

Common Ferns of the North Central Northeast Region



***Caution-This is a limited species key
NWPL**

1. Ferns with 2 types of fronds* or leaflets (sterile and fertile) or as separate leaf structure.
 2. Ferns with two types of fronds (dimorphic), sterile and fertile.*
 3. Fern leaflets once cut.....*Onoclea*
 3. Fern leaflets twice cut.
 4. Fronds grow from a blackish knobbed base, stems and leaflets mostly lacking hairs.....*Matteuccia*
 4. Fronds lacking blackish knobbed base, stems and underside of leaflets very hairy.....*Osmundastrum*
 2. Ferns with one frond type that has sterile and fertile leaflets on the same frond.
 5. Frond leaflets cut twice, moist to wet mineral soils*Osmunda*
 5. Fronds cut three times, ferns often found in rocky, upland areas, fronds lack hairs.....*Cryptogramma*
1. Ferns with only one type of frond or leaflet, sometimes the fronds of an individual fern may lack any fertile sori.
 6. Fronds twice cut.
 7. Sori elongated in chain like structures***Woodwardia*
 7. Sori circular or crescent shaped but not in elongated chain like arrangements.
 8. Lower two pinnae (leaflets) pointing downward.....*Phegopteris*
 8. Lower two pinnae more or less at right angle to stem.
 9. Fronds mostly broadest at base, stem wire-like and black, leaf edges rolled*Thelypteris*
 9. Fronds tapered at both ends, stems thin, brown to green.....*Parathelypteris*

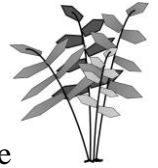


6. Fronds thrice cut.

10. Fronds with numerous scales at base.....*Dryopteris*

10. Fronds with very few scales or scales lacking.

11. Fronds divided from the base forming a cluster of fronds.



12. Fronds wider than 6 inches and taller than one foot.....*Athyrium*

12. Fronds smaller than 6 inches wide and no taller than one foot.....*Cystopteris*

11. Fronds divided from a central erect stalk and/or from near the base but not forming clusters of fronds.

13. Fronds divided into circular or semi-circular shape with black forked stalks

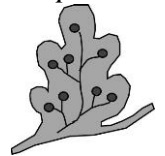
.....*Adiantum*



13. Fronds divided into a three parted triangle; stalk color various.

14. Fronds tall and coarse, sori located on margins of pinnae**.....*Pteridium*

14. Fronds small, sori located on flat surface of pinnae*Gymnocarpium*



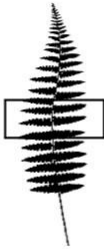
* Frond(s) is equal to saying leaf or leaves. The smaller leaf units on a frond are referred to as pinnae.

Leaflet Shapes

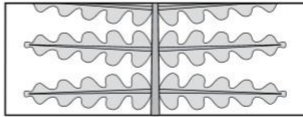
Once-Cut Fern



Simple
Leaflet

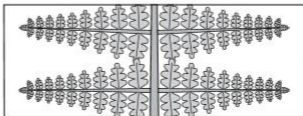


Twice-Cut Fern

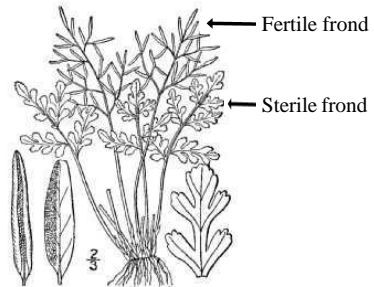
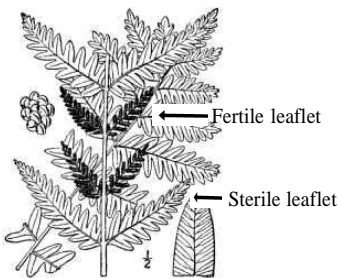


Leaflet with
Subleaflets
(pinnules)

Thrice-Cut Fern

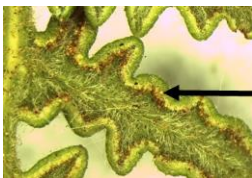


Subleaflets
(pinnules)
with lobes



USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. An illustrated flora of the northern United States, Canada and the British Possessions. 3 vols. Charles Scribner's Sons, New York. Vol. 1: 32.

