SPECIAL INSERT: 2000-01 NATIONAL REGISTER OF BIG TREES

American Forests

THE GOOD, THE BAD, & THE BIGGEST

Champion Trees, including Clint's

THE SIZE OF THE EAST JAMES WHITMORE ON HISTORIC TREES URBAN WATERSHEDS



American Forests

VOL. 106, NO. 1

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SPECIAL INSERT: 2000-01 NATIONAL REGISTER OF BIG TREES

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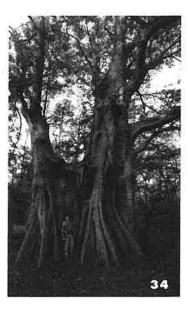
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MICHELLE ROBBINS

Welcome to 'The Show'

For trees, there's only one version of the Major Leagues. Grab a scorecard and enjoy.

n baseball they call the Major Leagues "The Show," and for the players, it's a chance to strut their stuff for the world to see. In the spring we have our own version of The Show at AMERICAN FORESTS. But around here the "big time" means Big Tree time, when we pause to applaud the best and the biggest of 826 species of native and naturalized trees.

It's pretty amazing when you think about it: Scores of citizens go out and hunt for trees whose

height, circumference, and crown spread make them genetic All Stars. Katie Byrne, our big tree coordinator, takes those nominations, sends them to state coordinators to verify, and then starts tallying.

We're delighted to present the results: the new millennium's first crop of novice, familiar, and reinstated champs. Rest assured that in this, American Forests' 125th year, we've left no crown spread unmeasured in our search to bring you the best of the big trees for 2000. Get set for an arboreal blockbuster worthy of a Hollywood premiere. It has:

• Suspense: Will the reinstated Darlington oak ("Clippings," Winter 1999) retain its title?

- Glamour: Clint Eastwood made our day by agreeing to pose with his newly crowned champ and talking about his roots (Register, page 14).
- Drama: Who won our first-ever photo contest?
- Intrigue: Which trees reign biggest east of the Mississippi? (page 34)

(We're short on good old-fashioned romance, but I don't want to carry this too far. So I'll just say that throughout the Register we also profile some prolific big tree hunters who have an inordinate fondness-and knack-for finding champion trees.)

Be sure you note our slimmed-down species

without champs list. We urged people to help us eliminate that list, and while we knew it was a long shot to totally eradicate it, the list shrank by 44from 137 to 93—no small task. An especial thanks to those who helped us find these trees.

Efforts to find species without champs yielded an unexpected bonus: co-champion key tree cacti, one of only four officially endangered trees in the Register. It's appearance this time—the first-ever for this tree-leaves the Santa Cruz cypress as the

> Register's lone "championless" endangered tree. A worthy goal for next time!

We're also celebrating efforts to protect another "endangered" tree of sorts: the national cochampion smoketree, which Purdue University has announced it will move from land slated for a major construction project (see Clippings).

Spring, of course, means more than just Big Trees and baseball. Stepping up to the plate in April are Earth Day, the 30th annual celebration of what sustains and nourishes us, and Arbor Day, a former American Forests presi-

dent's way of reminding people about the importance of planting trees.

We think J. Sterling Morton and Earth Day founder Gaylord Nelson would be pleased that people now recognize how vital trees are in solving many of our environmental problems, including one of our most pervasive: sprawl.

This year as you celebrate these two important dates, take a moment to recognize where the tree you plant fits into the world today. Support efforts to keep sprawl in check or calculate your carbon debt on our website (www.americanforests.org), then pay that debt in trees planted.

Who knows? The tree you plant today may one day make it to "The Show." AF

species without champs yielded an unexpected bonus: co-champion tree cacti, one of only four officially endangered trees in the Register.

Efforts to find

The national champion peachleaf willow in West Allis, Wisconsin.



CLIPPINGS

CHAMP ON THE MOVE

They're planning a new arts center for Purdue University and from all accounts it sounds like a pretty impressive place. But we're even more impressed by what's happening there before construction begins. Rather than destroy the national co-champion smoketree, which currently calls that piece of earth home, Purdue has announced plans to move it.

It's the first time we know of that someone has attempted to save a national champ by moving it.

The dilemma was brought to Purdue's attention by Guy Sternberg, a landscape architect, AMERICAN FORESTS member, and Purdue alumni. Sternberg also put his call to save the smoketree on the Internet, and Purdue officials say they've gotten letters and emails from as far away as France and Japan.

In a letter to University president Steven C. Beering, American Forests **Executive Director Deborah Gangloff** wrote: "I urge you to save this tree, as it is a significant link to our forest heritage and a beautiful example of the diversity of trees in the United States. It also serves as a living landmark on the Purdue campus."

Smoketrees are generally small trees with short trunks and widespreading crowns. The unusual name

comes from its clusters of smoky-pink flowers, which from a distance resemble puffs of smoke as they fade. The tree is a popular ornamental for its beautiful autumn leaves of orange, yellow, or red.

The Purdue tree has been a national champion since 1984.

While there are never any guarantees when you attempt to uproot nature, AMERICAN FORESTS' big tree coordinator Katie Byrne offered kudos both to

> Sternberg for his championing of the tree and to Purdue, which is spending more than \$20,000 on the move.

"The university is setting an important precedent by showing it is possible to balance progress with a respect for natural treasures," Byrne says. "We hope others lucky enough to host a national champion accord their trees the same amount of respect."

The university has a long-standing reputation for show-

ing respect for trees and the environment. It runs three Campus Tree Tours that showcase interesting trees.

Those wishing to show support for Purdue's action can contribute to a moving and maintenance fund. Send checks to: Purdue Research Foundation, Agricultural Development, 1140 Agricultural Administration Building, Purdue University, West Lafayette, IN 47904-1140. On the memo line, note: Smoketree.



The co-champion smoketree is the Register's only "traveling" species.

CARBON COUNTERS

An initiative from the World Bank will help create a market for buying and selling carbon credits to fight global warming.

The bank will set up a \$150 million fund using government and private donations, according to a report in The Washington Post. The money will allow businesses in developed countries to purchase carbon "credits" from developing nations with less energy-efficient industries. The fund's structure is based on the approval of the Kyoto protocol on global warming.

VALUABLE TREES

True Value, in conjunction with Fiskars Inc., will donate funds to support Global ReLeaf tree planting across America. More than 10,000 True Value stores will attach information about AMERICAN FORESTS and the benefits of tree planting on select Green Thumb lawn and garden cutting tools. To locate a True Value store near you, visit www.truevalue.com.

ONE WE'LL MISS

Join us in bidding a sad farewell to Peanuts creator Charles Schulz and the antics of Charlie Brown, Snoopy, and (our personal favorite) the kite-eating tree. Schulz, who died in February, announced last December he was ending the 50-year-old comic strip to concentrate on his recovery from colin cancer.

There has long been much to love about Peanuts, but we especially delighted in the spring besting match between the beleaguered and be-striped Charlie Brown and the wily tree that always found new ways to snag his kite.

Springtime will be a little less joyful this year.









CLIPPINGS

ENVIROS 1, GLOBALIZATION O

Protesters filled the normally tranquil streets of Seattle, Washington, last December to oppose the environmental and labor policies of the World Trade Organization.

Some of the 40,000 people who gathered in the Emerald City lobbied against the Accelerated Tariff Liberalization plan, a U.S. proposal to eliminate trade tariffs for lumber and other forest products. Environmentalists, who said the rule would cause a decrease in wood prices and increase the worldwide demand for logging, celebrated when trade ministers failed to support the proposal.

"Peaceful protesters in Seattle and voices from around the world have called for the WTO to include environmental protection, transparency, democracy, and participation," Greenpeace International's Remi Parmentier told Environment News Service. "From here on, it will be simply impossible for the



WTO protesters oppose the organization's environmental and trade policies.

WTO to ignore their concerns."

The proposal would have eliminated tariffs for wood, lumber, wood chemicals, rattan, and wood chemicals by Jan.

1, 2002 for developed countries and by Jan. 1, 2004 for emerging nations. Another section of the Clinton-backed plan called for developed nations to eliminate many tariffs on pulp, paper, and printed products by Jan. 1. Developing countries would have complied by Jan. 1, 2002.

Some forestry organizations supported the plan. A June 1999 study from the Office of the U.S. Trade Representative showed that looser tariffs would increase worldwide timber harvests up to 1 percent with logging levels in the United States remaining constant. But conservation groups said the study's focus on timber harvest ignores larger questions of environmental standards and geographical pressures.

The Seattle talks collapsed after four days when the 135 attending member countries disagreed on how to proceed. U.S. Trade Representative Christine Barshefsky said discussions would continue in Geneva next year.

Celebrate the New Millennium with some Living Landmarks

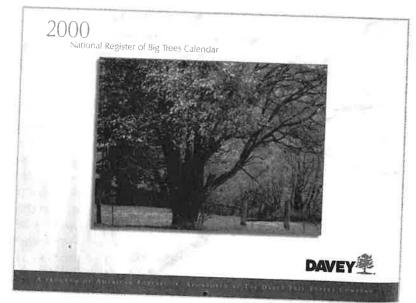
or 60 years, American Forests has worked with citizens to register the largest tree of each U.S. species. These champion trees serve as living landmarks tying us to our past—and our future. Get to know some of these champion trees through the 2000 Big Trees Calendar.

Each month you'll find a striking photo of a magnificent treeimages from mountaintops and meadows to big cities and small towns coast to coast.

Bring the images of these living landmarks to your home or office for just \$7.95.

Supplies are limited, so order yours today. Call 800/368-5748 or go to www.americanforests.org

The 2000 Big Trees Calendar was produced and donated to American Forests by The Davey Tree Expert Company as part of its corporate sponsorship of the National Register of Big Trees.



THE NATIONAL REGISTER BIG TREES 2000

AMERICAN-

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Plant Tomorrow's Champions Today

MERICAN FORESTS' National Register of Big Trees salutes the champion trees of many species. This biennial event is a wonderful way to tell the world about the truly charismetic trees that grace our landscape and to introduce people to the central role trees play in our lives.

Look to the future with us by planting tomorrow's champion trees now. American Forests: Global Releaf program has planted more than 12 million trees in damaged ecosystems through the beginning of 2000. And we are on our way to planting 20 million trees for a new millennium of cleaner air and water, clearer rivers and streams, more beautiful cities, and unbroken forestland for wildlife, recreation, and beautiful vistas.

PLANT THE "UNSUNG" CHAMPIONS

The trees you plant with AMERICAN FORESTS are the "unsung" champions. Trees in the front lines of the fight against water and air pollution, that absorb sulfur dioxide through their leaves and excess fertilizer through their roots. Trees working to coal the earth as they absorb curbon dioxide, the chief culprif in chinase changer. And trees that do yeoman duty by cooling our homes, in summer, shielding them in winter, and saving taxpayer money in stormwater retention. Trees that taise our spirits by reminding us of life's grandeur.

JOIN US IN PLANTING TOMORROW'S 20 MILLION "UNSUNG" CHAMPIONS TODAY

Take a mament to plant trees with American Forests. For just \$25 you can plant 25 champions of tomorrow, receive our award-win ning magazine, and also receive a certificate that celebrates your participation in our Global Releaf goal of 20 million new trees.

Call 800/545-TREE; Email rierg@amfor.org; Web: www.americaniorosis.org; or write: American Eorests, P.O. Box 2000, Washington, DC 20013.

AMERICAN FORESTS



A PARTNERSHIP OF CARING

Deborah Gangloff and Doug Cowan

HOW TO NOMINATE A POTENTIAL CHAMP

A REGISTER RETROSPECTIVE

Sixty years, thousands of trees, millions of memories. —Deborah Gangloff

CROWNING CHAMPIONS FOR A NEW AGE

New champs soar, Florida scores, an endangered species emerges, and from California: real star power. —Whit Bronaugh

A STAR'S STAR ATTRACTION

For Clint Eastwood, Carmel represents roots, fond memories, a protected past, and now, a champion among trees. —Dan Smith

IN SEARCH OF OLD-GROWTH GIANTS

Towering, massive, ancient. Get ready for some really big trees. —Whit Bronaugh

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SPECIES BY SCIENTIFIC NAME

SPECIES WITHOUT CHAMPS

62 CHAMPS BY STATE

Cover: National co-champion weeping willow, By Whit Bronaugh

A REY TO SYMBOLS AND ABBREVIATIONS

Co-champion: * Naturalized: A Off 1998 Species without Champs list: † County: Co.

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

In Champs by State List, number in parentheses indicates number of co-champs per state

A PARTNERSHIP CARING

The year 2000 marks a very special year for the National Register of Big Trees. Not only does this 2000 edition coincide with the 60th anniversary of the Register, but it is also the 10-year anniversary of



AMERICAN FORESTS' partnership with

The Davey Tree Expert Company.

Our alliance has been an exceptional experience for AMERICAN

FORESTS; with Davey Tree's help and involvement we have received more attention and recognition for the National Register of Big Trees than ever before. It remains of one of

the most popular and enduring programs at AMERICAN FORESTS. With Davey Tree's help we have been able to produce and distribute a beautiful, four-color calendar each year, upgrade the database software package that helps us keep track of the champs, make the Register accessible on the World Wide Web, and bring people professional photographs of the national champions.

We also want to thank our State Big Tree Coordinators, who keep an eye on the national champs in their states. They are essential in gathering and updating data on the trees and providing general support to the program. They are truly our "eyes" across the country. With their help we are pleased to present the most comprehensive National Register of Big Trees ever published.

AMERICAN FORESTS has spent the last 125 years championing the value of trees in the U.S. and around the world. We are proud to present here the champions of the tree world—the largest known specimens of all our native and naturalized tree species. Their age, size, and grandeur compel us to join them in championing the environment.

Deborah Gangloff

Executive Director, AMERICAN FORESTS

In the late 1800s John Davey formulated and tested his theories for a new approach to saving trees and in 1901 published *The Tree Dactor*, which became the definitive book on tree surgery. It embodied Davey's concern for the environment and his commitment to teaching people about proper tree care. In 1909, at the age of 63, he incorporated The Davey Tree Expert Company.

Almost a hundred years later, Davey Tree employees throughout North America are still carrying his message. The Davey Tree Expert Company is proud of its affiliation with American Forests—another organization that cares about, and for, trees. We are particularly honored to have been the national sponsor of The National Register of Big Trees for the last 10 years.

Davey Tree and American Forests each have a long history of caring for North

America's forests, whether they're urban forests, utility right-of-way forests, residential forests, or Amazon rainforests. American Forests' 125 years of operation are marked by several notable efforts, including its Global ReLeaf tree-planting cam-



paign and CITYgreen software, both of which Davey Tree supports as a corporate partner.

The National Register of Big
Trees celebrates the endurance of
nature's giants and serves as a
humbling reminder that our environment depends upon healthy
trees. By honoring the giants of

today, we are planting the seeds for the next generation to ensure that there are giants in the future.

R. Douglas Cowan

Chairman and CEO, The Davey Tree Expert Company

HOW TO NOMINATE A CHAMPION

HOW TO NOMINATE A POTENTIAL CHAMP

For each nomination AMERICAN FORESTS needs the following information:

- Correct name of the species or variety (only U.S. native and naturalized species are eligible). If you need help with identification, call your local Parks, Forest Service, or Extension office.
- Circumference of the tree in inches at 4 1/2 feet above the ground. If there is a fork at this point, measure the smallest circumference below the fork. If it branches below 4 1/2 feet, measure the largest single stem at 4 1/2 feet.
- Vertical height of the tree to the nearest foot. The most reliable tools for this purpose are an Abney hand level, a hypsometer, or a transit. Lacking those, you can use a straight stick. Hold the stick at its base vertically at arm's length, making sure its length above your hand equals the distance from your hand to your eye. Walk backward away from the tree, staying approximately level with the tree's base. Stop when the stick above your hand appears to be the same length as the tree. You should be sighting over your hand to the base of the tree and, without moving anything but your eye, sighting over the top of the stick to the top of the tree. Measure how far you are from the tree, and that measurement—in feet—is the tree's height.
- Average diameter of the crown to the nearest foot. Measure the widest spread of the crown and the narrowest, then add them together and divide by two.
- 6 Location.
- O Date measured and by whom.
- Name and address of owner.
- Clear photograph with date taken.
- Description of the tree's physical condition.
- 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.

DEFINITIONS OF TREES

As defined in the Checklist, trees are woody plants having 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 faliage, 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 U.S. 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

To 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

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

- The Editors

RETROSPECTIVE

BY DEBORAH GANGLOFF

SIXTY YEARS,

THOUSANDS OF TREES,

MILLIONS

OF MEMORIES.

I guess you could call it a "bus man's holiday." After years of involvement in American Forests' National Register of Big Trees, there I was on vacation last August with friends and family, looking for national champion trees in the Great Smoky Mountains. My guide: Big Tree Hunter par excellence Will Blozan, arborist and former park ranger. I was a little apprehensive about spending the day with Will because I once sent a Wall Street Journal reporter into the field with him, and I don't think she'll forget that trip anytime soon. Maybe she had spent too long sitting in an office or maybe Will took pity on us, but his field tour was like a walk in the park. We were impressed by the number and size of trees in this east-

ernmost area of the park. Massive pines and tulip-poplars towered above, proving you don't have to go to California to find cathedral groves!

I remember thinking that my feelings among these giants must have been similar to those that inspired AMERICAN FORESTS to launch the National Register of Big Trees 60 years ago. In 1940 Americans saw war creeping ever closer. France, Belgium, Denmark, Norway, and others fell to Germany. Blitzkrieg intensified in London. But it was also a time of "firsts" in the United States: FM radio hit the airwaves, food could be freeze-dried, and M&M candy debuted in groceries. McDonald's sold its very first of billions of hamburgers.

One of American Forests' firsts took place that same year when we launched the National Register of Big Trees. At first the program was simply called American Big Trees. By 1961, it was highfalootingly referred to as the Social Register of Big Trees. In 1978 we settled on the National Register of Big Trees. As the name changed, the

list grew: from 100 champs to 355 in 1961 to more than 850 currently.

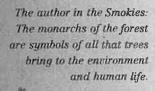
In 1940 America was a growing country facing impending involvement in another world war. The need for wood for the nation and its possible entanglement in war increased forest harvests on private lands. A concerned research engineer with

Southern Hardwood Producers in Memphis, Tennessee, Joseph Stearns published his article "Let's Find and Save the Biggest Trees" in the September 1940 issue of *American Forests*.

"One of the most tragic stories in the history of American forests is now in the making. It hasn't been written in its final form, but our children will live to see that day unless something is done. I refer to the gradual disappearance of our most magnificent remaining tree specimens," Stearns wrote. "The giants I have in mind are not necessarily the big redwoods of the West Coast; nor are they the well known famous and historic trees. Such trees are in the main well protected. I refer to the giants scattered throughout our remaining virgin forest stands . . ."

And he proposed that we do something about it. "Shall we sit idly by while this is being done? I believe that a few of our biggest specimens of each tree species should be singled out, marked, plotted on timber maps, and preserved. All lumber company employees should be notified that such trees are not to be cut, damaged by felling adjacent trees, or scarred by careless axmen... So here is a challenge to every individual tree lover, to every forest conservationist in the country; to every

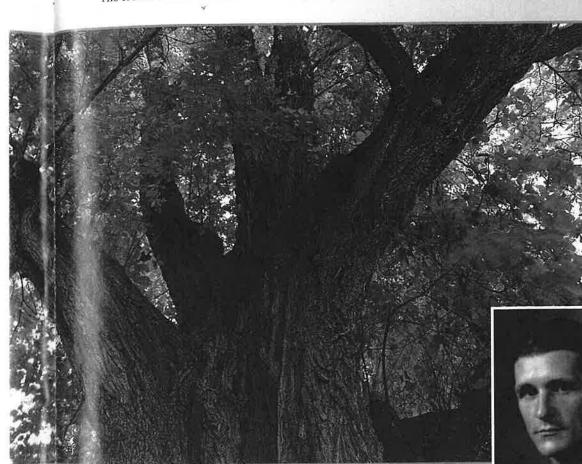




forester; to every lumberman; to farmers; vacationists, to all who come in contact with trees,"

Then he laid out his plan. "The first task, of course, is to locate the largest specimens of our major species—a happy task in which everyone going into the woods can participate. Then concerted action to bring about the protection and preservation of these great old giants. If an organization is necessary to accomplish this, then let's organize. Or, and this might prove more immediately effective, let every tree lover, every forester, every lumberman rally behind some established national forest conservation organization able and willing to fight for the preservation of our biggest tree specimens."

AMERICAN FORESTS accepted the challenge in those same pages with a call to action: "WANTED! The location and measurement of the largest specimens of ... American Tree Species." Our ration-



"ONE OF THE MOST TRAGIC STORIES IN THE HISTORY OF AMERICAN FORESTS IS NOW IN THE

> MAKING. . . . I REFER TO THE GRADUAL DISAPPEARANCE OF OUR MOST MAGNIFICENT REMAINING TREE SPECIMENS."

-JOSEPH STEARNS, PICTURED HERE WITH THE NATIONAL CHAMPION SASSAFRAS

ale was simple. "Such a conservation activity will have incalculable benefits, not only in stimulating greater tree appreciation, but in establishing a nation-wide laboratory for tree and forestry studies by future generations."

We had some expert help in setting up the program. Frederick W. Besley, Maryland state forester and an American Forests director for 18 years, wrote in October 1940 to offer his assistance. "I hope the Association, in its quest for records of big trees, will endeavor to establish a standard of measurement so that all can be properly compared." Besley shared Maryland's rules, which we still use today: "three standard measurements as more nearly giving a true evaluation of the size of the trees, namely the circumference of the trunk at 4 1/2 feet from the ground, which would take it beyond root swell, the greatest diameter of spread of branches in feet in a line that would touch the trunk of the tree and third, the height of the tree in feet."

Also included in Besley's letter was the nomination for a white oak as national champion. To this day, 60 years later, the Wye Oak on Maryland's Eastern Shore holds the title of national champion white oak. The Wye Oak is sacred in Maryland. Purchased by the state, it is the only tree in Wye Oak State Park. Miles of cabling keep it erect, and it receives regular professional care. A metal plate on the trunk prevents public access to a hollow cavity that can hold a half-dozen people.

The late Chester Sewell of the state forestry agency expressed the immense pride people had in

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—STATE FORESTER

the Wye Oak with a true story he told new recruits. His professional career started on the Eastern Shore in the shadow of the living legend. Introductory training required him to travel to other parts of the state. A couple hours into his maiden trip, a dispatcher on the fire control radio reported the Wye Oak had fallen. Shaken, he pulled his car off the road and sat in a stupor for some time before turning back. He found the tree still standing but having lost a limb larger than many mature trees. Sewell was assigned to watch over the fallen limb day and night until it could be properly removed.

With its excellent soils and active state forester, tiny little Maryland held the title of state with the most champs in the program's early years.

Another of its champions was also a famous and historic tree. The tulip tree (yellow-poplar or *lirio-dendron tulipifera*) known as the Liberty Tree, on the campus of St. John's College in Annapolis, reigned as national champion from 1940 to 1966. Indian treaties were signed in its shade, and Francis Scott Key, George Washington, and General Lafayette all sat beneath its spreading branches. The Sons of Liberty used the tree as a meeting place to plan the American Revolution. Sadly, the tree was deemed unsafe by the college and removed last fall.

The national champion osage-orange, outside Patrick Henry's Virginia home, is also famous for historical reasons. Popular legend holds that the doctor who treated Henry wept beneath the tree when Henry died. We now know this is not true, but the tree's real story is even better. Grown from fruit sent back by Lewis and Clark, it was presented to Henry's daughter by Thomas Jefferson. The osage-orange species was unknown until Lewis and Clark "discovered" it on their expedition.

As this story shows, while the trees are spectacular it is the people—the big tree hunters, both nominators and owners—who make the Big Tree program possible. They range from the extremely dedicated, who search for champs regularly, to those who have nominated only the tree beside their home. A common bond unites them: They love "their" trees.

Nominators send in vacation pictures of big trees; owners have bragged about their trees to friends and neighbors. One woman, wheelchair-bound, asked her mailman to measure her tree for the Register. When the home of one champion's owner caught fire, he told the firemen, "Don't spray the house, it's too far gone. Save the tree!" Missing a good picture of the tree, one nominator sent in beautifully detailed drawings. Tony's Steak and Lobster House in New York prominently features its champion on its menu. The nominator of the yellow poplar featured the tree on his Christmas cards. Even celebrities can own celebrity trees: weatherman Willard Scott is the former owner of the national champion gumbo-limbo in Florida, and Clint Eastwood is the proud owner of the bluegum eucalyptus champ (see Register page 14).

Nominators, or big tree hunters, have been our strongest supporters for quality control in the program. They have helped us fine-tune our nomination requirements and weed out ineligible species. And in a few cases, when a discrepancy or disagreement arose over the title, groups of

FREDERICK W. BESLEY,

WITH MARYLAND'S

CHAMPION WHITE OAK,

THE WYE OAK

hunters committed to work together to take the measurements. Two notable cases are those of the sitka spruce and the giant sequoia.

In 1975, with the help of the National Geographic Society, American Forests' representatives trekked to the California home of the big trees and measured several contenders for the throne. The sequoia General Sherman held its title by sheer volume alone. An expedition of big tree hunters settled the issue of which of two sitks spruce challengers would ascend to the throne. And while the program calls for simple ways to measure trees, 21st century technology now enables hunters to use lasers to gauge a tree's height to the exact centimeter. A growing listserve of big tree hunters now lets them debate size and species in cyberspace.

It may take high-tech solutions to resolve some of the good-natured competition among big tree enthusiasts. Washington and Oregon have often competed for champs of the massive species that grow in the great Northwest. When a Douglas-fir champ was crowned in Washington, a reward was offered to anyone who could find a tree in Oregon larger than the Washington champ. Kentucky desperately wants the Kentucky coffeetree title (now in Maryland), while Ohio wants the Ohio buckeye champ (now in Kentucky). In fact, every state wants the champ of their state tree!

And we can learn from big trees. A mathematics professor uses our way to calculate a tree's point total as an example of a weighted formula. Forestry researchers have used big tree data to estimate size and composition of prehistorical forests.

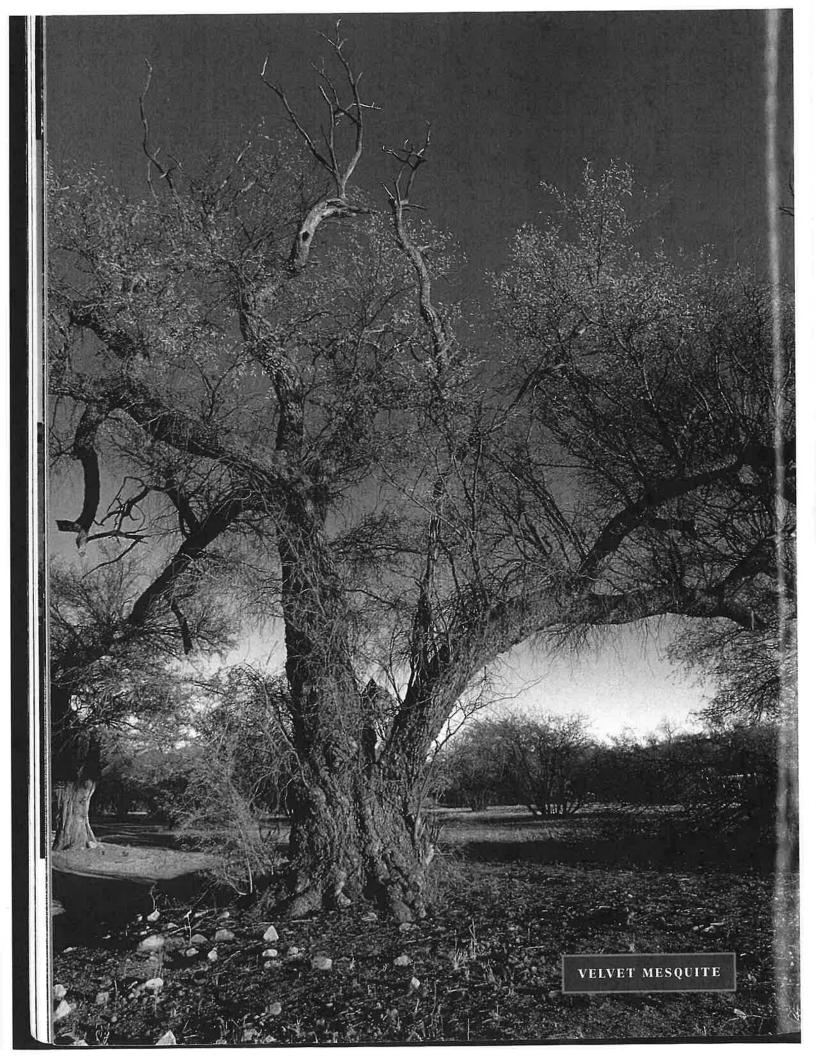
The 1990 Register was the first to benefit from the sponsorship of the Davey Tree Expert Company. While reading a 1988 National Geographic, I noticed an ad from Davey that featured its care of the national champion live oak, the Seven Sisters, in Lewisburg, Louisiana. I thought, if Davey cares for one national champion, maybe it would like to care for them all! We launched Davey's sponsorship by planting a tree with Senator John Glenn in 1989 at the Smithsonian's Air and Space Museum in Washington. It's a great educational partnership with an important message. Big trees bring more benefits—social, economic, and ecological—and for a tree to grow big, it needs care.

This is perhaps the most important message of big trees. Any tree can be a national champion, but all trees are champions of the environment. Humans share a vital symbiotic relationship with trees and could not exist without them. The monarchs of the forest are symbols of all that trees bring to the environment and human life. They deserve our respect and appreciation—and our protection. AF

The national champion osage-orange dwarfs the home of patriot Patrick Henry. The species was unknown until "discovered" by Lewis and Clark on one of their expeditions.

Deborah Gangloff is American Forests' executive director.





CHAMPIONS for a New Age

I write this article in late 1999 with full confidence that the National Register of Big Trees—and the big trees themselves—will survive the passing of the second millennium.

That's because I've met a survivor from the first millennium, Utah's champion Rocky Mountain juniper; and I have visited California's champion

giant sequoia, a tree born when we first began counting the years toward a millennium. I've even made the acquaintance of the champion western juniper, which no doubt scoffs at Y2K, having been around since Y2KBC.

Even if you're among those who realize that, in the absence of a Year 0, the real millennium doesn't begin until 2001, relax, put your trust in ancient champion trees, and check out the Class of 2000.

The National Register of Big Trees celebrates its 60th year and begins the popularly accept-

ed new millennium with 867 champs and cochamps representing 826 species. From the worldfamous, incredibly huge, 60-year veteran giant sequoia to the obscure, diminutive, rookie Georgia holly, this exclusive list features the dimensions of the most magnificent individual trees in America. And by doing so, of course, it highlights each species' potential.

The Big Tree Register is a lot like a healthy natural forest. On any given day not much happens. But over the years its dynamic nature becomes apparent as most trees get bigger, some are diminished, and a few bite the proverbial and literal dust. In the two years since the last Register, 150 stately trees have been crowned as the biggest of their kind, and 100 have been dethroned.

Most dethroned champions simply lost the point game to a bigger tree. But a few were

deemed undeserving in the first place. The former titleholders for Oregon white oak, Norway maple, rock elm, buckwheattree, turkey oak, and blackbead catclaw were all unmasked as trees of a different species.

Six trees, including the 737-point exaggeration of a sycamore, were stripped of their crowns because they broke the multi-stem rule: If a tree forks below 4 1/2 feet, the circumference should be measured from the largest single stem above that level. It is important to follow that rule because the circumferences of multi-stem trees greatly

inflate their point totals. This detracts from the impressions of true giants, robbing them of the respect they deserve.

At least 16 champion trees died of various causes. An Engelmann spruce in Payette Lake, Idaho, succumbed to bark beetles. Gravity and wind got the best of the co-champ eastern white pines in Upper Michigan. In Florida, Hurricane Georges knocked out the biggest Key byrsonima while Josephine flattened the biggest yellow hawthorn. On the Fort Apache Indian Reservation

NEW CHAMPS
SOAR, FLORIDA SCORES,
AN ENDANGERED
SPECIES EMERGES,
AND FROM
CALIFORNIA:
REAL STAR POWER.
STORY & PHOTOS
BY
WHIT BRONAUGH

in Arizona, lightning struck down one of two co-champion Chihuahua pines. (To add insult to injury, the other was dethroned by a tree elsewhere in Arizona.) A tornado obliterated a 461-point silver maple in Polk County, Iowa. And a 367-point digger pine in Redding, California, met its demise by the most powerful force of all: the Highway Department.

The newly crowned in the Class of 2000 cover nearly the entire arboreal spectrum, from the twig-like 17-point Florida crossopetalum to the colossal 1,291-point coast redwood. At first one might wonder how, after 60 years of searching, big tree hunters—or even casual hikers—could miss the world's biggest coast redwood. But the best hiding place for a giant tree is a forest of other giants.

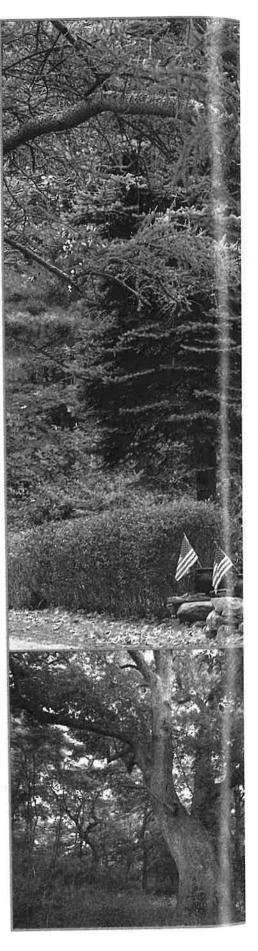
The team of Ron Hildebrant, Michael Taylor, and Steven Sillett found not one but two trees that beat the 1998 champion redwood. In fact, the one dubbed the Lost Monarch is only 9 points shy of the ol' General Sherman giant sequoia, long recognized as the biggest tree in the world!

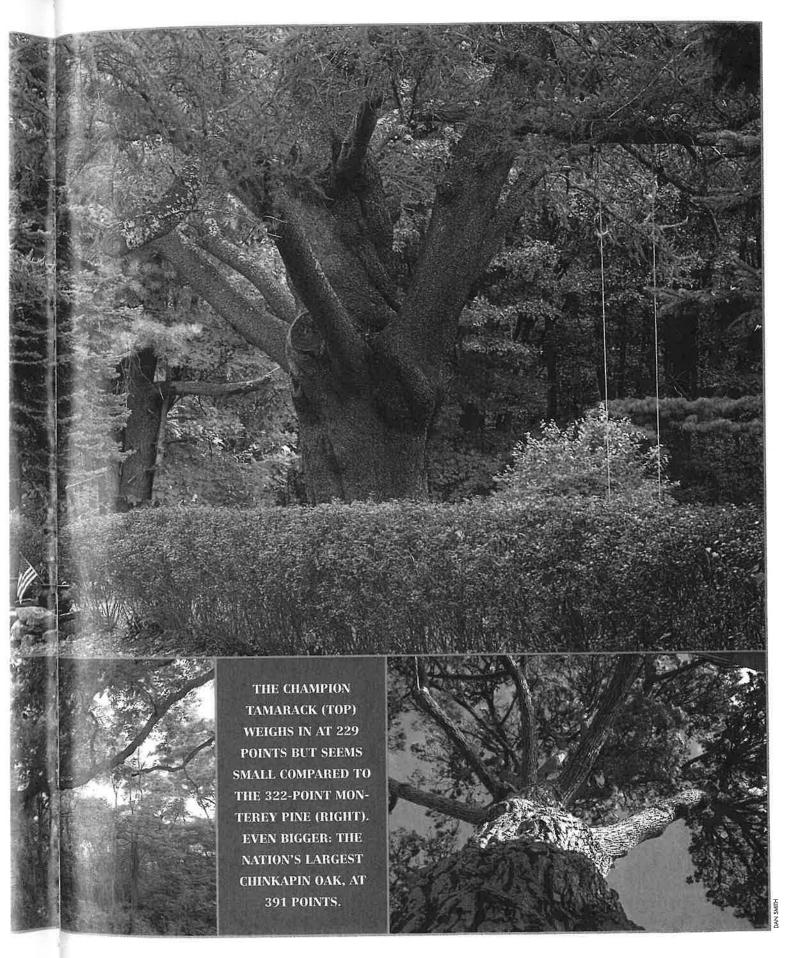
To picture the size of the Lost Monarch, stand in the middle of a room roughly 22 feet on all sides. Then imagine it entirely filled with wood and gradually tapering upward 30 stories, a bit taller than the Statue of Liberty, including pedestal.

Also notable at the upper end of the spectrum of new royals are two others in the Top 10. The coast Douglas-fir solidified its No. 5 ranking among the biggest of the big with the discovery of an 804-point tree in the Olympic Mountains of Washington. A California-laurel from Grass Valley, California, boasting a 45-foot girth and 684 points, bested its Oregon predecessor by 77 points and moved up to 7th place as the Top 10's only hardwood. (The only hardwood on the previous list was the now-dethroned sycamore.)

Four other new champions topped the 500-point mark: in California, a bluegum eucalyptus owned by Clint Eastwood (629 points—see Register, page 14), canyon live oak (548 points), and California red fir (547 points), and in Washington, a Western hemlock (545 points). These impressive point totals grant them membership in the exclusive 500+ Club, which includes only 43 of

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America's 826 tree species.

The runts of the tree world make up the opposite end of the new champion line-up. The 2000 list has 34 new champs with fewer than 50 points. It may be hard to call them monarchs with a straight face but, as the biggest of their kind, they deserve the same respect as the giant sequoia.

None of these tiny titans have trunks wider than this page, and only one reaches 30 feet tall. The smallest is the 17-point Florida crossopetalum on Key Largo. It has a trunk you could encircle with the fingers of one hand, a crown half the spread of your arms, and an uppermost leaf Michael Jordan could easily slam dunk.

The big tree freshman class of Y2K is scattered across the country from the southwestern deserts of California to the northern Appalachians of New Hampshire, and from the Florida Keys to the Olympic Peninsula. Of the 28 states boasting new champions, Florida tops the list with 39, primarily because of the efforts of Joseph Nemec, a park ranger at Key Largo Hammocks State Botanical Site. Working in endemic tree heaven, he found 14 new champs, all on Key Largo, with appropriately exotic names like princewood, Bahama strongback, red stopper, and myrtle-of-the-river.

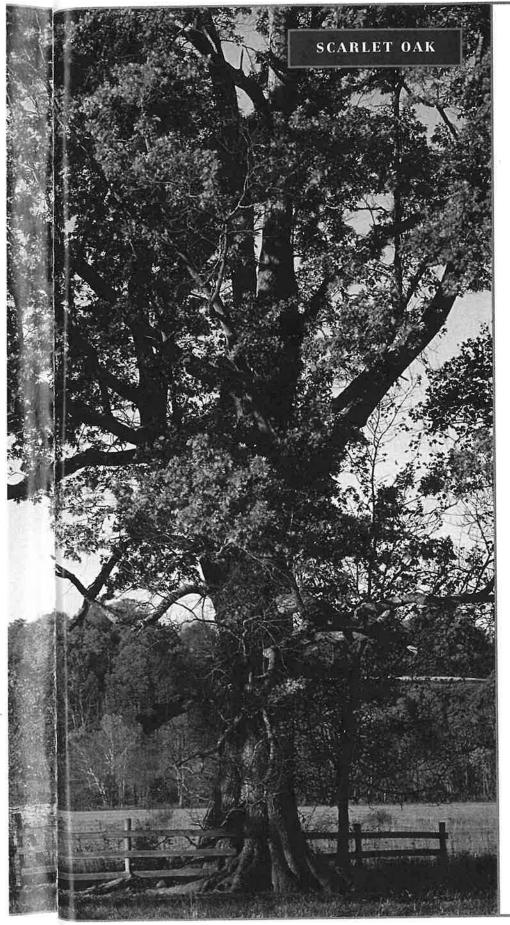
Also in Florida, the Register has its firstever listing of not one but two co-champion key tree cacti, an endangered species. One of those co-champs is the ultimate bean pole of the tree world with a 23-foot height and a crown spread of 1 foot. When American Forests reported on the status of endangered trees and their champions in 1996, four trees were on the brink: roundleaf birch, Florida torreya, key-tree cactus, and Santa Cruz cypress.

Since that time, when only the birch and the torreya had champions, recovery efforts have proved so successful the roundleaf birch has been reclassified as threatened. Unfortunately, the Gowen cypress, then a candidate for listing, has been added to the Endangered Species List because of urban growth and the fire suppression that follows. The species needs fire to reproduce. The new champion Gowen cypress was found at California's Point Lobos State Park in one of only two remaining natural stands.

In Arizona, state big tree coordinator

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Robert Zahner and fellow big tree hunters Ken Morrow, Mike Hallen, and Ken Porter discovered 18 of that state's 29 new champs. Among the notable additions are a 249-point quaking aspen in Coronado National Forest, a 384-point alligator juniper in Prescott National Forest, and a 426-point Arizona sycamore in Aravaipa Canyon. California also did well this year with 21 new champs, 10 topping 400 points. State big tree coordinator Art Cowley contributed half of those, including a 464-point California sycamore and the aforementioned 629-point bluegum eucalyptus.

