting state (see Earthkeeper, pg. 47 of magazine) with 21 new champs to compensate for an equal number of dethroned trees. California, Virginia, North Carolina, and Florida had between 10 and 12 new champs each.

A different set of states shines when considering those with the greatest net gain in number of nationally recognized big trees. Georgia, helped by Jimmy Mock's six

nominations, had a net gain of eight champions, followed by Ohio (5), South Carolina (4), and Kentucky (3).

Arkansas lost its only champion, a 124-point Ozark chinkapin in Clark County, to wind, and

Kansas lost its sole champ, an eastern redbud in Topeka, due to mismeasurement. They join the hopeful states of Delaware, Massachusetts, North Dakota, Oklahoma, and Wyoming who must, for now, be satisfied with breathing a few out-of-state champion molecules every now and then. Meanwhile, Rhode Island, Iowa, the District of Columbia, and New Jersey can each celebrate their one champion for at least another two years.

In the last two years 56 champions were knocked out by bigger challengers. Among them were four trees that easily topped 400 points: a 455-point water tupe-

East Granby,

Connecticut, is

celebrating the

return of national

champion status

to its native son

black oak, which

lost its title in

2001. The

now and former

champ has a

point total of 443.





lo in Southampton County, Virginia; a 435-point Arizona sycamore in Coconino National Forest, Arizona; a 430-point Shumard oak in Powell County, Kentucky; and a 428-point Engelmann spruce in Olympic National Park, Washington.

Big trees have an aura of immortality because they often live so much longer than we do. But the time for them to stop making oxygen for us eventually comes as it did for 48 monarchs in the last two years. The most notable losses were a 444-point overcup oak in Bertie County, North Carolina; a 431-point sweetgum in Craven County, North Carolina; and a 357- point white poplar in Charlevoix, Michigan. Two other champions, a white mulberry in Missouri and a wildgoose plum in Illinois, retired due to injuries and consequent loss of points.

Former Nuttall oak champs, American mountain-ash, dotted and green hawthorns, Canada plum, Kenai birch, and

smooth dogwood have been mysteriously listed as 'whereabouts unknown.' Another 15 trees were stripped of their title because they were misidentified (black ash, red buckeye, seaside alder, Fraser fir, Japanese privet, Bonpland willow, black oak, turkey oak), mismeasured (longbeak eucalyptus, eastern redbud, and Utah serviceberry), or too small to be a tree (evergreen sumac, cinnamon clethra, yellow anise-tree, and jumping-bean sapium).

That's the news from the world of big trees. Now let out that breath. Someday soon, the biggest trees in America will get a whiff and use your carbon dioxide to get even bigger. And if you can't find a worthy tree to nominate, and still want to contribute, just keep breathing. You might even put a contender over the top for 2008. AF

Bronaugh's Wildlife of North America: A Naturalist's Lifelist is due out this fall.

THE NEW RULES

Winners are determined not just by how well they play the game, but by how the game is played. Attention all big tree hunters: The rules are about to change. For greater detail, go to the National Register of Big Trees on American Forests' website (www.americanforests.org), but here are the most important changes.

I. The 10-Year Rule

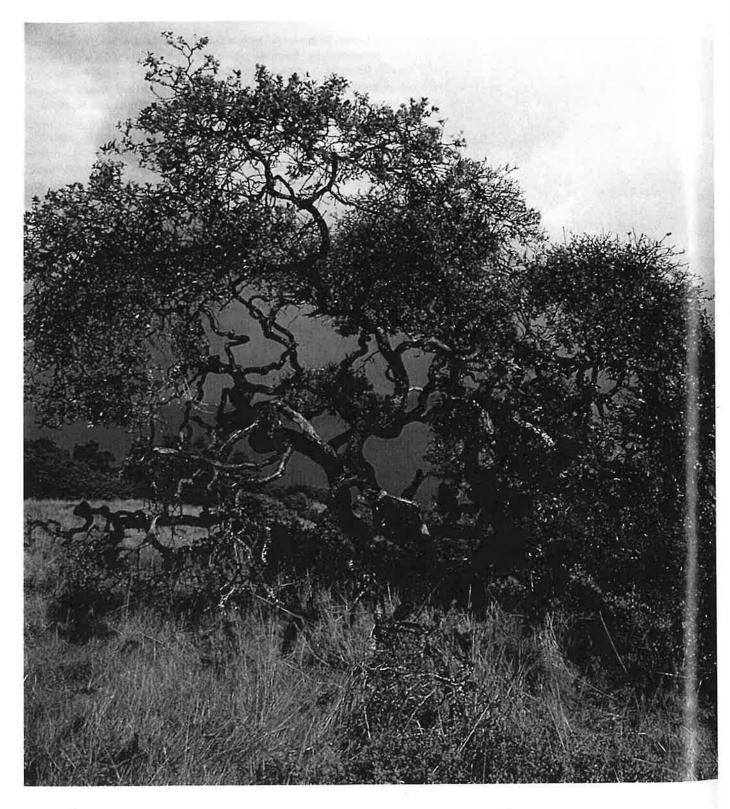
Starting with the 2008 Register, champions must be measured within 10 years of the current Register to maintain their champion status. This means that any champion last measured before 1998 will be dethroned unless it is remeasured before the 2008 Register. Starting in 2010, only two years of champions (88 for 2010) will be eliminated if they aren't remeasured, but expect big changes in 2008 because there are 385 champions and co-champions that were last measured between 1965 and 1998. The Big Tree Program uses both boxing terms (contender, challenger, champion, title) and royalty terms (dethroned, crowned) to convey number one status on nationally recognized Big Trees. Now the 10-Year Rule says Big Trees are less like kings, who rule for life, and more like boxers, who must periodically accept challenges or lose their title by default. This rule will eliminate situations like the California sycamore that was nominated in 1940, the first year of the Register, wiped out by a flood in 1969, but not dethroned until 1992 when the news finally reached American Forests.

2. Circumference of Forked Trees

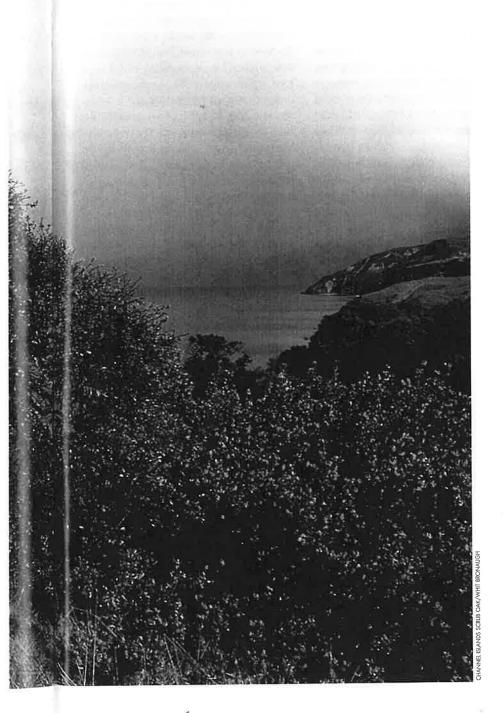
AMERICAN FORESTS will return to measuring the smallest circumference below a fork that is at or below 4 1/2 feet. This recognizes that a tree's true circumference is measured on its trunk, not a limb. But first, nominators must determine if the tree is, and always was, one tree or if it is actually the result of two or more trunks that began as separate sprouts and grew into each other. In multi-stemmed trees there is often a seam indicating where two trunks grew together. You should also suspect this condition when the axes of the main trunks do not appear to meet above ground.

3, Crown Spread Measurement

Formerly, this was done by averaging the widest and narrowest crown spread diameters. From now on, forget the narrowest measurement and replace it with one taken at right angles to the widest measurement.



Championing Changes



s in the Forest

A boy says to a botanist,
"What's the name of that tree?"
The botanist replies,
"I don't know. We call it *Quercus alba.*"

o build on an idea by zoologist and author Richard Dawkins, imagine bringing all your direct female ancestors back to life. Line them up starting with you holding your mother's hand, your mother holding her mother's hand, and so on. Keep going for about 1.3 billion years worth of generations. We need to get back to when there weren't so many species in order to understand the complexity of dividing them up. Ultimately we're talking about trees here, but remember that all living things in the history of Mother Earth are seamlessly connected. So follow that ancestral line down, furry paw to scaly foot, amphibious foot to fin to tail to pseudopodia, flagella, and cilia. Don't laugh. These are your relatives I'm talking about.

Now let's move back up through the generations but start with a different "daughter" than the one that led to you. This daughter's generational line runs parallel to your own ancestral line but is, shall we say, firmly rooted to the ground. This long-lost relative could be the hemlock you climbed as a kid. Or the redbud you planted in your yard. Or the big oak you nominated to be a champion tree.

by Whit Bronaugh

To make sense of all your extended family, and to reflect as much biological reality as possible, we divide life up into species. Sometimes it's obvious where to draw the line. We all know a sycamore from a sequoia. But sometimes it's like drawing the line between two colors in the rainbow. Where does one stop and the other begin?

The modern scientific naming of plants began on May 1, 1753, with the publication of *Species Plantarum* by a man so famous that biologists the world over think of him when they see the letter "L." Carl Linnaeus named and described thousands of species, including more than 130 North American trees. Most of the rest of our trees were named and described soon after the first explorers arrived in a given region.

Then botanists began looking more closely at variations within particular species, hybridization, reproductive systems, microscopic morphology, and, eventually, gene flow and DNA. Often their findings caused them to redraw the lines between species.

he last time AMERICAN FORESTS redrew the lines for the National Register of Big Trees was in the late 1990s with Elbert Little Jr., author of Checklist of United States Trees (Native and Naturalized). Little's 1979 publication, which the Register uses, was a seminal work but, like most science, was only a snapshot of the limits of our knowledge at that time. Botanists have learned a lot since then.

It's time to make changes in the Register to reflect our improved but still imperfect understanding of where the lines should be drawn. The taxonomy of the 2008 Register will be completely updated, but this preview of some of the possible changes will give big tree fans an idea of what to expect, and a jump-start on finding champions among our long-lost cousins.

Oaks have always given botanists fits with their penchant for wanton hybridization, so it's no surprise that many proposed taxonomic changes involve *Quercus* species. A new species, Channel Islands scrub oak (*Quercus pacifica*), was described in 1994. It is a shrub or small tree found only off the southern coast of

California on Santa Cruz, Santa Catalina, and Santa Rosa islands. This oak was long thought to be part of the coastal sage scrub oak complex, but it is actually more closely related to the blue oak.

Another Channel Islands endemic that might soon be an eligible member of the Register is the island live oak (Quercus tomentella). Found in moist canyons at lower elevations, this rare evergreen grows to at least 60 feet tall and 2 feet in diameter. As evidenced by fossils, it is a relic that retreated from the mainland long ago. It made a brief appearance in the Register in 1980 as a newly listed species without a champ, but apparently became the victim of a data entry error and is only now coming out of exile.

A more widespread species that could be added to the Register is the bluff oak (Quercus austrina), formerly treated as a variety of Durand oak (Quercus durandi), with which it is often confused. Look for specimens up to 75 feet tall in lowland forests from Mississippi to South Carolina.

At least six other oaks might make their presence felt among the Quercus

It's time to make changes in the Register to reflect our improved but still imperfect understanding of where the lines should be drawn.

From left, Great Basin bristlecone pine, Arizona smooth cypress, Cedros Island oak, and the oak's only known site, the San Ysidro Mountains just north of Mexico.





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already on the Register, although their rarity makes the nomination of a champion difficult by anyone not associated with them via conservation or research. The robust oak (Quercus robusta), Mexican oak (Quercus carmenensis), and lateleaf oak (Quercus tardifolia) are all restricted in the U.S. to the Chisos Mountains of Big Bend National Park, Texas. In 1992, a natural population of netleaf white oak (Quercus polymorpha), otherwise widespread in Mexico and Guatemala, was discovered in Val Verde County, Texas.

The mapleleaf oak (Quercus acerifolia), recently elevated to full species from a variety of Shumard oak, has only been found at six sites in the Magazine and Ouachita mountains of Arkansas, and totals only a few hundred individual trees. The Cedros Island oak (Quercus cedrosensis), of Cedros Island and mainland Baja California, was discovered in 1995 to be growing just north of the border in the San Ysidro Mountains, where it is known from only four sites.

One sterile Sonoran oak (Quercus viminea) has been found in the U.S., at Red

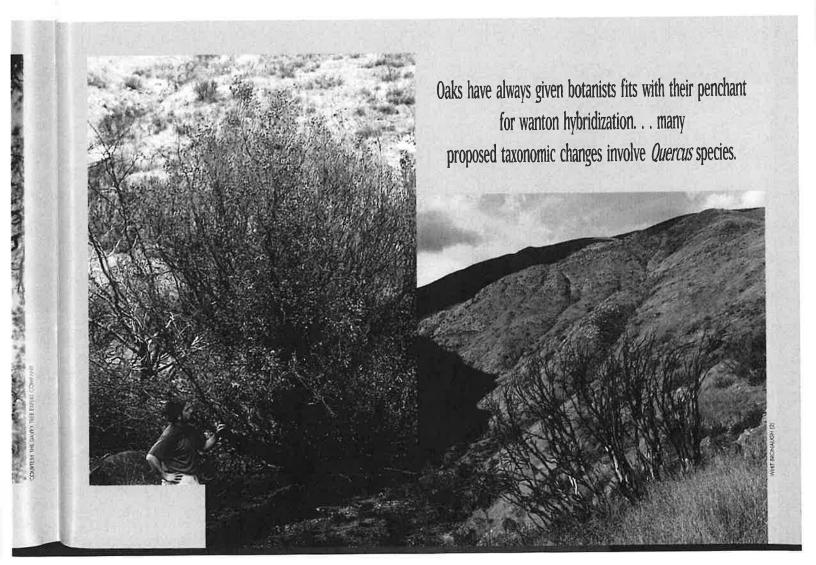
Mountain, Santa Cruz County, Arizona. However, no specimens have been located since so it don't look for it to be added to the Register anytime soon, but with global warming, big tree hunters may not have long to wait.

The thorniest problem (pun intended) in the taxonomy of North American trees is undoubtably *Crataegus*, the hawthorns. Various named species have been produced by rampant hybridization, changes in chromosome number, and asexual development of seeds. But to make matters far worse, several hair-splitting taxonomists at the beginning of the 1900s described numerous species on the basis of minute differences, like the color of the anther, the pollen bearing part of the stamen. This resulted in more than 1,100 named hawthorn species in the continental U.S.!

Most of this taxonomic nightmare was created by a former director of the Arnold Arboretum at Harvard, Charles Sargent, who described an astounding 700 species of *Crataegus*. That's about as many species as all the other native trees in mainland America combined!

Fortunately, by 1979 the taxonomic "lumpers" (those who lump together similar species) had gained the upper hand over the "splitters," (those who classify minor species variations as separate trees) and had whittled the number of hawthorns down to the 35 native species recognized in Little's Checklist and in the current Register. But the tide has turned. American Forests has not yet decided how to deal with "the Crataegus problem," but be forewarned: the USDA's Plants Database, the Integrated Taxonomic Information System, and The Nature Conservancy's NatureServe all cite the North Carolina Botanical Garden's Synthesis of the North American Flora as the primary authority for their own lists. A strict following of the Synthesis would add more than 100 hawthorns to the Register.

One other addition to the Register will likely be the recently naturalized African sumac. Introduced to Tucson in 1925, and subsequently widely planted as an ornamental, this native of South Africa is now invasive along desert streams and washes in Arizona.



Slightly balancing all these potential additions to the Register are a number of trees under consideration to be dropped. The Macdonald oak, the only oak in the current Register to have never had a champion, shares the same distribution as the new Channel Islands scrub oak. No coincidence there. It is now known to be a hybrid between Channel Islands scrub oak and valley oak. The Kearney sumac, another empty throne species, could be dropped because it does not reach tree size, at least not in the United States.

A minimum of three full species might be deleted from the Register because they have been lumped with another species. The Carneros yucca, Florida chinkapin, and Hinds willow are now what taxonomists call synonyms (no longer accepted names) of Faxon yucca, Allegheny chinkapin, and sandbar willow. Other trees you might soon have to forget about include the following varieties that are no longer recognized: Black Hills spruce, Arizona smooth cypress, northwestern paper birch, Florida elm, Florida elder, Simpson stopper, and Deering

Tree-cactus. Of course, any current champions of these delisted species will be stacked up against champions of the species they are lumped with. So some may be able to change their name and still keep their place in the Register.

There will be many other differences in the 2008 Register, but they will not have any bearing on which trees you should size up. Only the names will be changed to protect the taxonomic integrity of AMERICAN FORESTS. Many varieties will be elevated to full species status, which means they'll have their own separate heading in 2008. These include intermountain and Colorado bristlecone pines, redbay, silkbay, swampbay, pignut hickory, Alaska paper birch, and 14 varieties of oak (all current varieties in the Register except Bigelow and Durand oaks). A few full species will be demoted to mere varieties: southern and eastern redcedars, speckled and mountain alders, and Torrey and fewflower vauguelinias.

When Linnaeus erected the pine genus, *Pinus*, he included hemlocks, firs, and spruces. Later botanists kept the pines in

Pinus but moved the hemlocks to Tsuga, the firs to Abies, and the spruces to Picea. Similar generic reshufflings are still taking place and could soon affect the names you see in the Register. Incense-cedar could move from Libocedrus to Calocedrus; giant chinkapin from Castanopsis to Chrysolepis; saguaro from Cereum to Carnegiea; Key tree-cactus from Cereus to Pilosocereus; smokethorn from Dalea to Psorothamnus; and you could just see the bumelias (Bumelia), willow bustic (Dipholis), and false-mastic (Mastichodendron) join each other in Sideroxylon.

Finally, some changes in common names might also be in order. "Digger" is an old pioneer term derisively used to label California Indians for the way they obtained some of their food (roots and bulbs), and so the digger pine could become California foothill pine. However, look for most of the potential common name changes in the trees of Florida where Little often used the Latin genus as part of the common name instead of the more colorful, and truly vernacular, names currently in use. New

Look for the taxonomy of the 2008 National Register of Big Trees to be completely updated; some possible changes are proposed here.

From left, some species under consideration for taxonomic changes: Sandpost oak, Black Hills spruce, coast redwood, and
Texas live oak.





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names could include Lancewood (Florida nectandra), great leadtree (great leucaena), Florida clover-ash (Florida tetrazygia), greenheart (coffee colubrina), princesstree (royal paulownia), fevertree (pinckneya), and Florida toadwood (Florida cupania).

If change makes you feel unstable, join the botanists. Unless you want to wait decades or centuries until all the data are in, we must accept that taxonomists' current standards for the relationships of all our very distant arborescent cousins is the best that can be done at this time. New information, discoveries, and opinions will cause more changes in the future.

But look on the bright side. A sassafras (Sassafras albidum) is still a sassafras (Sassafras albidum), pines are still in the genus Pinus, and you may no longer have to ponder the difference between Hinds and sandbar willows. Best of all, there are probably more than 900 species of hawthorns that won't be in the 2008 Register. AF

Photojournalist Whit Bronaugh lives in Eugene, Oregon.



IN WITH THE NEW, OUT WITH THE SYNONYMS?

A preliminary list of tree species that you might see added or deleted in the 2008 National Register of Big Trees.

Species potentially added: you may need to start looking for a big one of these!

Scientific Name Common Name Ouercus tomentella Island oak Quercus pacifica Channel Isl. scrub oak Quercus cedrosensis Cedros Island oak Mapleleaf oak Quercus acerifolia Bluff oak Quercus austrina Ouercus carmenensis Mexican oak Lateleaf oak Quercus tardifolia Robust oak Quercus robusta Quercus polymorpha Netleaf white oak Rhus lancea African sumac

Location Channel Islands, Calif. Channel Islands, Calif. San Ysidro Mountains, Calif. Magazine & Ouachita mtns., Ark. lowlands of Miss. to S. Carolina Chisos Mountains, Texas Chisos Mountains, Texas Chisos Mountains, Texas Val Verde County, Texas Ariz.

Species that might be deleted: if so, save your tape measure for something else!

Scientific Name **Common Name** Kearney sumac Rhus kearneyi Quercus macdonaldii McDonald oak Black Hills spruce Picea glauca var. densata Cupressus arizonica Arizona smooth cypress var. glabra Florida elm var. floridana Florida chinkapin Northwestern paper birch Betula papyrifera Cereus robinii Deering tree-cactus var. deeringii Hinds willow

Simpson stopper

Carneros yucca

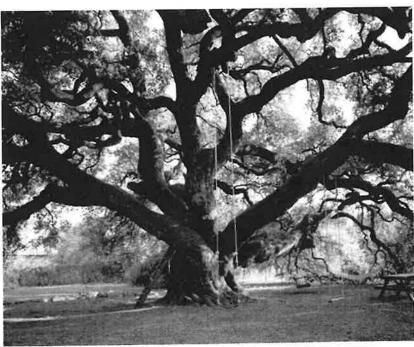
Hawthorns (many)

Florida elder

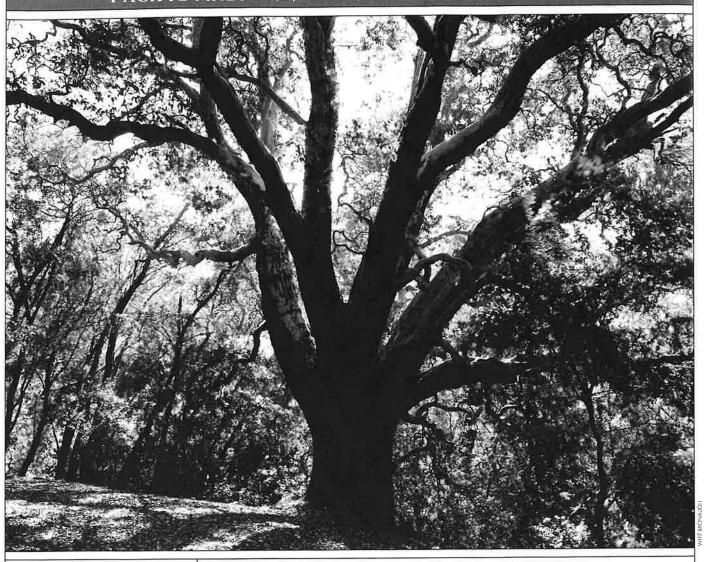
Ulmus americana Castanea alnifolia var. subcordata Salix hindsiana Myrcianthes fragrans var. simpsonii Sambucus canadensis var. laciniata Yucca carnerosana Crataegus species

Reason Deleted only a shrub in the U.S. hybrid grouped w/white spruce grouped w/Arizona cypress grouped w/American elm grouped w/Allegheny chinkapin grouped w/paper birch grouped w/Key tree-cactus grouped w/sandbar willow grouped w/twinberry stopper grouped w/American elder

grouped w/Faxon yucca nationwide, mostly in the East



SPRING 2006



From
the Big Tree
Coordinator



rince its beginning in 1940 there have been many changes to the National Register of Big Trees. And although 65 years of big tree hunters and state coordinators have helped shape the program into what it is today, the mission and message have remained constant: to protect our nation's big trees and recognize the values that trees and forests provide. AMERICAN FORESTS has continued the program's evolution with the sponsorship of The Davey Tree Expert Company, the help of a grant from the National Urban and Community Forestry Advisory Council, and a partnership with Virginia Tech's forestry department. A two-year process begun in the fall of 2004 has helped us to assess and update our measurement standards and show the value of our Champions on the web. Our thanks to all those who took part in our surveys, forums, and discussions, and special thanks to our Big Tree Advisory Committee and particularly Jeff Kirwan at Virginia Tech for their continued dedication to the world of Big Trees. The changes brought about through this process are yet another set of stepping stones in a program that we hope will continue to touch and inspire people for generations to come. Please enjoy American Forests' 2006-2007 National Register of Big Trees and join us in celebrating the importance and value of our trees by discovering new champs, helping maintain those you have nominated in the past, and planting future champions. To learn more about AMERICAN FORESTS' Big Tree program—and our many other programs to plant and care for our arboreal neighbors visit us at www.americanforests.org.—Ethan Kearns, Big Tree coordinator

