

## Red maples bloom

by Michael Pollock

The tiny but multitudinous crimson to yellowish flowers of red maples add clots of color to the otherwise gray late-winter landscape starting in February or even January. Red maples, also called scarlet maples, have red features year-round, thus the easily understood scientific name *Acer rubrum* (*Acer* is maple in Latin, derived from sharp or hard, referring to its use in lances). There is a medium-sized maple outside my door, part of NSCU's A Tree's Life citizen science program ([ecoipm.org/a-trees-life/](http://ecoipm.org/a-trees-life/)) and there was a larger maple with intertwined trunks. The big red maple had beautiful smooth, light grey bark with large patches of white and pale green lichens and graceful, sturdy, but thin limbs, beautiful in winter. Gray treefrogs, roughly maple gray, often hid in its branches. The smaller tree has bright salmon red leaves in the fall, while the larger maple only turned dull yellow and often lost most of its leaves by about September. It was broken by storms and damaged again by trimming, so it was mostly cut down in December 2015, coincidentally just when the large post oak and mistletoe across the street was cut. There was a chance it would re-sprout, but it died. The narrow smaller maple is sending fingers of growth racing into the new sunny gap.

There are several native and non-native maples in North Carolina, with some subspecies and occasional hybrids. Red maples



have leaves with three to five pointy lobes, and unlike sugar maples (stylized on Canada's flag), the edges are doubly serrated and have sharp angles between the points. I think sugar maples have the more spectacular fall foliage, while silver maples are unremarkable. Silver maples have large, serrated, and deeply cut leaves and broken twigs are supposed to have a distinctive odor. They are native, but I have only seen planted ones. Maple leaf viburnums have maple-like foliage but are unrelated shrubs.

Like other maples, red maples have leaves paired along their thin twigs, which are dark red, brown, or green and speckled with pale lenticels. Bare twigs reveal the u-shaped leaf scars and have rings of scars marking each year of growth, ending with terminal buds. Young maples have smooth, pale bark, becoming darker and furrowed. Possibly this is why red maples (and silver maples) have been called white maples.

Red maples can grow to 100' or taller and are supposed to be relatively short-lived. There is a very large specimen in UNC's Coker Arboretum and large ones along Cameron Avenue. Near an entrance to my neighborhood there was a huge, spreading maple that probably long stood beside a farm building in a field. Its limbs arched out, starting very close to the ground, creating an expansive canopy wider than it was tall, covering that backyard. About a year ago it disappeared. Red maples are usually subcanopy trees and are probably more common today than long ago.

Red maples are ubiquitous, but are most

common near water. Young forests in wetlands can be composed of mainly ash and red maple, hence other common names, swamp or water maple (while river or creek maple is another name for silver maple), though even red maples probably don't like to have their roots submerged long. They have shallow roots, and foot traffic along with dryness might have harmed my large red maple. Red maples cover a huge range of latitudes, from Newfoundland to South Florida, and west to East Texas and Minnesota, but a sapling transplanted within this area still might not be able to survive.

As spring approaches, the twigs curve more and the many flower buds, strung like beads, swell. The flowers are probably both insect and wind pollinated, and even in January many insects, probably flies and hymenopterans, can be seen on sunny days high amid the limbs of a flowering maple, though the flowers might not be colorful to attract insects and red isn't a common spring flower color. Sugar maples have dazzling greenish yellow, wind-pollinated flowers around early April. Red maple flowers are usually one sex, and a tree usually produces only one sex, but sometimes trees have flowers of both sexes or hermaphroditic flowers, and reportedly can have different flowers each year. I have only seen male flowers on my trees, and the overall effect was yellowish or flesh-colored.

These tiny but colorful flowers reward close examination, and I make a point to appreciate them. The outer coverings open to reveal white and hair-fringed inner parts shielding several fiery red-orange to ruddier red flower buds on yellow stalks. Each flower has five petals and five sepals. Many long yellow stamens extend far out of the flowers, creating a hairy appearance. The female flowers seem more uniformly ruby, with two short, fuzzy partially joined styles. Each fertilized flower sprouts two winged seeds, and its brilliant red pedicel elongates so they dangle from the branch. The male flowers wither and these trees return to being bare, while female trees become more colorful as spring develops. Around April or May my street is covered with small pinkish red maple keys and much larger greenish, rough-textured silver maple seeds that scrape along the pavement with the wind. A nearby pond often had thick bright green algae from fertilizer runoff in early summer, and many red maples sprouted in it. Sugar maples and boxelders shed their brown samaras later.

Mistletoe can be common on isolated red

maples in landscaping or around beaver ponds, on planted silver maples, and there is a luxuriant mistletoe on what I take to be a sugar maple facing UNC's Student Store.

Many moth caterpillars include red maple as a food plant, but few eat only maple. One of the best known is the green-striped mapleworm, caterpillar of the rosy maple moth, a bright pink and yellow, furry moth, most common in rural places like Jordan Lake. Pink prominents might be mimics. Green-striped mapleworms have black 'horns' and red heads and live in groups on maples and oaks. Caterpillars in this subfamily have exceptionally thick exoskeletons. They burrow to pupate, where the last brood waits out the winter. Lesser maple spanworm moths, shiny white moths with four brown lines, are common at lights in early summer. Huge Polyphemus and Cecropia moth caterpillars can feed on maple. Dark red and ivory bull's eyes appear on the upper sides of the fresh foliage, but I don't know what causes them.