Florida, Arizona, and California have an unfair advantage because 200 tree species are found only within their borders in the United States. That makes the accomplishments of Georgia and Tennessee especially impressive, with each counting 9 and 11 new big tree titles, respectively. The rest of the botanically similar southeastern states add only 11.

In Georgia, this year's champs include the reinstated Darlington oak, which was removed from the 1998 list because it was considered too similar to the laurel oak to be classified as a separate species. After protests from experts and Georgia tree lovers, American Forests turned to specialists at the U.S. National Arboretum, who deemed it worthy of separate species status. Welcome back!

Finding a big tree worthy of a crown isn't as hard as it may seem. Currently, 93 species have no champion at all. Many big tree hunters have multiple nominations, proving that luck plays a minor role. Spending time in the woods and maintaining an awareness of trees wherever you go are far more important. And, if you live in the southern portion of a species range, in an area full of endemics or near old-growth forest, your chances are even better.

So with field guide and measuring tape in hand, head to the woods and keep your eyes peeled for a tree with royal sap. Whether Y2K spells the end of the world or the beginning of forever, can you think of a better way to spend the day? AF

Photojournalist Whit Bronaugh lives in Arlington, Kentucky. He nominated the national champion elephant-tree.

FOR CLINT
EASTWOOD,
CARMEL
REPRESENTS
ROOTS, FOND
MEMORIES,
A PROTECTED
PAST, AND
NOW, A
CHAMPION
AMONG TREES:
THE BLUEGUM
EUCALYPTUS



A STAR'S ATTRACTION

What comes to mind when you think of Clint Eastwood?

Dirty Harry, probably. Maybe a scene from "Play Misty for Me" or "The Outlaw Josie Wales." What about a man who once worked as a logger and who carries a lifelong knee injury from a load of logs that fell on him at a pulp mill? Someone who is an avid golfer, skier, and helicopter pilot with a passion and loyalty for the Monterey Peninsula and its landscape?

Together these images make up the Clint Eastwood who joined American Forests recently to re-measure a bluegum eucalyptus on his Mission Ranch property in Carmel, California. The tree was this year crowned the national champion for its species, meaning it is the largest known bluegum eucalyptus in the United States.

Native to Tasmania and nearby areas of Australia, the bluegum has a reputation as one of the world's fastest-growing and largest trees. A naturalist on a Captain Cook voyage in the 1770s first collected bluegum seeds in Australia at Adventure Bay. By the 1870s the species had an avid California following.

BY DAN SMITH
PHOTOS BY JOHN TODD

EASTWOOD AND CALIFORNIÃ BIG TREE COORDINATOR

ART COWLEY

Mission Ranch has several large bluegums, but the champ's massive trunk, which measures more than 38 feet around, makes it a standout. On that December day the lawn surrounding the tree sported small, hard seeds that looked like shriveled acorns cut in half. Paper-thin brown strips of peeled bark littered the ground.

The evening before the sunset had been spectacular, with high, thin orange clouds that blazed for an hour. The tree reflected golden over the small pond and footbridge beneath it, shining onto the lush lower meadow beyond.

While Eastwood has long recognized the tree's beauty, it was American Forests' California Big Tree Coordinator, Art Cowley, who first noticed its poten-



CONDUCT AN
OFFICIAL
MEASUREMENT
ON EASTWOOD'S
BLUEGUM
EUCALYPTUS.

tial. Cowley spied the tree in 1998 while attending mass at the Mission and used his always-close-at-hand yellow tape measure to check his guess.

When contacted, Eastwood graciously agreed to pose for a picture with his tree and spend part of a morning discussing his connection to the land there. That day he helped take final measurements of his champ for the 2000 Register and collected seeds, which have been sent to American Forests' Famous & Historic Trees project in Jacksonville, Florida, for possible propagation.

Mission Ranch, the champ tree's home, is adjacent to historic Carmel Mission, which dates from the early 1800s and underwent a massive restoration in the 1900s. Today, regular masses are celebrated there and elementary school classes are held. Back in the 1850s the adjacent ranch was one of California's first dairies, and its creamery supplied the county.

Eastwood bought the property in 1986 to save it from condominium developers. Since then he has worked to restore it as a guest ranch.

"They were going to level it all for 66 condos,"

Eastwood told us as we looked out over barns, a bunkhouse, a century-old farmhouse, and the creamery-turned-restaurant and bar. All of this—and likely a number of the property's dozens of mature trees—would have been razed. Of course, any developer would relish this site: 22 acres of gently sloping land above a meadow extending perhaps half a mile to where the Carmel River meets the ocean. Point Lobos appears in the distance.

As Cowley prepared to "officially" re-measure the tree, Eastwood remarked how star stature has not guaranteed the eucalyptus an easy ride. A neighbor, dissatisfied with his ocean view, has urged that the tree and its almost-as-large twin on the other side of the bunkhouse be severely trimmed.

When chief gardener and groundskeeper Angel Erickson joined our group, Eastwood suggested with a chuckle that having the tree recognized as a national treasure ought to make it easier to resist that neighbor's requests to hack it back. (Although national champion status does not ensure protection for crowned trees, sometimes designation encourages communities to protect these arboreal treasures.) Eastwood also offered to send AMERICAN FORESTS' upcoming press announcement of the new champions to the local weekly newspaper, *The Pinecone*.

That release will include two Carmel trees—Eastwood's and a neighboring Monterey pine newly crowned after the previous champ succumbed to pitch canker, which threatens 75 percent of the native pine population (see "Clippings," Autumn 1999). The other champ also was identified by Cowley, who has driven and hiked hundreds of miles to check out trees since taking on the volunteer post five years ago. In that time he has increased California's state list from 125 to 193, visiting most of those trees personally.

For nearly half a century the rolling seaside landscape of Carmel and the Monterey Peninsula, some two hours south of San Francisco, have been a special place for Eastwood, who first visited Mission Ranch in 1951 when he was stationed at nearby Ft. Ord. Just 20 minutes from the base, Mission Ranch offered great music and a place to meet single women.

Eastwood honeymooned in Carmel in 1953 and later bought a home there. But more than that, he put down roots—roots that had never taken hold in the many places he lived in the West as his family worked its way through the Depression and the war years.

Aside from his two-year stint as the town's mayor in the mid-80s, Eastwood's most visible connection with Carmel is the ranch. But in recent years he developed a golf course farther up the Carmel River as well. During construction

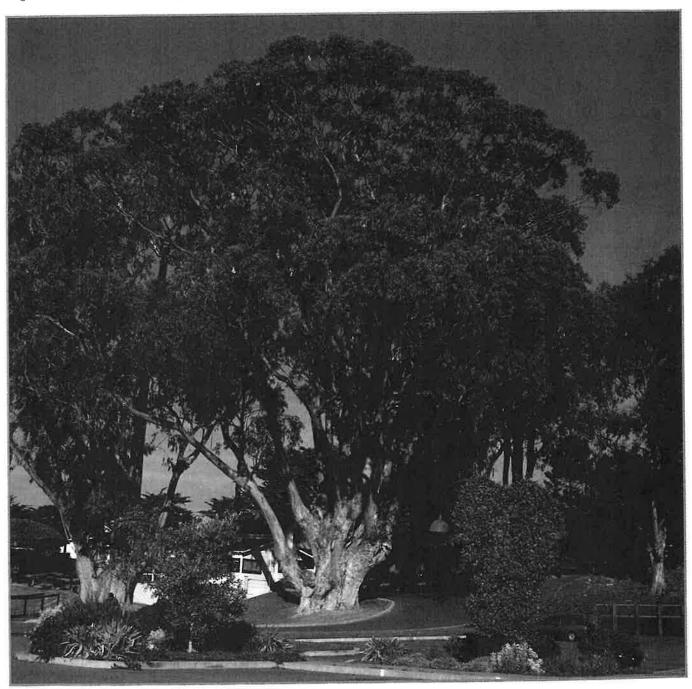
Eastwood had more than 200 trees moved to save them from destruction and to avoid introduction of non-native species. He points to a 300-year-old oak the course designer wanted removed. Instead, Eastwood brought in an experienced firm to move the huge tree. Now it thrives just off the fairway.

Before departing to catch up on the progress of the ranch's farmhouse renovation, Eastwood recalled his memory of learning about the General Sherman, the nation's largest giant sequoia, in school. He was surprised to hear the mammoth tree still reigns as not only the champion of its species, but as the biggest tree on earth and one just four champions remaining from American Forests' first Register in 1940. American Forests presented

Eastwood with a seedling from the Tomb of the Unknown Soldier in Arlington, Virginia, which he hopes one day will grow as grand as his champion eucalyptus.

It's unlikely that the raw, unbridled masculinity that characterizes so much of the film persona of Clint Eastwood will ever be eclipsed by that of Clint Eastwood, lover of trees. But it is clear that behind the actor at home riding the range is a man whose passions include an active outdoor life and a commitment to protecting places that are special to him. AF

Dan Smith is American Forests' vice president for communications.



IN SEARCH OF OLD-GROWTH

GIANTS

TOWERING, MASSIVE, ANCIENT. GET READY FOR SOME REALLY BIG TREES.

STORY AND PHOTOS BY WHIT BRONAUGH

"Where are the hig trees?" the passing hiker asked. We were about 4 miles up the Caldwell Fork Trail in Great Smoky Mountains National Park en route to the national champion northern red oak. All along the way my guide, hig tree hunter and arborist Will Blozan, had been pointing out trees with statistics that would be

the envy of nearly every forest tree east of the Pacific Northwest. Will looked at the hiker as if he had asked him where the sky was. "Everywhere," Blozan replied. Talk about not seeing the forest for the trees!

Unfortunately, the hiker's question would have been all too appropriate for 99 percent of America's forests. In that case, the answer would have been, "Long gone." That's why, when Joseph Stearns challenged us 60 years ago to seek out and

protect our largest tree specimens, thus inspiring AMERICAN FORESTS' Big Tree program, he was referring primarily to "the giants scattered throughout our remaining virgin forest stands."

A few big trees, like the champion Pacific yew and a co-champion western redcedar, were saved when the surrounding old-growth was leveled and hauled away. That's like saving one page from a whole library. Fortunately, we still have a few "books" left, scattered around the country. But their scarcity—combined with

a big tree formula that tends to favor opengrown deciduous trees—means that champion trees in old-growth are precious and rare finds. So without detracting from our beautiful big yard, farm, and city street trees, let this brief survey of old-growth champions inspire you to meet Stearns' original challenge.

One area where that challenge has largely

been met is the West Coast. Big tree hunter Robert Van Pelt says most champion conifers there can be found in the region's remaining 2 percent of old-growth forest. The Olympic Mountains, perhaps the crown jewel of American old-growth, national have eight champions, all conifers, including the 804-point coast Douglas-fir, 922point sitka spruce, and 931-point western redcedar. These giants have only the redwoods and sequoias to look up to.

The Olympics are also home to the biggest western hemlock, subalpine and Pacific silver fir, Alaska-cedar, and Englemann spruce.

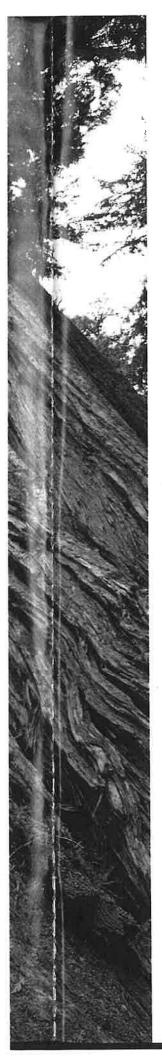
Other western old-growth areas with champions include the Washington Cascades (noble fir, western and subalpine larch), the redwood parks (grand fir and coast redwood), the national parks of the Sierras (California white and red firs and giant sequoia), and wilderness areas in the Siskiyou Mountains (ponderosa pine and incense-cedar). Meeting any of these champions, or just walking among their old-





Old-growth champions
can be found on both
coasts. In the East, the
362-point black cherry
(far left) resides in
Great Smoky Mountains
National Park. But that
large tree pales in
comparison to the 902point co-champion sitka
spruce (left) in Seaside,
Oregon, a tree with a
56-foot circumference.

The national forests are treasure troves for big tree hunters. In Oregon's Siskiyou National Forest, outdoor enthusiasts can catch a glimpse of the 680point champion Port-Orford-cedar. For hikers on Gabes Mountain Trail in Great Smoky **Mountains National** Park, the 378-point champion yellow buckeye (far right) would be tough to overlook.



growth neighbors, is a humbling experience. These trees put us in our place. We are forced to confront our myopic and abridged view of the natural world and give these elders the respect they deserve.

The big trees of eastern are no less inspiring, if viewed in context; but only recently have we begun to document them, much less appreciate them. According to Mary Davis and Robert Leverett of the Eastern Oldgrowth Forest Information Clearinghouse, less than 0.5 percent of original forest east of

the Great Plains still stands. Although this is about 2 million acres, much of it—especially in northern Minnesota and Michigan and the Ozarks—has been stunted somewhat by less than ideal growing conditions.

"Habitat plays the biggest role for growing champion trees," Leverett says, "but the best forest habitats for many species are gone." Leverett, who probably has measured more trees in the East than anyone else, believes the Southern Appalachians

are likely the true home of the biggest eastern hemlocks. But we may never know where most other species would grow the biggest, and how big that is.

However, largely through Will Blozan's efforts, we now know much potential still exists for discovering champion trees in eastern old-growth. Blozan has had a hand in nominating 16 of 18 current national champions found in the virgin coves of the Smoky Mountains. The biggest eastern hemlock is an impressive 17 feet around and 165 feet tall. But it's the deciduous trees that really surprise. The champion yellow buckeye, black cherry, and chestnut oak are all a few inches thicker and only 20 feet to 30 feet shorter than the hemlock. The red maple tops out at 141

feet with a girth of 23 feet. With its shaggy bark, huge bole, and thick coat of moss, it bears no resemblance to the red maples most of us know. And remember, these monarchs are surrounded by many princes only a few points shy of seizing the throne.

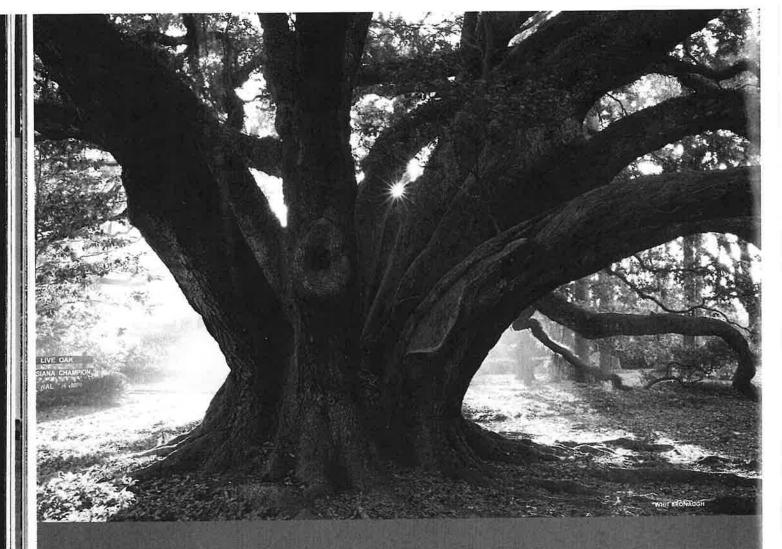
Outside the ancient Southern Appalachian groves, big tree hunters agree that Congaree Swamp National Monument in South Carolina has the most potential for record trees in eastern old-growth. In fact, at 130 feet to 160 feet, the deciduous forest there could be the tallest in the East. Currently a water hickory, possumhaw, and two common persimmon co-

champions call it home. The other champions of old-growth are more scattered. The new 363point eastern white pine champion was discovered in the old-growth of the Porcupine Mountains of Upper Michigan. A cochampion common persimmon and the biggest pumpkin ash live in the old-growth 160-acre bottomland forest of Big Oak Tree State Park in southeastern Missouri. The biggest Shumard oak graces a 175-acre uncut forest in, of all

places, downtown Memphis.

On our hike in the old-growth of the Smokies I had to keep reminding myself that the northern red oak Blozan showed me was (A) not on the West Coast and (B) not a conifer. On hikes in the old-growth forests of the Olympics I have wondered if I was still on planet earth. The biggest trees in these last surviving pockets of old-growth are champions in the way Mother Nature, and Joseph Stearns, intended them to be: towering, massive, ancient, and living in a forest of peers. Let's find more. AF

Photojournalist Whit Bronaugh travels far and wide to capture the essence of America's biggest and most impressive trees.



THE NATIONAL REGISTER BIG TREES 2000-01

FROM THE BIG TREE COORDINATOR

It is my great pleasure to bring you this year's list of national champion trees. The year 2000 marks not only the 60th anniversary of the National Register of Big Trees, but also my first as coordinator of the Big Tree program.

I am proud to write that we have worked diligently to make this Register the most comprehensive and accurate one to date. But the quest to find the largest trees in North America is far from over. We still need your help in locating these trees and measuring them properly.

There are many people who have helped me with the task of producing such an immense list. First, a big thank you to American Forests' state Big Tree Coordinators; without their help, this list would not have been possible. I'd also like to thank the meticulous Big Tree hunters who supply me with invaluable information about the champs. Lastly, the staff at American Forests, particularly Deborah Gangloff, Janine Guglielmino, Michelle Robbins, Lydia Scalettar, and my predecessor Bill Cannon.

I look forward to working with you to recognize and celebrate these wonderful trees. They are all truly giants.

					LOCATION	NOMINATOR
SPECIES / MOST RECENT MEASUREMENT	CIRCUMFERENCE" HE	IGHT' SP	READ' TO	TAL POINTS		
ACACIA					C U Pinal County Ariz	William Kinnison
Blackbrush, <i>Acacia rigidula</i> , 1998*†	16	26	29	49	Central Arizona College, Pinal County, Ariz.	Ken Morrow
Blackbrush, Acacia rigidula, 1999*†	14	27	31	49	Glendale, Ariz.	
AILANTHUS						Robert Hogue
Tree-of-heaven, Ailanthus altissima, 1999∆	248	67	64	331	Hamilton, Tenn.	Kaban nagaa
A L A S K A - C E D A R						Robert L. Wood
Chamaecyparis nootkatensis, 1994	451	124	27	582	Olympic NP, Wash.	Konell f. Moon
						1 III 0 C l D
A L D E R Arizona, Alnus oblangifolia, 1982	199	129	50	341	Cibola NF, N. Mex.	Jerald Lopeman & Soloman Peralta
European, Alnus glutinosa, 1995∆	108	70	41	188	Davenport, lowa	Mark D. Rouw Will Blozan & Michael Davie
Hazel, Alnus serrulata, 1997*	26	47	24	79	Riverside Business Park, Asheville, N.C.	Will Blozan & Michael Davie
Hazel, Alnus serrulata, 1997*	30	42	24	78	Riverside Business Park, Asheville, N.C.	Will Blozan & Michael Davie
Hazel, Alnus serrulata, 1997*	26	42	22	74	Riverside Business Park, Asheville, N.C.	Slim Stillman
Mountain, Alnus tenuifolia, 1993	94	71	39	175	Umatilla NF, Wash.	Ron Simon
Red, Alnus rubra, 1979	245	104	49	361	Clatsop Co., Ore.	Richard Salzer
Seaside, Alnus maritima, 1987	15	24	12	42	Lake Accotink, Springfield, Va.	Mike Lee
Sitka, Alnus sinuata, 1993	33	30	39	73	Maury Island, King Co., Wash.	W. Brennan, P. Thompson, R. Kilgore
Speckled, Alnus rugosa, 1984	38	66	56	118	St. Clair Co., Mich.	Art Cowley & Don Zuckswert
White, Alnus rhombifolia, 1998	127	54	84	202	Pierpoint Springs, Tulake Co., Calif.	All comby a bon Estimator
ALLTHORN					A Louisian Aries	Robert and Glenda Zahner
Koeberlinia spinosa, 1995	23	20	19	48	Boyce Thompson Southwest Arboretum, Ariz.	KODALI AIIA CIGUAA TAIIIGI
ALVARADOA						LL C Cook 9 Km Forest
Mexican, Alvaradoa amorphoides, 1993	25	15	9	42	Miami, Fla.	John G. Cordy & Jim Eggert
ANACAHUITE	74	25	33	107	Camino Real Viejo, Mercedes, Tex.	William MacWhorter
Cordia boissieri, 1995						
ANACUA	175	42	46	229	Four Seasons Hotel, San Antonio, Tex.	Ann Holland
Ehretia anacua, 1983*	170	42	50	225	Victoria Co., Tex.	Bob McVey
Ehretia anacua, 1991*	170	12	30			
ANISE-TREE	10	29	20	49	Prairie Cr. and County Dirt Rd., Perry Co., Ala.	Dr. Thomas Wilson
Florida, <i>Illicium floridanum</i> , 1991	15 7	18	13	28	Ocala NF, Lake George Ranger District, Fla.	Jeff Overby & Ilke Toklu
Yellow, Illicium parviflorum, 1993	1	10	13	20	occid,	
APPLE		44	40	220	Bedford, Hillsborough Co., N.H.	J. Beaudet, R. Pichette, C. Mower
Common, Malus sylvestris, 1993∆	183	44	49	239	Nisqually NWR, Wash.	Robert Van Pelt
Oregon crab, Malus fusca, 1989	66	79	47	157	Oakland Co., Mich.	Paul W. Thompson
Prairie crab, Malus ioensis, 1994	38	46	68	101 158	Chestertown, Md.	Eleanor P. Colston
Southern crab, Malus angustifolia, 1996	96	47 37	60 35	116	Hampstead, Va.	L. App, S. Bailey, W. Wallace
Sweet crab, Malus coronaria, 1976	70	3/	ده	110	Humpove/	
ARBORVITAE	=.		0.4	145	Natural Bridge, Va.	Jimmy and Sandra Mock
Oriental, <i>Thuja orientalis</i> , 1997∆	74	65	24	145	Nullital Blidgo, 130	
ASH					Corenes Toy	Brian Sichel
Berlandier, Fraxinus berlandierana, 1995	234		78	319	Los Fresnos, Tex. Adrian, Mich.	R.W. Smith & Paul W. Thompson
Black, Fraxinus nigra, 1984	99	155	108	281		H.A. Gaw & E. Listerman
Blue, Fraxinus quadrangulata, 1994	185		66		Danville, Ky.	Byron Carmean & G.M. Williamson
Carolina, Fraxinus caroliniana, 1987*	56		42		Chesapeake, Va. O'Leno SP, Fla.	Robert W. Simons & Daniel B. Ward
Carolina <i>, Fraxinus caroliniana</i> , 1993*	56				Coronado NF, Ariz.	Josh Tewksbury
Goodding, Fraxinus gooddingii, 1995	25				Coronado Nr. Anz.	D. Steen, S. Heaney, E.B. Ehrle
Green, Fraxinus pennsylvanica, 1995	259				Cass Co., Mil Boynton Canyon, Ariz.	K. Morrow, M. Hallen, C. Mills
Lowell, Fraxinus anomala var. lowelii, 199					Sauvie Island, Ore.	Eldon Boge & Robert Heilman
Oregon, Fraxinus latifolia, 1999	284				O L T CD Ma	Bruce Palmer
Pumpkin, Fraxinus profunda, 1992	180) 133	93	, ააი	ug van e	BIG TREE REGISTER 2000

SPECIES / MOST RECENT MEASUREMENT CIT	CUMFERENCE'	' HEIGHT'	SPREAD'	TOTAL POII	NTS LOCATION	NOMINATOR
ngleleaf (typ.), <i>Fraxinus anomala</i> var. <i>anomala</i> , 199	9 52	31	15	87	Highway 141, on Dolores River, Colo.	Vince Urbina
xas, Fraxinus texensis, 1989	54	66	47	132	Lost Maples SNA, Tex.	W.J. Graves & R. Heideman
ro-petal, <i>Fraxinus dipetala</i> , 1986	35	34	28	76	Lake Co., Calif.	Frank T. Callahan
lvet, Fraxinus velutina, 1996	196	76	88	294	Santa Cruz Co., Ariz.	Kenneth A. Porter
hite, Fraxinus americana, 1983	304	95	82	420	Tony's Lobster & Steakhouse, Palisades, N.Y.	F. Arthur Belcher
SPEN						
ptooth, Populus grandidentata, 1980*	140	102	64	258	Estill Co., Ky.	Dennis Burns
gtooth, <i>Populus grandidentata</i> , 1984*	105	132	67	254	Marquette, Mich.	Paul W. Thompson
uaking, <i>Populus tremuloides</i> , 1991 [‡]	122	109	59	246	Ontonagon Co., Mich.	Paul Thompson & Elwood B. Ehrle
uaking, <i>Populus tremuloides</i> , 1998*	127	114	32	249	Coronado NF, Ariz.	Ken Morrow & Mike Hallen
VOCADO						
ersea americana, 1999∆	172	75	60	262	Mission at San Juan Capistrano, Calif.	Art Cowley & Camille Newton
ACCHARIS					*	
ıstern, <i>Baccharis halimifolia</i> , 1998*†	14	14	10	31	Pierce Co., Ga.	Jimmy Mock
ıstern, <i>Baccharis halimifolia</i> , 1993*†	18	10	8	30	Jenkins Middle School, Putnam Co., Fla.	Ned Neenan
ALDCYPRESS						1.50 a.m. 1.51
mmon (typ.), <i>Taxodium distichum</i> var. <i>distichum</i> , 19	81 644	83	85	748	Cat Island, La.	Jeff Hunt & Desmond Clapp
ontezuma, <i>Taxodium mucronatum</i> , 1995	268	85	87	375	San Benito, Cameron Co., Tex.	Sue Griffin
ARRETA						
elietta parvifolia, 1989	18	34	25	58	Rio Grande Valley NWR, Alamo, Tex.	Terry Rossignol
ASSWOOD						
nerican, <i>Tilia americana</i> , 1993	292	78	100	395	Montgomery County, Pa.	Sherman Perkins & Halfred Wertz
rolina, <i>Tilia caroliniana</i> , 1996	74	84	46	170	Wakulla SP, Fla.	John A. Wallace & Thomas D. Beitzel

Frank Knight lives in a little town with a lot of big trees.

Yarmouth, Maine, population 8,500, is home to more than 10 percent of the 80 champions on Maine's state list and Knight knows them all like the back of his hand. That's because he discovered seven of them. Knight, 91, took a forestry course at the University of Maine in 1930 and has spent the rest of his life working with and around trees. Now, nearly 70 years after that forestry course, he spends his retirement hunting for big trees and protecting the few elms left in this town devastated by Dutch elm disease.

Knight's special project: the largest American elm in New England, affectionately dubbed "Herbie" by the woman who owns it. "Our towns were lined with beautiful elms before the 1960s and '70s," Knight says. "We lost so many that the few left—including this big

"Herbie"—were so great, that we said we wanted to try and save it and the few others."

Herbie stands 110 feet tall with a 19-foot circumference and a 93-foot crown spread, for a total of 350 points. The tree, located next to a private residence and along the town's main street, probably would have died without Knight's persistence, says Seth Mercier, formerly American Forests' Maine big tree coordinator and the man charged with tracking the state's tree list. Indeed, Knight reports that he and his crew have cut Dutch elm disease from Herbie in 13 different years, sometimes more than once a season.

"Frank is one of those community spark plugs that everybody turns to if they have questions or problems about their trees," Mercier says. "He's kind of a one-man show."

FRANK KNIGHT: Maine's Community Spark Plug



Trees have long held Knight's attention. He worked for Great Northern and Finch, Pruyn in New York's Adirondack region before the Great Depression. In 1937 he launched a pulpwood and lumber business that aided the war effort. Since 1956 he's been the town's appointed tree warden, a volunteer position.

Every year during May, June, and July—the months elms are most susceptible to Dutch elm disease—Knight checks Herbie and the town's other remaining elms almost every day. That's no problem for Knight, who combines tracking the big tree and his other favorite activity, playing \$\exists \text{golf}, to keep himself young.}

"I've enjoyed everything I've done," he says. "It keeps me young, keeps me busy. The golf season just ended yesterday and I played 126 times. I kept track. I've never been any good. But it's just fun."

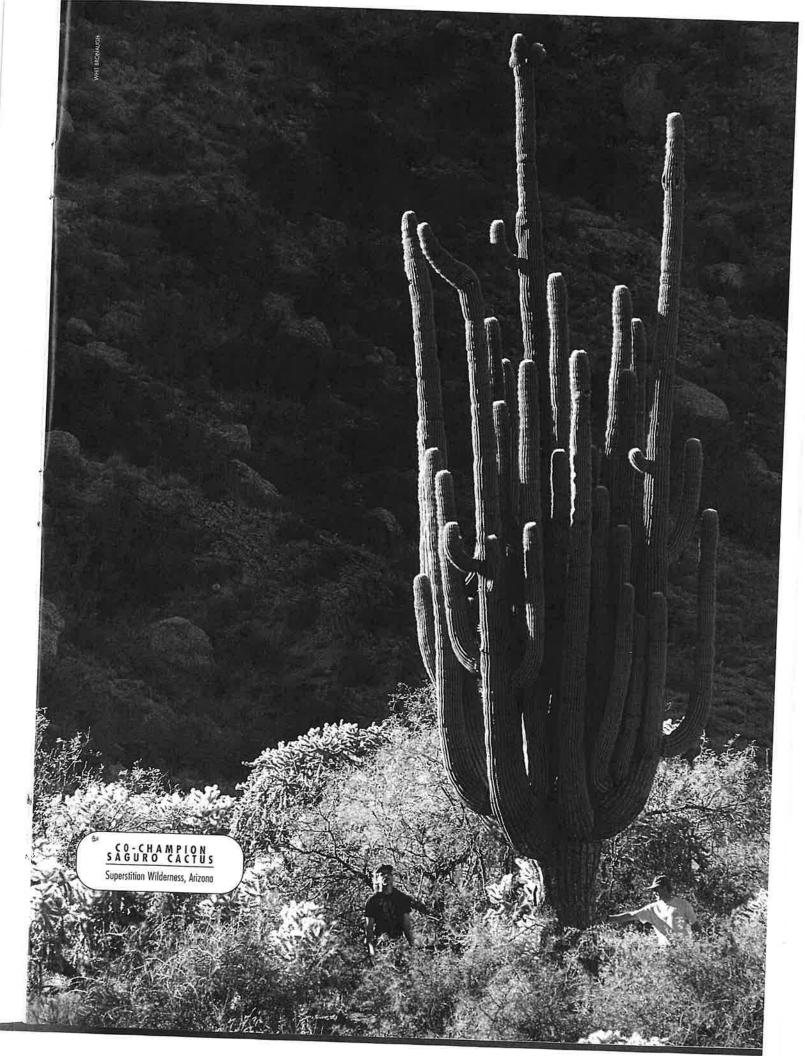
Though he may be unlucky on the golf green, Knight has made luck with his green thumb. In addition to Herbie, Knight has discovered three state champion oaks, a Norway spruce, a catalpa, and others. He spends weekends and evenings looking for more champs. And since he became tree warden, he's planted hundreds of trees on public and private property to help restock the town's lost greenery. But perhaps his biggest public service has been preserving the town's biggest, most beloved tree.

"Many elms in New England have been lost to Dutch elm disease; some towns have lost all their trees," Mercier says. "It's amazing this one has survived at this size for this long, all due to one man."

— Janine Guglielmino

SPECIES / MOST RECENT MEASUREMENT CIRCUM	MFERENCE	" HEIGHT'	SPREAD'	TOTAL PO	INTS LOCATION	NOMINATOR
White, Tilia heterophylla, 1997	223	116	57	353	Pisgah NF, N.C.	C. Woodard, M. Davie, W. Blozan
BAYBERRY						
Northern, Myrica pensylvanica, 1999†	10	13	10	25	Jockey's Ridge SP, N.C.	Sid Shearin
	33	18	23	57	Bellingrath Gardens, Theodore, Ala.	Richard Salzer
Odorless, Myrica inodora, 1994	46	38	35	93	Patrick's Point SP, Calif.	Robert Van Pelt
Pacific, Myrica californica, 1999†	68	28	33	104	Elizabeth II Historic Site, Manteo, N.C.	Richard and Richard Alan Salzer
Southern, Myrica cerifera, 1993*	76	20	38	106	Berkley Plantation, Charles City, Va.	Richard Salzer
Southern, Myrica cerifera, 1994*	72	25	36	106	Berkley Plantation, Charles City, Va.	Richard Salzer
Southern, Myrica cerifera, 1994*	68	26	32	102	Berkley Plantation, Charles City, Va.	Richard Salzer
Southern, <i>Myrica cerifera</i> , 1994*	00	20	JZ	102	bordley Flamanon, chanss sing, va.	
BAYCEDAR					D. D. K. El	Vincent P. Condon & William G. Miller
Suriana maritima, 1995	10	12	23	28	Big Pine Key, Fla.	VINCEIN F. CONDON & WINDIN C. Miller
BEECH						
American, Fagus grandifolia, 1994	279	115	138	429	Harwood, Md.	Gary Heinz
BIRCH						
Alaska paper, Betula papyrifera var. neoalaskana, 1993*	72	64	21	141	Nikiski, Alaska	Ron Miller
Alaska paper, Betula papyrifera var. neoalaskana, 1993*	56	74	33	138	Nikiski, Alaska	Ron Miller
	41	57	50	111	Galesville, Trempealeau Co., Wis.	Michael Rieggert
Gray, Betula populifolia, 1999	50	47	19	102	Hope, Alaska	Ron Miller
Kenai, Betula papyrifera var. kenaica, 1994	112	67	80	199	Sleeping Bear Dunes, Leelanau, Mich.	Elwood B. Ehrle & John Spencer
Mountain paper, Betula papyrifera var. cordifolia, 1995		66	30	120	Minam River, Ore.	Frank T. Callahan
Northwestern paper, Betula papyrifera var. subcordata, 197		65	32	119	Hell's Canyon NRA, Idaho	F.D. Johnson & M. Newell
Northwestern paper, Betula papyrifera var. subcordata, 19		107	76	346	Black Lake, Cheboygan Co., Mich.	Robert Stein
Paper (typ.), Betula papyrifera var. papyrifera, 1991*	220		76	348	Point aux Barques, Mich.	John J. Chorzel
Paper (typ.), Betula papyrifera var. papyrifera, 1996*	222	107		303	Lawrence Co., Tenn.	D. Shires
River, Betula nigra, 1999	188	90	100	81	Jefferson NF, Va.	Paul Shrauder
Roundleaf, Betula uber, 1978	28	49	15			Philip Harvell
Sweet, Betula lenta, 1989	182	78	80	280	New Boston, N.H.	Maynard Drawson
Water, Betula occidentalis, 1973	111	53	42	175	Wallowa Co., Ore.	Robert Van Pelt
Western paper, Betula papyrifera var. commutata, 1989	189	81	57	284	Bellingham, Wash.	Robert G. Fisk
Yellow, Betula alleghaniensis, 1983	252	76	91	351	Deer Isle, Maine	ROBERT G. FISK
B L A C K - M A N G R O V E						
Avicennia germinans, 1996	101	43	57	158	Mound Key, Fla.	Larry Fooks & Arden Arrington
BLACKBEAD						
Ebony, Pithecellabium flexicaule, 1995	173.	53	60	241	McAllen, Hidalgo Co., Tex.	Joe Ideker
Guadeloupe, Pithecellobium guadalupense, 1992	11	16	16	31	Big Pine Key, Fla.	R.W. Simons & M.L. Elitz
	• • • • • • • • • • • • • • • • • • • •				,	
BLACKHAW		0.4	22	0.4	Wakefield G. Washington NM, Va.	Richard Salzer
Viburnum prunifolium, 1986*	64	24	33	96	Roanoke, Va.	Richard Salzer
Viburnum prunifolium, 1991*	64	24	28	95 00	Hempstead Co., Ark.	Dwight Moore
Rusty, Vibumum rufidulum, 1961*	47	25	30	80		Jim Cortese
Rusty, Viburnum rufidulum, 1997*	47	30	28	84	Knox Co., Tenn.	31111 C011030
BLADDERNUT						NAME OF THE PARTY.
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
BLOLLY						
Longleaf, <i>Guapira discolor</i> , 1994	55	21	10	79	Lignumvitae Key SP, Fla.	Charlotte Niedhauk
• • •					•	€
BLUEBLOSSOM	00	41	20	70	Curry Co., Ore.	Frank T. Callahan
Blue-myrtle, Ceanothus thyrsiflorus, 1976	32	41	20	7 <u>B</u>	Corry Co., Ore.	
BLUEWOOD						Joe Ideker
Condalia hookeri, 1989	77	30	26	114	San Juan, Tex.	TOG INGYG!
BOXELDER						
Acer negundo, 1993	214	110	127	356	Washtenaw Co., Mich.	Paul W. Thompson
-						DIG TREE BECLETER BORD

SPECIES / MOST RECENT MEASUREMENT	CIRCUMFERENCE	" HEIGHT	' SPREAD	' TOTAL P	OINTS LOCATION	NOMINATOR
BUCCANEER-PALM						
Pseudophoenix sargentii	26	25	8	53	Elliott Key, Biscayne NP, Fla.	Carol L. Lippincott
BUCIDA						
Bucida buceras, 1997∆	139	50	48	201	Charles Deering Estate, Fla.	J. Valenta, A. Lupus, R. Hammer
BUCKEYE					-	
Bottlebrush, Aesculus parviflora, 1993	34	14	20	53	Virginia Beach, Va.	Richard Salzer
California, Aesculus californica, 1972	174	48	78	242	Walnut Creek, Calif.	Richard Wilson
Ohio (typ.), Aesculus glabra var. glabra, 1994	151	148	48	311	Dunnville, Ky.	Max Leach & Danny Helm
Painted, Aesculus sylvatica, 1999†	12	27	15	43	Mountain Park, Fulton Co., Ga.	Jess and Doug Riddle
Red, Aesculus pavia, 1983*	91	64	52	168	Kalamazoo Co., Mich.	Paul W. Thompson
Red, Aesculus pavia, 1794*	95	58	48	165	Roanoke, Va.	William S. Hubard
Texas, Aesculus glabra var. arguta, 1986	51	30	24	87	Harper, Tex.	Bob and Lou Ellen O'Kennon
Yellow, Aesculus octandra, 1995	229	136	53	378	Gabes Mountain Tr., Great Smoky Mtns. NP, Tenn.	Will Blozan & Michael Davie
B U C K T H O R N						
California, Rhamnus californica, 1976	24	30	25	60	Sunol Regional Park, Alameda Co., Calif.	E. Lagel
Carolina, Rhamnus caroliniana, 1982*	23	43	18	71	Norris Dam SP, Tenn.	F. Podriznik & J. Hiser
Carolina, Rhamnus caroliniana, 1974*	41	27	23	74	Middleburg, Va.	Richard Salzer
Cascara, Rhamnus purshiana, 1996*	77	37	45	125	Sedro Woolley, Wash.	Robert Van Pelt
Cascara, Rhamnus purshiana, 1999*	84	33	20	122	Hell's Canyon NRA, Idaho	F.D. Johnson
European, Rhamnus cathartica, 1972∆	45	61	65	122	Opposite Nichols Arboretum, Ann Arbor, Mich.	Dennis Jones & Paul W. Thompson
Glossy, Rhamnus frangula, 1991∆	20	40	25	66	Cranbrook Institute, Bloomfield Hills, Mich.	Paul W. Thompson
Hollyleaf, Rhamnus crocea, 1999	26	26	44	63	Greenfield, Calif.	Frank T. Callahan & Art Cowley
BUCKWHEAT-TREE						
Cliftonia monophylla, 1967*	66	30	21	101	Crooked Creek, Fla.	H.W. White Jr. & J. MacBrown
Cliftonia monophylla, 1981*	49	44	31	101	Washington Co., Fla.	Charles Reeves
BUFFALOBERRY	.,				•	
	78	22	20	105	Malheur Co., Ore.	Frank T. Callahan
Silver, Shepherdia argentea, 1975	70	LL	LU	103	Humon co., oto.	
BUMELIA	47	27	25	0.2	Shelby Park, Nashville, Tenn.	Mark S. Hackney
Buckthorn, Burnelia lycioides, 1999	47	37 80	35 66	93 190	Robertson Co., Tex.	E. G. Marsh
Gum, Bumelia lanuginosa, 1991	93 55	30	32	93	Lower Rio Grande NWR, Tex.	William MacWhorter
Saffron-plum, Bumelia celastrina, 1991	55 41	41	28	89	Amelia Island SRA, Fla.	Buford Pruitt Jr.
Tough, Bumelia tenax, 1987	41	41	20	07	Amond Bidita Ster, Fia.	
BURNINGBUSH		45	00	110	Flind at Dad. Marine Co. Mich	Paul W. Thompson
Eastern, Evonymus atropurpureus, 1991	60	45	33	113	Elizabeth Park, Wayne Co., Mich.	1 uui 14. Tilotiipsoii
BUSTIC						11 T V 1 0 D
Willow, Dipholis salicifolia, 1994	72	57	29	136	Barnacle State Historical Site, Dade Co., Fla.	John T. Valente & Rodger Hammer
BUTTERNUT						
Juglans cinerea, 1998	259	78	76	356	Chester, Conn.	Edward A. Richardson
BUTTON-MANGROVE						
Conocarpus erectus, 1993	174	51	68	242	Palm Beach, Fla.	Kenneth Van der Hulse
BUTTONBUSH						
Cephalanthus occidentalis, 1999	60	26	38	96	Buttonwillow, Calif.	Frank T. Callahan
BYRSONIMA						
Key, Byrsonima lucida, 1995	31	35	17	70	Big Pine Key, Fla.	T.A. Williams, V. Lopez, V. Condon
	U I	0.3	17		0 , 110 110 117	
CAESALPINIA	or.	07	10	، 57	Hidalgo Co., Tex.	Joe Ideker
Mexican, Caesalpinia mexicana, 1995	25	27	19	57	muungo co., rex.	300 (40//0)
CAJEPUT-TREE				000	Non-Fa Bassad Horder Co. El	loff Manaus
Melaleuca quinquenervia, 1992∆	231	62	28	300	Near Ft. Denaud, Hendry Co., Fla.	Jeff Mangun



SPECIES / MOST RECENT MEASUREMENT	CIRCUMFERENCE	" HEIGHT'	SPREAD'	TOTAL PO	DINTS LOCATION	NOMINATOR
CALIFORNIA - LAUREL Umbellularia californica, 1997	546	108	110	/0.4		
CAMPHOR-TREE	J40	100	118	684	Grass Valley, Calif.	Brian Barrette
Cinnamomum camphora, 1992∆	422	67	103	515	Darby, Fla.	C. L.:- V.
CANELLA			*		54.57, 114.	Sylvia Young
anella winterana, 1998	25	30	19	60	Crocodile Lake NWR, Fla.	Inc. I N
ANOTIA					CISCOUND LUKE 1441, TIU.	Joseph Nemec
anotia holocantha, 1995	48	21	15	73	Gila Co., Ariz.	W 11
APER					one co., rite.	Ken Morrow
maica, <i>Capparis cynophallophora</i> , 1997	19	20	26	46	Lee Co., Fla.	David Fox & Dee Slinkard

Will Blozan, Sid Shearin, and Ken Knox couldn't be more different. But the three men responsible for more than half of North Carolina's champion trees share two things: a passion for trees and an almost religious devotion to measurement standards.

