



Hardy Ferns for Oklahoma

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David Hillock
Senior Extension Specialist

Casey Hentges
Associate Extension Specialist

Mike Schnelle
Professor, Department of Horticulture and Landscape Architecture

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Ferns are synonymous with forested areas. Typically, they grow in wooded areas where the environment is ideal for growth: shaded, dependable moisture, and loose, crumbly soil that is acidic to neutral in pH.

Ferns provide a delicate and airy quality to a shade garden. The fine texture of ferns contrasts nicely with perennials that have large leaves like hostas, the shiny leaves of hellebores, and the colorful leaves of coral bells (Image 1).



Image 1. The delicate appearance of ferns contrasts nicely with other perennials in the garden such as hosta, hellebore and coral bells. (Photo courtesy of David Hillock)

Ferns put on most of their growth in spring and again in fall. Some ferns can be aggressive spreaders when conditions are favorable, making them great groundcovers. Others are clump-forming and can be used as accents among other groundcovers and plants (Image 2).



Image 2. Many ferns spread to form a groundcover. This is a mix of ferns and other groundcovers in a shade garden. (Photo courtesy of Casey Hentges).

Ferns suitable for Oklahoma are tolerant of both cold and heat. Some of the many species of ferns will grow in just about every area of the state. Most grow in shade but a few will grow in full sun if constant moisture is available. While most ferns grow between 1 and 3 feet tall and wide, some only grow a few inches. Others can grow as high as 6 feet. Most ferns are slow growing and can take several years to reach their mature size.

Culture

Most ferns require a moist, shady spot to grow. This can be under a tree in the landscape, a wooded area or the north side of a building. Most need ample moisture during the summer for growth and should be given an inch or more a week if rainfall is absent.

Ferns prefer well-drained soil high in organic matter. Heavy clay soils should be mixed with organic matter to improve drainage. Mix a 2-inch layer of compost or other organic material into the top 10 inches of soil before planting. Sandy soils can also benefit from the incorporation of organic matter. Adding organic matter to sandy soil helps improve both nutrient and water retention. It is best to prepare large areas for ferns instead of just amending individual holes. Adding too much organic matter to a small area may lead to an accumulation of excess moisture, causing root rot. Most ferns prefer acidic soils with a pH below 7, though there are a few that prefer a slightly alkaline (basic) soil with a pH above 7. Perform a soil test before planting to check the pH and adjust nutrient levels according to soil test recommendations.

Fertilizing should be done in spring after new growth has begun. Ferns can be sensitive to over fertilization, so it is best to use a slow-release fertilizer or organic fertilizer.

Ferns also benefit from mulch. In wooded areas, the leaves falling from the trees work just fine. In other areas apply a 2- to 3-inch layer of leaves or pine straw in the spring and in the fall.

Fern Life Cycle

Ferns are a unique plant and date back to prehistoric times. Instead of seeds, ferns grow from spores. If you look closely at a fertile fern leaf (Images 3 & 4) you will see brown dots that are the spore cases called sporangia.



Image 3. Fertile fern leaf with spore cases called sporangia (singular: sporangium), groups of sporangia are called sori (singular: sorus). (Photo courtesy of David Hillock).



Image 4. Fertile fronds. (Photo courtesy of Mike Schnelle)

Each spore case is full of many spores. Spores are released into the air. When they land in a suitable spot they germinate, becoming small leaf-like structures called a prothallium. The prothallium produces both male and female sexual organs. When the female organs become fertilized by the male organs, small fern plants begin to grow. In some ferns, it can take as long as six months for the first fronds (leaves) to appear after fertilization (Figure 1).