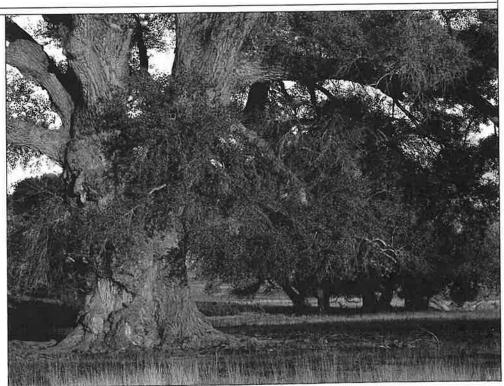
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Mountain, Arrays Endurous, x 1993 94 15 39 173 39 173 39 173 39 173 39 173 39 173 39 173 39 173 39 39 73 39 39	Hazel, Alnus serrulata, 2005*	49					· ·
Stick Almus funds, 2003	Mountain, Alnus tenuifolia, ★ 1995	94	71				
Sinka, Anius sinuata, Nijasa x 1994	Red, Alnus rubra, 2005	288	87	100			_
Specified, Amus Tragesa, # 1984 198 92 40 251 Polk Co., Ore. Maynard Drawson	Sitka, Alnus sinuata, ★ 1993	33	30	39		· -	
Alithorn Robertinia spinosa, 1993 27 23 21 55 Boyce Thompson Arboretum, Ariz. Bob & Gienda Zahner	Speckled, Alnus rugosa, ★ 1984	38	66				
Roberlinia spinosa, 1993	White, Alnus rhombifolia, 1986	149	92	40	251	Polk Co., Ore.	Maynard Drawson
Alvaradoa amorpholdes, ★ 1983	Allthorn						Data B. Olanda Zahnov
Mexican, Alvaradoa amorphoides, ★ 1983 25 15 9 42 Miami, Fla. John C. Cordy & Jim Eggert	Koeberlinia spinosa, 1993	27	23	21	55	Boyce Thompson Arboretum, Ariz.	Bob & Glenda Zailler
A Π a C a 1 μ i L Camino Real Viejo, Mercedes, Texas William MacWhorter Cordia boissieri, 1995 76 25 38 111 Camino Real Viejo, Mercedes, Texas Bob McVey A T a C u a Finetia anaeua, 2003 146 42 52 201 Victoría Co., Texas Bob McVey A T i S e T re e Fiorida, Illicium fioridanum, * 1991 15 29 20 49 Prairie Cr. & County Dirt Rd., Perry Co., Ala. Thomas Wilson A p p I e Comman, Malus sylvestris, * 1986 141 70 45 222 Burke's Garden, Va. Corgon crab, Malus fusca, * 1989* 66 79 47 157 Nisqually NWR, Wash. Robert Van Pelt Oregon crab, Malus fusca, 2003* 90 48 55 152 Gifford Pinchot NF, Wash. Robert Van Pelt Oregon crab, Malus siceasis, * 1976 38 46 68 101 Oakland Co., Mich. Southern crab, Malus angustifolia, * 1996* 96 47 60 158 Chestertown, Md. Eleanor P. Colston Southern crab, Malus angustifolia, * 2001* 15 30 61 160 Montre Co., Ga. Randy Bingham A T D O T V I L a C C C C C C C C C C C C C C C C C C	Alvaradoa						Library County & Lim Eddort
Cordia boissieri, 1995 76 25 38 111 Camino Real Viejo, Mercedes, Texas William MacWhorter AT a C LL B AT a C LL B Erreta anacua, 2003 146 42 52 201 Victoria Co., Texas Bob McVey A T I S C S County Dirt Rd., Perry Co., Ala. Thomas Wilson A P D I C Common, Mailus Sylvestris, ★ 1980* 66 79 47 157 Nisqually NWR, Wash. Robert Van Pelt Oregon crab, Mailus fusca, ★ 1980* 66 79 47 157 Nisqually NWR, Wash. Robert Van Pelt Oregon crab, Mailus fusca, 2003* 102 41 45 154 Gifford Pinchot NF, Wash. Robert Van Pelt Oregon crab, Mailus fusca, 2003* 90 48 55 152 Gifford Pinchot NF, Wash. Robert Van Pelt Southern crab, Mailus sagustifolia, ★ 1996* 96 47 60 158 Chestertown, Md. Eleanor R. Coiston Southern crab, Mailus angustifolia, ★ 1997*Δ 74 65 24 145	Mexican, Alvaradoa amorphoides, ★ 1983	25	15	9	42	Miami, Fla.	John C. Cordy & Jim Eggert
AT 1	Anacahuite						14/1111 14/ 14/ 14/ 14/-
Ehretia anaeura, 2,003	Cordia boissieri, 1995	76	25	38	111	Camino Real Viejo, Mercedes, Texas	William MacWhorter
Anise-tree Florida, Illicium floridanum, ★ 1991 15 29 20 49 Prairie Cr. & County Dirt Rd., Perry Co., Ala. Thomas Wilson Apple Common, Maius sylvestris, ★ 1986△ 141 70 45 222 Burke's Garden, Va. Louise G. Hoge Common, Maius fusca, ★ 1989* 66 79 47 157 Nisqually NWR, Wash. Oregon crab, Maius fusca, 2003* 102 41 45 154 Gifford Pinchot NF, Wash. Oregon crab, Maius fusca, 2003* 90 48 55 152 Gifford Pinchot NF, Wash. Oregon crab, Maius fusca, 2003* 90 48 55 162 Gifford Pinchot NF, Wash. Oregon crab, Maius fusca, 2003* 90 48 55 162 Gifford Pinchot NF, Wash. Oregon crab, Maius fusca, 2001* 115 30 61 160 Monroe Co., Ga. Southern crab, Maius angustifolia, ★ 1996* 96 47 60 158 Chestertown, Md. Southern crab, Maius angustifolia, ★ 2001* 115 30 61 160 Monroe Co., Ga. Arborvitae Oriental, Thuja orientalis, ★ 1997+△ 74 65 24 145 Natural Bridge, Va. Portsmouth, Ohio Brian P. Riley As I Berlandier, Fraxinus berlandierana, 1995 252 48 72 318 Los Fresnos, Texas Black, Fraxinus quadrangulata, 2005 58 82 25 146 Montgomery County, Va. Black, Fraxinus quadrangulata, 2005 155 120 132 308 Montgomery County, Va. Carolina, Fraxinus caroliniana, ★ 2004* 56 58 24 120 O'Leno State Park, Fla. Carolina, Fraxinus caroliniana, 2005* 43 74 15 121 Columbia, N.C. Carolina, Fraxinus caroliniana, 2005* 43 74 15 121 Columbia, N.C. Carolina, Fraxinus goaddingii, ★ 1995 25 30 22 61 Coronado NF, Ariz. David & Pourthourg Josh Tewebury David & Pourthourg Josh Tewebury Josh Tewebury David Promotourg Josh Tewebury David Thomburg David Thomburg & Harry Untiedt Eldon Boge & Robert Hellman Bruce Palmer Text C. Counthy Dirt Rd., Perry Co., Ala. Bliky Walker Text C. Counthy Dirt Rd., Perry Co., Ala. Burke's Garden, Va. Louise G. Hoge Robert Van Pett Robert Van P	Anacua						5 L W W .
Florida, Illicium floridanum, ★ 1991 15 29 20 49 Prairie Cr. & County Dirt Rd., Perry Co., Ala. Thomas Wilson	Ehretia anacua, 2003	146	42	52	201	Victoria Co., Texas	Bob Mcvey
Apple Common, Malus sylvestris, * 1986Δ 141 70 45 222 Burke's Garden, Va. Louise G. Hoge Oregon crab, Malus fusca, * 1989* 66 79 47 157 Nisqually NWR, Wash. Robert Van Pelt Oregon crab, Malus fusca, 2003* 102 41 45 154 Gifford Pinchot NF, Wash. Robert Van Pelt Oregon crab, Malus fusca, 2003* 90 48 55 152 Gifford Pinchot NF, Wash. Robert Van Pelt Southern crab, Malus angustifolia, * 1996* 96 47 60 158 Chestertown, Md. Eleanor P. Colston Southern crab, Malus angustifolia, * 2001* 115 30 61 160 Monroe Co., Ga. Randy Bingham Arborvitae Oriental, Thuja orientalis, * 1997*Δ 74 65 24 145 Natural Bridge, Va. Jimmy and Sandra Mock Driental, Thuja orientalis, * 2003*Δ 3 54 28 144 Portsmouth, Ohio Brian Sichel Black, Fraxinus periandier, ran, 1995 252 48 72 318 Los Freenos, Texas Br	Anise-tree						TI ARILANA
Common, Malus sylvestris, ★ 1986∆ 141 70 45 222 Burke's Garden, Va. Louise G. Hoge Oregon crab, Malus fusca, ★ 1988 ★ 66 79 47 157 Nisqually NWR, Wash. Robert Van Pelt Oregon crab, Malus fusca, 2003 ★ 102 41 45 154 Glifford Pinchot NF, Wash. Robert Van Pelt Oregon crab, Malus fusca, 2003 ★ 90 48 55 152 Glifford Pinchot NF, Wash. Robert Van Pelt Prairie crab, Malus angustifolia, ★ 1996 ★ 38 46 68 101 Oakland Co., Mich. Paul W. Thompson Southern crab, Malus angustifolia, ★ 2001 ★ 115 30 61 160 Monroe Co., Ga. Randy Bingham Arborvitae Oriental, Thuja orientalis, ★ 1997 ★ 74 65 24 145 Natural Bridge, Va. Jimmy and Sandra Mock Oriental, Thuja orientalis, ★ 2003 ★ 83 54 28 144 Portsmouth, Ohio Brian Sichel Black, Fraxinus anifera, * 2005 58 82 25 146 Montgomery County, Va. Byron Carmean & Gary	Florida, Illicium floridanum, ★ 1991	15	29	20	49	Prairie Cr. & County Dirt Rd., Perry Co., Ala.	inomas Wilson
Common, Malus syrvestris, ★ 1980± 11 15 15 15 15 15 15 1	Apple	5.					
Oregon crab, Malus fusca, 2003* 102 41 45 154 Glifford Pinchot NF, Wash. Robert Van Pelt Oregon crab, Malus fusca, 2003* 90 48 55 152 Gifford Pinchot NF, Wash. Robert Van Pelt Prairie crab, Malus inessis, ★ 1976 38 46 68 101 Oakland Co., Mich. Paul W. Thompson Southern crab, Malus angustifolia, ★ 1996* 96 47 60 158 Chestertown, Md. Eleanor P. Colston Southern crab, Malus angustifolia, ★ 2001* 115 30 61 160 Monroe Co., Ga. Randy Bingham Ar borvitae Oriental, Thuja orientalis, ★ 1997*Δ 74 65 24 145 Natural Bridge, Va. Jimmy and Sandra Mock Brian P. Riley As In Berlandier, Fraxinus berlandierana, 1995 252 48 72 318 Los Fresnos, Texas Brian Sichel Black, Fraxinus quadrangulata, 2005 155 120 132 308 Mays Lick, Ky. Kevin Galloway Carolina, Fraxinus caroliniana, ★ 2004* 58 24 120	Common, Malus sylvestris, ★ 1986△	141	70	45	222		
Oregon crab, Malus fusca, 2003* 90 48 55 152 Gifford Pinchot NF, Wash. Robert Van Peit Prairie crab, Malus succa, 2003 * 90 48 55 152 Gifford Pinchot NF, Wash. Robert Van Peit Southern crab, Malus angustifolia, ★ 1996 * 96 47 60 158 Chestertown, Md. Eleanor P. Colston Southern crab, Malus angustifolia, ★ 2001 * 115 30 61 160 Monroe Co., Ga. Randy Bingham Arborvitae Oriental, Thuja orientalis, ★ 1997 * △ 74 65 24 145 Natural Bridge, Va. Jimmy and Sandra Mock Oriental, Thuja orientalis, 2003 * △ 83 54 28 144 Portsmouth, Ohio Brian P. Riley Ash Berlandler, Fraxinus berlandierana, 1995 252 48 72 318 Los Fresnos, Texas Brian Sichel Black, Fraxinus nigra, ★ 2005 58 82 25 146 Montgomery County, Va. Byron Carmean & Gary Williamson Carolina, Fraxinus quadrangulata, 2005 155 120 132 308 Mays Lick,	Oregon crab, Malus fusca, ★ 1989*	66	79	47	157	• •	
Oregon crab, Mailus insca, 2003* 38 46 68 101 Oakland Co., Mich. Paul W. Thompson Southern crab, Mailus angustifolia, ★ 1996* 96 47 60 158 Chestertown, Md. Eleanor P. Colston Southern crab, Mailus angustifolia, ★ 2001* 115 30 61 160 Monroe Co., Ga. Randy Bingham Arborvitae Oriental, Thuja orientalis, ★ 1997*Δ 74 65 24 145 Natural Bridge, Va. Jimmy and Sandra Mock Oriental, Thuja orientalis, 2003*Δ 83 54 28 144 Portsmouth, Ohio Brian P. Riley Ash Berlandier, Fraxinus berlandierana, 1995 252 48 72 318 Los Fresnos, Texas Brian Sichel Black, Fraxinus quadrangulata, 2005 58 82 25 146 Montgomery County, Va. Byron Carmean & Gary Williamson Carolina, Fraxinus quadrangulata, 2005* 43 74 15 121 Columbia, N.C. Sid Shearin Carolina, Fraxinus caroliniana, 2005* 43 74 15 121 Columbia, N.C.	Oregon crab, Malus fusca, 2003*	102	41	45	154		
Praine crab, Maius Soethist, ★ 1916 Sab	Oregon crab, Malus fusca, 2003*	90	48	55	152	Gifford Pinchot NF, Wash.	
Southern crab, Maius angustriona, ★ 1990* 95 47 60 150 Monroe Co., Ga. Randy Bingham Arborvitae Oriental, Thuja orientalis, ★ 1997*∆ 74 65 24 145 Natural Bridge, Va. Driental, Thuja orientalis, ★ 2003*∆ 83 54 28 144 Portsmouth, Ohio Brian P. Riley Ash Berlandler, Fraxinus berlandierana, 1995 252 48 72 318 Los Fresnos, Texas Black, Fraxinus nigra, ★ 2005 58 82 25 146 Montgomery County, Va. Byron Carmean & Gary Williamson Keyin Galloway Carolina, Fraxinus caroliniana, ★ 2005 155 120 132 308 Mays Lick, Ky. Keyin Galloway Carolina, Fraxinus caroliniana, ★ 2004* 56 58 24 120 O'Leno State Park, Fla. Robert W. Simons & Daniel B. Ward Carolina, Fraxinus caroliniana, 2005* 43 74 15 121 Columbia, N.C. Sid Shearin Chihuahua, Fraxinus papillosa, 2003 33 49 17 86 Coronado NF, Ariz. Chihuahua, Fraxinus cuspidata, 2004 46 40 37 95 Coconino NF, Ariz. Goodding, Fraxinus gooddingli, ★ 1995 25 30 22 61 Coronado NF, Ariz. Green, Fraxinus greggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Lowell, Fraxinus greggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Lowell, Fraxinus greggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. David Thornburg & Harry Untiedt Eldon Boge & Robert Heilman Prescott NF, Ariz. David Thornburg & Harry Untiedt Eldon Boge & Robert Heilman Prescott NF, Ariz. David Thornburg & Harry Untiedt Eldon Boge & Robert Heilman Bronk Forsinus anomala var. anomala, 1995 188 150 77 357 Big Oak Tree SP, Mo. Texas, Fraxinus texensis, 2001 76 72 67 165 Bandera Co., Texas	Prairie crab, Malus ioensis, ★ 1976	38	46	68	101		
Southern crab, Maius angustriolia, ★ 2001* 119 119 30 01 100 Monitor Sot, duit Ar bor√itae Oriental, Thuja orientalis, x 1997*Δ 74 65 24 145 Natural Bridge, Va. Jimmy and Sandra Mock Ash Berlandier, Fraxinus berlandierana, 1995 252 48 72 318 Los Fresnos, Texas Brian Sichel Black, Fraxinus nigra, ★ 2005 58 82 25 146 Montgomery County, Va. Byron Carmean & Gary Williamson Blue, Fraxinus quadrangulata, 2005 155 120 132 308 Mays Lick, Ky. Kevin Galloway Carolina, Fraxinus quadrangulata, 2005* 43 74 15 121 Columbia, N.C. Robert W. Simons & Daniel B. Ward Carolina, Fraxinus caroliniana, 2005* 43 74 15 121 Columbia, N.C. Sid Shearin Chihuahua, Fraxinus papillosa, 2003 33 49 17 86 Coronado NF, Ariz. David & Paul Thornburg Goodding, Fraxinus gooddingii, * 1995 25 30 22 61 <th< td=""><td>Southern crab, Malus angustifolia, ★ 1996*</td><td>96</td><td>47</td><td>60</td><td>158</td><td>· ·</td><td></td></th<>	Southern crab, Malus angustifolia, ★ 1996*	96	47	60	158	· ·	
Oriental, Thuja orientalis, ★ 1997*△ 74 65 24 145 Natural Bridge, Va. Jimmy and Sandra Mock Oriental, Thuja orientalis, 2003*△ 83 54 28 144 Portsmouth, Ohio Brian P. Riley A S h Berlandler, Fraxinus berlandierana, 1995 252 48 72 318 Los Fresnos, Texas Brian Sichel Black, Fraxinus nigra, ★ 2005 58 82 25 146 Montgomery County, Va. Byron Carmean & Gary Williamson Blue, Fraxinus quadrangulata, 2005 155 120 132 308 Mays Lick, Ky. Kevin Galloway Carolina, Fraxinus caroliniana, 2004* 56 58 24 120 O'Leno State Park, Fla. Robert W. Simons & Daniel B. Ward Carolina, Fraxinus caroliniana, 2005* 43 74 15 121 Columbia, N.C. Sid Shearin Chihuahua, Fraxinus papillosa, 2003 33 49 17 86 Coronado NF, Ariz. David & Paul Thornburg Greger, Fraxinus gooddingii, * 1995 25 30 22 61 Coronado NF, Ariz. David Thorn	Southern crab, Malus angustifolia, ★ 2001*	115	30	61	160	Monroe Co., Ga.	Randy Bingham
Oriental, Thuja orientalis, ★ 1997 A 74 65 24 145 Nadid Hidge, Fraxinus Diago, Natural Hidge, Natural Hidge	Arborvitae						V d Candra Maok
As h Berlandier, Fraxinus berlandierana, 1995 252 48 72 318 Los Fresnos, Texas Brian Sichel Black, Fraxinus nigra, ★ 2005 58 82 25 146 Montgomery County, Va. Byron Carmean & Gary Williamson Kevin Galloway Blue, Fraxinus quadrangulata, 2005 155 120 132 308 Mays Lick, Ky. Kevin Galloway Carolina, Fraxinus caroliniana, ★ 2004* 56 58 24 120 O'Leno State Park, Fla. Robert W. Simons & Daniel B. Ward Carolina, Fraxinus caroliniana, 2005* 43 74 15 121 Columbia, N.C. Sid Shearin Chihuahua, Fraxinus papillosa, 2003 33 49 17 86 Coronado NF, Ariz. David & Paul Thornburg Fragant, Fraxinus gooddingii, ★ 1995 25 30 22 61 Coronado NF, Ariz. David Thornburg Green, Fraxinus geoggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Libby Davidson Lowell, Fraxinus geoggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Li	Oriental, Thuja orientalis, ★ 1997*△	74	65	24	145	Natural Bridge, Va.	
Berlandier, Fraxinus berlandierana, 1995 252 48 72 318 Los Fresnos, Texas Brian Sichel Black, Fraxinus nigra, ★ 2005 58 82 25 146 Montgomery County, Va. Byron Carmean & Gary Williamson Blue, Fraxinus quadrangulata, 2005 155 120 132 308 Mays Lick, Ky. Kevin Galloway Carolina, Fraxinus caroliniana, ★ 2004* 56 58 24 120 O'Leno State Park, Fla. Robert W. Simons & Daniel B. Ward Carolina, Fraxinus caroliniana, 2005* 43 74 15 121 Columbia, N.C. Sid Shearin Chihuahua, Fraxinus papillosa, 2003 33 49 17 86 Coronado NF, Ariz. David & Paul Thornburg Fraganta Fraxinus cuspidata, 2004 46 40 37 95 Coconino NF, Ariz. David Thornburg Green, Fraxinus pennsylvanica, ★ 1981 259 95 95 378 Cass Co., Mich. D. Steen, S. Heaney, E.B. Ehrle Lowell, Fraxinus anomala var. lowelli, 2003 58 33 21 96 Prescott NF, Ariz. David Thornburg	Oriental, Thuja orientalis, 2003*∆	83	54	28	144	Portsmouth, Ohio	Brian P. Riley
Berlandler, Fraxinus berlandierana, 1995 232 48 72 310 Los Thiosty, No. Byron Carmean & Gary Williamson Black, Fraxinus nigra, ★ 2005 58 82 25 146 Montgomery County, Va. Kevin Galloway Carolina, Fraxinus quadrangulata, 2005 155 120 132 308 Mays Lick, Ky. Kevin Galloway Carolina, Fraxinus caroliniana, 2004* 56 58 24 120 O'Leno State Park, Fla. Robert W. Simons & Daniel B. Ward Chihuahua, Fraxinus caroliniana, 2005* 43 74 15 121 Columbia, N.C. Sid Shearin Chihuahua, Fraxinus papillosa, 2003 33 49 17 86 Coronado NF, Ariz. David & Paul Thornburg Fragama Fraxinus cuspidata, 2004 46 40 37 95 Coconino NF, Ariz. David Thornburg Green, Fraxinus geoddingii, ★ 1995 25 30 22 61 Coronado NF, Ariz. Josh Tewksbury Green, Fraxinus geoggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Libby David Thornburg & Harry Untiedt <td>Ash</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>B : . 0 - b - l</td>	Ash						B : . 0 - b - l
Black, Fraxinus quadrangulata, 2005 155 120 132 308 Mays Lick, Ky. Kevin Galloway	Berlandier, Fraxinus berlandierana, 1995	252	48	72		Los Fresnos, Texas	
Blue, Fraxinus quadranguiata, 2005 153 120 152 300 153 120 152 300 153 120 152 300 153 120 152 300 153 120 153 300 153 120 153 300 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 153 150 165 16	Black, Fraxinus nigra, ★ 2005	58	82	25	146	Montgomery County, Va.	
Carolina, Fraxinus caroliniana, * 2004* 56 58 24 120 0 tento state tain, N.C. Sid Shearin Carolina, Fraxinus papillosa, 2003 33 49 17 86 Coronado NF, Ariz. David & Paul Thornburg Fragant, Fraxinus cuspidata, 2004 46 40 37 95 Coconino NF, Ariz. David Thornburg Goodding, Fraxinus gooddingii, * 1995 25 30 22 61 Coronado NF, Ariz. Josh Tewksbury Green, Fraxinus pennsylvanica, * 1981 259 95 95 378 Cass Co., Mich. D. Steen, S. Heaney, E.B. Ehrle Gregg, Fraxinus greggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Libby Davidson Lowell, Fraxinus anomala var. lowelli, 2003 58 33 21 96 Prescott NF, Ariz. David Thornburg & Harry Untiedt Oregon, Fraxinus latifolia, 1975 284 65 66 366 Sauvie Island, Ore. Eldon Boge & Robert Heilman Pumpkin, Fraxinus profunda, 1995 188 150 77 357 Big Oak Tree SP, Mo. Singleleaf, Fraxinus anomala var. anomala, 1999 52 31 15 87 Highway 141, on Dolores River, Colo. Texas, Fraxinus texensis, 2001 76 72 67 165 Bandera Co., Texas Billy Walker	Blue, Fraxinus quadrangulata, 2005	155	120	132	308	Mays Lick, Ky.	
Carolina, Fraxinus caroliniana, 2005* 43 74 13 121 Solutinian, Inc. David & Paul Thornburg Chihuahua, Fraxinus papillosa, 2003 33 49 17 86 Coronado NF, Ariz. David Thornburg Fragant, Fraxinus cuspidata, 2004 46 40 37 95 Coconino NF, Ariz. David Thornburg Goodding, Fraxinus gooddingii, ★ 1995 25 30 22 61 Coronado NF, Ariz. Josh Tewksbury Green, Fraxinus pennsylvanica, ★ 1981 259 95 95 378 Cass Co., Mich. D. Steen, S. Heaney, E.B. Ehrle Gregg, Fraxinus greggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Libby Davidson Lowell, Fraxinus anomala var. lowelii, 2003 58 33 21 96 Prescott NF, Ariz. David Thornburg & Harry Untiedt Oregon, Fraxinus latifolia, 1975 284 65 66 366 Sauvie Island, Ore. Eldon Boge & Robert Heilman Pumpkin, Fraxinus anomala var. anomala, 1995 188 150 77 357 Big Oak Tree SP, Mo. Vince Urbina Singleleaf, Fraxinus texensis, 2001 76 72	Carolina, Fraxinus caroliniana, ★ 2004*	56	58	24	120		
Chihuahua, Fraxinus papillosa, 2003 33 49 17 80 Cotonino NF, Ariz. David Thornburg Fragant, Fraxinus cuspidata, 2004 46 40 37 95 Coconino NF, Ariz. Josh Tewksbury Goodding, Fraxinus gooddingii, ★ 1995 25 30 22 61 Coronado NF, Ariz. Josh Tewksbury Green, Fraxinus pennsylvanica, ★ 1981 259 95 95 378 Cass Co., Mich. D. Steen, S. Heaney, E.B. Ehrle Gregg, Fraxinus greggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Libby Davidson Lowell, Fraxinus anomala var. iowelii, 2003 58 33 21 96 Prescott NF, Ariz. David Thornburg & Harry Untiedt Oregon, Fraxinus latifolia, 1975 284 65 66 366 Sauvie Island, Ore. Eldon Boge & Robert Heilman Pumpkin, Fraxinus profunda, 1995 188 150 77 357 Big Oak Tree SP, Mo. Bruce Palmer Singleleaf, Fraxinus anomala var. anomala, 1999 52 31 15 87 Highway 141, on Dolores River, Colo. Vince U	Carolina, Fraxinus caroliniana, 2005*	43	74	15	121	Columbia, N.C.	
Fragants Fraxinus cuspidata, 2004 46 40 37 95 Coconino NF, Ariz. David Infortourg Goodding, Fraxinus gooddingii, ★ 1995 25 30 22 61 Coronado NF, Ariz. Josh Tewksbury Green, Fraxinus pennsylvanica, ★ 1981 259 95 95 378 Cass Co., Mich. D. Steen, S. Heaney, E.B. Ehrle Gregg, Fraxinus greggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Libby Davidson Lowell, Fraxinus anomala var. lowelii, 2003 58 33 21 96 Prescott NF, Ariz. David Thornburg & Harry Untiedt Oregon, Fraxinus latifolia, 1975 284 65 66 366 Sauvie Island, Ore. Eldon Boge & Robert Heilman Pumpkin, Fraxinus profunda, 1995 188 150 77 357 Big Oak Tree SP, Mo. Bruce Palmer Singleleaf, Fraxinus anomala var. anomala, 1999 52 31 15 87 Highway 141, on Dolores River, Colo. Vince Urbina Texas, Fraxinus texensis, 2001 76 72 67 165 Bandera Co., Texas Billy Malker		33	49	17	86	Coronado NF, Ariz.	
Goodding, Fraxinus gooddingli, ★ 1995 25 30 22 61 Storolidad Nr, Mil. D. Steen, S. Heaney, E.B. Ehrle Green, Fraxinus pennsylvanica, ★ 1981 259 95 95 378 Cass Co., Mich. D. Steen, S. Heaney, E.B. Ehrle Gregg, Fraxinus greggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Libby Davidson Lowell, Fraxinus anomala var. lowelli, 2003 58 33 21 96 Prescott NF, Ariz. David Thornburg & Harry Untiedt Oregon, Fraxinus latifolia, 1975 284 65 66 366 Sauvie Island, Ore. Eldon Boge & Robert Heilman Pumpkin, Fraxinus profunda, 1995 188 150 77 357 Big Oak Tree SP, Mo. Bruce Palmer Singleleaf, Fraxinus anomala var. anomala, 1999 52 31 15 87 Highway 141, on Dolores River, Colo. Vince Urbina Texas, Fraxinus texensis, 2001 76 72 67 165 Bandera Co., Texas Billy Walker	Fragant Fraxinus cuspidata, 2004	46	40	37	95	Coconino NF, Ariz.	-
Green, Fraxinus pennsylvanica, * 1981 299 95 95 376 663 560, middle Gregg, Fraxinus greggii, 2003 17 27 26 51 Univ. of Arizona, Ariz. Libby Davidson Lowell, Fraxinus anomala var. lowelii, 2003 58 33 21 96 Prescott NF, Ariz. David Thornburg & Harry Untiedt Oregon, Fraxinus latifolia, 1975 284 65 66 366 Sauvie Island, Ore. Eldon Boge & Robert Heilman Pumpkin, Fraxinus profunda, 1995 188 150 77 357 Big Oak Tree SP, Mo. Bruce Palmer Singleleaf, Fraxinus anomala var. anomala, 1999 52 31 15 87 Highway 141, on Dolores River, Colo. Vince Urbina Texas, Fraxinus texensis, 2001 76 72 67 165 Bandera Co., Texas Billy Walker	Goodding, Fraxinus gooddingii, 🖈 1995	25	30	22	61	Coronado NF, Ariz.	
Lowell, Fraxinus anomala var. lowelii, 2003 58 33 21 96 Prescott NF, Ariz. David Thornburg & Harry Untiedt Oregon, Fraxinus latifolia, 1975 284 65 66 366 Sauvie Island, Ore. Eldon Boge & Robert Heilman Pumpkin, Fraxinus profunda, 1995 188 150 77 357 Big Oak Tree SP, Mo. Bruce Palmer Singleleaf, Fraxinus anomala var. anomala, 1999 52 31 15 87 Highway 141, on Dolores River, Colo. Texas, Fraxinus texensis, 2001 76 72 67 165 Bandera Co., Texas Billy Walker	Green, Fraxinus pennsylvanica, ★ 1981	259	95	95	378	Cass Co., Mich.	
Oregon, Fraxinus latifolia, 1975 Pumpkin, Fraxinus profunda, 1995 Singleleaf, Fraxinus anomala var. anomala, 1999 Texas, Fraxinus texensis, 2001 Texas, Fraxinus texensis, 2001 Texas, Fraxinus anomala var. Inwelli, 2003 Sauvie Island, Ore. Eldon Boge & Robert Heilman Bruce Palmer Vince Urbina Billy Walker Frank J. Collebon		17	27	26			
Pumpkin, Fraxinus profunda, 1915 Pumpkin, Fraxinus profunda, 1995 Singleleaf, Fraxinus anomala var. anomala, 1999 Texas, Fraxinus texensis, 2001		58	33	21	96	Prescott NF, Ariz.	
Pumpkin, Fraxinus profunda, 1995 188 150 77 357 Big Oak Tree SP, Mo. Bruce Palmer Singleleaf, Fraxinus anomala var. anomala, 1999 52 31 15 87 Highway 141, on Dolores River, Colo. Vince Urbina Texas, Fraxinus texensis, 2001 76 72 67 165 Bandera Co., Texas Billy Walker		284	65	66	366	Sauvie Island, Ore.	
Texas, Fraxinus texensis, 2001 76 72 67 165 165 165 165 165 165 165		188	150	77	357	_	
lexas, Fraxinus texensis, 2001	Singleleaf, Fraxinus anomala var. anomala, 1999	52	31	15	87		
Two-petal, Fraxinus dipetala, 1986 39 32 34 80 Lake Co., Calif. Frank T. Callahan	Texas, Fraxinus texensis, 2001	76	72	67	165	Bandera Co., Texas	•
	Two-petal, Fraxinus dipetala, 1986	39	32	34	80	Lake Co., Calif.	Frank I. Callanan

Martie, Parients selatifen, 2001* 198 00	SPECIES/MEASUREMENT	IRCUMFE ENGE	^В нејбит	spR	EAO	TOTAL LOCATION	NOMINATOR
South Principle Michina 2004 21	0004*	190	00	95	300	Foceil Springs WA Ariz	Jerry Nash & Mike Hallen
Webs. Parillong Verbilland, 2005 23 28 29 76 297 White Parillong Verbilland, 2005 304 55 22 420 Worthebello Restaurant, Pallaades, N.Y. Mike DeBooth							•
Works Profiles and extension, 2005 95 92 420 Montbello Retaurant, Pallasdes, N.Y. Mile DeBonts							
Aspects Aspe							-
Biguesis, Papulus armoniforma, 2005 69 93 51 275 Appleton, Maine Bruck Ruffman		304	33	02	720	Montepone Nestadiand, Laneados, 1911	
Segregate Segr		169	93	51	275	Appleton, Maine	Bruce Kauffman
Avoice A							Bill Collar
Parameter 1999A 1985 72 98 72 72 73 74 74 74 74 74 74 74		120	200	•			
Backbart Secuence		185	72	59	272	Mission at San Juan Capistrano, Calif.	Art Cowley & Camille Newton
Eastern Raccharks hallmfolia; 2001							
Part Carper Section		14	21	19	40	Lincoln Co., Ga.	Doug & Jess Riddle
Control, Insection discharem or discharem, 2001 + 64							
Common, searcher districtions was constrainty, 2005 600 82 65 758 Mointes, Miss. Norman Haigh & Barry Scott		644	83	85	762	Cat Island, La.	Jeff Hunt & Desmond Clapp
Montesum, Buodulm mucronatum, 1995 287 88 89 377 San Benitle, Camenen Co., Texas Suo Griffin		660	82	65	758	Holmes, Miss.	Norman Haigh & Barry Scott
Relies a particular,		287	68	89	377	San Benito, Cameron Co., Texas	Sue Griffin
Sasswood	Barreta						
American, // Illia americana, 1991 277	Helietta parvifolia, ★ 1989	18	34	25	58	Lower Rio Grande Valley NWR, Palmview, Texas	Terry Rossignol
Carolina, Time and Description Descr	Basswood						
Carolina, Tilla caroliniana, 2001* 155 75 55 244 East Feliciana Parish, La. Brain Chandler Carolina, Tilla caroliniana, 2001* 155 75 55 244 East Feliciana Parish, La. Brain Chandler Carolina, Tilla caroliniana, 2001* 155 75 55 244 East Feliciana Parish, La. Brain Chandler Carolina, Tilla caroliniana, 2001* 155 75 55 353 553 553 553 553 553 553 553	American, <i>Tilia americana</i> , 1991	277	89	87	388	Montgomery County, Pa.	
Nation	Carolina, Tilia caroliniana, 2001*	124	107	60			
Northern Myrica pensylvanica, 1999 11 15 10 28 Jockey's Ridge SP, N.C. Sid Shearin Godeness, Myrica celifornica, 2003 66 35 39 111 Prairis Creek Redwoods SP, Calif. Robert Van Pelt	Carolina, Tilia caroliniana, 2001*						
Northern, Myrica pensywanica, 1999	White, Tilia heterophylla, ★ 1997	223	116	57	353	Pisgah NF, N.C.	C. Woodard, M. Dayle, W. Blozan
Oddreiss, Myrica pelingrians, 1994 33 18 23 57 Beilingrath Garders, Theodore, Ala. Richard Salzer Robert Van Pelt Robert Van Pelt Rick Greger & Charles, Stant Rick Greger & Charles, Stant Rick Greger & Charles, Flant Rick Greger & Charles, Stant Rick Greger & Charles, Flant Rick Gr	-						Cid Chaguin
Prairie Creek Redwoods SP, Calif. Robert Van Pelt Robert Van Pelt Robert Van Pelt Rick Gregor & Charles Stant						-	
Southern, Myrica ceriflera, 2005 72 51 84 144 Machipongo, Va. Rick Gregor & Charles Stant Baycedar Suriana maritima, * 1995 72 15 184 144 Machipongo, Va. Rick Gregor & Charles Stant Beech American, Faglus grandifolia, * 1995 72 15 184 429 Lothian, Md. Gary Heinz Birch Alaska pp., Betula papyriflera var. neoalaskana, 2005 99 63 47 174 Trapper Creek, Alaska Gray, Betula papyriflera var. neoalaskana, 2005 99 63 47 174 Trapper Creek, Alaska Minth paper, Betula papyriflera var. conditolia, * 1973 112 67 80 199 Siceping Bear Dunes, Leelanau, Mich. Stu Bassett & E.B. Enrie Nithwish pp., Betula papyriflera var. subcordata, * 1975 46 66 30 120 Minam River, Ore. Frank T. Callahan Nithwish pp., Betula papyriflera var. subcordata, * 1987 46 66 30 120 Minam River, Ore. Frank T. Callahan Nithwish pp., Betula papyriflera var. subcordata, * 1987 46 66 30 120 Minam River, Ore. Frank T. Callahan Nithwish pp., Betula papyriflera var. papyriflera, * 1991* 200 107 76 348 Black Lake, Cheogyan Co., Mich. Speape, Betula papyriflera var. papyriflera, * 1991* 201 107 76 348 Point aux Barques, Mich. John J. Chorzel Back Lake, The Lake Stant Mewell Water, Betula indi, * 1961 182 78 80 280 New Boston, N.H. Philip Harvell Water, Betula eland, * 1961 182 77 261 Bellingham, Wash. Sweet, Betula langhamiensis, 2005 186 104 78 310 Guid City, Mich. D. Milarch & E.B. Ehrle Black-thead Catclaw, Pithecellobium flexicaule, 1991 171 50 64 237 McAllen, Hidalgo Co., Texas Dellingham, Wash. Black-bead Catclaw, Pithecellobium flexicaule, 1991 171 50 64 237 McAllen, Hidalgo Co., Texas Dellingham, Wash. Black-haw Viburumu pruntifolium, * 1991* 64 24 28 95 Roanoke, Va. Black-haw William J. Schilling Black-h							
Baycedar Surfana marttima, * 1995 10 12 23 28 Big Pine Key, Fla. Vincent P. Condon & William G. Miller							
Surlana maritima, * 1995 10 12 23 28 Big Pine Key, Fla. Vincent P. Condon & William G. Miller Beech Representation Figure Spring Flow of the Condon & William G. Miller Beech Birch Alaska (Sary Retula papyrifera var. neoalaskana, 2005 99 63 47 174 Trapper Creek, Alaska (Sary, Betula papyrifera var. condifolia, * 1973 112 67 80 199 Sleeping Bear Dunes, Leelanau, Mich. (Stu Bassett & E.B. Ehrle Mnth paper, Betula papyrifera var. subcordata, * 1975 * 46 66 30 120 Minam River, Ore. (Prank T. Callahan Khrwstm ppr., Betula papyrifera var. papyrifera, * 1991 * 20 107 76 346 Black Lake, Cheboygan Co., Mich. (Robert Stein Paper, Betula papyrifera var. papyrifera, * 1996 * 222 107 76 346 Point aux Barques, Mich. (Robert Stein Paper, Betula papyrifera var. papyrifera, * 1996 * 222 107 76 348 Point aux Barques, Mich. (Robert Stein Paper, Betula papyrifera var. papyrifera, * 1996 * 222 107 76 348 Point aux Barques, Mich. (Robert Stein Paper, Betula papyrifera var. papyrifera, * 1996 * 222 107 76 348 Point aux Barques, Mich. (Robert Stein Paper, Betula papyrifera var. papyrifera, * 1996 * 222 107 76 348 Point aux Barques, Mich. (Robert Stein Paper, Betula papyrifera var. papyrifera, * 1996 * 225 112 341 Lawrence Co., Fenn. (Dan & Dan & Danid Shires Paper, Betula papyrifera var. commutata, 2003 123 124 135 135 146 178 178 179 177 1261 Bellingham, Wash. (Robert Van Pelt Paper, Betula papyrifera var. commutata, 2003 123 124 125		72	51	84	144	wachipongo, va.	Nick diegol & Chanes Stant
## Brech American, Fagus grandifolia, * 1995 279 115 138 429 Lothian, Md. Gary Heinz ## Birch Alaska pr., Betula papyrifera var. necalaskana, 2005 99 63 47 174 Trapper Creek, Alaska Terrence P. Cooney ## Cooney Gray, Betula papyrifera var. necalaskana, 2005 72 69 54 155 Kalamazoo, Mich. Stu Bassett & E.B. Enfe ## Minth paper, Betula papyrifera var. cordifolia, * 1973 112 67 80 199 Sieeping Bear Dunes, Leelanau, Mich. Elwood B. Ehrle & John Spencer ## Nirthwestrin pr., Betula papyrifera var. subcoordata, * 1967** 46 66 30 120 Minam River, Ore. Frank T. Callahan ## Nirthwestrin pr., Betula papyrifera var. subcoordata, * 1967** 46 65 32 119 Heil's Canyon NRA, Idaho E.D. Johnson & M. Newell ## Paper, Betula papyrifera var. papyrifera, * 1991* 220 107 76 346 Black Lake, Cheboygan Co., Mich. John J. Chorzel ## River, Betula inifer, 1981 208 105 112 341 Lawrence Co., Tenn. Dan & David Shires ## River, Betula inifer, 1981 34 49 15 87 Jefferson NR, Va. Paul Shrauder ## Water, Betula papyrifera var. commutata, 2003 172 70 77 261 Bellingham, Wash. Philip Harvell ## Water, Betula papyrifera var. commutata, 2003 172 70 77 261 Bellingham, Wash. Robert Van Peit ## Pale Revial papyrifera var. commutata, 2003 123 54 60 192 Everglades NR, Fla. Thomas J. Smith ## Blackbead ## Catclaw, Pithocellobium unguis-cati, * 2002 150 72 49 234 Sarasota, Fla. William J. Schilling ## Catclaw, Pithocellobium gwadalupense, * 1995* 11 16 16 31 No Name Key, Fla. R. W. Simons & M. L. Eletz ## Caudeloupe, Pithocellobium gwadalupense, * 1995* 19 19 16 32 No Name Key, Fla. R. W. Simons & M. L. Eletz ## Caudeloupe, Pithocellobium gwadalupense, * 1995* 19 19 16 32 No Name Key, Fla. R. W. Simons & M. L. Eletz ## Caudeloupe, Pithocellobium gwadalupense, * 1995* 19 19 16 32 No Name Key, Fla. R. W. Simon	_	10	10	22	20	Big Dine Key Fla	Vincent P Condon & William G. Miller
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Alaska ppr., Betula papyrifera var. neoalaskana, 2005 99 63 47 174 Trapper Creek, Alaska Terrence P. Cooney		270	115	138	429	Lothian Md.	Gary Heinz
Alaska ppr., Betula papyrifera var. neoalaskana, 2005 99 63 47 174 Trapper Creek, Alaska Terence P. Cooney Gray, Betula papyrifera var. cordifolia, ★ 1973 112 67 80 199 Sleeping Bear Ounes, Leelanau, Mich. Stu Bassett & E.B. Ehrle Mnth paper, Betula papyrifera var. subcordata, ★ 1975*46 66 30 120 Minam River, Ore. Frank T. Callahan Nrthwstm ppr, Betula papyrifera var. subcordata, ★ 1967*46 65 32 119 Hell's Canyon NRA, Idaho E.D. Johnson & M. Newell Paper, Betula papyrifera var. papyrifera, ★ 1991* 220 107 76 346 Black Lake, Cheboygan Co., Mich. Robert Stein Reve, Betula papyrifera var. papyrifera, ★ 1991* 220 107 76 348 Point aux Barques, Mich. Paper, Betula papyrifera var. papyrifera, ★ 1991* 220 107 76 348 Point aux Barques, Mich. Paper, Betula nigra, 1981 208 105 112 341 Lawrence Co., Tenn. Dan & David Shires Roundleaf, Betula uber, 1978 34 49 15 87 Jefferson NF, Va. Paul Shrauder Sweet, Betula lenta, ★ 1961 182 78 80 280 New Boston, N.H. Water, Betula papyrifera var. commutata, 2003 172 70 77 261 Bellingham, Wash. Water, Betula alleghaniensis, 2005 186 104 78 310 Gould City, Mich. Black — mangrove Avicennia germinans, 2003 123 54 60 192 Everglades NF, Fla. Black bead Catclaw, Pithecellobium unguis-cati, ★ 2002 150 72 49 234 Sarasota, Fla. Black bead Catclaw, Pithecellobium guadalupense, ★ 1992* 11 16 16 31 No Name Key, Fla. Guadeloupe, Pithecellobium guadalupense, ★ 1995* 9 19 16 32 National Key Deer Refuge, Fla. R.W. Simons & M.L. Eletz T. Ann Williams & Vincent P. Condon Black haw Viburum prunifolium, ★ 1985* 64 24 28 95 Roanoke, Va. Rusty, Viburnum ruffululum, ★ 1991* 64 24 28 95 Roanoke, Va. Rusty, Viburnum ruffululum, ★ 1999 47 30 23 83 Knox Co., Tenn. Jim Cortese Black Haw Viburum ruffululum, ★ 1991* 64 24 28 95 Roanoke, Va. Richard Saizer Rusty, Viburnum ruffululum, ★ 1999 47 30 23 83 Knox Co., Tenn. Jim Cortese Black Haw Namero Republication of Proposers And Proposers Republication of Proposers Republication of Proposers Republication of Proposers Republication of Proposers Republicati		213	113	100	720	Edition, mar	,
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Mnth paper, Betula payriflera var. cordifolia, ★ 1973 112 67 80 199 Sleeping Bear Dunes, Leelanau, Mich. Elwood 8. Ehrle & John Spencer Frank T. Callahan Nrthwstrn ppr, Betula payriflera var. subcordata, ★ 1967*46 65 32 119 Hell's Carryon NRA, Idaho FD. Johnson & M. Newell Paper, Betula payriflera var. subcordata, ★ 1967*46 65 32 119 Hell's Carryon NRA, Idaho ED. Johnson & M. Newell Paper, Betula payriflera var. payriflera, ★ 1996* 222 107 76 348 Point aux Barques, Mich. John J. Chorzel River, Betula payriflera var. payriflera, ★ 1996* 222 107 76 348 Point aux Barques, Mich. John J. Chorzel River, Betula payriflera var. payriflera, ★ 1996* 222 107 76 348 Point aux Barques, Mich. John J. Chorzel Roundleaf, Betula uber, 1978 34 49 15 87 Jefferson NF, Va. Paul Shrauder Sweet, Betula lanta, ★ 1961 182 78 80 280 New Boston, N.H. Philip Harvell Water, Betula payriflera var. commutata, 2003 172 70 77 261 Bellingham, Wash. Robert Van Peit Yellow, Betula alleghaniensis, 2005 186 104 78 310 Gould City, Mich. D. Milarch & E.B. Ehrle Black-mangrove Avicennia germinans, 2003 123 54 60 192 Everglades NP, Fla. Thomas J. Smith Biology, Pithecellobium myduls-cati, ★ 2002						, ,	Stu Bassett & E.B. Ehrle
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Avicennia germinans, 2003 123 54 60 192 Everglades NP, Fla. Thomas J. Smith Blackbead Catclaw, Pithecellobium unguis-cati, ★ 2002 150 72 49 234 Sarasota, Fla. William J. Schilling Ebony, Pithecellobium flexicaule, 1991 171 50 64 237 McAllen, Hidalgo Co., Texas Joe Ideker Guadeloupe, Pithecellobium guadalupense, ★ 1992* 11 16 16 31 No Name Key, Fla. R.W. Simons & M.L. Eletz Guadeloupe, Pithecellobium guadalupense, ★ 1995* 9 19 16 32 National Key Deer Refuge, Fla. T. Ann Williams & Vincent P. Condon Blackhaw Viburnum prunifolium, ★ 1985* 64 24 33 96 Geo. Washington Birthplace NM, Wakefield, Va. Richard Salzer Viburnum prunifolium, ★ 1991* 64 24 28 95 Roanoke, Va. Richard Salzer Rusty, Viburnum rufidulum, ★ 1999 47 30 23 83 Knox Co., Tenn. Jim Cortese Bladdernut American, Staphylea trifolia, ★ 1966 19 36 37 64 Macomb Co., Mich. H.J. Ne	Yellow, Betula alleghaniensis, 2005	186	104	78	310	Gould City, Mich.	D. Milarch & E.B. Enrie
Blackbead Catclaw, Pithecellobium unguis-cati, ★ 2002 150 72 49 234 Sarasota, Fla. William J. Schilling Ebony, Pithecellobium flexicaule, 1991 171 50 64 237 McAllen, Hidalgo Co., Texas Joe Ideker Guadeloupe, Pithecellobium guadalupense, ★ 1992* 11 16 16 31 No Name Key, Fla. Guadeloupe, Pithecellobium guadalupense, ★ 1995* 9 19 16 32 National Key Deer Refuge, Fla. Blackhaw Viburnum prunifolium, ★ 1985* 64 24 33 96 Geo. Washington Birthplace NM, Wakefield, Va. Richard Salzer Viburnum prunifolium, ★ 1991* 64 24 28 95 Roanoke, Va. Rusty, Viburnum rufidulum, ★ 1999 47 30 23 83 Knox Co., Tenn. Jim Cortese Bladdernut American, Staphylea trifolia, ★ 1966 19 36 37 64 Macomb Co., Mich. Blolly	Black-mangrove					- 4 / ND FI	Thomas I Smith
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Guadeloupe, Pithecellobium guadalupense, ★ 1992* 11 16 16 31 No Name Key, Fla. R.W. Simons & M.L. Eletz Guadeloupe, Pithecellobium guadalupense, ★ 1995* 9 19 16 32 National Key Deer Refuge, Fla. T. Ann Williams & Vincent P. Condon Blackhaw Viburnum prunifolium, ★ 1985* 64 24 33 96 Geo. Washington Birthplace NM, Wakefield, Va. Richard Salzer Viburnum prunifolium, ★ 1991* 64 24 28 95 Roanoke, Va. Richard Salzer Rusty, Viburnum rufidulum, ★ 1999 47 30 23 83 Knox Co., Tenn. Jim Cortese Bladdernut American, Staphylea trifolia, ★ 1966 19 36 37 64 Macomb Co., Mich. H.J. Nett & Paul W. Thompson Sierra, Staphylea bolanderi, ★ 1986 14 28 12 45 Fresno Co., Calif. Frank T. Callahan							-
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Viburnum prunifolium, ★ 1985* 64 24 33 96 Geo. Washington Birthplace NM, Wakefield, Va. Richard Salzer Richard Salzer Viburnum prunifolium, ★ 1991* 64 24 28 95 Roanoke, Va. Richard Salzer Rusty, Viburnum rufidulum, ★ 1999 47 30 23 83 Knox Co., Tenn. Jim Cortese Bladdernut American, Staphylea trifolia, ★ 1966 19 36 37 64 Macomb Co., Mich. H.J. Nett & Paul W. Thompson Sierra, Staphylea bolanderi, ★ 1986 14 28 12 45 Fresno Co., Calif. Frank T. Callahan		9	Ta	ΤO	32	Hadional Not Deel Notago, Fla.	The state of the s
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Rusty, Viburnum rufidulum, ★ 1999 47 30 23 83 Knox Co., Tenn. Bladdernut American, Staphylea trifolia, ★ 1966 19 36 37 64 Macomb Co., Mich. Sierra, Staphylea bolanderi, ★ 1986 14 28 12 45 Fresno Co., Calif. Blolly						- ·	
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American, Staphylea trifolia, ★ 1966 19 36 37 64 Macomb Co., Mich. H.J. Nett & Paul W. Thompson Slerra, Staphylea bolanderi, ★ 1986 14 28 12 45 Fresno Co., Calif. Frank T. Callahan Blolly		71	50	20	-	**	
Sierra, Staphylea bolanderi, * 1986 14 28 12 45 Fresno Co., Calif. Frank T. Callahan Blolly		19	36	37	64	Macomb Co., Mich.	H.J. Nett & Paul W. Thompson
Blolly							
Cl. 1 in Notifical							
	_	54	21	11	78	Lignumvitae Key Botanical SP, Fla.	Charlotte Neidhauk