Last fall Blozan, 32, flew to Massachusetts in search of the largest tree in New England. To ensure an accurate measurement, he scrambled up two white pines and sent down a tape measure. Using an infrared laser range finder and clinometer, he has measured nearly 1,000 hemlocks for a book he's writing about big trees. And he hiked several miles with fellow tree hunter Bob Leverett in "serious hypothermia weather" to measure his first national champion, a 439-point red maple in Tennessee.

"We whacked through 200 yards of rhododendron to get to the tree," he says. "Before we went through I stoked [Leverett] up on a bag of chocolate chips. He was kind of a big guy, kind of crawling, and he looks up and

says, 'Oh my God, oh my God.' He was kind of bowing to the tree. Smoky Mountain red maples are incredible, just incredible."

Blozan's interest in trees began during his childhood in Rockville, Maryland. Even then he loved climbing trees, and Blozan and his brother divvied up the trees in their front yard and vied for the right to climb them. Later, he would study forest biology at North Carolina's Warren Wilson College and work for the National Park Service at Great Smoky Mountains National Park, updating the park's champion tree list, before starting his own tree business.

Since 1995 Blozan has nominated more than 40 trees to the national list, by far the most of any North Carolina tree hunter. Often he travels far to find champs. Other hunters ply their trade close to home. As superintendent of eastern North Carolina's Pettigrew State Park, Sid Shearin has the run of about 100 acres of the last remaining eastern old-growth, making it an area naturally rich in "big old trees," he says. Not everyone understands his hobby, though. "It's kind of a treasure hunt," he says. "Even when I was dating my wife a long time ago, I'd take her out with me and she'd go back and tell people. Folks would say, 'What kind of a kook is she marrying?' "

Shearin, 46, started tree-hunting when he joined the state park system 22 years ago. Since then he has discovered between 15 and 20 state and notional champions, including the national champion coastal plain willow (172 points) and swampbay (111 points). That despite what some consider treacherous conditions.

"You can only look for them in the wintertime because of poison ivy and mosquitoes.

NORTH CAROLINA Land of the Big Tree Hunters



Snakes don't bother me. Some people are afraid, but I'm not. We're in the swamps here, and we do have our share of insects," he laughs.

Shearin shares his knowledge with locals at a yearly big tree walk, held the Sunday before Thanksgiving for the last 14 years. Fifty or 60 people usually take part. Shearin tells tree hunters to look for unusual bark, and he urges them never to give up. He discovered several champs while looking for other things, particularly large trees downed by hurricanes.

"[Pettigrew] is purchasing property now, and the first thing I'm going to do [on the new land] is take a look at the trees," he says. "I won't particularly be looking for big trees, but I might find one anyway."

Ken Knox shares Shearin's attitude. A consulting arborist who spends his days in the field, 62-year-old Knox has discovered several champs while on the clock.

Recently, he found a huge shingle ook at the Asheville

Country Club near a route heavily traveled by golfers.

"It's amazing how many [champs] are close to a road and visible to a lot of people," Knox says. "If something catches my eye as I'm driving along the road, I'll invariably stop and measure it."

That seemingly small task requires a clinometer, a 100- to 200-foot tape measure, and Knox's mathematical wits. He measures from a distance to account for height inflation and "generally gets within 1 percent of surveyors" who double-check his efforts, he says.

Knox took up tree-hunting nearly 40 years ago after graduating from Penn State with a forestry degree. He learned about AMERICAN FORESTS' Big Tree program while working in Canandagua, New York, where he saw a state champion bur oak on Main Street. A plaque identifying the tree piqued his interest.

"I thought, 'Gee. What is a state champion?'" he says. "I've been keeping my eyes open since then."

Knox has visited about 200 state and national champion trees and currently has four national champs, including a chickasaw plum and catawba rhododendron. Though he often hunts alone, he has tried to pass his interest on to his six children, who range in age from 23 to 42

"It's a wonderful program to spur interest in trees of all kinds," Knox says. "It gets people to think about trees as something wonderful to have in your yard and teaches them to care for them and help them live longer."

—Janine Guglielmino

CACTODREAM					The second secon	HOMINATOR
CASTORBEAN Ricinus communis, 1995Ơ		14 0	•			
	2	24 21	U	20 49	9 Marlicopa Co., Mesa, Ariz.	Ken Morrow
CASUARINA						
Horsetail, <i>Casuarina equisetifolia,</i> 1968∆	20	7 89	9 !	56 310	Olowało, Maui, Hawaii	L.W. Bryan
CATALPA						
Northern, Catalpa speciosa, 1990*	24:		7 8	35 370	State Capitol Grounds, Lansing, Mich.	Paul W. Thomspon
Northern, Catalpa speciosa, 1993*	264				Walla Walla, Wash.	Robert Van Pelt
Southern, Catalpa bignonioides, 1999	22	1 86	8	327	Ruxton, Baltimore Co., Md.	Mr. and Mrs. Charles Curlett
CATCLAW						
Gregg, <i>Acacia greggii</i> , 1971	77		4	6 138	Red Rock, N. Mex.	Samuel Lamb
Roemer, Acacia roemeriana, 1997	54		2	4 84	The Alamo, San Antonio, Tex.	Richard Salzer
Wright, Acacia wrightii, 1986	72	36	42	2 119	Uvalde Co., Tex.	Virgil Helm
CERCOCARPUS						· ·
Alderleaf, Cercocarpus montanus, 1999†	26	21	11	50	Neff's Canyon, Wasatch-Cache NF, Utah	Tony Dietz
Birchleaf, Cercocarpus betuloides, 1972	44	34	29	85	Central Point, Ore.	Frank T. Callahan
Curlleaf, Cercocarpus ledifolius, 1998	61	30	36	100	Great Basin NP, Nev.	S.D. Warner
Hairy, Cercocarpus breviflarus, 1996	32	20	17	56	Coronado NF, Ariz.	Robert Zahner & Sid Jackson
CHASTETREE						2 32 3263011
Common, Vitex agnus-castus, 1999∆	101	26	34	136	Ridgewood Ave., Charlotte, N.C.	William S. Logan
CHERRY						Minuti 3. Lugari
Alabama black, Prunus serotina var. alabamensis, 1995	5 40	35	27	82	Bristol, Fla.	D-L-+T t O D t t D tut t
Bitter, Prunus emarginata, 1997*	58	100	27	165	Seward Park, Seattle, Wash.	Robert T. Ing & Daniel B. Ward
Bitter, Prunus emarginata, 1999*	65	86	40	161	Cooks Hill Road, Centralia, Wash.	Arthur Jacobson Marshall Murray
Black (typ.), Prunus serotina var. serotina, 1997	210	134	70	362	Great Smoky Mountains NP, Tenn.	Will Blozan & Jan Stykar
Catalina, Prunus Iyonii, 1992	120	41	55	175	Catalina Island, Avalon, Calif.	A. Douglas Propst & Bill Hartley
Chokecherry, common (typ.), 1999	168	74	88	264	Owings Mills, Baltimore Co., Md.	Frank X. Rurka
Prunus virginiana var. virginiana					No.	Trulk A. Auku
Chokecherry, western, 1991	54	73	18	132	Kootenai Co., Idaho	J. D. Pratt & D. Van Natter
Prunus virginiana vor. melanocarpa,						or an individual of the control of t
scorpment, Prunus serotina var. eximia, 1998	102	51	53	166	Kerr Co., Tex.	Mark Duff & Robert Edmonson
Hollyleaf, <i>Prunus ilicifolia</i> , 1999	54	50	56	118	Jolon, Calif.	Frank T. Callahan
Aahaleb, <i>Prunus mahaleb</i> , 1993∆ Aazzard, <i>Prunus avium</i> , 1993∆	78	36	47	126	Lake Stevens, Wash.	Ron Brightman & Robert Van Pelt
in, Prunus pensylvanica, 1999†	263	80	80	363	West Chester, Chester Co., Pa.	Maurice Hobaugh & P. and C. Youngblood
our, Prunus cerasus, 1972∆	71	85	28	163	Sevier Co., Tenn.	Roп Нау
outhwestern black, <i>Prunus serotina</i> var. <i>rufula</i> , 1996*	119	68	75	206	Calhoun Co., Mich.	Paul W. Thompson
outhwestern black, <i>Prunus serotina</i> var. <i>rufula</i> , 1999*	102	45	26	154	Prescott NF, Ariz.	William Litzinger
lest Indies, Prunus myrtifolia, 1989	100 65	39 52	42	150	Tonto NF, Ariz.	Mike Hallen
HESTNUT	00	53	50	131	Miami, Fla.	Carol Lippincott
nerican, Castanea dentata, 1993*	005	10.				
nerican, <i>Castanea dentata</i> , 1993* nerican, <i>Castanea dentata</i> , 1993*	235	106	101	366	Cicero, Wash.	Robert Van Pelt
HINABERRY	247	86	111	361	Carson, Wash.	Robert Van Pelt & Ron Brightman
elia azedarach, 1967∆	222	75	96	321	Kaohe, South Kona, Hawaii	L.W. Bryan
HINKAPIN						•
egheny, Castanea pumila, 1993	85	55	60	155	Putnam Co., Fla.	Mr. and Mrs. John Mathe
rida, Castanea alnifolia, 1961	74	50	30	132	Hempstead Co., Ark.	Dwight Moore
nt, Castanopsis chrysophylla, 1996		122	37	284	Mendocino Co., Calif.	Paul A. Violett
ark, Castanea ozarkensis, 1989	181	22	18	208	Claiborne Co., Miss.	Stuart Knight
HOLLA						•

CLUVES			AN U	PARENT AND	OTAL POINTS LOCATION	NOMIHATOR
CINNECORD						
Acacia choriophylla, 1986		14 2	20	24	40 Sugarloaf Shores, Monroe Co., Fla.	David Sinclair & Mike Cullen
CLETHRA					•	- 2110 STUCION OF WING COURT
Cinnamon, Clethra acuminata, 1995*		10 3	3	12	Caldwell Fork Tr., Great Smoky Mtms. NP, N.C.	Will and Carl Plane 2 1 Co. 1
Cinnamon, Clethra acuminata, 1997*		9 2	9	10	Caldwell Fork Tr., Great Smoky Mtns. NP, N.C.	Will and Carl Blozan & Jan Stykar Will Blozan & Michael Davie
CLIFFROSE					, many mins. Mr, M.C.	MILL DIOZUII & MICHUEL DUVIE
Cowania mexicana, 1998	1	5 30)	12	18 Washington Co., Utah	D. H
CLUSIA					Hashington Co., Oldi	Ronald A. Larsen
Florida, <i>Clusia rosea</i> , 1995	2	5 40) :	37 7	A Hart I I I I I I I I I I I I I I I I I I I	
COCONUT		J 10	,	<i>,</i>	4 Hugh Taylor Birch SP, Ft. Lauderdale, Fla.	Jim Higgins
Palm, Cocos nucifera, 1979∆	1	0 00	,	17 1-	_	
COFFEETREE	6	0 93	Ż	27 15	9 Between Pauahi and Ponohawai, Hilo, Hawaii	Jane and Bryce Robinson
Kentucky, <i>Gymnocladus dioicu</i> s, 1999	187	84	8	0 29	Washington Co., Md.	John Leaf
CONDALIA						South Edul
Bitter, <i>Condalia globosa</i> , 1995	28	19	2	5 53	Tucson, Ariz.	Dahara 7-L
CORALBEAN						Robert Zahner
Southeastern, Erythrina herbacea, 1995	40	32	30	79	IM "Dine" Dealt MAND CL	
Southwestern, Erythrina flabelliformis, 1999	11	15	12		and anning mink, tio.	Richard Workman
CORKWOOD			12	. 47	Arizona-Sonora Desert Museum, Tucson, Ariz.	George Montgomery
Leitneria floridana, 1989†	.0	т./	_			
COTTONWOOD	8	16	7	26	Wallasassa Bay State Preserve, Fla.	Robert W. Simons
Black, Populus trichocarpa, 1995						
Eastern (typ.), Populus deltoides var. deltoides, 1991	320	158	110		Willamette Mission SP, Ore.	Maynard C. Drawson
Fremont (typ.), Populus Verroides Var. deltoides, 1991	433	85	121	548	Minadoka Dam, Cassia Co., Idaho	Jon and Don McFarland
Fremont (typ.), <i>Populus fremontii</i> var. <i>fremontii</i> , 1996 Meseta, <i>Populus fremontii</i> var. <i>mesetae</i> , 1986	504	92	108	623	Santa Cruz Co., Ariz.	Mark Rouw & Don Richard
	190	60	60	265	Brewster Co., Tex.	James E. Liles
Narrowleaf, Populus angustifolia, 1973	314	79	80	413	Malheur Co., Ore.	Donald Oakes
Plains, Populus deltoides var occidentalis, 1967	432	105	93	560	Hygiene, Colo.	Allegra Collister
Rio Grande, Populus fremontii var. wislizeni, 1997	366	123	104	515	Fort Davis, Tex.	Steve Runnels
Swamp, Populus heterophylla, 1990	42	55	23	103	Leflore Co., Miss.	Philip Barbour
CRANBERRYBUSH					V	· milp outbout
American, Viburnum trilobum, 1985*	10	32	31	50	Bloomfield Hills, Mich.	D., (111 7)
American, Viburnum trilobum, 1985*	18	25	25	49	Wayne, Mich.	Paul W. Thompson
American, <i>Viburnum trilobum</i> , 1989*	10	32	31	50	Westcroft Gardens, Mich.	Paul W. Thompson
CROSSOPETALUM					a saladis, mich.	Paul W. Thompson
Florida <i>, Crossopetalum rhacoma,</i> 1998†	5	11	3	17	Koy large Hamma L. Co. D.	
CUPANIA	~		J	17	Key Largo Hammocks State Botanical Site, Fla.	Joseph Nemec
Florida, <i>Cupania glabra</i> , 1993	25	91	00			
YPRESS	23	31	22	62	Monroe Co., Fla.	Clifford Shaw & George Avery
urizona smooth, <i>Cupressus arizonica</i> var. <i>glabra</i> , 1998	10:					_ ·
rizona (tvn.) Contactus arizonica var. glabra, 1998	196	70	40	-276	Tonto NF, Ariz.	Rick Heffernon
rizona (typ.), <i>Cupressus arizonica</i> var. <i>arizonica</i> , 1993 aker, <i>Cupressus bakeri</i> , 1976	240	93	48	345	Santa Catalina Mountains, Ariz.	James Mielke
	129	129	29	265	Rogue River NF, Ore.	Frank T. Callahan
uyama <u>sa, Cupressus arizonica</u> var. stephensonii, 1976	70	37	28	114	Cleveland NP, Calif.	Frank T. Callahan
owen (typ.) <i>, Cupressus goveniana</i> var. <i>goveniana</i> , 1999 acNab, <i>Cupressus macnabiana</i> , 1981	66	40	52	119	Point Lobos SP, Calif.	Alan R. Washburn
endocino Curroscus espesia-	155	55	45	221	Amador Co., Calif.	Frank T. Callahan
endocino, Cupressus goveniana var. pigmaea, 1991 onterey, Cupressus macrocarpa, 1999		142	40	419 .	Mendicino Co., Calif.	Frank T. Callahan
the Converse orizonia			116	668	San Mateo, Pescadero Co., Colif.	R. Huntington & Fiesta Garden School
Ite Cunreccue grizonias	115	45	30	168	Sequoia NF, Calif.	Frank T. Callahan
roent Cuproccus caranner: 1001	124	32	40	166	Sequoia NF, Calif.	Frank T. Callahan
rgent, Cupressus sargentu, 1991 Tate, Cupressus guadalupensis var. forbesii, 1976		145	40	303	Somoma Co., Calif.	Frank T. Callohan
uid. Liififessiis niindaliinaaaaaaa	88	47	38		·	COOK I STURBURI

SPECIES / MOST RECENT MEASUREMENT CIRC	LUMFEREN	E" HEIGHT'	SPREA	ID' TOTAL	POINTS LOCATION	NOMINATOR
CYPRESS-PINE Blue, Callitris hugelii, 1994∆	180	60	58	255	Bradenton, Fla.	Steve Spezig
C Y R I L L A Littleleaf, Cyrilla racemiflora var. parvifolia, 1993† Swamp (typ.), Cyrilla racemiflora var. racemiflora, 1993* D A H O O N	58 † 51	27 44	33 30	93 103	University of Arizona, Ariz. Washington Co., Fla.	Frank T. Callahan Charles R. Reeves
llex cassine, 1984* llex cassine, 1995* * Ilex cassine, 1995* Ilex cassine, 1994* Myrtle, Ilex myrtifolia, 1998	55 32 54 34 77	40 68 42 61 55	36 31 36 34 35	104 108 105 104 141	St. Lucie Co., near Ft. Pierce, Fla. San Carlos Park, Fla. Immokalee, Fla. San Carlos Park, Fla. St. Marks NWR, Fla.	Paul G. Williams Chris Anderson Chris Anderson Sam Allison David Roddenberry
O A R L I N G - P L U M Reynosia septentrionalis, 1992 D E S E R T - W I L L O W	21	28	13	52	Lignumvitae Key SP, Monroe Co., Fla.	Charlotte Niedhauk
Chilopsis linearis, 1995 DEVILS - WALKINGSTICK	160	68	48	240	Pinal Canyon Drive, Gila Co., Ariz.	Mitchell Holder
iralia spinosa, 1997	23	74	16	101	Great Smoky Mountains NP, Tenn.	Katherine Johnson & Will Blozan
smanthus americanus, 1991	36	46	27	89	Putnam Co., Fla.	Ned D. Neenan
ternate-leaf, Cornus alternifolia, 1997 ackfruit, Cornus sessilis, 1998†	41 20 110		27 16 42	97 42 154	Madison, N.J. Shasta Co., Calif. Glenwood Park, Norfolk, Va.	Dave Johnson & Jon Rafalowski Frank T. Callahan B. Carmean, G. Wiliamson, D. Leibman



Flowering, Cornus florida, 1995* Gray, Comus racemosa, 1975 Pacific, Cornus nuttallii, 1986 Red-osier, Cornus stolonifera, 1999 Roughleaf, Cornus drummondii, 1987* Roughleaf, Cornus drummondii, 1997* Roundleaf, Cornus rugosa, 1975 Smooth, Cornus glabrata, 1993*† Smooth, Cornus glabrata, 1993*† Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973 Coast (typ.), Pseudotsuga menziesii var. menziesii,		114 18 169 13 15 31 11 38 26 10 12 10 38	31 38 60 26 43 30 40 26 38 23 23 23.	48 24 58 15 14 13 16 27 19 24 22	157 62 244 43 62 64 55 71 69	Clinton, Sampson Co., N.C. Oakland Co., Mich. Clatskanie, Ore. White Bird, Idaho Rosedale SP, Bolivar City, Miss. Washington Co., Miss. Leland, Mich. Walla Walla, Wash. Palatka, Fla.	A. J. Bullard Paul W. Thompson John E. Makela F.D. Johnson Paul Beard Lamar Dorris Paul W. Thompson R. Van Pelt, R. Brightman, S. Muse
Gray, Comus racemosa, 1975 Pacific, Cornus nuttallii, 1986 Red-osier, Cornus stolonifera, 1999 Roughleaf, Cornus drummondii, 1987* Roughleaf, Cornus drummondii, 1997* Roundleaf, Cornus rugosa, 1975 Smooth, Cornus glabrata, 1993*† Smooth, Cornus glabrata, 1993*; Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973		18 169 13 15 31 11 38 26 10 12	38 60 26 43 30 40 26 38 23 23.	24 58 15 14 13 16 27 19 24 22	62 244 43 62 64 55 71 69 39	Oakland Co., Mich. Clatskanie, Ore. White Bird, Idaho Rosedale SP, Bolivar City, Miss. Washington Co., Miss. Leland, Mich. Walla Walla, Wash.	Paul W. Thompson John E. Makela F.D. Johnson Paul Beard Lamar Dorris Paul W. Thompson R. Van Pelt, R. Brightman, S. Muse
Pacific, Cornus nuttallii, 1986 Red-osier, Cornus stolonifera, 1999 Roughleaf, Cornus drummondii, 1987* Roughleaf, Cornus drummondii, 1997* Roundleaf, Cornus rugosa, 1975 Smooth, Cornus glabrata, 1993*† Smooth, Cornus glabrata, 1993*† Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973		169 13 15 31 11 38 26 10 12	60 26 43 30 40 26 38 23 23.	58 15 14 13 16 27 19 24 22	244 43 62 64 55 71 69 39	Oakland Co., Mich. Clatskanie, Ore. White Bird, Idaho Rosedale SP, Bolivar City, Miss. Washington Co., Miss. Leland, Mich. Walla Walla, Wash.	Paul W. Thompson John E. Makela F.D. Johnson Paul Beard Lamar Dorris Paul W. Thompson R. Van Pelt, R. Brightman, S. Muse
Red-osier, Cornus stolonifera, 1999 Roughleaf, Cornus drummondii, 1987* Roughleaf, Cornus drummondii, 1997* Roundleaf, Cornus rugosa, 1975 Smooth, Cornus glabrata, 1993*† Smooth, Cornus glabrata, 1993*; Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973		13 15 31 11 38 26 10 12	26 43 30 40 26 38 23 23. 22	15 14 13 16 27 19 24 22	43 62 64 55 71 69 39	Clatskanie, Ore. White Bird, Idaho Rosedale SP, Bolivar City, Miss. Washington Co., Miss. Leland, Mich. Wallo Walla, Wash. Walla Walla, Wash.	John E. Makela F.D. Johnson Paul Beard Lamar Dorris Paul W. Thompson R. Van Pelt, R. Brightman, S. Muse
Roughleaf, Cornus drummondii, 1987* Roughleaf, Cornus drummondii, 1997* Roundleaf, Cornus rugosa, 1975 Smooth, Cornus glabrata, 1993*† Smooth, Cornus glabrata, 1993*† Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973		15 31 11 38 26 10 12	43 30 40 26 38 23 23. 22	14 13 16 27 19 24 22	62 64 55 71 69 39	White Bird, Idaho Rosedale SP, Bolivar City, Miss. Washington Co., Miss. Leland, Mich. Walla Walla, Wash. Walla Walla, Wash.	F.D. Johnson Paul Beard Lamar Dorris Paul W. Thompson R. Van Pelt, R. Brightman, S. Muse
Roughleaf, Cornus drummondii, 1997* Roundleaf, Cornus rugosa, 1975 Smooth, Cornus glabrata, 1993*† Smooth, Cornus glabrata, 1993*† Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973		31 11 38 26 10 12	30 40 26 38 23 23. 22	13 16 27 19 24 22	64 55 71 69 39	Rosedale SP, Bolivar City, Miss. Washington Co., Miss. Leland, Mich. Walla Walla, Wash. Walla Walla, Wash.	Paul Beard Lamar Dorris Paul W. Thompson R. Van Pelt, R. Brightman, S. Muse
Roundleaf, Cornus rugosa, 1975 Smooth, Cornus glabrata, 1993*† Smooth, Carnus glabrata, 1993*† Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973		11 38 26 10 12	40 26 38 23 23. 22	16 27 19 24 22	55 71 69 39	Washington Co., Miss. Leland, Mich. Walla Walla, Wash. Walla Walla, Wash.	Lamar Dorris Paul W. Thompson R. Van Pelt, R. Brightman, S. Muse
Smooth, Cornus glabrata, 1993*† Smooth, Cornus glabrata, 1993*† Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973		38 26 10 12	26 38 23 23. 22	27 19 24 22	71 69 39	Leland, Mich. Walla Walla, Wash. Walla Walla, Wash.	Paul W. Thompson R. Van Pelt, R. Brightman, S. Muse
Smooth, Carnus glabrata, 1993*; Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Carnus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973		26 10 12 10	38 23 23. 22	19 24 22	71 69 39	Walla Walla, Wash. Walla Walla, Wash.	R. Van Pelt, R. Brightman, S. Muse
Swamp, Cornus stricta, 1993* Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973		10 12 10	23 23. 22	19 24 22	69 39	Walla Walla, Wash.	
Swamp, Cornus stricta, 1988* Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† D O U G L A S - F I R Bigcone, Pseudotsuga macrocarpa, 1973		12 10	23 23. 22	24 22	39		Pohort V D II o D
Swamp, Cornus stricta, 1988* Western, Cornus occidentalis, 1992† D O U G L A S - F I R Bigcone, Pseudotsuga macrocarpa, 1973		10	23. 22	22			Robert Van Pelt & Ron Brightman
Western, Cornus occidentalis, 1992† DOUGLAS-FIR Bigcone, Pseudotsuga macrocarpa, 1973			22		41		Robert W. Simons
D O U G L A S - F I R Bigcone, <i>Pseudotsuga macrocarpa</i> , 1973				28	39	Indian Creek Rd., Chesapeake, Va.	 Byron Carmean & Gary Williamson
Bigcone, Pseudotsuga macrocarpa, 1973			23	21		Indian Creek Rd., Chesapeake, Va.	Byron Carmean & Gary Williamson
Bigcone, <i>Pseudotsuga macrocarpa</i> , 1973 Coast (typ.), <i>Pseudotsuga menziesii</i> yar, menziesii			20	21	66	Woodland, Wash.	Robert Van Pelt & Ron Brightman
Coast (typ.), Pseudotsuga menziesii yar menziasii		241	145	25			•
	100Ω		145		430	Angeles NF, Calif.	William Maxwell
Rocky Mountain, Pseudotsuga menziesii var. glauca,	1770		281		804	Olympic NF, Wash.	
ELDER	177/	316	139	55	469	Deschutes NF, Jefferson Co., Ore.	D. Shaw, S. Sillett, S. Bailey, R. Van Pelt Mark Corbet & Ben Benhower
						,	work colds & deu Reupomel
American (typ.), Sambucus canadensis var. canadens	is, 1987	38	16	22	60	Jefferson NF, Va.	
Blackbead, Sambucus melanocarpa, 1972		39	42		89	Columbia Co., Ore.	Richard Salzer
Blue, Sambucus cerulea, 1997	1	56	45		11	William SP, San Jose, Calif.	Oliver Matthews
Florida, Sambucus canadensis var. laciniata, 1994	8	26		_	47	Marion Co., Fla.	Art Cowley
Mexican, Sambucus mexicana, 1994	13				78		Robert W. Simons
Pacific red, Sambucus callicarpa, 1993						Santa Cruz River, Tubac, Ariz.	Robert Zahner
ELEPHANT-TREE				2/	7 1	Coupeville, Wash.	Ron Brightman
Bursera microphylla, 1997*	1	7 ,	•				
Bursera microphylla, 1998*	1			16 3		Yumo Co., Ariz.	Ken Morrow
ELLIOTTIA	2	I]:	2 2	?1 3	8,	Anza-Borrego Desert SP, Calif.	Whit Bronaugh
Elliottia racemosa, 1999							******* DIONAUGII
	34	43	3 2	0 82	2 1	ison, Tattnall Co., Ga.	
ELM					·		Howard Stanley & Red Castleman
American, Ulmus americana, 1997	282	112	11:	. 400		h a	
Cedar, Ulmus crassifolia, 1989*	127					arlin, Grand Traverse Co., Mich.	Evelyn Seka & John Spencer
Cedar, Ulmus crassifolia, 1994*	112	17,000		-		umphreys Co., Miss.	Mike Hawkins
Florida, Ulmus americana var. floridana, 1985*	117		69	_		lver River, Marion Co., Fla.	R. Simons, J. Buckner, J. Clutts, K. Greenberg
Florida, Ulmus americana var. floridana, 1989*		56	60		01	ustee Battlefield State Memorial, Fla.	Frank Loughran
Rock, Ulmus thomasii, 1988	95	70	77	184	, La	fayette Co., Fla.	Jerry N. Livingston
September, Ulmus seratina, 1985	202	117	122	350	Ca	ssopolis, Mich.	Paul W. Thompson
Siberian, <i>Ulmus pumila</i> , 1997∆	105	150	64	271	Col	bert Co., Ala.	raut vv. inompson T.F. Hall
Slippery, <i>Ulmus rubra</i> , 1988*	239	95	97	358	Gra	nd Junction, Colo.	
Slippery, Ulmus rubra, 1995*	240	100	119	370		age Park, Sugar Grove, Ohio	Bob Ely
Vinged, <i>Ulmus alata</i> , 1991	250	100	100	375		nroeville, Ohio	Toni and Gene DeBruin
	185	97	78	302		mond Co., N.C.	Susan Marshall
SENBECKIA						on, n.c.	Walter B. High
erlandier, <i>Esenbeckia berlandieri</i> , 1995	41	24	21	70	C -	C T	
UCÄLYPTUS	·	~ 1	41	70	cam	eron Co., Tex.	Brownsville Beautification Committee
uegum <i>, Eucalyptus globulus</i> , 1998∆	ДΖТ	100	10-				
ngbeak, <i>Eucalyptus camaldulensis</i> , 1995∆	461	135	131	629		on Ranch, Carmel, Calif.	Art Cowley & Clint Eastwood
ALSE-MASTIC	342	130	105	498		Co., Ariz.	Doug Koppenger
istichodendron foetidissimum, 1973							2008 vohheiidet
	105	118	94	247	Castel	llow Hammock Park, Fla.	
LISEBOX					443101	HAMINIOCK I UIK, FIG.	Albert Hetzell & Ron Smith
minda latifolia, 1995	10	19	13	20	EL		
AMERICAN FORESTS	. •	"/	19	32	Horida	ı Keys Refuge, Fla.	Niko Reisinger & Donna Stevenson

It seemed like the perfect day to look for a big tree.

That's what Ken Morrow and Mike Hallen thought on a sunny day in December 1998 as they drove for several hours to Aravaipa Canyon, about 90 miles southeast of Phoenix. Their goal: find and measure an Arizona sycamore Morrow had spotted on a recent camping trip with his girlfriend.

Despite the sunny weather, temperatures dropped to the low 40s, a rarity for sunny Arizona. Nevertheless, the duo waded for two miles through the icy water of Aravaipa Creek. They hopped from land to creek, jamming their hands in their pockets and haping to warm their feet in the water. Finally, they reached the promised tree, a 426-point specimen with a 335-foot circumference.

But the clinometer wouldn't work. So the intrepid travelers turned around and hiked back. They did see one miracle that day, though—snow."It was 40 miles of desert, solid white, just like back East," Hallen says. "It was really rare and just amazing."

Such a harrowing experience might discourage lesser tree hunters. But Hallen, 43, and Morrow, 45, returned several months later with clinometer in hand. On that trip they found two other state champs, a Bonpland willow and an Arizona walnut. Much of the fun comes from the search, both say.

"We cover a lot of ground. We're not afraid to throw on a pack and get off the pavefrient," Hallen says. "We always have a good time, tree or no tree. We always find something interesting."

That usually includes trees. The two discovered 26 of Arizona's 71 current national champions, six of those as a team. Arizona Big Tree Coordinator Bob Zahner attributes the state's "impressive record . . . in large part to Ken and Mike." Their friendship began just two years ago when they separately entered a local newspaper contest to find the next champion saguro

KEN MORROW & MIKE HALLEN Arizona's Dynamic Duo



cactus. They discovered the 125-point giant in Tonto National Forest's Superstition Wilderness after several weekends of traveling together.

"After three weekends of hiking around, you get to know a person pretty well," Morrow says. "Mike was a real good hiker and interested in trees."

A horticulturist who runs an ornamental desert tree farm near Phoenix, Morrow became interested in big trees when his customers asked him how large their seedlings could grow. He found answers in AMERICAN FORESTS' National Register. He met his match in Hallen, a postal worker and outdoors lover who learned about the list from an article in Arizona Highways magazine. Hallen says hunting with Morrow helps him learn about the science of trees.

"It's still a learning experience for me," Hallen says. "I've got a long way to go to catch up with Ken. I want to learn all the scientific names, common names, where they grow, everything I can about them."

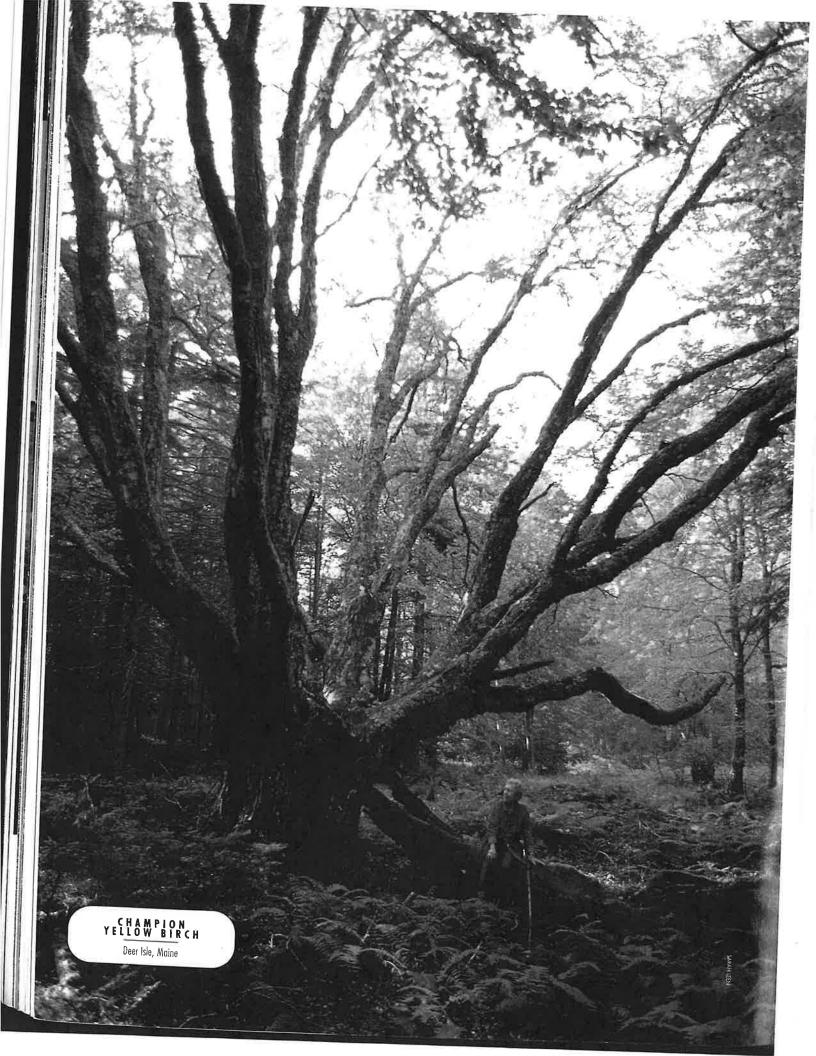
Naw, Marrow says, they meet once or twice a month, "not necessarily looking for a big tree [but] we just kind of stumble across things." Hallen serves as the official photographer, while Morrow jots down the tree's specs and distinguishing characteristics.

"It's definitely a two-man job, especially for measuring," Morrow says. "It always helps to have two people to measure the crown spread and the baseline of a tall tree."

Though they hope to avoid future Arizona snowstorms, this dynamic duo is seeking new adventures, including creating a Big Tree tour company to help people locate hard-to-find champs. Such tours could return tree-lovers to their roots.

"[Trees] kind of touch everybody. Who doesn't remember a tree from childhood . . . that they saw out their window when they were growing up?" Morrow says. "It's rooted in primordial history."

