



HARDY FERNS

Ferns are valuable garden plants of great dependability and beauty. Their leaves, known as fronds, can be lacy or leathery, plain green or variegated. Ferns can provide a long season of interest. Ferns do not flower but their foliage is extremely pleasing in the shade gardens. Ferns offer trouble free elegance, rarely suffering from pests or diseases.

Ferns were tremendously popular in Victorian times, and many wealthy British had ferneries - shady garden areas devoted to fern collections. As we become more aware of the values of foliage texture in modern landscapes, we are re-discovering the refreshing diversity of hardy ferns. In the wild, ferns inhabit the cool, shady woodland areas, in the protection naturally provided by trees.

Even if your garden space is limited, find a place in the shade for Ferns. They ask for very little care, and repay you with ease of growth and breathtaking beauty. Best of all, they add texture like no other perennial — graceful and airy, despite their hardiness and willingness to grow.



Planting Ferns

Ferns require moist, humus rich soil. Roto till four to six inches of **well-rotted manure** or **Bumper Crop** into the entire garden before planting. This mulch helps to increase the moisture-holding ability of the soil and helps to increase the soil acidity. If you have heavy soil, lighten it with well-rotted compost or utelite.



Most ferns do not like hot temperatures, low humidity, dry soil or drying winds. Plant ferns in cool, shady areas that are somewhat protected from winds. A few, such as Lady Ferns (*Athyrium filix-femina*), will grow in full sun, provided the planting site is damp.

Ferns grow well on the north and east side of houses, fences, and sheds. Ferns can also grow in other locations if you can change the environment to match the fern's needs. Ferns can grow well under trees and shrubs, if they are properly planted and cared for. Shrubs and trees may have roots close to the surface that can rob nutrients and water from the fern's roots. You may have to water and fertilize your ferns more often in these areas than you would need to in other flower gardens, to have them flourish. Mulch your ferns once a year to help improve the soil, to keep the roots cool, and to help the soil retain moisture.



Ferns do not like to be moved or transplanted, so plan and prepare your gardens before planting them. Plant your Fern very shallowly, with the crown flush with the surrounding soil. Most ferns do not grow well the first year planted. Don't be discouraged if your fern loses most, or all, of its fronds the first summer. If they do lose all their fronds, keep the roots moist, but do not keep them wet because they do not need much water. The roots will grow new fronds and the plants will look great next spring.

Care and Maintenance

Ferns look best if they are trimmed and groomed occasionally. It is best not to tidy-up your ferns too early in

the spring as the previous year's fronds provide frost protection for the crown. Spent fronds should be cut as new growth begins and after all damaging frosts are past, usually around the end of March. Timing will change each year so it is up to you to observe and act according to the season's weather.



Remove any damaged or dead fronds close to the ground. When the old fronds are removed, a mulch of 2-3 inches of compost or composted manure will keep the crown and roots snug and moist. It will also provide a cool insulating blanket to help conserve moisture during the growing season. Do not pile compost directly around the crown but leave 2-3 inches of space to prevent rotting.

Trim ferns lightly all summer if needed. Don't trim ferns in the fall or winter; wait until the new growth appears in the spring to remove any winter injured fronds. The older fronds protect new buds during the winter.

Fertilizing Ferns

Ferns, as a rule, need very little fertilizer: just make sure the soil is very rich in humus. Do not use fresh manure as a fertilizer, it may be too strong and may burn the plants. Apply a little slow release fertilizer, such as **Dr. Earth Rhododendron & Azalea Fertilizer**, **bone meal** or **blood meal**, early each spring.



An occasional application of an acid loving plant fertilizer during the summer will help acidify the soil and give your fern a light feeding. **Never apply any fertilizer directly to the fronds, the fertilizer will turn them brown.**

Most Ferns are slow growing and can take several years to reach their mature size, which varies greatly between varieties.