SPECIES/ MEASUREMENT	CIRCUMFER ENCE"	HEIGHT'	SPR	elle II	TOTAL LOCATION	NOMINATOR
Blueblossom	32	41	20	78	Curry Co., Ore.	Frank T. Callahan
Blue-myrtle, <i>Ceanothus thyrsiflorus</i> , ★ 1976	32	41	20	10	Garry Gol, Gre.	
Bluewood	77	30	26	114	San Juan, Texas	Joe Ideker
Condalia hookeri, * 1989	11	30	20	114	Sall Sall, Toxas	
Boxelder	230	120	84	371	Monrovia, Md.	Kevin Moore
Acer negundo, 2003	230	120	04	3/1	Monovia, ma.	
Buccaneer-palm	26	25	8	53	Elliott Key, Biscayne NP, Fla.	Carol L. Lippincott
Pseudophoenix sargentii, ★ 1997	20	25	0	55	Linder Noy, Discayno W., Ca.	
Bucida	120	50	48	201	Charles Deering Estate, Fla.	J. Valenta, A. Lupus, R. Hammer
Bucida buceras, ★ 1997∆	139	50	40	201	Ondried Dooring Lotato, Fran	··
Buckeye	2.4	14	20	53	Virginia Beach, Va.	Richard Salzer
Bottlebrush, <i>Aesculus parviflora</i> , ★ 1993	34 176	46	60	237	Santa Cruz Co., Calif.	Jeff Reimer & Walter Mark
California, Aesculus californica, 2001			64	233	Greenwich, Ohio.	Brian P. Riley
Ohio, Aesculus <i>glabra var. glabra</i> , 2003	140	77		233 56	Mountain Park, Fulton Co., Ga.	Jess & Doug Riddle
Painted, A <i>esculus sylvatica</i> , 2001	18	34	16	165	Roanoke, Va.	William S. Hubard
Red, Aesculus pavia, ★ 1994	95	58	48		Harper, Texas	Bob & Lou Ellen O'Kennon
Texas, Aesculus glabra var. arguta, ★ 1986	51	30	24	87	Gabes Mount. Tr., Great Smoky Mtns. NP , Tenn.	Will Blozan & Michael Davie
Yellow, <i>Aesculus octandra</i> , ★ 1995	229	136	53	378	Gapes Would, II., Gleat Smoky Willis, IV., Telli.	Will blozair a Midiadi bario
Buckthorn			0.5	00	Sunol Reg'l Wilderness, Alameda Co., Calif.	E. Lagel
California, <i>Rhamnus californica</i> , ★ 1976*	24	30	25	60	•	David & Judy Thornburg
California, <i>Rhamnus californica</i> , 2003*	23	23	39	56	Prescott NF, Ariz.	Phil & Claudette Brown
Carolina, <i>Rhamnus californica</i> , 2001	40	25	24	71	Clarksville, Tenn.	Steve Ferguson
Cascara, <i>Rhamnus purshiana</i> , ★ 1977*	99	37	50	149	Seaside, Ore.	Ray Cross
Cascara, <i>Rhamnus purshiana,</i> ★ 1980*	109	27	43	147	Siuslaw NF, Ore.	Sid Shearin
European, <i>Rhamnus cathartica</i> , 2005∆	217	27	41	254	Halifax, N.C.	Paul W. Thompson
Glossy, <i>Rhamnus frangula</i> , ★ 1976∆	20	40	25	66	Cranbrook Institute, Bloomfield Hills, Mich.	Frank T. Callahan & Art Cowley
Hollyleaf, <i>Rhamnus crocea</i> , 1976	26	26	44	63	Greenfield, Calif.	Frank I. Cananan & Art Cowley
Buckwheat-tree						David Poddonhorry
Cliftonia monophylla, 2000	49	57	38	115	Wakulla Co., Fla.	David Roddenberry
Buffaloberry						FIt T Collabor
Silver, <i>Shepherdia argentea</i> , 🖈 1975	78	22	20	105	Malheur Co., Ore.	Frank T. Callahan
Bumelia					=	Marila C. Handroom
Buckthorn, <i>Bumelia lycioides</i> , 1999	48	31	29	86	Shelby Park, Nashville, Tenn.	Mark S. Hackney
Gum, <i>Bumelia lanuginosa</i> , ★ 1977	93	80	66	190	Robertson Co., Texas	E. G. Marsh
Saffron-plum, <i>Bumelia celastrina</i> , ★ 1991	55	30	32	93	Lower Rio Grande NWR, Texas	William MacWhorter
Tough, Bumelia tenax, ★ 1987	41	41	28	89	Amelia Island SRA, Fla.	Buford Pruitt Jr.

RIO GRANDE COTTONWOOD }

exas's 489-point behemoth, near Fort Davis, has reigned as national champ since 1976. The biggest *Populus fremontii* var. *wislizeni* has a 367-inch circumference and stands 92 feet tall with a 118-foot average crown spread. The Lone Star State stands out for its number of champs. It boasts a total of 78, making it fourth in line for bragging rights, surpassed only by Florida, California, and Arizona. The Rio Grande is one of two national champion cottonwoods in Texas.



SPECIES/MEASUREMENT	CIRCUM- FERENCE	HEIG	HI SP	SEAD!	TOTAL LOCATION	NOMINATOR
Burningbush Eastern, Euonymus atropurpureus, 2002	90	40	34	139	Norwood Hills Country Club, St. Louis, Mo.	Lorri Grueber
Bustic					•	
Willow, Dipholis salicifolia, ★ 1994	72	57	29	136	Barnacle State Historicl Site, Dade Co., Fla.	John T. Valente & Rodger Hammer
Butternut						
Juglans cinerea, 1989	265	80	86	367	Chester, Conn.	Edward A. Richardson
Button-mangrove	174	51	68	242	Palm Beach, Fla.	K, Van der Hulse & D. L. Lockhart
Conocarpus erectus, * 1974 Buttonbush	114	31	00	242	raini beach, ria	TO PAIR GOT TIMES & D. E. ESSIMATE
Cephalanthus occidentalis, 1999	60	26	38	96	Buttonwillow, Calif.	Frank T. Callahan
Byrsonima **						
Key, <i>Byrsonima lucida</i> , ★ 1997*	31	35	17	70	Big Pine Key, Fla.	T.A. Williams & Vincent P. Condon
Key, <i>Byrsonima lucida</i> , ★ 1995*	31	35	17	70	Monroe, Fla.	Eloise Boon & Vincent P. Condon
Caesalpinia						
Mexican, Caesalpinia mexicana, 1995	48	45	60	108	Hidalgo Co., Texas	Joe Ideker
California-laurel	F00	400	440	074	Co- Finon Colif	Dave Grabner & Leo Martin
Umbellularia californica, 1997 Canella	536	108	119	674	San Francisco, Calif.	Dave drapner & Leo Maran
Cantella Winterana, 1998	25	30	19	60	Crocodile Lake NWR, Fla.	Joseph Nemec
Canotia	20		10			
Canotia holocantha, 2005	65	32	20	102	Wikieup, Ariz.	John Carr & David Thornburg
Caper						
Jamaica, <i>Capparis cynophallophora</i> , ★ 1986	25	15	20	45	Lee Co., Fla.	David Fox & Dee Slinkard
Casuarina						1 W B
Horsetail, Casuarina equisetifolia, ★ 1968△	207	89	56	310	Olowalo, Maui, Hawaii	L.W. Bryan
Catalpa	005	01	0.4	207	Kaight Township, Ind	Thomas E. Westfall
Northern, Catalpa speciosa, 2003	285 271	81 88	84 68	387 376	Knight Township, Ind. Yalobusha Co., Miss.	J. Fergusion, J. Edwards, G. Byrd
Southern, Catalpa bignonioides, 2000 Catclaw	211	00	00	370	Talobasila oo., Miss.	
Gregg, Acacia greggii, ★ 1971*	77	49	46	138	Red Rock, N. Mex.	Samuel Lamb
Gregg, Acacia greggii, 2002*	98	28	40	136	Uvalde, Texas	G.C. Carlile
Roemer, Acacia roemeriana, 1991	61	22	24	89	The Alamo, San Antonio, Texas	Richard Salzer
Wright, <i>Acacia wrightii</i> , ★ 1986	72	36	42	119	Uvalde Co., Texas	Virgil Helm
Cercocarpus						Town Distri
Alderleaf, Cercocarpus montanus, 1999	26	21	11	50	Neff's Canyon, Wasatch-Cache NF, Utah	Tony Dietz Frank T. Callahan
Birchleaf, Cercocarpus betuloides, ★ 1972	44 30	34 18	29 25	85 54	Central Point, Ore. Catalina Island Conservancy, Calif.	Art Cowley
Catalina, <i>Cercocarpus traskiae</i> , 2003 Curlleaf, <i>Cercocarpus ledifolius</i> , 2001	116	23	28	146	Sequoia NF, Calif.	Loren Ross
Hairy, Cercocarpus breviflorus, ★ 1996	32	20	17	56	Coronado NF, Ariz.	Robert Zahner & Sid Jackson
Chastetree						
Common, <i>Vitex agnus-castus</i> , 2003∆	111	26	37	146	Johnson City, Texas	Robert Edmondson
Cherry						
Alabama blk, <i>Prunus serotina</i> var. <i>alabamensis</i> , ★1997		35	27	82	Bristol, Fla.	Robert T. Ing & Daniel B. Ward
Bitter, <i>Prunus emarginata</i> , 1999	65	86	40	161	Centralia, Wash.	Marshall Murray
Black, Prunus serotina var. serotina, 2005*	216	85	61	316	West Portsmouth, Ohio Du Quoin, III.	Ben Hamilton Maurice O'Keefe
Black, <i>Prunus serotina</i> var. <i>serotina</i> , 2003* Black, <i>Prunus serotina</i> var. <i>serotina</i> , ★ 1997*	187 169	112 132	78 51	319 314	Great Smoky Mountains NP, Tenn.	Will Blozan & Jan Stykar
Catalina, <i>Prunus Iyonii</i> , 1996	115	43	45	169	Catalina Island Conservancy, Calif.	A. Douglas Propst & Bill Hartley
Chokecherry, common,	110	t.			,,	
Prunus virginiana var. virginiana, 1999	168	74	88	264	Owings Mills, Md.	Frank X. Rurka
Chokecherry, western,						
Prunus virginiana var. melanocarpa, ★ 1991	54	73	18	132	Kootenai Co., Idaho	J.D. Pratt & D. Van Natter
Escarpment, <i>Prunus serotina</i> var. <i>eximia</i> , 2003*	102	51	53	166	Real Co., Texas	Lee Haile
Escarpment, Prunus serotina var. eximia, 1998*	102	51	53	166	Kerr Co., Texas	Mark Duff & Robert Edmonson
Hollyleaf, Prunus Ilicifolia, 1993	54 94	50 36	56 38	118 130	Jolon, Calif. VanWert Co., Ohio	Frank T. Callahan Brian P. Riley & Barry L. Weber
Mahaleb, <i>Prunus mahaleb</i> , 2005*Δ Mahaleb, <i>Prunus mahaleb</i> , ★ 1993*Δ	84 78	36	47	126		Ron Brightman & Robert Van Pelt
Mazzard, <i>Prunus avium</i> , 1989Δ	290	96	73	404	West Chester, Penn.	M. Hobaugh, P. & C. Youngblood
Pin, Prunus pensylvanica, 2005*	60	75	50	148	Kalamazoo, Mich.	Emma Pitcher & Elwood B. Ehrle
Pin, Prunus pensylvanica, 1999*	58	75	41	143	Great Smoky Mountains NP, Tenn.	Gerald Shelton
Sour, <i>Prunus cerasus</i> , ★ 1972∆	119	68	75	206	Calhoun Co., Mich.	Paul W. Thompson
Southwestern black, Prunus serotina var. rufula, 2004	136	66	50	215	Prescott NF, Ariz.	David Thornburg & Harry Untiedt



SPECIES/ MEASUREMENT	CIRCUM- FERENCE	HEIGHT	10	END.	TOTAL LOCATION POINTS	NOMINATOR
West Indies, Prunus myrtifolia, ★ 1989	65	53	50	131	Miami, Fla.	Carol Lippincott
Chestnut						
American, Castanea dentata, 2005	288	70	70	376	Clarkston, Wash.	Wayne Bunce
Chinaberry						
Melia azedarach, ★ 1967∆	222	75	96	321	Kaohe, South Kona, Hawaii	L.W. Bryan
Chinkapin						
Florida, Castanopsis ainifolia, 🖈 2005	76	42	47	130	Columbia Co., Fla.	Joe McGrath
Giant, Castanopsis chrysophylla, ★ 1996	153	122	37	284	Mendocino Co., Calif.	Paul A. Violett
Cholla						
Jumping, Opuntia fulgida, 2001	32	21	15	57	Pinal Co., Ariz.	Mike Hallen
Cinnecord						
Acacia choriophylla, ★ 1986	14	20	24	40	Sugarloaf Key, Fla.	David Sinclair & Mike Cullen
Clethra						
Cinnamon, Clethra acuminata, ★ 1995'	10	33	12	46	Caldwell Fork Tr., Great Smoky Mtns. NP, N.C.	Will & Carl Blozan, Jan Stykar
Cliffrose						
Cowania mexicana, 2003	28	19	17	51	Grand Canyon NP, Ariz.	Mike Hallen
Clusia						
Florida, Clusia rosea, 🖈 1995	25	40	37	74	Hugh Taylor Birch SP, Ft. Lauderdale, Fla.	Jim Higgins
Coconut						
Palm, Cocos nucifera, ★ 1979∆	60	93	27	159	between Pauahi & Ponohawai, Hilo, Hawaii	Jane & Bryce Robinson
Coffeetree						
Kentucky, Gymnocladus dioicus, 2001	206	82	77	307	Lake Co., Ohio	Mark Ervin
Condalia						
Bitter, Condalia globosa, 2003*	44	18	16	66	Little Ajo Mountains, Ariz.	Jim Malusa

Rounding up Big Trees in the Buckeye State

hio is a state rich in biodiversity and biological wonders-not to mention big trees. Brian Riley realized that in 2000 shortly after graduating from high school in Ashville when he learned that since 1955, Ohio has had a big tree program modeled after American Forests' National Register of Big Trees.

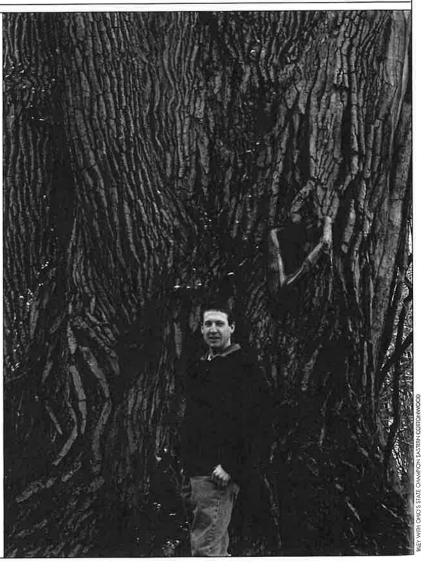
"As soon as I learned that the Ohio Division of Forestry was keeping official records of the largest trees of each species throughout the state, both native and exotic, I became instantly hooked and devoted to contributing to the Ohio Big Tree Program," he says.

Little did Riley realize what was in store when he set his sights on seeking champs. "I still cannot believe that my first nominated state champion turned out to be a European alder my Grandpa Skinner had planted in his backyard (in Columbus) more than 50 years ago," he remembers.

When Riley was not in forestry class at Ohio State University, he was out hunting big trees. His efforts to seek out and nominate numerous overgrown trees did not go unnoticed by officials at the state Division of Forestry. In 2003 they hired Riley as an intern to travel the state certifying new nominations and recertifying existing champs.

That internship turned into a job as a service forester after he graduated with a degree in forestry in 2004. And the state Big Tree Program is still his responsibility. "Being paid to do something I thoroughly enjoy is an honor I cannot put into words," he says.

To date Riley is responsible for finding five of Ohio's 11 national champs and 122 of the 256 champs on its state register. His greatest program achievement to date was finding a monster Ohio buckeye while following a posted detour. His discovery allowed Ohio to claim the champion title for its state tree. Says Riley, "I guess some things are just meant to be."



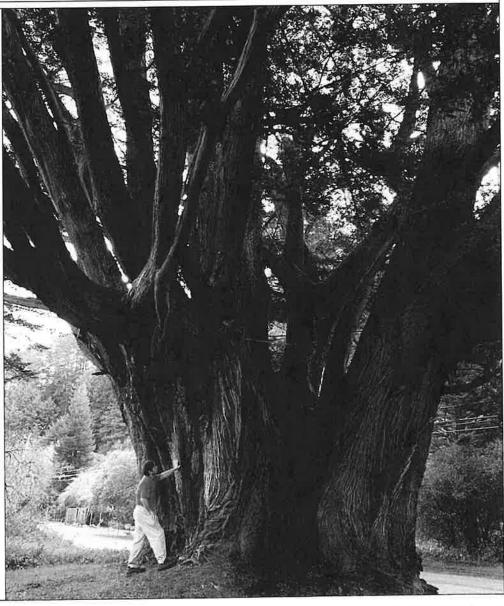
SPECIES, MEASUREMENT	CIRCUMFER- ENCE	HEIGHY	SPA	£A0	TOTAL LOCATION POINTS	NOMINATOR
Bitter, <i>Condalia globosa</i> , 2001*	42	17	25	65	Eagletail Mountains WA, Ariz.	Central Arizona College Hiking Club
Coralbean						
Southeastern, <i>Erythrina herbacea</i> , ★ 1995	40	32	30	79	J.N. "Ding" Darling NWR, Fla.	Richard Workman
Southwestern, <i>Erythrina flabelliformis</i> , 1999	11	15	12	29	Arizona Sonora Desert Museum, Tucson, Ariz.	George Montgomery
Corkwood		10			, , , , , , , , , , , , , , , , , , , ,	
Leitneria floridana, * 1989*	8	16	7	26	Waccasassa Bay State Preserve, Fla.	Robert Simons & Thomas Rooks
Leitneria floridana, 2000*	8	15	8	25	Waccasassa Bay State Preserve, Fla.	R.Simons, C. Lippincott, K. McPherso
Cottonwood	0	10				
Black, <i>Populus trichocarpa</i> , ★ 1982	320	158	110	506	Willamette Mission SP, Ore.	Maynard C. Drawson
	444	93	103	563	Seward, Neb.	Daryl Hackbart
Eastern, Populus deltoides var. deltoides, 2001	504	92	108	623	Santa Cruz Co., Ariz.	Mark Rouw & Don Richard
remont, Populus fremontii var. fremontii, 1996	211	49	84	281	Brewster Co., Texas	James E. Liles
Meseta, Populus fremontii var mesetae, 1986	314	79	80	413	Malheur Co., Ore.	Donald Oakes
Narrowleaf, <i>Populus angustifolia</i> , ★ 1973				560	Hygiene, Colo.	Allegra Collister
Plains, Populus deltoides var. occidentalis, 1967	432	105	93			Steve Runnels
Rio Grande, <i>Populus fremontii</i> var. wislizeni, 1976	367	92	118	489	Fort Davis, Texas	Lamar Dorris & David Linden
wamp, <i>Populus heterophylla</i> , 2000	151	93	50	257	Yazoo NWR, Miss.	Latilal Doille & David Elitaen
Cranberrybush		0.7			Disability And	Paul W Thompson
American, <i>Viburnum trilobum</i> , ★ 1977*	10	32	31	50	Bloomfield Hills, Mich.	Paul W. Thompson
merican, <i>Viburnum trilobum</i> , ★ 1985*	18	25	25	49	Wayne, Mich.	Paul W. Thompson
merican, <i>Viburnum trilobum,</i> ★ 1989*	10	32	31	50	Westcroft Gardens, Mich.	Paul W. Thompson
Cupania						OUT LONG O COMMITTEE
lorida, <i>Cupania glabra</i> , 🖈 1976	25	31	22	62	Monroe Co., Fla.	Clifford Shaw & George Avery
Cypress						
rizona, <i>Cupressus arizonica</i> var. <i>arizonica</i> , 1955	244	93	48	349	Coronado NF, Ariz.	James Mielke
rizona smooth, <i>Cupressus arizonica</i> var. <i>glabra</i> , 2003	215	70	52	298	Coconino NF, Ariz.	David Thornburg & Harry Untiedt
aker, Cupressus bakeri, ★ 1976	129	129	29	265	Rogue River NF, Ore.	Frank T. Callahan
uyamaca, Cupressus arizonicavar, stephensonii, 🛨 1976	6 70	37	28	114	Cleveland NP, Calif.	Frank T. Callahan
lowen, Cupressus goveniana var. goveniana, 1996	66	40	52	119	Point Lobos SP, Calif.	Alan R. Washburn
MacNab, <i>Cupressus macnabiana</i> , ★ 1981	155	55	45	221	Amador Co., Calif.	Frank T. Callahan
Mendocino, <i>Cupressus goveniana</i> var. <i>pigmaea</i> , 1986	238	150	49	400	Mendicino Co., Calif.	Frank T. Callahan
Monterey, Cupressus macrocarpa, 1994	553	102	111	683	San Mateo, Pescadero Co., Calif.	R. Huntington & Fiesta Garden Schl.
Piute, <i>Cupressus arizonica</i> var. <i>nevadensis</i> , 2005	112	74	60	201	Sequoia NF, Calif.	Loren Ross
anta Cruz, <i>Cupressus arizonica</i> var. <i>abramsiana</i> , 2003		56	41	179	Santa Cruz, Calif.	Whit Bronaugh
Santa Cruz, <i>Cupressus arizonica</i> var. <i>abramsiana</i> , 2003		68	40	177	Santa Cruz, Calif.	Whit Bronaugh
anta Cruz, <i>Cupressus arizonica</i> var. <i>abramsiana</i> , 2003 ³		67	45	175	Santa Cruz, Calif.	Whit Bronaugh
Gargent, Cupressus sargentii, 2001	244	58	64	318	Wildcat Canyon Regional Park, Calif.	Rory Nichols
-	93	71	48	176	San Diego Co., Calif.	Art Cowley
ecate, Cupressus guadalupensis var. forbesli, 2001	33	1 1	40	110	our progo con cam.	•
Cypress-pine	180	60	50	253	Bradenton, Fla.	Steven Spezia
llue, <i>Callitris hugelii</i> , ★ 1975∆	100	00	30	233	Bradenton, rid.	
Cyrilla	E4	4.4	20	102	Washington Co., Fla.	Charles R. Reeves
Swamp, Cyrilla racemiflora var. racemiflora, ★ 1980	51	44	30	103	wasiniigton co., ria.	Offaries II. Houses
Dahoon		4.0	00	404	Ot Lucia Campan Et Diores Elo	Paul G. Williams
lex cassine, ★ 1984*	55	40	36	104	St. Lucie Co. near Ft. Pierce, Fla.	Chris Anderson
lex cassine, ★ 1995*	32	68	31	108	San Carlos Park, Fla.	
lex cassine, ★ 1995*	54	42	36	105	Immokalee, Fla.	Chris Anderson Sam Allison
lex cassine, ★ 1994*	34	61	34	104	San Carlos Park, Fla.	
lex cassine, 1999*	44	57	21	106	Picayune Strand SF, Fla.	Chris Anderson
Myrtle, <i>llex cassine,</i> 1999	77	55	35	141	St. Marks NWR, Fla.	David Roddenberry
Darling-plum						Ob a laste Niedberd
Reynosia septentrionalis, ★ 1975	21	28	13	52	Lignumvitae Key Botanical SP, Fla.	Charlotte Niedhauk
Desert-willow						
Chilopsis linearis, 1976	165	68	54	247	Pinal Canyon Drive, Gila Co., Ariz.	Mitchell Holder
Devils-walkingstic	k					
Aralia spinosa, ★ 1997	23	74	16	101	Great Smoky Mountains NP, Tenn.	Katherine Johnson & Will Blozan
Devilwood						
Osmanthus americanus, 2003	88	39	47	139	Keystone Heights, Fla	John & Janet Sloane
Dogwood					•	
Alternate-leaf, <i>Cornus alternifolia</i> , ★ 1997	41	49	27	97	Madison, N.J.	Dave Johnson & Jon Rafalowski
Blackfruit, Cornus sessilis, 1986	20	18	16	42	Shasta Co., Calif.	Frank T. Callahan
	110	33	42	154	Glenwood Park, Norfolk, Va.	Р & G Williamson, В. Carmean, D. Leibп
			. —			1 0
Flowering, <i>Cornus florida</i> , ★ 1988* Flowering, <i>Cornus florida</i> , 2003*	107	36	39	153	Williamson Co., Tenn.	Jerry Greenshaw