— Janine Guglielmino



SPECIES / MOST RECENT MEASUREMENT		ERENCE" I		OF READ	TUTA	L POINTS LOCATION	HOMINATOR
FLORIDA - BOXWOOD							一一一
Schaefferia frutescens, 1986		24	27	16	55	Lignumvitae Key State Botanical Site, Fla.	Ken Roundtree & Dave Sinclair
FLORIDA-PRIVET						, , , , , , , , , , , , , , , , , , , ,	ven vonligites & Dake Ziuclajt
Forestiera segregata, 1993		25	18	21	48	Humiston Beach Park, Vero Beach, Fla.	Instee B - 1
FLOWERFENCE						run, rold bouch, file.	Janice Broda
Caesalpinia pulcherrima, 1991*∆		20	12	15	36	Terrace Broward Co., Fla.	14. %
Caesalpinia pulcherrima, 1991*∆			6	14	36	Crescent Dr., Hollywood, Calif.	John Kern
FORESTIERA						Joseph Di., Hollywood, Collif.	D. Spicer, W. Harms, W. Tesauro
Desert-olive, Forestiera phillyreoides, 1997		0 1	7	17	31	Buenos Aires NWR, Ariz.	
FRANKLINIA				''	J I	duerios aires NWK, Ariz.	Roseann Hanson
Franklinia alatamaha, 1986	7	8 3	7	42	10/	W. I.	
FREMONTIA	,	J 3	′	42	126	Wyndmoor, Montgomery Co., Pa.	John Swartley
California, Fremontodrendron californicum, 1980	4	n -	,	0.1			
FRINGETREE	4	0 26		21	71	North Fork, Calif.	Jack Dozier & Walter Puhn
Chionanthus virginicus, 1989*							
Chionanthus virginicus, 1989*	4:				91	Telford Spring County Park, Fla.	Buford Pruitt Jr.
GALLBERRY	53	32	3	35	94	Mount Vernon, Va.	Richard Salzer
Large, <i>Ilex coriacea</i> , 1999							
,	10	27	1	2 4	40	Great Dismal Swamp, Va.	Byron Carmean & Gary Williamson
GEIGER-TREE	12						Strong connecting only Milliamsou
Cordia sebestena, 1994∆	27	24	1	9 5	56	Tarpon Bay Marina, Lee Co., Fla.	F Hover M Diver C + 1
GRAYTWIG						, , , , , , , , , , , , , , , , , , , ,	E. Hoyer, M. Dixon, C. Anderson
Schoepfia chrysophylloides, 1998†	7	15	10) 2	25	Key Largo Hammocks State Botanical Site, Fla.	L. Lu
BUAJILLO						, -5.5° manimucka ande politifical Site, Fla.	Joseph Nemec
cacia berlandieri, 1989	18	15	12	3	6	Albert Schwarz Panch Mannel T	
UIANA-PLUM				0	-	Albert Schwarz Ranch, Mercedes, Tex.	Fleet Lentz
rypetes lateriflora, 1998	21	23	ਾ 8	A.	<u>,</u>	Van I El	6 4
U M B O - L I M B O	-1	40	0	46	J	Key Largo, Fla.	Jeanne M. Parks
ursera simaruba, 1992*	108	55	r.c	17.		6	
ursera simaruba, 1992*	125	55 41	52 40	176		Captiva Island, Fla.	Jeff Mangun
rsera simaruba, 1995*	99	64	48 57	178		St. Mary's Star of the Sea Church, Key West, Fla.	W. Hubard & Beverlee Wang
ACKBERRY	//	04	5/	177		Snider Park, Ft. Lauderdale, Fla.	Kathy Preston & Frank Zickar
mmon, <i>Celtis occidentalis</i> , 1993	ggr	0.4					
orgia, <i>Celtis tenuifolia</i> , 1999	235 22	94	88	351		Mason City, III.	James R. Ream
theimer, Celtis lindheimeri, 1975	72	30 43	25	58		Oconee, Washington Co., Ga.	Robert Strange
leaf, Celtis reticulata, 1988	180	43 69	46 75	127		Comal Co., Tex.	Frank Love & John Haislet
ıy, Celtis pallida, 1996	31	22	75 24	268		atron Co., N. Mex.	Ralph A. Fisher Jr.
WTHORN	01	22	24	59	K	incon Valley, Pima Co., Ariz.	Matt Johnson
utiful, Crataegus pulcherrima, 1993	25	47	0.7				
nore, Crataegus intricata, 1982	25 on	46	31	79		allahassee, Fla.	Malcolm Johnson
k, Crataegus douglasii, 1993	90 111	23 41	42	124		arrenton, Va.	Richard Salzer
perry, Crataegus brachyacantha, 1993	98	41	57 47	166		eacon Rock SP, Wash.	Robert Van Pelt
,#€rataegus erythropoda, 1997	70 24	36 16	46 21	146		oile, Nacogdoches Co., Tex.	Keith Cook
pur, Crataegus crus-galli, 1987*	60	40	21	45		Illand Moore Park, Fort Collins, Colo.	Tim Buchanan
pur, Crataegus crus-galli, 1994*	71	33	48 30	112		onossas, Va.	Richard Salzer
nbia, <i>Crataegus columbiana</i> , 1992	38	24	23	112		ntral City, Ky.	Henry Converse
d, Crataegus punctata, 1979	97	38	23 38	68 145		z Perce Co., Idaho	Ken & Brant Steigers
y, Crotaegus mollis, 1972	105	52	30 62	173		naan Valley Park, W. Va.	Richard Salzer
rf, Crataegus flabellata, 1985*	24 .	30	18	173 59		isse lle, Mich.	Paul W. Thompson
of, Crataegus flabellata, 1988*	26	30	28	63		enandoah NP, Va. enandoah NP, Va.	Richard Salzer

SPECIES / MOST RECENT MEASUREMENT	CIRCUMFERENCE"	HEIGHT'	SPREAD'	TOTAL PO	DINTS LOCATION	NOMIHATOR
Flacks Controlled execulants 1001	51	21	30	80	Pipestem SP, W.Va.	Richard Salzer
Fleshy, Crataegus succulenta, 1991 Frosted. Crataegus pruinosa, 1991*	64	30	36	103	Shenandoah Co., Va.	Richard Salzer
Frosted, Crataegus pruinosa, 1991*	63	32	32	103	Shenandoah Co., Va.	Richard Salzer
Green, Crataegus viridis, 1981	61	40	45	112	Marlinton, W. Vo.	Richard Salzer
Kansas, Crataegus coccinioides, 1995	33	30	36	72	Brooklyn Botanic Garden, N.Y.	George Peters
Littlehip, Crataegus spathulata, 1999	42	35	32	85	Hapeville, Fulton Co., Ga.	Jim L. Chance
May, Crataegus aestivalis, 1993	31	43	19	79	Angelina NF, Tex.	Edward C. Fritz
Oneflower, Crataegus uniflora, 1991	14	18	16	36	Gainesville, Fla.	Robert T. Ing & Daniel B. Ward
Oneseed, Crataegus monogyna, 1992∆	111	37	58	163	Mount Vernon, Wash.	Ron Brightman
Parsley, Crataegus marshallii, 1996	46	27	33	81	Covington Co., Miss.	Bryant E. Brown & Jon Wallace
Pear, Crataegus calpodendron, 1991	23	20	25	49	Pope, III.	Larry Stritch & Scott Grigoroff
Riverflat, Crataegus opaca, 1989	45	29	36	83	Jones Co., Miss.	Herman Smith
Scarlet, Crataegus coccinea, 1983	54	37	29	98	Oneida, N.Y.	Charles McFadden
Washington, Crataegus phaenopyrum, 1987*	54	33	39	97	Chattanooga National Cemetery, Tenn.	Bruce Kauffman
Washington, Crataegus phaenopyrum, 1988*	54	36	38	100	Abingdon, Va.	Richard Salzer
Washington, Crataegus phaenopyrum, 1988*	62	30	32	100	Abingdon, Va.	Richard Salzer
Yellow, Crataegus flava, 1999	36	15	19	56	Augusta Co., Va.	Richard Salzer
					· ·	
HAZEL California, Corylus cornuta var. californica, 1989	66	50	42	127	Lincoln Co., Ore.	Tom Morgan
Hazelnut, Corylus americana, 1997	30	27	21	62	Prince Frederick, Calvert Co., Md.	John Zyla
	30	LI	21	UL.	Times Troublek, Curver Co., Ma.	
HEWLOCK	1/1	00	το.	070	Designation M.C.	Ken Knox
Carolina, <i>Tsuga caroliniana</i> , 1999	161	99	50	273	Henderson, N.C.	W. Blozan, J. Boetsch, M. Davie
Eastern, Tsuga canadensis, 1995	202	165	38	377	Great Smoky Mountains NP, Tenn.	Mark R. Corbet
Mountain, Tsuga mertensiana, 1999	320	105	33	433	Deschutes NF, Ore.	Mark R. Corbet
Western, Tsuga heterophylla, 1999	338	194	51	545	Brothers WA, Olympic NF, Wash.	Mulk A. Colbei
HERCULES-CLUB						7 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Zanthoxylum clava-herculis, 1999	60	38	55	112	Holly Springs Cernetery, Nacogdoches Co., Tex.	Robin G. and Happy Jane Willhoite
Texas, Zanthoxylum hirsutum, 1993†	50	51	28	108	Jasper Co., Tex.	H. Gaskamp & Brian Clark

If you have a big tree in the Baton Rouge, Louisiana, area, chances are Brian Chandler's seen it. As the area Extension forester, Chandler, 47, has been a reliable pair of eyes for the state's big tree program since he came to the Louisiana Cooperative Extension Service in 1981.

State big tree coordinator Janet Tompkins of the Louisiana Forestry Association is quick to sing his praises, calling him "the best" champion tree finder.

Most of Louisiana's forestland is owned by small private landowners—the folks Chandler works with in the course of his job, she says. The big tree program is always in the back of his mind, and he's quick to point out notable trees to landowners who don't realize just what they have.

And Chandler's measurements are always true.

Perhaps that's why he's often the first name that

comes to mind when people need a tree measurement checked. Tape measure and clinometer in hand, he heads out to check out nominations, sometimes for folks who say they

BRIAN CHANDLER Keeping Trees in Mind



aren't sure what kind of tree it is—they just know it's a big one.

And those trees aren't always hard to spot.

"Champions aren't always in the woods," Chandler says, citing two state champs that reside at an arboretum in Baton Rouge. "Some are in town in people's yards."

Chandler has one national champion to his credit, a 298-point spruce pine, new to this year's National Register. The pine, which stands 112 feet tall with a 66-foot crown spread and 160-inch circumference, dethroned the previous champ, which Chandler also nominated. No surprise that his home parish of West Feliciana has nine state champs—more than any other parish in Louisiana.

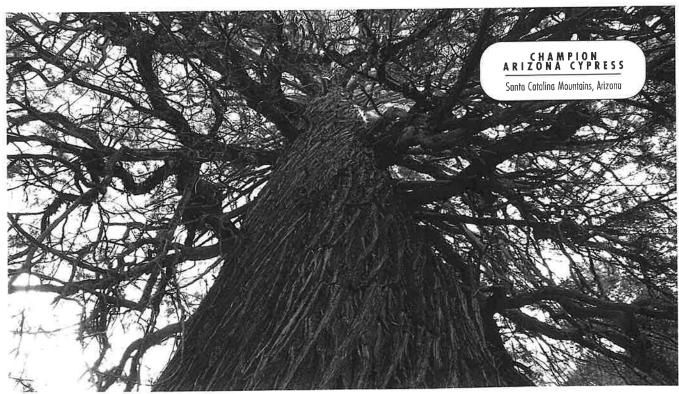
A hunter and fisherman, Chandler is attuned to the woods around him, and he has passed that love on to his son Chris, a high school junior, who has expressed interest in job in forestry. Chandler will be finding new ways to pass

that enthusiasm on to his fellow Louisianans this year as volunteer chairman for the state's —Michelle Robbins

SPECIES / MOST RECENT MEASUREMENT	CIRCUMFERENCE	" HEIGHT'	SPREAD	' TOTAL PO	INTS LOCATION	NOMINATOR
HIBISCUS						
Sea, Hibiscus filiaceus, 1991∆	102	50	74	171	Boca Raton Garden Club, Fla.	Evelyn Somerville
Shrub althea, <i>Hibiscus syriacus</i> , 1999Ơ	8	19	13	30	Arnold, Anne Arundel Co., Md.	Colby B. Rucker
HICKORY						
Bitternut, Carya cordiformis, 1999	182	120	100	327	LaGrange, Fayette Co., Tenn.	William David Smith
Black, Carya texana, 1996	128	139	84	288	Orange Co., Tex.	Earl Williams
Carolina, <i>Carya ovata</i> var. <i>australis</i> , 1997	94	150	65	260	Near Gallant, Etowah Co., Ala.	J. Lawrence Brasher
Mockernut, Carya tomentosa, 1989	140	156	70	314	Humphreys Co., Miss.	David K. Lee
Nutmeg, Carya myristiciformis, 1985	132	145	80	297	Lowndes Co., Ala.	Danny Howard
Pignut, Carya glabra var. glabra, 1997	200	105	125	336	St. Simon Island, Ga.	Ken Knox & Sam Hocott
Red, Carya glabra var. odorata, 1997	84	140	62	240	Boar Hog Bridge, Great Smoky Mtns. NP, Tenn.	W. Blozan, R. Genter, B. Dellinger
Sand, Carya pallida, 1997*	143	94	86	259	Vineland, N.J.	Stephen R. Field & Adele Filippi
Sand, Carya pallida, 1998*	138	104	68	259	St. Leonard, Calvert Co., Md.	John Zyla
Scrub, Carya floridana, 1992	62	47	48	121	Highland Co., Fla.	J. Thorsen, R. Simons, J. and M. Buckner
Shagbark, Carya ovata var. ovata, 1984*	132	153	56	299	Sumter NF, S.C.	Claude J. Moody
Shagbark, Carya ovata var. ovata, 1994*	144	132	109	303	Todd Co., Ky.	Joe Dwyer
Shellbark, Carya laciniosa, 1994	167	139	80	326	Greenup, Ky.	Charles Wilburn
Water, Carya aquatica, 1993*	228	101	85	350	Barr's Landing, Lake George, Fla.	Robert W. Simons & Daniel B. Ward
Water, Carya aquatica, 1996*	190	148	49	350	Congaree Swamp NM, S.C.	Robert Jones & Lee Reynaud
HOLLY						
American, <i>Ilex opaca</i> , 1999	125	76	48	213	I-85 at Hugley, Chambers Co., Ala.	Jeff Abney
Carolina, <i>Ilex ambigua</i> , 1995	18	27	30	53	New Port Richey, Pasco Co., Fla.	Donald Robinson & Michael W. Kenton
Georgia, Ilex longipes, 1998†	5	12	12	20	Giles Co., Tenn.	Dwayne Estes
Sarvis, <i>Ilex amelanchier</i> , 1999†	8	14	18	27	Natural Bridge, Va.	Richard Salzer
HONEYLOCUST					-	
Gleditsia triacanthos, 1999*	226	100	88	348	Frederick Co., Md.	Gary Schmidt
Gleditsia triacanthos, 1993*	233	90	88	345	Williamsport Pike, Greencastle, Pa.	P. Wert & C. Brewer
	200	,,	00	0.15	,	
HOPBUSH	14	22	13	39	Key Largo Hammocks State Botanical Site, Fla.	Joseph Nemec
Dodonaea viscosa, 1998	14	LL	10	37	Rey Edigo Hallimocks State Bolames Sins, 1161	
HOPHORNBEAM		0.0	0.4	,,	n. n. J No T	James E. Liles
Chisos, Ostrya chisosensis, 1983	28	32	24	66	Big Bend NP, Tex.	Arvid Tesaker
Eastern, Ostrya virginiana, 1991	115	74	111	217	Grand Traverse Co., Mich.	Ernest A. Kurmes
Knowlton, <i>Ostrya knowltonii</i> , 1996	39	44	29	90	Coconino Co., Ariz.	LINUSI M. RUITIUS
HOPTREE						F LT Callabar
California, Ptelea crenulata Greene, 1991	49	22	20	76	Lake Co., Calif.	Frank T. Callahan
Common, <i>Ptelea trîfoliata</i> , 1982	33	35	40	78	Ada, Mich.	Paul W. Thompson & C. Rogers
HORNBEAM						
American, Carpinus caroliniana, 1983	95	69	56	178	Ulster Co., N.Y.	Morgan Wright
HUAJILLO						
Pithecellobium pallens, 1991	8	21	13	32	US 281 & Quarters Drive, Tex.	Joe Ideker
HUISACHE						
Acacia farnesiana, 1989	161	30	46	203	Atascosa County Jail, Tex.	Martin Soward
	101					
HULS A CHILLO	A /	24	29	77	Apache Blvd., Tempe, Ariz.	Ken Morrow
Acacia tortuosa, 1996	46	24	L7	17	Apacito bira., tompo, mic.	
HYPELATE			_	0.5	V	Joseph Nemec
Hypelate trifoliata, 1998*	54	39	8	95 01	Key Largo Hammocks State Botanical Site, Fla.	V. Condon & W. Miller
Hypelate trifoliata, 1994*	46	39	25	91	Coral Coast Subdivision, Key Largo, Fla.	t' chings or the times
INCENSE-CEDAR					and the second of the second	L Horr D. McHardy D. Wright
Libocedrus decurrens, 1969	462	152	49	626	Marble Mountains Wilderness, near Sawyers Bar, Calif	. J. Hell, D. Michalay, D. Winghi

INDIA-ALMOND				SAMELIAL	CONTO.	AL POINTS LOCATION	NOMINATOR
Terminalia catappa, 1986∆		135	/1				
INDIAN-FIG		133	61	71	214	Monroe Co., Fla.	D. Sinclair & M. Cullen
Opuntia ficus-indica, 1999∆		0.4					
INKWOOD		36	14	16	54	Tucson Medical Center, Ariz.	Ken Porter
Exothea paniculata, 1989							
		40	44	21	89	Key Largo Hammocks State Botanical Site, Fla.	Albert Hetzell & Ron Smith
JERUSALEM-THORN							The state of the s
Parkinsonia aculeata, 1997 →	1	12	40	59	167	Tucson, Ariz.	Tom and Kiki Georgelos
JOEMOOD		41					tota and take beorgeins
Jacquinia keyensis, 1995	2	3	3	13	39	Cudjoe Key, Fla.	Di C1
JOSHUA-TREE						(say tal	Dianna Stevenson & Vince Condon
Yucca brevifolia, 1999	15	5 4	6	38	211	Stanford University, Santa Clara Co., Calif.	
JUJUBE						Stationa diliversity, Salita Clara Co., Calif.	Art Cowley
Common, Ziziphus jujuba, 1997*△	6-	4 4	6	36	119	Fort World Day of D. J. T	
Common, Ziziphus jujuba, 1998*∆	67				117	Fort Worth Botanic Gardens, Fort Worth, Tex.	John A. Haislet
JUNIPER				, ,	113	Callaway Gardens, Harris Co., Ga.	Tommy Hutcherson
Alligator, Juniperus deppeana, 1995*	328	46	: /	19 3	207	C 11 H	
Alligator, Juniperus deppeana, 1998*	308				386 384	Granite Mountain, Prescott NF, Ariz.	William Litzinger
Ashe, Juniperus ashei, 1999	138				207	Prescott NF, Ark.	Richard and Mickey Contreras
California, Juniperus californica, 1976	94	33			37	New Braunfels, Comal Co., Tex. Colusa Co., Calif.	Mark Peterson
Common, Juniperus communis, 1993	37	46	2		90	Washtenaw Co., Mich.	Frank T. Callahan
Drooping, Juniperus flaccida, 1982	102	55			66	Big Bend NP, Tex.	M. Huemann & Paul W. Thompson
Oneseed, Juniperus monosperma, 1981	168	29	28		04	Jicarilla Mountains, N. Mex.	James E. Liles
Pinchot, Juniperus pinchotii, 1977	142	23	27		72	Alpine, Tex.	Tom Guck
Rocky Mountain, Juniperus scopulorum, 1989	247	40	21	29	92	Cache NF, Utah	Frank T. Callahan R.P. McLaughlin
Utah, Juniperus osteosperma, 1996	268	38	46	31	7	Crowley Lake, Calif.	•
Western, Juniperus occidentalis, 1983	480	86	58	58	H (2)	Stanislaus NF, Calif.	Randy Witters and Kim "Witters" Fritsche J.R. Hall
KIDNEYWOOD							J.M. 110
Eysenhardtia polystachya, 1993	49	21	25	7	6	Coyote Mountain WA, Ariz.	Dates Civil-il
ARCH						,	Peter Gierlach
turopean, <i>Larix decidua</i> , 1996∆	183	92	72	293	3	Northfield, Washington Co., Vt.	
ubalpine, <i>Larix lyallii</i> , 1993	236	94	56	344		Wenatchee NF, Wash.	Robert Stanton
Vestern, Larix occidentalis, 1993*	230	189	35	428		Wenatchee NF, Wash.	Stephen Arno & Jeff Hart
/estern, <i>Larix occidentalis</i> , 1995*	264	153	34	426	ó	Lolo NF, Missoula Co., Mont.	Kathy and Robert Van Pelt Helen Smith & Micha Krebs
AURELCHERRY						,	LIGIGII SIIIIIII & MICUO KLGDS
orolina, <i>Prunus caroliniana</i> , 1987*	127	47	55	188		Lakeland, Fla.	No. I. C. I.
orolina <i>, Prunus caroliniana,</i> 1996*	128	47	49	187		Harris Co., Tex.	Nick Sykes
glish, <i>Prunus laurocerasus,</i> 1987∆	96	32	52	141		Seattle, Wash.	Joseph Munguia & Paul Kisel Arthur Lee Jacobson
EADWOOD							WILLIAM TREATMENT AND THE SET INCOME.
ugiodendron ferreum, 1993	70	37	27	114		Monroe Co., Fla.	D :16: 1. 0 =
EBBEK							David Sinclair & Frank Zickar
izia lebbeck, 1968∆	257	65	95	346		Lahaina, Hawaii	
UCAENA		-		210		Eunama, Nawan	L.W. Bryan
at, Leucaena pulverulenta, 1994	33	27	26	ل 7		Audub C-L-Lo L o -	
eleaf, <i>Leucaena retusa</i> , 1986	33	21	26 26	67 61		Audubon Sabal Palm Grove Sanctuary, Tex.	Joe Ideker
DFLOWER			20	01		Terrell Co., Tex.	Frank T. Callahan
, Calyptranthes pallens, 1993	49	40	24	0.5			
GNUMVITAE	1/	40	24	95	١	lascaya Museum and Gardens, Miami, Fla.	Carol L. Lippincott
ahbark, Guaiacum sanctum, 1995	27	21		_			
AMERICAN FORESTS	37	31	39	78	K	ey West, Fla.	Vincent Condon & Mike Miller

SPECIES / MOST RECENT MEASUREMENT	CIRCUMFERENCE'	' HEIGHT'	SPREAD'	TOTAL PO	INTS LOCATION	ROTANIMON
Texas, Guaiacum angustifolium, 1974	32	26	22	64	Alamo, Tex.	Terry Fears
LOBLOLLY - BAY Gordonia lasianthus, 1993	164	95	60	274	Ocala NF, Fla.	Robert Simons & Daniel B. Ward
LOCUST		12			- dl 11 11	D.I. Marria
Black, <i>Robinia pseudoacacia</i> , 1974	280	96	92	399	Dansville, N.Y.	B.L. Morris
Clammy, Robinia viscosa, 1996	19	35	21	59	Botanical Gardens, Highlands, N.C.	Bill Wykle
New Mexico, Robinia neomexicana, 1997	90	71	28	168	Tonto NF, Ariz.	Mike Hallen & George Kieren
LOTEBUSH Ziziphus obtusifolia, 1999	14	26	20	45	San Pedro River, Pima Co., Ariz.	Tom Butler
LYONIA Tree, Lyonia ferruginea, 1998	35	45	30	88	Seminole Ranch Conservation Area, Fla.	Mary Keim & Randy Snyder
LYSILOMA						
Bahama, <i>Lysiloma latisiliquum</i> , 1998	101	50	59	166	Miomi International Airport, Fla.	Jeff Dawson & Steve Duncan
Littleleof, <i>Lysiloma microphyllum</i> , 1998	54	33	39	97	Central Arizona College, Ariz.	Bill Kinnison
MADRONE						
Arizona, Arbutus arizonica, 1997	176	42	46	230	East Sawmill Canyon, Coronado NF, Ariz	Tom Harlon
Pacific, Arbutus menziesii, 1997	418	80	121	528	Humboldt Co., Calif.	R.H. Menzies
Texas, Arbutus texana, 1999	175	26	50	214	Lincoln NF, N. Mex.	Mark Rossacker
MAGNOLIA						
Ashe, Magnolia ashei, 1993	55	52	37	116	Henry Fndn for Botanical Restoration, Gladwyn, Pa.	J. Henry, R. Steiger, R. Langford
Bigleaf, Magnolia macrophylla, 1999	55	87	32	150	Roswell, Fulton Co., Ga.	Doug and Jess Riddle
Cucumbertree, Magnolia acuminata, 1985	293	75	83	389	Waukon, lowa	Robert Drahn
Frasier, Magnolia fraseri, 1998	118	121	33	247	Great Smoky Mountains NP, Tenn.	Jess and Doug Riddle
Pyramid, Magnolia pyramidata, 1988*	62	65	32	135	Tallohassee, Fla.	R.W. Simons & M.W. Schwartz
Pyramid, <i>Magnolia pyramidata</i> , 1999*	46	84	30	138	Greensboro, Gadsden Co., Fla.	Arthur and Meredith Frassand
Southern, Magnolia grandiflora, 1994	268	98	90	389	Jones Co., Miss.	Jeff Yelverton
Sweetbay, Magnolia virginiana, 1991	173	92	52	278	Union Co., Ark.	Ernest Ford & Steven Paes



SPECIES / MOST RECENT MEASUREMENT	CIRCUMF	ERENCE"	HEIGHT,	SPRE	AD' TO	TAL POINTS LOCATION	The Park State of the State of
Umbrella, <i>Magnolia tripetala</i> , 1993		122	50	50	18		NOMINATOR
MAHOGANY			30	20	10	5 Bucks Co., Pa.	John Swartley
West Indies, Swietenia mahagoni, 1992	1	75	70	0.4	07		
MANCHINEEL	,	73	79	96	278	8 Key West, Fla.	William S. Hubard
Hippomane mancinella, 1993							
′		56	46	51	115	Watson Hammock, Fla.	Clifford Shaw & George Avery
MANGO							Carrola Silaw & Deolge Avery
Mangifera indica, 1992∆	34	46	94	91	463	Hilo, Hawaii	D-L-1 LW-L-1 - 1
MANGROVE							Robert and Katherine Van Pelt
Red, <i>Rhizophora mangle</i> , 1995 ¯	4	7	58	42	116	J.N. "Ding" Darling NWR, Fla.	
MANZANITA					110	J.A. Ding Duning NWK, Fla.	Arny Bennett
Big, Arctostaphylos manzanita, 1989	9	2 2	22	20	100		
Bigberry, Arctostaphylos glauca, 1976	5:			32	122	Austin Creek SRA, Guerneville, Colif	Roger Raiche & Greg de Nevers
Pringle, Arctostaphylas pringlei, 1999	37			43	96	Sunol Regional Park, Calif.	E. Lagel
Whiteleaf, Arctostaphylos viscida, 1998	92			14	59	Red Rock-Secret Mountain WA, Ariz.	K. Morrow, M. Hallen, C. Mills
MAPLE	/1		2	32	122	Pierpoint Springs, Tulare Co., Calif.	Art Cowley & Frank T. Callahan
Bigleaf, Acer macrophyllum, 1995	44-						
Black, Acer nigrum, 1987	419			90	543	Clatsop Co., Ore.	Maynard Drawson
Canyon, Acer grandidentatum, 1998	198			127	348	Allegan Co., Mich.	Harold Nett & Paul W. Thompson
Chalk, Acer leucoderme, 1999	139	75		50	227	Tonto NF, Ariz.	Rick Heffernon
Florida, Acer barbatum, 1997	33	54		50	100	Thompson Mills Forest, Jackson Co., Ga.	Bill Lott & Jimmy Mock
Mountain, Acer spicatum, 1982	140	75			228	Jasper Co., Ga.	Marshall Skinner
Norway, Acer platanoides, 1994∆	33	58		31	99	Houghton Co., Mich.	R. Krentzer & Pat Thompson
Red, Acer rubrum, 1997	180	120			317	Hamilton College, Clinton, N.Y.	Charles McFadden
Rocky Mountain, <i>Acer glabrum</i> , 1996	276	141			439	Great Smoky Mountains NP, Tenn.	Will Blozan
Silver, Acer saccharinum, 1996	107	67			188	Guernes Island, Island Co., Wash.	Robert Van Pelt & Ron Brightman
Striped, Acer pensylvanicum, 1984*	293	115	11		136	Columbia Co., Wis.	Michael Bednarek
Striped, Acer pensylvanicum, 1997*	50	77	2		34	Bailey Arboretum, Nassau Co., N.Y.	T. Kozlowski & F. Dearstyne
Sugar, Acer saccharum, 1996	44	77	3		29	Trillium Gap Trail, Great Smoky Mtns. NP, Tenn.	Will Blozan
line, Acer circinatum, 1992	274	65	5		53	Kitzmiller, Md.	Richard Cropp
AAYTEN	67	46	3	5]	22	Tillamook Co., Ore.	Bill Schoppert
lorida, Maytenus phyllanthoides, 1995*							
orida <i>, Maytenus phyllanthoides,</i> 1995*	17	18	18		40	Sanibel, Fla.	Stewart Brown
	15	17	22	! 3	37	Sanibel, Fla.	Richard Workman
ESQUITE							Alchard Workings
oney (typ.), <i>Prosopis glandulosa</i> var. <i>glandulosa</i> , 1997	172	57	87	25	1	Near Leakey, Real Co., Tex.	D : W D #
rewbean, <i>Prosopis pubescens</i> , 1983*	39	30	36	7	8	Big Bend NP, Tex.	Ronnie W. Pendley
rewbean, <i>Prosopis pubescens</i> , 1983*	35	28	40	7	3	Big Bend NP, Tex.	James E. Liles
vet, <i>Prosopis velutina</i> , 1993	196	46	60	257		Santa Cruz Co., Ariz.	James E. Liles
stern honey, <i>Prosopis glandulosa</i> var. <i>torreyana</i> , 1997	76	47	39	133		Air Ground Combat Center, San Bernadino, Calif.	Gilbert Sykes
ILKBARK						and comount comon, sun bernaumo, came	Commanding General
petes diversifolia, 1994	39	46	18	90)	Kov Large Cl-	
OUNTAIN-ASH		-		/ 0	•	Key Largo, Fla.	Vincent P. Condon & William G. Miller
rican, <i>Sorbus americana,</i> 1979	80	62	40	1.50			
peag, <i>Sorbus aucuparia</i> , 1997∆	132		40	152		West Virginia SP, W, Va.	Richard Salzer
пе <i>, Sorbus scopulina,</i> 1993	24	43 14	42	186		Noodland Park Zoo, Wash.	Arthur Lee Jacobson
vy, Sorbus decora, 1982	57	58	20	43		inch Arboretum, Spokane, Wash.	Arthur Lee Jacobson & Ronald Brightman
, Sorbus sitchensis, 1981		50	32 10	123		Mackinac Co., Mich.	William J. Mahalak
UNTAIN-HOLLY	17	U	18	74	. G	ardiner, Ore.	Lance Morgan
opanthus collinus, 1982	10	00					
UNTAIN-LAUREL	13	20	10	36	0	akland Co., Mich.	Paul W. Thompson
ia latifolia, 1999†							1.2011
	56	20	19	81	En	nnin Co., Ga.	George C. Hoffman

SPECIES / MOST RECENT MEASUREMENT		NCE" HEIGHT	SPRE	EAD' TOTA	L POINTS LOCATION	HOMINATOR
MULBERRY						
Black, Morus nigra, 1999Ơ	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, 1997	36	29	31	73	Edgar Canyon, Pima Co., Ariz.	Tom Butler
White, <i>Morus alba</i> , 1992∆	292	59	73	369	Johnson Co., Mo.	Susan Troxel
MYRTLE-OF-THE-RIVER						JUSTIN HONO!
Calyptranthes zuzygium, 1997†	9	22	4	32	Key Largo Hammocks State Botanical Site, Fla.	Joseph M.
NANNYBERRY						Joseph Nemec
Viburnum lentago, 1994 →	34	50	40	94	Oakland Co., Mich.	B 1111 -1
NOLINA				7.1	ounding Co., MICH.	Paul W. Thompson
Bigelow, Nolina bigelovii, 1997	125	13	8	140	6 L . B	
OAK	123	10	0	140	Cabeza Prieta NWR, Yuma Co., Ariz.	Tom and Anita Harlon
Ajo, Quercus turbinella var. ajoensis, 1998	82	32	40	104		
Arizona white, <i>Quercus arizonica</i> , 1999	133	52 56	40	124	Organ Pipe Cactus NM, Ariz.	R. and G. Zahner, K. Morrow
Arkansas, <i>Quercus arkansana</i> , 1996	140	88	47	201	Tonto NF, Ariz.	Mike Hallen
Bear, Quercus ilicifolia, 1992	34	41	100 30	253	Covington Co., Miss.	Bryant E. Brown & Jon Wallace
Bigelow, <i>Quercus durandii</i> var. <i>breviloba,</i> 1999	111	54	38	83	Romney, W. Va.	Mark Whetzel & Chip Brown
Black, Quercus velutina, 1999	322	86	30 105	175	Williamson Creek, Travis Co., Tex.	Mark Baker
lackjack, <i>Quercus marilandic</i> a, 1999	144	94	65	434	New Gate Rd., East Granby, Conn.	Edward A. Richardson
lue, Quercus douglasii, 1974	243	94	65 48	254 349	Byron Methodist Church, Peach Co., Ga.	David Preston
luejack, <i>Quercus incana</i> , 1992	119	54	40 54	349 187	Southern Alameda Co., Calif.	E. Lagel
ur, Quercus macrocarpa, 1995	322	- '	103	444	Pinellas Co., Fla.	Greg Barton
alifornia black, <i>Quercus kelloggii</i> , 1972	338		115	491	Paris, Ky.	Owen H. Robinson
anyon live, <i>Quercus chrysolepis</i> , 1998	422		125	548	Siskiyou NF, Ore.	Ralph King
apman <i>, Quercus chapmanii,</i> 1989	81	45	50	139	Groveland, Stanislaus Co., Calif. Ocala NF, Fla.	Bill Dagg
errybark, <i>Quercus falcata</i> var. <i>pagodifolia</i> , 1991*	324		136	482	Sussex Co., Va.	Robert Simons
errybark, Quercus falcata var. pagodifolia, 1993*	342			479	Colonial Beach, Va.	Byron Carmean & Gary Williams
estnut, <i>Quercus prinus</i> , 1997	222	144		384	Mill Creek, Great Smoky Mtns. NP, Tenn.	William S. Hubard A. Stupka, W. Blozan, M. Davie

There is a southern red oak that weighs fondly in John Zyla's memory. The oak was not a national champ, not even a state champ, but it was a heck of a tree. Big and spreading, it was a highlight of the yearly big tree tour Zyla did during his six years as naturalist for Calvert County, Maryland. He loved to take the busings of people down just to stand under the spread of the massive tree.

Zyla waited patiently, hoping Calvert's behemoth would get a chance in the state limelight, but the tree was eventually done in by its own size and weight. It began to pull apart at the trunk and went down last year in Hurricane Floyd.

Zyla, 36, is a guy who likes big trees. He compiled the big tree list for this rural county, which hugs the western shore of Chesapeake Bay. Now that he's left his county naturalist post, he's thinking about starting a similar list in his home county of St. Mary's.

Zyla began compiling county champs using a previously published list of local historic trees as his base. After seeing which of those were still standing, Zyla checked out what trees were expected to grow in the county and started looking.

He likens the ongoing hunt for big trees to "trying to solve a mystery."

JOHN ZYLA Maryland's Tree Detective



Getting started is not that difficult, he insists. Start out slow—learn the difference between species like oaks and maples. Read books, take a class, or use folks at a local nature center as a resource. "That's how we all got up to speed." Before you know it, he says, you begin to recognize the differences within the species and next thing you know, you're hunting down local trees.

Unfortunately, Zyla adds, many trees that are easy to spot are introduced species. Native champs are often hidden in the woods. After you're comfortable looking for them, Zyla advocates big tree hunting in the winter, when leaves are down and it's easier to see the shape of the bark. In the spring, when leaves are abundant and green, "everything's a blur."

Nothing's ever surefire when it comes to big tree hunting, but your odds are better if you check out old cemeter-

ies and old homes, he says. Often those trees reflect what was popular during a certain time period, and you may find trees there that were not planted anywhere else.

Zyla has hunted down examples of most of the approximately 150 native and introduced species in Calvert County. His name appears in the National list next to two trees in Maryland: the swamp white oak in Clinton and the co-champ peach in Lusby. -Michelle Robbins



SPECIES / MOST RECENT MEASUREMENT	CIRCUMFE	RENCE" HEI	GHT' S	PREAD' TO	AL POINTS LOCATION	NOMINATOR
Chinkapin, Quercus muehlenbergii, 1995	2:	58 110	0	92 39	Near Montgomery, Clark Co., Ky.	Pete Kovalic & Larry Norton
Chisos, <i>Quercus graciliformis</i> , 1982	(5 60	5	36 140		James E. Liles
Coast live, <i>Quercus agrifolia</i> , 1999	33	18 58	}	75 415		Clint Powell
Darlington, Quercus hemisphaerica, 1992	23	4 98	,	95 354		L.H. Simkins Jr. & David McTier
Delta post, <i>Quercus stellata</i> var. <i>paludosa</i> , 1988	11	8 108		56 240		Edward C. Fritz
Dunn, Quercus dunnii, 1995*	8	3 37	3	36 129	Yavapai Co., Ariz.	Lora Morrow
Dunn, <i>Quercus dunnii</i> , 1999*	8	5 35	4	10 130	Jolon, Calif.	Frank T. Calllahan & Art Cowley
Durand (typ.), <i>Quercus durandii</i> var. <i>durandii</i> , 1997	18	9 95	10	6 311	Omaha, Ga.	Joel Robertson
Emory, Quercus emoryi, 1998*.	19:	54	8	6 268	Oak Tree Canyon, Ariz.	Robert and Glenda Zahner
Emory, Quercus emoryi, 1993*	186	56	9	2 265	Santa Cruz Co., Ariz.	T. Basinger
Engelmann, <i>Quercus engelmannii</i> , 1968	129	78	10	0 232	Pasadena, Calif.	Woodbridge Metcalf
English, <i>Quercus robur</i> , 1997*△	187	88	9	1 298	North Bend, Ohio	Carl Hunsicker
English, Quercus robur, 1993*∆	178	102	89	302	State Capital, Olympia, Wash.	Robert Van Pelt
Gambel, Quercus gambelii, 1981	216	47	85	284	Gila NF, N. Mex.	Dahl Kirkpatrick
Georgia, <i>Quercus georgiana</i> , 1999	73	75	63	164	Athens, Ga.	Lucia Duncan-Harrison
Graves, Quercus gravesii, 1982*	154	42	40	206	Big Bend NP, Tex.	James E. Liles
Graves, Quercus gravesii, 1976*	145	51	4]	206	Seminole Canyon, Tex.	
Gray, Quercus grisea, 1993	216	45	73	279	Gila Valley, N. Mex.	B. Simpson, J.J. McEntire, J.B. Norris
Havard, <i>Quercus havardii</i> , 1986	40	30	23		Yoakum Co., Tex.	Ralph Fisher Jr.
Interior live, <i>Quercus wislizeni</i> , 1982	268	90	69		Near Stockton, Calif.	C. Murrell Thompson
Locey, Quercus glaucoides, 1989	107	58	96	189	Magic Springs Ranch, Blanco Co., Tex.	Darold Mac Dannald
Laurel, <i>Quercus laurifolia</i> , 1993	267	93	122	391	Marengo Co., Ala.	David Vaughn
Live (typ.), Quercus virginiana var. virginiana, 1976	439	55	132	527	Near Lewisburg, La.	Allen Black
Mexican blue, Quercus oblongifolia, 1999*	120	65	69	202	Hidalgo Co., N. Mex.	John deMarche & Louisiana Forestry Asso.
Myrtle, Quercus myrtifolia, 1986	69	36	35	114	Ft. Clinch SP, Fla.	Samuel Lamb
Netleaf, Quercus rugosa, 1998	88	47	36	144		Carol Beck
Northern pin, <i>Quercus ellipsoidalis</i> , 1999†	184	128	92	335	Santa Catalina Mountains, Coronado NF, Ariz. Osborn Road, Bay Village, Ohio	Robert Zahner & James W. Smith
Northern red, <i>Quercus rubra</i> , 1999*	294	98	97	416	Buckland, Franklin Co., Mass.	Mary and Mike Ronan
Northern red <i>, Quercus rubra,</i> 1997*	257	134	81	411	·	Alison Wright & Dick Coolin
Nuttall, <i>Quercus nuttallii</i> , 1991	280	118	85	419	Double Gap Bridge, Great Smoky Mnts. NP, N.C.	Will Blozan & Michael Davie
Oglethorpe, <i>Quercus oglethorpensis,</i> 1999	117	69	69	203	St. Helena Meridian, La. Near Lexington, Ga.	Butch Calhoun
Overcup, <i>Quercus lyrata</i> , 1987	258	156	120	444	• ,	Samuel Jones
in, Quercus palustris, 1991	240	110	112	378	Lewiston-Woodville, Bertie Co., N.C.	Larry Lawrence & Tom White
ost (typ.), Quercus stellata var. stellata, 1987*	236	85	88	343	Dick Barry Farm, Henderson Co., Tenn.	Wade McMahan & Mike Stanford
ost (typ.), Quercus stellata var. stellata, 1996*	237	84	88		Surry Co., Va.	G.M. Williamson & Byron Carmean
and live, <i>Quercus virginiana</i> var. <i>geminata</i> , 1995*	189	81	106	343	Jefferson, Jackson Co., Ga.	Jimmy Mock
and live, <i>Quercus virginiana</i> var. <i>geminata</i> , 1995*	181	94	100	297	Gainesville, Fla.	Robert W. Simons
and post, <i>Quercus stellata</i> var. <i>margaretta</i> , 1995	157	87	92	300	Gainesville, Fla.	Daniel B. Ward
carlet, Quercus coccinea, 1995	248	120	93	267	Marianna, Fla.	Robert T. Ing & Daniel B. Ward
ningle, <i>Quercus imbricaria</i> , 1997	208	105	62	391	Powell Co., Ky.	Raymond Hayes
numard (typ.), <i>Quercus shumardii</i> var. <i>shumardii,</i> 1994	249	190		329	Cincinnati, Ohio	A. P. Newman & R. Bernhard
verleaf, Quercus hypoleucoides, 1994	123	69	88	461	Overton Park Forest, Memphis, Tenn.	B. Slavicek, L. Slavicek, K. Mortimer
outhern red (typ.), <i>Quercus falcata</i> var. <i>falcata</i> , 1999	312		52	205	Santa Rita Mountains, Ariz.	Robert Zahner
vamp chestnut, <i>Quercus michauxii</i> , 1998*	276	150	156	501	Thomaston, Upson Co., Ga.	C. Bowie, J.A. Osbolt, G. Hill
ramp chestnut, Quercus michauxii, 1989*		105	216	435	Marshall, Tenn.	Sharon Hayes
ramp white, Quercus bicolor, 1992	197		148	434	Fayette Co., Ala.	Randy Aldridge
as, Quercus shumardii var. texana, 1999	228	120	92 50	371	Clearwater Nature Center, Clinton, Md.	John Zyla
tas live, Quercus virginiana var. fusiformis, 1999	108	60	59	183	Travis Co., Sunset Valley, Tex.	Mark Baker
mey, Quercus toumeyi, 1994	295	42	98	362	Rio Frio Bed n' Breakfast, Real Co., Tex.	LeAnn Walker
binella (typ.), Quercus turbinella var. turbinella, 1993	68	27	33	103	Atascosa Lookout Trail, Coronado NF, Ariz.	Robert Zahner
key, Quercus laevis, 1994	160	43	49	215	Spring Mountain Ranch SP, Clark Co., Nev.	John Jones
ley, Quercus lobata, 1984	127	72			Pasco Co., Fla.	David Brown & Tony Richards
ey, Quercus pungens var. vaseyana, 1982*		163			South of Covelo, Calif.	Willis Linn Jepsen
Pangana val. vasayunu, 1702	45	48	40	103	Big Bend NP, Tex.	James E. Liles

SPECIES / MOST RECENT MEASUREMENT	CIRCUMFERENCE	" HEIGHT"	SPREAD'	TOTAL PO	DINTS LOCATION	NOMINATOR
Vasey, Quercus pungens var. vaseyana, 1996*	61	39	32	108	Val Verde Co., Tex.	B. Simpson, J.J. McEntire, J.B. Norris
Water, Quercus nigra, 1996	278	120	111	426	Roseland Plantation, Concordia Parish, La.	Kevin Bridgewater
White, <i>Quercus alba</i> , 1996	382	96	119	508	Wye Mills SP, Md.	F.W. Besley
Willow, Quercus phellos, 1986	318	73	132	424	Noxubee Co., Miss.	Bryant E. Brown
OLEANDER						
Nerium oleander, 1997∆	46	29	36	84	Exeter Cemetery, Exeter, Calif.	Art Cowley
OSAGE-ORANGE						
Maclura pomifera, 1994	321	60	85	402	Charlotte Co., Va.	Red Hill Shrine
O Y S T E R W O O D						
Gymnanthes lucida, 1998	15	24	11	41	Lignuṃvitae Key State Botanical Site, Fla.	Michael Cullen & David Sinclair
PALMETTO						
Cabbage, Sabal palmetto, 1994†	69	60	14	133	Lafayette Co., Fla.	Jerry N. Livingston
Mexican, Sabal mexicana, 1995*	61	50	15	115	Hidalgo Co., Tex.	Joe Ideker & Bill McWhorter
Mexican, Sabal mexicana, 1995*	61	45	20	111	San Benito, Cameron Co., Tex.	Sue Griffin
PALOVERDE						
Blue, Cercidium floridum, 1976	86	53	42	150	Riverside Co., Calif	Frank T. Callahan
Texas, Cercidium texanum, 1995	37	34	34	80	Las Palomas WMA, Tex.	Joe Ideker
Yellow, Cercidium microphyllum, 1998†	34	28	37	71	Tohono Chul Park, Tucson, Ariz.	Russ Buhrow
PAPAYA						
Carica papaya, 1993∆	20	25	4	46	Homestead, Fla.	A.H. Hetzell & R. Smith
PAPER-MULBERRY						
Boussonetia papyrifera, 1991∆	157	75	55	246	Flamingo Tropical Gardens, Ft. Lauderdale, Fla.	David Bar-Zvi
PARADISE-TREE						
Simarouba glauca, 1994	109	63	59	187	Fort Lauderdale, Fla.	A. Buckley, Hendrickson, R. Trickel
PARASOLTREE						
Chinese, Firmiana simplex, 1999Ơ	140	44	36	193	Mission San Louis Ray, San Diego, Calif.	Art Cowley

Some might say Bob Kloubec has a thankless job. As a tree hunter in Minnesota and North Dakota, his chances of finding a national champion are slim: Those two states have just two champs between them.

