

Ferns for Shady Spots

By Susan Camp

Years ago, we built a small, stone terrace at the edge of the woods. It is bare right now, except for two large pots, each containing a lush autumn fern (*Dryopteris erythrosora*). The mild winter has left the ferns looking green and healthy. They fend for themselves most of the year. It's a good thing they are independent, because I have never bothered to learn much about ferns.

Ferns date back about 360 million years, to the Carboniferous Period. An estimated 11,000 species of ferns exist today. Ferns predate seed-bearing plants and reproduce from spores. Spore cases can be observed as brown dots on the undersides of leaves. Ferns produce and drop millions of spores during their lifetimes. For a detailed explanation of the fern reproductive cycle, see "A Brief Introduction to Ferns" on The American Fern Society website.

Ferns grow abundantly on every continent, except in the Arctic and Antarctica. Most ferns are found in tropical and sub-tropical climates, particularly in shady woodlands. Most cannot survive in cool, dry, mountainous environments.

Ferns are non-flowering plants. 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 roots emerge from the rhizomes.

In the spring, curled baby fronds, called fiddleheads or croziers, after a bishop's crook, appear. Fiddleheads of certain species were traditionally eaten in springtime, but research indicates that they contain carcinogenic substances.

Fern species range in size from a few inches to massive tree ferns up to 80 feet tall. There are even climbing varieties. Japanese Climbing Fern (*Lygodium japonicum*) is an Asian and Australian native, introduced to Florida in the 1930's as an ornamental. It spreads quickly, smothering trees and native plants. It is a persistent invader in the Lower South, according to "A Field Guide for the Identification of Invasive Plants in Southern Forests." Another fern, bracken (*Pteridium aquilinum*), is considered a weed in many countries; fortunately, bracken is not a common problem in our region. Bracken grows from strong underground rhizomes in open fields and moorland and is difficult to eradicate.

"Tried and True Native Plant Selections for the Mid-Atlantic" from the Northern Virginia Master Gardeners are handy plant fact sheets that include information on several native ferns suitable for planting on the Middle Peninsula. All 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. These ferns are excellent replacements for invasive groundcovers like creeping liriope, English ivy, and vinca.

Lady fern (*Athyrium asplenoides*) is a deciduous perennial with delicate, arching, light-green fronds and dark-red leaf stalks at maturity. Fiddleheads appear until frost. Lady fern tolerates rabbits and deer. It can spread aggressively.

Royal fern (*Osmunda spectabilis*) is a tall, erect deciduous perennial with pink leaflets that change to bright green, becoming yellow or brown in the fall. The stalks are green to wine-colored. Fuzzy fiddleheads appear in early spring. Royal fern tolerates wet soil and brief flooding. Rabbits and deer rarely cause damage.

Cinnamon fern (*Osmundastrum cinnamomeum*) fossils date back to 75 to 180 million years ago. 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. Fiddleheads are covered with wooly hairs. Cinnamon fern provides food for some insects and protective covering for birds

Christmas fern (*Polystichum acrostichoides*) is an evergreen perennial with leathery, dark green lance-shaped fronds. It grows in a circular cascade. Emerging fiddleheads are covered with silvery scales. Christmas fern dislikes wet, clay soil.

Ferns provide color and textural interest in shady areas or containers. They contrast well with other shade plants like hostas and hellebores. Dainty, curled fiddleheads welcome in the spring. The best part is that they don't require a lot of attention.

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