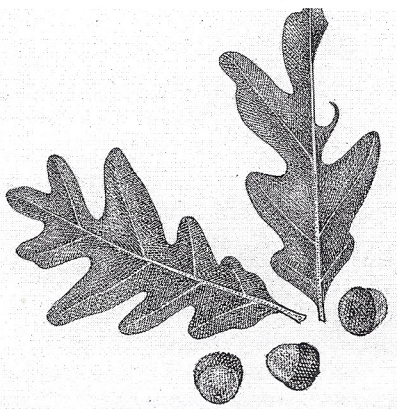
The Rights of Oaks

BY ERIC DINERSTEIN
Contributing Writer

ILLUSTRATION BY TRUDY NICHOLSON
Contributing Artist

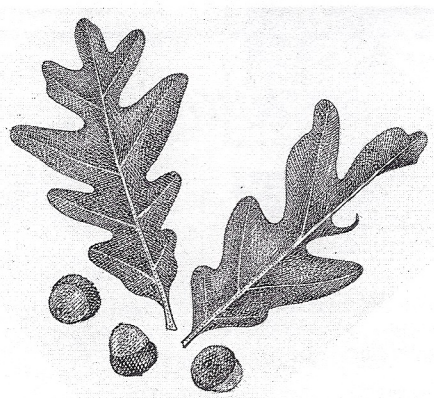


The first week of October in Cabin John, and in the Eastern U.S. more generally, is when autumn really goes to work. Technically, of course, fall begins on September 21st. But at least for me, from an ecological or even aesthetic perspective, the arrival of fall is an audible signal: the sound of oak acorns clattering against the leaves as they drop like small chestnut-colored bombs to the forest floor. First, a plunk, then a pattering, and, in years of heavy seed production, a slow-motion hailstorm of acorns in the woods along Cabin John Creek.

Our Creek Trail is full of oaks—mainly chestnut oaks and white oaks. In the neighborhood of Cabin John, walking past the immense willow oaks and red oaks lining the route I take along the southern end of 76th Place (where it runs into Tomlinson) brings to mind a fairy tale, or in a humbler vein, reminds me how small we are as organisms compared to such mighty oaks. Oaks are indeed often the tallest trees in the forests, and are also some of the largest and heaviest trees, which is in part why their dense wood is so valued by those who would cut them down.

They are also among the oldest trees still living. In Europe, there are record-breaking trees still standing that date back 1,000 years. Some of these can be found in England's Nottinghamshire that could well have sheltered Robin Hood's Merry Men. The Wye Oak, on the famous Wye Plantation in Maryland, reigned until recently as the grandest white oak in the region. It fell down in a storm in 2002 at the age of 462 years, already a mature tree when George Washington was born. Oaks are so long-lived that any trees over 50 feet tall were likely residents of Cabin John long before any of us moved in. In my way of thinking, these honorary citizens of our area have residential rights, too.

Aside from their longevity and prominence, oaks are also standouts in their incredible diversity and range. From our North American perspective, we likely think of ourselves as the center of the oak universe. But that's not the case. There are over 500 species in the genus *Quercus*, the oak tribe, part of the beech family (Fagaceae). And

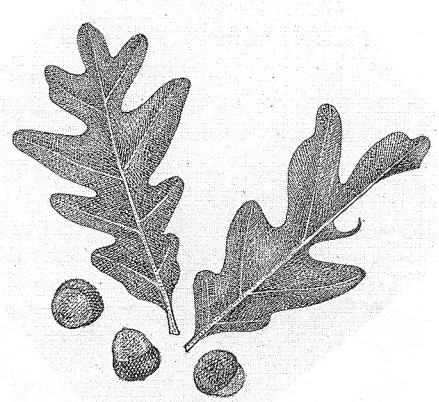


while they are spread across the northern hemisphere, from western to the eastern U.S., across Europe to China and Japan, the highest diversity is recorded in North America. But not in the U.S., with its 90 or so recorded species, but in the drier areas of Mexico, with a reported 160 species, 109 limited to that country.

The next country richest in oaks is China, with about 100 species, which illustrates the similar ecological origins our forests have with China. The seeming ubiquity of oaks is remarkable. When you hike into the cloud forests of Central America or China, or the middle elevations of the Himalayas, for example, you enter oak forests, which can survive on moisture provided only by mists. And even south of the equator, oak-relatives—*Castanopsis* and *Lithocarpus*—become dominant members of the forest canopy. In short, in many places, oaks rule.

The dominance and diversity of oaks and oak relatives in the world's forests make them not only of vital ecological importance; they also take on a special significance, becoming what scientists refer to as keystone species—that is, a species whose selective removal from an ecosystem can trigger massive changes in, or even collapse of, that ecosystem. This is because the acorns of oaks, even though full of tannins that make them bitter to our taste, are the mainstay of many wildlife species. And not just here in the U.S.; when I was in the Russian Far East and neighboring China, I learned that it was the Mongolian oak—along with the Korean pine and its nuts—that fed the wild boar and deer species that in turn fed the Amur (Siberian) tiger.

In their acorn production, oaks follow the ecological pattern known as mast fruiting. Some years, the acorns are produced in huge quantities. In others, acorns are much less common. Why does mast fruiting occur? It is estimated that only about 1 in 10,000 acorns ever gives rise to an adult oak tree to replace it. By producing so many "propagules" in one year, the individual oak and all of its oak neighbors synchronize seed production to greatly increase the probability that they will so overwhelm the needs of local acorn eaters



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NATURE

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that many acorns will escape being consumed. Then, in the following years, when acorns are scarce, the acorn-eating squirrels and chipmunks and other seed-eaters suffer major population declines, keeping the seed predator numbers in check. In this, oaks appear as great evolutionary strategists.

Oaks fill another immense ecological role: a record 543 species of butterflies and moths rely on oak leaves to feed their hungry caterpillars, a far higher number than for any other tree species. The unfortunate among those caterpillars serve another ecological function: they become bird food. An experienced birder will tell you that if you want to watch spring migratory warblers, vireos, tanagers, orioles and the like, find the nearest large oak tree, where they will gather.

In our area, sadly, it is not just the acorns that are coming down this year. In my neighborhood walks, I noticed one large oak that was cut down by new homeowners and another on the same street slated for felling. In an era where certain groups advocate loudly for human rights to be cherished, I hereby climb on my monthly soapbox, via this column, to urge Cabin John residents to cherish the rights of nature as well: PLEASE STOP CUTTING DOWN OAK TREES. INSTEAD, PLEASE START PLANTING THEM.

In a time in Earth's history when we are urged to plant as many trees as possible as our contribution to preventing climate change, planting an oak, not cutting down a healthy one, is a laudable thing to do for future generations. VN

Uh Oh! Haunted House Number 13!

BY BURR GRAY
President of FCBCC

Halloween harbors superstitions, one of which is that thirteen is unlucky. So be wary as you approach this year's creepy Haunted House at the Clara Barton Community Center. Set for **Sunday, October 28**, from **4:00 to 6:00 pm**, it will not disappoint. Fortunes will be told, witches and zombies will haunt your path, and games will challenge your nerve and skill.

All ages are welcome, free of charge, though children up to age 12 are most likely to be spellbound. Little ones may want a hand to hold. Refreshments will be offered, and small gifts will be handed out to kids.

Sunday, October 28
4:00 to 6:00 pm
Clara Barton Community Center

Conjured up by the Friends of Clara Barton Community Center in conjunction with the Montgomery County Department of Recreation, this annual event will usher you straight into the aura of Halloween. Go to *www.FriendsCBCC.org* for more information. VN