

Gardening with Native Ferns

by Cindy Gilberg

As spring gives way to summer and temperatures rise, I head for the woodland garden to seek shelter in the cool of the lush green shade. There, under the canopy of the trees, occasional colonies of ferns reach upward above the shorter perennials. They add a sense of mystery and timelessness, a clue to their primitive longevity. Ferns represent a group of plants that have enormous antiquity, though now they are considerably smaller than their giant ancestors. Before flowering plants appeared on earth, ancient forests consisted of large tree ferns, clubmosses and horsetails. Giant dragonflies darted about in the mists of these primordial forests that would later become the rich seams of coal that modern society is dependant on.

Ferns reproduce by spores rather than by seeds – it is arrangement of spores on the fertile fronds that is a critical part of the key to their identification. Some have separate fertile fronds that ripen in autumn to a lovely chocolate or cinnamon brown, persisting through the winter to provide interest in the cold and subtle landscape. This group includes the ostrich, cinnamon, royal and sensitive ferns. Other species produce spores on the underside of their fronds. These rusty-looking clusters are sometimes mistakenly identified as a pest problem by novices.



Ferns are an integral part of a shade garden, adding (in most species) an exquisitely delicate texture. This quality is valuable in design since fine-textured plants help unify the tapestry of green in the garden. Use the finely dissected leaves of ferns by weaving masses of them in and around other woodland species. Plant ferns in front of large leaved shrubs such as wild hydrangea or beautyberry to creating some fabulous textural contrasts. Blend ferns with shorter plants such as squaw weed, wild ginger and woodland phlox. In fact, incorporate ferns into plantings with almost any other woodland species except those that also have ferny foliage and you will create some stunning combinations. In larger settings, ferns planted en masse are quite practical as a ground cover since most ferns tend to spread and colonize.

Our native ferns are most commonly found in the wild in the deciduous woodlands and wet lowlands. Those listed below thrive in organic-rich woodland soils. To replicate that in home gardens, remember that compost is a fern's best friend - be generous when establishing new plants. Apply additional compost (2" or so) over the soil surface as needed to replenish and maintain a sufficient level of organic matter.

Of the approximately 70 species of ferns in Missouri only a handful are currently available in local and mail order nurseries. Below are just a few to hunt down and try.

Christmas fern (*Polystichum acrostichoides*), found in moist but also in dry often rocky wooded slopes, grows 1 to 1 ½ ft. tall. The semi-evergreen fronds were used by early American settlers to make Christmas wreaths, hence its common name. In my gardening experience this fern is tolerant of drier soils though it has more luxuriant growth in richer soils.

Ostrich fern (*Matteuchia struthiopteris*) is the tallest of our ferns topping out at 5-6 ft. The fiddleheads of ostrich fern are edible, however it is recommended not to eat them raw but rather to steam or sauté them for about 10-15 minutes. Ostrich fern makes an incredible large-scale ground cover.

Narrow-leaved spleenwort (*Athyrium pycnocarpon*) is less common, both in the wild and in local garden centers. It recently attracted my attention and has become one of my new favorites. Its tall stature (3 ft.) and its more unusual foliage makes a stunning addition to any woodland garden.

Sensitive fern (*Onoclea sensibilis*) and **royal fern** (*Osmunda regalis*) both thrive in low, wet soils. And both have broader, less fern-like texture combined with separate spore fronds. These two ferns are particularly well suited for use in rain or water gardens in shaded locations.

Wood fern (*Dryopteris marginalis*) commonly grows in moist ground in seeps, along creeks and spring branches in the Ozarks. Growing up to 3 ft. tall, it has a classic fern habit and bears its spores along the underside of the fronds.

Cinnamon fern (*Osmunda cinnamomea*) has gorgeous cinnamon-colored spore fronds that are prominent in fall and through the winter. Also growing to 3 ft., this fern is another that can tolerate wet soils, though it thrives in rich soils with average moisture as well.