

Oak Tree Hunting!

Here's a fun outdoor idea for Scout families to do together: Go on an "oak tree hunt" on your street! How many can you find? How many different oak tree species can you identify?

Here are some interesting oak tree facts:

- There are approximately 600 different oak tree species world-wide. In the state of Georgia, we have 33 different native oak tree species! Plenty of those can be found in the Atlanta region, too.

(Collect 'em all, Scouts! Call your game "Oakymon Go"! Ha-ha! 😊)

- Acorns produced by oak trees are a valuable food source for many wild animals. Humans use oak lumber for making beautiful furniture, hardwood floors, and superb fuel for fires at home and while camping.
- All oak tree species belong to the "Quercus" genus (abbreviated below with a "Q.")
- Nearby, we have a rare oak species called "Georgia oak" (*Q. georgiana*). It grows on granite rock faces like Stone Mountain and similar areas elsewhere in our state, Alabama, and South Carolina.
- Different kinds of oaks belong to two big subgroups:
 - The "white oak group" species produce their acorns from start to finish in one year. Usually (but not always), the leaves of most species in this group have round-edged lobes.
 - The "red oak group" species need two years to produce their acorns. Usually (but not always), the leaves of most species in this group have sharp pointed-edged lobes.

Within about a 5-minute walk from my house, I can identify at least 5 different oak species growing alongside my street. These include white oak (*Q. alba*), southern red oak (*Q. falcata*), water oak (*Q. nigra*), willow oak (*Q. phellos*), and shumard oak (*Q. shumardii*). All of these are common in our area. See this "**Native Trees of Atlanta**" poster/brochure image (save the image to your computer and expand to read the details). It will help you identify these 5 oaks and other Tucker trees: <https://mytreeman.com/2019/04/city-planning-brochure-is-stunningly-beautiful/>

To learn how to identify different oak species, most people find it easiest to look at the shapes of leaves. Here are 3 additional resources you might find helpful:

1. Go behind the Tucker Recreation Center on Lavista Road. There you will find the "Tucker Trees" garden, which has labels that identify many trees native to our city (not just oaks).



2. The U.S. Department of Agriculture and the U.S. Forest Service have a free 175-page book that provides a lot of information and photos from oak tree species that grow in the eastern half of the United States. Here's the link:
<https://www.fs.fed.us/foresthealth/technology/pdfs/fieldguide.pdf>
3. Here's a terrific book to learn more about identifying trees that grow in our part of the country:
Kirkman, L. Katherine, and Leopold, Donald J. (2007) Native Trees of the Southeast.
Portland, OR: Timber Press.

How old is that oak?

Suppose that you find a really big oak tree during your "family oak hunt." Here's how to estimate how old it is. We'll need to use a long section of paracord (see Backyard Bushcraft issue #5) or a long flexible tape measure, and a calculator. We also need to look up the "growth factor" for the tree species, because different kinds of trees grow at different rates. Here's a website that provides "growth factors" <https://www.thoughtco.com/estimating-forest-trees-age-1343321>

For this example, I will use the huge water oak behind the picnic pavilion at the Scout Hut. Water oaks belong to the red oak group. (That's the same "compass tree" I talked about in Backyard Bushcraft issue #3.) So, using the website listed above, it's growth factor = "4." By the way, the growth factor for various species in the white oak group = "4.5"

Step 1: I measured the circumference of the Scout Hut's big water oak by tying my red paracord at chest height around the tree. See photo below. After stretching it out straight, I then measured the length of that paracord to get the circumference = 131 inches.



Step 2: I calculated the tree's diameter by dividing the circumference by pi (which is approximately 3.14):

$$131 \text{ divided by } 3.14 = \text{the diameter of this tree} = 41.72 \text{ inches}$$

Step 3: I next multiplied the diameter by the growth factor for "red oak group" species:

$$41.72 \times 4 = \text{age of the Scout Hut water oak estimate} = 167 \text{ years}$$

Step 4: So approximately what year did this water oak sprout from its acorn? We just need to subtract the estimated age from our current year, which is 2020:

$$2020 - 167 = 1853$$

Our Scout Hut's magnificent and beautiful water oak has been growing there for a long time!