Watering Ferns

Shade loving ferns appreciate an organic, evenly moist, well drained soil. Water ferns deeply once or twice a week during the first growing season to keep



the soil thoroughly moistened. Water ferns more frequently during hot, dry spells in the summer. As a general rule, the more sun a fern gets, the more water it requires to maintain a healthy appearance.

As much as they love moisture, it is possible to water ferns too much. Just be sure to keep the soil reasonably moist.

Fern Terminology

Fronds and Fiddleheads - The leaves of ferns are called fronds. The tightly rolled buds that emerge from the ground and unfold are called fiddleheads.

Deciduous or Evergreen - Ferns that die back to the ground at the end of each season are called deciduous. Evergreen ferns keep their fronds from year to year.

Fertile Blades - Some ferns will send up a brown encrusted spike called a fertile blade. This frond is part of the fern's reproductive effort, like seeds on other plants. They are often used in dried arrangements, and they can simply be removed if you find them unattractive.

Spores - Ferns do not have flowers or seeds. Instead they reproduce by means of SPORES. SPORES are tiny dust-like particles that grow in, and are released from, structures on the undersides of the fronds.

Ferns are not appealing to deer. It's important to remember that, if deer are hungry or thirsty enough, they will consume plants they normally wouldn't eat at any other time. So while no plant is completely deer resistant, you are more likely to discourage them with ferns. Ferns make an excellent choice for any garden where deer are a problem.

Hardy Fern Varieties

There are about 12,000 different species of ferns worldwide. Ferns come in a diverse range of texture, color, sizes and shapes.

Many of the native species that grow in our mountains are not available to buy, but listed below are some of the hardy species that should grow well in your yard, if they are planted in just the "right spot". Choose one, two, or more varieties to add color, variety and interest to your flower gardens.

Ferns are also lovely planted with shade-lovers such as Alchemilla, Brunnera, Dicentra (Bleeding Heart), Hosta, Mertensia (Virginia Bluebells), Phlox divaricata, Pulmonaria (Lungwort), Tiarella (Foam Flower), and Viola.

Many varieties of hardy ferns are available to choose from for home gardens. Listed below are some of the varieties we usually have available. Unfortunately, we do not have all of these varieties available all the time.

Maidenhair Fern -- *Adiantum pedatum*

Very delicate, fan-shaped fronds. Stems are shiny and black, with light green lacy leaves. Suitable for rock gardens or under shrubs. Grows twelve to twenty-four inches tall and spreads twelve to eighteen inches wide.



Hart's Tongue Fern -- *Asplenium scolopendrium*

Evergreen. It is unusual because unlike most ferns, it has simple leaves rather than the more typical pinnate or feathery fronds. It has thick, leathery, bright-green fronds which are curled at the edges. Shiny, wavy-edged fronds unfurl in early spring, and remain all year. Grows 16" tall.

Lady in Red Fern -- *Athyrium augustum forma rubellum*

Deciduous, creeping, erect. Known for vibrant burgundy red stems that contrast beautifully with the green fronds. Colors become more intense with age and less nitrogen. A great colorful fern in mass planting in part shade & semi moist setting. Plant them with red astilbes or dark leaf Ligularia to help accentuate the stem color. Grows 30" to 36" Tall.



Photo Credit: Monrovia Nursery

Crested Lady Fern -- *Athyrium filix femina 'Cristatum'*

Fronds are bright green in color and grow on stiff stems that emerge from a crown at the base of the plant. Leaflets are very refined with crested growth at the end of each of the leaflets. Plants grow to be three to four feet tall and require shade.



Photo Credit: Monrovia Nursery

Japanese Painted Fern -- *Athyrium niponicum 'Pictum'*

Deciduous. Very popular hardy fern and one of the most colorful, with a wide range of silver, burgundy, & green. Very adaptable to moist to slightly dry soils. Arching fronds are olive green with a metallic-gray sheen. Leaflets are purplish at base and silvery green at the tips. This fern adds a bright touch to the shade garden. Grows 12" to 20" tall.



