AMERICAN FORESTS

SEPTEMBER 1940

35 CENTS A COPY

AMERICAN FORESTS

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Published monthly by

THE AMERICAN FORESTRY ASSOCIATION

919 Seventeenth Street
Washington, D. C.

The American Forestry Association is a citizens' organization for the advancement of intelligent management and use of the country's forests and related resources of soil, water, wildlife and outdoor recreation.

Its educational activities seek to bring about a better appreciation and handling of these resources, whether publicly or privately owned, that they may contribute in the highest degree to the welfare of the nation and its people.

In addition to publication of two magazines — AMERICAN FORESTS and CONSERVATION, both designed to keep before the people of the country important conservation questions and issues, the Association carries on educational projects in various fields including forest fire prevention, reforestation, protection of fish and wildlife, upstream flood control, prevention of soil erosion, preservation of wilderness areas, establishment of national forests and parks, development of forestry by private endeavor, the teaching of conservation in the schools of the country, promotion of research in timber growing and use and expansion of markets for forest products.

The Association is independent. It has no connection with any federal or state governments. It is non-political and non-commercial. All its resources and income are devoted to the advancement of conservation. It has been so operated since its founding in 1875. All citizens interested in forestry and conservation are eligible for membership.

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VOLUME 46 — September, 1940 — NUMBER 9

AMERICAN FORESTS

THOSE who read Dr. Cornish's article on page 400 of this issue must wonder if the Thorn Tree which for twelve centuries has served as a landmark on the Devonshire coast of England still stands. The story was written before Hitler released the aerial blitzkrieg which, as this issue goes to press, is pouring destruction along the channel coast. A bomb may already have obliterated every evidence of the tree. As to this—and all England—only time will tell. But if you believe in ancient traditions, destruction of the tree may be fateful, for when the Anglo-Saxons selected a tree for this now historic landmark they chose the Hawthorne because of the immemorial tradition that he who destroyed it would be forever cursed.

* * * * * *

Census takers who routinely count the people of the United States every decade have it easy compared to the corps of men who keep annual tab on our wild duck populations. Between two and three thousand trained observers engage in this work, which is headed up by the Fish and Wildlife Service of the Department of the Interior. Men of this agency scout the flyways of migratory birds from the Arctics to deep Mexico appraising the increase or decrease of the various species of wild ducks that every spring and fall migrate northward and southward. Some of their experiences and hardships are interestingly told in Wildlife Leaflet BS-165, recently issued by the Wildlife Service.

This duck census is of tremendous importance to millions of people in the United States, particularly the great army of duck hunters. Upon its results depends in considerable degree the extent of the duck hunter's sport. When the census shows that the duck population is on the down, the hunter may expect various restrictions upon his legal hunting privilege and vice versa.

This year's census brings happy news to the duck hunters. It shows the wild duck population on the up. According to the Wildlife Service, there are this year "somewhere in the neighborhood of 65,000,000 ducks and geese on the continent"—an increase of about fifteen per cent over last year. This is two and one-half times the 1935 estimate—critical year in wild duck history. Mallards and pintails, the 1940 census shows, are staging the best comeback.

As reported on page 420, the 1940 showing of migratory game birds has warranted Secretary Ickes in extending the duck hunting season this fall and has brought from the Wildlife Service the optimistic statement that "the experience of the past few years conclusively demonstrates that under a program of sound management the United States, Canada and Mexico can continue to enjoy reasonable sport with migratory game birds and at the same time perpetuate them."

* * * * * *

In this issue AMERICAN FORESTS launches a unique campaign. It is a sort of treasure hunt to locate and save the biggest living trees of each of the more important species growing in the United States. For details turn to Mr. Stearns' article on page 413. If the idea there proposed does not lure you to this hunt, there is somehow something lacking in your love of trees and of the beauty and majesty that is in their bigness.

There is more than sentiment in this undertaking. According to the laws of forest genetics, bigness begets bigness. Therefore seeds from the big specimens of the different species may serve to spread their bigness throughout the land. If they are sound and have grown rapidly so much the better from the standpoint of breeding up the species. Once they are located and made known, the world, as with the man who invents a better mouse trap, will make beaten paths to their doors.

