

More Ground to Cover

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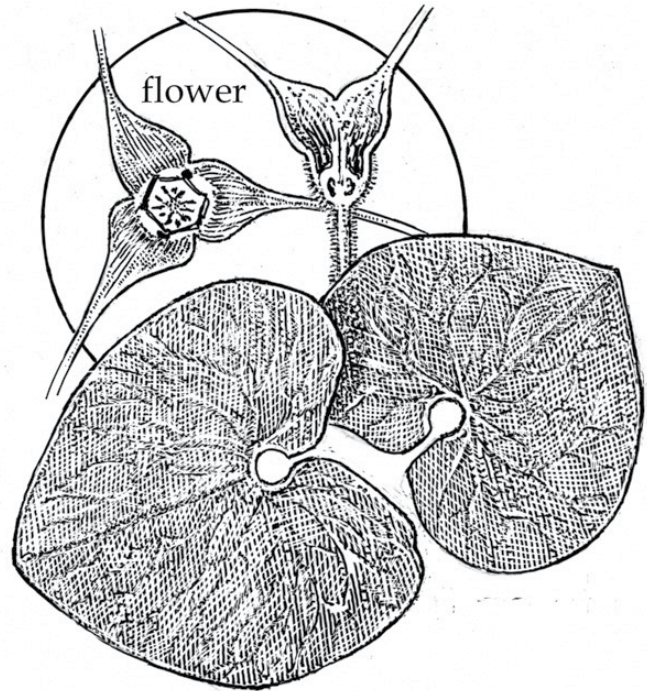
ILLUSTRATION BY TRUDY NICHOLSON
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Protecting precious topsoil by avoiding erosion is the guiding principle of every responsible farmer. Gardeners should heed the same commandment. In bright sunlit gardens, a wide variety of plants can effectively shield the exposed earth from washing away in a heavy rainstorm. But because much of Cabin John is still covered by trees, the challenge emerges when the canopy shades out sun-loving plants. In these spots the soil surface sits bare, exposed to heavy rains and wind, unless you find a shade-loving ground cover.

Fortunately, native plant species in our area have evolved to thrive under a dense tree canopy. Two such species could become the foot soldiers in an effort to repopulate the gardens of Cabin John with native vegetation that offer beautiful flowers, lush evergreen foliage, or both. And each has a fascinating ecological story to tell.

One of the most interesting species in our entire native flora is wild ginger, sometimes known as Canada wild ginger (*Asarum canadense*). It bears no taxonomic relation

to the cultivated ginger plant of the tropics or to its relative, turmeric—both members of the Zingiberaceae, the true ginger family. Canada wild ginger belongs to the Dutchman’s pipe family, a group largely tropical and known for its bizarrely shaped flowers that resemble deep-bowled curved

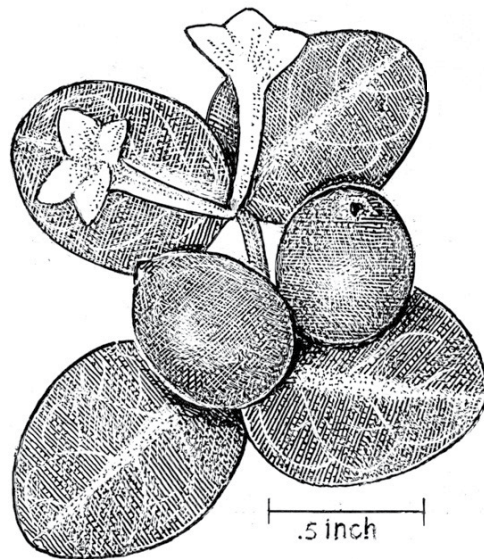


WILD GINGER

tobacco pipes. Many members of this family (*Aristolochiaceae*) are vines or lianas. Canada wild ginger grows solely prostrate and in the dense shade in areas along Cabin John Creek, covering the ground layer with heart- or kidney-shaped leaves. But it is the flowers that are most amazing: dark, mysterious, hairy, purple blossoms with three petal-like structures that are tapered at the tips and fused at the base to form a cup. Right out of a dark fairy tale.

After pollination, a pod emerges inside the flower that splits open upon ripening to expose seeds covered in a fatty tissue. That fatty tissue is attractive to ants that carry off the seeds to their lairs, feed the fatty tissue to the larvae, and thereby disperse the seeds unharmed. Wild ginger is but one of the up to 25% of our early spring ephemeral

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PARTRIDGEBERRY

MORE GROUND

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wildflowers in our area that rely on ants to disperse their seeds (these were covered in the April 2015 Local Nature column entitled *Ants in our Plants*). Now you can bring this star of local nature into that shady spot in your yard.

A companion of wild ginger in the shadiest parts of our Cabin John Creek trail is partridgeberry. It's easy to spot in winter, a ground-hugger with evergreen, opposite leaves that sport white stripes down the mid-vein of each leaf. In winter there is often a bright red berry, tasteless to us but gobbled down by wild turkey, partridge, quail,

and other overwintering birds, and even foxes, skunks, and mice.

Partridgeberry is one of our most diminutive plants but spreads beautifully and would make an excellent garden-border plant mixed with an edging of rocks. Partridgeberry is one of the few temperate-zone plants, along with bedstraw and buttonbush, that belong to the tropical family Rubiaceae, known also as the coffee tree family. The miniature flowers of the partridgeberry even slightly resemble the much larger flowers of coffee and its allies in the family.

Quinine is another famous plant that belongs to the Rubes

(as botanists affectionately call them). The Rubes contain some of the most beautiful flowering trees in the world, including my favorite, a species called Captaincookia, found only on the island of New Caledonia.

There's not much to eat on a partridgeberry, so don't grow it for its fruit. Canada wild ginger, in contrast, was sought out by Native Americans for the underground tubers that served as a spicy seasoning. Not recommended these days as further biochemical research shows that the plant contains some noxious chemicals.

However, the Native Americans gave Canada wild ginger an important place in their natural apothecary. They treated a

variety of ailments ranging from urinary tract infections and tuberculosis to convulsions with its roots.

But it's that ant-bait that really intrigues me. I have yet to do this, but someday, this spring while waiting for the pandemic isolation to lift, when the ant-attracting seeds are out, I am going to lay prone and be eye-level with the wild ginger I have in my backyard forest and wait for the ants to arrive. Even in 2021 you can still feel like Charles Darwin about to encounter an evolutionary spectacle in miniature. **VN**