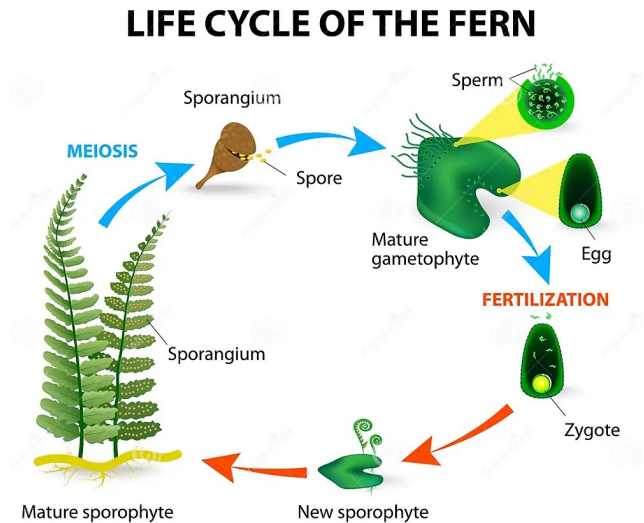


Figure 1. Fern alternation of generation cycle. Photo credit: [dreamstime.com/stock-illustration-fern-life-cycle-ferns-different-other-land-plants-as-both-gametophyte-sporophyte-phases-free-living-image42481682](https://www.dreamstime.com/stock-illustration-fern-life-cycle-ferns-different-other-land-plants-as-both-gametophyte-sporophyte-phases-free-living-image42481682)

Propagation

Ferns grow from spores but may be propagated by division, which is the most practical form of propagation for the home gardener. Plants may need to be divided if the center of the clump is thin, hollow, dead and/or the leaves are smaller than usual. You may also divide them if you simply want more plants.

Division is generally done every three to five years to keep the plants vigorous. Divide right after the first frost in the fall, after the leaves have dropped, or you can divide them in very early spring, just as new growth is emerging, if you are careful not to damage the delicate new leaves.

How the ferns are divided will depend on their growth habit. Spreading ferns grow by underground stems called rhizomes, which can be dug up, separated into smaller pieces, and replanted. Clump forming ferns have fibrous roots and the whole plant can be dug and divided into smaller clumps and replanted. You can also do what is referred to as edge division, which involves cutting divisions from the outside edges of a clump.

Problems

In general, ferns have few problems if in proper growing conditions. Scale insects can occasionally be a problem,

which can be treated with horticultural oil or insecticidal soap. Slugs can also be a problem. Slugs sometimes leave behind slime trails, which can be seen as a silvery deposit on hard surfaces, leaves and stems. Slugs can make irregular holes in plant tissue with their rasping mouth parts. Treat with an appropriate pesticide. Foliar nematodes can attack some ferns. Symptoms of foliar nematodes are reddish brown areas between the leaf veins. Infected plants should be removed and destroyed. Dig plants up, bag them and remove them from your garden as soon as you notice symptoms to reduce the risk of the nematodes spreading to healthy plants. Do not put them in the compost pile.



Image 7: 'Lady in Red' Lady fern (*Athyrium filix-femina* 'Lady in Red'). (Photo courtesy of David Hillock).



Image 5. Marsh fern (*Thelypteris palustris*), a native of Oklahoma. (Photo courtesy of David Hillock)



Image 8: Sensitive fern (*Onoclea sensibilis*) growing as a groundcover in a shade garden. (Photo courtesy of David Hillock)



Image 6. Hart's Tongue fern, *Asplenium scolopendrium*, is an evergreen fern typically producing an erect-arching clump of tongue-shaped, leathery, bright green fronds. Though there is a rare American variety (*A. s. var. americanum*), most sold in commerce are a European variety. (Photos courtesy of David Hillock).



Image 9. Korean Rock fern, *Polystichum luctuosum* (*P. tsusimensense*). (Photo courtesy of David Hillock)



Image 10. Autumn fern, *Dryopteris erythrosora*. (Photo courtesy of David Hillock)



Image 11. Ostrich fern, *Matteuccia struthiopteris*. (Photo courtesy of Casey Hentges)



Image 12. Ferns can create a nice green background to highlight colorful foliage plants such as caladium and heuchera. (Photo courtesy of Casey Hentges)

References

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Lady Bird Johnson Wildflower Center, <https://www.wildflower.org/>