** Sori are clusters of sac like structures known as sporangia that contain spores, a reproductive unit of ferns.



Sori on
margins
of pinnae



Elongated
sori
arranged
in chains

1. © Gerald D. Carr

Photos of species are arranged alphabetically.

Adiantum pedatum
Northern Maidenhair (FACU)



Athyrium angustum
Northern Lady Fern (FAC)



Scales on leaf stalk
brown to dark brown.

Leaf blade broadest
toward the middle.

Athyrium asplenoides
Southern Lady Fern (FAC)



Scales on leaf stalk light
brown to brown.

Blade broadest just above
base.

Cryptogramma stelleri
Fragile Rockbrake (FACU)



Cystopteris fragilis
Brittle Bladder Fern (FACU)



Dryopteris cristata
Crested Wood Fern (OBL)



Gymnocarpium dryopteris
Northern Oak Fern (FACU)



Matteuccia struthiopteris
Ostrich Fern (FAC)



4. © 2007 Louis-M. Landry



5. © 2016 Bruce Patterson

Onoclea sensibilis
Sensitive Fern (FACW)



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Osmunda claytoniana
Interrupted Fern (FAC)



Infertile leaflets above
and below fertile
leaflets.

2 © 2016
New England
Wildflower
Society

Osmunda spectabilis
Royal Fern (OBL)



Fertile (spore bearing)
leaflets at the top of
frond; infertile leaflets
below fertile leaflets.

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Osmundastrum cinnamomeum
Cinnamon Fern (FACW)



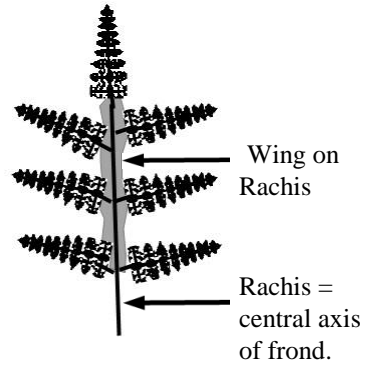
Parathelypteris noveboracensis
New York Fern (FAC)



Phegopteris connectilis
Narrow Beech Fern (FACU)



Wing on rachis
(rachis = central
axis of frond)
extends from top
of frond to just
above the two
lowest leaflets on
frond.

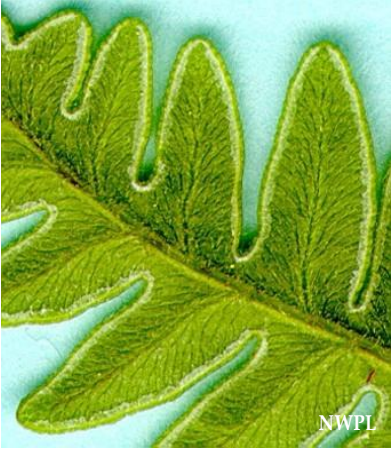


Phegopteris hexagonoptera
Broad Beech Fern (FACU)



Wing on Rachis
(Rachis = central
axis of frond)
present to base
of leaflets.

Pteridium aquilinum
Northern Bracken Fern (FACU)



Thelypteris palustris
Eastern Marsh Fern (FACW)



Woodwardia virginica
Virginia Chain Fern (OBL)



4, © 2016 Louis-M. Landry

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1. Carr, Gerald. 2013. *Woodwardia fimbriata*. Digital image. Oregon Flora Image Project. University of Hawaii: Botany Department. Web. 2 Feb. 2016. <http://www.botany.hawaii.edu/faculty/carr/ofp/woo_fim.htm>.
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5. Patterson, Bruce. 2016. *Matteuccia struthiopteris*. Copyright © 2016 New England Wild Flower Society. Web. <<https://gobotany.newenglandwild.org>>.
6. Mittlehauser, Glen. 2016. *Osmundastrum cinnamomeum & Thelypteris palustris*. Copyright © 2016 New England Wild Flower Society. Web. <<https://gobotany.newenglandwild.org>>.
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9. Chakya, K. 2012. *Dryopteris cristata*. Copyright 2015. Web. <<https://www.minnesotawildflowers.info/fern/crested-fern>>.