SPECIES/MEASUREMENT	CIRCUM- FERENCE	неіант	sita	TAD:	TOTAL LOCATION POINTS	NOMINATOR
1075	18	38	24	62	Oakland Co., Mich.	Paul W. Thompson
Gray, Cornus racemosa, ★1975	169	60	58	244	Clatskanie, Ore.	John E. Makela
Pacific, <i>Cornus nuttallii</i> , ★ 1975 Red-osier, <i>Cornus stolonifera</i> , ★ 1983	13	26	15	43	White Bird, Idaho	F.D. Johnson
Roughleaf, <i>Cornus drummondii</i> , 2001	40	22	33	70	Shelby Co., Tenn.	David Smith
Roundleaf, <i>Cornus rugosa</i> , ★ 1975	11	40	16	55	Leland, Mich.	Paul W. Thompson
Smooth, <i>Cornus glabrata</i> , 1991/2001	16	42	16	62	Jefferson NF, Va.	Richard Salzer
Swamp, <i>Cornus stricta</i> , 2003*	13	24	17	42	Madison, Miss.	Ed Brown & Jack Herring
Swamp, <i>Cornus stricta</i> , 2001*	12	19	22	37	Fayette Co., Tenn.	David Smith
Swamp, <i>Cornus stricta</i> , ★ 1989*	12	23	22	41	Indian Creek Rd., Chesapeake, Va.	Byron Carmean & Gary Williamson
Swamp, <i>Cornus stricta,</i> ★ 1989*	10	22	28	39	Indian Creek Rd., Chesapeake, Va.	Byron Carmean & Gary Williamson
Western, Cornus occidentalis, 2003	32	25	35	66	Polk Co., Ore.	Barbra Rupers
Douglas-fir						
Bigcone, <i>Pseudotsuga macrocarpa</i> , 1945	269	165	94	458	Mt. Baldy Village, Angeles NF, Calif-	William Maxwell
Coast, Pseudotsuga menziesii var. menziesii, 1999*	512	301	65	829	Jedediah Smith Redwoods SP, Calif.	Robert Van Pelt
Coast, Pseudotsuga menziesii var. menziesii, 1999*	505	281	71	804	Olympic NP, Wash.	Preston P. Macy
Rocky Mountain,						14 LO. bat & Bar Bankawar
Pseudotsuga menziesii var. glauca, ★ 1999	316	139	55	469	Deschutes NF, Jefferson Co., Ore.	Mark Corbet & Ben Benhower
Elder						Dishard Calvar
Arnerican, Sambucus canadensis var. canadensis, ★ 1989		16	22	60	Jefferson NF, Va.	Richard Salzer Oliver Matthews
Blackbead, Sambucus melanocarpa, ★ 1972	39	42	30	89	Columbia Co., Ore.	
Blue, Sambucus cerulea, 2005	136	30	38	176	Porterville, Calif.	Art Cowley Robert W. Simons
Florida, Sambucus canadensis var. laciniata, ★ 1994		18	12	47	Marion Co., Fla.	Ken Morrow
Mexican, Sambucus mexicana, 2005	95	41	26	143	Patagonia, Ariz.	William Schoppert
Pacific red, Sambucus callicarpa, 2001	56	27	32	91	Tillamook Co., Ore.	William Schoppere
Elephant-tree			••		Ontrans Duinto NIM/D. Avir	James W. Cain
Bursera microphylla, 2005	34	16	28	57	Cabeza Prieta NWR, Ariz.	James W. Gam
Elliottia			00	0.0	Classwillo, Co.	Howard Stanley & Red Castleman
Elliottia racemosa, 1989	36	47	20	88	Glennville, Ga	monard stame, a new section
Elm	077	122	84	420	Meeman-Shelby SP, Tenn.	David Smith
American, <i>Ulmus americana</i> , 2001*	277		68	421	Fountain Creek, Va.	Byron Carmean & Gary Williamson
American, <i>Ulmus americana</i> , ★ 2002*	282	122 120	68	293	Meeman-Shelby SP, Tenn.	David Smith
Cedar, <i>Ulmus crassifolia</i> , 2001	156 174	72	62	261		David Holley
Florida, <i>Ulmus americana var. floridana</i> , 2003	202	117	122	350		Paul W. Thompson
Rock, <i>Ulmus thomasii</i> , ★ 1989	239	95	97	358		Bob Ely
Siberian, <i>Ulmus pumila</i> , ★ 1999*Δ	238	86	128	356		Brian Riley
Siberian, <i>Ulmus pumila</i> , 2001*∆	232	103	93	358	· ·	Stuart Frazier
Slippery, <i>Ulmus rubra</i> , 2003 Winged, <i>Ulmus alata</i> , ★1983	132	114	112	274	· ·	Robert Simons & Dennis Andrews
Esenbeckia	102				3 . 3 .	
Berlandier, <i>Esenbeckia berlandieri</i> , ★ 1995	41	24	21	70	Cameron Co., Texas	Brownsville Beautification Comm.
Eucalyptus		= -				
Bluegum, <i>Eucalyptus globulus</i> , 2000∆	586	141	126	759	Petrolia, Calif.	Loren Salladay & Robert Bush
Longbeak, <i>Eucalyptus camaldulensis</i> , 2003∆	276	112	84	409	Chandler, Ariz.	Mike Hallen & Sylvia Escudero
False-mastic						
Mastichodendron foetidissimum, ★ 1973	105	118	94	247	Castellow Hammock Park, Fla.	Albert H. Hetzell & Ron Smith
Falsebox						
Gyminda latifolia, ★ 1995	10	19	13	32	Florida Keys Refuge, Fla.	Niko Reisinger & Dianna Stevenson
Fiddlewood						
Florida, Citharexylum fruticosum, ★ 1986	17	27	12	47	Lignumvitae Key Botanical SP, Fla.	Ken Roundtree & Frank L. Zickar
Fig						
Florida strangler, <i>Ficus aurea</i> , 2005	446	54	158	540	Palm Beach Co., Fla.	Gael Silverblatt
Shortleaf, Ficus citrifolia, ★ 1986	248	41	57	303	Lignumvitae Key Botanical SP, Fla.	David M. Sinclair & Frank L. Zickar
Fir				10		0.00
Balsam, Abies balsamea, 1992	151	104	48	267		R.O. Brooks & C. Keeran
California red, Abies magnifica, ★ 1999	365	172	41	547		R. Van Pelt, R. Knight, M. Rudnicki
California white, Abies concolor var. Iowiana, 1997	276	217	39	503		Robert Van Pelt
Corkbark, Abies lasiocarpa var. arizonica, ★ 1969	157	95	33	260	Lincoln NF, N. Mex.	Earl Aldon
Fraser, Abies fraseri, 2005	134	100	58	249		Ken & Pam Knox
Grand, Abies grandis, ★ 1997	245	257	36	51		Robert Van Pelt & Dale Thornburg
Noble, Abies procera, 1964*	359	227	41	596		Harold Coates & Bob Smith
Noble, Abies procera, 1989*	313	272	49	59		Robert Van Pelt
Pacific silver, Abies amabilis, 1999	260	218	37	48	 Olympic NP, Bogachiel Valley, Wash. 	Robert Van Pelt & Steve Sillett

SPECIES/ MEASUREMENT	IRCUMFE ENCE	REIGHT	5.09		TOTAL LOCATION POINTS	RCTANIMON
Rocky Mtn. white, Abies concolor var. concolor, 2005	180	156	41	346	Cochita, N.M.	Charles Wickland
Subalpine, Abies lasiocarpa var. lasiocarpa, 1965	252	130	26	389	Olympic NP, Wash.	Stephen Arno & Oscar Sedergren
Fishpoison-tree						25
Florida, Piscidia piscipula, ★ 1986	101	41	48	154	Lee Co., Fla.	David Fox & Dee Slinkard
Florida-boxwood						
Schaefferia frutescens, ★ 1986	24	27	16	55	Lignumvitae Key Botanical SP, Fla.	Ken Roundtree & David M Sinclair
Flowerfence x						
Caesalpinia pulcherrima, ★ 1991*△	20	12	15	36	Terrace Broward Co., Fla.	John Kern
Caesalpinia pulcherrima, ★ 1991*△	16	16	14	36	Crescent Dr., Hollywood, Calif.	D. Spicer, W. Harms, W. Tesauro
Forestiera						
Desert-olive, Forestiera phillyreoides, * 1997	10	17	17	31	Buenos Aires NWR, Ariz.	Roseann Hanson
Franklinia						
Franklinia alatamaha, 1986	42	33	40	85	Wyndmoor, Montgomery Co., Penn.	John Swartley
Fremontia						
California, Fremontodrendron californicum, 2003	54	25	28	86	Sequoia NF, Calif.	Art Cowley
Fringetree						
Chionanthus virginicus, ★ 1987*	42	41	31	91	Telford Spring County Park, Fla.	Buford Pruitt Jr.
Chionanthus virginicus, 2001*	57	25	43	93	Salt Lake City, Utah	Art Scott & Shirley Hawkins
Chionanthus virginicus, 2003*	64	20	20	89	Elmwood Cemetery, Tenn.	Carlyle Page
Gallberry						
Large, Ilex coriacea, 2004	16	33	21	54	Vernon Parish, La.	Charles Allen

MONTEREY CYPRESS }

alifornia's striking national champion Cupressus macrocarpa is located near San Mateo in Pescadero County. The tree has a 553-inch circumference and stands 102 feet tall with an 111-foot average crown spread for a total of 683 points. The tree has reigned as national champ since 1994. California deserves special recognition as a home for Big Trees. Not only does the Golden State boast the second highest total in number of champs (101, second only to Florida), but it is home to seven of the 11 largest species overall. The Monterey cypress is No. 9 on that list.





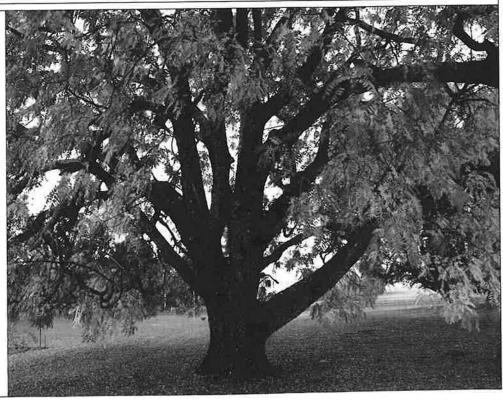
SPECIES/MEASUREMENT	CIRCUMFER- ENGE"	HEIGHT	584	AD PO	DYAL LOCATION HINTS LOCATION	NOMINATOR
Coigor trop						
Geiger-tree Cordia sebestena,★1988∆	27	24	19	56	Tarpon Bay Marina, Lee Co., Fla.	Eric H. Hoyer & Chris J. Anderson
Guajillo						
Acacia berlandieri, ★ 1989	18	15	12	36	Albert Schwarz Ranch, Mercedes, Texas	Fleet Lentz
Gumbo-limbo						
Bursera simaruba, ★ 1992*	108	55	52	176	Captiva Island, Fla.	Jeff Mangun
Bursera simaruba, ★ 1992*	125	41	48	178	St. Mary's Star of the Sea, Key West, Fla.	W. Hubard & Beverlee Wang
Bursera simaruba, ★ 1995*	99	64	57	177	Snider Park, Ft. Lauderdale, Fla.	Kathy Preston & Frank Zickar
Hackberry						
Common, <i>Celtis occidentalis</i> , 2003	248	126	112	402	Wayland, Mich.	Elwood B. Ehrle
Georgia, <i>Celtis tenuifolia</i> , 2005	38	54	28	99	Buncombe Co., N.C.	Ron Lance & Ken Knox
Netleaf, <i>Celtis reticulata</i> , 🛨 1989	180	69	75	268	Catron Co., N. Mex.	Ralph A. Fisher Jr.
Spiny, <i>Celtis pallida</i> , 2000	25	31	23	62	Tucson, Ariz.	Bob and Rita Cote
Hawthorn						Disk and Balmay
Biltmore, <i>Crataegus intricata</i> , ★ 1982	90	23	42	124	Warrenton, Va.	Richard Salzer
Black, <i>Crataegus douglasii</i> , ★ 1993	111	41	57	166	Beacon Rock SP, Wash.	Robert Van Pelt Keith Cook
Blueberry, <i>Crataegus brachyacantha</i> , 🛨 1993	98	36	46	146	Etoile, Nacogdoches Co., Texas	Keith Cook Edith Makra
Broadleaf, <i>Crataegus dilatata</i> , 2003	51	23	34	83	Morton Arboretum. Lisle, III.	Tim Buchanan
Cerro, <i>Crataegus erythropoda</i> , ★ 1997	24	16	21	45	Rolland Moore Park, Fort Collins, Colo.	Richard Salzer
Cockspur, <i>Crataegus crus-galli</i> , 🛨 1981/2001	60	40	48	112	Manassas, Va.	Ken & Brant Steigers
Columbia, <i>Crataegus columbiana</i> , ★ 1992	38	24	23	68	Nez Perce Co., Idaho	R. Salzer & Richard Alan Salzer
Dotted, <i>Crataegus punctata</i> , 2005	77	28	38	115	Smyth Co., Va.	Paul W. Thompson
Downy, <i>Crataegus mollis</i> , ★ 1972	105	52	62	173	Grosse IIe, Mich.	Dan Cooley & Michael Plevich
Fanleaf, <i>Crataegus flabellata</i> , 2001	47	36	35	92	Horrison Co., W. Va.	Edith Makra
Fireberry, <i>Crataegus chrysocarpa</i> , 2003	15	10	20	30	Morton Arboretum, Lisle, III.	Jim Cortese
Fleshy, <i>Crataegus succulenta</i> , 1991	54	32	35	95	University of Tennessee-Knoxville, Tenn. Shenandoah Co., Va.	Richard Salzer
Frosted, <i>Crataegus pruinosa</i> , ★ 1991*	64	30	36	103	Shenandoah Co., Va.	Richard Salzer
Frosted, <i>Crataegus pruinosa</i> , ★ 1991*	63	32	32	103	Gilchrist Co., Fla.	C. Houder, R. Heeke, R. Simons
Green, Crataegus viridis, 2005*	45	41	34	95	Southampton, Va., Fla.	Byron Carmean & Gary Williamson
Green, Crataegus viridis, ★ 2005*	39	44	38	93	Morton Arboretum, Lisle, III.	Edith Makra & Kunso Kim
Kansas, Crataegus coccinioides, 2003	36	16	40	62 85	Hapeville, Fulton Co., Ga.	Jim L. Chance
Littlehip, Crataegus spathulata, 1981	42	35	32	99	Meeman-Shelby SP, Tenn.	David Smith
May, Crataegus aestivalis, 2001	54	34	43	36	Gainesville, Fla.	Robert T. Ing & Daniel B. Ward
Oneflower, Crataegus uniflora, ★ 1992	14	18	16	163	Mount Vernon, Wash.	Ron Brightman
Oneseed, Crataegus monogyna, ★ 1993*△	111	37	58 56	158	Old Saybrook, Conn.	Donald Swan
Oneseed, <i>Crataegus monogyna</i> , 1991*∆	100	44 28	30	89	Covington Co., Miss.	Bryant E. Brown & Jon Wallace
Parsley, Crataegus marshallii, 1997	53		25	49	Pope, III.	Larry Stritch & Scott Grigoroff
Pear, Crataegus calpodendron, ★ 1991	23	20 30	35	97	Union, Parish Co., La.	Stephen Pagans
Riverflat, Crataegus opaca, 2001	58	34	32	104	Oneida, N.Y.	Charles McFadden
Scarlet, Crataegus coccinea, 1980	62 28	25	28	60	Harris Co., Texas	Lynn Lowery
Texas, Crataegus texana, 2003	43	27	26	77	Jeff Davis County, Texas	Thomas R. Mangren
Tracy, Crataegus tracyi, 2003	61	33	44	105	Chattanooga National Cemetery, Tenn.	Bruce Kauffman
Washington, Crataegus phaenopyrum, 1988*		36	38	100	Abingdon, Va.	Richard Salzer
Washington, Crataegus phaenopyrum, ★ 1989*		30	32	100	Abingdon, Va.	Richard Salzer
Washington, <i>Crataegus phaenopyrum</i> , ★ 1989*	38	41	34	87	Nassau Co., Fla.	Christian S. Noble
Yellow, <i>Crataegus flava</i> , 2000	50		٠.			
Hazel California,						
Conylus comuta var. californica, ★ 1993	66	50	42	127	Lincoln Co., Ore.	Tom Morgan
Hazelnut, Corylus americana, 1999	30	27	21	62	Prince Frederick, Md.	John Zyla
Hemlock						
Carolina, Tsuga caroliniana, ★ 2005	86	88	40	184	Montgomery County, Va.	James C. Clark
Eastem, Tsuga canadensis, 1995	202	165	39	377	Great Smoky Mountains NP, Tenn.	W. Blozan, J. Boetsch, M. Davie
Mountain, <i>Tsuga mertensiana</i> , ★ 2001*	277	113	44	401	Alpine Co., Calif.	Allen Miller
Mountain,						
Tsuga mertensiana, ★ 1995/2001*	234	152	41	396	Olympic NP, Wash.	R. Van Pelt, R. Wood, A. Jacobsor
Western, Tsuga heterophylla, 1954/2001*	335	172	65	523 ¹	Olympic NP, Wash.	Preston Macy
Western, Tsuga heterophylla, 1987/2001*	273	237	67	527	Olympic NP, Wash.	Robert Van Pelt
Western, Tsuga heterophylla, 1989/2001*	342	195	47	549	Olympic NP, Wash.	Robert L. Wood & Robert Van Pel
Hercules-club						
Zanthoxylum clava-herculis, ★ 2000	53	68	29	128	Buena Vista Island, Miss.	Bill Brown & Mac Walters
Texas, Zanthoxylum hirsutum, 1999	22	17	24	45	Gillespie Co., Texas	Mark Duff

SPECIES/MEASUREMENT	CIRCUM FERENCE	HEIGH	π spr	EAD P	OTAL LOCATION	NOMINATOR
Hibiscus	102	50	74	171	Boca Raton Garden Club, Boca Raton, Fla.	Evelyn Somerville
Sea, Hibiscus tiliaceus, ★ 1994∆ Shrub althea, Hibiscus syriacus, 2005*∆	102	18	16	32	Jefferson, Ga.	Jimmy Mock
Shrub althea, Hibiscus syriacus, 2005*∆	10	17	16	31	Jefferson, Ga.	Jimmy Mock
Shrub althea, Hibiscus syriacus, 1999*∆	8	19	13	30	Arnold, Md.	Colby B. Rucker
	17	16	9	35	Pulaski, Tenn.	Dwayne Estes
Shrub althea, <i>Hibiscus syriacus</i> , 2001*∆	11	10	5	00	Talaski, form	•
Hickory Bitternut, Carya cordiformis, 1999	182	120	100	327	LaGrange, Fayette Co., Tenn.	William David Smith
Black, Carya texana, 1980	118	127	70	263	Sabine NF, Texas	Mahler, Fant, Baggett, Fritz
	94	150	65	260	Near Gallant, Etowah Co., Ala.	J. Lawrence Brasher
Carolina, Carya ovata var. australis, ★ 1997	178	108	65	302	Upper Mariboro, Md.	Md. Nat'l Capital Park & Plan. Comm.
Mockernut, Carya tomentosa, 2003	132	145	80	297	Lowndes Co., Ala.	Danny Howard
Nutmeg, Carya myristiciformis, ★ 1985	209	90	125	330	St. Simons Island, Ga.	Ken Knox & Sam Hocott
Pignut, Carya glabra var. glabra, 1997				327	Great Smoky Mtns. NP, Tenn.	Bill Korn
Red, Carya glabra var. odorata, 2001	154	153	79	276	Greenville Co., S.C.	Steven D. Smith
Sand, Carya pallida, 2005	132	129	60			Richard & Teresa Ware
Shagbark, Carya ovata var. ovata, 2005*	156	120	100	301	Cedartown, Ga.	Claude J. Moody
Shagbark, Carya ovata var. ovata, 2002*	142	145	56	301	Sumter NF, S.C.	James & Kathleen Suite
Shagbark, Carya ovata var. ovata, 2003*	177	90	116	296	Edgewater, Md.	Charles Wilburn & Rick Crooks
Shellbark, Carya laciniosa, 1994	171	141	80	332	Greenup, Ky.	
Water, Carya aquatica, ★ 1981*	228	101	85	350	Barr's Landing, Lake George, Fla.	Betty Rich
Water, Carya aquatica, 1996*	194	143	46	349	Congaree Swamp NM, S.C.	Robert Jones & Lee Reynaud
Holacantha						W 44 Local
Holacantha emoryi, 2000	38	25	23	69	Organ Pipe Cactus NM, Ariz.	Jim Malusa
Holly						
American, Ilex opaca, 2003	139	68	48	219	Cumberland, Va.	Edward H. Robertson
Carolina, llex ambigua, ★ 1996	18	27	30	53	New Port Richey, Pasco Co., Fla.	D. Robinson & M.W. Kenton *
Honeylocust						
Gleditsia triacanthos, 1999	236	114	93	373	Frederick Co., Md.	Gary Schmidt
Hopbush					0	
Dodonaea viscosa, 1999	14	22	13	39	Key Largo Hammocks Botanical SP, Fla.	Joseph Nemec
Hophornbeam						
Chisos, Ostrya chisosensis, 1983	27	34	24	67	Big Bend NP, Texas	James E. Liles
Eastern, Ostrya virginiana, 1976	115	74	111	217	Grand Traverse Co., Mich.	Arvid Tesaker
Knowlton, Ostrya knowltonii, 2005	62	48	44	121	Coconino NF, Ariz.	D. Thornburg, A. Allgood, H. Untiedt
Hoptree						
California, Ptelea crenulata Greene, ★ 1991	49	22	20	76	Lake Co., Calif.	Frank T. Callahan
Common, Ptelea trifoliata, ★ 1972	33	35	40	78	Ada, Mich.	Paul W. Thompson & C. Rogers
Hornbeam						
American, Carpinus caroliniana, ★ 2001	119	75	68	211	Westchester Co., N.Y.	Robert Messenger
Huajillo						
Pithecellobium pallens, 2001	18	41	27	66	University of Arizona, Tucson, Ariz.	Kathryn Stiles
Huisache						
Acacia farnesiana, 1989	160	29	43	200	Atascosa County Jail, Tex.	Martin Soward
Huisachillo	100	20		200		
	49	31	30	88	Phoenix, Ariz.	Ken & Kathy Morrow
Acacia tortuosa, 2003	43	01	50	00		· n
Hypelate	EA	39	8	95	Key Largo Hammocks Botanical SP, Fla.	Joseph Nemec
Hypelate trifoliata, 1999*	54 46	39	o 25	91	Coral Coast subdivision, Key Largo, Fla.	V. Condon & W. Miller
Hypelate trifoliata, ★ 1994*	46	39	∠5	31	Coral Coast Subulvision, Ney Largo, Ha.	The section of the firms
Incense-cedar	400	105	40	CAF	Marble Mountains Wilderness Calif	J. Herr, D. McHardy, D. Wright
Libocedrus decurrens, ★ 1969	468	165	49	645	Marble Mountains Wilderness, Calif.	5. Holl, D. Mollardy, D. Milght
India-almond	4.0	0.4	- .	04.4	Manuac Co. El-	D. Sinclair & M. Cullen
Terminalia catappa, ★ 1986△	135	61	71	214	Monroe Co., Fla.	D. Silidiali & W. Gullell
Indian-fig					Toron Madisol Control Auto	Kon Porter
Opuntia ficus-indica, 1999∆	36	14	16	54	Tucson Medical Center, Ariz.	Ken Porter
Inkwood						Albant Hatrall O Bas Cortab
Exothea paniculata, ★ 1999	40	44	21	89	Key Largo Hammocks Botanical SP, Fla.	Albert Hetzell & Ron Smith
Jerusalem-thorn						
Parkinsonia aculeata, 2003	78	45	50	136	Arcadia Park, Phoenix, Ariz.	Larry B. Wright & Russell T. Gates
Joewood						
Jacquinia keyensis, ★ 1997	23	13	13	39	Cudjoe Key, Fla.	Dianna Stevenson & Vince Condon
Joshua-tree						
Yucca brevifolia, 1999	168	48	44	227	Stanford Univ., Santa Clara Co., Calif.	Art Cowley

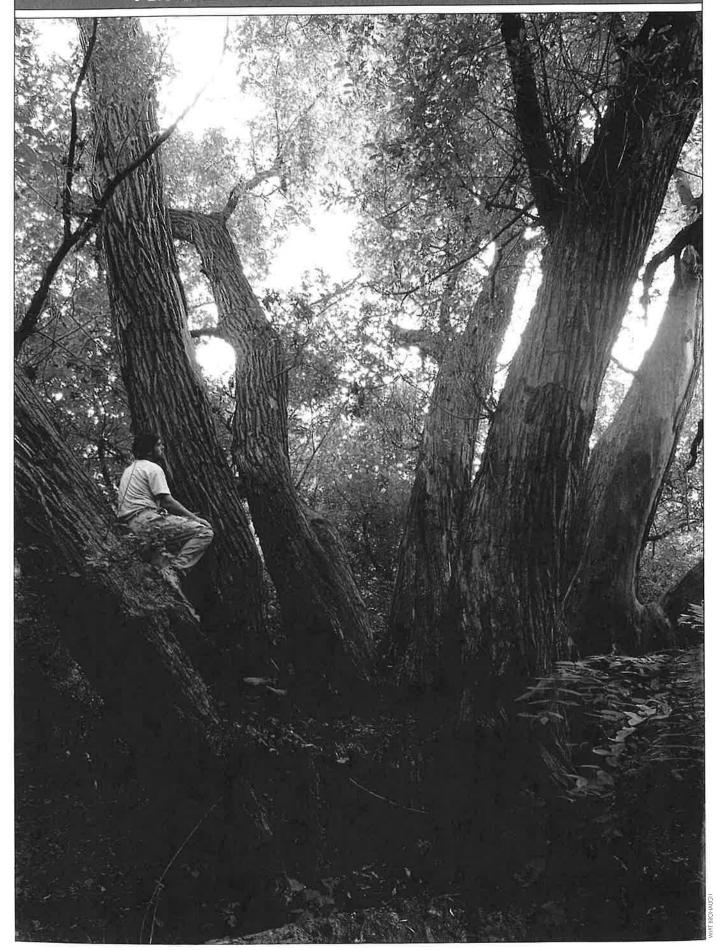
Jujube	N.
The second secon	
Common Zizinhus jujuha 2002A 93 61 51 167 U.S. Capitol grounds, Washington, DC Rod Roy	vse
Common, Ziziphus Jujuba, 2002id	,
Alligator, Juniperus deppeana, 2004	on, D. Ernerson, T. Wright, J. Simich, osh, G. Jones, T. Erwin, D. Mosser
Ashe, Juniperus ashei, 1999 139 41 49 192 New Braunfels, Comal Co., Texas Mark Pe	eterson
	. Callahan
Common, Juniperus communis, ★ 1993 37 46 28 90 Washtenaw Co., Mich. M. Huel	mann & Paul W. Thompson
Drooping, Juniperus flaccida, ★ 1982 102 55 35 166 Big Bend NP, Texas James B	E. Liles
Oneseed, Juniperus monosperma, ★ 1981 168 29 28 204 Jicarilla Mountains, N. Mex. Tom Gu	ıck
Pinchot, Juniperus pinchotii, 1977 138 28 33 174 Alpine, Texas Frank T.	. Callahan
Redberry, Juniperus erythrocarpa, 2005* 106 35 48 153 Cottonwood, Ariz. David 8	& Judy Thornburg
Redberry, Juniperus erythrocarpa, 2001* 119 28 33 155 Organ Pipe Cactus NM, Ariz. John St	tiles
Rocky Mountain, Juniperus scopulorum, ★ 1940 247 40 21 292 Cache NF, Utah R.P. Mc	Laughlin
Utah, Juniperus osteosperma, 1996 260 40 56 314 Crowley Lake, Inyo NF, Calif. R. Witte	ers & K. "Witters" Fritsche
Western, Juniperus occidentalis, 1940 481 78 56 573 Stanislaus NF, Calif. J.R. Hall	11
Kidneywood	
Eysenhardtia polystachya, ★ 1993 49 21 25 76 Coyote Mountain WA, Ariz. Peter G	ierlach
Texas, Eysenhardtia texana, 2003 17 27 14 48 Superior, Ariz. K. Morr	row, K. Stiles, M. Hallen
Larch	
	Stanton
Subalpine, <i>Larix Iyallii</i> , 1993 265 103 75 387 Wenatchee NF, Wash. Stephe	en Arno & Jeff Hart
Western, Larix occidentalis, 1995 273 162 34 444 Lolo NF, Missoula Co., Mont. Helen S	Smith & Micha Krebs
Laurelcherry	
Carolina, <i>Prunus caroliniana</i> , 1996 132 48 46 192 Harris Co., Texas Paul Ki	isel
English, <i>Prunus laurocerasus</i> , 1985∆ 109 33 52 155 Seattle, Wash. Arthur	Lee Jacobson
Leadwood	
Krugiodendron ferreum, ★ 1986 70 37 27 114 Monroe Co., Fla. R. Rose	e
Lebbek	
<i>Albizia lebbeck</i> , ★ 1968△	ryan
Leucaena	
Great, Leucaena pulverulenta, 1994 33 27 26 67 Audubon Sabal Palm Grove Sanctuary, Texas Joe Ide	
Littleleaf, <i>Leucaena retusa</i> , ★ 1986 33 21 26 61 Terrell Co., Texas Frank T	T. Callahan
Lidflower	
Pale, Calyptranthes pallens, ★ 1993 49 40 24 95 Vascaya Museum and Gardens, Miami, Fla. Carol L	_, Lippincott

BLACK WALNUT }

his spreading black walnut, on Sauvie Island, Oregon, has reigned as national champ since its initial measurement in 1991. The national champion Juglans nigra is 130 feet tall with a 278-inch circumference and a 140-foot crown spread. It has a total of 443 points. It is one of 36 national champs for the state of Oregon, which ranks tenth on the list for total number of champs.