That's not how Kloubec sees it. His passion for trees has taken him across the country and deep into nearby forests. His efforts have been rewarded with 11 North Dakota state champions and one Minnesota state champ, making him "Mr. Tree," according to Glenda Fauske, AMERICAN FORESTS' Big Tree coordinator and the information and education coordinator for the North Dakota Forest Service.

"When you get involved with trees, you know Bob—and in a good way," Fauske says. "He's such a nice guy. He's worked with trees and landscaping pretty much his whole life. When he finds an interesting tree, he'll send a picture or an article, and he knows before any of the staff if a tree dies or gets sick."

Kloubec, 73, lives near the North Dakota-Minnesota border. He attributes his love of nature to his father, a passionate gardener who kept "all kinds of trees," including a junesberry that as a child Koublec says he believed was "fruit from heaven." Later, trees took center stage at

ROBERT KLOUBEC North Dakota's Optimistic Hunter



Kloubec's job with the Clay County Soil Conservation Service and as a freelance landscape designer.

But Kloubec's search for arboreal giants began in earnest in 1982 after he retired and studied under Big Tree hunter Dale Herman at North Dakota State University. Kloubec contacted state Big Tree coordinators and sought out champs in Oregon, Texas, Washington, and close to home because "it's just a fun thing to do," he says.

Kloubec hunts mostly in winter so he can see deep into the forest canopy. He recommends bringing a friend because "four eyes are better than two." In fact, a friend helped Kloubec uncover his first major find, an American basswood with a 13-foot circumference. That tree, which was "pretty good and big for North Dakota" (the national champ has a 24-foot circumference) would be named the state's

With only 12 inches of rain per year, no endemic trees,

and less-than-perfect growing conditions, North Dakota has little chance of snatching a national champion. But if anyone can do it, Fauske says, Kloubec can.

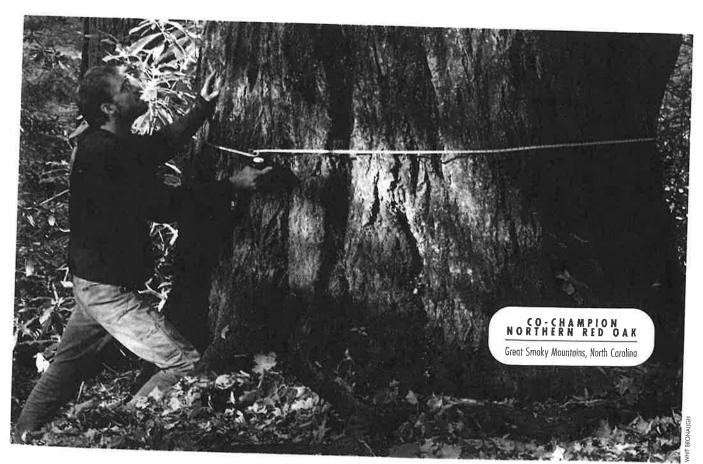
"It would be a big plum to have one on the national list," Kloubec says. "I put out the challenge to everyone to find it."

—Janine Guglielmino

PAULOWINIA	SPECIES / MOST RECENT MEASUREMENT CIRCUM	MFERENCE	" HEIGHT'	SPREAL	O' TOTAL PO	DINTS LOCATION	NOMINATOR
Republication benerinting, 1979 A L M	PAULOWNIA						
PAUR OTTS - PALM Machanity weight 1992 Machanity weight 1993 Machanity weight 1993 Machanity weight 1993 Machanity weight 1993 Machanity		276	52	73	346	Reitz Memorial High School, Evansville, Ind.	Scott C. Wagner & Mary Ellen Jones
Accordination weight [1929* 13 32 3 44 45 Ferichal Trageal Carbon, Fina. One hears & Dame H. World World							
According layer signified, 1995 10 34 4 45 Ferichi Tengrici Gunden, Winni, Rin. Doe Boaris & Burnel & Word		13	32	3	46	West Palm Beach, Fla.	Michael Zimmerman
PAW PAW Currons, Amine Indeko, 1988 24	•						Don Evans & Daniel B. Ward
Common, Keimien Brücke, 1986 26 63 29 94 Chespender, Mr. Seyme Charles Sey	•	10	01	•	13	, 414.11.2 110.21.21.4	
Park Lake Jenn Co., Flax Robert W. Simons & Duniel & Word		27	19	20	0.4	Chocanoako Va	Byron Cormean & Gary Williamson
Pares persion, 1986						•	,
Panus parsica, 1986*Δ 72 13 32 98 Belinder, Nu. Richard Solater PE AR R PE AR Very Bernary Ve		Z I	24	17	47	Turk, tuke Jelli Co., Tid.	ROBOTI III SIIIIOIIS & SAINOI ST TIA
PEAR (Darmon, Professor Municipal 1991 Δ 174 59 56 247 Windshurp, Wisch. R. Ven Pedr, S. Muse, M. Drawson PECAN (Common, Professor Municipal 1991 Δ 174 59 56 247 Windshurp, Wisch. R. Ven Pedr, S. Muse, M. Drawson PECAN (Common, Professor Municipal 1997 Δ 186 18 35 52 214 Browned Co., Fea. Billy and Lynn Frisch PER PER TER E Schims and II, 1991 Δ 186 35 52 214 Browned Co., Fea. John W. Ken Pedr, S. Muse, M. Drawson PER S I M M ON (Common, Discoprose wightiona, 1999* 88 18 12 30 228 Big Cock Time SP, Mus. Schims and III, 1991 Δ 186 185 223 Dardonarda, Aik. Shotly Reyward (Common, Discoprose wightiona, 1999* 96 121 42 288 Big Cock Time SP, Mus. Schims Pedrey Reyward (Common, Discoprose wightiona, 1999* 97 120 40 225 Corquee Sworp NM, S.C. Robert II, Innex & Greek Annold Common, Discoprose wightiona, 1999* 97 120 40 225 Corquee Sworp NM, S.C. Robert II, Innex & William Groves PI Leave, Discoprose regiona, 1995* 95 120 40 225 Corquee Sworp NM, S.C. Robert II, Innex & William Groves PI Leave, Discoprose regiona, 1995* 95 120 40 225 Corquee Sworp NM, S.C. Robert II, Innex & William Groves PI Leave, Discoprose regiona, 1995* 95 120 40 225 Corquee Sworp NM, S.C. Robert II, Innex & William Groves PI Leave, Discoprose regiona, 1995* 95 120 40 225 Corquee Sworp NM, S.C. Robert II, Innex & William Groves PI Leave, Discoprose regiona, 1995* 18 18 28 24 28 18 28 28 28 28 28 28 28 28 28 28 28 28 28		70	10	00	0.0	D. L. W.	Dishard Calzon
Pick R Common, Pyrus cammunis, 1991	·					•	
Corner (0.1991)	Prunus persica, 1994*∆	50	3/	25	73	LUSDY, Mu.	JOHN ZYIU
PECAN Peca	PEAR						D. V. D. L. G. H. M. D.
P.F.P.E.F.Y.R.E.E.Schinus notion, 1999A 367 37 37 37 37 37 37 3	Common, <i>Pyrus communis</i> , 1991∆	174	59	56	247	Waitsburg, Wash.	K. Van Pelt, S. Muse, M. Drawson
PEPPER PER PEPPER PER PEPPER PER PEPPER PER PER PER PER PEPPER P	PECAN						
Schimus mulle, 1999\(1991\(\text{ 1991\(\text{ 1991\(\text{ 1999\(\text{ 1991\(\text{ 1	Carya illinoensis, 1999	257	91	120	378	Weatherford, Parker Co., Tex.	Billy and Lynn Finch
Schimus mulle, 1999\(1991\(\text{ 1991\(\text{ 1991\(\text{ 1999\(\text{ 1991\(\text{ 1	PEPPERTREE						
Rational Servicines Intersication Infolia, 1991A. 166 35 52 214 Broward Co., Flo. John W. Kern		367	57	72	442	San Juan Capistrano, Calif.	Ray Wheeler
PERSIAM NON Common, Disspyres virginiane, 1999* 88 812 30 228 8ig Ook Iren SP, Mo. John Wylie & Gene Bunk Common, Disspyres virginiane, 1987* 136 66 85 223 Durdonelle, Alk. Schelly Hayward Common, Disspyres virginiane, 1999* 96 121 42 228 Tuckdhow WMA, Screwn Ce, Go. Jim Claire Common, Disspyres virginiane, 1995* 95 120 40 225 Congaree Swarmp NM, S.C. Robert H. Jones & Gretal Arnold Common, Disspyres virginiane, 1995* 85 132 37 226 Congaree Swarmp NM, S.C. Robert H. Jones & Gretal Arnold Robert Sp. Montine Richter William Groves PIGE ON - PLUM Concolod and reversifiely, 1994 84 49 22 139 Simpson Park, Miomi, Fla. Harold Methal PINK K N E Y A Pinckneya pubens, 1991 81 81 81 81 81 81 81		166	35	52	214	Broward Co., Fla.	John W. Kern
Common, Disspyros virginiana, 1997* 136 66 85 233 Dordanella, Ark. Shelby Nayward							
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Chades Eddington							T.A. Walker, W. Crawford, T. Dietz
	Loblolly, <i>Pinus taeda</i> , 1993	188	148	83	357	Warren, Ark.	Charles Eddington

		ENCE" HEIG	nı 3P)	CEAD, IGI	AL POINTS LOCATION	NOMINATOR
Lodgepole, <i>Pinus contorta</i> var. <i>latifolia,</i> 1999	13	2 155	3	1 295	Valley Co., Idaho	J. Parker, R. Dyer, F. Johnson
Longleaf, <i>Pinus palustris</i> , 1999	12	7 120	6	6 264	•	Terrell L. Brooks
Mexican pinyon, Pinus cembroides, 1982	11	1 66	4	188		James E. Liles
Monterey, <i>Pinus radiata</i> , 1998	204	95	90	322	Carmel, Monterey Co., Calif.	Art Cowley
Parry pinyon, <i>Pinus quadrifolia</i> , 1976	86	53	42	? 150		Frank T. Callahan
Pinyon (two-leaf), <i>Pinus edulis</i> , 1982†	213	69	52	295	· ·	Joseph P. Szimhart
Pitch, Pinus rigida, 1998*	142	112	75	273	White Co., Helen, Ga.	K. Jackson, P. Todd, J. Mock
Pitch, Pinus rigida, 1999*	169	99	40	278	Bradford, Merrimack Co., N.H.	Bill Wyler
Pond, Pinus serotina, 1998 →	112	119	60	.5 246	Ocalanat Forest, Lake George, Fla.	Jerry Clutts
Ponderosa (typ.), Pinus ponderosa var. ponderosa, 19		227	68	537	Plumas Co., Calif.	John Bell & Philip Intorf
Ponderosa (typ.), Pinus ponderosa var. ponderosa, 19	97* 294	223	59	532	Trinity Alps Wilderness, Shasta-Trinity NF, Calif.	Robert Van Pelt & Al Groncki
Red, <i>Pinus resinosa,</i> 1993*	124	124	60	263	Watersmeet, Mich.	E.B. Ehrle, R. Zelinski, P. Thompson
Red, <i>Pinus resinosa</i> , 1998*	120	126	48	258	Clearwater Co., Itasca SP, Minn.	Sidney Frissell & Stephen McCool
Rocky Mountain ponderosa, 1982	241	194	64	451	Lolo NF, Mont.	Donald M. Wood & Don Campbell
Pinus ponderosa var. scopularum						bondio M. Wood & Don Campbell
Sand, Pinus clausa, 1997	97	91	42	199	Welaka SF, Fla.	Ned D. Neenan
Scotch, <i>Pinus sylvestris</i> , 1983∆	186	64	76	269	Lenawee Co., Mich.	Rea V. Neenan Paul W. Thompson & H. Nett
Shore (typ.), <i>Pinus contorta</i> var. <i>contorta</i> , 1992	138	101	37	248	Bryant, Snohomish Co., Wash.	Ron Brightman
Shortleaf, <i>Pinus echinata</i> , 1999	139	88	68	244	Myrtle, Miss.	· ·
Sierra lodgepole, <i>Pinus contorta</i> var. <i>murrayana</i> , 1997	238	124	42	373	Stanislaus NF, Calif.	Glenn H. Coffey
Singleleaf pinyon, <i>Pinus monophylla</i> , 1991	164	45	40	219	Inyo Co., Calif.	Mr. and Mrs. C. Grinstead
Slash (typ.), Pinus elliottii var. elliottii, 1992	130	138	55	282	Jacksonville, Fla.	Frank T. Callahan
South Florida slash, <i>Pinus elliottii</i> var. <i>densa</i> , 1997	138	68	64	222	Vero Beach, Fla.	Scott Crosby
Southwestern white, Pinus strobiformis, 1974	185	111	62	312	Lincoln NF, N. Mex.	Sebastian River High School
Spruce, <i>Pinus glabra</i> , 1998*	125	149	53	287	Muscogee Co., Ft. Benning, Ga.	Thomas Dix
Spruce, <i>Pinus glabra</i> , 1997*	160	112	66	289	Thompson Creek Road, near Norwood, La.	Steve Kerlin & Tommy Hutcherson
Sugar, Pinus lambertiana, 1993	442	232	29	681	Dorrington, Calif.	Brian Chandler & Charles Wilson
Table mountain, Pinus pungens, 1984	97	94	46	203	Stokes Co., N.C.	Herbert E. McLean & Gary Whitson
Torrey, Pinus torreyana, 1993	245	126	130	404	Carpenteria, Calif.	Mike Pell & Steve Williams
Virginia, <i>Pinus virginiana</i> , 1998	111	101	56	226	Camp Crooked Creek, Ky.	Edward Scanlon
Washoe, Pinus washoensis, 1997	243	145	64	404	South Warner Wilderness, Modoc Co., Calif.	A. Grisanti, T. Corbett, G. Webb
Western white, <i>Pinus monticola</i> , 1991	394	151	52	558	El Dorado NF, Calif.	H.F. Bowman
Whitebark, <i>Pinus albicaulis</i> , 1980	331	69	47	412	Sawtooth NRA, Idaho	Henry Carsten & Maynard Drawson
PISONIA	7.				outroom ma, radio	Allan W. Ashton & David O. Lee
Pisonia rotundata, 1994	38	28	14	69	Manua C. El	
PLUM	00	20	17	07	Monroe Co., Fla.	Robert W. Ehrig
Allegheny, <i>Prunus alleghaniensis</i> , 1991*	07	07				
illegheny, <i>Prunus alleghaniensis</i> , 1991*	37	37	24	80	Jefferson NF, Va.	Richard Salzer
merican, <i>Prunus americana</i> , 1993	52	24	32	84	Lock Haven Swim & Beach Club, Roanoke, Va.	Richard Salzer
anada, <i>Prunus nigra</i> , 1972	39	48	36	96	Gadsden Co., Fla.	R. Simons, J. Buckner, A. Gholson, R. Godfrey
hickasaw, <i>Prunus angustifolia</i> , 1987	50	51	48	113	Macomb Co., Mich.	Paul W. Thompson
atwoods, <i>Prunus umbellata</i> , 1991	51	32	32	91	Henderson Co., N.C.	Ken Knox
arden, <i>Prunus domestica</i> , 1991∆	18	34	24	58	Gainesville, Fla.	R. Ing, D. Ward, R. Simons
ortulan, Prunus hortulana, 1999	130	47		189	Portland, Ore.	Phyllis Reynolds
amath, <i>Prunus subcordata</i> , 1972	34	27	30	69	Van Meter SP, Mo.	Kendali Laughlin
exican, <i>Prunus mexicana</i> , 1999	42	28	19	75	Klamath Falls, Ore.	Frank T. Callahan
ildgoose, <i>Prunus munsaniana,</i> 1991	28	39	36	76	Wilkinson Co., Miss.	Jack Herring
	56	20	20	81.	New Salem State Historical Park, III.	Sue Wydick & Guy Sternberg
OINCIANA						
yal, Delonix regia, 1981∆	102	61	57	177	Ft. Denaud Road, Hendry Co., Fla.	Michael W. Kenton
OISON-SUMAC					• • •	
established #10.7 Or -						
kicodendron vernix, 1972* Kicodendron vernix, 1991*	34	16	17	54	Robins Island, N.Y.	George Peters

SPECIES / MOST RECENT MEASUREMENT	CIRCUMFERE	NCE" HEIGH	IT' SPRE	AD' TOTA	L POINTS LOCATION	NOMINATOR
POISONTREE						HOMINALOR
Florida, Metopium toxiferum, 1993	81	39	32	128	Lignumvitae Key State Botanical Site, Fla.	y .
POND-APPLE					Eighthinde key State botalical Site, Fla.	Ken Roundtree & Dave Sinclair
Annona glabra, 1989	125	44	47	181	Miami, Fla.	
PONDCYPRESS				101	muni, Hu.	Carol Lippincot
Taxodium distichum var. nutans, 1999†	243	115	54	372	Alternaka Dinas Life Danas a	
POPLAR			31	0/2	Altamaha River, Jefferson Davis Co., Ga.	Jimmy Mock
Balsam, Populus balsamifera, 1991	165	128	57	307	Champion, Mich.	
White, <i>Populus alba</i> , 1992Δ	263	93	86	378	St. Charles, III.	Elwood B. Ehrle & Paul W. Thompson
PORT-ORFORD-CEDAR			•	070	31. Chules, III.	Brett Slavicek & Kimberly Mortimer
Chamaecyparis lawsoniana, 1968	451	219	39	680	Sielines NE O	
PORTIATREE		217	u,	000	Siskiyou NF, Ore.	Donald Denniston
Thespesia populnea, 1968∆	108	42	69	167	W.L. t. u	
POSSUMHAW		12	u,	107	Kekaha, Hawaii	L.W. Bryan
llex decidua, 1995	36	42	52	91	6	
POSSUMHAW	00	72	JZ	71	Congaree Swamp NM, Richland Co., S.C.	L.L. Gaddy & Guy Taylor
lex decidua, 1993	39	47	31	0.4		
PRICKLY-ASH	37	47	งเ	94	Gadsden Co., Fla.	R. Simons, J. Buckner, A. Gholson, R. Godfre
ommon, Zanthoxylum americanum, 1994	15	28	20	50		
me, Zanthoxylum fagara, 1993	21	26	38 38	53	Beverly Hills Rouge Park, Mich.	Paul W. Thomspon
RINCEWOOD	2.1	20	JU	57	Lee Co., Fla.	Eric H. Hoyer & Norma Jean Byrd
rostema caribaeum, 1998†	22	33	19	/0	C. N. I. I. Waren	
RIVET	LL	UU	17	60	Crocodile Lake NWR, Key Largo, Fla.	Joseph Nemec
ornia, Liaustrum ovalifolium 1994A						
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	04	23	31	95	Manteo, N.C.	Richard Salzer



SPECIES / MOST RECENT MEASUREMENT C	- Compens	NCE" HEIGH	I' SPR	EAD' TOTA	L POINTS LOCATION	NOMINATOR
Chinese, <i>Ligustrum sinense</i> , 1991∆	97	73	69	7 187	Sacramento State Capital Grounds, Calif.	
Japanese, <i>Ligustrum japonicum</i> , 1984∆	98	42	44	151	Capitol Building Grounds, Richland Co., S.C.	Robert Van Pelt & Arthur Lee Jacobsor
RAPANEA					steering, Memaria Co., S.C.	Ronald Ferguson
Florida, <i>Rapanea punctata</i> , 1992	29	30	17	63	Sanibel, Fla.	- 0
REDBAY					34,100, 114.	Ferrell Johns
Redbay (typ.), Persea borbonia var. borbonia, 1993	152	77	52	242	Hamilton Co., Fla.	
REDBUD			32	272	nummon co., Fig.	Norman Nichols
California, Cercis occidentalis, 1980	74	29	35	112	Cont. D. Chr.	
Eastern (typ.), Cercis canadensis var. canadensis, 1997	† 78	42	40	130	Santa Rosa, Calif.	E. Lagel
Texas, Cercis canadensis var. texensis, 1992	72	30	33	110	Ore City, Upshur Co., Tex. Dallas Co., Tex.	Marie Johnson
REDCEDAR			00	110	pallas co., lex.	Courtney Blevins
Eastern, Juniperus virginiana, 1997	242	57	69	21/	I will ell a la	
Southern, Juniperus silicicala, 1995	195	75	52	316 283	Lone Hill Church Cemetery, Coffee Co., Ga.	Richard Johnston
Western, Thuja plicata, 1977*	732	178	54	203 924	Archer, Alachua Co., Fla.	Robert Simons
Western, Thuja plicata, 1993*	761	159	45	931	Forks, Wash. Olympic NP, Wash.	Ken Hoover
REDSHANK			13	701	Olympic NP, Wash.	F.W. Mathias
Adenostoma sparsifolium, 1977	42	23	18	70	N d W = 0 · · · · ·	
REDWOOD	, ,	20	10	70	North Warner Springs, Calif.	Frank T. Callahan
Coast, Sequoia sempervirens, 1993*	867	313	101	1200	0.11.6.1.0.1	
oast, Sequoia sempervirens, 1998*	893	307		1205 1224	Prairie Creek Redwoods SP, Calif.	Ron Hildebrant & Michael Taylor
oast, Sequoia sempervirens, 1998*	950	321		1224	Jedidiah Smith SP, Del Norte Co., Calif.	R. Hildebrant, M. Taylor, S. Sillett
HODODENDRON			50	14/1	Jedidiah Smith SP, Del Norte Co., Calif.	R. Hildebrant, M. Taylor, S. Sillett
atawba, Rhododendron catawbiense, 1991*	10	26	11	20	Dr. Lur D. L. e	
atawba, <i>Rhododendron catawbiense</i> , 1995*	17	19	17	39 40	Pisgah NF, Burke Co., N.C.	Ken, Amy, and Mike Knox
cific, Rhododendron macrophyllum, 1976	20		20	40 58	Blue Ridge Parkway, Buncombe Co., N.C.	Will Blozan & Katherine Johnson
sebay, <i>Rhododendron maximum</i> , 1981	25		22	71	Mendocino Co., Calif.	Frank T. Callahan
		. •	~ L	7.1	Sumfer NF, Oconee Co., S.C.	Roland E. Schoenike

Ed Richardson con measure his retirement in inches. That's because in the 12 years he's been a volunteer with Connecticut's Notable Trees program, he's measured more than 1,000 potential champion trees.

From his home in Glastonbury, Richardson, 75, treks all over the middle of the state measuring wanna-be champs. He is known for his tenacity with tough ID's.

"I look at the buds, the leaves or needles, the shape, the branch, the fruit, and keep at it until I'm convinced I've got it,"he says. That knowledge has come through a lot of self-study, a course at the Arnold Arboretum, lots of books, and an occasional consult.

Retired from his job as a vice president at an insurance company, Richardson first read about Connecticut's big tree program in a 1987 article in *The New York Times*. He called up and offered his help. Now he shares his excitement for arboreal treasures through maps of tree

trails he designs for public use. "I give tree walks quite frequently," he says.

In addition to taking calls and checking measurements, Richardson is adept at finding his own champs. Richardson nominated several trees for this year's National Register, and more than half of the 300-plus trees on Connecticut's program bear his name as

ED RICHARDSON Connecticut's Identification Guru



His suggestion for would-be tree hunters: "Look on old estates, institutions, colleges, hospitals, cemeteries." The trees planted there have been protected and cared for. He prefers to hunt big trees when the leaves are still on—which makes them easier to identify, he thinks.

When you take stock of so many of a state's trees you're bound to see all-kinds of things. Richardson remembers taking people to see a giant cucumber magnolia that he suspects would have been a national champ had it not had its top "whacked" by a hurricane. The massive tree towered over the yard of a small house. When the family finally decided it needed to be taken down, Richardson said he was shocked to see the mighty tree's trunk was actually about 98 percent hollow, even at ground level.

State big tree coordinator Glenn Dreyer marvels at Richardson's self-taught savvy and boundless enthusiasm,

praising his work with parks and cemeteries to create tree inventories, informational brochures, and databases that help people gain new appreciation for the trees around them.

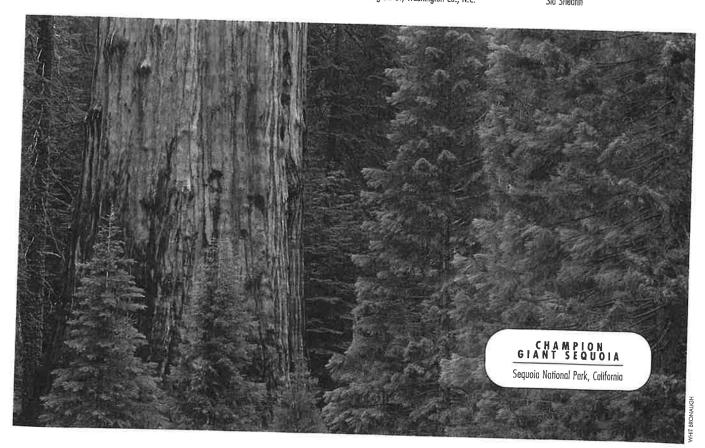
Although Connecticut may not be able to boast an abundance of national champs (it has four), its program is grounded on the firmest of footings, thanks in large part to Ed Richardson.

—Michelle Robbins

SPECIES / MOST RECENT MEASUREMENT	CIRCOM	FERENCE"	HEIGHT	SPREA	D, LOT	TAL POINTS LOCATION	NOMINATOR
ROYALPALM							NOMINATOR
Florida, <i>Roystonea elata</i> , 1995		50	99	18	154	4 Near Copeland, Fla.	
RUSSIAN-OLIVE			• •		10.	weur copeiana, ria.	Daniel B. Ward
Elaeagnus angustiflolia, 1997∆	1	163	53	58	221	Description and the second	
SAGEBRUSH		00	טט		231	Near Black Hills Speedway, S. Dak.	Royce King
Big, Artemisia tridentata, 1991*		17	1 7	٠,	20		
Big, Artemisia tridentata, 1995*			17 13	16 17	38		R. Noggles, B. Glodowski, F. Johnson
S A G U A R O	•	ΔU ,	13	17	37	Crooked River Natonal Grassland, Ore.	Mark R. Corbet
Cereus giganteus, 1992*	,			_			
Cereus giganteus, 1997*			38	17	130	San Manuel, Ariz.	Charley Blank
Cereus giganteus, 1999*			50	12	130	Cave Creek, Maricopa Co., Ariz.	Lauri Barker
Cereus giganteus, 1999*		34 4;		10	130	Tonto NF, Ariz.	Ken Morrow & Mike Hallen
	84	34 43	3	24	133	Cottonwood Creek, Bradshaw Mountains, Ariz.	Joe Pleggenkuhle
SAPODILLA Manillara zanata 1992* A							200 1 1098011/01110
Manilkara zapota, 1992*∆ Manilkara zapota, 1993*∆	156				244	Key West, Fla.	William S. Hubard
	174	4 56	ذ	53	243	Matheson Preserve, Miami, Fla.	A. Cohen, L. Hardy, R. Smith
SASSAFRAS						•	A. Collett, L. Maray, K. Smith
Sassafras albidum, 1995	262	2 78	}	69	357	Owensboro, Ky.	5 AW = 1
SATINLEAF						owensuolo, ny.	Dr. O.W. Rash
Chrysophyllum oliviforme, 1994	73	41	1	34	123	M:: rt-	
SATINWOOD			•	Α.	lLu	Miami, Fla.	Clifford Show & Al Hetzell
West Indies, Zanthoxylum flavum, 1993	33	20	9	••	10		
SAW-PALMETTO	UV	20	۷	28	60	Bahia Honda SP, Fla.	John Baust
Serenoa repens, 1994*	0.0	20					
Serenoa repens, 1987*	22	20	13		45	Withlacoochee SF, Fla.	Buford C. Pruitt
i i	27	21		8 :	50	Ft. Pierce, Fla.	Steve Fousek & Paul Williams
S C A R L E T B U S H							STOTO FOODOR OF FOUR THINIUMS
Hamelia patens, 1996	15	13	16	j (32	Big Pine Key, Fla.	Jean F. De St. Croix
SEAGRAPE						,,	18011 L. D6 21. CLOIX
Coccoloba uvifera, 1994	149	62	66	22	18	Miami, Fla.	
SEQUOIA						Million, I lu.	Don McGarthy
Giant, Sequoiadendron giganteum, 1975	998	275	107	130	١٨	C - Lin Chr	
SERVICEBERRY	,,,	LIJ	10,	100	Ü	Sequoia NP, Calif.	Isabelle F. Story
llegheny, <i>Amelanchier laevis</i> , 1997	70	101	27	10			
owny, Amelanchier arborea, 1986	78 108	101	36	188		Boulevard Prong, Great Smoky Mtns. NP, Tenn.	Will Blozan & Amy Gamerman
oundleaf, <i>Amelanchier sanguinea</i> , 1989	108 54	60 34	53	181	1	Burkes Garden, Va.	Louise G. Hoge
tah, Amelanchier utahensis, 1996†		34	42	99		Clarendon, Vt.	Dave Potter
estern, Amelanchier alnifolia, 1993	268 39	38 42	46	317		Crowley Lake, Calif.	Randy Witters and Kim "Witters" Fritsche
I L K B A Y	37	42	43	92	. 1	Beacon Rock SP, Wash.	Robert Van Pelt
rsea borbonia var. humilis, 1991							
	55	38	46	105	(Ocala NF, Fla.	Robert W. Simons
ILKTASSEL							RODGIT 11. JUNIO115
ovyleaf, <i>Garrya elliptica</i> , 1972	28	29	22	63	P	Brookings, Ore.	г Етенц
ight, Garrya wrightii, 1997	28	22	22	56		Buenos Aires NWR, Ariz.	Frank T. Callahan Robert Zahner
T K T T E E							KODEIT Zanner
mosa, <i>Albizia julibrissin</i> , 1997∆	179	56	74	254	0	Orlando, Fla.	3
LVERBELL			•			nunuv, riu.	Marsha S. Roepe
olina, <i>Halesia carolina</i> , 1995*	151 1	104	40	245	· c		
olina, <i>Halesia carolina</i> , 1995*		103	40 45	265 266		reat Smoky Mountains NP, Tenn.	Will Blozan & Tom Remaley
olina, <i>Halesia carolina</i> , 1995*		96	45 39			reat Smoky Mountains NP, Tenn.	W. Blozan, T. Remaley, D. McCully
e, Halesia parviflora, 1993†		23	39 15	261 37	Die Die	reat Smoky Mountains NP, Tenn.	Will Blozan & Michael Davie
wing, Halesia diptera, 1988		42	40		Kir.	ce Creek Swamp, Putnam Co., Fla.	Robert Simon & Daniel B. Ward
		72	40	166	Σþι	oring Grove Cemetery & Arboretum, Cincinnati, Ohio	Len Thomas & Tom Smith

	CIRCUMFER	THE WAY	Septim 1846)	1.7	AL POINTS LOCATION	NOMINATOR
SILVERPALM						
Florida, Coccothrinax argentata, 1979*	1	9 2	7	6 48	Bahia Honda State Park Recreation Area, Fla.	Capt. John A. Baust
Florida, Coccothrinax argentata, 1994*	2	21 25	5	7 48		Clifford Shaw & George Avery
SMOKETHORN					Ten New York Tribut, Tild.	Cilifold Sillow & George Avery
Dalea spinosa, 1976	4	8 17	7 12	2 68	Anza Borrego SP, Calif.	F 1 + 6 H 1
SMOKETREE				- 00	Anza bonogo 31, com.	Frank T. Callahan
American, Cotinus obovatus, 1989*	9.5	5 39	38) 144	B 1 11 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
American, Cotinus obovatus, 1991*	104				Perdue University, West Lafayette, IN	S.A. Jamieson & A.T. Grossman
SNOWBELL	10-	T 32	40	147	Hamilton Co., Ohio	Tim Jacob
Bigleaf, Styrax grandifolius, 1997	10					
	13	34	14	51	Wilkinson Co., Miss.	Jack Herring
SOAPBERRY						
Western, Sapindus drummondii, 1993	126	62	67	205	Corpus Christi, Tex.	Brian Sichel
Wingleof, Sapindus saponaria, 1991	88	72	36	169	Paynes Prairie State Preserve, Fla.	Robert Simons
SOLDIERWOOD						wasan sumulis
Colubrina elliptica, 1998*	24	41	9	67	John Pennekamp Coral Reef SP, Fla.	Joseph Marris
Colubrina elliptica, 1999*	25	30	29	62	Crocodile Lake NWR, Fla.	Joseph Nemec
Colubrina elliptica, 1991*	22	41	13	66	Wild Tamarind Nature Trail, Monroe Co., Fla.	Joseph Nemec
SOPHORA					ramama natata nan, montoe co., Fig.	Jeanne M. Parks
Mescalbean, Sophora secundiflora, 1983	68	27	27	102	Compel Co. Tou	
Texas, Sophora affinis, 1969*	60	33	30	102	Comal Co., Tex.	Ann Holland & Kathy Thieleman
Texas, Sophora affinis, 1999*	63	32	36	101	Leokey, Tex.	John Haislet
SOURWOOD	00	UL	JU	104	Round Mountain, Rt. 3, Tex.	Bill Edwards
Oxydendrum arboreum, 1998	100	0.5	7.0			
·	132	95	70	245	Amelia Co., Va.	John Anderson & Joseph Humphreys
SPARKLEBERRY						
Tree, Vaccinium arboreum, 1984*	58	24	33	90	Aiken Co., S.C.	Roy Simkins Jr.
Tree, Vaccinium arboreum, 1991*	52	29	45	92	Evergreen Country Club, Evergreen, Ala.	Nell Stuart
Tree, Vaccinium arboreum, 1997*	33	47	30	88	DeSoto NF, Miss.	Gary H. Lott & Wayne R. McCardie
SPICEBUSH						, and a mayor it. micculuid
Lindera benzoin, 1999*	14	26	20	45	Fayette Co., Tenn.	David Smith
Lindera benzoin, 1997*	15	24	20	44	Western N.C. Arboretum, Buncombe Co., N.C.	
Lindera benzoin, 1997*	14	23	27	44	Warren Wilson College, N.C.	Will Blozan & Katherine Johnson Will Blozan
Lindera benzoin, 1997*	12	24	20	41	Warren Wilson College, N.C.	Will Blozan & Katherine Johnson
SPRUCE	. 43				go, mer	THE DIVICUL & NUMERING JOHNSON
Black, <i>Picea mariana</i> , 1989	62	78	21	145	Taylor Co., Wis.	No. 1 Per 1
Black Hills, <i>Picea glauca</i> var. <i>densata</i> , 1996	104	122	25	232	Spearfish Canyon, S. Dak.	Nick Risch
Blue, <i>Picea pungens</i> , 1980	186	122	36	317	Ashley NF, Utah	Mark Rouw
Brewer, <i>Picea brewerana</i> , 1999	272	137	44	420	Shasta-Trinity NF, Calif.	A.J Frandsen & Sherel Goodrich
ngelmann, <i>Picea engelmannii</i> , 1995	283	179	27	469	Olympic NP, Wash.	Leonard Herzstein & Neal Hadley
lorway, <i>Picea abies</i> , 1994∆	180	120	66	317	Hamilton College, Clinton, N.Y.	Robert Van Pelt & Arthur Jacobson
ed, <i>Picea rubens</i> , 1986*	169	123		302	Great Smoky Mountains NP, N.C.	Charles McFadden
ed, <i>Picea rubens</i> , 1997*		146		299	Thicket Branch, Great Smoky Mtns. NP, N.C.	Jim Renfro & Chris Blokeman
itka <i>, Picea sitchensis,</i> 1987*		206		902	Seaside, Ore.	Will Blozan
itka <i>, Picea sitchensis,</i> 1987*		191		922	Olympic NF, Wash.	Maynard Drawson
/hite (typ.) <i>, Picea glauca</i> var. <i>glauca,</i> 1995		130		262	Koochiching Co., Minn.	Robert Van Pelt
TEWARTIA	5	. 00	20	70Z	ROGERICARY CO., MIRE.	Richard Stapleton
ountain, Stewartia ovata, 1995	20	27	17	50	w. t.	
rginia, Stewartia malacodendron, 1987*	20 10	26	17	50	Washington Park Arboretum, Seattle, Wash.	Robert Van Pelt & Arthur Lee Jacobson
rginia, Stewartia malacodendron, 1994*	10	15	24	31	Chesapeake, Va.	Byron Carmean & G.M. Williamson
TOPPER	10	19	28	36	Ponce de Leon, Fla.	Murdock "Ray" Gillis
xleaf, Eugenia foetida, 1998*†						
, 20goma 106maa, 1770	16	19	14	39	Marathon, Monroe Co., Fla.	Dianna Stevenson & Jeanette Hobbs

	IRCUMFEREN	L HEIGHT	SPRE	AD' TOTAL	POINTS LOCATION	NOMINATOR
Boxleaf, Eugenia foetida, 1999*†	11	24	8	37	Key Largo Hammocks State Botanical Site, Fla.	
Red, Eugenia rhombea, 1999†	19	23	14	46	Crocodile Lake NWR, Key Largo, Fla.	Joseph Nemec
Redberry, Eugenia confusa, 1993	60	46	26	113	Viscaya Museum & Gardens, Miami, Fla.	Joseph Nemec
Simpson, Myrcianthes fragrans var. simpsonii, 1995	34	51	40	95	Fern Forest Nature Center, Pompono Beach, Fla.	Albert H. Hetzell & Ron Smith
White, Eugenia axillaris, 1994*	15	28	= 9	45	Barnacle State Historical Site, Fla.	Jim Higgins
White, Eugenia axillaris, 1993*	15	25	11	43	Sanibel Island, Fla.	John T. Valenta & Rodger Hammer Richard R. Workman
STRONGBACK						NICHUIU K. WORKMON
Bahama, <i>Bourreria ovata</i> , 1999	32	28	14	64	Crosodilo Lako NIMB Vandana El	
Rough, Bourreria radula, 1995 😁	22	23	19	50	Crocodile Lake NWR, Key Largo, Fla. Key West, Fla.	Joseph Nemec
SUGARBERRY			• • •	30	NGY 44631, 11U.	Vincent P. Condon
Celtis laevigata, 1984	301	81	114	411	C	
SUMAC	001	UI	114	411	Society Hill, S.C.	Edward Drayton & C.K. Dunlap
Evergreen, Rhus virens, 1991	36	12	17	52	Concern Huntel C. T.	
Mearns, Rhus choriophylla, 1995	24	20	19	49	Concan, Uvalde Co., Tex. Coronado NF, Ariz.	W.J. Graves
Prairie, <i>Rhus lanceolata</i> , 1994*	45	29	23	80	Comal Co., Tex.	Robert Zahner
Prairie <i>, Rhus lanceolata</i> , 1994*	48	23	35	80	Kerrville, Tex.	Rudy Schlather
Shining (typ.), <i>Rhus copallina</i> var. <i>copallina</i> , 1988	40	48	36	97	Adams Co., Miss.	Raymond C. Doggett
Smooth, Rhus glabra, 1993*	38	26	27	71	Walla Walla, Wash.	Danny Bryant & Bill Brown
Smooth, <i>Rhus glabra</i> , 1993*	26	38	19	69	Walla Walla, Wash.	R. Van Pelt, R. Brightman, S. Muse
Southern, <i>Rhus copallina</i> var. <i>leucantha</i> , 1993	13	22	15	39	Arcadia, Fla.	Robert Van Pelt & Ron Brightman
Staghorn, <i>Rhus typhina</i> , 1985	50	61	20	116	Tallapoosa Co., Ala.	Arden Streit Jr.
iugar, <i>Rhus ovata</i> , 1995	65	32	33	105	Superstition WA, Tonto NF., Ariz.	Ted Kretschmann
WAMP-PRIVET					Sopoismon WA, JUHU NE., AIIZ.	Ken Morrow
orestiera acuminata, 1997	100	41	49	153	Varon NIWD W-Lines Co. 11	
WAMPBAY			"	170	Yazoo NWR, Washington Co., Miss.	David Linden
ersea borbonia var. pubescens, 1999	63	36	47	111	Pettigrew SP, Washington Co., N.C.	