Name	Size	Light	Moisture	Comments
<i>Adiantum capillus-veneris</i> – Southern Maidenhair Fern (N)	12-26"	Light to full shade	M	Develops thin wiry stems with delicate leaves. Best with constant moisture. More tolerant of alkaline soils. Do not overcrowd, disease will result. Propagate through rhizome division. Zones: 6-9.
<i>Adiantum pedatum</i> – Northern Maidenhair Fern (N)	1-2'	Part to full shade	M	Do not let dry out. Leaves are lacy on whorled, black stems. Fronds and leaves form a distinctive horseshoe shape. Deciduous. Prefers constant moisture but not too wet. Do not overcrowd; disease will result. Propagate through rhizome division. Zones: 3-8.
<i>Arachniodes standishii</i> – Upside Down Fern	1.5-2'	Part to full shade	M to W	Delicate, lacy, arching fronds give an upside-down appearance. Tolerates heavy shade and is resistant to deer damage. Prefers acidic soils. Evergreen. Propagate by division. Zones: 4-8.
<i>Asplenium platyneuron</i> – Ebony Spleenwort (N, common)	6-20"	Some sun to light shade	M to D	Erect, dark evergreen fronds. Does not like wet soils. Tolerates acid or alkaline soils. Propagate through rhizome division. Zones: 3-9
<i>Asplenium rhizophyllum</i> – Walking Fern (N) (OK)	2" to 1'	Light to dense shade	M	Found growing in tufts in moist, shady, rocky cliffs, mossy rocks, and near streams or ravines. Often grows on basic (pH > 7) limestone rocks but sometimes also found on sandstone or other acidic (pH < 7) rocks. Does not tolerate prolonged drought. Propagate by clump division. Zones: 4-8.
<i>Asplenium scolopendrium</i> – Hart's Tongue Fern See Image 6.	8-12"	Part to full shade	M	Evergreen, typically producing an erect-arching clump of tongue-shaped, leathery, bright green fronds. Leaf margins may be wavy. Alkaline to slightly acidic soils. Propagate by clump division. Zones: 5-9.
<i>Athyrium filix-femina</i> – Lady Fern (N) See Image 7.	2-4'	Light to full shade	M to W	Vigorous with upright, deciduous leaves. Produces a flush of reddish growth in spring. Prefers constant moisture but can stand some drought. Propagate through rhizome division. Cultivars: 'Cristatum', 'Fancy Fronds', 'Frizelliae', 'Lady in Red', 'Veroniae Cristatum', 'Victoriae'. Zones: 5-9.
<i>Athyrium filix-femina</i> var. <i>asplenioides</i> – Southern Lady Fern (N)	18-36"	Light shade	M (D to Nrm)	Lacy, large, broad, light green leaves. Acidic to neutral soils. Can be an aggressive spreader. Tolerates seasonal flooding. Propagate by rhizome division. Zones: 5-9
<i>Athyrium</i> 'Ghost' – Ghost Fern	30"	Part to full shade	M	'Ghost' is a deciduous hybrid (<i>Athyrium niponicum</i> var. <i>pictum</i> and <i>Athyrium filix-femina</i>) noted for its upright silvery foliage. Slowly spreading clump of fronds that are a soft grayish-green with an overlay of silvery hues accented by contrasting dark maroon midribs. Silvering is best in the spring, with fronds becoming more grayish-green as hot temperatures arrive. Propagate by clump division. Zones: 4-9.
<i>Athyrium niponicum</i> var. <i>pictum</i> – Japanese Painted Fern (<i>Anisocampium niponicum</i>)	10-15"	Light to full shade	M	Deciduous fronds are a mix of silvery-gray, green and burgundy on dark purple stems. Propagate by clump division. Zones: 3-8.