Red maple leaves are supposed to be poisonous to cattle and horses, but deer and presumably beavers can eat the twigs and leaves while cottontails eat the seedlings. Gray squirrels eat the keys. Birds such as turkeys, purple finches, evening grosbeaks, and red-breasted nuthatches consume seeds and buds. I have heard that seed-eating migrants are especially abundant this year due to food scarcity. In recent years a yellow-bellied sapsucker, a woodpecker that only winters here, has moved in and drilled a few rows of bleeding holes near the base of my maples, licking up the sap and maybe any insects. They call all winter, but I associate their plaintive cries with cold days when snow is forecast.

Maple syrup can be gathered from many maples and red maple inner bark, seeds, and seedlings were reportedly used in cooking, and there are herbal uses.

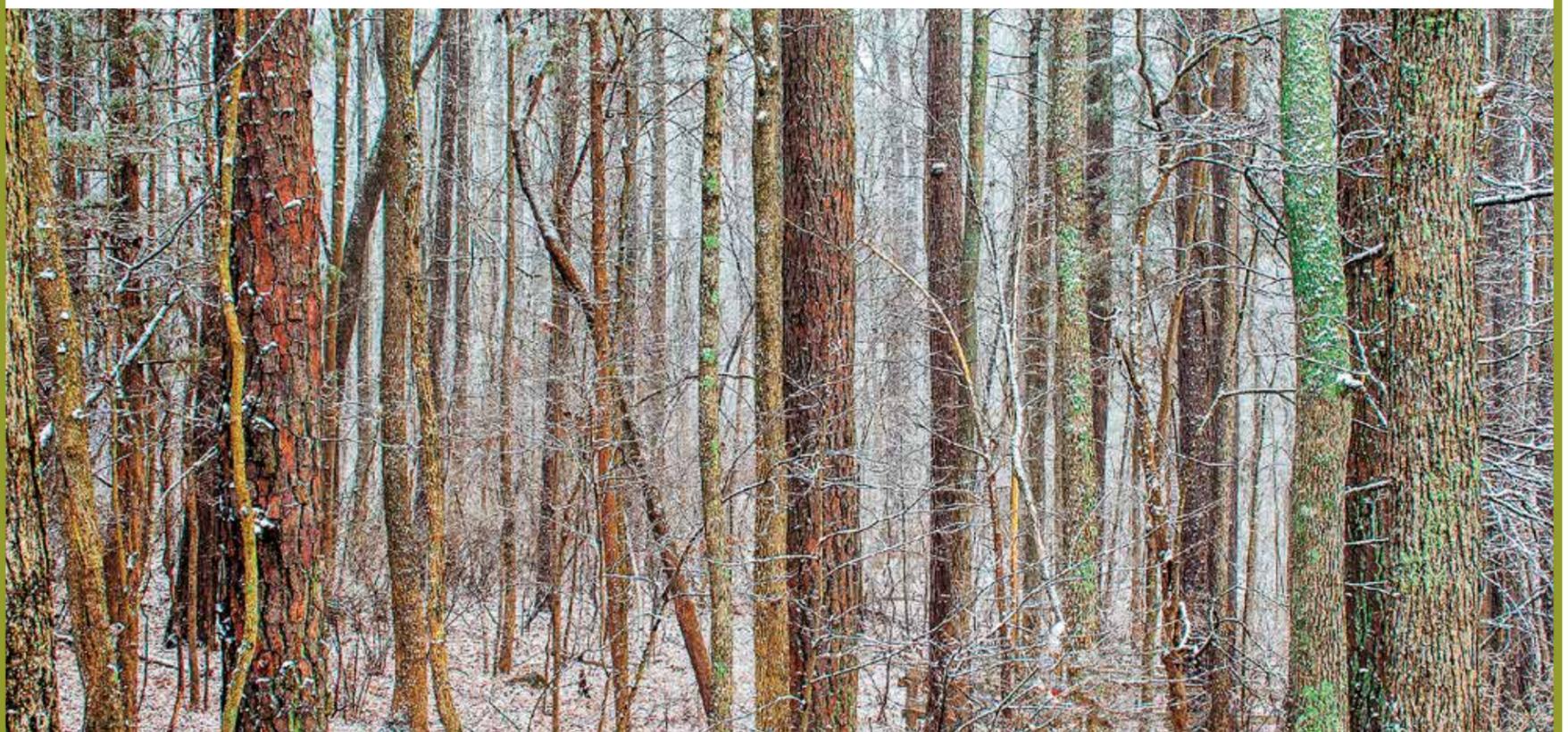
Red maple is also known as soft maple (while sugar maple is called hard). Once, Duke Energy right-of-way maintenance left a lot of pieces, so I whittled some faces. The inner bark is reddish and the wood pale and relatively hard. The wood has been used for household surfaces and items, and unusual grains are used in musical instruments. It was also used to produce lye, pulp, charcoal, and wood acetate. Brown and black dyes and ink can be made with tannin from bark.

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**Chatham Forest** Sometimes even town folk don't have to go far to find Nature. Case in point, this shot of a wintery wonderland was taken from my back deck in one of Pittsboro's more Nature-friendly housing developments, aptly named Chatham Forest. Each day I can gaze out upon a diverse woodland of cedar, loblolly pine, sweetgum, dogwood, redbud, maple, hickory, holly, sourwood and oak, all planted by Mother Nature herself. It's a certified Backyard Wildlife Habitat and home to urban deer, squirrels, fox, raccoons, opossum, turtles, song birds and raptors. Together we live in a smart development that preserves spaces and places to protect the diversity of Nature for the common good.

PHOTO BY GARY SIMPSON