SPECIES / MOST RECENT MEASUREMENT	CIRCUMFEREN	ICE" HEIGH	T' SPRI	EAD' TOTA	L POINTS LOCATION	ET WITH THE REAL PROPERTY.
S W E E T G U M Liquidambar styraciflua, 1986	278	136	66	431		NOMINATOR
SWEETLEAF		700	00	401	Craven Co., near Perfection, Neuse River, N.C.	H.E. Bremer, B. Tate, S. Newcombe
Symplocos tinctoria, 1986* Symplocos tinctoria, 1986*	54 35	54 70	38 36	118	Southern Chesapeake, Va.	Byron Carmean & Gary M. Williamsor
SYCAMORE	05	70	36	114	Southern Chesapeake, Va.	Byron Carmean & Gary M. Williamson
<i>Platanus occidentalis,</i> 1999 Arizona <i>, Platanus wrightii,</i> 1981*	334	95	105	455	Bath, Vo.	Kirk Lunsford
Arizona, <i>Platanus wrightii</i> , 1999*	283	114	116	426	Sierra Co., N. Mex.	Donald Darlina
California, <i>Platanus racemosa</i> , 1998	335 344	69	88	426	Aravaipa Canyon WA, Pinalco, Ariz.	Ken Morrow
ALLOWTREE	344	94	104	464	San Juan Capistrano, Orange Co., Calif	Art Cowley
apium sebiferum, 1996∆	136	/0		200		
A L L O W W O O D	100	69	68	222 -	Vidor, Tex.	Robert N. Norton
imenia americana, 1997†	16	18	14	38	Constitution of	
AMARACK		, ,	17	30	Crocodile Lake NWR, Fla.	Joseph Nemec
arix laricina, 1998	151	62	64	229	Country Con-	
AMARIND			•		Coventry, Conn.	Edward Richardson
marindus indica, 1992∆	167	75	84	263	Monroe Co., Fla.	
A M A R I S K			-,	200	monios cu., Fig.	Mike Cullen & David Sinclair
marix chinensis, 1999∆	170	45	50	228	Albuquerque, N. Mex.	Robert Squires

If finding big trees is but one puzzle in the mystery of life, then be glad for puzzlers like Daniel B. Ward, a botanist and retired University of Florida professor. Ward is big on big trees and he has devoted a chunk of his retirement years to cleaning up, straightening out, and polishing the list of those in Florida.

He describes himself as "a background guy," better at mulling over and solving technical questions than being an acute observer. Despite that modest assertion, Ward has dozens of champs to his name, often found with friends.

In 1990, he and friend Robert Ing, an entomologist, offered to help get the Florida list in shape. They ended up going through the whole list, checking out old records, remeasuring, and hunting for downed champs. The acknowledgments page of their book, Big Trees: The Florida Register (published in 1997 by the Florida Native Plant Society), is loaded with names of people who have helped find and measure the trees.

He nominated his first big tree in 1963, but the tree bug had bitten long before that. He remembers cycling

round Montgomery County, Indiana, as a boy, measuring trees and recording the numbers in a little notebook, which he still has. Armed with a Ph.D. in botany, he served on the faculty of the University of Florida for 37 years, which gave him a chance to indulge his love for big trees.

As he says, people can "do their hobby and call it research; brag about it and call it

In addition to Big Trees, Ward coauthored a book on endangered biota in the late 1970s. Although Ward's tangible contribution runs to the technical—things like nomenclature and

DANIEL B. WARD It's All in the Details



species ID—rather than to tours or garden club talks, he inspires by the strength of what he has accomplished, by his teaching of students, and by the enthusiasm he exudes as he talks about identifying trees, the people who've helped him with measurements, and the important contribution a Register can make to conservation efforts.

Although Ward will never lose his connection with big trees, at 71 he mentions pulling back a little, freeing himself up to work on other projects. But in the next breath he's anticipating aloud the virgin forest and spectacular cabbage palm a caller has invited him to see. And people are always writing and calling with trees that need measuring. He always feels the pull of obligation to check them out,

Learning that you have a record-size tree (even if it's not the biggest) can be a source of enormous pride, he says. The tree "becomes important—you put a fence around it . . . you put a provision in your deed that the tree ... and the area around it must be protected."

Record-sized trees are a given in the South, which is

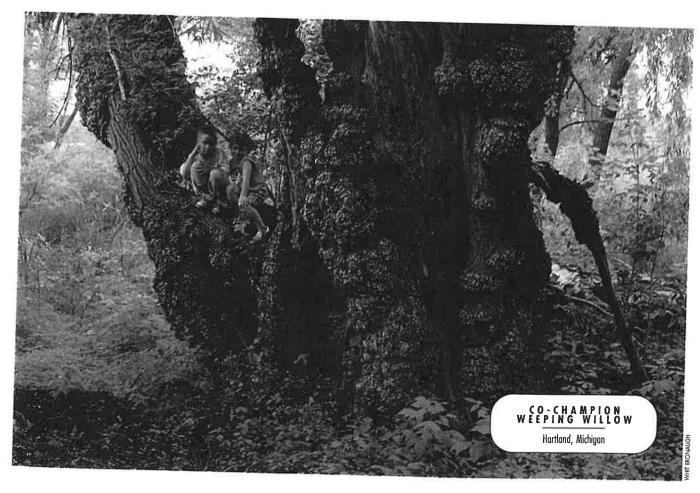
known for its lush trees of unusual size and shape. Ward's favorites are the surviving mammoth baldcypresses because when he looks at the trees once prized by loggers, "I'm seeing a vanished past" that was inadvertently missed or left because of some perceived defect.

Would-be tree hunters, of course, need to arm themselves with a clinometer, a tape measure, and either a knowledge of what species are out there and a sense of the size of the champion or an expert who can help you hunt. There's one other thing that tops Ward's equipment list: "bug spray. I'm assuming you want to enjoy yourself." --- Michelle Robbins

C II C			HEIGHT'	1000	TOTAL POINTS LOCATION	NOMINATOR
Small-flower, Tamarix parviflora, 1986∆		56	14	22	76 Hampton, Va.	Richard Salzer
TANOAK						WEIGHT SUIZE
Lithocarpus densiflorus, 1997		275	144	59 4	34 Ophir, Curry Co., Ore.	Goorge Mills
TESOTA					, , , , , , , , , , , , , , , , , , , ,	George Miller
Olneya tesota, 1995		170	45	43 2	26 Maricopa Co., Ariz.	W
THATCHPALM					Moneopa Co., Mil.	K. and J. Marrow
Florida, <i>Thrinax radiata</i> , 1991		17	28	2 4	16 Hollywood Fla	
Key, Thrinax morrisii, 1995		19	19		,	D. Spicer, W. Harms, W. Tesauro
TORCHWOOD				· '	O Fairchild Tropical Garden, Miami, Fla.	Don Evans & Daniel B. Ward
Amyris elemifera, 1994		18	22	15 4	4 H. C. El	
TORREYA			22	15 4	4 Monroe Co., Fla.	Mike Cullen & David Sinclair
California, Torreya californica, 1992	9	51	07			
Florida, <i>Torreya taxifalia</i> , 1972				68 364	o manner, cuin,	Frank T. Callahan
TOYON	'	U /	45	40 164	Norlina, N.C.	Robert Simons
Heteromeles arbutifolia, 1992		. .				
TREE TOBACCO	:	58 ;	32	28 97	Santa Barbara Co., Calif.	Frank T. Callahan
Nicotiana glauca, 1999						
	ì	2	8	12 33	Tucson, Ariz.	John and Janielle Richmond
TREE-CACTUS						John and Jonese Victibilotio
Deering, Cereus robinii var. deeringii, 1992	1	1 2	3	2 35	Monroe Co., Fla.	AAT-AL1 W 11
Key (typ.), Cereus robinii var. robinii, 1992*†	1	1 2	3	1 34	National Key Deer Refuge, Monroe Co., Fla.	Michael K. Hennessey Michael K. Hennessey
Key (typ.), <i>Cereus robinii</i> var. <i>robinii</i> , 1995*†	1.	2 1	7	2 30	Natioanl Key Deer Refuge, Monroe Co., Fla.	Vincent P. Condon
TREMA					, was gay monitor co., Tid.	vincetii r. Condon
Florida, <i>Trema micrantha</i> , 1995	18	3 39	3	0 65	Collier Co., Fla.	g
TRIFOLIATE-ORANGE					comor cas, riu.	Chris Anderson & Lisa Moore
Poncirus trifoliata, 1984*∆	50	14	15	5 68	Aikan Ca. S.C.	
Poncirus trifoliata, 1995*∆	43				Aiken Co., S.C. Roanoke, Va.	Roland E. Schoenike & Thomas B. Earle
TUPELO			20	, 00	roulloke, va.	William S. Hubard
Black (typ.), Nyssa sylvatica var. sylvatica, 1998*	185	78	64	270	F. D. T. T. W.	
Black (typ.), Nyssa sylvatica var. sylvatica, 1998*	182	68	95		Franklin Township, N.J.	David Johnson
Ogeechee, <i>Nyssa ogeche,</i> 1993*	166	93	41	269	Madison, Conn.	Edward A. Richardson & Nicholas Williams
Ogeechee, <i>Nyssa ogeche,</i> 1993*	174	81	48	267	Apalachicola NF, Fla. Apalachicola NF, Fla.	Robert W. Simons & Dale Allen
Swamp, <i>Nyssa sylvatica</i> var. <i>biflora,</i> 1987	238	102	57	354	1 1	R. Simons, D. Ward, D. Allen, G. Hegg
Nater, Nyssa aquatica, 1991	336	105	56	455	Dismal Swamp NWR, Suffolk Co., Va. Southhampton Co., Va.	Byron Carmean & Gary Williamson
VAUQUELINIA			55	.23	Soonnumpion Co., Vd.	Byron Carmean & Gary Williamson
orrey, Vauquelinia californica, 1993	78	47	40	135	Organ Rica Cast No. 1	
/ ELVETSEED		"	40	193	Organ Pipe Cactus NM, Ariz.	Robert Zahner
lliptic-leaf, <i>Guettarda elliptica</i> , 1993	36	າາ	0.4	15		
oughleaf, <i>Guettarda scabra</i> , 1998†	36 11	23 17	24	65	Simpson Park, Miami, Fla.	William G. Miller & John Valenta
'IBURNAM	11	17	11	31	Key Largo Hammocks State Botanical Site, Fla.	Joseph Nemec
ossumhaw, <i>Viburnum nudum</i> , 1999†		1,				
alter, Viburnum obovatum, 1991	4 17	16	16	24	Chesapeake, Va.	Byron Carmean & Gary Williamson
ALNUT	17	23	23	46	Gainesville, Fla.	Robert W. Simons & Daniel B. Ward
zona <i>, Juglans major,</i> 1999						
ck, Juglans nigra, 1991	225	85	98	335	Grant Co., N. Mex.	Ralph Fisher Jr.
le, Juglans microcarpa, 1980*	278	130	140	443	Sauvie Island, Ore.	Dan Tillman
e, Juglans microcarpa, 1986*	160	50	80	230	Denton Co., Tex.	Jim M. Lewis
thern California, <i>Juglans hindsii,</i> 1986	160	53	65	229	Lincoln Co., N. Mex.	Tommy Roybal
thern California, <i>Juglans californica</i> , 1973	290	115	106	432	Napa, Calif.	John Britton Tree Service
Comornia, Jugiuns Comornica, 17/3	241	116	95	381	Chico, Calif.	Gordon R. Foster

WASHINGTON	CIRCUMF				فللت	TAL POINTS LOCATION	NOMINATOR
WASHINGTONIA							
California (fanpalm), Washingtonia filifera, 1991*		120	83	21	20	8 Sacramento State Capital Grounds, Calif.	Robert Van Pelt & A.L. Jacobson
California (fanpalm), Washingtonia filifera, 1991*			101	22	20	7 Sacramento State Capital Grounds, Calif.	Robert Van Pelt & A.L. Jacobson Robert Van Pelt & A.L. Jacobson
California (fanpalm), Washingtonia filifera, 1997*	1	41	66	18	212		Art Cowley
WATER-ELM						, and a second s	All Cowley
Planera aquatica, 1983	1	83 1	06	96	313	New Bern, N.C.	Did to
WATERLOCUST						non bon, n.c.	Richard Salzer
Gleditsia aquatica, 1993	1	10	74	73	202	W 1	
WHITE-CEDAR "			<i>,</i> 1	/3	202	Wyndmoor, Pa.	Maurice E. Hobaugh
Atlantic, Chamaecyparis thyoides, 1985	10	17					
Northern, <i>Thuja occidentalis</i> , 1978	18		88	42	285	Brewton, Ala.	James M. McGougin Sr.
	21	6 [13	42	340	Leelanau Co., Mich.	Paul W. Thompson
WILD-DILLY							, , , , , , , , , , , , , , , , , , ,
Manilkara bahamensis, 1998	3	4 1	9	32	61	Crane Hammock subdivision, Marathon, Fla.	Harne Dollach Q. L
MILLOM						The state of the s	Harry DeLashmutt & Jeanette Hobbs
Arroyo, Salix lasiolepis, 1975	43	3 2	7	20	75	Wallowa Co., Ore.	e-1
Autumn, Salix serissima, 1985	35			44	94	Oakland Co., Mich.	Frank T. Callahan
Bebb, <i>Salix bebbiana</i> , 1991	101	23		27	131	Sawtooth NF, Idaho	Paul W. Thompson
Black, <i>Salix nigra</i> , 1995	400			92	499	Grand Traverse Co., Mich.	Bill Little & Howard Hudak
Bonpland, <i>Salix bonplandiana,</i> 1999	169				251		Elwood B. Ehrle & John Spencer
Coastal plain, <i>Salix caroliniana</i> , 1995	106	52			172	Gila Box Riparian National Conservation Area, Ariz. Pettigrew SP, Creswell, N.C.	
Crack, Salix fragilis, 1994*∆	310	116			459	Beverly Hills, Mich.	Sid Shearin
Crack, Salix fragilis, 1986*△	305	122			458		Paul W. Thompson
Florida, <i>Salix floridana</i> , 1993	10	20	2		36	Clinton Rd., north of Utica, Mich. Ocala NF, Fla.	H.J. Nett & Paul W. Thompson
Goodding, <i>Salix gooddingii</i> , 1993	354	45	8		421		Jeff Overby & Ilke Toklu
Hinds, Salix hindsiana, 1986	58	50	3		116	Walsh Ranch, Luna Co., N. Mex. Jackson Co., Ore.	Ralph Fisher Jr.
Hooker, Salix hookerana, 1975	51	32	2		90	Warrenton, Ore.	Frank T. Callahan
Mackenzie, Salix mackenzieana, 1999†	17	30	2		54	·	Frank T. Callahan
Meadow, Salix petiolaris, 1976	13	34	18		52	Lake Sornmamish SP, Wash. Traverse Lake, Mich.	R. Van Pelt, A. Jacobson, R. Brightman
Pacific, Salix lasiandra, 1999†	162	60	80		42		Paul W. Thompson
Peachleaf, Salix amygdaloides, 1988	417	58	82		96	Dry Creek Regional Park, Alameda Co., Calif.	Howard R. Cooley
Purple-osier, <i>Salix purpurea</i> , 1972∆	15	37	49		64	Greenfield Park, West Allis, Wis.	Eugene Zanow
Pussy, Salix discolor, 1983*	54	47	33	10		Leelanua Co., Mich.	Paul W. Thompson
Pussy, Salix discolor, 1991*	74	25	48	11		Clinton, Mich.	Paul W. Thompson
Sandbar, <i>Salix exigua</i> , 1984	69	36	46	11		Jamestown, R.I.	Patrick M. Dorcus
Scouler, <i>Salix scoulerana</i> , 1993*	168	40	50	22		Criglersville, Va.	Richard Salzer
Scouler, Salix scoulerana, 1993*	144	64	47	22		Lincoln City, Ore.	Maynard Drawson
Shining, <i>Salix lucida</i> , 1985	130	74	81	22		Maury Island, Wash.	Robert Van Pelt & Ron Brightman
Silky, <i>Salix sericea</i> , 1991	40	48	36	9;		Traverse City, Mich.	Paul W. Thompson
itka, <i>Salix sitchensis</i> , 1999	32	35	37	76		Lake Drummon Causeway, Va.	Byron Carmean & Gary Williamson
racy, Salix tracyi, 1975	36	20	15	60		Gene Coulon Park, Renton, Wash.	R. Van Pelt, A. Jacobson, R. Brightman
Veeping, <i>Salix babylonica</i> , 1990*∆	309	117	116			Central Point, Ore.	Frank T. Callahan
leeping, Salix babylonica, 1991*∆	344	86	93	455 453		Detroit, Mich.	Mr. and Mrs. J. Kropp
/hite, <i>Salix alba</i> , 1985*∆		118	131			Hartland, Livingston Co., Mich.	J. Pergament & Paul W. Thompson
hite, <i>Şalix alba,</i> 1991*∆		133	∞142	467 470		West of New Hudson, Oakland Co., Mich.	Paul W. Thompson
llow, <i>Salix lutea</i> , 1985	25	24	142			New Hudson, Oakland Co., Mich.	R. Turner, S. Lyons, P. Thompson
wleaf, <i>Salix taxifolia</i> , 1996	71	33	31	53		Lemhi Co., Idaho	S. J. Brunsfeld & F. D. Johnson
INTERBERRY	, ,	UU	31	112		San Rafael Valley, near Lochiel, Ariz.	Robert Zahner
mmon, llex verticillata, 1994*	0.4	1.0					
mmon, llex verticillata, 1994*	24	13	16	41		'irginia Beach, Va.	Richard and Richard Alan Salzer
untain, <i>llex montana</i> , 1995		13	16	38		irginia Beach, Va.	Richard and Richard Alan Salzer
ooth, <i>llex laevigata</i> , 1999†		30	30	76	В	rooklyn Botanic Garden, N.Y.	George Peters
÷	8	18	21	31	Le	Winetes V-	Richard Salzer

SPECIES / MOST RECENT MEASUREMENT	CIRCUMFERENC	E" HEIGHT'	SPREAD	P' TOTAL	POINTS LOCATION	NOMINATOR
NITCH-HAZEL tarnamelis virginiana, 1984	52	35	30	95	Bedford, Va.	Richard Salzer
r A U P O N lex vomitoria, 1993†	19	32	21	56	Palatka, Putnam Co., Fla.	Ned D. Neenon
ELLOW - POPLAR liptree, <i>Liriodendron tulipifera,</i> 1997 ELLOW WOOD	374	111	125	516	Bedford, Va.	Kenneth E. Crouch & Glenn Garrett
adrastis kentukea, 1987	256	61	63	333	Spring Grove Cemetery, Cincinnati, Ohio	Paul Ries
orida, Taxus floridana, 1986 cific, Taxus brevifolia, 1989 U C C A	25 180	20 54	26 30	52 242	Torreya SP, Fla. Lewis Co., Wash.	Joey T. Brady & Jerome Bracewell B. Malcomb, L. Barnhouse, A. Storkman, Levitt
aked, Yucca rostrata, 1994 neros (Spanish-dagger), Yucca carnerosana, 1977 on, Yucca faxoniana, 1991 ave, Yucca schidigera, 1987	48 51 91 66	16 25 18 24	9 10 9 7	66 79 111 92	San Antonio Zoo, Tex. Sierra Blanca, Tex. Puett Ranch, Hudspeth Co., Tex. Needles Resource Area, Calif.	Steve Lowe Frank T. Callohan Nelson Puett R. Alexander, G. Meckfessel, K. Nosstrom,
ndlilly, Yucca gloriosa, 1998 ott, Yucca schottii, 1997 otree, Yucca elata, 1996 y, Yucca torreyi, 1987 l, Yucca traculeana, 1991	106 43 62 86 24		12 11 6 1	147 61 95 111 56	Library Grounds, Huntington Beach, Calif. Santa Catalina Mountains, Coronado NF, Ariz. Tucson, Ariz. Sacramento Mountains, Lincoln NF, N. Mex. Cameron Co., Tex.	L. Persson Art Cowley Hanna Brugman Christopher Banks John McNelly William MacWhorter



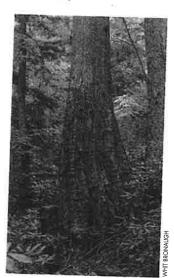
Abies fraseri, Fraser fir

Abies grandis, Grand fir

Abies amabilis, Pacific silver fir
Abies balsamea, Balsom fir
Abies bracteata, Bristlecone fir
Abies concolor var. concolor, Rocky Mountain
white fir
Abies concolor var. lowiana, California white fir

Abies lasiocarpa var. arizonica, Corkbark fir Abies lasiocarpa var. lasiocarpa, Subalpine fir Abies magnifica, California red fir Abies procera, Noble fir Acacia berlandieri, Guajillo Acacia choriophylla, Cinnecord Acacia farnesiana, Huisache Acacia greggii, Gregg catclaw Acacia macracantha, Long-spine acacia Acacia rigidula, Blackbrush acacia Acacia roemeriana, Roemer catclaw Acacia tortuosa, Huisachillo Acacia wrightii, Wright catclaw Acer barbatum, Florida maple Acer circinatum, Vine maple Acer globrum, Rocky Mountain maple Acer grandidentatum, Canyon maple Acer leucoderme, Chalk maple Acer macrophyllum, Bigleaf maple Acer negundo, Boxelder Acer nigrum, Black maple Acer pensylvanicum, Striped maple Acer platanoides, Norway maple∆ Acer rubrum, Red maple Acer saccharinum, Silver maple Acer saccharum, Sugar maple Acer spicatum, Mountain maple Acoelorrhaphe wrightii, Paurotis-palm Adenostoma sparsifolium, Redshank Aesculus californica, California buckeye Aesculus glabra var.arguta, Texas buckeye Aesculus glabra var. glabra, Ohio buckeye Aesculus octandra, Yellow buckeye Aesculys parviflora, Bottlebrush buckeye Aesculus pavia, Red buckeye Aesculus sylvatica, Painted buckeye Ailanthus altissima, Tree-of-heaven∆ Albizia julibrissin, Mimosa silktree∆ Albizia lebbeck, Lebbek△ Alnus glutinosa, European alder∆ Alnus maritima, Seaside alder

Alnus oblongifolia, Arizona alder Alnus rhombifolia, White alder Alnus rubra, Red alder Alnus rugosa, Speckled alder Alnus serrulata, Hazel alder Alnus sinuata, Sitka alder Alnus tenuifolia, Mountain alder Alvaradoa amorphoides, Mexican alvaradoa Amelanchier alnifolia, Western serviceberry Amelanchier arborea, Downy serviceberry Amelanchier laevis, Allegheny serviceberry Amelanchier sanguinea, Roundleaf serviceberry Amelanchier utahensis, Utah serviceberry Amphitecna latifolia, Black-calabash Amyris balsamifera, Balsam torchwood Amyris elemifera, Torchwood



Prunus serotina var. serotina (Black cherry), Tennessee

Annona glabra, Pond-apple Annona squamosa, Sugar-apple∆ Aralia spinosa, Devils-walkingstick Araucaria cunninghamii, Cunningham araucaria Arbutus arizonica, Arizona madrone Arbutus menziesii, Pacific madrone Arbutus texana, Texas madrone Arctostaphylos glauca, Bigberry manzanita Arctostaphylos manzanita, Big manzanita Arctostaphylos pringlei, Pringle manzanita Arctostaphylos viscida, Whiteleaf manzanita Ardisia escallonioides, Marlberry Artemisia tridentata, Big sagebrush Asimina obovata, Bigflower pawpaw Asimina parviflora, Smallflower pawpaw Asimina triloba, Common pawpaw

Avicennia germinans, Black-mangrove



Baccharis halimifolia, Eastern baccharis Betula alleghaniensis, Yellow birch Betula lenta, Sweet birch Betula nigra, River birch Betula occidentalis, Water birch Betula papyrifera var. commutata, Western paper birch Betula papyrifera var. cardifolia, Mountain paper birch Betula papyrifera var. kenaica, Kenai birch Betula papyrifera var. neoalaskana, Alaska paper birch Betula papyrifera var. papyrifera, Paper birch (typ.) Betula papyrifera var. subcordata, Northwestern paper birch Betula populifolia, Gray birch Betula uber, Roundleaf birch Bourreria ovata, Bahama strongback Bourreria radula, Rough strongback Broussonetia papyrifera, Paper-mulberry Δ Bucida buceras, Bucida∆ Burnelia celastrina, Saffron-plum burnelia Bumelia lanuginosa, Gum bumelia Bumelia lycioides, Buckthorn burnelia Bumelia tenax, Tough bumelia Bursera microphylla, Elephant-tree Bursera simaruba, Gumbo-limbo



Caesalpinia mexicana, Mexican caesalpinia Caesalpinia pulcherrima, Flowerfence△ Callitris hugelii, Blue cypress-pine△ Calyptranthes pallens, Pale lidflower Calyptranthes zuzygium, Myrtle-of-the-river Canella winterana, Canella Canotia holacantha, Canotia Capparis cynophallophora, Jamaica caper Capparis flexuasa, Limber caper Carica papaya, Papaya∆ Carpinus caroliniana, American hornbeam Carya aquatica, Water hickory Carya cordiformis, Bitternut hickory Carya floridana, Scrub hickory Carya glabra var. glabra, Pignut hickory Carya glabra var. adorata, Red hickory Carya illinoensis, Pecan Carya laciniosa, Shellbark hickory

Byrsonima lucida, Key byrsonima

Carya myristiciformis, Nutmeg hickory Carya ovata var. australis, Carolina hickory Carya ovata var. ovata, Shagbark hickory Carya pallida, Sand hickory Carya texana, Black hickory Carya tomentosa, Mockernut hickory Castanea alnifolia, Florida chinkapin Castanea dentata, American chestnut Castanea ozarkensis, Ozark chinkapin Castanea pumila, Allegheny chinkapin Castanopsis chrysophylla, Giant chinkapin Casuarina equisetifolia, Horsetail casuarina Catalpa bignonioides, Southern catalpa Catalpa speciosa, Northern catalpa Ceanothus arboreus, Feltleaf ceanothus Ceanothus spinosus, Greenbark ceanothus Ceanothus thyrsiflorus, Blue myrtle blueblossom Celtis laevigata, Sugarberry Celtis lindheimeri, Lindheimer hackberry Celtis occidentalis, Common hackberry Celtis pallida, Spiny hackberry Celtis reticulata, Netleaf hackberry Celtis tenuifolia, Georgia hackberry Cephalanthus occidentalis, Buttonbush Cercidium floridum, Blue paloverde Cercidium microphyllum, Yellow paloverde Cercidium texanum, Texas paloverde Cercis canadensis var. canadensis, Eastern redbud Cercis canadensis var. texensis, Texas redbud Cercis occidentalis, California redbud Cercocarpus betuloides, Birchleaf cercocarpus Cercocarpus breviflorus, Hairy cercocarpus Cercocarpus ledifolius, Curlleaf cercocarpus Cercocarpus montanus, Alderleaf cercocarpus Cercocarpus traskiae, Catalina cercocarpus Cereus giganteus, Saguro Cereus robinii var. deeringii, Deering tree-cactus Cereus robinii var. robinii, Key tree-cactus Chamaecyparis lawsoniana, Port-Orford-cedar Chamaecyparis nootkatensis, Alaska-cedar Chamaecyparis thyoides, Atlantic white-cedar Chilopsis linearis, Desert-willow Chionanthus virginicus, Fringetree Chrysobalanus icaco, Cocoplum Chrysophyllum oliviforme, Satinleaf Cinnamomum camphora, Camphor-tree∆ Citharexylum berlandieri, Berlandier fiddlewood Citharexylum fruticosum, Florida fiddlewood Citrus aurantifolia, Lime∆ Citrus aurantium, Sour orange∆ Citrus sinensis, Orange∆

Cladrastis kentukea, Yellowood Clethra acuminata, Cinnamon clethra Cliftonia monophylla, Buckwheat-tree Clusia rosea, Florida clusia Coccoloba diversifolia, Pigeon plum Coccoloba uvifera, Seagrape Coccothrinax argentata, Florida silverpalm Cocos nucifera, Coconut∆ Colubrina arborescens, Coffee colubrina Colubrina cubensis, Cuba colubrina Colubrina elliptica, Soldierwood Condalia globosa, Bitter condalia Condalia hookeri, Bluewood Conocarpus erectus, Button-mangrove Cordia boissieri, Anacahuite Cordia sebestena, Geiger-tree∆

Crataegus berberifolia, Barberry hawthorn Crataeaus brachyacantha, Blueberry hawthorn Crataegus brainerdii, Brainerd hawthorn Crataegus calpodendron, Pear hawthorn Crataegus chrysocarpa, Fireberry hawthorn Crataegus coccinea, Scarlet hawthorn Crataegus coccinioides, Kansas hawthorn Crataegus columbiana, Columbia hawthorn Crataegus crus-galli, Cockspur hawthorn Crataegus dilatata, Broadleaf hawthorn Crataegus douglasii, Black hawthorn Crataegus erythropoda, Cerro hawthorn Crataegus flabellata, Fanleaf hawthorn Crataegus flava, Yellow hawthorn Crataegus greggiana, Gregg hawthorn Crataegus harbisonii, Harbison hawthorn



Salix amygdaloides (Peachleaf willow), Wisconsin

Cornus alternifolia, Alternate-leaf dogwood Cornus drummondii. Roughleaf dogwood Cornus florida, Flowering dogwood Cornus glabrata, Smooth dogwood Cornus nuttallii, Pacific dogwood Cornus occidentalis, Western dogwood Cornus racemosa, Gray dogwood Cornus rugosa, Roundleaf dogwood Cornus sessifis, Blackfruit dogwood Cornus stolonifera, Red-osier dogwood Cornus stricta, Swamp dogwood Corylus americana, Hazelnut hazel Corylus comuta var. californica, California hazel Cotinus obovatus, American smoketree Cowania mexicana, Cliffrose Crataegus aestivalis, May hawthorn

Crataegus intricata, Biltmore hawthorn Crataeaus lacrimata, Pensicola hawthorn Crataegus marshallii, Parsley hawthorn Crataegus mollis, Downy hawthorn Crataegus monogyna, Oneseed hawthorn△ Crataegus opaca, Riverflat hawthorn Crataegus phaenopyrum, Washington hawthorn Crataegus pruinosa, Frosted hawthorn Crataegus pulcherrima, Beautiful hawthorn Crataegus punctata, Dotted hawthorn Crataegus reverchonii, Reverchon hawthorn Crataegus saligna, Willow hawthorn Crataeaus spathulata, Littlehip hawthorn Crataegus succulenta, Fleshy hawthorn Crataegus texana, Texas hawthorn Crataegus tracyi, Tracy hawthorn

Crataegus triflora, Threeflower hawthorn
Crataegus uniflora, Oneflower hawthorn
Crataegus viridis, Green hawthorn
Crassopetalum rhacoma, Florida crossopetalum
Cupania glabra, Florida cupania
Cupressus arizonica var. arizonica, Arizona
cypress (typ.)
Cupressus arizonica var. alabra. Arizona smooth

Cupressus arizonica var. glabra, Arizona smooth cypress

Cupressus arizonica var. nevadensis, Piute cypress Cupressus arizonica var. stephensonii,

Cupressus bakeri, Baker cypress Cupressus goveniana var. abramsiana,

Santa Cruz cypress

Cupressus goveniana var. goveniana, Gowen
cypress (typ.)

Cupressus goveniana var. pigmaea, Mendocino cypress

Cupressus guadalupensis var. forbesii, Tecate cypress

Cupressus macrocarpa, Monterey cypress
Cupressus macrocarpa, Monterey cypress
Cupressus sargentii, Sorgent cypress
Cyrilla racemiflora var. parvifolia, Littleleaf cyrilla
Cyrilla racemiflora var. racemiflora,

Swamp cyrilla (typ.)



Dalea spinosa, Smokethorn

Delonix regia, Royal poinciana∆

Diospyros texana, Texas persimmon

Diospyros virginiana, Common persimmon

Dipholis salicifolia, Willow bustic

Dodonaea viscosa, Hopbush

Drypetes diversifolia, Milkbark

Drypetes lateriflora, Guiano-plum



Ehretia anacua, Anacua
Elaeagnus angustiflolia, Russian-olive∆
Elliottia racemosa, Elliottia
Erythrina flabelliformis, Southwestern coralbean
Erythrina herbacea, Southeastern coralbean
Esenbeckia berlandieri, Berlandier esenbeckia
Eucalyptus carnaldulensis, Longbeak eucalyptus∆
Eucalyptus globulus, Bluegum eucalyptus∆
Eugenia axillaris, White stopper
Eugenia confusa, Redberry stopper
Eugenia foetida, Boxleaf stopper

Euonymus atropurpureus, Eastern burningbush Euonymus occidentalis, Western burningbush Exostema caribaeum, Princewood Exothea paniculata, Inkwood Eysenhardtia polystachya, Kidneywood Eysenhardtia texana, Texas kidneywood



Fagus grandifolia, American beech
Ficus aurea, Florida strangler fig
Ficus citrifolia, Shortleaf fig
Firmiana simplex, Chinese parasoltree∆
Forestiera acuminata, Swamp-privet
Farestiera angustifolia, Texas forestiera
Forestiera phillyreoides, Desert-olive forestiera
Forestiera segregata, Florida-privet
Franklinia alatamaha, Franklinia
Fraxinus americana, White ash
Fraxinus anomala var. anomala, Singleleaf
ash (typ.)

Fraxinus anomala var. lowelii, Lowell ash Fraxinus berlandierana, Berlandier ash Fraxinus caroliniana, Carolina ash Fraxinus cuspidata, Fragrant ash Fraxinus dipetala, Two-petal ash Fraxinus gooddingii, Goodding ash Fraxinus greggii, Gregg ash Fraxinus latifolia, Oregon ash Fraxinus nigra, Black ash Fraxinus papillosa, Chihuahua ash Fraxinus pennsylvanica, Green ash Fraxinus profunda, Pumpkin ash Fraxinus quadrangulata, Blue ash Fraxinus texensis, Texas ash Fraxinus velutina, Velvet ash Fremontodendron californicum, California fremontia Fremontodendron mexicanum, Mexican fremontia



Garrya elliptica, Wavyleaf silktassel
Garrya wrightii, Wright silktassel
Genipa clusiifolia, Seven-year-apple
Gleditsia aquatica, Waterlocust
Gleditsia triacanthos, Honeylocust
Gordonia lasianthus, Loblolly-bay
Guaiacum angustifolium, Texas lignumvitae
Guaiacum sanctum, Roughbark lignumvitae
Guapira discolor, Longleaf blolly
Guettarda elliptica, Ellipticleaf velvetseed
Guettarda scabra, Roughleaf velvetseed
Gyminda latifolia, Falsebox

Gymnanthes lucida, Oysterwood
Gymnocladus dioicus, Kentucky coffeetree

H

Halesia carolina, Carolina silverbell
Halesia diptera, Two-wing silverbell
Halesia parviflora, Little silverbell
Hamamelis virginiana, Witch-hazel "
Hamelia patens, Scarletbush
Helietta parvifolia, Barreta
Heteromeles arbutifolia, Toyon
Hibiscus syriacus, Shrub althea hibiscus A
Hippomane mancinella, Manchineel
Holacantha emoryi, Holacantha
Hypelate trifoliata, Hypelate



Ilex ambigua, Carolina holly Ilex amelanchier, Sarvis holly Ilex cassine, Dahoon llex coriacea, Large gallberry Ilex decidua, Possumhaw Ilex krugiana, Tawnyberry holly Ilex laevigata, Smooth winterberry *llex longipes*, Georgia holly Ilex montana, Mountain winterberry llex myrtifolia, Myrtle dahoon llex opaca var. arenicola, Dune holly llex opaca var. opaca, American holly llex verticillata, Common winterberry llex vomitoria, Yaupon Illicium floridanum, Florida anise-tree Illicium parviflorum, Yellow anise-tree



Jacquinia keyensis, Joewood
Juglans californica, Southern California walnut
Juglans cinerea, Butternut
Juglans hindsii, Northern California walnut
Juglans major, Arizona walnut
Juglans microcarpa, Little walnut
Juglans nigra, Black walnut
Juniperus ashei, Ashe juniper
Juniperus californica, Colifornia juniper
Juniperus communis, Common juniper
Juniperus deppeana, Alligator juniper
Juniperus erythrocarpa, Redberry juniper
Juniperus flaccida, Drooping juniper
Juniperus monosperma, Oneseed juniper
Juniperus monosperma, Oneseed juniper

Juniperus osteosperma, Utah juniper Juniperus pinchotii, Pinchot juniper Juniperus scopulorum, Rocky Mountain juniper Juniperus silicicala, Southern redcedar Juniperus virginiana, Eastern redcedar

K

Kalmia latifolia, Mountain-laurel Koeberlinia spinosa, Allthorn Krugiodendron ferreum, Leadwood

Laguncularia racemosa, White-mangrove Larix decidua, European larch△ Larix Ioricina, Tamarack Larix Iyallii, Subalpine larch Larix occidentalis, Western larch Leitneria floridana, Corkwood Leucaena pulverulenta, Great leucaena Leucaena retusa, Littleleaf leucaena Libocedrus decurrens, Incense-cedar Licaria triandra, Florida licaria Ligustrum japonicum, Japanese privet∆ Ligustrum ovalifolium, California privet∆ Ligustrum sinense, Chinese privet∆ Lindera benzoin, Spicebush Liquidambar styraciflua, Sweetgum Liriodendron tulipifera, Yellow-poplar Lithocarpus densiflorus, Tanoak Lyonia ferruginea, Tree Iyonia Lyonothamnus floribundus, Lyontree *Lysiloma latisiliquum*, Bahama lysiloma Lysiloma microphyllum, Littleleaf lysiloma

M

Maclura pomifera, Osage-orange Magnolia acuminata, Cucumbertree magnolia Magnolia ashei, Ashe magnolia Magnolia fraseri, Fraser magnolia Magnolia grandiflora, Southern magnolia Magnolia macrophylla, Bigleaf magnolia Magnolia pyramidata, Pyramid magnolia Magnolia tripetala, Umbrella magnolia Magnolia virginiana, Sweetbay magnolia Malus angustifolia, Southern crab apple Malus coronaria, Sweet crab apple Malus fusca, Oregon crab apple Malus ioensis, Prairie crab apple Malus sylvestris, Common apple∆ Mangifera indica, Mango∆ Manilkara bahamensis, Wild-dilly

Manilkara zapota, Sapodilla∆ Mastichodendron foetidissimum, False-mastic Maytenus phyllanthoides, Florida mayten Melaleuca quinquenervia, Cajeput-tree∆ Melia azedarach, Chinaberry∆ Metopium toxiferum, Florida poisontree Morus alba, White mulberry∆ Morus microphylla, Texas mulberry Morus nigra, Black mulberry∆ Morus rubra, Red mulberry Myrcianthes fragrans var. fragrans, Twinberry stopper (typ.) Myrcianthes fragrans var. simpsonii, Simpson stopper Myrica californica, Pacific bayberry Myrica cerifera, Southern bayberry Myrica heterophylla, Evergreen bayberry Myrica inodora, Odorless bayberry

N

Nectandra coriacea, Florida nectandra
Nemopanthus collinus, Mountain-holly
Nerium oleander, Oleander∆
Nicotiana glauca, Tree tobacco
Nolina bigelovii, Bigelow nolina
Nyssa aquatica, Water tupelo
Nyssa ogeche, Ogeechee tupelo
Nyssa sylvatica var. biflora, Swarmp tupelo
Nyssa sylvatica var. sylvatica, Black tupelo (typ.)