<i>Botrychium virginianum</i> (<i>Botrypus virginianus</i>) – Rattlesnake Fern (N, OK)	1-4'	Part to light shade	M	Diverse, found growing in dry to wet conditions, though it prefers moist, fertile, acidic soils high in organic matter; tolerates heavy shade. Fronds are light green and delicate; stems can be green to red. May be difficult to establish. May not be available commercially. Zones: 4-9.
<i>Cyrtomium falcatum</i> – Japanese Holly Fern	30"	Light to full shade	M	Bold, coarse textured evergreen leaves make these large plants a feature in the landscape year-round. Provide supplemental water during dry periods. Easy to grow. Propagate by clump division. Zones: 6-10.
<i>Cyrtomium fortunei</i> – Japanese Holly Fern	1-2'	Part to full shade	M	Evergreen; good drainage essential. Fronds resemble holly branches and are dull green in color. It has become weedy in some areas where it has escaped cultivation. Scale, root rot and fungal spots can occur. Seldom damaged by deer or rabbits. Propagate by clump division. Zones: 6-9.
<i>Cyrtomium macrophyllum</i> – Large-leaf Holly Fern	2'	Part to full shade	M	Bold, evergreen to semi-evergreen, light green leaves. Propagate by clump division. Zones: 6-10.
<i>Dennstaedtia punctilobula</i> – Hay-Scented Fern	1-2'	Sun to part shade	M (occasionally D)	Yellow-green fronds that turn yellow in fall; crushed fronds emit the fragrance of freshly mowed hay. Tolerates a wide range of soils. Tolerates full sun with consistent moisture. May spread rapidly. In hot summer climates it may look ragged by late summer. Propagate by rhizome division. Zones: 3-8.
<i>Dryopteris affinis</i> 'Cristata' – Golden-scaled Male Fern (<i>Cyclodium heterodon</i> var. <i>abbreviatum</i>)	3-4'	Part to full shade	M	Also called 'Cristata the King.' Derived from an evergreen fern native to the moist woodlands of eastern Europe and western Asia. Light green fronds mature into a darker green. The tall arching fronds have leaflet edges that are divided and are crested or even frilly in appearance. Grow as understory plant, bedding plant or showy specimen. Prune back dead fronds in spring to encourage new growth. Propagate by clump division. Zones: 4-8.
<i>Dryopteris x australis</i> – Dixie Wood fern (N)	4-5'	Part to full shade	M	Large, architectural plants. A naturally occurring hybrid with glossy, bright green leaflets. Clump forming. Locate in an area protected from strong winds to prevent damage to fronds. Sterile. Must be propagated by clump division. Zones: 5-9.
<i>Dryopteris carthusiana</i> – Toothed Wood Fern (N)	2-3'	Part to full shade	M	Lacy, bright lime-green, outward-growing fronds with blackish scales on the stipes (frond stems). Fronds will remain green in mild winters. Propagate by clump division. Zones: 3-8.
<i>Dryopteris celsa</i> – Log Fern (N)	3-4'	Part to full shade	M	A naturally occurring hybrid often found growing on fallen logs. Fronds are erect, deeply cut, shiny dark green with contrasting dark central stipes (stems). Fronds are semi-evergreen. Makes a great groundcover. Propagate by clump division. Zones: 4-9.
<i>Dryopteris clintoniana</i> – Clinton's Wood Fern (N)	3'	Part sun to light shade	M	Naturally occurring hybrid found in swamps and wet woods in nature. Dark green, evergreen foliage. Propagate through rhizome division. Zones: 3-8.