Ghost Fern -- *Athyrium niponicum 'Ghost'*

Deciduous. Upright habit and silvery fronds that give it a ghostly look, hence the name. Emerging new fronds have a shimmering whitish color that darkens slowly to a silvery green with burgundy accents. 'Ghost' spreads slowly by shallow rhizomes, eventually becoming an excellent ground cover. Grows best in a sheltered location and its color is best in light shade. Grows 30" to 36".



Photo Credit: Monrovia Nursery

Regal Red Japanese Painted Fern -- *Athyrium niponicum 'Regal Red'*

Deciduous. The dark violet red interior of each frond is contrasted by bright silver edges making each leaflet distinct. Leaves color up more with a bit of sun exposure, but can be more vertical and less attractive if they receive too much sun. The fronds work well in cut flower arrangements, providing lasting color and soft texture. Grows 18" to 24" tall.



Photo Credit: Monrovia Nursery

Ursula's Red Japanese Painted Fern -- *Athyrium niponicum Ursula's Red*

Deciduous. Long, finely cut, elegant fronds unfurl in spring a gleaming white on top and rich wine-red underneath. As the season progresses, the red tones begin to influence the top of the leaves, and the white sizzles into silver. Creating a fabulous two-tone effect. Stands out among other Ferns, as well as with Hostas and other shade lovers. Grows 18" to 24" tall.

Deer Fern -- *Blechnum spicant*

Semi-evergreen. This frond is often called a deer's tongue fern. They like deep shade and some moisture. In the sun, they tend to be smaller. The more sun it receives, the more moisture it requires.



Golden Scaled Fern -- *Dryopteris affinis*

Semi-evergreen. Especially attractive in spring. Golden-green fronds, unfurl in late-spring and early-summer, and turn rich-green as they mature. Grows 24" to 36" tall.

Autumn Fern -- *Dryopteris erythrospra*

Evergreen. Glossy green foliage turns beautiful red and orange as new growth appears in spring & fall. Most popular evergreen fern. Very hardy & adaptable. Good container fern. Autumn Fern spreads by underground stems. Young papery fronds are reddish when young and the mature foliage is deep green and deeply cut. This fern prefers shade. Grows 18" to 24".

Brilliance Autumn Fern -- *Dryopteris erythrospra 'Brilliance'*

Evergreen, slow spreading, erect-arching. All the same great attributes as the Autumn, but a bit sturdier stem and more 'brilliant' colorations of oranges & reds as the new growth appears. Grows 18" to 30" tall.



Photo Credit: Monrovia Nursery

Wood Fern -- *Dryopteris carthusian*

Very hardy variety that is easy to grow. The fronds are often used by florists in cut flower arrangements. Grows two to three feet tall.

Robust Male Fern -- *Dryopteris filix-mas 'Undulata Robusta'*

Semi-evergreen. A vigorous fern with strong upright dark green fronds that become arching as they mature. A great looking tough fern with wonderful texture. Part shade, part sun. Can tolerate drier soils and more sun. Grows 24" to 48" tall.



Barnes' Fern -- *Dryopteris filix-mas 'Barnesii'*

Deciduous. Upright fern with slender fronds, and a mid to dark green coloring. Foliage is attractive all summer long, and may be used as greenery in flower arranging. It is very tough and drought tolerant, ideal for dry-shade planting. Grows 24" to 36" tall.

Leather Wood Fern -- *Dryopteris marginalis*

Evergreen. The newly-emerged leaves are light green, but they turn dark green by summer. Often used by florists. The fronds arise in a vase shape and rapidly taper to a point. The blade is lance-shaped and leathery. This fern is great for the shaded rock or woodland garden and native gardens. Good for naturalizing. Grows 24" to 36" tall.