Myrica pensylvanica, Northern bayberry



Olneya tesata, Tesota
Opuntia brasiliensis, Brazil pricklypear∆
Opuntia ficus-indica, Indian-fig∆
Opuntia fulgida, Jumping cholla
Osmanthus americanus, Devilwood
Ostrya chisosensis, Chisos hophornbeam
Ostrya knowltonii, Knowlton hophornbeam
Ostrya virginiana, Eastern hophornbeam
Oxydendrum arboreum, Sourwood



Parkinsonia aculeata, Jerusalem-thorn
Paulownia tomentosa, Royal paulownia△
Persea americana, Avocado△
Persea borbonia var. borbonia, Redbay
Persea borbonia var. humilis, Silkbay
Persea borbonia var. pubescens, Swampbay
Picea abies, Norway spruce△
Picea brewerana, Brewer spruce
Picea engelmannii, Engelmann spruce

Picea glauca var. densata, Black Hills spruce Picea glauca var. glauca, White spruce Picea mariana, Black spruce Picea pungens, Blue spruce Picea rubens, Red spruce Picea sitchensis, Sitka spruce Picramnia pentandra, Bitterbush Pinckneya pubens, Pinckneya Pinus albicaulis, Whitebark pine Pinus aristata vor. aristata, Colorado bristlecone pine Pinus aristata var. longaeva, Intermountain bristlecone pine Pinus attenuata, Knobcone pine Pinus balfouriana, Foxtail pine Pinus banksiana, Jack pine Pinus cembroides, Mexican pinyon pine Pinus clausa, Sand pine Pinus contorta var. bolanderi, Bolander's pine Pinus contorta var. contorta, Shore pine Pinus contorta var. latifolia, Lodgepole pine Pinus contorta var. murrayana, Sierra lodgepole pine Pinus coulteri, Coulter pine

Pinus discolor, Border pinyon pine Pinus echinata, Shortleaf pine Pinus edulis, Pinyon (two-leaf) pine Pinus edulis var. fallax, Fallax pinyon pine Pinus elliottii var. densa, South Florida slash pine Pinus elliottii var. elliottii, Slash pine (typ.) Pinus engelmannii, Apache pine Pinus flexilis, Limber pine Pinus glabra, Spruce pine Pinus jeffreyi, Jeffrey pine Pinus lambertiana, Sugar pine Pinus leiophylla var. chihuahuana, Chihuahua pine Pinus monophylla, Singleleaf pinyon pine Pinus monticola, Western white pine Pinus muricata, Bishop pine Pinus nigra, Austrian pine∆ Pinus palustris, Longleaf pine Pinus ponderosa var. arizonica, Arizona pine Pinus ponderosa var. ponderosa, Ponderosa pine Pinus ponderosa var. scopulorum, Rocky Mountain ponderosa pine Pinus pungens, Table Mountain pine Pinus quadrifolia, Parry pinyon pine

Pinus radiata, Monterey pine

Pinus sabiniana, Digger pine

Pinus resinosa, Red pine

Pinus rigida, Pitch pine

Pinus serotina, Pond pine Pinus strobiformis, Southwestern white pine Pinus strobus, Eastern white pine Pinus sylvestris, Scotch pine∆ Pinus taeda, Loblolly pine Pinus torreyana, Torrey pine Pinus virginiana, Virginia pine Pinus washoensis, Washoe pine Piscidia piscipula, Florida fishpoison-tree Pisonia rotundata, Pisonia Pistacia texana, Texas pistache Pithecellobium flexicaule, Ebony blackbead Pithecellobium guadalupense, Guadeloupe blackbead Pithecellobium pallens, Huajillo Pithecellobium unguis-cati, Catclaw blackbead

Prosopis glandulosa var. glandulosa, Honey mesquite (typ.) Prosopis glandulosa var. torreyana, Western honey mesquite Prosopis pubescens, Screwbean mesquite Prosopis velutina, Velvet mesquite Prunus alleghaniensis, Allegheny plum Prunus americana, American plum Prunus angustifolia, Chickasaw plum Prunus avium, Mazzard cherry∆ Prunus caroliniana, Carolina laurelcherry Prunus cerasus, Sour cherry∆ Prunus domestica, Garden plum∆ Prunus emarginata, Bitter cherry Prunus fremontii, Desert apricot

chokecherry cherry Prunus virginiana var. virginiana, Chokecherry cherry (typ.) Pseudophoenix sargentii, Buccaneer-palm Pseudotsuga macrocarpa, Bigcone Douglas-fir Pseudotsuga menziesii var. glauca, Rocky Mountain Douglas-fir Pseudotsuga menziesii var. menziesii, Coast Douglas-fir Psidium guajava, Guava∆ Psidium longipes, Long-stalk stopper Ptelea crenulata, California hoptree Ptelea trifoliata, Common hoptree Pyrus communis, Common pear A



Quercus agrifolia, Coast live oak Quercus alba, White oak Quercus arizonica, Arizona white oak Quercus arkansana, Arkansas oak Quercus bicolor, Swamp white oak Quercus chapmanii, Chapman oak Quercus chrysolepis, Canyon live oak Quercus coccinea, Scarlet oak Quercus douglassii, Blue oak Quercus dunnii, Dunn oak Quercus durandii var. breviloba, Bigelow oak Quercus durandii var. durandii, Durand oak (typ.) Quercus ellipsoidalis, Northern pin oak Quercus emoryi, Emory oak Quercus engelmannii, Engelmann oak Quercus falcata var. falcata, Southern red oak Quercus falcata var. pagodifolia, Cherrybark oak Quercus gambelii, Gambel oak Quercus garryana, Oregon white oak Quercus georgiana, Georgia oak Quercus glaucoides, Lacey oak Quercus graciliformis, Chisos oak Quercus gravesii, Graves oak Quercus grisea, Gray oak Quercus harvardii, Harvard oak Quercus hemisphaerica, Darlington oak Quercus hypoleucoides, Silverleaf oak Quercus ilicifolia, Bear oak Quercus imbricaria, Shingle oak Quercus incana, Bluejack oak Quercus kelloggii, California black oak Quercus laevis, Turkey oak Quercus laurifolia, Laurel oak Quercus lobata, Valley oak Quercus lyrata, Overcup oak

Quercus macdonaldii, McDonald oak Quercus macrocarpa, Bur oak Quercus marilandica, Blackjack oak Quercus michauxii, Swamp chestnut oak Quercus mohriana, Mohr oak Quercus muehlenbergii, Chinkapin oak Quercus myrtifolia, Myrtle oak Quercus nigra, Water oak Quercus nuttallii, Nuttall oak Quercus oblongifolia, Mexican blue oak Quercus oglethorpensis, Oglethorpe oak Quercus palustris, Pin oak Quercus phellos, Willow oak Quercus prinus, Chestnut oak Quercus pungens var. pungens, Sandpaper oak (typ.) Quercus pungens var. vaseyana, Vasey oak

Quercus robur, English oak∆ Quercus rubra, Northern red oak Quercus rugosa, Netleaf oak Quercus shumardii var. shumardii, Shumard oak (typ.) Quercus shumardii var. texana, Texas oak

Quercus stellata var. margaretta, Sand post oak Quercus stellata var. paludosa, Delta post oak Quercus stellata var. stellata, Post oak (typ.) Quercus tourneyi, Tourney ook Quercus turbinella var. ajoensis, Ajo oak Quercus turbinella var. turbinella, Turbinella oak (typ.)

Quercus velutina, Black oak Quercus virginiana var. fusiformis, Texas live oak Quercus virginiana var. geminata, Sand live oak Quercus virginiana var. virginiana, Live oak (typ.) Quercus wislizeni, Interior live oak



Rapanea punctata, Florida rapanea Revnosia septentrionalis, Darling-plum Rhamnus betulifolia, Birchleaf buckthorn Rhamnus californica, California buckthorn Rhamnus caroliniana, Carolina buckthorn Rhamnus cathartica, European buckthorn∆ Rhamnus crocea, Hollyleaf buckthorn Rhamnus frangula, Glossy buckthorn∆ Rhamnus purshiana, Cascara buckthorn Rhizophora manale, Red mangrove Rhododendron catawbiense, Catawba rhododendron Rhododendron macrophyllum, Pacific rhododendron Rhododendron maximum, Rosebay rhododendron Rhodomyrtus tomentosa, Downy-myrtle∆



Liriodendron tulipifera (Yellow-poplar), Virginia

Planera aavatica, Water-elm Platanus occidentalis, Sycamore Platanus racemosa, California sycamore Platanus wrightii, Arizona sycamore Poncirus trifoliata, Trifoliate-orange△ Populus alba, White poplar∆ Populus angustifolia, Narrowleaf cottonwood Populus balsamifera, Balsam poplar Populus deltoides var. deltoides, Eastern cottonwood Populus deltoides var. occidentalis, Plains cottonwood Populus fremontii var. fremontii, Freemont cottony,pod (typ.) Populus fremontii var. mesetae, Meseta cottonwood Populus fremontii var. wislizeni, Rio Grande cottonwood Populus arandidentata, Bigtooth aspen Populus heterophylla, Swamp cottonwood Populus tremuloides, Quaking aspen

Populus trichocarpa, Black cottonwood

ain

Prunus hortulana, Hortulan plum Prunus ilicifolia, Hollyleaf cherry Prunus laurocerasus, English laurelcherry∆ Prunus Iyonii, Catalina cherry Prunus mahaleb, Mahaleb cherry∆ Prunus mexicana, Mexican plum Prunus munsoniana, Wildgoose plum Prunus myrtifolia, West Indies cherry Prunus nigra, Canada plum Prunus pensylvanica, Pin cherry Prunus persica, Peach∆ Prunus serotina var. alabamensis, Alabama black cherry Prunus serotina var. eximia, Escarpment cherry Prunus serotina var. rufula. Southwestern black cherry Prunus serotina var. serotina, Black cherry (typ.) Prunus subcordata, Klamath plum Prunus umbellata, Flatwoods plum Prunus virginiana var. melanocarpa, Western

Rhus choriophylla, Mearns sumac Rhus copallina var. copallina, Shining sumac (typ.) Rhus copallina var. leucantha, Southern sumac Rhus glabra, Smooth sumac Rhus integrifolia, Lemonade sumac Rhus kearneyi, Kearney sumac Rhus lanceolata, Prairie sumac Rhus laurina, Laurel sumac Rhus microphylla, Littleleaf sumac Rhus ovata, Sugar sumac Rhus typhina, Staghorn sumac Rhus virens, Evergreen sumac Ricinus communis, Castorbean∆ Robinia kelseyi, Kelsey locust Robinia neomexicana, New Mexico locust Robinia pseudoacacia, Black locust Robinia viscosa, Clammy locust Roystonea elata, Florida royalpalm

S

Sabal mexicana, Mexican palmetto Sabal minor, Dwarf palmetto Sabal palmetto, Cabbage palmetto Salix alaxensis, Feltleaf willow Salix alba, White willow△ Salix amygdaloides, Peachleaf willow Salix arbusculoides, Littletree willow Salix babylonica, Weeping willow∆ Salix bebbiana, Bebb willow Salix bonplandiana, Bonpland willow Salix caroliniana, Coastal plain willow Salix discolor, Pussy willow Salix exigua, Sandbar willow Salix floridana, Florida willow Salix fluviatilis, River willow Salix fragilis, Crack willow△ Salix geyerana, Gever willow Salix gooddingii, Goodding willow Salix hindsiana, Hinds willow Salix hookerana, Hooker willow Salix lasiandra, Pacific willow Salix lasiolepis, Arroyo willow Salix lucida, Shining willow Salix lutea, Yellow willow Salix mackenzieana, Mackenzie willow Salix melanopsis, Dusky willow Salix nigra, Black willow Salix pellita, Satiny willow Salix petiolaris, Meadow willow Salix purpurea, Purple-osier willow△ Salix pyrifolia, Balsam willow

Salix scoulerana, Scouler willow
Salix sericea, Silky willow
Salix serissima, Autumn willow
Salix sessilifolia, Northwest willow
Salix sitchensis, Sitka willow
Salix taxifolia, Yewleaf willow
Salix tracyi, Tracy willow
Salix viminalis, Basket willow∆
Sambucus callicarpa, Pacific red elder
Sambucus canadensis var. canadensis,
American elder



Aesculus octandra (Yellow buckeye), Tennessee

Sambucus canadensis var. laciniata, Florida elder Sambucus cerulea, Blue elder Sambucus melanocarpa, Blackbead elder Sambucus mexicana, Mexican elder Sambucus velutina, Velvet elder Sapindus drummondii, Western soapberry Sapindus saponaria, Wingleaf soapberry Sapium biloculare, Jumping-bean sapium Sapium sebiferum, Tallowtree△ Sassafras albidum, Sassafras Savia bahamensis, Maidenbush Schaefferia frutescens, Florida-boxwood Schinus molle, Peppertree△ Schinus terebinthifolia, Brazil peppertree∆ Schoepfia chrysophylloides, Graytwig Sequoia sempervirens, Coast redwood Sequoiadendron giganteum, Giant sequoia Serenoa repens, Saw-palmetto Shepherdia argentea, Silver buffaloberry . Simarouba glauca, Paradise-tree Solanum erianthum, Mullein nightshade Sophora affinis, Texas sophora Sophora secundiflora, Mescalbean sophora

Sorbus americana, American mountain-ash Sorbus aucuparia, European mountain-ash Sorbus decora, Showy mountain-ash Sorbus scopulina, Greene mountain-ash Sorbus sitchensis, Sitka mountain-ash Staphylea bolanderi, Sierra bladdernut Staphylea trifolia, American bladdernut Stewartia malacodendron, Virginia stewartia Stewartia ovata, Mountain stewartia Styrax americanus, American snowbell Stryax grandifolius, Bigleaf snowbell Stryax grandifolius, Sycamore-leaf snowbell Suriana maritima, Baycedar Swietenia mahagoni, West Indies mahogany Symplocos tinctoria, Sweetleaf

T

Tamarindus indica, Tamarind∆ Tamarix chinensis, Tamarisk∆ Tamarix gallica, French tamarisk∆ Tamarix parviflora, Small-flower tamarisk∆ Taxodium distichum var. distichum, Baldcypress (typ.) Taxodium distichum var. nutans, Pondcypress Taxodium mucronatum, Montezuma baldcypress Taxus brevifolia, Pacific yew Taxus floridana, Florida yew Tecoma stans, Yellow-elder Terminalia catappa, India-almond∆ Tetrazygia bicolor, Florida tetrazygia Thespesia populnea, Portiatree∆ Thrinax morrisii, Key thatchpalm Thrinax radiata, Florida thatchpalm Thuja occidentalis, Northern white-cedar Thuja orientalis, Oriental arborvitae△ Thuja plicata, Western redcedar Tilia americana, American basswood Tilia caroliniana, Carolina basswood Tilia heterophylla, White basswood Torreya californica, California torreya Torreya taxifolia, Florida torreya Toxicodendron vernix, Poison-sumac Trema lamarckiana, West Indies trema Trema micrantha, Florida trema Tsuga canadensis, Eastern hemlock Tsuga caroliniana, Carolina hemlock Tsuga heterophylla, Western hemlock Tsuga mertensiana, Mountain helmock



Ulmus alata, Winged elm Ulmus americana, American elm Ulmus americana var. floridana, Florida elm Ulmus crassifolia, Cedar elm Ulmus pumila, Siberian elm∆ Ulmus rubra, Slippery elm Ulmus serotina, September elm Ulmus thomasii, Rock elm Ulmus thomasii, Rock elm Ulmus acalifornica, California-laurel Ungnadia speciosa, Mexican-buckeye



Vaccinium arboreum, Tree sparkleberry
Vauquelinia californica, Torrey vauquelinia
Vauquelinia pauciflora, Fewflower vauquelinia
Viburnum lentago, Nannyberry
Viburnum nudum, Possumhaw viburnum
Viburnum obovatum, Walter viburnum
Viburnum prunifolium, Blackhaw
Viburnum rufidulum, Rusty blackhaw
Viburnum trilobum, American cranberrybush
Vitex agnus-castus, Common chastetree



Washingtonia filifera, California (fanpalm) washingtonia



Ximenia americana, Tallowwood



Yucca aloifolia, Aloe yucca
Yucca brevifolia, Joshua-tree
Yucca carnerosana, Carneros
(Spanish-dagger) yucca
Yucca elata, Soaptreee yucca
Yucca faxoniana, Faxon yucca
Yucca gloriosa, Moundlily yucca
Yucca rostrata, Beaked yucca
Yucca schidigera, Mojave yucca
Yucca schottii, Schott yucca
Yucca torreyi, Torrey yucca
Yucca treculeana, Trecul yucca

Z

Zanthoxylum americanum, Common prickly-ash
Zanthoxylum clava-herculis, Hercules-club
Zanthoxylum coriaceum, Biscayne prickly-ash
Zanthoxylum fagara, Lime prickly-ash
Zanthoxylum flavum, West Indies satinwood
Zanthoxylum hirsutum, Texas hercules-club
Ziziphus jujuba, Common jujube∆
Ziziphus obtusifolia, Lotebush

ACACIA

Long-spine, Acacia macrocantha (Fla.)**

APRICOT

Desert, Prunus fremontii (Calif.)

ARAUCARIA

Cunningham, Araucaria cunninghamii (Hawaii)

ASH

Chihuahua, *Franxinus papillasa* (Tex., N. Mex., Ariz.)

Fragrant, *Franxinus cuspidata*, (Tex., N. Mex. Ariz.). Gregg, *Franxinus greggii* (Tex.)

BAYBERRY

Evergreen, Myrica heterophylla (N.J., Pa., Del.)

BITTERBUSH

Picramnia pentrandra (Fla.)

BLACKBEAD

Catclaw, Pithecellobium unguis-cati (Fla.)

BLACK-CALABASH

Amphitecna latifolia (Fla.)

BUCKTHORN

Birchleaf, Rhamnus betulifolia (Tex., N. Mex. Ariz.)

BURNINGBUSH

Western, Evonymus occidentalis (Wash., Ore.)

CAPER

Limber, Capparis flexuosa (Fla.)

CEANOTHUS

Feltleaf, *Ceanothus arboreus* (Calif.) Greenbark, *Ceanothus spinosus* (Calif.)

CERCOCARPUS

Catalina, Cercocarpus traskiae (Calif.)

COCOPLUM

Chrysobalanus icaco (Fla.)

COLUBRINA

Coffee, Colubrina arborescens (Fla.) Cuba, Colubrina cubensis (Fla.)

CYPRESS

Santa Cruz, Cupressus goveniana var. abramsiana (Calif.)

DOWNY-MYRTLE

Rhodomyrtus tomentosa∆ (Fla.)

ELDER

Velvet, Sambucus velutina (Calif., Nev., Ariz.)

FIDDLEWOOD

Berlandier, Citharexylum berlandieri (Tex.)

FIR

Bristlecone, *Abies bracteata* (Colo., Idaho, Ore., Calif.)

FORESTIERA

Texas, Forestiera angustifolia (Tex.)

FREMONTIA

Mexican, Fremontodendron mexicanum (Calif.)

GUAVA

Psidium guajava∆ (Fla., Calif.)

HAWTHORN

Barberry, Crataegus berberifolia (III., Kan., Tex., Miss., Ky., Mo., La., Ark.) Brainerd, Crataegus brainerdii (Mich., Ohio, Pa.) Broadleaf, Crataegus dilatata (N.Y., Vt., N.H.)

Fireberry, Crataegus chrysocarpa (Maine, Wyo.)

Gregg, Crataegus greggiana (Tex.)
Harbison, Crataegus harbisonii (Tenn., Ala., Miss.)
Pensacola, Crataegus lacrimata (Fla.)
Reverchon, Crataegus reverchonii (Mo., Kan.)
Texas, Crataegus texana (Tex.)

Threeflower, Crataegus triflora (Ga., Ala., Miss.)
Tracy, Crataegus tracyi (Tex.)

Willow, Crataegus saligna (Colo.)

HOLACANTHA

Holacantha emoryi (Tex.)

HOLLY

Dune, *llex opaca* var. *arenicola* (Fla.) Tawnyberry, *llex krugiana* (Fla.)

JUNIPER

Redberry, Juniperus erythrocarpa (Tex., N. Mex., Ariz.)

KIDNEYWOOD

Texas, Eysenhardtia texana (Tex.)

LICARIA

Florida, Licaria triandra (Fla.)

LIME

Citrus aurantifolia∆ (Fla.)

LOCUST

Kelsey, Robinia kelseyi (N.C., Tenn., Ky.)

LYONTREE

Lyonothamnus floribundus (Calif.)

MAIDENBUSH

Savia bahamensis (Flg.)

MARLBERRY

Ardisia escallonioides (Fla.)

MEXICAN-BUCKEYE

Ungnadia speciosa (Tex., N. Mex.)

NECTANDRA

Florida, Nectandra coriacea (Fla.)

NIGHTSHADE

Mullein, Solanum erianthum (Fla., Ala., La.)

OAK

McDonald, *Quercus macdonaldii* (Calif.) Mohr, *Quercus mohriana* (Okla., Tex., N. Mex.) Oregon white, *Quercus garryana* (Wash., Ore., Calif.)

Sandpaper (typ.), *Quercus pungens* var. pungens (Tex., N. Mex.)

ORANGE

Citrus sinensis Δ (Fla.) Sour, Citrus aurantium Δ (Fla., Ga.)

PALMETTO

Dwarf, *Sabal minor* (N.C., Fla., Tex., Okla., Ariz.)

PAWPAW

Bigflower, Asimina obovata (N.C., S.C., Ga., Fla.)

PINE

Fallax pinyon, *Pinus edulis* var. *fallax* (Colo., Utah)

PISTACHE

Texas, Pistacia texana (Tex.)

PRICKLY-ASH

Biscayne, Zanthoxylum coriaceum (Fla.)

PRICKLYPEAR

Brazil, Opuntia brasiliensis∆ (Fla.)

SAPIUM

Jumping-bean, Sapium biloculare (N. Mex., Ariz., Colif.)

SEVEN-YEAR-APPLE

Genipa clusiifolia (Fla.)

SNOWBELL

American, *Styrax americanus* (Va., N.C., S.C., Ga.)

Sycamore-leaf, Styrax platanifolius (Tex.)

STOPPER

Long-stalk, Psidium longipes (Fla.) Twinberry (typ.), Myrcianthes fragrans var. fragrans (Fla.)

SUGAR-APPLE

Annona squamosa∆ (Fla.)

SUMAC

Kearney, Rhus kearneyi (Calif.) Laurel, Rhus laurina (Calif.) Lemonade, Rhus integrifolia (Calif.) Littleleaf, Rhus microphylla (Tex., Okla., N.Mex., Ariz.)

TAMARISK

French, Tamarix gallica∆ (Tex., La.)

TETRAZYGIA

Florida, Tetrazygia bicolor (Fla.)

TORCHWOOD

Balsom, Amyris balsamifera (Fla.)

TREMA

West Indies, Trema lamarckiana (Fla.)

VAUQUELINIA

Fewflower, Vauquelinia pauciflora (Ariz.)

WHITE-MANGROVE

Laguncularia racemosa (Fla.)

WILLOW

Balsam, *Salix pyrifolia* (Minn., Wis., Mich., N.Y., Maine)

Basket, *Salix viminalis* (Mass., Maine, Conn., R.I., Vt.)

Dusky, *Salix melanopsis* (Wash., Ore., Utah, Calif., Wya.)

Feltleaf, Salix alaxensis (Alaska)

Geyer, *Salix geyerana* (Mont., Ariz., Colo., Wyo.)

Littletree, Salix arbusculoides (Alaska)

Northwest, Salix sessilifalia (Wash., Ore.) River, Salix fluviatilis (Maine, Minn., S.D., Kan., Va.)

Satiny, Salix pellita (Minn., Wis., Mich., N.Y., Maine, Vt., N.H.)

YELLOW-ELDER

Tecoma stans (Tex., N. Mex., Ariz.)

YUCCA

Aloe, Yucca aloifolia (N.C., S.C., Ga., Alo., Fla.)

**Indicates states in which species can be found

CHAMPS BY STATE

ALABAMA

ANISE-TREE, Florida BAYBERRY, Odorless ELM, September HICKORY, Carolina HICKORY, Nutmea

HOLLY, American

OAK, Laurel OAK, Swamp chestnut* SPARKLEBERRY, Tree*

SUMAC, Staghorn WHITE-CEDAR, Atlantic

ALASKA

BIRCH, Alaska paper* (2) BIRCH, Kenai

ARIZONA

ACACIA, Blackbrush*† (2)

ALLTHORN ASH, Goodding

ASH, Lowell†

ASH, Velvet

ASPEN, Quaking*

CANOTIA

CASTORBEANA†

CERCOCARPUS, Hairy

CHERRY, Southwestern black* (2)

CHOLLA, Jumping CONDALIA, Bitter

CORALBEAN, Southwestern

COTTONWOOD, Fremont

CYPRESS, Arizona (typ.)

CYPRESS, Arizona smooth

CYRILLA, Littleleaft

DESERT-WILLOW

ELDER, Mexican

ELEPHANT-TREE*

EUCALYPTUS, Longbeak△

FORESTIERA, Desert-olive

HACKBERRY, Spiny

HOPHORNBEAM, Knowlton

HUISACHILLO

INDIAN-FIG△ JERUSALEM-THORN

JUNIPER, Alligator*

KIDNEYWOOD

LOCUST, New Mexico

LOTEBUSH

LYSILOMA, Littleleaf

MADRONE, Arizona

MANZANITA, Pringle

MAPLE, Canyon

MESQUITE, Velvet

MULBERRY, Texas

NOLINA, Bigelow OAK, Ajo

OAK, Arizona white

OAK, Dunn*

OAK, Emory* (2)

OAK, Netlenf

OAK, Silverleaf OAK, Tourney

PALOVERDE, Yellow†

PINE, Apache* (2)

PINE, Arizona

PINE, Border pinyon†

PINE, Chihuahua SAGUARO* (4)

SILKTASSEL, Wright

SUMAC, Mearns

SUMAC, Sugar SYCAMORE, Arizono*

TESOTA

TREE TOBACCO

VAUQUELINIA, Torrey

WILLOW, Bondland

WILLOW, Yewleaf

YUCCA, Schott YUCCA, Soaptree

ARKANSAS

BLACKHAW, Rusty* CHINKAPIN, Florida JUNIPER, Alligator* MAGNOLIA, Sweetbay PERSIMMON, Common*

PINE, Loblolly

CALIFORNIA

ALDER, White ASH, Two-petal AVOCADO∆

BAYBERRY, Pocifict BLADDERNUT, Sierro

BUCKEYE, California BUCKTHORN, California

BUCKTHORN, Hollyleaf

BUTTONBUSH

CALIFORNIA-LAUREL CHERRY, Catalina

CHERRY, Hollyleaf

CHINKAPIN, Giant

CYPRESS, Cuyamaca CYPRESS, Gowen

CYPRESS, MacNah

CYPRESS, Mendocino

CYPRESS, Monterey

CYPRESS, Piute* (2)

CYPRESS, Sargent

CYPRESS, Tecate DOGWOOD, Blackfruit†

DOUGLAS-FIR, Bigcone ELDER, Blue

ELEPHANT-TREE*

EUCALYPTUS, Bluegum△

FIR, California red FIR, California white

FIR, Grand

FLOWERFENCE*△

FREMONTIA, California

HOPTREE, California INCENSE-CEDAR

JOSHUA-TREE

JUNIPER, California

JUNIPER, Utah

JUNIPER, Western

MADRONE, Pacific MANZANITA, Big

MANZANITA, Bigberry MANZANITA, Whiteleaf

MESQUITE, Western honey

OAK, Blue

OAK, Canyon live

OAK, Coast live OAK, Dunn*

OAK, Engelmann

OAK, Interior live

OAK, Valley OLEANDERA

PALOVERDE, Blue

PARASOLTREE, Chinese△†

PEPPERTREE_

PINE, Bishop

PINE, Bolander's

PINE, Coulter PINE, Digger

PINE, Foxtail

PINE, Intermountain bristlecone

PINE, Jeffrey PINE, Knobcone

PINE, Monterey PINE, Parry pinyon

PINE, Ponderosa* (2)

PINE, Sierra lodgepole

PINE, Singleleaf pinyon PINE, Sugar

PINE, Torrey

PINE, Washoe PINE, Western white

PRIVET, Chinese△

REDBUD, California REDSHANK

REDWOOD, Coast* (3)

RHODODENDRON, Pacific SEQUOIA, Giant

SERVICEBERRY, Utah†

SMOKETHORN

SPRUCE, Brewer SYCAMORE, California TORREYA, California

TOYON

WALNUT, Northern California

WALNUT, Southern California

WILLOW, Pacifict

YUCCA, Mojave

ASH, Singleleaf (typ.) COTTONWOOD, Plains ELM, Siberian A

BUTTERNUT OAK, Black TAMARACK

ALVARADOA, Mexicun ANISE-TREE, Yellow ASH, Carolina BACCHARIS, Eastern*†

BAYCEDAR

BLACKBEAD, Guadeloupe

BLOLLY, Longleaf

BUMELIA, Tough BUSTIC, Willow

BYRSONIMA, Key

CAPER, Jamaica

CHERRY, West Indies

CINNECORD CLUSIA, Florida

CORKWOODT

CUPANIA, Florido

CYRILLA, swamp (typ.)† DAHOON, Myrtle

DARLING-PLUM

DEVILWOOD

ELM, Cedar*

WASHINGTONIA, California (fanpalm)*(3)

YUCCA, Moundlilly

COLORADO

HAWTHORN, Cerro

CONNECTICUT

TUPELO, Black*

FLORIDA

BASSWOOD, Carolina

BLACK-MANGROVE

BUCCANEER-PALM

BUCIDA△ BUCKWHEAT-TREE* (2)

BUTTON-MANGROVE

CAJEPUT-TREEA

CAMPHOR-TREE△ CANELLA

CHERRY, Alabama black

CHINKAPIN, Allegheny

CORALBEAN, Southeastern CROSSPETALUM, Floridat

CYPRESS-PINE, Blue△

DAHOON* (4)

DOGWOOD, Swamp*

ELDER, Florida ELM, Florida* (2) **FALSEBOX**

FALSE-MASTIC FIDDLEWOOD, Florida

FIG, Florida strangler FIG, Shortleaf

FISHPOISON-TREE, Florida

FLORIDA-BOXWOOD FLORIDA-PRIVET

FLOWERFENCE* FRINGETREE*

GEIGER-TREE△ **GRAYTWIGT**

GUIANA-PLUM GUMBO-LIMBO* (3)

HAWTHORN, Beautiful HAWTHORN, Oneflower

HIBISCUS, Sea A HICKORY, Scrub

HICKORY, Water* HOLLY, Carolina

HOPBUSH HYPELATE* (2) INDIA-ALMONDA

INKWOOD

JOEWOOD

LAURELCHERRY, Carolina* LEADWOOD LIDFLOWER, Pale LIGNUMVITAE, Roughbark

LOBLOLLY-BAY LYONIA, tree LYSILOMA, Bahama

MAGNOLIA, Pyramid* (2) MAHOGANY, West Indies MANCHINEEL

MANGROVE, Red MAYTEN, Florida* (2) MILKBARK

MYRTLE-OF-THE-RIVER† OAK, Bluejack OAK, Chapman

OAK, Myrtle OAK, Sand live* (2) OAK, Sand post

OAK, Turkey OYSTERWOOD PALMETTO, Cabbaget

PAPAYA∆ PAPER-MULBERRY A PARADISE-TREE

PAUROTIS-PALM* (2) PAWPAW, Smallflower PEPPERTREE, Brozila

PIGEON-PLUM PINCKNEYA PINE, Pond

CHAMPS BY STATE

PINE, Sand PINE, Slash (typ.) PINE, South Florida slash PISONIA PLUM, American PLUM, Flatwoods POINCIANA, Royal POISONTREE, Florida POND-APPLE POSSUMHAW* PRICKLY-ASH, Lime PRINCEWOOD† RAPANEA, Florida REDBAY REDCEDAR, Southern ROYALPALM, Florida SAPODILLA*△ (2) SATINLEAF SATINWOOD, West Indies SAW-PALMETTO* (2) SCARLETBUSH SEAGRAPE SILKBAY SILKTREE, MimosoA SILVERBELL, Little† SILVERPALM, Florida* (2) SOAPBERRY, Wingleaf SOLDIERWOOD* (3) STEWARTIA, Virginia* STOPPER, Boxleaf* (2)† STOPPER, Redt STOPPER, Redberry STOPPER, Simpson STOPPER, White* (2) STRONGBACK, Bohomo STRONGBACK, Rough SUMAC, Southern TALLOWWOOD† TAMARIND A THATCHPALM, Florida THATCHPALM, Kev TORCHWOOD TREE-CACTUS, Deering TREE-CACTUS, Key* (2)† TREMA, Florida TUPELO, Ogeechee* (2) VELVETSEED, Elliptic-leaf VELVETSEED_Roughleaf† VIBURNUM, Walter WILD-DILLY WILLOW, Florida YAUPON†

П

VIBURNUM, Wolter
WILD-DILLY
WILLOW, Florida
YAUPON†
YEW, Florida
GEORGIA
BACCHARIS, Eastern*†
BUCKEYE, Painted†

ELLIOTTIA HACKBERRY, Georgia HAWTHORN, Littlehip HICKORY, Pignut JUJUBE, Common*A MAGNOLIA, Bigleaf MAPLE, Chalk MAPLE, Florida MOUNTAIN-LAURELT OAK, Blackjack OAK, Darlington OAK, Durand (typ.) OAK, Georgia OAK, Oglethorpe OAK, Post* OAK, Southern red PERSIMMON, Common* PINE, Longleof PINE, Pitch*

PONDCYPRESS†
REDCEDAR, Eastern
H A W A I I
CASUARINA, Horsetail \(\text{CHINABERRY} \)

PINE, Spruce*

COCONUT, Polm \(\triangle \)
LEBBEK \(\triangle \)
MANGO \(\triangle \)
PORTIATREF \(\triangle \)

IDAHO

BIRCH, Northwestern paper*
BUCKTHORN, Cascara*
CHERRY, Western chokecherry
COTTONWOOD, Eastern
DOGWOOD, Red-osier
HAWTHORN, Columbia
PINE, Lodgepole
PINE, Whitebark
WILLOW, Bebb

WILLOW, Yellow

HACKBERRY, Common HAWTHORN, Pear PLUM, Wildgoose POPLAR, White∆

INDIANA PAULOWNIA, Royal∆

PAULOWNIA, Royal A
SMOKETREE, American*

ALDER, European∆ MAGNOLIA, Cucumbertree

KENTUCKY
ASH, Blue
ASPEN, Bigtooth*
BUCKEYE, Ohio

HAWTHORN, Cockspur* HICKORY, Shagbark* HICKORY, Shellbark OAK, Bur OAK, Chinkapin OAK, Scarlet PINE, Virginia SASSAFRAS

LOUISIANA
BALDCYPRESS, Common
OAK, Live

OAK, Nuttall OAK, Water

PINE, Spruce*

MAINE BIRCH, Yellow

MARYLAND

APPLE, Southern crob BEECH, American CATALPA, Southern CHERRY, Common chokecherry COFFEETREE, Kentucky

HAZEL, Hazelnut HIBISCUS, Shrub altheaƠ HICKORY, Sand* HONEYLOCUST*

MAPLE, Sugar MULBERRY, Black 1 OAK, Swamp white OAK, White PEACH* 2

MASSACHUSETTS
OAK, Northern red*

MICHIGAN

ALDER, Speckled APPLE, Prairie crab ASH, Black ASH, Green

ASPEN, Bigtooth* ASPEN, Quaking* BIRCH, Mountain paper

BIRCH, paper*
BLADDERNUT, American
BOXELDER

BUCKEYE, Red* BUCKTHORN, European∆ BUCKTHORN, Glossy∆

BURNINGBUSH, Eastern CATALPA, Northern*

CHERRY, Sour∆ . CRANBERRYBUSH, American* (3)

DOGWOOD, Gray DOGWOOD, Roundleaf* ELM, American ELM, Rock HAWTHORN, Downy
HOPHORNBEAM, Eastern
HOPTREE, Common
JUNIPER, Common
MAPLE, Black
MAPLE, Mountain
MOUNTAIN-ASH, Showy
MOUNTAIN-HOLLY

NANNYBERRY PINE, Eastern white PINE, Red* PINE, Scotch∆

PLUM, Canada POPLAR, Balsam PRICKLYASH, Common WHITE-CEDAR, Northern WILLOW, Autumn WILLOW, Black

WILLOW, Crack*△ (2) WILLOW, Meadow WILLOW, Purple-osier△

WILLOW, Pussy* WILLOW, Shining

WILLOW, Weeping*∆ (2)

WILLOW, White* Δ (2)

MINNESOTA PINE, Jack PINE, Red*

SPRUCE, White

MISSISSIPPI CHINKAPIN, Ozark

COTTONWOOD, Swamp DOGWOOD, Roughleaf* (2) ELM, Cedar*

HAWTHORN, Parsley HAWTHORN, Riverflat HICKORY, Mockernut MAGNOLIA, Southern OAK, Arkansas

OAK, Willow PINE, Shortleaf PLUM, Mexican

SNOWBELL, Bigleaf SPARKLEBERRY, Tree* SUMAC, Shining

SWAMP-PRIVET

MISSOURI

ASH, Pumpkin BIRCH, Paper* MULBERRY, White∆ PERSIMMON, Common* PLUM, Hortulan

MONTANA LARCH, Western*

PINE, Rocky Mountain ponderosa

NEVADA

CERCOCARPUS, Curlleaf OAK, Turbinella

NEW HAMPSHIRE

APPLE, Common∆ BIRCH, Sweet PINE, Pitch*

NEW JERSEY

DOGWOOD, Alternate-leaf HICKORY, Sand* TUPELO, Black*

NEW WEXICO

ALDER, Arizona
CATCLAW, Gregg
FIR, Corkbark
HACKBERRY, Netleaf
JUNIPER, Oneseed
MADRONE, Texas
OAK, Gambel
OAK, Gray
OAK, Mexicon blue
PINE, Colorado bristlecone* (2)
PINE, Pinyon (two-leaf)
PINE, Southwestern white
SYCAMORE, Arizona*
TAMARISKA

NEW YORK

WALNUT, Arizona

WALNUT, Little*

YUCCA, Torrey

WILLOW, Goodding

ASH, White
HAWTHORN, Konsas
HAWTHORN, Scarlet
HORNBEAM, American
LOCUST, Black
MAPLE, Norway

MAPLE, Striped*
POISON-SUMAC*

SPRUCE, Norway
WINTERBERRY, Mountain

NORTH CAROLINA

ALDER, Hazel* (3)
BASSWOOD, White
BAYBERRY, Northern†
BAYBERRY, Southern*
CHASTETREE, Common (2)
DOGWOOD, Flowering*
ELM, Winged
FIR, Fraser
HEMLOCK, Carolina
LOCUST, Clammy
OAK, Northern red*
OAK, Overcup

CHAMPS BY STATE

PINE, Table Mountain PLUM, Chickasaw PRIVET, California RHODODENDRON, Catawba* (2) SPICEBUSH* (3) SPRUCE, Red* (2) **SWAMPBAY SWEETGUM**

TORREYA, Florida WATER-ELM

WILLOW, Coastal plain

OHIO

ELM, Slippery* (2) OAK, English*△ OAK, Northern pint OAK, Shingle SILVERBELL, Two-wina SMOKETREE, American* YELLOWWOOD

OREGON

ALDER, Red ASH, Oregon

BIRCH, Northwestern paper* BIRCH, Woter

BLUEBLOSSOM, Blue-myrtle BUFFALOBERRY, Silver

CERCOCARPUS, Birchleaf COTTONWOOD, Black

COTTONWOOD, Narrowleaf CYPRESS, Baker DOGWOOD, Pacific

DOUGLAS-FIR, Rocky Mountain

ELDER, Blackbead HAZEL, California HEMLOCK, Mountain MAPLE, Bigleaf

MAPLE, Vine

MOUNTAIN-ASH, Sitka OAK, California black

PLUM, Garden△ PLUM, Klomath

PORT-ORFORD-CEDAR SAGEBRUSH, Big*

SILKTASSEL, Wavyleaf

SPRUCE, Sitka* TANOAK

WALNUT, Black

WILLOW, Arroyo WILLOW, Hinds WILLOW, Hooker

WILLOW, Scouler*

WILLOW, Tracy

PENNSYLVANIA

BASSWOOD, American CHERRY, Mazzard∆ FIR, Balsam

FRANKLINIA HONEYLOCUST* MAGNOLIA, Ashe MAGNOLIA, Umbrella WATERLOCUST

RHODE ISLAND

WILLOW, Pussy*

SOUTH CAROLINA

HICKORY, Shagbark* HICKORY, Water* PERSIMMON, Common* (2) POSSUMHAW* PRIVET, Japanese∆ RHODODENDRON, Rosebay SPARKLEBERRY, Tree* SUGARBERRY TRIFOLIATE-ORANGE*

SOUTH DAKOTA

RUSSIAN-OLIVEA SPRUCE, Black Hills

TENNESSEE

AlLANTHUS, Tree-of-heaven△ BIRCH, River BLACKHAW, Rusty* BUCKEYE, Yellow BUCKTHORN, Carolina* BUMELIA, Buckthorn