WHIT BRONAUGH

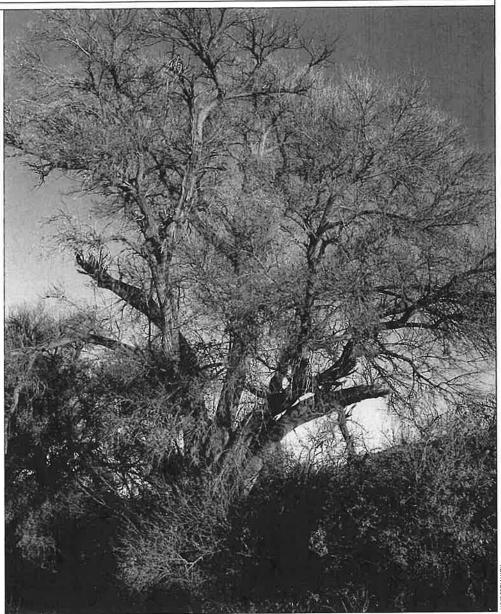


SPECIES/MEASUREMENT	CIRCUMFER ENGE	некант	Sar	EAD E	OTAL LOCATION	NOMINATOR
	::110+					
Lignumvitae		24		70	Ch Manual Stor of the See May Wast Fla	Vincent Condon & Mike Miller
Roughbark, <i>Guaiacum sanctum</i> , ★ 1997	37	31	39 15	78 62	St. Mary's Star of the Sea, Key West, Fla. Alamo, Texas	Terry Fears
Texas, Guaiacum angustifolium, 1974	31	27	15	62	Aldilio, lexas	10117 1 0 0 10
Lime	14	21	15	39	Phoenix, Ariz.	Larry B. Wright & Russell T. Gates
Citrus aurantifolia, 2003∆ Loblolly-bay	14	21	10	00	Thousand, The	, 3
Gordonia lasianthus, ★ 1963	164	95	60	274	Ocala NF, Fla.	Robert Simons & Daniel B. Ward
Locust	101				,	
Black, <i>Robinia pseudoacacia</i> , 1974	312	94	68	423	Livingston Co., N.Y.	G. Weidman
Clammy, <i>Robinia viscosa</i> , 1996	23	23	13	49	Botanical Gardens, Highlands, N.C.	Bill Wykle
New Mexico, <i>Robinia neomexicana</i> , 2005*	84	81	35	174	Coconino NF, Ariz.	Judy Thornburg
New Mexico, Robinia neomexicana, 1997*	92	76	42	179	Tonto NF, Ariz.	Mike Hallen & George Kieren
Lotebush						
Ziziphus obtusifolia, 1999	14	26	20	45	San Pedro River, Pima Co., Ariz.	Tom Butler
Lyonia					2	M. W. C. Davidson
Tree, <i>Lyonia ferruginea</i> , 1998	35	45	30	88	Seminole Ranch Conservation Area, Fla.	Mary Keim & Randy Snyder
Lyontree						A + Cavilar
Lyonothamnus floribundus, 2003	34	46	16	84	Catalina Isl. Conservancy, Los Angeles, Calif.	Art Cowley
Lysiloma				004	Dada Carreto Fla	Robert F. Mulgrew & Susan Formenth
Bahama, <i>Lysiloma latisiliquum</i> , 2003	166	49	62	231	Dade County, Fla.	Ken & Kathy Morrow
Littleleaf, Lysiloma microphyllum, 2005	64	32	41	106	Paradise Valley, Ariz.	Non & Rathy Monon
Madrone	176	40	46	230	East Sawmill Canyon, Coronado NF, Ariz.	Tom Harlan
Arizona, Arbutus arizonica, 1997	176 316	42 88	116	433	Big Sur Land Trust, Carmel Valley, Calif.	Alan Washburn
Pacific, <i>Arbutus menziesii</i> , 2003	175	26	50	214	Lincoln NF, N. Mex.	Mark Rossacker
Texas, Arbutus texana, 1999	175	20	50	217	Ellion W, W. Mox.	
Magnolia Ashe, <i>Magnolia ashei</i> , 2005	62	44	44	117	Montgomery Co., Pa.	Betsy Davis, Scott Wade
Bigleaf, Magnolia macrophylla, 2005	73	84	50	170	Biltmore Estate, Asheville, N.C.	B. Alexander, R. Lance, K. Knox
Cucumbertree, <i>Magnolia acuminata</i> , 2003	288	79	88	389	North Canton, Stark Co., Ohio	Jeremy R. Felland
Frasier, <i>Magnolia fraseri</i> , 1998	118	121	33	247	Great Smoky Mountains NP, Tenn.	Jess & Doug Riddle
Pyramid, <i>Magnolia pyramidata</i> , 1999	46	84	30	138	Greensboro, Gadsden Co., Fla.	Arthur & Meredith Frassand
Southern, <i>Magnolia grandiflora</i> , ★ 1994	268	98	90	389	Jones Co., Miss.	Jeff Yelverton
Sweetbay, Magnolia virginiana, 2002	176	93	71	287	Cumberland Island, Ga.	C. Ruckdeschel, C.R. Shoop, M.N. Hopkins
Umbrella, Magnolia tripetala, 1969	139	59	50	211	Bucks Co., Pa.	John Swartley
Yellow cucumbertree,						
Magnolia acuminata var. subcordata, 1970	155	84	65	256	Chester Co., Pa.	John Swartley & Scott Wade
Mahogany						Money O. Harband S. D. Wood
West Indies, <i>Swietenia mahagoni</i> , ★ 1992	175	79	96	278	St. Mary's Star of the Sea, Key West, Fla.	William S. Hubard & B. Wang
Manchineel						J. Parks, J. Andrew, D. Ward
Hippomane mancinella, ★ 1976	56	46	51	115	Watson Hammock, Fla.	J. Parks, J. Allulew, D. Wald
Mango			0.4	400	IRI- Hamai	Robert & Katherine Van Pelt
Mangilera indica, \star 1993 Δ	346	94	91	463	Hilo, Hawaii	Robert & Ratherine van voor
Mangrove	47	F0	40	116	J.N. "Ding" Darling NWR, Fla.	Amy Bennett & R. Workman
Red, Rhizophora mangle, ★ 1995	47	58	42	110	J.N. Dilig Darling HWK, Fide	,,
Manzanita	110	30	27	156	Chico, Calif.	Jim Brobeck
Big, Arctostaphylos manzanita, 2005	119 79	32	27	118	Alameda Co., Calif.	Paul Furman
Bigberry, Arctostaphylos glauca, 2005 Pringle, Arctostaphylos pringlei, 2003*	36	17	23	59	Coconino NF, Ariz.	David & Judy Thornburg
Pringle, Arctostaphylos pringlei, 2003 Pringle, Arctostaphylos pringlei, 1999*	37	18	14	59	Coconino NF, Ariz.	K. Morrow, M. Hallen, C. Mills
Whiteleaf, Arctostaphylos viscida, 2001	91	24	24	121	Pierpoint Springs, Tulare Co., Calif.	Art Cowley
Maple			-		*	
Bigleaf, Acer macrophyllum, ★ 1995	419	101	90	543	Clatsop Co., Ore.	Maynard Drawson
Black, <i>Acer nigrum</i> , ★ 1976	198	118	127	348	Allegan Co., Mich.	Harold Nett & Paul W. Thompson
Canyon, <i>Acer grandidentatum</i> , 1998	140	80	58	235	Tonto NF, Ariz.	Rick Heffernon
Chalk, Acer leucoderme, 2003*	38	50	42	99	Mount Berry, Ga.	Richard & Teresa Ware
Chalk, Acer leucoderme, 1996*	34	54	50	101	Thompson Mills Forest, Jackson Co., Ga.	Bill Lott & Jimmy Mock
Florida, Acer barbatum, 2003	146	91	75	256	Mount Berry, Ga.	R. & T. Ware, Pat Tomlinson
Mountain, <i>Acer spicatum</i> , ★ 1982*	33	58	31	99	Houghton Co., Mich.	R. Krentzer & Pat Thompson
Mountain, Acer spicatum, 2001*	34	62	20	101	Tray Mountain, Ga.	Jimmy Mock
Norway, Acer platanoides, \star 1985* Δ	230	70	78	320		Heilman, G. Odato, F. Heilman, T. Fry, C. Huber
Norway, <i>Acer platanoides</i> , 2001*∆	212	79	100	316	Kenyon College, Ohio	John Aughanbaugh & Brian P. Riley
Red, <i>Acer rubrum</i> , ★ 1994	276	141	88	439	Great Smoky Mountains NP, Tenn.	Will Blozan

SPECIES/MEASUREMENT	CIRCUM- FERENCE	HEIGHT	- Vi	5370	TOTAL LOCATION	NOMINATOR
Rocky Mountain, <i>Acer glabrum</i> , ★ 1997	107	67	55	188	Guemes Island, Island Co., Wash.	Robert Van Pelt & Ron Brightman
Silver, Acer saccharinum, 2003	347	115	61	477	Newberry, Luce Co., Mich.	Charles Wade & David Mitchell
Striped, <i>Acer pensylvanicum</i> , ★ 1997	44	77	31	129	Trillium Gap Trail, Great Smoky Mountains. NP, Tenn.	Will Blozan
Sugar, Acer saccharum, 2003	223	115	89	360	Lyme, Conn.	Glenn Dreyer
Vine, Acer circinatum, 1989	38	64	37	111	Olympic NP, Wash.	Robert Van Pelt
Mayten						
Florida, <i>Maytenus phyllanthoides</i> , 2003	22	19	26	48	Boyce Thompson Arboretum, Superior, Ariz.	K. Morrow, K. Stiles, M. Hallen
Mesquite						
Honey, Prosopis glandulosa var. glandulosa, 1984	172	55	89	249	Near Leakey, Real Co., Texas	Ronnie W. Pendley
Velvet, Prosopis velutina, 1949	196	46	60	257	Santa Cruz Co., Ariz.	Gilbert Sykes
Wstrn honey, <i>Prosopis glandulosa</i> var. <i>torreyana, 2001</i>	106	34	82	161	Tulare, Calif.	Art Cowley
Mexican-buckeye						
Ungnadia speciosa, 2003	12	22	17	38	Fort Worth, Texas	Steven Houser
Milkbark						
Drypetes diversifolia, ★ 1994	39	46	18	90	Key Largo, Fla.	Vincent P. Condon & William G. Miller
Mountain-ash						
American, <i>Sorbus americana</i> , ★ 1979	55	50	34	114	Middle Point Trail, Monongahela NF, W. Va.	T. Rovello
European, Sorbus aucuparia, 2003∆	121	46	47	179	Seattle, Wash.	R. Van Pelt & A. L. Jacobson
Greene, <i>Sorbus scopulina</i> , ★ 1993	24	14	20	43	Finch Arboretum, Spokane, Wash.	A. L. Jacobson & R. Brightman

VELVET ASH }.

his velvet ash, located in Santa Cruz County, Arizona, is one of the state's three national champion Fraxinus velutina. The other two are in Prescott National Forest and Coconino National Forest. The Santa Cruz County tree, a titleholder since 1996, stands 76 feet tall with a 202-inch circumference and a 88-foot crown spread for a total of 300 points. Arizona is one of the Big Three for Big Trees—only Florida and California have more national champions. One reason for Arizona's success: its unique climate; many of its champs grow nowhere else. Another reason is long-time state coordinator Bob Zahner, who retired in 2005. Read more about Bob's work on behalf of the state's Big Trees in the Earthkeeper section of American Forests magazine (p. 47).



SPECIES/MEASUREMENT 0	IRCUMFER- ENGE	HEIGHT	318	EAR P	OTAL LOCATION DINTS	NOMINATOR
2 / 11 / 1000	F7	59	32	123	Mackinac Co., Mich.	William J. Mahalak
Showy, Sorbus decora, ★ 1968	57 19	58 50	32 18	123 74	Gardiner, Ore.	Lance Morgan
Sitka, Sorbus sitchensis, ★ 1981	19	50	10	14	dardiner, orc.	
Mountain-holly	13	20	10	36	Oakland Co., Mich.	Paul W. Thompson
Nemopanthus collinus, ★ 1976	13	20	10	50	ountain out, mone	
Mountain-laurel	56	20	19	81	Suches, Fannin Co., Ga.	George C. Hoffman
Kalmia latifolia, 1999*	48	25	18	78	Great Smoky Mtns. NP, Tenn.	Will Blozan
Kalmia latifolia, 2003* Mulberry	40	25	10	10	arout sinony meter any comme	
Black, Morus nigra, 1999∆	252	78	76	349	Westminster, Carroll Co., Md.	Beth Sanders
Red, Morus rubra, 1999	301	52	52	366	Fayette Co., Tenn.	David Smith
Texas, Morus microphylla, 2001	100	30	48	142	Presidio Co., Texas	Oscar Mestas
White, Morus alba, 2002Δ	197	46	59	258	Woodstock Co., Va.	William R. Warren
Mullein nightshade		10	•		,	
Potato-tree, Solanum erianthum, 2003	13	16	17	33	Hidalgo County, Texas	William MacWhorter
Myrtle-of-the-river						
Calyptranthes zuzygium, ★ 1999	9	22	4	32	Key Largo Hammocks Botanical SP, Fla.	Joseph Nemec
Nannyberry	_					
Viburnum lentago, ★ 1976	34	50	40	94	Oakland Co., Mich.	Paul W. Thompson
Nolina						
Bigelow, Nolina bigelovii, ★ 1997	125	13	8	140	Cabeza Prieta NWR, Yuma Co., Ariz.	Tom & Anita Harlan
Oak						
Ajo, Quercus turbinella var. ajoensis, 1993	82	35	40	127	Organ Pipe Cactus NM, Ariz.	R. & G. Zahner, K. Morrow
Arizona white, Quercus arizonica, 2003	210	42	65	268	Santa Cruz Co., Ariz.	David & Paul Thornburg
Arkansas, Quercus arkansana, 1997	150	100	104	276	Covington Co., Miss.	Bryant E. Brown & Jon Wallace
Bear, Quercus ilicifolia, 1985	49	41	34	99	Shenandoah NP, Va.	Richard Salzer
Bigelow, Quercus durandii var. breviloba, 1999	113	41	52	167	Travis Co., Texas	Mark Baker
Black, Quercus velutina, 1989	322	86	105	434	East Granby, Conn.	Edward A. Richardson
Blackjack, Quercus marilandica, 1996	144	94	65	254	Byron Methodist Church, Peach Co., Ga.	David Preston
Blue, Quercus douglasii, 2001	276	112	83	409	Tulare Co., Calif.	Art Cowley & Dan Busby
Bluejack, Quercus incana, 2003*	83	68	45	162	Mixon, Cherokee Co., Texas	Gregory Dean Stockton
Bluejack, Quercus incana, 2003*	87	61	45	159	Mineola, Wood Co., Texas	William Godwin
Bluejack, Quercus incana, ★ 2001*	88	56	65	160	Pasco Co., Fla.	Michael W. Kenton
Bur, Quercus macrocarpa, ★ 1980	322	96	103	444	Paris, Ky.	Owen H. Robinson
California black, Quercus kelloggii, ★ 1972	338	124	115	491	Siskiyou NF, Ore.	Ralph King
Canyon live, Quercus chrysolepis, 2001	345	69	121	444	Tulare Co., Calif.	Mike Cobb & Art Cowley
Chapman, Quercus chapmanii, 1963	83	51	57	148	Ocala NF, Fla.	Robert W. Simons
Cherrybark, Quercus falcata var. pagodifolia, 2003*	332	123	122	486	Tipton Co., Tenn.	David Smith
Cherrybark, Quercus falcata var. pagodifolia, ★ 1991*	324	124	136	482	Sussex Co., Va.	Byron Carmean & Gary Williamson
Chestnut, Quercus prinus, 2003	272	99	98	396	Arnold, Md.	Tom Mayer & Jeanine Ove
Chinkapin, Quercus muehlenbergii, 2001	289	80	107	396	Marietta, Ohio	Jim Noe & Marilyn Ortt
Chisos, Quercus graciliformis, 1982	65	34	40	109	Big Bend NP, Texas	Oscar Mestas
Coast live, Quercus agrifolia, 1999	338	58	75	415	Julian, Calif.	Clint Powell
Darlington, Quercus hemisphaerica, ★ 2002*	226	99	134	359	Alachua, Fla.	Gordon Ward & Daniel Ward
Darlington, Quercus hemisphaerica, 2001*	216	108	119	354	Follow-Me Golf Course, Ft. Benning, Ga.	Daniel Milburn & Scott Long
Delta post, Quercus stellata var. paludosa, 2005	192	115	97	331	near Florence, Ga.	Joel Robertson
Dunn, Quercus dunnii, 1995	95	39	36	143	Yavapai Co., Ariz.	Lora Morrow Maraball & Soott Adams
Durand, Quercus durandii var. durandii, 2003	76	70	35	155	Oakey Woods WMA, Ga.	Marshall & Scott Adams G. Sternberg, J. Evertson, J. Locklear
Dwarf chinkapin, Quercus prinoides, 2001	41	25	22	72	Salem, Neb.	M. Melendrez, G. Sternberg, T. Buchanan
Emory, Quercus emoryi, 2001	222	81	72	321	Catron Co., N. Mex.	M. Melendrez, G. Sternberg, T. Buchanan Clinton S. Powell
Engelmann, Quercus engelmannii, 2003*	214	27	43	252	Julian, San Diego Co., Calif.	Woodbridge Metcalf
Engelmann, Quercus engelmannii,1951*	144	84	106	255	Pasadena, Calif.	Robert Van Pelt
English, Quercus robur, 1993∆	209	108	103	343	State Capitol, Olympia, Wash.	S. Poppenberger, H. Untiedt, D. Thornburg
Gambel _{த்} Quercus gambelii, 2003	219	106	64	341	Coconino NF, Ariz.	Lucia Duncan-Harrison
Georgia, Quercus georgiana, 1996	73	75	63	164	Athens, Ga.	B. Simpson, J.J. McEntire, J.B. Norris
Graves, Quercus gravesii, ★ 1976	145	51	41	206	Amistad Recreation Area, near Del Rio, Texas	G. Sternberg, T. Buchanan, M. Melendre
Gray, Quercus grisea, 2001	237	55	37	301	Coronado NF, N. Mex.	C. Murrell Thompson
Havard, Quercus havardii, ★ 1986	40	30	23	76	Plains, Yoakum Co., Texas	Darold Mac Dannald
Interior live, Quercus wislizeni, 1982	252	51	73	321	Near Stockton, Calif.	David Vaughn
Lacey, Quercus glaucoides, 1989	114	53	74	186	Magic Springs Ranch, Blanco Co., Texas	R. & E. Lehman & Byron Carmean
Laurel, Quercus laurifolia, ★ 1987*	257	82	106	366	Chesapeake, Va.	Geoffrey A. Cummings
Laurel, Quercus laurifolia, ★ 1987*	258	80	114	367	Okaloosa Co., Fla.	John deMarche & La. Forestry Assoc.
Live, Quercus virginiana var. virginiana, 1976*	439	55	132	527	Near Lewisburg, La.	551111 doina.0110 d. == 0100017

SPECIES/MEASUREMENT	CIRCULI- FERENCE	HEGHT	98	EAD	TOTAL LOCATION POINTS	NOMINATOR
Live, <i>Quercus virginiana</i> var. <i>virginiana</i> , 2001*	411	77	140	523	Ware Co., Ga.	Jimmy Mock
Mexican blue, <i>Quercus oblongifolia</i> , 1999	120	65	69	202	Hidalgo Co., N. Mex.	Samuel Lamb
Mohr, <i>Quercus mohriana</i> , 2001	37	18	20	60	Guadalupe Mountains NP, Texas	T. Buchanan, M. Melendrez, G. Sternberg
Myrtle, <i>Quercus myrtifolia</i> , 2005	27	37	16	68	St. Marys, Ga.	Jimmy Mock
Netleaf, <i>Quercus rugosa</i> , 1998	90	47	36	146	Coronado NF, Ariz.	Robert Zahner & James W. Smith
Northern red, <i>Quercus rubra</i> , 2001	405	80	102	511	Monroe Co., N.Y.	Dan Dinero
Nuttall, <i>Quercus nuttallii</i> , 1986/2001	288	113	81	422	Vernon, La.	William E. Burns
Oglethorpe, <i>Quercus oglethorpensis</i> , 1968	120	79	82	220	Near Lexington, Ga.	Samuel Jones
Oregon white,						
<i>Quercus garryana</i> , ★ 1970/2000	272	98	72	388	Douglas Co., Ore.	Allen Silveus
Overcup, <i>Quercus lyrata</i> , 2005*	218	122	113	368	Congaree NP., S.C.	John E. Cely
Overcup, <i>Quercus lyrata</i> , 2005*	209	136	104	371	Congaree NP., S.C.	Robert H. Jones, Lee Reynaud
Pin, <i>Quercus palustris</i> , 2003*	238	129	121	397	Davies Co., Ky.	Scott Eckstein
Pin, <i>Quercus palustris</i> , 2001*	240	134	88	396	Middlesboro County Club, Middlesboro, Ky.	M. Harp, L. Johnson, D. Carmical
Post, <i>Quercus stellata</i> var. <i>stellata</i> , ★ 1996	237	84	88	343	Jefferson, Ga.	Jimmy Mock
Sand live, <i>Quercus virginiana</i> var. <i>geminata</i> , ★ 1985	189	81	106	297	Gainesville, Fla.	Robert W. Simons
Sand post, <i>Quercus stellata</i> var. <i>margaretta</i> , ★ 1997	157	87	92	267	Marianna, Fla.	Robert T. Ing & Daniel B. Ward
Sandpaper, <i>Quercus pungens</i> var. <i>pungens,</i> 2003	13	18	29	38	Coronado NF, Ariz.	Ken Morrow
Scarlet, Quercus coccinea, 2005	189	114	179	348	Middlesboro, Ky.	Lem Johnson, Brandon Howard
Shingle, <i>Quercus imbricaria</i> , 1989	219	105	62	340	Cincinnati, Ohio	A. P. Newman & R. Bernhard
Shumard, <i>Quercus shumardii</i> var. <i>shumardii</i> , 2002	332	96	96	452	Anna, III.	Larry Mahan
Silverleaf, <i>Quercus hypoleucoides</i> , 2001	158	85	52	256	Coronado NF, Ariz.	Ken Porter & Mike Hallen
Southern red, <i>Quercus falcata</i> var. <i>falcata,</i> 1996	312	150	156	501	Thomaston, Upson Co., Ga.	C. Bowie, J.A. Osbolt, G. Hill
Swamp chestnut, <i>Quercus michauxii</i> , 2003	266	140	115	435	Big Oak Tree SP, Mo.	Bruce Palmer
Swamp white, <i>Quercus bicolor</i> , 2001	300	68	49	380	Highland Co., Va.	P. &G. Williamson, B. Carmean
Texas, <i>Quercus shumardii</i> var. <i>texana</i> , 2003	198	70	82	289	Fort Worth, Tarrant Co., Texas	Matthew & Michael Blevins
Texas live, <i>Quercus virginiana</i> var. <i>fusiformis</i> , 2002	357	48	80	425	Graham, Young Co., Texas	Jay Burkett
Toumey, Quercus toumeyi, 2005	64	24	31	96	Santa Cruz Co., Ariza	Ken & Kathy Morrow
Turbinella, <i>Quercus turbinella var. turbinella</i> , 1993	81	51	48	144	Spring Mountain Ranch SP, Nev	John Jones
Valley, <i>Quercus lobata</i> , ★ 1979	348	163	99	536	South of Covelo, Calif.	Willis Linn Jepsen
Vasey, <i>Quercus pungens</i> var. <i>vaseyana</i> , 1982*	47	50	34	106	Big Bend NP, Texas	James E. Liles
Vasey, <i>Quercus pungens</i> var. <i>vaseyana</i> , ★ 1976*	61	39	32	108	Del Rio, Texas	B. Simpson, J.J. McEntire, J.B. Norris
Water, <i>Quercus nigra,</i> ★ 1996*	278	120	111	426	Roseland Plantation, Concordia Parish, La.	Kevin Bridgewater
Water, <i>Quercus nigra</i> , 2001*	286	118	108	431	Jones Co., Miss.	Herman Smith
White, <i>Quercus alba</i> , 2004*	312	86	116	427	Lawrenceville, Va.	Frank E. McKeever
Willow, <i>Quercus phellos</i> , 2003	305	112	136	451	Eastville, Northhampton Co, Va.	Ralph Dodd & Jack Wilkins
Oleander						
Nerium oleander, 2003∆*	55	28	25	89	Sun City, Ariz.	Larry B. Wright & Russell T. Gates
<i>Nerium oleande</i> r, 1997∆*	51	32	36	92	Exeter, Calif.	Art Cowley
Orange						A + O - valous
Citrus sinensis, 2001∆	61	34	31	103	Kern Co., Calif.	Art Cowley
Sour, <i>Citrus aurantium</i> , 2004∆	44	28	24	78	Tucson, Ariz.	Judy Nantell, Chris Maloney
Osage-orange					01 1-11-0-11	Dod Hill Chrisa
Maclura pomifera, 1969	326	60	64	402	Charlotte Co., Va.	Red Hill Shrine
Oysterwood						Markard Oulland Provid Cinglein
Gymnanthes lucida, 1998	15	24	11	41	Lignumvitae Key Botanical SP, Fla.	Michael Cullen & David Sinclair
Palmetto						Louis N. Livingston
Cabbage, Sabal palmetto, ★ 1999	69	60	14	133	Lafayette Co., Fla.	Jerry N. Livingston
Dwarf, Sabal minor, 2003*	43	28	13	74	Brazoria, Texas	Mickey Merritt
Dwarf, <i>Sabal minor</i> , 2003*	42	24	12	69	Brazoria, Texas	Edward C. Fritz
Mexican, Sabal mexicana, ★ 1989*	61	50	15	115	Weslaco, Texas	Joe Ideker & Bill McWhorter
Mexican, Sabal mexicana, ★ 1995*	61	45	20	111	San Benito, Texas	Sue Griffin
Paloverde					Hudas Maring Co. Ari-	Mike Hallen & Chuck Hookaday
Blue, Cercidium floridum, 2003	87	42	62	145	Hyder, Maricopa Co., Ariz.	Mike Hallen & Chuck Hockaday
Texas, Cercidium texanum, ★ 1995	37	34	34	80	Las Palomas WMA, Texas	Joe Ideker
Yellow, Cercidium microphyllum, 2003	43	29	43	83	Mobile, Maricopa Co., Ariz.	Mike Hallen
Papaya					Hamastand Ci-	D Workman
Carica papaya, ★ 1973∆	27	17	11	47	Homestead, Fla.	R. Workman
Paper-mulberry	0:-	07		05.	Halifan M.C.	Cid Chaarin
Boussonetia papyrifera, 2005∆	217	27	41	254	Halifax, N.C.	Sid Shearin
Paradise-tree						
Simarouba glauca, ★ 1994	109	63	59	187	Fort Lauderdale, Fla.	A. Buckley, Hendrickson, R. Trickel

SPECIES/ MEASUREMENT	CIRCUMFER ENCE	HEIGHT	SPE	(EAD)	TOTAL LOCATION	NOMINATOR
Parasoltree						
Chinese, Firmiana simplex, 1999Δ	141	47	36	197	San Diego Co., Calif.	Art Cowley
Paulownia						
Royal, Paulownia tomentosa, 1989∆	285	57	66	359	Reitz Memorial High School, Evansville, Ind.	Scott C. Wagner & Mary Ellen Jones
Paurotis-palm			V.			
Accelorrhaphe wrightii, * 1989*	13	32	4	46	West Palm Beach, Fla.	Michael Zimmerman
Acoelorrhaphe wrightii, ★ 1995*	10	34	4	45	Fairchild Tropical Garden, Miami, Fla.	Don Evans & Daniel B. Ward
Pawpaw						
Common, Asimina triloba, 2004	62	62	43	135	Ann Arbor, Mich.	Margaret Leary
smallflower, Asimina parviflora, ★ 1980	21	24	17	49	Lake Jem Co. Park, Fla.	H. Terrell Davis
Peach						
- Prunus persica, ★ 1986*Δ	72	18	32	98	Bealton, Va.	Richard Salzer
Prunus persica, ★ 1995*△	50	37	25	93	Lusby, Md.	John Zyla
Pear						
Common, Pyrus communis, ★ 1991∆	174	59	56	247	Waitsburg, Wash.	R. Van Pelt, S. Muse, M. Drawson
Pecan						
Carya illinoensis, 2000	267	136	111	431	Cocke Co., Tenn.	W.K. Remine
Peppertree						
Schinus molle, 1969∆	367	57	72	442	San Juan Capistrano, Calif	Ray Wheeler
Persimmon						
Common, <i>Diospyros virginiana</i> , 2002	142	82	58	239	Portsmouth, Ohio	Brian P. Riley
ēxas, Diospyros texana, ★ 1965	68	26	32	102	Uvalde Co., Texas	William Graves
Pigeon-plum				40		
Coccoloba diversifolia, ★ 1965	84	49	22	139	Simpson Park, Miami, Fla.	Harold Nett

A Watchful Eye Brings Rewards

oren Ross' flirtation with the now-champion digger pine began in 1972 when he was in forestry school at Humboldt State University in California. When he spotted the tree, located in Kern County, California, he mentioned it to his professor, who introduced $\mathop{\text{\rm him}}\nolimits$ to AMERICAN FORESTS' Social Registry of Big Trees (now the National Register of Big Trees).

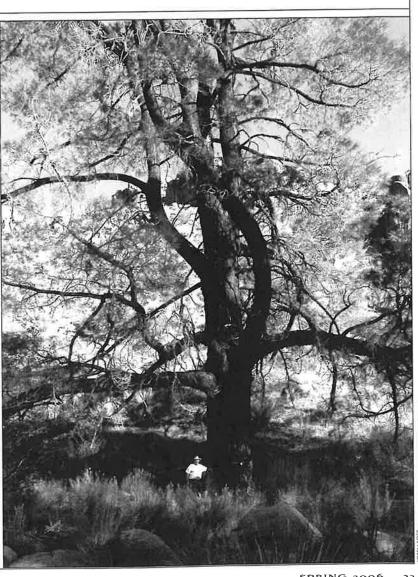
"Unfortunately," Ross recalls, "my tree was topped by a smaller-diameter but much taller tree. This continued to be the case for the next 25 years."

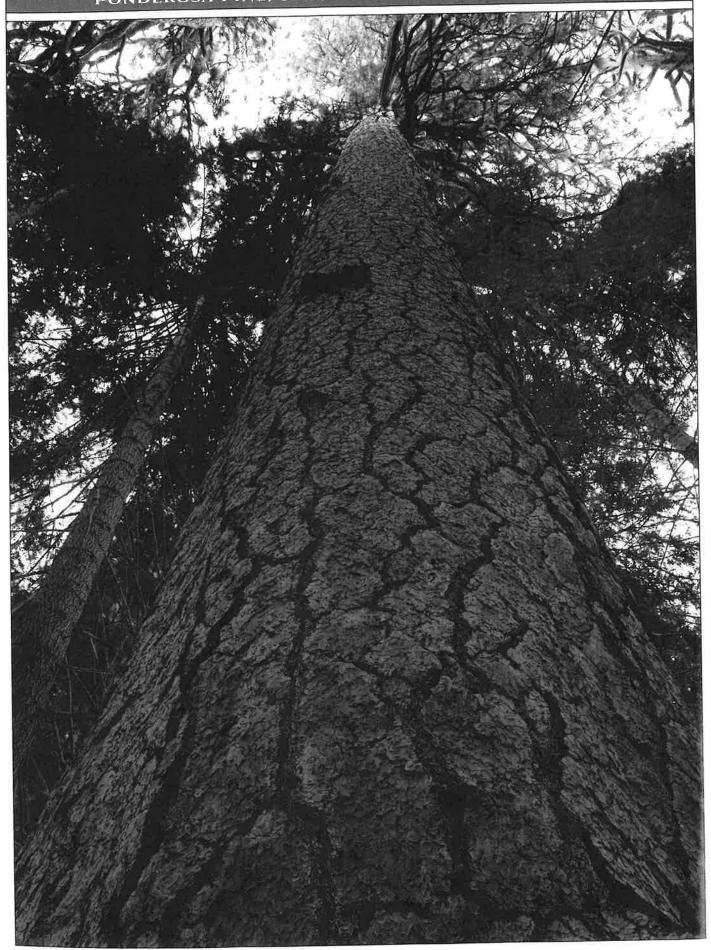
Ross' 348-point digger pine—126 feet tall with a 200-inch circumference and an 86-foot crown spread—was one of five trees he nominated for the 2006-2007 Register. Three of those are new champions, including the digger pine, a 201-point piute cypress in Sequoia National Forest, and a 146-point curlleaf cercocarpus, also in Sequoia National Forest.

Over the years, Ross says he spent a lot of time in the woods-"working for the Forest Service and, later, hiking during my days off from my job as a fire captain with a local agency fire department."

Along the way, he made notes about exceptional trees he came across. One nolina he saw, for example, he says was "much bigger than anything I had ever seen, I just never thought of it as a tree." He discovered the current national champ curlleaf cercocarpus "last summer, on the last large wildland fire of my career."

"I would like to think that my retirement will have me out looking for more big trees, but the truth is my 'to do' list is $% \left(1\right) =\left(1\right) \left(1\right) \left($ quite long," Ross says from his home in Lake Isabella, California. "But my experience from the last 30 years shows that all you have to do is be aware when you are out doing your thing and you never know what might pop up."