Ostrich Fern -- *Matteuccia struthiopteris*

Deciduous. Vigorous grower with very large lacy lance-shaped fronds. Fronds grow in fountain-shaped clumps. Can be 1-2' wide. This fern prefers semi-shade, lots of water, and rich soil. It is so versatile, however, that it can do well in drier soils and in full sun. Part shade is best for color. This variety spreads rapidly, once established in the garden. This variety is perhaps the best and easiest fern to grow, especially for the beginner. Grows 24" to 48" tall.



Sensitive fern -- *Onoclea sensibilis*

Deciduous. Its beaded, fertile fronds turn dark brown at maturity. This fern is sensitive to drought, and requires consistently moist soil to thrive. The common name of this fern comes from the fact that it wilts quickly when cut, or touched by frost, but it is hardy in other ways. Grows 12" to 18" tall.



Royal Fern -- *Osmunda regalis*

Deciduous. A truly unique and spectacular fern. This forms a large crown, sending out a ring of arching leather green frond with contrasting red stems. Foliage is deep green with long smooth edges. Likes moist, acidic shady site, although can tolerate sunnier spots as well. A beautiful and graceful plant. Grows 24" to 60" tall.



Photo Credit: Monrovia Nursery

Cinnamon Fern -- *Osmunda cinnamomea*

Deciduous. Typically grows in clumps to 2-3' tall, but with constant moisture can reach 5' in height. The common name of this plant is in reference to the cinnamon colored fibers found near the frond bases. Can live in drier soil in part shade or full sun. A very impressive plant when mature. Osmunda fiber used in the potting of orchids comes from the roots of these ferns. Grows 30" to 60" tall.



Alaskan Fern -- *Polystichum setiferum*

Also known as Soft Shield Fern. This fern flourishes in shady areas. It has narrow, lance-shaped fronds that grow to be two feet long. The fronds have feathery, dark green leaflets. It is a very hardy plant with a tropical appearance. This variety is excellent for shaded rock gardens and in annual flower gardens. Grows 18" to 30" tall.



Photo Credit: Monrovia Nursery

Christmas Fern -- *Polystichum acrostichoides*

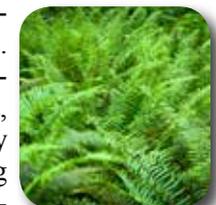
Evergreen. This native species has leathery dark green fronds. They have very dependable evergreen fronds, usually available for decorations during the Christmas season. Best among rocks & drier soils, rather than rich woodland. Grows 12" to 18" tall.

Dyce's Holly Fern -- *Polystichum Dycei*

Semi Evergreen. This large Holly Fern adds a bold and elegant look to shaded gardens. Sturdy, arching fronds with glossy dark green foliage emerge from a center crown to give a symmetrical appearance. It is a great, bold fern for dry shade. Grows 24" to 36" tall.

Western Sword Fern -- *Polystichum munitum*

Evergreen. They are robust, reliable, and virtually maintenance-free. They put up with difficult soil and manage to keep up appearances even in hot, dry weather. Their deep green, leathery fronds are attractive year-round. Long fronds in cool, shady locations. In warmer, less humid areas plants are more compact. Grows 24" to 48" tall.



Tassel Fern -- *Polystichum polyblepharum*

Evergreen. Tassel Ferns are very showy and easy to grow. Their dark green fronds grow in a very symmetrical, rosette form. The stiff stems are covered with soft, copper-brown hairs. Tassel Ferns should be planted in compost rich, evenly moist soil in a area with partial to full shade. Grows 18" to 24" tall.



Photo Credit: Monrovia Nursery

Woodsia Fern -- *Woodsia obtusa*

Deciduous. This little fern will tolerate sun better than other varieties. Forms a clump of sword-shaped, bright green fronds. Suitable for rock garden or growing in walls. Found in the wild growing in cliff faces Grows 12" tall.



More Resources:

- <http://hardyfernlibrary.com/ferns/home.cfm>
- <http://www.hardyferns.org/index.php>
- <http://amerfernsoc.org/>