CHERRY, Black CHERRY, Pint

DEVILS-WALKINGSTICK HAWTHORN, Washington* HEMLOCK, Eastern

HICKORY, Bitternut HICKORY, Red

HOLLY, Georgia† MAGNOLIA, Frasier MAPLE, Red

MAPLE, Striped* MULBERRY, Red OAK, Chestnut

OAK, Pin OAK, Shumard OAK, Swamp chestnut* SERVICEBERRY, Allegheny

SILVERBELL, Carolina* (3) SPICEBUSH*

TEXAS

ANACAHUITE ANACUA (2)* ASH, Berlandier ASH, Texas BALDCYPRESS, Montezuma

BARRETA BLACKBEAD, Ebony BLUEWOOD

BUCKEYE, Texas BUMELIA, Gum BUMELIA, Saffron-plum

CATCLAW, Roemer CATCLAW, Wright CHERRY, Escarpment COTTONWOOD, Meseta

CAESALPINIA, Mexican

COTTONWOOD, Rio Grande ESENBECKIA, Berlandier

GUAJILLO

HACKBERRY, Lindheimer HAWTHORN, Blueberry HAWTHORN, May HERCULES-CLUB

HERCULES-CLUB, Texast HICKORY, Black HOPHORNBEAM, Chisos

HUAJILLO HUISACHE

JUJUBE, Common*∆ JUNIPER, Ashe

JUNIPER, Drooping JUNIPER, Pinchot LAURELCHERRY, Carolina*

LEUCAENA, Great LEUCAENA, Littleleaf LIGNUMVITAE, Texas MESQUITE, Honey

MESQUITE, Screwbean (2)* OAK, Bigelow OAK, Chisos

OAK, Delta post OAK, Graves (2)* OAK, Havard

OAK, Lacey OAK, Texas OAK, Texas live

OAK, Vasey (2)* PALMETTO, Mexican (2)*

PALOVERDE, Texas PECAN

PERSIMMON, Texas PINE, Mexican pinyon REDBUD, Eastern†

REDBUD, Texas SOAPBERRY, Western SOPHORA, Mescalbean

SOPHORA, Texas (2)* SUMAC, Evergreen SUMAC, Prairie (2)

TALLOWTREE WALNUT, Little* YUCCA, Beaked

YUCCA, Carneros (Spanish-dagger)

YUCCA, Faxon

YUCCA, Trecul

HATU

CERCOCARPUS, Alderleaf† CLIFFROSE FIR, Rocky Mountain white JUNIPER, Rocky Mountain PINE, Limber SPRUCE, Blue

VERMONT

LARCH, European∆ SERVICEBERRY, Roundleaf

VIRGINIA ALDER, Seaside APPLE, Sweet crab ARBORVITAE, Oriental△ ASH, Carolina* BAYBERRY, Southern* (3) BIRCH, Roundleaf BLACKHAW* (2) BUCKEYE, Bottlebrush BUCKEYE, Red* BUCKTHORN, Carolina* DOGWOOD, Flowering* DOGWOOD, Swamp* (2) ELDER, American FRINGETREE* GALLBERRY, Large HAWTHORN, Biltmore HAWTHORN, Cockspur*

HAWTHORN, Fanleaf* (2) HAWTHORN, Frosted* (2) HAWTHORN, Washington* (2) HAWTHORN, Yellow HOLLY, Sarvist OAK, Cherrybark* (2)

OAK, Post* OSAGE-ORANGE PAWPAW, Common

PEACH*△ PLUM, Allegheny* (2) POISON-SUMAC*

SERVICEBERRY, Downy SOURWOOD

STEWARTIA, Virginia* SWEETLEAF* (2)

SYCAMORE TAMARISK, Small-flower TRIFOLIATE-ORANGE*△

TUPELO, Swamp TUPELO, Water

VIBURNUM, Possumhaw† WILLOW, Sandbar

WILLOW, Silky

WINTERBERRY, Common* (2) WINTERBERRY, Smooth† WITCH-HAZEL

YELLOW-POPLAR, Tuliptree

WASHINGTON

ALASKA-CEDAR ALDER, Mountain ALDER, Sitka APPLE, Oregon crab BIRCH, Western paper

BUCKTHORN, Cascara* CATALPA, Northern*

CHERRY, Bitter* (2) CHERRY, Mahaleb A

CHESTNUT, American* (2) DOGWOOD, Smooth*† (2)

DOGWOOD, Western†

DOUGLAS-FIR, Coast ELDER, Pacific red

FIR, Noble* (2) FIR, Pacific silver

FIR, Subalpine HAWTHORN, Black

HAWTHORN, Oneseed△ HEMLOCK, Western

LARCH, Subalpine LARCH, Western*

LAURELCHERRY, English A MAPLE, Rocky Mountain

MOUNTAIN-ASH, European Δ MOUNTAIN-ASH, Greene

OAK, English*△ PEAR, Common A PINE, Austrian∆

PINE, Shore REDCEDAR, Western* (2) SAGEBRUSH, Big*

SERVICEBERRY, Western SPRUCE, Engelmann

SPRUCE, Sitka* STEWARTIA, Mountain

SUMAC, Smooth* (2) WILLOW, Mackenziet

WILLOW, Scouler* WILLOW, Sitka

YEW, Pacific

WEST VIRGINIA

HAWTHORN, Dotted HAWTHORN, Fleshy HAWTHORN, Green MOUNTAIN-ASH, American OAK, Bear

WISCONSIN

BIRCH, Grav MAPLE, Silver SPRUCE, Black WILLOW, Peachleaf

(number) indicates co-champs per state

Wouldn't it be great if a paper and wood products company

forest practices

independently

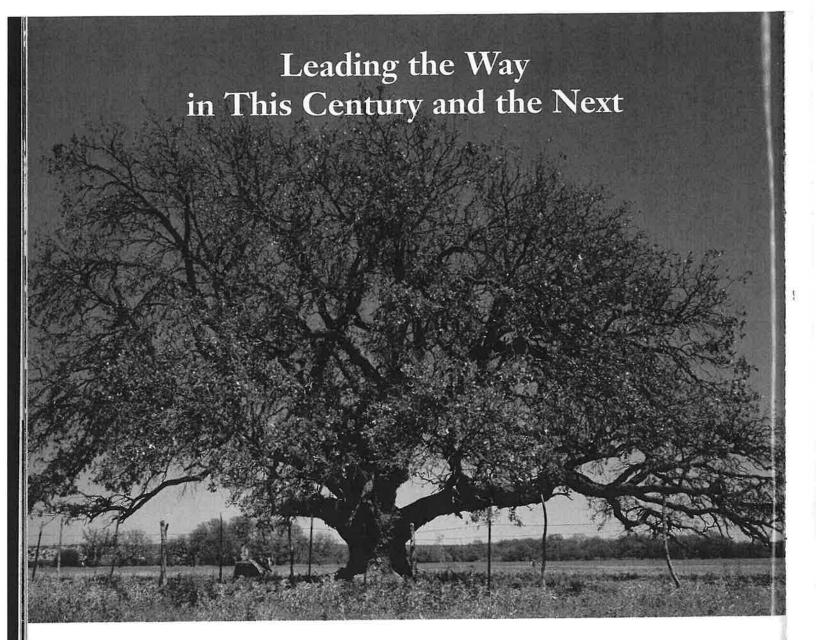
audited?

Champion is doing it.

Today.

On November 14, 1998, Champion became the first paper and wood products company to announce that all of its forest practices in the United States will undergo a third-party review by a team of independent experts. Our pledge is part of our continuing support of the American Forest and Paper Association's Sustainable Forestry Initiative. SFI defines how America's forest product companies properly integrate the growing, nurturing, and harvesting of trees with the conservation of soil, air, water quality, and wildlife and fish habitats. As one of the largest producers of wood, pulp, and paper in the world and one of the largest private forestland owners in the U.S., we have a big stake in protecting the environment. That's why we know it's important for us to provide proof not only of our good intentions, but also our actual performance.





It took root in the 19th century. It flourished in the 20th. And, at the beginning of the 21st, The Davey Tree Expert Company is leading the way.

More than a century ago, John Davey planted the seeds of excellence in tree care and preservation. Today, his company stands as a formidable force in the green industry, thanks to its strong foundation.

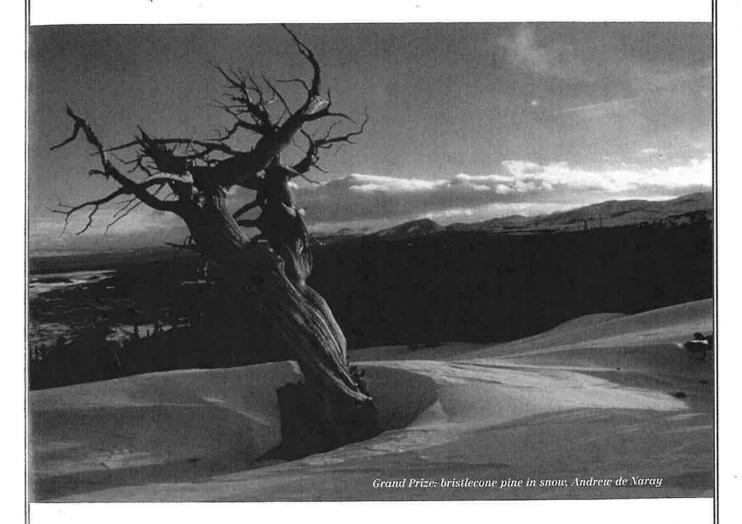
From coast to coast, The Davey Tree Expert Company sets the standard in the green industry in this century and the next.



AMERICAN FORESTS'



BIG TREE PHOTO CONTEST



The assignment was to depict big trees—in their environment, as they related to people, or just showing their grandeur—and we were impressed by the range of interpretations we saw as American Forests hosted its first-ever Big Trees photo contest. Photographers could submit in one of four categories: Trees in Their Environment, People and Trees, Champion Trees, and For Kids Only. Our more than 60 entries depicted everything from dramatic winter landscapes and a couple strolling through a red-gold autumn woods to giant sycamores baking in a hot Massachusetts sun and bear cubs hiding in the hollow cavity of a California tree.

AMERICAN FORESTS





lockwise from above: 2nd place,
Trees in Their Environment,
Carolyn G. Truman; 1st place, Champion
Trees, Betty Wayne; 1st place, Trees in
Their Environment, Andrew de Naray;
1st place, Kids, Michael Lorberg.

What made these pictures winners? A combination of creativity, setting, composition, and style, according to our panel of distinguished judges—Big Tree photographer Albin Dearing, Washington Post photographer Michael Williamson, American Forests Big Tree Coordinator Katie Byrne, and Maryland Forester Maureen Brooks.

A tough job, they said, with

many wonderful entries. But all agreed that one image stood above the rest. American Forests' member Andrew de Naray, our grand prize winner, captured that title with his photograph of a bristlecone pine in snow at Windy Ridge, Colorado. Judges praised de Naray's efforts in taking the dramatic shot because he "hiked up there and made a commitment to





stand in the snow and get that light."

Shooting trees can be tricky, as no doubt our entrants found, and judges offered these suggestions:

Shoot early or late in the day or when the sky is overcast—never in the mid-day sun.

Don't be afraid to use people to get a sense of a tree's size, and watch for that extra element that makes a good pic-

ture great: a bird flying into a forest scene, children having a picnic under a tree ablaze with autumn color. Don't discount images that show our connection with trees: bird-houses, tree swings, treehouses. And never forget to turn the "date stamp" feature off on your camera!

American Forests had a winning mix of tree and photo know-how in our judges: Our



Big Tree Coordinator Katie
Byrne knows striking tree
color when she sees it, having
grown up in Massachusetts.
She recently spent two years
working with refugees in
Hungary. Long-time big tree
photographer Albin Dearing
advises aspiring tree photographers to search for character: "everything, even trees,
has character."

Michael Williamson, a

AMERICAN FORESTS



bove: 1st place, People and Trees, Ken Fromknecht.

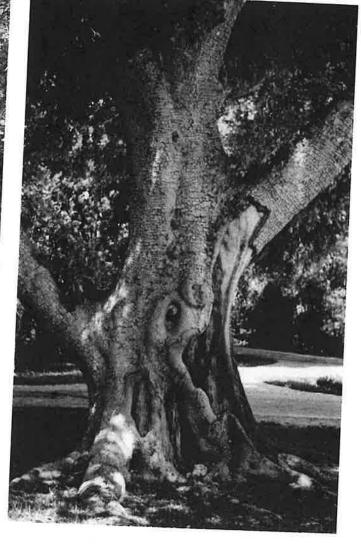
Right: 3rd place, People and Trees,
George Hale Jr. Page 29, clockwise from upper left: 2nd place, People and
Trees, David Fields; 2nd place,
Champion Trees, R.F. Mulgrew; 3rd place, Trees in Their Environment,
Ronald F. Billings.

Pulitzer Prize-winning photographer for *The Washington*Post, has photographed nature and people for more than 25 years. "Ask yourself, 'How does [the scene] make you feel?' Flaws can be part of the beauty, richness, and timelessness of a photograph," he says. Maureen Brooks sees her share of trees as an education specialist for the Department









of Natural Resources Forest Service in Maryland. She is coordinator of the state's Big Tree program.

The Grand Prize winner was awarded a Nikon N60 camera with a 28-80mm lens; 1st place winners received an Olympus Epic Zoom 80 camera; the Kids Only winner, a Canon Sure Shot WP-1. 2nd place winners got a Canon

Sure Shot Owl; 3rd place, choice of Famous & Historic Tree. All winners plus honorable mentions received a oneyear membership.

Thanks to all who entered, and congratulations to these winners:

- Grand Prize—Andrew de Naray
- Trees in Their Environment— 1st: Andrew de Naray; 2nd:

Carolyn G. Truman; 3rd:
Ronald F. Billings; Honorable
Mention: Andrew de Naray,
Tom Gaman, George M. Hale
Jr. Judges praised the "dramatic light" in Truman's redwoods shot and Billings' framing of the live oak known as
the Angel Oak.

Champion Trees—1st: Betty
 Wayne; 2nd: R.F. Mulgrew;
 3rd: George M. Hale Jr.;

Honorable Mention: Ronald F. Billings, Tom Reynolds.

- People and Trees—1st: Ken Fromknecht; 2nd: David Fields; Honorable Mention: Norman F. Boas. Judges especially liked how Fields used light to highlight the texture of the trees.
- Kids Only: 1st, Michael Lorberg, 10.

-The Editors

Sizing up the EAST

IN WHICH WE PULL DESERVING

BEHEMOTHS FROM

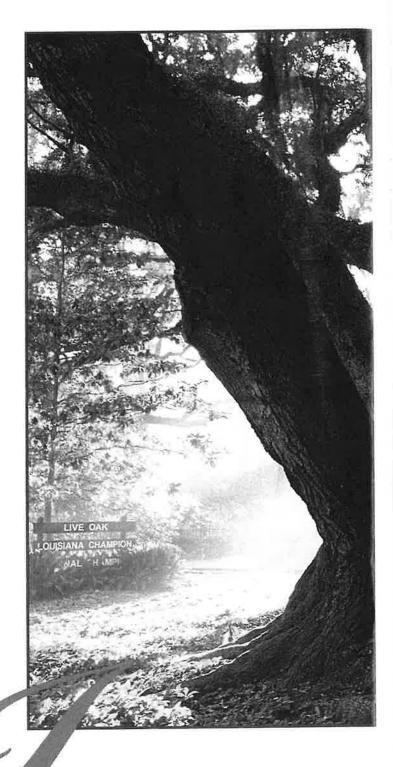
THE SHADOW OF THEIR WESTERN

COUNTERPARTS

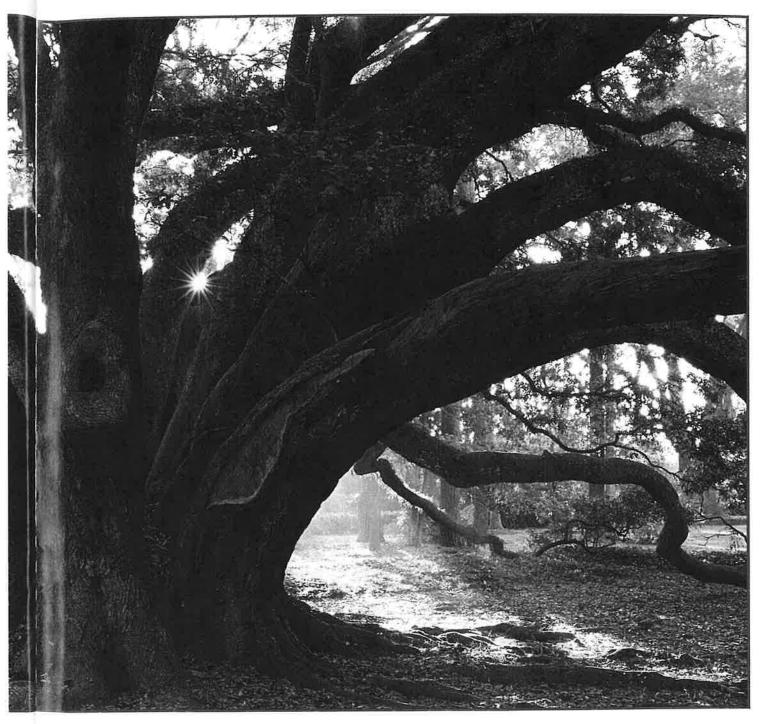
AND GIVE THEM THEIR DUE.

STORY AND

PHOTOS BY WHIT BRONAUGH



suspect that when Mother Nature passed out the genes and growing conditions for size and longevity, she expressed an inordinate fondness for trees in the West, where all but one of the current 25 biggest national champion trees reside. Despite their impressive point totals, the East's biggest trees have long been over-



Champion: Live Oak

shadowed by their mighty western peers. Remember, though, nowhere in the East does rainfall begin to approach that of the soggy Pacific Northwest. The only eastern areas that have mild winters and long growing seasons like the West Coast are in the South, where hurricanes, tornadoes, and other storms prevent most

trees from reaching western proportions. And the East is home to less than half as many conifer species, which often have far greater longevity than most flowering trees. "Not fair!" we eastern big tree lovers say. So let's level the playing field and see where the limelight falls on an "Eastern Register of Big Trees."

I COULD EASILY

IMAGINE DINOSAURS NIBBLING THE

DELICATE FERNLIKE

FOLIAGE OF THE NATIONAL CHAMPION

COMMON BALDCYPRESS

OR SCRATCHING THEIR SIDES

ALONG THE TRUNK.



The East's biggest champ is a 748-point common baldcypress that resides in a second-growth floodplain forest along the lower Mississippi River in Louisiana. At 83 feet the tree's height doesn't strain the neck much, but it would take at least nine people, with arms outstretched, to hug its massive 53-foot girth. Purists may deride the flaring and fluted trunk, which inflates the tree's point total, although the strange shape is probably why loggers have let it stand. And no matter how it is measured, it is still a gigantic, jaw-dropping presence that inspires visions of prehistoric forests.

I could easily imagine dinosaurs nibbling the delicate fernlike foliage or scratching their sides along the trunk.

The fact that the four previous common baldcypress champions all topped 600 points adds further support to its probable status as the East's biggest species. If the contest were based on volume—a more appropriate but far more difficult attribute to measure—the King of the East still would be a baldcypress but the crown would belong to a tree near Longwood, Florida, known as the Sovereign Cypress. Robert Van Pelt, a big tree hunter best known for his many western nominations, has estimated this single-stemmed, 15-foot diameter colossus to be about 8,000 cubic feet. Allowing for trunk taper, a 3-foot diameter tree containing that much wood would have to be more than half a mile tall!

For the last quarter-century the East's second-largest champion has been a sycamore in northern Ohio that weighs in at 737 points, more than 200 points bigger than the number three champ, a live oak. Although the sycamore is big, it's less impressive than its numbers imply because it is a multi-stem tree that forks below breast height (4 1/2 feet). For that reason, American Forests has recently dethroned the imposter and is encouraging new nominations.

istorical accounts suggest that sycamores may still rightfully claim title as the East's second-largest species and largest hardwood. The previous sycamore champ, a Kentucky tree, attained a 39-foot girth and totaled 589 points before it died in 1982.

The granddaddy of them all may have been a Mt. Carmel, Illinois, sycamore that had a girth of 66 feet at the base, barely tapering to 62 feet at the 20-foot level. Pace out 21 feet and try to imagine a sycamore trunk taking up all that space, without shaking your head in disbelief. Even if this goliath only had a very average height of 100 feet and a crown spread of 80 feet, it would have scored at least 888 points!

Now second on our list, at 527 points, is the aforementioned live oak, which sprawls in majestic splendor just north of Lake Pontchartrain in Louisiana. With its huge sheltering crown and big limbs that arc to the ground, it conjures up images of fairy tale forests. It made me feel six years old again, and I barely resisted the urge to scamper along its horizontal branches and chase after imaginary elves. Called the Seven Sisters for its seven trunks, it was judged by the Live Oak Society, as well as American Forests, to be one tree, rather than seven different trees fused together. Still, some hig tree enthusiasts consider it a multi-stem tree that has an unfair advantage over the normal growth form. Single stemmed live oaks are known to reach an impressive 25 feet in girth, but that falls far short of a number three ranking among eastern species.

Even if the live oak's status as the second biggest eastern champ does not persist once the Seven Sisters Oak passes on, there is one category in which the live oak, at least on average, often reigns supreme. Many live oaks are two or three times wider, in crown



Champions: Wye (White) Oak & Deachleaf Willow

spread, than they are tall, resulting in spreads that approach 150 feet. If it's shade you want, especially throughout the year, you're likely to find the most per tree under a live oak. The champion covers one-third of an acre, practically a forest by itself. It's big enough to give a square yard of shade to each of 1,520 people.

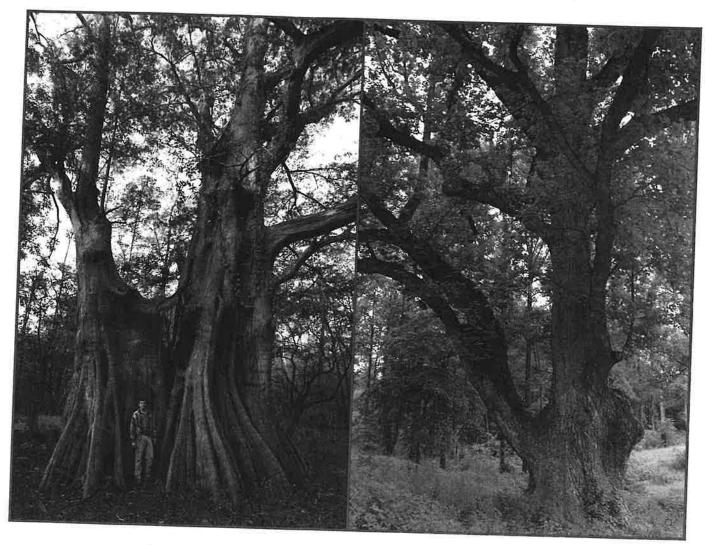
Bedford, Virginia claims the third biggest eastern tree with a 516-point yellow-poplar, or tuliptree, whose 31-foot girth has helped it hold the crown since 1972. This monarch grows in a small woodland of skinny trees that emphasize its greatness. Like so many champion trees, it has a calming and reassuring effect that seems to say, "Sit with me a while and regain the natural rhythm of life."

Serious big tree hunters feel the Bedford yellow-poplar, because it has several forks at the 8-to-12-foot level, lacks the characteristics that make the species a true contender for one of the biggest trees in the East. Giant yellow-poplars are remarkable for their lofty heights and barely tapering columnar shapes. This species may be the tallest and most voluminous hardwood in the East. There are reliable historical records of yellow-poplar heights to at least 190 feet and girths that surpass 30 feet. One massive specimen in the Craggy Mountains of North Carolina was more than 34 feet around,

150 feet tall, and 5,000 cubic feet in volume. Although there are no yellow-poplars that reach such dimensions today, some old-growth specimens in the Smoky Mountains have been measured to 177 feet in height and more than 24 feet in circumference.

Coming in at number four is the camphor-tree, a naturalized species from Asia. According to my field guide, camphor-trees grow to 40 feet tall and 2 feet in diameter. That barely qualifies as a branch on the champion camphor-tree in Darby, Florida. It tops out at 67 feet and has a monstrous girth of more than 35 feet. Most camphor-trees were grown for camphor oil until it began to be made artificially. The champ is now far more valuable for its protective shade, climbable branches, and inspiring size and beauty.

The fifth biggest tree in the east is the famous white oak at Wye Mills, Maryland. It nearly dwarfs the town itself with its huge symmetrical crown and buttressed base. At an estimated age of 450 years, it is probably one of the oldest deciduous trees in the East. It is also the only eastern champion left from the Class of 1940 when the National Register of Big Trees was created. In fact, after a chestnut oak in Connecticut, it was the second tree ever to be officially nominated for national champion status.



Champions: Common Baldcypress & Zulip-Doplar

While the undisputed champ by girth and points is the common baldcypress, the top five do not necessarily come in at number one in individual statistics. In the top 25, the blue ribbon for crown spread belongs to a co-champion swamp chestnut oak in Tennessee, which measures an impressive 216 feet.

The crown for height is won easily by its co-champion in Alabama (200 feet), followed closely by the Shumard oak at 190 feet. (In previous Registers the title for tallest eastern tree belonged to the soaring eastern white pine. There are numerous early records of eastern white pines well over 200 feet tall, including one from Merideth, New York, that measured 247 feet after it had fallen.) If it had a larger circumference, the swamp chestnut oak might be a contender for the East's top-scoring elite.

After the white oak the actual ranking of eastern champions becomes somewhat arbitrary because successive champs are often separated by only a few points. But no matter what the order, it's clear that in the East, in contrast to the West, broadleaf trees rule. Nine of the top ten eastern champs are broadleaf, whereas nine of the top ten western champs are conifers. In fact, for the eastern list, after the common baldcypress at number one, the next biggest conifer is the alligator juniper at number 39. Of the 38 broadleaf

trees in the eastern top 40, 17 are oaks.

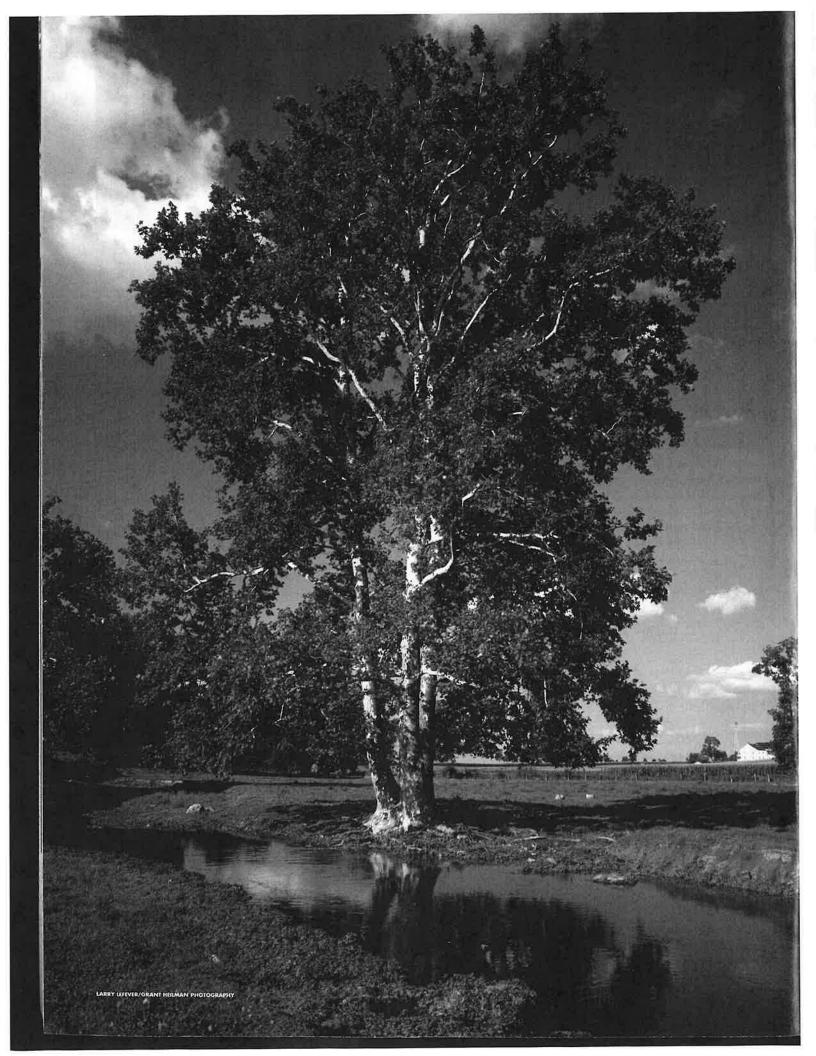
The distribution of big trees is not yet an exact science but, in general, the greater photosynthetic efficiency of broadleaf trees allows them to grow faster than the conifers throughout most of the East. In the West, dry summers negate that advantage by slowing down and even stopping photosynthesis. This enables conifers to pull ahead in the other seasons with their evergreen leaves churning away while broadleaf trees are leafless. Conifers in the West and oaks in the East also get big because their resistance to disease and insects allows them to grow for many centuries.

Unfortunately, few ancient trees in the East have survived American Progress so it's no wonder that most eastern trees seem like scrawny adolescents compared to the great champions of the West. Thankfully, some pockets of eastern old-growth yet remain where arboreal giants persist (see "In Search of Old-Growth Giants," Register page 18). And as the National Register of Big Trees illustrates, the East can still boast a few giants that even a westerner could appreciate. AF

Photojournalist Whit Bronaugh recently relocated to Kentucky, where he can include his passion for eastern big trees.

The Biggest Champion Trees in the East

1.0	CIRCUMFERENCE (IN.)	HEIGHT (FT.)	CROWN SPREAD (FT.	.) POINTS	STATE
1. Common Baldcypress	644	83	85	748	Louisiana
2. Live Oak	439	55	132	527	Louisiana
3. Yellow-Poplar	374	111	125	516	Virginia
4. Camphor-Tree (n)	422	67	103	515	
5. White Oak	382	96	119	508	Florida
6. Southern Red Oak	312	150	156	501	Maryland
7. Black Willow	400	76	92	499	Georgia
8. Peachleaf Willow	417	58	82		Michigan
9. Cherrybark Oak	324	124	136	496	Wisconsin
Cherrybark Oak	342	110	108	482	Virginia
10. White Willow (n)	301	133		479	Virginia
White Willow (n)	316		142	470	Michigan
11. Shumard Oak	249	118	131	467	Michigan
12. Crack Willow (n)		190	88	461	Tennessee
Crack Willow (n)	310	116	131	459	Michigan
13. Sycamore	305	122	124	458	Michigan
14. Weeping Willow (n)	334	95	105	455	Virginia
	309	117	116	455	Michigan
Weeping Willow (n)	344	86	93	453	Michigan
15. Water Tupelo	336	105	56	455	Virginia
16. Overcup Oak	258	156	120	444	North Carolina
17. Bur Oak	322	96	103	444	Kentucky
18. Florida Strangler Fig	360	63	72	441	Florida
19. Red Maple	276	141	88	439	Tennessee
20. Silver Maple	293	115	110	436	Wisconsin
21. Swamp Chestnut Oak	276	105	216	435	Tennessee
Swamp Chestnut Oak	197	200	148	434	Alabama
2. Black Oak	322	86		434	Connecticut
3. Sweetgum	278	136		431	
4. American Beech	279	115		429	North Carolina
5. Water Oak		120			Maryland
t)=naturalized				426	Louisiana



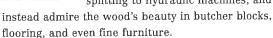
Celebrating the Sycamore

Popular and distinctive for their multicolored, patchwork bark, sycamores—and their relatives, the planetrees—are widely used as shade trees in residential yards and public settings in many areas of the United States, as well as in Europe, Asia Minor, and China.

It is the regularly peeling bark that gives these rapid-growing shade trees their beauty. Sycamores

are also easily identified by the fuzzy ball-like fruits that hang from their branches. Deciduous trees, they drop their large leaves every fall.

The wood is heavy, hard, tough, and coarse. Anyone trying to split sycamore slabs for firewood using a wedge and maul, as I have, is likely to add a few unprintable words to his or her vocabulary. Leave the splitting to hydraulic machines, and



IIGHLIGHTING NOTABLE TREES—BY JEFF BALL

In pioneer times, sycamore's toughness made it a favorite for wheels to pull ox carts and for barber poles and wooden washing machines. It rolled along the rails as panels for Pullman cars and slats for Saratoga trunks; it built stereoscopes that helped people see faraway places; and it brought music home in piano and organ cases and phonograph boxes.

The American sycamore, also called buttonwood, is native to the eastern part of our country. The Philadelphia area boasts some sycamores that date from William Penn's arrival there.

WIDE OPEN SPACES

Sycamores grow rapidly and can sometimes reach 70 feet in their first 20 years. At maturity they will likely reach 110 feet or more, and their huge, angled branches spread as wide or even wider than their height. Trunks can reach from 6 to 10 feet across. Obviously this tree is too big for a small yard, but sycamores make a spectacular specimen in a spacious one. They're also too large to squeeze between a sidewalk and curb. In early colonial

days, it was said, settlers used hollowed-out monster sycamores to stable livestock.

The large, coarse leaves resemble maple leaves in shape, with three to five sharply pointed lobes measuring up to 10 or 12 inches long and 6 or 8 inches across. The surface is a smooth, dull medium green; the paler underside has hairy veins. Sycamore leaves emerge in late spring and most drop in November, although a few may persist until very late winter. Their fall color is not too showy.

After about 10 years sycamores and planetrees begin to shed their bark in large patches, creating mottled trunks of cream, tan, and olive green—a sort of calico bark. Fallen bark and leaf litter from one mature sycamore can provide plenty of chopped leaf mulch each fall.

Sycamore flowers emerge in late May or early June, about the same time leaves appear. They form round clusters about 1 inch in diameter. Both

the male and female flowers are yellowish green and inconspicuous. Female clusters develop over the season into pale brown, fuzzy seed balls, prompting the popular name "buttonwood." The seed balls dangle on the branches through the fall and much of the winter before beginning

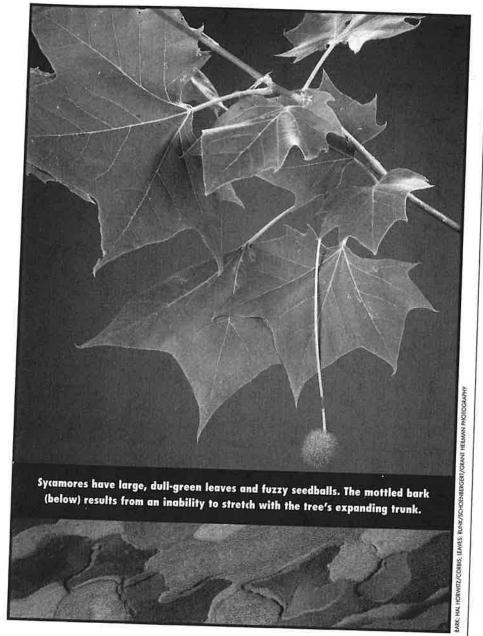
THE NATIONAL CHAMP

Species: American sycamore
(Platanus accidentalis)
Location: Bath, Virginia
Circumference at 4.5 feet:
334 in.
Height: 95 feet
Crown spread: 105 feet
Total points: 455
Nominator: Kirk Lunsford
The National Register of Big Trees is sponsored by The Davey Tree Expert Company

to shed seeds in spring. Windborne hairs released when the seed balls fall apart may cause mild nasal irritation to those with tree allergies.

ANIMAL LOVERS

Purple finches love sycamores for their seeds, and so do squirrels and foxes. As the trees grow old and large, they develop deep cavities where large limbs were pruned or have dropped off. These cozy holes shelter generations of squirrels, bats, and the occasional hive of wild honeybees. Sycamores naturally



grow in river bottoms, and beavers use the young trees for dams and houses.

CHOICES, CHOICES

There are three kinds of sycamores in the United States: the native American sycanhore (of which there are three species: American, California, and Arizona); the smaller Oriental; and the London planetree, a durable hybrid recognized in the early 1700s when the American and Oriental trees genetically crossed in Europe. Widely planted in England, the London planetree survived equally well in the country's

damp climate and in the smoky urban conditions of cities like London.

Adopted by U.S. nurserymen as a good choice for cities, the planetree was widely planted in the East and vigorously propagated by the nursery trade. It was often a better choice for urban areas because it could handle poor air quality, grew to a smaller size, and so did not require as large a growing area. Also, it did not suffer from anthracnose, a leaf and twig disease that damages sycamores during damp spring conditions.

The original cross of the American

and Oriental sycamores was more luck than science. Its genetic makeup was cloudy until the National Arboretum's Frank Santamour investigated the tree's genetic fiber and scientifically re-created the original accidental cross.

Today, the popular variety "bloodgood" resembles the original American-Oriental cross—and again is a particularly good choice for urban spaces. Somewhat smaller than the American sycamore, bloodgood has slightly smaller leaves and a more greenish tinge overall. It bears its fuzzy fruitballs in distinctive pairs from a common stalk. Bloodgood is one of very few tree species that will survive in selected locations within all 50 states. Columbia or Liberty London planetree varieties also are good options for the home landscape.

HOME CARE

Sycamores tolerate a variety of soil types, as long as the soil is moist and reasonably well drained. They are not particularly drought-tolerant, and in nature they are found most often in bottomlands and along rivers and streams. They do fine in neutral or even somewhat alkaline soil (pH 6.6 to 8.0).

As long as they have enough moisture for their roots, sycamores can tolerate dry air, pollution, and compacted soil, making them a popular choice for the city. They prefer full sun but will accept light shade.

In the fall for the first three to four years after planting, sycamores benefit from some slow-acting granular fertilizers formulated for woody plants. After that time they can take care of themselves.

They do not require routine pruning, but they occasionally need special pruning to establish a single central stem, or leader, when they are young. They also benefit from periodic trimming in their formative years. Sycamores respond so well to even hard pruning that people often train them as hedges or shape them to make allees.

PESTS

Sycamores and planetrees tend to be tough trees with few major pest problems, except for the aforementioned anthracnose. Trees enjoying good air circulation—free from crowding by other large trees—tend to be less vulnerable to this disease. Other occasional problems include:

Symptom: Leaves turn pale, mottled;

drop early

Probable Cause: Lacebug

Symptom: Trunks and limbs scarred,

weakened; twig drop **Probable Cause**: Borers Symptom: Bumps on leaves and branches; stunted growth Probable Cause: Scale

Symptom: Fewer, smaller leaves; blue-black stains on bark

Probable Cause: Cankerstain Symptom: Stained bark Probable Cause: Dog urine

Our yard has a mature sycamore growing at a rather steep angle toward the house with much of its main foliage directly above the roof. Years ago, when my wife Liz became a bit antsy about the tree falling on the

house, we had a certified arborist check it out.

He just laughed, saying our brick house would probably blow over before a windstorm caused the tree to fall over. Thank goodness for sycamores' deep and strong root systems. AF

Jeff Ball appears on NBC's Today Show as a gardening expert and writes articles and books about gardening.

Let us know what you think of this new feature. Next issue: the bur oak.

WITNESS TREES FROM BERKELEY PLANTATION AND THE MOON

Have you ever walked beneath the whispering boughs of a towering tree and wondered at the history it has seen? If trees could talk, they would tell of chance encounters that changed lives, log cabins where settlers grew families, fiery speeches that changed minds, and savage battles that ended young lives.

Few trees have seen as much history as a sycamore at Virginia's Berkeley Hundred Plantation. The plantation has been called the ancestral home of all Americans after 38 trav-

el-weary English fell on their knees in prayers of Thanksgiving there December 4, 1619, nearly a year before the Pilgrims reached Plymouth. The first bourbon was distilled at Berkeley in 1621, only months before the small colony was wiped out in an Indian massacre in 1622.

The plantation was bought by the Harrison family in 1691; in 1726, Benjamin Harrison IV built America's first three-story house there, a fine example of Georgian architecture. His son, Benjamin Harrison V, a signer of the Declaration of Independence, was born there, as was his son, William Henry Harrison. Known as Old Tippecanoe after his legendary battle with Chief Tecumseh, William Henry Harrison became the

ninth president of the United States in 1841. He is remembered chiefly for catching pneumonia during his lengthy inaugural address and, a month later, becoming the first president to die in office.

No one knows for sure the age of the Berkeley Plantation Sycamore, but it was already full grown in 1862 when Abraham Lincoln stood beneath its boughs to review and encourage the Army of the Potomac. A Mississippi sycamore has a remarkable lineage of a different sort. On January 31, 1971, the United States launched Apollo 14 to complete its third lunar landing. Aboard with Edgar Mitchell and Alan Shepard Jr. was Stuart Allen Roosa, also known as "Smokey" for his background as a U.S. Forest Service smokejumper (firefighters who jump from planes into forests to battle raging fires).

As an astronaut Stuart never lost his appreciation for forests or his love for trees, and with him on this mission to

circle the moon he carried seven packets of tree seeds. After Apollo 14 landed, a Forest Service scientist germinated the seeds at NASA's manned space center at Houston. In 1975 a moon seedling was planted in front of the University of Mississippi's Forestry Science Building. It is now a mighty tree.

Stuart and I were phone buddies, chatting on several occasions about his love for trees. We planned a tree-planting tour in spring 1995 to help schoolchildren plant their own moon sycamores. Sadly, he died the day after Christmas 1994. Before his death Stuart expressed hope that descendants of the moon sycamore could encourage Americans to dream as big as the moon while planting trees to

improve the quality of life here on earth.

Descendants of both sycamores are available from American Forests' Famous & Historic Trees program. Other "witness" sycamores are available as well. To learn more about those trees or for more information, call 800/320-TREE or visit our website at www.americanforests.org.

—Jeff Meyer, director, American Forests' Famous & Historic Trees project