SPECIES/MEASUREMENT	CIRCUMFER ENCE	нетент	SPREAD	P	OTAL LOCATION	NOMINATOR:
•						
Pinckneya	10	21	7 3	33	Marion Co., Fla.	Robert T. Ing & Daniel B. Ward
Pinckneya pubens, ★ 2005*	10	18		30	Nahunta, Ga.	Jimmy Mock & Richard Gill
Pinckneya pubens, 1991* Pine	10	10	0 .	50	Manufica, da.	3,
Apache, Pinus engelmannii, 1998*	127	108	44 24	46	Mt. Wrightson WA, Coronado NF, Ariz.	R. & G. Zahner & K. Morrow
Apache, Pinus engelmannii, 1999*	121	112		43	Mt. Wrightson WA, Coronado NF, Ariz.	Ken Morrow & Mike Hallen
Arizona, <i>Pinus ponderosa</i> var. <i>arizonica</i> , 1998	153	127		94	Santa Catalina Mtns., Coronado NF, Ariz.	R. & G. Zahner & K. Porter
Austrian, <i>Pinus nigra</i> , 1995∆	128	95		37	Lincoln Park, Tacoma, Wash.	Robert Van Pelt
Bishop, <i>Pinus muricata</i> , 2005	198	72		92	Oakland, Calif.	Art Cowley
Bolander's, <i>Pinus contorta</i> var. <i>bolanderi</i> , ★ 1983		76		39	Jughandle State Reserve, Calif.	Robert E. Sholars
Border pinyon, <i>Pinus discolor</i> , 2005	61	46	28 1:	14	Chiricahua NM, Ariz.	John Titus
Chihuahua, Pinus leiophylla var. chihuahuana, 1998	121	87	34 2	17	White Mountain Apache Reservation, Ariz.	Dave Borland & Lucky Holden
Colorado bristlecone, <i>Pinus aristata</i> , ★ 1985*	132	76	39 2:	18	Carson NF, N. Mex.	S. Edmonds, J. Crellin, W. Hurst
Colorado bristlecone, <i>Pinus aristata</i> , ★ 1986*	138	72	33 2:	18	Colfax Co., N. Mex.	Joel B. Cotton
Coulter, <i>Pinus coulteri</i> , 2001	152	141	72 3	11	San Diego Co., Calif.	Art Cowley & Clint Powell
Digger, <i>Pinus sabiniana</i> , 2005	200	126	86 34	48	Kelso Creek, Kern Co., Calif.	Loren Ross
Eastern white, <i>Pinus strobu</i> s, 2003	229	125	72 37	72	Morrill, Maine	Elsie Bowen
Foxtail, <i>Pinus balfouriana</i> , ★ 1982	316	76	34 40	01	Trinity NF, Calif.	Stanley G. & Richard S. Moore
Great Basin bristlecone, <i>Pinus longaeva</i> , 2003	455	52	44 5:	18	Humboldt-Toiyabe NF, Nev.	Robert Van Pelt
Jack, <i>Pinus banksiana</i> , ★ 1980	116	56	61 18	87	Lake Bronson SP, Minn.	Steve Morgan & Rick Olson
Jeffrey, <i>Pinus jeffreyi</i> , 2005	306	192	90 52	21	Dardanelle, Stanislaus NF, Wash.	Robert Van Pelt
Knobcone, <i>Pinus attenuata</i> , ★ 1976	135	117	66 26	69	Shasta Co., Calif.	Paul Caster
Limber, <i>Pinus flexilis</i> , ★ 1968	275	58	46 34	45	Uinta NF, Utah	T.A. Walker, W. Crawford, T. Dietz
Loblolly, <i>Pinus taeda</i> , 2001	176	167	71 36	61	Congaree Swamp NM, S.C.	Doug Riddle, Jess Riddle, Will Blozan
Lodgepole, <i>Pinus contorta</i> var. <i>latifolia</i> , 1980	132	155	32 29	95	Valley Co., Idaho	S. Keaffer & T. McManus
Longleaf, <i>Pinus palustris</i> , 2005*	145	106		60	Montgomery Co., N.C.	Johnny Mabe
Longleaf, <i>Pinus palustris</i> , 1996*	127	120		64	Macon, Bibb Co., Ga.	Terrell L. Brooks
Mexican pinyon, <i>Pinus cembroides</i> , 1982*	74	49		32	Big Bend NP, Texas	Robert Edmondson
Mexican pinyon, <i>Pinus cembroides</i> , 1982*	67	57		34	Big Bend NP, Texas	James E. Liles
Monterey, <i>Pinus radiata</i> , 2003	334			28	Carmel, Calif.	Alan Washburn Frank T. Callahan
Parry pinyon, <i>Pinus quadrifolia</i> , ★ 1976	86	53		50	Riverside Co., Calif.	Joseph P. Szimhart
Pinyon (two-leaf), <i>Pinus edulis</i> , ★ 1982	213	69		95	Cuba, N.Mex.	K, Jackson, P. Todd, J. Mock
Pitch, Pinus rigida, 1998*	146	114		78	White Co., Helen, Ga.	William Weiler
Pitch, Pinus rigida, 1999*	170	99		30 64	Bradford, Merrimack Co., N.H. Patterson, Ga.	Jimmy Mock & Chris Mock
Pond, <i>Pinus serotina</i> , 2001	119	132 227		37	Plumas Co., Calif.	John Bell & Philip Intorf
Ponderosa, <i>Pinus ponderosa</i> var. <i>ponderosa</i> , ★ 1974*		223		31 32	Trinity Alps Wilderness, Shasta-Trinity NF, Calif.	Robert Van Pelt & Al Groncki
Ponderosa, <i>Pinus ponderosa</i> var. <i>ponderosa,</i> ★ 1997* Red, <i>Pinus resinosa</i> , ★ 1968*	124	124		63	Watersmeet, Mich.	E.B. Ehrle, R. Zelinski, P. Thompson
Red, <i>Pinus resinosa</i> , 19 60* Red, <i>Pinus resinosa</i> , 1967*	120	126		58	Clearwater Co., Itasca SP, Minn.	Sidney Frissell & Stephen McCool
Rocky Mtn. ponderosa,	120	120	40 L	00	order water bos, reason or, minute	
Pinus ponderosa var. scopulorum, 1997	246	194	64 45	56	Lolo NF, Mont.	Donald M. Wood & Don Campbell
Sand, <i>Pinus clausa</i> , ★ 1997	97	91		99	Welaka SF, Fla.	Ned D. Neenan
Scotch, <i>Pinus sylvestris</i> , 2005∆	174	53		45	Beatrice, Neb.	Christine Meyer
Shore, <i>Pinus contorta</i> var. <i>contorta</i> , ★ 1993	138	101		48	Bryant, Snohomish Co., Wash.	Ron Brightman
Shortleaf, <i>Pinus echinata</i> , 2003*	123	105		45	Demorest, Habersham Co., Ga.	Jimmy Mock
Shortleaf, <i>Pinus echinata</i> , 1980*	135	87		40	Myrtle, Union Co., Miss.	Glenn H. Coffey
Sierra lodgepole, <i>Pinus contorta</i> var. <i>murrayana</i> , 1963°		116		74	San Bernadino NF, Calif.	Miles Gulik
Sierra lodgeple, <i>Pinus contorta</i> var. <i>murrayana</i> , ★1985°		124	42 3	73	Stanislaus NF, Calif.	Mr. & Mrs. C. Grinstead
Singleleaf pinyon, <i>Pinus monophylla</i> , 2005	167	50	52 23	30	Washoe Co., Nev.	Dian Mercier, Harley Moe
Slash, <i>Pinus elliottii</i> var. <i>elliottii</i> , 2001*	143	129	59 28	87	Alachua Co., Fla.	R. W. Simons & M. Meisenburg
Slash, <i>Pinus elliottii</i> var. <i>elliottii</i> , ★ 1985*	130	138	55 28	82	Jacksonville, Fla.	James R. Karels
South Florida slash, <i>Pinus elliottii</i> var. <i>densa,</i> 2005*	127	74	55 2	15	Sarasota, Fla.	Jono Miller, Julie Morris
South Florida slash, <i>Pinus elliottii</i> var. <i>densa</i> , 2005*	130	69	69 2	16	Dunedin, Fla.	Michael Kettles
South Florida slash, Pinus elliottii var. densa, 2005*	122	76	74 2	16	Sarasota, Fla.	Jono Miller
Southwestern white, <i>Pinus strobiformis</i> , ★ 1974	185	111	62 3	12	Lincoln NF, N. Mex.	Thomas Dix
Spruce, <i>Pinus glabra</i> , 2003	146	156	70 3	19	Bienville NF, Miss.	Grace & Art Bradshaw
Sugar, <i>Pinus lambertiana</i> , ★ 1994	435	209	59 6	59	Dorrington, Calif.	Herbert E. McLean & Gary Whitson
Table mountain, <i>Pinus pungens</i> , 1988	104	120	41 23	34	Stokes Co., N.C.	M. Pell, S. Williams, K. Knox, S. Knox
Torrey, <i>Pinus torreyana</i> , ★ 1973	245	126	130 4	04	Carpenteria, Calif.	Edward Scanlon
Virginia, <i>Pinus virginiana</i> , 2005	112	103	56 23	29	Shepherdsville, Ky.	Lisa Armstrong
Washoe, <i>Pinus washoensis</i> , ★ 1997	243	145	64 4	04	South Warner Wilderness, Modoc Co., Calif.	H.F. Bowman Henry Carsten & Maynard Drawson
Western white, Pinus monticola, ★ 1984	394	151	52 5	58	El Dorado NF, Calif.	nemy caracon a may have a serious

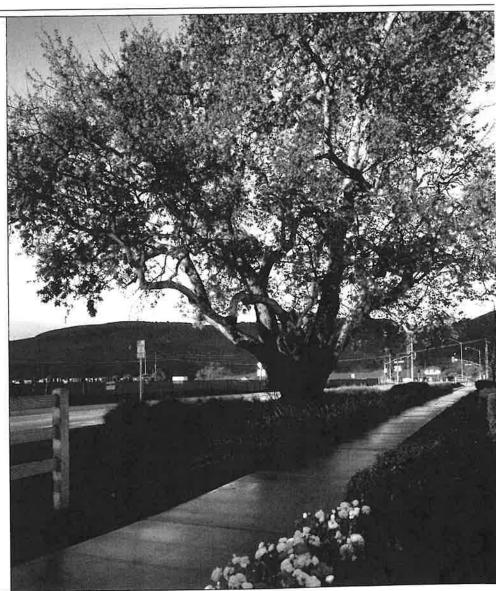
Prisorial Report Michael Report	SPECIES/MEASUREMENT	CIRCUM FERENCE	HEIGHT	i di	EAD' p	TOTAL LOCATION	NOMINATOR:
Pis Cache Distance Market Distance	Whitebark, <i>Pinus albicaulis</i> , ★ 1980	331	69	47	412	Sawtooth NRA, Idaho	Allan W. Ashton & David O. Lee
Pistach Pist						-	Data and M. Chaire
Plum Alleg Pern, Puruse alleghandenson, 1991 37 37 37 37 37 37 37 3	Pisonia rotundata, 1994	38	28	14	69	Monroe Co., Fla.	Robert W. Enrig
Teas Notice Accessed Acce	Pistache				24	L. D. Dair Weiter Center Landby Toyas	Mark Duff
Alleghery, Prumos alleghamensis, v. 1991		32	21	31	61	Judge Roy Bean Visitor Center, Languy, Texas	Mark Dull
Alleghary, Private diagnosphilarity, 1991 52 43 3 48 30 36 American, Private America		27	27	24	90	lofforcan NE Va	Richard Salzer
Alleghers, Provision Singligation (1962) 39 48 36 86 Gaddelen Co., Fa. Rismora, I. Bohren, A. Groban, R. Gorden, P. Go							
Chicasaw, Propuse agingsigning, 2000 139 86 48 228 Cataop, St. Ort. William Schappert Chicasaw, Propuse agingsigning, 2001 139 47 48 189 Portland, Ort. Propulse Reynolds Spring, Propuse Antonian, 2002 23 24 56 Weard, Co. Ort. Propulse Reynolds Brain, P. Rilby Regnonds Brain, P. Rilby Regnonds				_			R. Simons, J. Buckner, A. Gholson, R. Godfrey
Street Property	1						William Schoppert
Carden, Pentus dementation, \$1930. 130 47 48 189 Portsand, Orn. Phyllis Regnoids Physician, Paras Architalna, \$2005 30 24 58 60 Clerront Co., Ohio Brian R. Riley Randam, Paras Architalna, \$2005 25 28 26 60 Clerront Co., Ohio Brian R. Riley Randam, Paras Architalna, \$2005 25 25 25 26 60 Clerront Co., Ohio Brian R. Riley Phyliother, Paras Architalna, \$2005 25 25 25 26 60 Clerront Co., Ohio Brian R. Riley Phyliother, Paras Architalna, \$2005 25 25 25 26 60 Clerront Co., Ohio Brian R. Riley Phyliother, Paras Architalna, \$2005 25 25 25 25 25 25 25						•	R. Ing, D. Ward, R. Simons
Institution, Promose productions, 2004 30 20 24 56 56 56 57 57 58 58 60 60 60 60 60 60 60 6				48	189	Portland, Ore.	Phyllis Reynolds
		30	20	24	56	Newark, Ohio	Brian P. Riley
		25	28	26	60	Clermont Co., Ohio	-
Merican, Pumus mericanan, 1992/2000/2004 68 17 18 90 Hood Co., Texas Frank L. Saffarrana Jr.	The state of the s	42	28	19	75	Klamath Falls, Ore.	
Wildgoose, Primes Pursonaina, 2003 25 36 35 70 Dallas County, Texas Stove Houser		68	17	18	90	Hood Co., Texas	
Rysal_Delanta regita, * 1972A	Wildgoose, <i>Prunus munsoniana</i> , 2003	25	36	35	70	Dallas County, Texas	Steve Houser
Poison Summary Summa	Poinciana						Michael W. Korton
Toucodendron vermix, 200° 18 3 0 19 5 2	Royal, <i>Delonix regia</i> , ★ 1972∆	102	61	57	177	Ft. Denaud Road, Hendry Co., Fla.	Michael W. Nenton
December	Poison-sumac						Colby R. Bucker
Poisontree Poisontree Poisontree Poisontree Poisontree Poisontree Poisontree Poisontree Poisontree Poisontee Poisont	Toxicodendron vernix, 2000*						*
Forlida, Metapilum taxiliferum, * 1986 81 39 32 128 Lignumvitae Key Botanical SP, Fla. Ken Roundfree & David M. Sinclair POnd - apple 125 44 47 181 Miami, Fla. Carol L. Lippincott Carol L. Lippincott 181 Miami, Fla. Ca		23	23	21	51	Gnesapeake, va.	B, Carmoun & G, Williamson
Pond-apple		01	20	22	120	Liggumvitae Key Botanical SP Fla	Ken Roundtree & David M. Sinclair
Annone glabra, 1989 125		81	39	32	120	Eignumvitae Ney Botamour Or, Fra.	
Pondcypress Taodium distichum var. Intens. 2004 344 32 24 382 Hyde Co., N.C. John P. Bittner		125	11	47	181	Miami, Fla.	Carol L. Lippincott
Taxodlum distichum var. nutans, ★ 2004 344 32 24 382 Hyde Co., N.C. John P. Bittner		125	44	71	101	mam, rose	
Poplar Balsam, Populus abisamifera, 1994 165 128 57 307 Champion, Mich. Elwood B. Ehrle & Paul W. Thompson White, Populus abisamifera, 1994 198 88 348 St. Clair, Mich. Elwood B. Ehrle & Paul W. Thompson White, Populus abisamifera, 1968 207 119 88 348 St. Clair, Mich. Elwood B. Ehrle & Paul W. Thompson Elwood B. Ehrle & Portriatree Thespesia populinea, 1968 42 69 167 Kekaha, Hawaii L.W. Bryan Portro Conford Cedar Chamaecypanis lawsoniana, 1968 452 229 39 691 Siskiyou NF, Ore. Donald Denniston Possumhaw Prickly-ash Common, Zanthosylum americanum, 1980 15 28 38 53 Beverly Hills Rouge Park, Bloomfield Hills, Mich. Line, Zanthosylum americanum, 1980 21 25 38 57 Lee Co., Fla. Ench. Hoyer & Norma Jean Byrd Princewood Enstema canthaeum, 1998 22 33 19 60 Crocodile Lake NWR, Key Largo, Fla. Joseph Nemec Privet California, Ligustrum avalifolium, 1999		344	32	24	382	Hyde Co., N.C.	John P. Bittner
Balsam, Populus balsamifera, ★ 1994 165 128 57 307 Champion, Mich. Elwood B. Ehrle & Paul W. Thompson White, Populus alba, 2004 207 119 88 348 St. Clair, Mich. Elwood B. Ehrle & Portiatree The Spesia populnea, ★ 1968 108 42 69 167 Kekaha, Hawaii LW. Bryan Port-Orford-cedar Chamaecypanis lawsoniana, ★ 1968 45 229 39 691 Siskiyou NF, Ore. Donald Denniston Possurnhaw Iller decidua, 1981 37 38 49 87 Richiand Co., S.C. Prickly-ash Common, Zanthoxylum americanum, ★ 1980 15 28 38 53 Beverly Hills Rouge Park, Bloomfield Hills, Mich. Line, Zanthoxylum americanum, ★ 1980 15 28 38 57 Lee Co., Fla. Princkly-ash Common, Zanthoxylum americanum, ★ 1980 15 28 38 57 Lee Co., Fla. Princkly-ash Princewood Dostema canbaeum, 1998 22 33 19 60 Crocodile Lake NWR, Key Largo, Fla. Privet California, Ligustrum ovalifolium, 1999 40 6 30 38 136 Roanoke, Va. California, Ligustrum ovalifolium, 1999 40 65 30 38 136 Roanoke, Va. Rapanea Fordia, Rapanea punctata, ★ 1992 29 30 17 63 Sanibel, Fla. Ferrell Johns Redbay Redcedar Eastern, Juniperus Wirginiana, ★ 1989 242 57 69 316 Lone Hill Church Cemetery, Coffee Co., Ga. Red Cedar Eastern, Juniperus Wirginiana, ★ 1989 242 57 69 316 Lone Hill Church Cemetery, Coffee Co., Ga. Red Cedar Eastern, Juniperus Wirginiana, ★ 1989 242 57 69 316 Lone Hill Church Cemetery, Coffee Co., Ga. Redbay Redsbank Redbay		011	-				
White, Populus alba, 2004 207 119 88 348 St. Clair, Mich. Elwood B. Ehrle	_	165	128	57	307	Champion, Mich.	Elwood B. Ehrle & Paul W. Thompson
PORTIAITE The provided The p		207	119	88	348	St. Clair, Mich.	Elwood B. Ehrle
Port-Orford-cedar Chamaecyparis lawsonlana, ★ 1968 452 229 39 691 Siskiyou NF, Ore. Donald Denniston							
Chamaecyparis lawsonlana, ★ 1968 452 229 39 691 Siskiyou NF, Ore. Donald Denniston	Thespesia populnea, ★ 1968∆	108	42	69	167	Kekaha, Hawaii	L.W. Bryan
Possumhaw	Port-Orford-cedar			¥.			
Miler decidua, 1981 37 38 49 87 Richland Co., S.C. Robert H. Jones, Lee Renaud	Chamaecyparis lawsoniana, ★ 1968	452	229	39	691	Siskiyou NF, Ore.	Donald Denniston
Prickly-ash Common, Zanthoxylum americanum, ★ 1980 15 28 38 53 Severly Hills Rouge Park, Bloomfield Hills, Mich. Lime, Zanthoxylum fagara, ★ 1988 21 26 38 57 Lee Co., Fla. Lee Co., Fla. Eric H. Hoyer & Norma Jean Byrd	Possumhaw						Dobort U. Jange Lee Pengud
Common, Zanthoxy/lum americanum, ★ 1980 15 28 38 53 Beverly Hills Rouge Park, Bloomfield Hills, Mich. Lime, Zanthoxy/lum fagara, ★ 1988 21 26 38 57 Lee Co., Fla. Frince Wood Exostema caribaeum, 1998 22 33 19 60 Crocodille Lake NWR, Key Largo, Fla. Joseph Nemec	The state of the s	37	38	49	87	Richland Co., S.C.	Robert H. Jones, Lee Kenada
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Redwood Coast, Sequoia sempervirens, ★ 1993* 867 311 101 1203 Prairie Creek Redwoods SP, Calif. Ron Hildebrant & Michael Taylor		48	23	26	78	Warner Springs, Calif.	Frank T. Callahan
Coast, Sequoia sempervirens, ★ 1993* 867 311 101 1203 Prairie Creek Redwoods SP, Calif. Ron Hildebrant & Michael Taylor		70	20	20			
D. Wildebrent M. Taylor S. Sillett	1	867	311	101	1203	Prairie Creek Redwoods SP, Calif.	Ron Hildebrant & Michael Taylor
		895	307	83	1223	Jedidiah Smith Redwoods SP, Calif.	R. Hildebrant, M. Taylor, S. Sillett

Jedidiah Smith Redwoods SP, Calif. R. Hildebrant, M. Taylor, S. Sillett 321 75 1290 Coast, Sequoia sempervirens, ★ 1998* 950 Rhododendron Jess Riddle Catawba, Rhododendron catawbiense, 2005 Baxter Crk Trail, Great Smoky Mtns NP, N.C. 15 25 15 43 Frank T. Callahan 28 17 54 Fort Bragg, Calif. Pacific, Rhododendron macrophyllum, 1976 22 Jimmy & Sandra Mock 28 36 65 Clayton, Ga. Rosebay, Rhododendron maximum, 2005* 28 K. Knox, B. Alexander, R. Lance 28 28 66 Biltmore Estate, Asheville, N.C. 31 Rosebay, Rhododendron maximum, 2005* Steve Muzal Sumter NF, S.C. Rosebay, Rhododendron maximum, 1981* 34 28 69 28 Royalpalm Daniel B. Ward Fakahatchee Stand, near Copeland, Fla. Florida, Roystonea elata, * 1995 50 99 18 154 Russian-olive Royce King Spin City, Pennington Co., S.D. 160 47 61 222 Elaeagnus angustiflolia, 1991∆ Sagebrush John Copeland On BLM land near Carson City, Nev. 35 22 10 12 Big, Artemisia tridentata, 2003* Ron Larson 39 Cedar City, Utah Big, Artemisia tridentata, 2002* 25 11 12 R. Noggles, B. Glodowski, F. Johnson 17 16 38 Franklin Co., Wash. Big, Artemisia tridentata, ★ 1991* 17 Mark R. Corbet 37 Crooked River National Grassland, Ore, 20 13 17 Big, Artemisia tridentata, ★ 1995* Saguaro Mammoth, Pinal Co., Ariz. Charley Blank 144 108 32 16 Cereus giganteus, 2003* J. Pleggenkuhle, C. Seymour, C. Hockaday Tonto NF, Ariz. Cereus giganteus, 2003* 143 94 46 10 Sapodilla William S. Hubard & B. Wang 62 244 Key West, Fla. 156 72 Manilkara zapota, ★ 1992*∆ Miller, Hammer, Flynn 56 53 243 Matheson Preserve, Miami, Fla. 174

CALIFORNIA SYCAMORE >

Manilkara zapota, ★ 1973*∆

he national champion California sycamore (Platanus racemosa) has reigned from its throne in San Juan Capistrano, California, since 1998. The graceful tree, which shades a walk with its 108-foot crown spread, rises to a height of 95 feet and has a 350-inch circumference. It boasts a point total of 472. It is one of 101 national champs for the state of California and one of three for San Juan Capistrano, which is also home to the national champ avocado and national champ peppertree. The Mission at San Juan Capistrano is known for the yearly return of its famous swallows, but at this rate the area should be known for its big frees!



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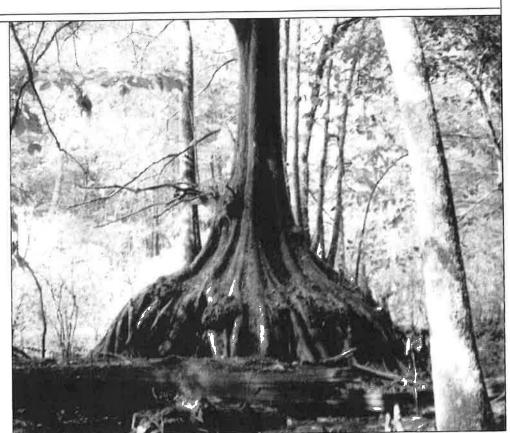
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SPECIES/ MEASUREMENT	CIRCUM- FERENCE	HEIGH	r	u.	TOTAL LOCATION	NOMINATOR
Sassafras					S.	
Sassafras albidum, ★ 1954	271	77	67	364	Owensboro, Ky.	O.W. Rash
Satinleaf						
Chrysophyllum oliviforme, ★ 1976	73	41	34	123	Miami, Fla.	W. Miller & J. Valenta
Satinwood						
Nest Indies, Zanthoxylum flavum, 2005	35	29	11	67	Key West, Fla.	Rebekah Stewart
Saw-palmetto						
Serenoa repens, ★ 1982*	22	20	13	45	Withlacoochee SF, Fla.	Buford C. Pruitt & D. Fogler
Serenoa repens, ★ 1987*	27	21	8	50	Ft. Pierce, Fla.	Steve Fousek & Paul Williams
Scarletbush						
Hamelia patens, 2005*	18	13	17	35	Melbourne Beach, Fla.	Blair & Dawn Witherington
Hamelia patens, ★ 1996*	15	13	16	32	Big Pine Key, Fla.	Jean F. De St. Croix
Seagrape						
Coccoloba uvifera, ★ 1971	149	62	66	228	Miami, Fla.	Don McGarthy
Sequoia						
Giant, Sequoiadendron giganteum, 1975	1020	274	107	1321	Sequoia NP, Calif.	Isabelle F. Story
Serviceberry						
Allegheny, <i>Amelanchier laevis</i> , ★ 1997	77	101	36	187	Blvd. Prong, Great Smoky Mtns. NP, Tenn.	Will Blozan & Amy Gamerman
Downy, <i>Amelanchier arborea</i> , ★ 1986	108	60	53	181	Burke's Garden, Va.	Louise G. Hoge
Roundleaf, <i>Amelanchier sanguine</i> a, 1978	58	39	34	106	Clarendon, Vt.	Dave Potter
Utah, Amelanchier utahensis, 2005	14	21	25	41	Flagstaff, Ariz.	David & Judy Thornburg
Western, Amelanchier alnifolia, ★ 1993	39	42	43	92	Beacon Rock SP, Wash.	Robert Van Pelt
Silkbay						
Persea borbonia var. humilis, ★ 1991	55	38	46	105	Ocala NF, Fla.	Robert W. Simons
Silktassel						
Wavyleaf, <i>Garrya elliptica</i> , ★ 1972	28	29	22	63	Brookings, Ore.	Frank T. Callahan
Wright, <i>Garrya wrightii</i> , ★ 1997	28	22	22	56	Buenos Aires NWR, Ariz.	Robert Zahner
Silktree						
Mimosa, <i>Albizia julibrissin</i> , ★ 1997△	179	56	74	254	Orlando, Fla.	Marsha S. Roepe
Silverbell						
Carolina, <i>Halesia carolina</i> , 2001	152	110	43	273	Great Smoky Mountains NP, Tenn.	Jess & Doug Riddle
Little, <i>Halesia parviflora</i> , 2005	19	16	25	42	Hamilton Co., Ohio	Brian P. Riley
Two-wing, <i>Halesia diptera</i> , 1989	57	44	41	111	Spring Grove Cemetery & Arboretum, Cincinnati, Ohio	Len Thomas & Tom Smith

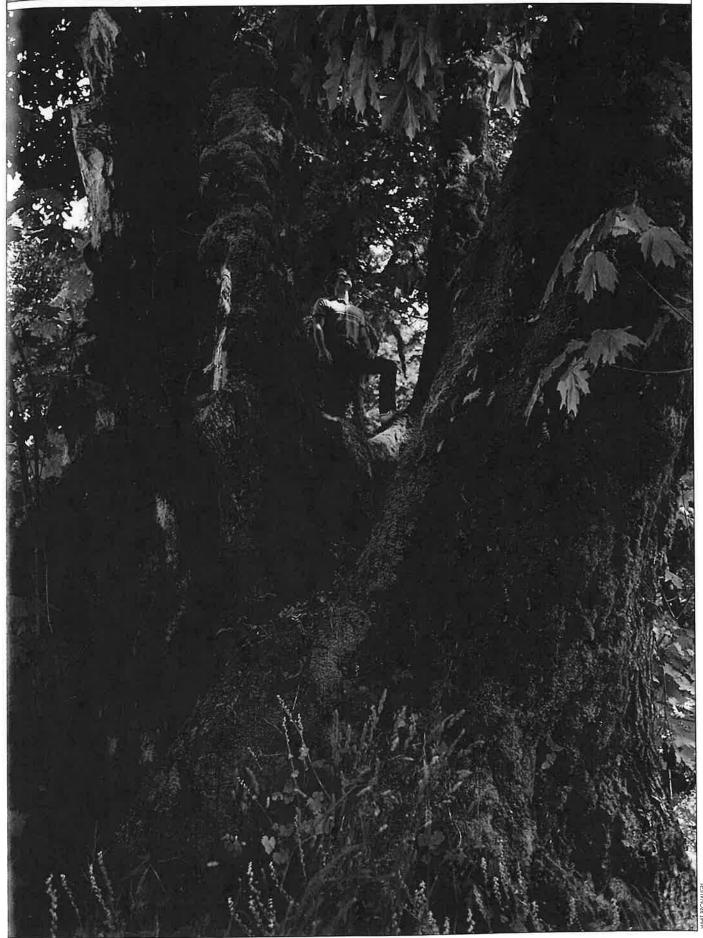
COMMON BALDCYPRESS }

r ississippi's new cochampion Taxodium distichum var. distichum in Holmes, was discovered during a hike through the cotton farm's property to find areas that could be enhanced for wildlife and waterfowl potential. The site, Quofaloma Plantation, was inherited a few years ago by Arthur Abercrombie Jr. of Baton Rouge, Louisiana, and his sister Betty Epley, of Magnolia, Arkansas, upon the death of their aunt. They recall spending summer vacations there when they were young—not realizing they were playing in the presence of royalty.