The very thought of preserving such progenitors of noble races adds to the thrill of adventure offered by this tree hunt. Who would not feel proud to be the discoverer and the locator of the largest tulip tree or the largest redwood or the largest white pine now growing in these United States? And what county and state would not be proud to be able to claim that in its soil grows the largest known tree of a given species?

Ovid Butler

Editor.

WANTED!

The Location and Measurement of the Largest Specimens of the Following American Tree Species

- Ash
  - Mountain
  - White
- Aspen, trembling
- Basswood
- Beech, American
- Birch
  - Black
  - Paper
  - Yellow
- Buckeye
- Butternut
- Catalpa
- Cedar
  - Eastern red
  - Eastern white
  - Incense
  - Port Orford
  - Western red
- Cherry, black
- Chestnut, American
- Cottonwood
  - Eastern
  - Western
- Cucumber
- Cypress
  - Arizona
  - Southern
- Dogwood, flowering
- Elm
  - American
  - Slippery
- Fir
  - Alpine
  - Balsam
  - Douglas
  - Lowland white
  - Red
  - Silver
  - Western white
- Gum
  - Black
  - Red
- Hackberry
- Hemlock
  - Carolina
  - Eastern
  - Mountain
  - Western
- Hickory
  - Bitternut
  - Pignut
  - Shagbark
- Holly, American
- Horse Chestnut
- Juniper
  - Alligator
  - Western
- Larch
  - Eastern
  - Western
- Locust
  - Black
  - Honey
- Maple
  - Bigleaf
  - Red
  - Silver
  - Sugar
- *Magnolia, laurel*
- Oak
  - Bur
  - California white
  - Chestnut
  - Eastern live
  - Oregon white
  - Pin
  - Post
  - Red
  - Scarlet
  - Swamp white
  - White
  - Willow
- Osage orange
- Pecan
- Persimmon
- Pine
  - Digger
  - Jack
  - Jeffery
  - Limber
  - Loblolly
  - Lodgepole
  - Longleaf
  - Northern white
  - Pinon
  - Pitch
  - Pond
  - Ponderosa
  - Red
  - Shortleaf
  - Slash
  - Sugar
  - Virginia
  - Western white
  - White bark
- Sassafras
- Spruce
  - Black
  - Blue
  - Engelmann
  - Red
  - Sitka
  - White
- Sycamore, American
- Tulip
- Walnut, black

The American Forestry Association heartily endorses the appeal by Mr. Joseph L. Stearns, on the opposite page, for the discovery and preservation of the largest specimens of outstanding American tree species. Such a conservation activity, it is believed, 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. Furthermore, these old monarchs, protected from fire, disease and the ax, will stand to the end of their natural lives as cherished landmarks in the saga of America.

The Association, therefore, gladly takes leadership in a national program to locate and preserve the largest specimens of the most important American trees. (To the hundred specified trees listed above others may be added.) Permanent records of these specimens will be compiled and maintained for this and future generations; these records will be made immediately available to the public through the pages of AMERICAN FORESTS. Furthermore, every effort will be made to gain the active cooperation of landowners, lumbermen, and professional foresters and other conservationists, as well as national, state and local conservation agencies.

But the success or failure of this undertaking will rest largely upon the active participation of tree lovers everywhere. Therefore, if you know of a very large tree make it your business to see that its full and accurate record is sent to The American Forestry Association: its identity as to species, its diameter or circumference four and a half feet above the ground, its height, its state of preservation, and, particularly, its location and ownership. If professional assistance for accurate identity and measurements is needed, solicit the aid of your state or local forester, or an experienced lumberman. Also, be sure to send the Association a photograph of the tree and nominate it as a candidate for "Biggest Tree" of its species.

In this way, and with your assistance, it is hoped to establish and preserve not only the largest specimens of our most important trees in the country as a whole, but also in each individual state. When the largest specimens of each species have been definitely determined, The American Forestry Association will issue appropriate certificates both to their discoverers and to their owners. Act now to save the largest specimens of America's trees. Send records and pictures to The American Forestry Association, 919 - 17th Street, N. W., Washington, D. C.

