

Woodland Treasures

By Susan Camp

One sunny afternoon last week, I walked through our woods to check on the mature thicket of mountain laurel (*Kalmia latifolia*) with dainty pink and white blossoms that remind me of calico fabric. The trees were showing buds, but none had opened, so I decided to make my annual spring search for pink lady's slipper (*Cypripedium acaule*). I have never found one, and I suspect it is because lady's slipper prefers pine or mixed hardwood-pine forest, and our woods are mostly hardwood with a few pines near the creek's edge.

Not finding a lady's slipper, I decided to look for other new or interesting plants. I carry my cell phone most of the time, because you never know what treasure you might discover. I use an app that lets me take a picture of a plant, animal, or insect in order to identify it. Several of these apps are available; some are free, and some charge a small fee to use. They aren't 100% accurate, but a good way to begin the identification process.

I have often mentioned our invasion of English ivy (*Helix hedera*), which has caused me much unhappiness for years, but it appears that our dogged removal efforts are finally having an effect. Great swaths of English ivy are being overcome by ferns, especially in the lower areas near the water.

I have written about ferns in the past and always confess to minimal knowledge about these lovely woodland plants. If you are like me, you tend to lump all ferns together and don't bother to learn about individual species, so a brief fern review is in order.

Ferns date back about 360 million years, and an estimated 11,000 species of ferns exist today. Ferns are non-flowering plants that reproduce from spores. You can observe spore cases as brown dots on the undersides of leaves.

The feathery fern leaf is called a frond. Each frond is composed of the leaf stalk or stipe and the leafy blade. The fern stems are rhizomes, but unlike the underground rhizomes of irises, fern rhizomes are partially visible. The fern's roots emerge from the rhizomes.

In the spring, curled baby fronds, called fiddleheads or croziers, after a bishop's crook, appear. Fiddleheads of some species are consumed, but caution is recommended as some fern species contain toxins.

I decided to snap a few photos, and to my surprise, I found three different species of native herbaceous perennial ferns growing on our property.

Long-lived cinnamon fern (*Osmundastrum cinnamomeum*) grows naturally in full to part shade in boggy areas with rich, moist acidic soils. It reaches 2 to 6 feet in height with a spread of 2 to 4 feet. Erect, fertile fronds that mature from green to red-brown are followed by sterile, yellow-green fronds. Fall color is a stunning gold to burnt-orange. Spring fiddleheads are covered with

wooly hairs. Cinnamon fern provides food for some insects and protective covering for birds and small mammals.

Netted chain fern (*Woodwardia areolata*) also prefers boggy or swampy areas and grows under the same conditions as cinnamon fern. Smaller, at 1 ½ to 2 feet in height with a 1 to 2-foot spread, netted chain fern bears bright green fronds tinged with pink in spring. It spreads easily by creeping rhizomes and can become weedy.

Ebony spleenwort (*Asplenium platyneuron*) is a smaller evergreen species that prefers rocky banks and crevices and will not tolerate wet soils. Light green sterile fronds droop to the ground. Erect, dark green fertile fronds die in winter. The black central stem gives the fern its common name.

The NCSU Extension Gardener Plant Toolbox provides information on several native ferns suitable for planting on the Middle Peninsula. Most of them require rich, moist, well-drained, acidic soil in a shady location. Most selections have no serious disease or insect pest problems and require low maintenance. Most are resistant to deer, wet soil, and heavy shade. Ferns are excellent replacements for invasive groundcovers like creeping lirioppe, English ivy, and vinca.