SPECIES/MEASUREMENT	CIRCUMFER ENGE	- HEIGHT	1919	EAD FO	ITALL LOCATION	NOMINATOR
Silverpalm				F.0	D. bis Handa CD Fla	John A. Baust
Florida, Coccothrinax argentata, ★ 1979*	19	29	6	50	Bahia Honda SP, Fla. Bahia Honda SP, Fla.	Clifford Shaw & George Avery
Florida, Coccothrinax argentata, ★ 1976*	21	25	7	48	Bania Honda SP, Fla.	Olifford Shaw & deer go record
smokethorn	40	47	10	60	Anza Borrego SP, Calif.	Frank T. Callahan
Dalea spinosa, ★ 1976	48	17	12	68	Aliza Borrego Sr, Calli.	, ram in ourana.
Smoketree	7/	56	32	138	Perdue University, West Lafayette, Ind.	S.A. Jamieson & A.T. Grossman
American, Cotinus obovatus, 1984	74	30	32	136	Totale bilivolois, wost Estayotto, mar	
Soapberry _{Western,} <i>Sapindus drummondii</i> , 2003	108	61	65	185	Aransas Co., Texas	Karl Bartels
	88	72	36	169	Paynes Prairie State Preserve, Fla.	Robert Simons
Wingleaf, <i>Sapindus saponaria,</i> ★ 1977 Soldierwood	00	12	00	100		
Colubrina elliptica, 1998*	24	41	9	67	John Pennekamp Coral Reef SP, Fla.	Joseph Nemec
Colubrina elliptica, 1998*	25	30	29	62	Crocodile Lake NWR, Fla.	Joseph Nemec
Colubrina elliptica, ★ 1991*	22	41	13	66	John Pennekamp Coral Reef SP, Fla.	Jeanne M. Parks
Sophora					·	
Mescalbean, Sophora secundiflora, 2005*	60	19	27	86	San Antonio, Texas	Ben McPherson
Mescalbean, <i>Sophora secundiflora</i> , 1983*	63	15	20	83	New Braunfels, Texas	Kathy Thieleman & Ann Holland
Texas, Sophora affinis, 1999	65	36	36	110	Llano Co., Texas	Bill Edwards
Sourwood						
Oxydendrum arboreum, 1998	132	95	70	245	Amelia Co., Va.	John Anderson & Joseph Humphreys
Sparkleberry						
Tree, Vaccinium arboreum, ★ 1991*	52	29	45	92	Evergreen Country Club, Evergreen, Ala.	Nell Stuart
Tree, <i>Vaccinium arboreum</i> , ★ 1997*	33	47	30	88	DeSoto NF, Miss.	Gary H. Lott & Wayne R. McCardle
Spicebush						
Lindera benzoin, 1999*	14	26	19	45	Ames Plantation, Fayette Co., Tenn.	David Smith
Lindera benzoin, ★ 2001*	12	32	24	50	Nassau Co., N.Y.	Mike Urban
Soruce						
Black, <i>Picea mariana</i> , 1989	68	78	21	151	Meford, Wis.	Nick Risch
Black Hills, <i>Picea glauca</i> var. <i>densata</i> , 2004	117	103	30	228	Black Hills NF, S. Dak.	Mark Rouw
Blue, <i>Picea pungens</i> , 2001	190	127	43	328	Ashley NF, Utah	A.J Frandsen & Sherel Goodrich
Brewer, <i>Picea brewerana</i> , 1999	272	137	44	420	Shasta-Trinity NF, Calif.	Leonard Herzstein & Neal Hadley
Engelmann, Picea engelmannii, 2005	292	181	50	486	Lowman, Idaho	Christopher Wagner & Penny Myers
Norway, <i>Picea abies</i> , ★ 2005∆	180	120	66	317	Hamilton College, N.Y.	Charles McFadden
Red, <i>Picea rubens</i> , ★ 1986*	169	123	39	302	Great Smoky Mountains NP, N.C.	Jim Renfro & Chris Blakeman
Red, <i>Picea rubens</i> , ★ 1997*	144	146	34	299	Thicket Branch, Great Smoky Mtns. NP, N.C.	Will Blozan
Sitka, <i>Picea sitchensis</i> , 1973*	629	204	93	856	Klootchy Creek Park, Seaside, Ore.	Maynard Drawson Robert Van Pelt
Sitka, <i>Picea sitchensis</i> , 1987*	668	191	96	883	Quinault Lake, Olympic NF, Wash.	Richard Stapleton
White, <i>Picea glauca</i> var. <i>glauca</i> , 1975	126	130	30	264	Littlefork, Koochiching Co., Minn.	Kichard Stapleton
Stewartia					W. data Basak Ma	Richard Salzer
Mountain, Stewartia ovata, 2001	34	16	11	53	Virginia Beach, Va.	Murdock "Ray" Gillis
Virginia, <i>Stewartia malacodendron,</i> ★ 1994	10	19	28	36	Ponce de Leon, Fla.	Maraock Ray anno
Stopper	4.0	40	4.4	20	Marathon, Monroe Co., Fla.	Dianna Stevenson & Jeanette Hobbs
Boxleaf, Eugenia foetida, 1998*	16	19	14	39 27	Maratnon, Monroe Co., Fla. Key Largo Hammock Botanical SP, Fla.	Joseph Nemec
Boxleaf, Eugenia foetida, 1999*	11	24	8	37 46	Crocodile Lake NWR, Key Largo, Fla.	Joseph Nemec
Red, Eugenia rhombea, 1999	19	23	14	46 113	Viscaya Museum & Gardens, Miami, Fla.	C. Lippincott
Redberry, <i>Eugenia confusa</i> , ★ 1993	60	46	26	113	viscaya Museum & daldens, Midmi, Ha.	
Simpson,	2.4	E4	40	95	Fern Forest Nature Cntr., Pompono Beach, Fla.	Jim Higgins
Myrcianthes fragrans var. simpsonii, ★ 1995	34 15	51 28	9	95 45	Barnacle State Historical Site, Fla.	John T. Valenta & Rodger Hammer
White, Fugeria axillaris, ★ 1994*	15 15	28 25	11	43	Sanibel Island, Fla.	Richard R. Workman
White, Eugenia axillaris, ★ 1993*	13	20	11	70	Spirit of rotating 1 list	
Strongback Rahama Rovernia avata 1999	32	28	14	64	Crocodile Lake NWR, Key Largo, Fla.	Joseph Nemec
Bahama, <i>Bourreria ovata</i> , 1999	22	23	19	50	Key West, Fla.	Vincent P. Condon
Rough, Bourreria radula, * 1995	22	20	10	30		
Sugarberry Celtis loouistate 2005	139	111	50	263	Taylorsville, Ky.	Lisa Armstrong
Celtis laevigata, 2005	103	711	50	_00		
Sumac	31	14	27	52	New Braunfels, Texas	RaeAnn & Loddie Roeder
Evergreen, Rhus virens, 2005	24	20	19	49	Coronado NF, Ariz.	Robert Zahner
Mearns, <i>Rhus choriophylla</i> , ★ 1995 Prairie, <i>Rhus lanceolata</i> , 1994	72	26	45	80	Kerrville, Texas	Raymond C. Doggett
Shining, Rhus copallina var. copallina, 2000	38	29	32	75	Pontotoc Co., Miss.	Rickey Harwell & G.W. Poyner
Smooth, <i>Rhus glabra</i> , 2001	36	52	28	95	Drybranch, Ga.	Roger Blount
Southern, <i>Rhus copallina var. leucantha</i> , ★ 1970		22	15	39	Arcadia, Fla.	Arden Streit Jr.
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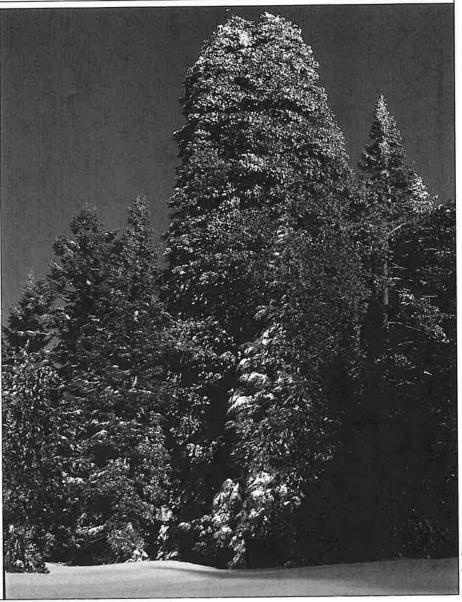
SPECIES/MEASUREMENT	CIRCUM- FERENCE	нендит	SPR	EAU'	TOTAL LOCATION	NOMINATOR
				440	Tallanana Ca. Ala	Ted Kretschmann
Staghorn, Rhus typhina, ★ 1985	50 71	61 34	20 36	116 114	Tallapoosa Co., Ala. Superstition WA, Tonto NF., Ariz.	Ken Morrow
Sugar, Rhus ovata, 1995	11	34	30	114	Supersulation was force in a must	
Swampbay Persea borbonia var. pubescens, 2005	40	68	25	114	Creswall, N.C.	Sid Shearin
Swamp-privet	40	00	20	111	0.00.00.00.00.00.00.00.00.00.00.00.00.0	
Forestiera acuminata, * 1997	100	41	49	153	Yazoo NWR, Washington Co., Miss.	David Linden
Sweetleaf	100				-	
Symplocos tinctoria, ★ 1986	35	70	36	114	Chesapeake, Va.	Byron Carmean & Gary M. Williamson
Sycamore						
Platanus occidentalis, 2001	440	85	68	542	Montgomery Co., Ky.	Charles Saunders & Chuck Wilburn
Arizona, <i>Platanus wrightii</i> , 2005	373	71	73	462	Camp Verde, Coconino NF, Ariz.	David Thomburg & Harry Untiedt
California, <i>Platanus racemosa</i> , 1998	350	95	108	472	San Juan Capistrano, Calif.	Art Cowley
Tallowtree						
Sapium sebiferum, 1996∆	137	68	68	222	Vidor, Texas	Robert N. Norton
Tallowwood						Jacob Names
Ximenia americana, ★ 1998	16	18	14	38	Crocodile Lake NWR, Fla.	Joseph Nemec
Tamarack				0.10	Mala Mala	Mike Debonis
Larix laricina, 2005	143	92	31	243	Wels, Maine	WIRE DEDOTIES
Tamarind	107	75	0.4	263	Key West, Fla.	Michael J. Cullen & David M. Sinctair
Tamarindus indica, ★ 1986Δ Tamarisk	167	75	84	203	Ney West, 11a.	ii
	170	45	50	228	Albuquerque, N. Mex.	Robert Squires
Tamarix chinensis, 1999Δ French, Tamarix gallica, 2005Δ	57	25	50	95	Dallas, Texas	David Richardson
Tanoak	31	20	00	00		
Lithocarpus densiflorus, ★ 1997	275	144	59	434	Ophir, Curry Co., Ore.	George Miller
Tesota						
Olneya tesota, 2005	198	33	55	245	Riverside Co., Calif.	Art Cowley
Tetrazygia						
Florida, <i>Tetrazygia bicolor</i> , 2005	24	22	15	49	Coral Gables, Fla.	David L. Lysinger
Thatchpalm						
Florida, <i>Thrinax radiata</i> , ★ 1991	17	28	2	46	Hollywood, Fla.	D. Spicer, W. Harms, W. Tesauro
Key, Thrinax morrisii, ★ 1996	19	19	9	40	Fairchild Tropical Garden, Miami, Fla.	Don Evans & Daniel B. Ward
Torchwood						Add O Hara & David Cinalaia
Amyris elemifera, ★ 1986	18	22	15	44	Key West, Fla.,	Mike Cullen & David Sinclair
Torreya				004	O contrar Onlife	Frank T. Callahan
California, <i>Torreya californica</i> , ★ 1993	251	96	68	364	Swanton, Calif.	Robert Simons
Florida, <i>Torreya taxifolia</i> , 1972	124	53	40	187	Norlina, N.C.	Nobel Comons
Toyon	E 4	20	39	92	Orange, Calif.	Art Cowley
Heteromeles arbutifolia, 1992*	54 58	28 32	28	97	Santa Barbara Co., Calif.	Frank T. Callahan
Heteromeles arbutifolia, ★ 1993* Tree-cactus	30	32	20	31	Santa barbara oo., oani.	
Deering,						
Cereus robinii var. deeringii, ★ 1994	11	23	2	35	Monroe Co., Fla.	Michael K. Hennessey
Key, <i>Cereus robinii</i> var. <i>robinii</i> , ★ 1999*	11	23	1	34	Nat'l Key Deer Refuge, Monroe Co., Fla.	Michael K. Hennessey
Key, <i>Cereus robinii</i> var. <i>robinii</i> , ★ 1999*	12	17	2	30	Nat'l Key Deer Refuge, Monroe Co., Fla.	Vincent P. Condon
Trema						
Florida, <i>Trema micrantha</i> , ★ 1995	18	39	30	65	Collier Co., Fla.	Chris Anderson & Lisa Moore
Trifoliate-orange						
Poncirus trifoliata, ★ 1995∆	43	18	20	66	Roanoke, Va.	William S. Hubard
Tupelo						
Black, <i>Nyssa sylvatica</i> var. <i>sylvatica</i> , 2001	232	110	81	362	Wood Co., Texas	William Godwin
Ogeechee, <i>Nyssa ogeche</i> , ★ 1981*	166	93	41	269	Apalachicola NF, Fla.	Robert W. Simons & Dale Allen
Ogeechee, <i>Nyssa ogeche</i> , ★ 1993*	174	81	48	267	Apalachicola NF, Fla.	R. Simons, D. Ward, D. Allen, G. Hegg
Swamp,		40.5		071	Discool Courses NIMP Coffells Co. Variation	Byron Carmean & Gary Williamson
Nyssa sylvatica var. biflora, ★ 1988	238	102	57	354	Dismal Swamp NWR, Suffolk Co., Va.	Byron Carmean & Gary Williamson
Water, Nyssa aquatica, 2005*	382	85	62	483	Southhampton Co., Va. Southhampton Co., Va.	Byron Carmean & Gary Williamson
Water, Nyssa aquatica, 2005*	386	82	43	479	Soutimampion co., va.	Sylvin Salmoan & Gary Timemoon
Vauquelinia	78	47	40	135	Organ Pipe Cactus NM, Ariz.	Robert Zahner
Torrey, Vauquelinia californica, 1993 Velvetseed	10	41	40	100	Organi i spo odotao ininj rinzi	
Elliptic-leaf, Guettarda elliptica, ★ 1993	36	23	24	65	Simpson Park, Miami, Fla.	William G. Miller & John Valenta
Roughleaf, Guettarda scabra, 1998	11	17	11	31		Joseph Nemec
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SPECIES/MEASUREMENT	CIRCUM FERENCE	HEIG	HT' SP		FOTAL LOCATION OINTS	NOMINATOR
Viburnam						
Possumhaw, Viburnum nudum, 2003	17	33	20	55	Watkinsville, Oconee Co., Ga.	Larry Morris & Scott Bryant
Walter, Viburnum obovatum, 2000	22	32	31	62	Suwannee River Water Mgmt. District, Fla.	Robert & Erika Simons
Walnut					vi	
Arizona, Juglans major, 1999	215	73	88	310	Aravaipa Canyon Preserve, Ariz.	Ken Morrow & Mike Hallen
Black, <i>Juglans nigra</i> , ★ 1991	278	130	140	443	Sauvie Island, Ore.	Dan Tillman
ittle, Juglans microcarpa, ★ 1986	160	53	65	229	Picacho, Lincoln Co., N. Mex.	Tommy Roybal
Northern California, <i>Juglans hindsii</i> , 1986	304	76	107	407	Napa, Calif.	John Britton Tree Service
Southern California, <i>Juglans californica</i> , 1973	259	112	106	398	Chico, Calif.	Gordon R. Foster
Washingtonia						
California (fanpalm), Washingtonia filifera, * 1991*	120	83	21	208	Sacramento State Capitol Grounds, Calif.	R. Van Pelt & A.L. Jacobson
California (fanpalm), Washingtonia filifera, 1991*	121	86	21	212	Sacramento State Capitol Grounds, Calif.	R. Van Pelt & A.L. Jacobson
California (fanpalm), Washingtonia filifera, 1997*	142	66	19	213	Sacramento State Capitol Grounds, Calif.	Art Cowley
Waterlocust						
Gleditsia aquatica, 1993*	121	74	63	211	Wyndmoor, Pa.	Maurice E. Hobaugh
Gleditsia aquatica, 2000*	103	93	45	207	Suwannee River Water Mgmt. District, Fla.	C. Houder, R. Heek, R. Simons
White-cedar						
Atlantic, Chamaecyparis thyoides, * 1961	186	88	42	285	Brewton, Ala.	James M. McGougin Sr.
Northern, <i>Thuja occidentalis</i> , ★ 1953	216	113	42	340	Leelanau Co., Mich.	Paul W. Thompson
Wild-dilly						
Manilkara bahamensis, 1998	43	33	10	79	Key West, Fla.	Key West Botanical Garden Society

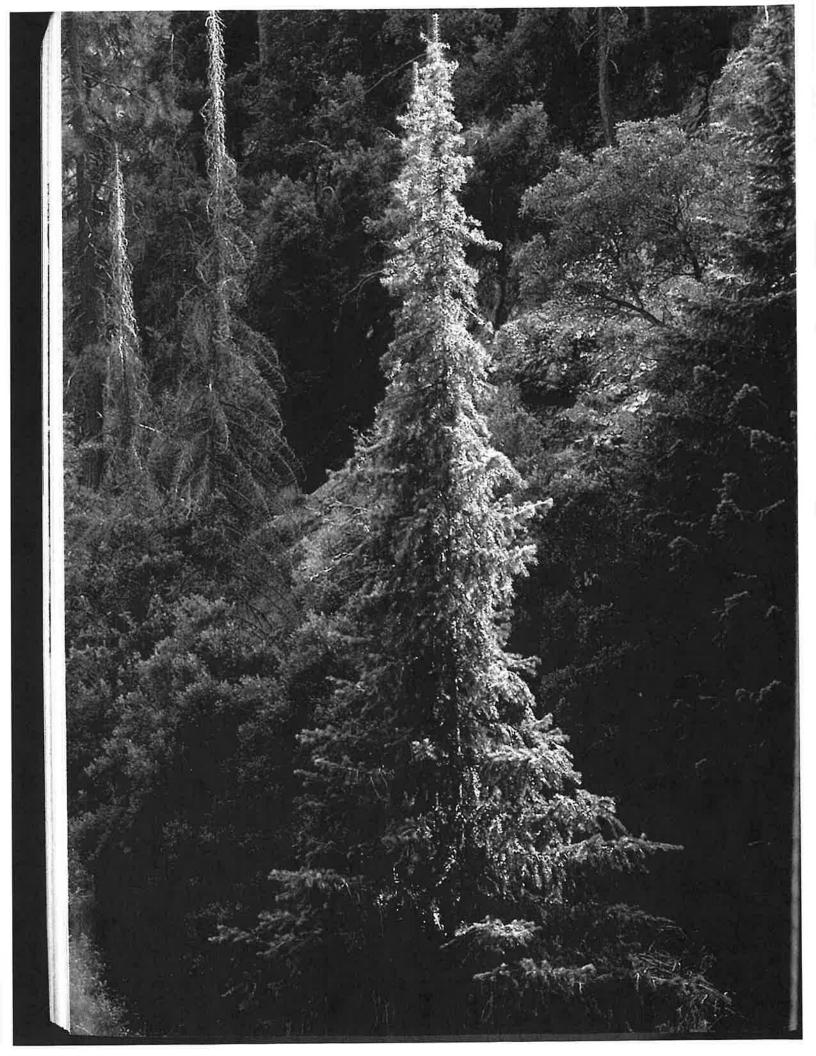
SIERRA LODGEPOLE PINE >

alifornia's towering national cod champion Sierra lodgepole pine stands tall in San Bernardino National Forest. It has a 245-inch circumference and stands 116 feet tall with a 50-foot crown spread for a total of 374 points. It has reigned as national champ since its nomination in 1963. Its co-champ, at 373 points, is in Stanislaus National Forest. You can find many national champs among the sprawling trees in the country's national forests. In California alone, there are 16 champs in national forests, four in national parks, and nine in state parks.



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SPECIES/MEASUREMENT	IRCUMFER ENCE	HEIGHT	SUR	P	OTAL DINTS LOCATION	NOMINATOR
Willow						
rroyo, <i>Salix lasiolepis</i> , 2003	89	41	49	142	San Juan Capistrano, Calif.	Art Cowley
Autumn, Salix serissima, ★ 1976	35	48	44	94	Oakland Co., Mich.	Paul W. Thompson
Bebb, <i>Salix bebbiana</i> , ★ 1983	101	23	27	131	Sawtooth NF, Idaho	Bill Little & Howard Hudak
Black, <i>Salix nigra</i> , ★ 1973	400	76	92	499	Grand Traverse Co., Mich.	Elwood B. Ehrle & John Spencer
Bonpland, Salix bonplandiana, 1999	169	63	74	251	Gila Box Riparian NCA, Ariz.	Ken Morrow & Mike Hallen
Coastal plain, <i>Salix caroliniana</i> , ★ 2005	56	30	9	88	Virginia Beach, Va.	Richard Salzer
Crack, Salix fragilis, ★ 1985*△	310	116	131	459	Beverly Hills, Mich.	Paul W. Thompson
	305	122	124	458	Clinton Rd., north of Utica, Mich.	H.J. Nett & Paul W. Thompson
Crack, Salix fragilis, ★ 1964*Δ	41	36	24	83	Fort Wainwright, Alaska	Mark R. Corbet
Feltleaf, Salix alaxensis, 2001	11	20	23	37	Ocala NF, Fla.	Jeff Overby & Ilke Toklu
Florida, <i>Salix floridana</i> , ★ 1993		45	89	421	Walsh Ranch, Luna Co., N. Mex.	Ralph Fisher Jr.
Goodding, <i>Salix gooddingii</i> , ★ 1993	354			116	Jackson Co., Ore.	Frank T. Callahan
linds, <i>Salix hindsiana</i> , ★ 1986	58	50	32			Joe Travers
looker, <i>Salix hookerana</i> , 2001	65	50	39	125	Tillamook Co., Ore.	R. Van Pelt, A. Jacobson, R. Brightma
Nackenzie, <i>Salix mackenzieana</i> , 1999	17	30	27	54	Lake Sammamish SP, Wash.	Paul W. Thompson
Neadow, <i>Salix petiolaris</i> , 🛨 1976	13	34	18	52	Traverse Lake, Mich.	Howard R. Cooley
acific, <i>Salix lasiandra</i> , 1999*	157	70	65	243	Dry Creek Regional Park, Alameda Co., Calif.	Art Cowley
acific, Salix lasiandra, 2001*	171	54	84	246	Kern Co., Calif.	
eachleaf, <i>Salix amygdaloides</i> , 1989	396	80	77	495	Greenfield Park, West Allis, Wis.	Eugene Zanow
Purple-osier, <i>Salix purpurea</i> , ★ 1972∆	15	37	49	64	Leelanua Co., Mich.	Paul W. Thompson
russy, <i>Salix discolor</i> , ★ 1991*	74	25	48	111	Jamestown, R.I.	Patrick M. Dorcus
andbar, <i>Salix exigua,</i> ★ 1984	69	36	46	117	Criglersville, Va.	Richard Salzer
Scouler, Salix scoulerana, 🖈 1995	144	64	47	220	Maury Island, Wash.	Robert Van Pelt & Ron Brightman
Shining, <i>Salix lucida</i> , ★ 1960	130	74	81	224	Traverse City, Mich.	Paul W. Thompson
itka, <i>Salix sitchensis</i> , 1999	32	35	37	76	Gene Coulon Park, Renton, Wash.	R. Van Pelt, A. Jacobson, R. Brightma
racy, <i>Salix tracyi</i> , ★ 1975	36	20	15	60	Central Point, Ore.	Frank T. Callahan
Veeping, <i>Salix babylonica</i> , ★ 1966*Δ	309	117	116	455	Detroit, Mich.	Mr. & Mrs. J. Kropp
Veeping, <i>Salix babylonica</i> , ★1991*∆	344	86	93	453	Hartland, Livingston Co., Mich.	J. Pergament & Paul W. Thompson
Vhite, <i>Salix alba</i> , ★ 1985*Δ	316	118	131	467	west of New Hudson, Oakland Co., Mich.	Paul W. Thompson
Vhite, Salix alba, ★ 1991*Δ	301	133	142	470	New Hudson, Oakland Co., Mich.	R. Turner, S. Lyons, P. Thompson
'ellow, <i>Salix lutea</i> , ★ 1985	25	24	16	53	Lemhi Co., Idaho	S. J. Brunsfeld & F. D. Johnson
'ewleaf, <i>Salix taxifolia</i> , 1996*	74	35	30	117	Lochiel, Ariz.	Robert Zahner
Winterberry						
Common, llex verticillata, ★ 1994*	24	13	16	41	Virginia Beach, Va.	Richard & Richard Alan Salzer
Common, <i>llex verticillata</i> , ★ 1994*	21	13	16	38	Virginia Beach, Va.	Richard & Richard Alan Salzer
Nountain, //ex montana, 2005	31	26	34	66	Helen, Ga.	Jimmy Mock & Gary Hooper
Witch-hazel	01		•			
Hamamelis virginiana, ★ 1984	52	35	30	95	Bedford, Va.	Richard Salzer
	ŲZ.	00	00	•	202.2.2,	
Yaupon	31	32	29	70	Guido Gardens, Metter, Ga.	Justin Taylor
llex vomitoria, 2003*	30	30	53	73	Autaugaville, Autauga Co., Ala.	John Pirtle
llex vomitoria, 2003*	30	30	55	10	· managarinal viamaga and via.	
Yellow-elder	20	22	19	48	Tonto NF, Ariz.	Ken Morrow
Tecoma stans, 2003	20	23	13	40	TORRO TRI TRICE	
Yellow-poplar	074	444	105	E16	Rodford Va	Kenneth E. Crouch & Glenn Garrett
[uliptree, <i>Liriodendron tulipifera</i> , ★ 1972	374	111	125	516	Bedford, Va.	7000000 - 000000 - 000000
Yellowwood	,	70	07	007	Leuisville Kv	Lisa Armstrong
Cladrastis kentukea, 2005	192	78	67	287	Louisville, Ky.	LIGH ATTROOPING
Yew			4.	=-	Toward CD Fle	Joey T. Brady & Jerome Bracewell
Florida, <i>Taxus floridana</i> , ★ 1986	25	20	26	52	Torreya SP, Fla.	B. Malcomb, L. Bamhouse, A. Storkman, R. L.
Pacific, <i>Taxus brevifolia</i> , ★ 1959*	180	54	30	242	Mineral, Wash.	Oliver Matthews
Pacific, <i>Taxus brevifolia</i> , ★ 2001*	160	70	40	240	Washington Co., Ore.	Ollivet Marrilems
Yucca						limmy Mook
Aloe, Mucca aloifolia, 2001	18	14	4	33	Hortense, Brantley Co., Ga.	Jimmy Mock
Beaked, <i>Yucca rostrata</i> , 1994	48	16	9	66	San Antonio Zoo, Texas	Steve Lowe
Carneros (Spanish-dagger), <i>Yucca carnerosana</i> , ★ 1977	7 51	25	10	79	Sierra Blanca, Texas	Frank T. Callahan
Faxon, <i>Yucca faxoniana</i> , ★ 1991	91	18	9	111	Puett Ranch, Hudspeth Co., Texas	Nelson Puett
Mojave, <i>Yucca schidigera</i> , ★ 1987	66	24	7	92	Needles Resource Area, Calif.	. Alexander, G. Meckfessel, K. Nosstrom, L. Persson
Moundlilly, <i>Yucca gloriosa</i> , 1998	118	32	38	160	Library Grounds, Huntington Beach, Calif.	Art Cowley
Schott, Yucca schottii, 2005	44	20	12	67	Patagonia, Ariz.	Ken Morrow
Schott, <i>Tucca schotth</i> , 2003 Soaptree, <i>Yucca elata</i> , ★ 1991/2001	60	26	12	89	Deming, N.Mex.	Frank T. Callahan
Torrey, <i>Yucca torreyi</i> , ★ 1987	86	23	6	111	Sacramento Mountains, Lincoln NF, N. Mex.	John McNelly
DDIES 106.6 00059. 8 1301	00		9	56	Lower Rio Grande NWR, Cameron Co., Texas	William MacWhorter



THRONES

They are out there. Some may live their entire lives without ever being seen by human eyes. Others may live among us, seen by thousands yet unrecognized, like royalty dressed as paupers. They are the biggest trees of their kind but they cannot lay claim to their rightful throne until someone discovers, measures, and nominates them.

Most of these true kings and queens of the forest are represented by lesser nobility, or even the occasional servant of the court who spends a few surreptitious and gleeful moments on the throne. The National Register of Big Trees lists the biggest known trees and can rarely claim absolute knowledge of the absolute ruler of a given species. We honor these surrogates, just as we honor Olympian gold medalists in spite of the probability that there are faster and stronger people somewhere in the world whose potential remains hidden. But the current Register lists 94 species for which the throne is completely empty. No king. No queen. Not even a naughty page.

Of course, before 1940, when American Forests initiated the Big Tree Program, all thrones were empty. For the first several decades it was essentially left to nominators to choose which trees needed a champion. Most were native or naturalized species but quite a few ornamen-

tals and hybrids were crowned. In 1980, after adopting Elbert Little Jr.'s *Checklist of United States Trees* as the authority for which species to include, American Forests began to print a list of Species Without Champs in each installment of the Register. Over the next 20 years, nominators reduced the number of empty thrones by an average of eight per year, from 257 in 1980, to 93 in 2000. During that period, each successive Register saw a reduction in crownless species with highs of 28 found in 1984, 36 in 1994, and 44 in 2000.

But in 2002, for the first time in Register history, we gained empty thrones and shot up to 99. The 2004 Register established an all-time low of 85, but this year we're back up to 94. Actually, 12 empty thrones in 2004 were filled in 2006, but another 24 species were dethroned and left without a successor.

Upon closer examination, 94 empty thrones isn't that bad. Twenty-four of these were occupied in 2004 but those champs have since either died (17), couldn't be found (2), had been misidentified (2), or were too small to be a tree (3). Crucially, none had potential successors waiting in the files of American Forests for their chance at glory. Until the current Register came out (the one you are holding), big tree hunters didn't know to look for a replacement. So a small number of temporarily empty thrones are to be expected.

With two years between published Registers, you might also expect the more unfamiliar or rare species to stay on the empty thrones list for a few rounds before a tree is nominated. Of the 94 empty thrones, 37 were once occupied. Most had a crowned tree within the last decade but a royal Pensacola hawthorn was last recognized in 1982. The last Fallax pinyon pines king finished its reign in 1978; the guava's throne has been empty since 1971.

Another nine empty thrones were formerly filled but not with true monarchs. The species they represented—like American snowbell, Georgia holly, and Florida crossopetalum—infrequently attain the stature of trees. In the 1990s the philosophy at American Forests was that any specimen, no matter how small, could be the champion if was the biggest one reported at that time. Later, after a number of twiggy things were crowned, it was decided that a specimen should meet accepted standards for being a tree—at least 9.5 inches in circumference and 13 feet tall. After all, this is not the National Register of Big Trees and Shrubs.



Trees in search of a titleholder: bristlecone fir (left) and Shumard oak (above).

there royalty is just
waiting to be
recognized. Long
live the king—
wherever it is.
Story and photos
by Whit Bronaugh

In Florida, look for graytwig (right).

Below, Key Largo's

This means that, out of 94 currently empty thrones, 57 species have never had a true champion, and 48 have never even had a nominee.

Out of a possible 826 species and varieties in the Register, that's not too bad. But the goal has always been to have a full roster of big trees so here is some information to help you find a lost champion, and get yourself in the record books.

Let's start with the easy ones. These are the thrones of recently dead or disqualified trees that had no backup wannabes. Sometimes quite a few thrones are vacated because of a concentrated effort by state big tree coordinators to relocate their state's champs. They often find that some champs have died, some have lost points due to damage, or some have been mismeasured or misidentified.

Empty thrones in 2006 include only a few familiar species like sweet crabapple, turkey oak, northern pin oak, and sweetgum. You are welcome to nominate a tree to replace them, but keep in mind the former champs scored 116, 218, 335, and 431 points, respectively. Other recently vacated thrones, with the previous champ's point totals: cajeput-tree (300), castorbean (49), Allegheny chinkapin (155), Ozark chinkapin (124), littleleaf cyrilla (61), September elm (271), Lindheimer hackberry (127), scrub hickory (121), screwbean mesquite (84), and water-elm (313). Your tree doesn't have to beat those numbers but, unless it's the only nominee, it must be close to have a chance at royal fame.

The next category of empty thrones are species that may or may not be common; the trick is to find

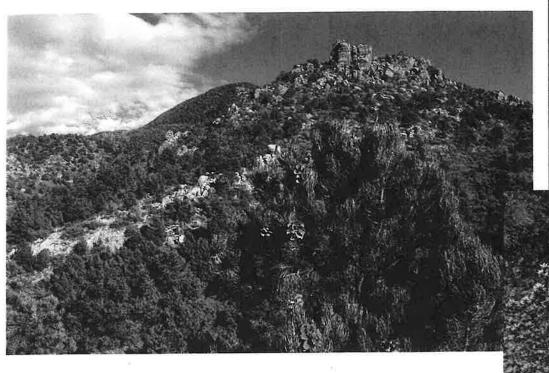
a specimen that is actually a tree. According to my field guides, these species rarely grow taller than 15 or 20 feet, but that's tall enough to be a champion. It is tempting, and allowed, to fill a throne with the first tree-sized specimen you happen upon. But as the Chinese philosopher Mencius said, "To give the throne to another man would be easy; to find a man who shall benefit the kingdom is difficult."

Tree species that are usually shrubs are scattered across the country. Hunt for tree-sized laurel sumac, lemonade sumac, or greenbark ceanothus in the chaparral of coastal southern California. The littleleaf sumac grows on dry slopes and plains from southeastern Arizona to central Texas. In south Texas, look for Texas forestiera. Any Geyer willow in western mountains, or any silky willow in the East, is a potential champ if more than 15 feet tall. Actually, most of the nine willows without champions are shrubs more often than trees; you'd be lucky to find specimens of any taller than 30 feet. Some Florida species reach just above tree size, some with telltale names like bitterbush and maidenbrush.

Many champion trees are discovered casually by people who happen to know a big whatever-it-is when they see it. But others, like quite a few with empty thrones, require a special and targeted effort to find because their species is very rare, isolated, or found only in a small part of the country. The range of the seaside alder includes Oklahoma, Maryland, Delaware, and Georgia, but it occupies only a few small areas in those states and is found nowhere in between. The last champion Kenai birch grew 47 feet tall, but to fill its vacated throne you'll have to search in Alaska. The rare and critically imperiled Kelsey locust, a small relative of black locust with narrow leaves and pink flowers, grows in the wild only in the western mountains of North Carolina.

California is touted as one of the floristic hotspots of the world with more than 1,400 plant species, including at least 25 trees, found nowhere else in the world. The distinctive bristlecone fir, easily recognized by its very narrow spirelike crown, is restricted to the Santa Lucia Mountains south of Monterey. Try looking in the Cone Peak area, but keep in mind the former champ was more than 4 feet thick and 182 feet tall. To find the first-ever champion feltleaf ceanothus, take a boat out to Santa Cruz or Santa Catalina Island. Go in February when they stand out in their coat of pale blue flowers. Other Channel Island endemic species will be added to the Register soon (see page 10). North of the border, extreme southern California is also the only place to find the first national champion desert apricot and Mexican fremontia. However, a nomination for the latter species is best left to botanists and conservationists, since the U.S. population has declined to fewer than 100 individuals.

subtropical West Indies hardwood hammock.



Among the species without a champion in the

Florida also has a large number of species found nowhere else in the U.S. In fact, the Sunshine State is the only place to look for about one-third of the species without a champion. Half of those are found only in the southern counties of Collier, Dade, and Monroe. The trick, and joy, is to learn how to identify subtropical trees. Would you know a cocoplum, graytwig, guiana-plum, seven-year-apple, long-stalk stopper, or balsam torchwood if you saw one?

This leads us to our last category of empty throne species, the ones which are hard to identify. In a few cases, the problem lies in a lack of easily available information. The Fallax pinyon pine, listed in the Register as Pinus edulis var. fallax, a variety of twoleaf pinyon pine, has not had a champion since a 98point tree wore the crown in 1978. It's not even mentioned in my field guides. But with some Internet sleuthing I found out that it is now treated as a variety of singleleaf pinyon pine (Pinus monophyla), and that it is primarily found in Arizona, although its range spills over a bit into each of the neighboring states. If you stay away from extreme western and northwestern Arizona, any big singleleaf pinyon pine you find in that state should be eligible to wear the Fallax pinyon pine crown.