THE GENERAL SHERMAN TREE
Largest and oldest living thing. 36 feet 6 inches in diameter at the base. (Sequoia gigantea)

National Park Service

LET'S FIND AND SAVE THE BIGGEST TREES

By JOSEPH L. STEARNS

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. 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, most of which are now inaccessible to the public because they are in private ownership.

At this moment I can think of several unusually large oaks, gums, sycamores, and pines that should be given special protection. In one restricted location in southeast Georgia I came across a mill that is, to my knowledge, now cutting the last original growth red bay trees in the United States. When logging operations have been completed there will be no red bays in the country worthy of classification above shrubs. 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. Railings should be erected around them; the ground should be cleared of fire hazards for a reasonable distance in every direction, and, when possible, a plowed strip of ground should be maintained as a further fire protective measure. This done, many of our finest specimens could be preserved for their natural lives. Then future generations would be able to see matured specimens of each tree species. If things go on as they are now this will never be possible.

Let me relate the story of a grand old tulip, or yellow poplar tree that fought for its existence for hundreds of years and, finally, through the carelessness of man, crashed to the ground in a fiery blaze one night in 1934.

Back in 1792, when the first settlers made their way into western North Carolina, the mountains were covered with an endless jungle of massive hardwood trees. The principal occupations at first, of course, were clearing land and making homes. But soon the sawmills came—small, crude affairs in those early days. Transportation of logs was by oxen, and the strength of these beasts, contrary to the popular expression, "strong as an ox," was pitiful in comparison to a modern tractor. For this reason the largest trees were left standing. Equipment then could not handle the big logs. As time went on larger mills made their appearance. These operations brought in overhead skidders and donkey engines, and most of the hardwoods up to six feet in diameter were easy prey.

But up on the steep slopes of Craggy Mountain, fifteen miles northeast of Asheville, there was one lordly yellow poplar that towered above all the great trees around it. No sawmill in the South could have handled such a log without blasting it in quarters, for its trunk was more than twelve feet in diameter, breast high, and not a limb emerged from its straight, massive shaft for a hundred feet above the ground.

Lumbermen in the early days passed this tree by because it was too big to handle. Those in later years would no doubt have cut it, even though they would have found it necessary to (*Continuing on page* 416)

Southern Hardwood Products, Inc.

All that remains of the world's largest tulip, or yellow poplar. Located near Weaverville, North Carolina, it was killed by fire in 1934

Let's Find and Save the Biggest Trees

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split the logs in order to move them, except for the fact that by this time a severe heart rot had developed — probably as a result of one of the many forest fires that swept through this country following the first logging operations. At any rate, the tree was not cut, and by some miracle it stood for decades with nothing but a hollow shell as its butt log.

I read about this tree in various lumber and forestry publications as early as 1902, many of the authors describing it as "the largest yellow poplar in the world." So I decided to investigate.

The Appalachian Forest Experiment Station, at Asheville, to my surprise, knew little about this tree. In fact, most of the foresters there had never heard of it. Finally, I found some one able to direct me to the giant, or what remained of it.

At Weaverville, I was fortunate enough to meet Walter Haines, who was quite familiar with the giant tulip. It was about two miles from his place, at the head of Reems Creek, he informed me. For many years, he added, campers, vacationists, Boy Scouts, and others had gone in to see it. As far back as he could remember, which was about forty years, the tree had been hollow. Aside from this, he said, it appeared to be healthy, had a good crop of blossoms each year, and had not been damaged by storms because it was securely anchored in rocky soil and growing in a cove, with high mountains all around. These protected it from the elements. Mr. Haines told me that he could go inside the tree through an open cavity on one side of the trunk and "turn around with a ten foot fence rail" held parallel with the ground. He added that "no shotgun ever made could kill a squirrel out of the top."