<i>Dryopteris cristata</i> – Narrow Swamp Fern or Crested Wood Fern (N)	1-3'	Sun to shade	M to W	Needs more than average moisture. Found growing in swamps and moist areas in nature. Leaves are often described as ladder-like. Sterile fronds are evergreen. Full sun is okay if moisture is plentiful. 'The King' is a larger form of the species. Propagate by clump division. Zones: 3-7.
<i>Dryopteris decipiens</i> – Deceptive Fern	1'	Light shade	M	Evergreen, elegant fronds; new growth is red-flushed in spring. From subtropical evergreen forests in South Central China and into Japan but is much more winter hardy than its origins would indicate. Propagate by clump division. Zones: 6-8.
<i>Dryopteris erythrosora</i> – Autumn Fern or Japanese Shield Fern See Image 10.	2-3'	Light to full shade	M	New spring leaves of this evergreen are coppery-pink in spring, turn green in summer, and rusty-brown in fall. Propagate by clump division. Zones: 5-9.
<i>Dryopteris filix-mas</i> – Male Fern (N)	3-5'	Light to full shade	M to Nrm	Upright, vase-shaped evergreen. Moisture is needed but does not need to be wet. Propagate by clump division. Many cultivars are available. 'Barnesii', 'Cristata Martindale', 'Linearis', 'Linearis Congesta', 'Linearis Cristata', 'Linearis Polydactyla', 'Nana', 'Parsley'. Zones: 4-8.
<i>Dryopteris goldiana</i> – Giant Wood Fern (N)	3-4'	Part to full shade	M	Dark green to golden-green fronds. Prefers moist, acidic soil and protection from winds. Propagate by clump division. Zones: 3-8.
<i>Dryopteris lepidopoda</i> – Sunset Fern	1-3'	Light to deep shade	M	In late spring, new coppery-pink fronds open quickly, developing to orange-bronze tones that mature to a glossy, deep olive green. Grows best in rich moist to well-drained soil but will tolerate sand or clay. Provide regular watering during dry weather to keep fronds from drying out. Though evergreen, fronds will collapse in mid to late winter. Cut the old fronds to the ground in late February or early March, before the new fronds emerge. Propagate by clump division. Zones: 6-9.
<i>Dryopteris ludoviciana</i> – Southern Wood Fern (N)	3-4'	Light to full shade	M	Glossy green fronds. Does well in really hot areas with heavy wet soil. Provide supplemental water during dry periods. Makes a great groundcover. Propagated by clump division. Zones: 6-10.
<i>Dryopteris marginalis</i> – Marginal Wood Fern, Marginal Fern, Marginal Shield Fern – (OK N)	20"	Light to full shade	M (D to Nrm)	Evergreen, upright, sturdy, dark, leathery leaves. Develops large clumps. Propagated by clump division. Zones: 3-9.
<i>Dryopteris nipponensis</i> – Wide Leaf Autumn Fern	2'	Part sun to light shade	M to D	A cousin to the better-known autumn fern; evergreen, with foliage shorter and broader than autumn fern. New growth is tinted red in spring. Requires consistently moist soil; do not let dry out between waterings. Propagate by clump division. Zones: 6-8.
<i>Dryopteris remota</i> – Remote Wood Fern, Scaly Buckler Fern, Wood Fern	2-2.5'	Part to full shade	M	Typically grows in an upright habit and features firm, erect, finely cut, medium green fronds with contrasting shaggy, golden brown central stipes (stems). Fronds are semi-evergreen. Propagate by clump division. Zones: 4-8.
<i>Dryopteris sieboldii</i> – Siebold's Wood Fern	1-3'	Light to full shade	M	A slow-growing, evergreen to semi-evergreen. Fronds are leathery triangular and blue-green. Propagate by rhizome division. Zones: 6-9.
<i>Dryopteris tokyoensis</i> – Tokyo Wood Fern	1.5-3'	Part to full shade	M	An erect, vase-shaped, deciduous fern. Each frond has 20-40 pairs of shallow-lobed, lance-shaped pinnae. Propagate by clump division. Zones: 5-8.

<i>Dryopteris uniformis</i> – Uniformed Male Fern	20"	Light to full shade	M	Evergreen, dark fronds. Grows best in slightly moist soil. Propagate by clump division. Cultivars: 'Cristata'. Zones: 5-8.
<i>Gymnocarpium dryopteris</i> - Oak Fern (N, OK)	6-12"	Part to full shade	M	Slow spreading to form patches of airy, bright green to greenish-gold leaves. Native to the northern half of the U.S. into the northern portions of Oklahoma, zone 6. Propagate from rhizomes.
<i>Homalosorus pycnocarpus</i> (<i>Athyrium pycnocarpon</i> , <i>Diplazium pycnocarpon</i>) – Glade Fern, Narrow-leaved Spleenwort (N)	3'	Shade	M	Resemble Christmas ferns in shape; elegant bright, light green in spring, deep green in summer, bronze in early fall. Foliage browns if soils dry out. Useful as groundcover because of their vigorous spread, particularly in very moist, shady spots. Propagate by clump division. Zones: 3-8
<i>Matteuccia struthiopteris</i> – Ostrich Fern (N) See Image 11.	4-6'	Light to full shade	M	Large deciduous fern. Vase shaped. Will reach greatest height with ample water and rich soil. Propagation by edge division. Zones: 3-7.
<i>Notholaena standleyi</i> – Star Cloak Fern or Standley's Cloak Fern (N, OK) (Basic soils)	1'	Part shade	D to M	Grows in xeric (arid) soils and rock crevices on slopes and rocky sites. Fronds pentagonal but sometimes triangular. Drought and heat tolerant. Fronds curl into a ball shape and unfurl when moisture is available. May not be available commercially. Zones: 6-9.
<i>Onoclea sensibilis</i> – Sensitive Fern, Bead Fern (N) See Image 8.	24-30"	Light to full shade	W to M	Coarse textured, deciduous. Fine groundcover in wet places; can be aggressive in some locations. In the wild it is often seen growing with cinnamon fern. Propagate by edge division. Zones: 4-8.
<i>Osmunda cinnamomea</i> – Cinnamon Fern (N)	2-3'	Sun to full shade	W to M	Upright deciduous, bright green, wooly in spring, yellow fall color. Stems that carry spores in spring look like cinnamon sticks. Constant moisture if grown in sun, in shade can stand some drought. Good accent plant. Propagate by edge division. Zones: 3-9.
<i>Osmunda claytoniana</i> – Interrupted Fern (N)	2-5'	Sun to full shade	M to D	Fronds are bright green except in the middle where some fertile spore cases develop on leaflets which are dark brown to black, interrupting the green portions. Propagate by clump division. Zones: 3-8.
<i>Osmunda regalis</i> – Royal Fern (N)	2-5'	Sun to full shade	W to M	Large, coarse textured. Good accent fern, tall and stately; use it where you want height. Tolerant of a wide range of conditions. Propagate by edge division. Zones: 3-9.
<i>Pleopeltis lepidopteris</i> – Brazilian Hairy Sword Fern	18"	Sun to light shade	M to D	Found growing across rocky or sandy soils. Native to southern Brazil. Fronds are silvery with fur, which gradually wears to reveal green on old leaves. Propagate from rhizomes. Cultivars: 'Morro dos Conventos'. Zones: 7-9.
<i>Pleopeltis polypodioides</i> – Resurrection Fern (N) (epiphytic)	3-6"	Deep to part shade	M	Evergreen typically found growing on trees, fallen logs, stumps, ledges and rocks. Epiphytic plant. May be difficult to establish. Fronds curl when dry but rehydrate quickly with rain. Propagate through rhizome division. Zones: 6-10.
<i>Polystichum acrostichoides</i> - Christmas Fern (N)	18-24"	Light to full shade	M (D to Nrm)	Evergreen, narrow, dark green, upright leaves. Clump forming. Can be grown as groundcover when planted in masses but best as a specimen or in small groupings. Propagate through rhizome division. Zones: 3-9.

