

CYSTOPTERIS TENNESSEENSIS Shaver
Tennessee Bladder Fern

FAMILY: Dryopteridaceae

SYNONYMS: *C. fragilis* (L). Bernh. var. *tennesseensis* (Shaver) McGregor

HABIT: Deciduous fronds to 80 cm from short-creeping rhizome.

SIMILAR SPECIES: This species may be confused with the other members of its genus in Ohio: *C. protrusa*, *C. bulbifera* and *C. tenuis*. *C. tennesseensis* can be separated from *C. bulbifera* by its irregularly shaped frond segments and its larger sori (2-5 mm), whereas *C. bulbifera* has regular frond dissections and smaller sori (1-2 mm). *C. tennesseensis* can be separated from the other two species by its broadly deltoid fronds, the occasional presence of scaly bulblets and the presence of large sori.

TOTAL RANGE: Circumboreal, s. in our range to MI, VT, and in mountains to NC, and VA.

STATE RANGE (as of 2008): Post-1980 records are from Adams, Athens, Belmont, Columbiana, Coshocton, Gallia, Greene, Highland, Hocking, Lawrence, Licking, Meigs, Monroe, Muskingum, and Vinton counties. Pre-1980 records are from Delaware, Fairfield, Pike, and Washington counties.

HABITAT: Calcareous sandstone and shale, limestone and dolomite outcroppings.

HAZARDS: Trampling of habitat by hiking and rock-climbing.

RECOVERY POTENTIAL: Probably good; this species long went unrecognized and overlooked. Additional populations are likely to be discovered with additional survey work.

INVENTORY GUIDELINES: Collect fronds with mature sori.

COMMENTS: This species is believed to be the fertile hybrid of an ancient cross between *C. bulbifera* and *C. protrusa*. *C. tennesseensis* may also hybridize with *C. tenuis* to form *C. x wagneri*. *C. tennesseensis* may grow together with other members of the genus in mixed populations. It should be sought in southern and eastern Ohio.

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