On questioning him further I learned that it was a habit for those who visited the tree to assemble in groups inside the trunk, either for purposes of shelter or just as a matter of curiosity. At one time, he bragged, a Scout Troop of forty boys crowded into this giant. Then, one stormy night in the fall of 1934 he saw a blaze reflected in the sky directly over the location of the veteran poplar. He hurried to the scene with neighboring farmers and found the big tree blazing furiously. There was nothing they could do as the fire had already swept upward 150 feet from the ground. Toward morning, weakened by the fire, the giant toppled with a crash that echoed from one end of the valley to the other.

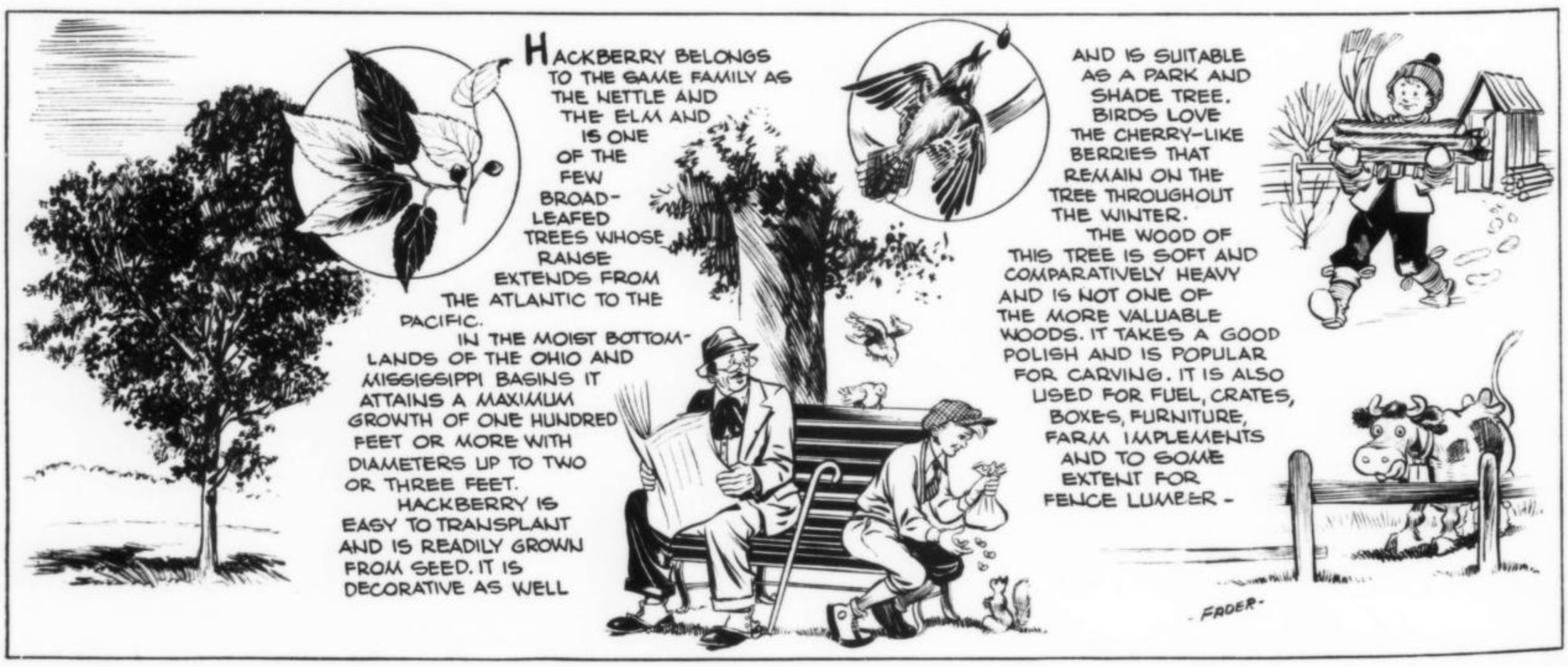
Later, Mr. Haines testified, a local sawmill operator salvaged the top logs from the charred tree and manufactured 6,000 feet of lumber, the wood of which was all curly, a rare thing in this species. Examination showed that the tree had been hollow for a distance of approximately forty feet from the ground, and it was at this point that the trunk broke when the tree fell. The cause of the fire was attributed to a pair of unknown squirrel hunters who had been observed the day of the fire in that section. Ostensibly, seeking shelter, they had built a fire in the hollow trunk. Then upon leaving — the old story — they failed to extinguish their fire. Today there is nothing but a gaunt, broken snag standing where this beautiful tree once flourished. Time and decay will soon remove all trace that it ever existed.

