

GYMNOCARPIUM APPALACHIANUM Pryer & Haufler  
Appalachian Oak Fern

FAMILY: Dryopteridaceae

HABIT: Perennial with deciduous fronds to 1.5 dm and long-running rhizomes; sporulating June-August.

SIMILAR SPECIES: Extremely similar to the Oak Fern (*Gymnocarpium dryopteris*) and growing in similar habitats. These two species are distinguished by spore size and by the length of the stalks of the pinnae (key and illustrations in Pryer and Haufler 1993).

TOTAL RANGE: Known only from OH, PA, VA, WV, and NC (range map in Pryer and Haufler 1993); rare and local throughout.

STATE RANGE: Known only from a series of 1908 collections from Wayne County.

HABITAT: Cool, rocky slopes with hemlocks.

HAZARDS: Deforestation and subsequent drying-out of habitat.

RECOVERY POTENTIAL: Unknown.

INVENTORY GUIDELINES: Collect mature, sporulating fronds.

COMMENTS: This recently described species is one of the ancestral diploids that apparently gave rise to the allotetraploid *Gymnocarpium dryopteris*. The two species are extremely similar and grow in similar habitats. The differences, though subtle, are consistent. Appalachian oak fern should be sought throughout northeast Ohio.

SELECTED REFERENCES:

Pryer, K. M. and C. H. Haufler. 1993. Isozymic and chromosomal evidence for the allotetraploid origin of *Gymnocarpium dryopteris* (Drypteridaceae). *Sys. Bot.* 18: 150-172.



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