Nine of the empty thrones are willows: balsam, basket, dusky, geyer, littletree, northwest, river, satiny, and silky. Only the balsam (28 points), dusky (87), and silky (97) have had former champions. Willows are usually found along streams and lakes, although they form upland thickets in the mountains and subarctic regions. They are readily identified as a group but the species sometimes fall into that field guide category of "notori-

ously difficult to distinguish." To do better than "Salix sp." you may need a good hand lens—or an expert botanist.

If willow identification gives you a headache, you can either chew the bark (the original source of aspirin) or just be grateful you are not trying to identify a hawthorn. In North America, these are the most notorious of all trees. If field guides were like old maps, hawthorns would be placed near the edge with the warning: Here there be monsters!

You know you're in trouble when the number of species recognized by different authorities varies from 35 to over 1000! Even George Petrides, author of the *Peterson Field Guides* to eastern and western trees, throws up his hands and includes only four species. The implication is if your tree isn't one of those four, surrender at 'Crataegus sp.' Unless you're a skilled botanist, you'll probably have to find one to identify and nominate a barberry, beautiful, Pensacola, Brainerd, Gregg, Harbison, Reverchon, threeflower, or (yikes!) willow hawthorn. For all but the first three, you'd be the first to fill their throne.

Fortunately, most of the empty thrones are *not* hawthorns. And with a concentrated effort, we can reduce the Species Without Champs list to just the recent dethronees that lack an immediate successor.

In J. R. R. Tolkein's Middle Earth, the people of Gondor waited a thousand years for the return of the king. The people of American Forests await the return of 91 kings. But with your help, it won't be long until "the crownless again shall be king." AF

Whit Bronaugh writes from Eugene, Oregon.

2006 Register:
Arizona singleleaf
pinyon pine
(above, left) and
feltleaf ceanothus
(above).

HELP US FIND **CHAMPS FOR** THESE }

here are 94 trees included on American Forests' National Register of Big Trees that do not currently have a champion rooted to the throne. Grab your tree ID book, this list, and maybe your favorite botanist and start hunting! Species with a & after their names have never had a champion. Look in the parentheses for a list of states in which the species can be found. A Δ indicates a naturalized species.

Species ALDER ANISE-TREE APPLE APRICOT ARALICARIA BAYBERRY BIRCH BITTERBUSH BURNINGBUSH CAJEPUT-TREE CAMPHOR-TREE CAPER CASTORBEAN CEANOTHUS CEANOTHUS CHINKAPIN CHINKAPIN COCOPLUM COLUBRINA COLUBRINA CROSSOPETALUM CYRILLA DOWNY-MYRTLE **ELDER** ELM FLORIDA-PRIVET FIDDLEWOOD FIR **FORESTIERA** FREMONTIA GRAYTWIG GUAVA GUIANA-PLUM HACKBERRY HAWTHORN HAWTHORN HAWTHORN **HAWTHORN** HAWTHORN **HAWTHORN** HAWTHORN **HAWTHORN** HAWTHORN HICKORY HOLLY HOLLY HOLLY HOLLY LICARIA LOCUST MAIDENBRUSH MAIDENBRUSH MESQUITE NECTANDRA OAK OAK OAK PAWPAW PEPPERTREE PINE PHIIM PRICKLY-ASH PRICKLY-PEAR PRIVET SAPIIIM SEVEN-YEAR-APPLE SNOWBELL SNOWBELL SNOWBELL STOPPER **STOPPER** SUGAR-APPLE SUMAC SUMAC SUMAC SUMAC SWEETGUM TAMARISK TORCHWOOD TREE TOBACCO TREMA VAUQUELINIA WATÈR-ELM WHITE-MANGROVE WILLOW WILLOW WILLOW WILLOW WILLOW WILLOW WILLOW WILLOW WILLOW

Common Name Seaside Yellow Sweet Crab Desert Cunningham Evergreen Western Limber Feltleaf Greenbark Allegheny Ozark Coffee Cuba Florida Littleleaf Velvet September Berlandier Bristlecone Texas Mexican Lindheimer Barberry Beautiful Brainerd Gregg Harbison Pensicola Reverchon Threeflower Willow Scrub Dune Georgia Sarvis Tawnberry Florida Kelsey Marlberry Screwbean Florida McDonald Northern pin Turkey Bigflower Brazil Fallax pinyon Canada Biscavne Brazil Chinese Jumping-bean American Bigleaf Sycamore-leaf Long-stalk Twinberry Kearney Laurel Lemonade Littleleaf Small-flower Balsam West Indies Fewflower Balsam Basket Dusky Gever Littletree Northwest River Satiny

Silky Smooth

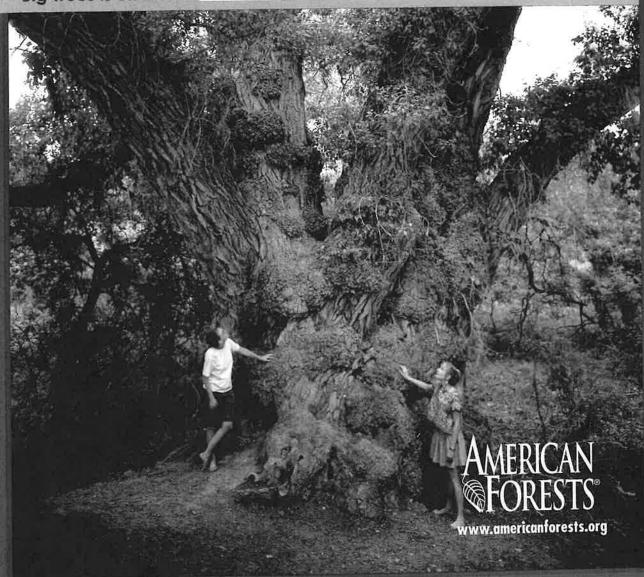
WINTERBERRY

Scientific Name Alnus maritima (OK, MD, DE, GA) Illicium parviflorum & (FL) Malus coronaria (NY, IN, MO, KS, TN, AL, GA, SC, NC)
Prunus fremontii ♣ (CA) Araucaria cunninghamii (HI) Myrica heterophylla * (NJ, PA, DE)
Betula papyrifera var. kenaica (AK)
Picramnia pentandra * (FL)
Euonymus occidentalis * (WA, OR) Melaleuca quinquenervia Δ (FL) Cinnamomum camphora △ (FL) Capparis flexuosa ❖ (FL) Ricinus communis (FL) Ceanothus arboreus 🍨 (CA) Ceanothus spinosus 🝨 (CA) Castanea pumila (NJ, PA) Castanea ozarkensis (MO, AR, OK) Chrysobalanus icaco & (FL)
Colubrina arborescens & (FL)
Colubrina cubensis & (FL) Crossopetalum rhacoma 💠 (FL) Crysilla racemiflora var. parvifolia (GA, FL) Rhodomyrtus tomentosa Δ & (FL) Sambucus velutina (CA, NV, AZ) Ulmus serotina (KY, IL, TN, AL, GA, AR, OK) Forestiera segregata (FL) Citharexylum berlandieri & (TX Abies bracteata (CO, ID, OR., Corestiera angustifolia 🏕 (TX) Fremontodendron mexicanum & (CA)
Schoepfia chrysophylloides (FL) Psidium guajava ∆ (FL, CA) Drypetes lateriflora (FL) Celtis lindheimeri (TX) Crataegus berberifolia & (IL, KS, TX, MS, KY, MO, LA, AR) Crataegus pulcherrima (FL)
Crataegus pulcherrima (FL)
Crataegus brainerdii & (Ml, OH, PA)
Crataegus greggiana & (TX)
Crataegus harbisonii & (TN, AL, MS) Crataegus lacrimata (FL)
Crataegus lacrimata (FL)
Crataegus reverchonii & (MO, KS)
Crataegus triflora & (GA, AL, MS)
Crataegus saligna & (CO) Carya floridana (FL) llex opaca var. arenicola ❖ (FL) llex longpipes ❖ (SC, GA, LA) llex amelanchier ❖ (NC, SC, GA, FL, LA) llex krugiana (FL) Licaria triandra ❖ (FL) Robinia kelseyi ❖ (NC, TN, KY) Robinia Reiseyi (N., IN, KT)
Savia bahamensis (FL)
Ardisia escallonioides (FL)
Prosopis pubescens (TX, NM, AZ, UT, NV, CA)
Nectandra coriacea (FL) Quercus macdonaldii * (CA)
Quercus ellipsoidalis (MI, WI, MN)
Quercus laevis (VA, NC, SC, GA, FL, AL, MS LA)
Asimina obovata * (NC, SC, GA, FL) Schinus terebinthifolia Δ (TX, CA) Pinus edulis var. fallax (CO, UT) Prunus nigra (MI, MN, IA, IL, IN, OH, WV, CT, RI, MA, VT, NH, ME) Zanthoxylum coriaceum & (FL) Opuntia brasiliensis $\Delta - (FL)$ Ligustrum sinense Δ (NC, LA) Sapium biloculare - (AZ CA)Genipa clusiifolia (FL) Styrax americanus & (VA, NC, SC, GA)
Styrax grandifolius & (VA, FL, TX, KY)
Styrax platanifolius & (TX) Psidium longipes 💠 (FL) Myrcianthes fragrans var. fragrans ❖ (FL) Annona squamosa Δ ❖ (FL.) Rhus kearneyi ❖ (CA) Rhus laurina & (CA)
Rhus integrifolia & (CA)
Rhus microphylla & (TX, OK, NM, AZ) Liquidambar styraciflua A (NJ, MD, DE, PA, VA, OH, IL, AK, TX, FL, WV) Tamarix paryiflora ∆ (CA) Amyris balsamifera ❖ (FL) Nicotiana glauca (FL, TX, NM, AZ, CA) Trema lamarckiana & (FL)
Vauquelinia pauciflora & (AZ)
Planera aquatica (NC, SC, FL, GA, AL, MS, LA, TX, OK, MO, IL, KY, TN) Planera aquatica (NC, SC, FL, GA, AL, MS, LA, TX, C Laguncularia racemosa (FL) Salix pyrifolia (MN, WI, MI, NY, ME) Salix viminalis & (MS, ME, CT, RI, VT)) Salix melanopsis (WA, OR, UT, CA, WY) Salix aevsusculoides & (AK) Salix sessilifolia & (MA, OR) Salix fluviatilis & (ME, MN., SD, KS, VA) Salix personal (MR, MN., SD, KS, VA) Salix sersicea (AK, WA, OR, CA, ID, MT) Ilex laevigata & (NY, ME, SC)

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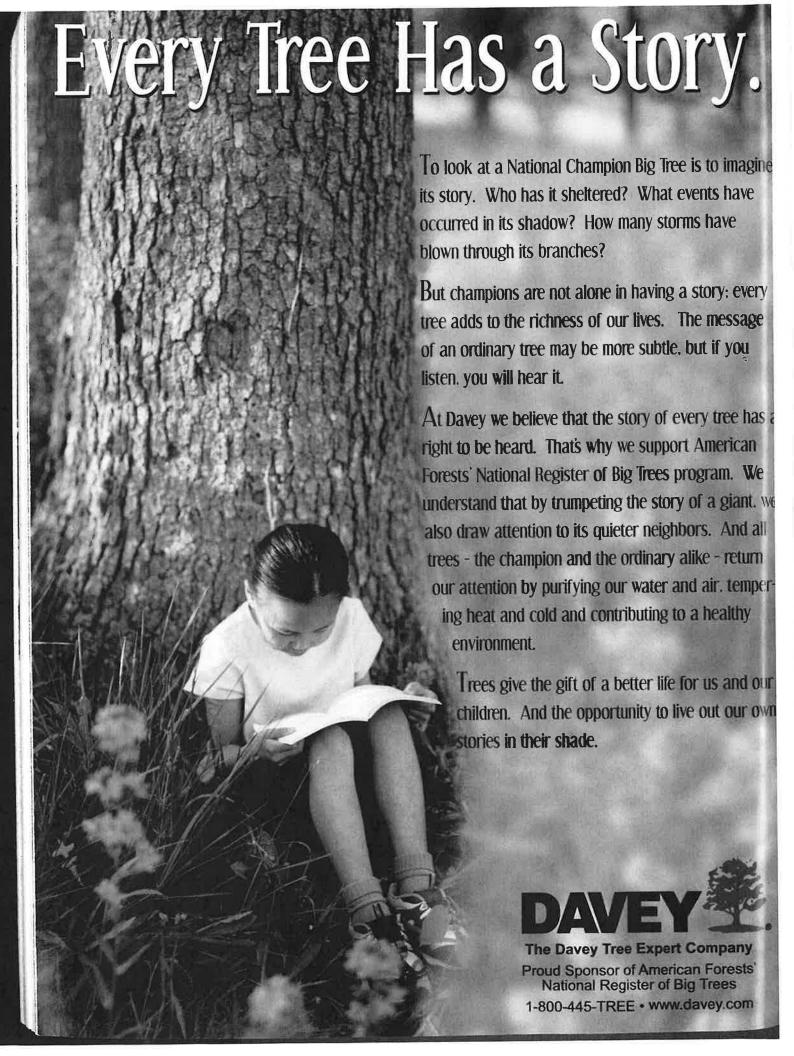


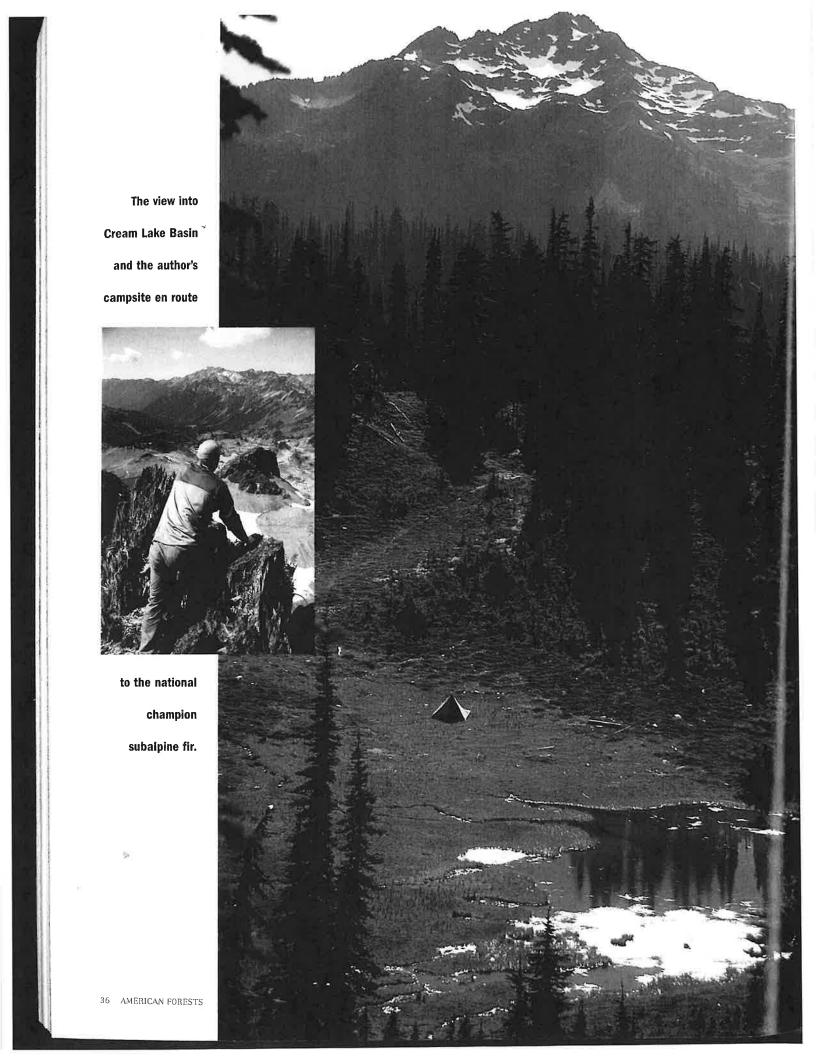
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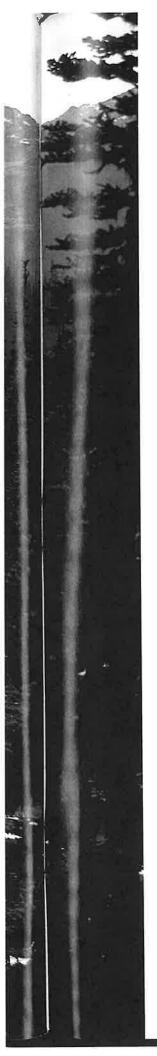
AMERICAN FORESTS'

- Cross-reference by Latin name
- Try your hand at finding select trees
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OLYMPIC UNDERTAKING

In the holy grail of arborism, in search of a national champ.

Story and photos by Tyler Williams

y father often admonished, "Son, nothing worthwhile comes easily." Lottery winners might take exception to this dictum, but in the realm of big tree hunting, Dad's advice rings true. As I stood beneath the world's biggest subalpine fir, deep in Washington's Olympic Mountains, it was clear that my reward was more than just another big tree.

The place held the aura of a sacred archaeological site, a sort of holy grail of arborism. I felt the presence not only of the stately trees around me, but also

that of the people who had come to this remote locale before. We share a brotherhood of spirit because this place is not reached on a mere whim. It is a destination.

The champion subalpine fir sits in the heart of the Olympic Peninsula, near a postcard-perfect mountain pond called Cream Lake. The surrounding wilderness is an alpine dreamscape: crevassed glaciers, glistening snowfields, cragged peaks, steep mountainsides thick with timber, blue lakes, wildflower meadows, tumbling creeks, raging rivers—most painted in various shades of surreal green. This is the landscape I had struggled through over the course of two and a half days.

My route started in the Elwa River Valley along the northern edge of Olympic National Park. From here, a 13-mile, 4,000-vertical-foot slog up a beaten path brought me to an alpine bowl where a black bear spooked away at my scent.

On day two, the broad trail degenerated into a narrow footpath, and the hiking got serious. Traversing a 50-degree slope and near-vertical fins of rock, the vague trail offered virtually the only route of travel in the steep plant-covered world. Just as I began to revel in its relative ease, it stopped. A slide path of loose crumbling rock obliterated any sign of a trail.

I continued across the gully hoping the route might reappear and found myself clawing through a tangle of shrubby yellow cedar. Clearly, this was not the way. I



turned and carefully edged my way back. The only other direction the route could have led was down. Ironically, this way was blocked by a small dead subalpine fir, its fallen prickly crown pointing at me like a bayonet. Casting off any thought that the tree was a sign I should turn back, I threw it out of the way and continued down. Within feet, I was no longer on any discernible route.

The suddenly disappearing trail rang eerily familiar, recalling the time I lost a trail in Idaho's Bitterroot Mountains. Darkness was falling along

with the first flakes of an approaching storm. Tentless, I crawled under the tightly bunched boughs of a grand old subalpine fir in an open meadow. Its dark cave-like womb sheltered me from two inches of wet snow that fell overnight. The next morning I found the trail.

This time, despite my searching I could not find any route whatsoever. A tree-assisted descent ensued as I lowered myself ape-like from branch to branch down the steep slope. Progress slowed. Two hours of scary downclimbs and frustrating bushwhacks brought me to a pass in the wild mountains, where the game-traveled trail magically reappeared. By this point in the day I was pretty exhausted. It was 11 a.m.

This type of backcountry beat-down is par for reaching the champion subalpine fir. Renowned big tree hunter Robert Van Pelt, Washington state coordinator for the National Register of Big Trees, visited the Cream Lake tree in 1992. Attempting an out and back dash from their basecamp seven miles distant, Van Pelt and his partner underestimated the rigorous route and were forced to spend the night out, lacking so much as a sleeping bag. The next morning brought blinding fog.

"We could only see about 30 feet," Van Pelt recalls. The duo climbed nearby Mt. Ferry to ascertain their position in the soup and from there regained the route and made it back to camp and cherished shelter.

Inclement weather is the norm in this region and

probably a big reason why Cream Lake grove such giants. Perched at the head of the Hoh River Valley, the Cream Lake Basin is a perfect bulls-eye for Pacific storms. Saturated air masses funnel up the Hoh before emptying their pregnant loads on the blockade of mountains at the head of the drainage. The valley below gets 135 inches of precipitation annually. Extrapolating to the higher Cream Lake Basin yields 170 inches or more a year, much of that snow.

Violent thunderstorms hit the area prior to the tree's initial reported dis-

covery in 1963. Young Stephen Arno and his two companions had to endure a night of "horrendous roars of lightning," as Arno recalls. They steered clear of any big tree lightning rods that night, but the next morning, as they emerged from their rain-soaked canvas tent, they were immediately drawn to the champion tree.

"We were just kinda looking around, and this thing stood out," Arno recalls. The trio went over to measure the tree's circumference and discovered they weren't the first to reach the great tree.

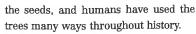
At the base of the massive trunk hung a hinged wooden door that concealed an old fire scar opening. Above the door was a mysterious note intended for someone who was expected to pass this way. Arno and his party were stunned. Here they were, miles from the nearest trail, staring at a wilderness message board.

Arno copied the note and investigated its origin after the trip. His detective work revealed that Herb and Lois Crisler, who shot the footage for the Disney True-Life Adventure film *The Olympic Elk*, were behind both the note and the door. They had used the great tree as a cache for their cumbersome camera equipment between filming forays in the early 1950s.

Half a century after the Crislers used the Cream Lake tree for their filming exploits, the notched-out fire scar remains, and perplexing remnants of past visitors seem to be inextricably linked to the tree.

When I departed the Cream Lake grove in the summer of 2005, it was with the exaltation that I had discovered a new champion. Just minutes earlier, I had uncovered a broken, moss-covered sign for the record tree—at the base of another gargantuan subalpine fir, 300 yards upslope from the real record holder. It was only after wandering through the grove looking for other giants that I came across the fire-scarred true champ. Apparently someone had moved the sign in the past 23 years, because Van Pelt reports it was in front of the correct tree on his 92 visit. Whatever motivated someone to hide the sign remains a mystery.

The magnetism of the king *Abies lasiocarpa* should not surprise those familiar with this species. After all, subalpine firs are nurturing trees. Grizzly bears strip the bark to get at nutritious cambium buried in the inner tissues. Numerous small mammals and birds eat



Subalpine fir resin has long been chewed as a remedy for halitosis, and the upright purple female cones can be crushed into powder and mixed with fat to produce a digestive cure. Some native American tribes called the subalpine fir "medicine plant" for its multiple uses. They used the firm boughs as bedding and burned its soft wood during the cold winters synonymous with subalpine fir country.

The deep snows that accumulate in alpine fir habitat often form massive drifts on the trees' downwind sides. In response, subalpine firs grow a thick mat of branches beneath the drifted snow pillows. On some trees in exposed locales, the leeward thicket can extend 20 feet from the trunk of the tree. This dense cluster of vegetation provides canopy for various forest dwellers: birds, snakes, deer, bear, lost hikers.

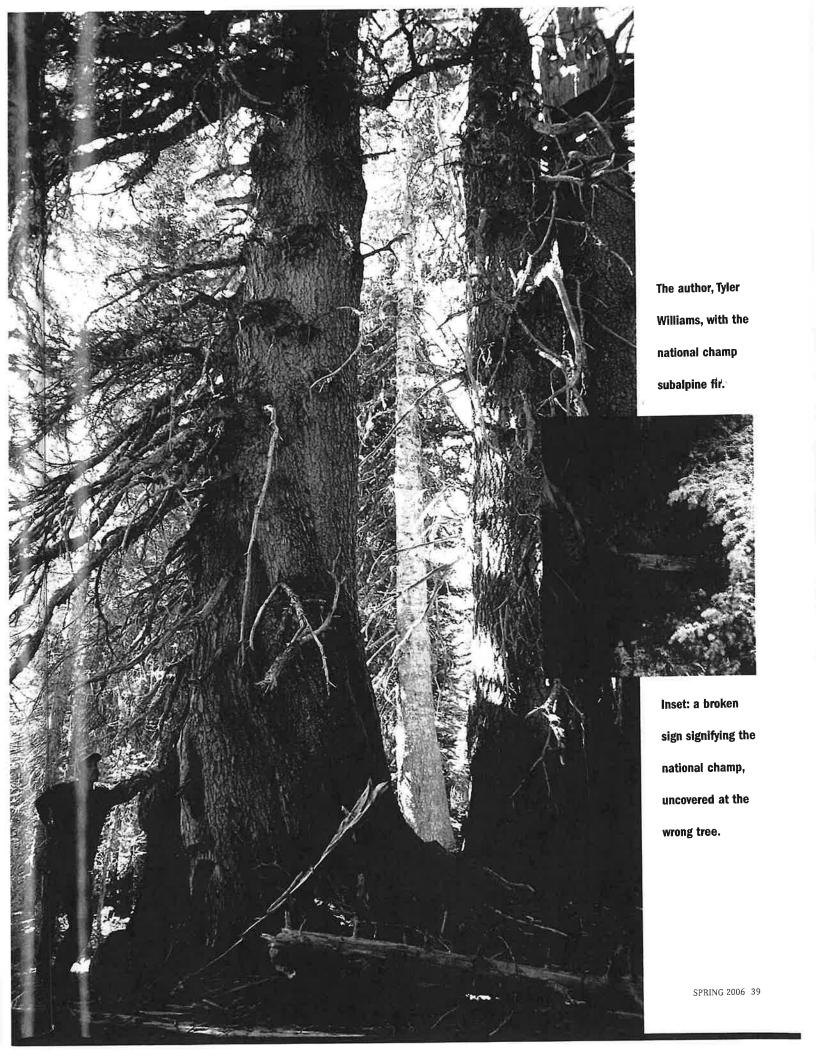
A labyrinth of branches sweeps downward from the trunk, diving beneath the duff of the forest floor before struggling back upward in a manicured looking hedge of green shrubbery. These wild hedges have just enough randomness, however, to make them more beautiful and unique than any human's clipper work.

The cylindrical shape of *Abies lasiocarpa* does give the distinct impression that it has been trimmed. The perfect form is the archetype of what most might conjure when they hear the word conifer. A tightly packed cone of short stout branches taper to a distinct point at the top, like a rocket set to pierce the sky.

Not all subalpine firs get the opportunity to grow into 100-foot tall natural Christmas trees. A large percentage of the species takes root at the very limit of timberline, clinging to windswept ridges buried in snow for nine months of the year. These hardy specimens sprawl shrub-like, some only growing a few feet in height over their entire 130-year life span. Even in this stunted state, an alpine fir is easily identified by its short one- to two-inch upturned needles and its compact shape. The bark is usually smooth silver/gray, although on big old trees like the 130-foot tall Cream Lake champion, it can be brown and scaly.

Squishy cork-like bark is a dead giveaway for *Abies lasiocarpa arizonica*, a variety commonly known as corkbark fir that grows at high elevations in Arizona and New Mexico. From these southern locales, the subalpine fir's range extends northward across mountainous areas of the West all the way to Alaska. Like an old friend, subalpine fir is always there to signal one's arrival in the high country, a place—as those lucky enough to see the Cream Lake tree know—we rarely visit without effort. **AF**

Tyler Williams is a guidebook author and photographer from the ponderosa pines of Flagstaff, Arizona.





PEOPLE WHO MAKE A
DIFFERENCE
FOR TREES AND FORESTS

Arid Advocate

Deserts, wildfires, shrubby species, amazing finds: such is the life of Arizona Big Tree Coordinator.

By Bob Zahner

s a kid growing up in the Southern
Appalachians I loved the forests and
was interested in their conservation.
This interest was expressed eventually as I became a professional forester
and university professor of forest ecology.

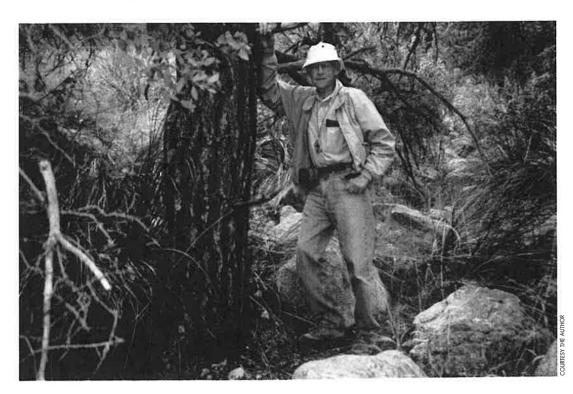
On retirement from teaching in the eastern forests at the University of Michigan and at Clemson University, my wife Glenda and I discovered the wonders of dry climate trees in the deserts and mountains of southern Arizona. From our home near Tucson we hiked many wildland trails, learning all we could about plants and their habitats. This activity soon led me to the Arizona Register of Big Trees (ARBT), newly organized in 1991 by horticulturist Richard Harris.

Through my forest research I had become fully aware of American Forests' Big Tree Program. When I first joined the ARBT group, the National Register listed 16 champion trees for this state, most of them nominated by people just passing through Arizona. And most locations were in or near urban areas and along highways. There were also an amazing number of "species without champs" that occur in Arizona. It seemed to me that the potential for new champions was great.

In 1993 I volunteered to be our state coordinator. I knew we needed to get out of the urban areas, into the mountains, canyons, and deserts. But I had to adjust my sights to the small sizes of these dry climate "trees." Even the champions of most desert species don't grow very large, and many of these are endemic to just the Southwest. On the other hand, the streamside and mountain forests are different; there we have discovered champion sycamore, cottonwood, ash, cypress, pine, oak, maple, and juniper, all trees any state

I knew
we needed to
get out of the
urban areas,
into the mountains,
canyons,
and deserts.

Retired Arizona Big Tree Coordinator Bob Zahner.



lion

ARTHKEEPER

We have lost to wildfire an average of one [champion]

would be proud to boast.

Within two years Glenda (a botanist) and I had added 10 new national champions to the Arizona tally. Our technique was simple. We already knew many field botanists, birders, federal and state forest and park rangers, and passed the word to them to be on the lookout for large specimens of any tree species. Then I consulted herbarium specimens, species range maps, and notes from trail guides. Suggestions soon began pouring in. We now have many big tree hunters from all over the state, and coordinating their discoveries has become a major job.

> By 1996 we had 48 national champions, and published our first "Arizona Register of Big Trees," with full-color photographs. In the year 2000 we published our second big tree

vegetation. We couldn't believe it, that this desert species could grow into a tall single bole tree over 2 feet in diameter!

A big tree coordinator's job is a roller coaster of expectations and disappointments. Arizona is a state with frequent severe wildfires, which keeps us on the alert monitoring our many champions out there. We have lost to wildfire an average of one a year, which the ARBT must try to replace. On the other hand, it is a thrill to find that a champion tree has in fact survived a holocaust. In the desert, lightning strikes are tree killers, and our giant saguaro cacti are the tallest things out there. Three times over the past 10 years it has been devastating to find our champion saguaro splattered on the ground.

"This has got to be the largest cottonwood tree in the world," I shouted. We had just rediscovered the gigantic Fremont cottonwood that used to be the national champion decades ago, but had been bested by a somewhat larger tree in New Mexico.

> years since it had been instated it not only to national champion, but at 42 feet in girth and 623 points it turned out to be largest specimen of any cottonwood species in the U.S., and possibly in the world.

I (often with subsequently been

significantly in the dethroned. We re-

dethroned. There were still 12 listed on the 2004 dozen champions listed on the current National state to ensure that Arizona (currently #3 in num-

We remeasured it, and sure enough it had grown

Glenda) have nominated probably 20 or more trees that have become national champions. but many of them have

National Register (10 for 2006). The amazing record of the ARBT is due in large part to the zealous fieldwork of three very motivated men and their very understanding wives: Ken and Kathy Morrow of Patagonia (Morrow has taken over as Arizona's state coordinator), Mike and Sylvia Hallen of Chandler, and David and Judy Thornburg of Cottonwood. Each of these couples has more than a Register. And they are still out there scouring the ber of national champs) stays among the champions of champion trees. AF

a year, which the ARBT must try

Two nominations during Zahner's tenure: Arizona walnut (above) and alligator juniper (right).

to replace.

register, then with 72 national champions. In 2002 my health began to fail for fieldwork, and I knew I'd soon have to retire from my job as the ARBT coordinator. I wanted to publish one more state register, which we did in 2005 with 88 national champions (2006 total: 82 national champs).

Of all of my nominations, the most exciting was the national champion Torrey vauquelinia. Like so many of our southwestern tree species, the vauguelinia is normally a large shrub, with a few stems reaching minimum tree size. Glenda and I had heard from a park ranger that there were some nice vauquelinia trees far up a remote canyon in Organ Pipe Cactus National Monument, down near the Mexican border. After backpacking several miles up the canyon, we began to pass a few tree-sized vauquelinias, and then suddenly, there it was, its huge crown emerging from giant boulders, towering 47 feet over all surrounding

AMERICAN FORESTS salutes Bob Zahner, who recently retired as our Arizona state Big Tree Coordinator. The National Register of Big Trees is better off because of you, Bob; we'll miss you.