<i>Polystichum luctuosum</i> (<i>P. tsussimense</i>), Korean Rock Fern, Dwarf Holly Fern, Tsushima Holly Fern See Image 9.	1-1.5'	Part to full shade	M to Nrm	Small, clump-forming, tufted, evergreen to semi-evergreen. Best in rich, fertile, humus, moist soil. Well-drained soils are necessary. Propagate by clump division in spring. Zones: 6-9.
<i>Polystichum makinoi</i> – Makino's Holly Fern	1-3'	Part to full shade	M	Lustrous, olive-green fronds, form a slightly arching mound. Each small leaflet is marked with a subtly contrasting, purple-brown midrib, giving a slightly smoky look to the plant. Frond stem (stipe) covered with brownish tan scales adding a soft, slightly furry look. Evergreen, trim back old fronds in late winter or spring. Tolerates hot and humid summers. Propagate by clump division. Zones: 5-9.
<i>Polystichum polyblepharum</i> – Japanese Tassel Fern	1.5-2'	Part to full shade	M	An evergreen native to Japan and southern Korea. Shiny, bipinnate, dark green fronds (to 1-2' long) with finely divided but overlapping pinnae; new fronds emerge stiffly, then droop backwards to form a tassel. Grows in an outward-spreading, vase-shaped clump. Crown rot develops in poorly drained soil. Propagate by clump division. Zones: 5-8.
<i>Polystichum x dycei</i> – Dyce's Holly Fern	1-2'	Part to full shade	M	Tolerates some temporary soil dryness once established. An interspecific hybrid of <i>P. proliferum</i> and <i>P. braunii</i> . Glossy, dark green, gently arching fronds. Plants will take on a broad vase-like habit. Sterile but can be propagated easily by the small bulbils that form at the ends of the fronds. Zones: 6-8.
<i>Pteridium aquilinum</i> – Bracken, Brake or Common Bracken, Eagle Fern (N)	1-4'	Light to full shade	D to M	Leaves three-parted, large, broad, airy, light green, bronze in fall. Can be extremely aggressive in moist conditions, but well-behaved in dry, thin woodland areas. Does not tolerate flooding. Propagate through rhizome division. Zones: 3-10.
<i>Thelypteris normalis</i> (<i>T. kunthii</i>) – Southern Shield Fern (N)	2-3'	Sun to full shade	M (D)	Deciduous, has light green fronds. Constant moisture in sun; can stand some drought in shade. Tolerates alkaline clay soil. Propagate through rhizome division. Zones: 6-10.
<i>Thelypteris noveboracensis</i> – New York Fern (N)	12-18"	Light to full shade	M	Chartreuse, lacy foliage. Valuable because of its bright, yellow-green color. Acidic soils. Propagate through rhizome division. Zones: 3-8.
<i>Thelypteris palustris</i> – Marsh Fern, Eastern Marsh Fern (N) See Image 5.	1-2.5'	Sun to part shade	M	Loves moisture but does not like standing water and does not do well in extensive shade. Spreads to form colonies. Good when used in woodland gardens, along ponds or water gardens. Propagate through rhizome division. Zones: 5-10.
<i>Woodsia obtusa</i> – Blunt-lobed Cliff Fern (N) (common)	6-18"	Part to full shade	M	Lacy, gray-green fronds. Easy to grow. Needs well-drained soil. Tolerates full shade. Propagate through rhizome division. Zones: 4-10.
<i>Woodwardia areolata</i> – Netted Chain Fern (N)	12" (30")	Light to full shade	M to W (D)	Glossy green, thin, wavy leaves. Great groundcover. Grows in wet forest soils but is drought tolerant. Acidic soils. SE Oklahoma species. Propagate through rhizome division. Zones: 3-9.
<p><u>Moisture:</u> W = Wet M = Moist D = Dry Nrm = Normal</p> <p><u>Range:</u> N = Native to North America OK - Native to Oklahoma</p>				

