



## MASSACHUSETTS RARE AND ENDANGERED PLANTS

### CLIMBING FERN

(*Lygodium palmatum* (Bernh.) Sw.)

#### DESCRIPTION

Climbing Fern does not have the characteristic overall shape of most ferns. It is an evergreen, ivy-like plant which sprawls over the ground or climbs clockwise short distances up shrubs and coarse herbs. In very favorable conditions, Climbing Fern may carpet up to an acre or more of the forest floor. The rootstalk is black, wiry, widely creeping and branching. The root sends up a row of twining delicate fronds to a height of 3 - 5 ft (0.9 - 1.5 m). The pinnae (fern equivalent of leaflets) are alternate. The sterile pinnae consist of a forking stalk, each stalk ending in a palmately lobed yellow-green blade about 2 in (3 - 6 cm) across. The fertile blades are tiny, palmate, and produce spores on the underside. The gross morphology of this fern distinguishes it from any other species in Massachusetts.

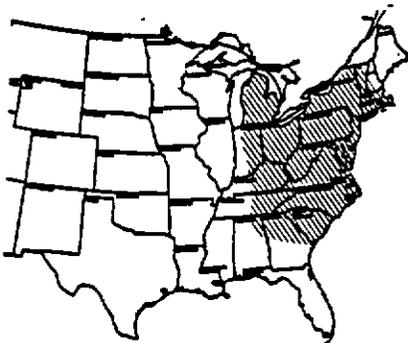


Wiley, Farida A. Ferns of Northeastern United States. Dover Publications, New York, New York. 1936.

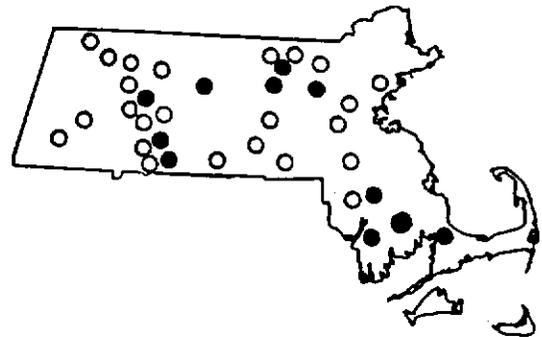
#### HABITAT IN MASSACHUSETTS

Climbing Fern grows in moist pine-oak-maple woods with an open understory, moist thickets and stream margins. This plant prefers acidic soils that are sandy, rich in humus, but nutrient poor. Regenerating woodlands and powerline corridors also provide habitat for this species in Massachusetts.

(continued overleaf)



Distribution of  
*Lygodium palmatum*



● Verified since 1978  
○ Reported prior to 1978

Distribution in Massachusetts by Town

#### RANGE

Climbing Fern occurs from southern New Hampshire and northwestern Vermont west to Michigan, and south to Georgia and Alabama.

#### POPULATION STATUS

Climbing Fern is a species of "Special Concern" in Massachusetts. It is considered rare in New England, New York, New Jersey, Maryland, South Carolina, Alabama, Pennsylvania, Ohio and Michigan.

There are 15 current sites (since 1978) in Massachusetts for Climbing Fern, and 27 additional historical (before 1978) locations.

In the 1800's, when Climbing Fern was much more common, it was very popular as a decoration and commercial collection contributed to its decline. The first plant protection law was passed in Connecticut in 1869 specifically to protect this species. Legal protection helped alleviate the collection problem. However, loss of habitat through expansion of agriculture and development continued as the major factor contributing to the species decline.

Although Climbing Fern may be abundant where it is found, populations are rare and localized. Climbing Fern continues to decline in Massachusetts due to loss of habitat through draining and filling of wetlands, land development projects, and the maturation of woodlands. Seemingly appropriate habitat for Climbing Fern is fairly common in Massachusetts, however, for unknown reasons, Climbing Fern occurs in only a very few of these areas.