The story of this tragedy has instilled something within me that is too strong to cast aside. I believe we should act to prevent similar happenings, especially when they concern the loss of the world's largest specimen of any particular tree species. The big yellow poplar on Reems Creek is gone, and no one can ever put it back. But there are other outstanding forest giants that are now unknown to all but a handful of people.

Who knows where the largest sweet gum is growing? Is there any one to reveal the location of the giant evergreen magnolias that Sargent describes as being four and a half feet in diameter? How about the biggest dogwood?

If anything can be done to locate, save, protect, and publicize our largest remain- (*Continuing on page* 424)

TREES AND THEIR USES—No. 52—HACKBERRY



Hurricane Benefits Wildlife

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reduce excessive fire hazards. Slash conditions created in the woodlands constitute not only a serious fire hazard endangering both human life and remaining forest cover, but a menace to forest wildlife as well. Not even unregulated hunting can be more devastating to wildlife than great forest fires.

The great material losses resulting from the storm stimulate one to consider the possibilities of duplicating its beneficial effects under controlled conditions. We do not need windstorms to create productive habitats. Intelligent environmental improvement by man is obviously less expensive and far more beneficial than are conditions created by high winds. Under certain conditions, openings created in large tracts of timber are not only good insurance against fire and insect pests, but may be a definite additional source of revenue to timber owners.

The owners of small farm woodlots may find, too, that the income from increased annual crops of wild game is the startling difference between profit and loss, merely by providing for or allowing forest food and shelter to establish itself within the woodlot. Thus, in a less spectacular manner, we may duplicate the wonders wrought by New England's greatest hurricane; and progressive timber owners may, with nature's vivid lesson to guide them, proceed upon a more sound basis of forest management and wildlife conservation.

Let's Save the Big Trees

(*Continued from page* 413)

ing tree specimens, in each species, now is the time to act. Lumbermen, foresters, naturalists, and tree lovers can devote attention to this urgent matter. And it is urgent! For example, down in Louisiana there is a big black gum seven feet in diameter at breast height. It is located on a tract of timber scheduled to be cut soon. This giant might be saved by an appeal to the lumbermen who own it. It is altogether possible they do not know it exists: and more than likely once they are aware of it, they would take pride in preserving what possibly may prove to be the largest black gum tree in the world.

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, particularly forest trees. 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.

Redeeming Shasta's Waters

(*Continued from page* 399)

of Biological Survey to make such uses of the impounded waters for fish culture stations and migratory bird resting and nesting areas as are not inconsistent with the primary use of the waters and/or the constitutional rights of the states."

Thus, extensive biological studies can be made to determine the stocking policies and problem of fish management. Naturally, all species of game fish now found in the streams above the dam site will become inhabitants of the reservoir. The type of fish to be planted, the effects of extreme temperatures and the fluctuation of the water level are all problems to be worked out. Indications are, however, that fishing, although limited to inland types of game fish, will be enlivened by a land-locked type of steelhead.

Nor will the hunter or outdoor lover be neglected. To compensate for the barrier of the reservoir, emergency feed will be provided for the 100 to 150 Yellowstone elk, increased from the fifty-eight released a score of years ago, and the herds of Columbia black-tailed deer. Also, the reforestation plans make provision for the planting and reservation of winter feed such as oaks and palatable browse. In addition, a program for stocking the area with grouse, wild turkeys, valley and mountain quail and other game birds is expected to be tied in with the program.

All in all, it looks as though when the huge project is finally completed everybody will have what they want. The farmers along the Sacramento River will have protection from drought and floods; the fishermen will have their fish; the hunters will have their game; and all will have the forests. There is more to building a dam than meets the eye.

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