Table 1. Hardy Ferns for Oklahoma.

Name	Size	Light	Moisture	Comments
<i>Argyrochosma dealbata</i> – Powdery Cloak-fern	2-6”	Shade	M	Tiny, delicate native to Oklahoma and the south-central US. Underside of fronds are coated with white powder giving the fern its name. Usually found growing in crevices of limestone and other calcareous rocks (alkaline soils). Zones: 5-9.
<i>Asplenium bradleyi</i> – Bradley’s Spleenwort	1-7”	Sun to part shade	D to M	Found growing on sandstone rock and cliffs; a small evergreen fern that grows in tight clusters on rocks. This is a difficult species to describe, but it can easily be identified using a field guide or dichotomous key. Latimer County. Zones: 4-9
<i>Asplenium pinnatifidum</i> – Lobed Spleenwort	1-7”	Medium shade	M	Evergreen, somewhat leathery fronds. Found in crevices of acidic, vertical rock formations (e.g., sandstone), and high humidity in an area that is protected from the wind. Not normally cultivated. This species has only been reported at Robbers Cave State Park, but there are several populations throughout the park, including Robbers Cave. Latimer County. Zones: 4-9.
<i>Asplenium septentrionale</i> – Forked Spleenwort	2-7”	Part sun	M to D	Does not have the typical fern appearance. The fronds have a grass-like appearance with narrow linear blades and may be mistaken for grass. The blade apex can be forked, thus its common name. Bright green narrow fronds. Found on cliffs, ledges, rocks and rock crevices on a variety of substrates. Cimarron County. Zones: 4-9.
<i>Cheilanthes wootonii</i> – Beaded Lipfern	6-15”	Sun to part shade	M to D	Evergreen, drought tolerant. <i>C. wootonii</i> can easily be mistaken for <i>C. eatonii</i> , <i>C. tomentosa</i> , or even <i>C. lindheimeri</i> . Cimarron, Greer, and Kiowa counties, but also seen in Canadian County. Zones: 7-9.
<i>Hemionitis lanosa</i> (<i>Cheilanthes lanosa</i> , <i>Myriopteris lanosa</i>) – Hairy Lipfern (N, OK)	6-12”	Sun to shade	D	Deciduous, drought-tolerant, grows in dry woodland areas and rock outcrops. Dark green fronds dry up and curl when it gets too dry but uncurl when moisture is added. Better in sunny areas than most ferns but may need additional water. Needs well-drained soil. Will grow in cracks on walls. Good for rock gardens, containers, crevices or borders. Grows on other rock types such as the limestone at Beavers Bend Resort Park and Robbers Cave State Park. This fern is one of the few in Oklahoma that could take over large patches of hillsides in open areas. Propagate by clump division. Zones: 5-8.

Table 2. Rare, Native Ferns.

These ferns are found in specific locations in the state and are not readily available commercially but may be of interest to some people; some may be listed as species of concern.

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