



white baneberry    may apple    hepatica    sugar maple    jack-in-the-pulpit    maidenhair fern    wild ginger    spring beauty    white trillium    trout lily    Christmas fern

Wisconsin, New York, Vermont, and West Virginia—all northern, mountainous, or both—have chosen the sugar maple as their state tree. That emphasizes the unity of these forests, whatever their individual differences. I think of the sugar maple as a forest's forest tree, showing characteristics which reveal a true interweaving with the life of its place. Sugar maple seeds, like those of such other climax forest trees as basswoods, elms, and the other maples, are fair-sized and in spring can pierce ground litter with their shoots. Thus the heavy foliage cast down in autumn does not impede the resurrection in spring. Then, too, the saplings are patient. They can endure deep forest shade, growing maybe only an inch each year until light comes. Many of those little trees of the understory may actually be older than you are! When an opening finally does release them they may spring up at the rate of about two feet a growing season. The consequence of this watchful waiting followed by powerful growth is that maples can suddenly take over another kind of forest, killing it off with their own dense shade. Finally, this shading will help enforce other aspects of the forest regime. Sugar maple leaves open early in spring and rule throughout summer, influencing the flowering and leafing-out times of many plants below. So, while responding to the annual rhythms of temperature and length of day, maples instill their own particular cadence into forests.

Curiously, the land community best equipped to defend itself against maples and their compatriots is grassland. To that can be added less formally organized sites like burned acres, heavily trodden places, and farmed fields. These are often too dry for the moisture-loving seeds and shallow roots to invade. Maples, however, being long-lived, generally capture the rewards that so often come to dumb persistence. Let a marsh fill in, a swamp arise, and the drying earth receive its tall oaks—the embryo maple forest waits, uses the last as its womb, and is finally the king. It can take over almost any kind of forest.

Shrubs and weeds that are characteristic of the maple understory have this same deliberate approach. Among the shrubs, maple-leaved viburnum and the viburnum called witch hobble, or highbush cranberry, stand out in my mind. Both have three-lobed, opposite leaves suggestive of red maple or, more true of witch hobble, mountain maple. Mapleleaved viburnum makes a nice specimen for sight-identification tests for students of natural history. Both these trees tend to be pioneering sorts, the maple-leaved viburnum preferring drier places and witch hobble wetter ones. Like so many shrubs of deciduous forests, these members of the honeysuckle family are spread by the birds and mammals that eat their berries. This does the animals a favor later, for they use the shrubby part of the woods for cover. One of the best-hidden exits from a woodchuck den I know of emerges beneath the dark green leaves of some short maple-leaved viburnums.

Herbaceous plants of the deep woods can be divided pretty much into two categories, based on reaction to shade. The largest number of species comes under the heading of "shade endurers," which generally appear early in spring, blossom in the few weeks of warmth and sunlight, and then endure the summer shade. Most of these species are perennials that collect and store food over their first autumn and the following spring, or even through another whole year, and then expend the lion's share of their reserves in the final summer stalk and its seeds. To me the most striking of the biennials is cardinal flower, whose scarlet birdlike blooms peer across woodland streams or even from the middle of slow riffles. On the other hand, the annuals in this category seem to have the least problem, since they live but a year. One of the best known of these is jewelweed, which may be encountered in marshy openings. Its plants borrow a page from the book of oaks, hickories, and walnuts by making a strong start in life with their large nutritious seeds. Jewelweed stems are fairly translucent, and when the lower end is placed in colored water the movement of fluid in the vessels can be followed rather well. The stem is full of liquid, and some people use it as a salve on the skin for poison ivy.

— Millard C. Davis, *The Near Woods*. New York, Knopf, 1974