

***Cystopteris tennesseensis* Shaver**

**Current status: TU**  
**Proposed status: PE**

**Submitted by: Tim Block and Ann Rhoads, Morris Arboretum, March 2010**

Tennessee bladder fern is an allotetraploid (the parents, both diploids, are *C. bulbifera* and *C. protrusa*).

**Habitat:** Grows on limestone cliffs and ledges and in cracks on masonry walls.

**Range:** southern PA to IA and south to TN and OK

**Description:** Stems creeping, leaves crowded near the stem apex, 2-pinnate-pinnatifid, rachis with occasional unicellular, gland-tipped hairs; plants with or without bulblets; indusial cup-shaped with scattered unisexual, gland-tipped hairs.

**Pennsylvania Status:** In Pennsylvania it is known from approximately 12 sites, all but one are scattered across the southern half of the state. There are 4 collections in the past 50 years of which only 1 (Rhoads and Block 2000, MOAR) is within the past 25 years.

**Identification Problems:** Some characteristics are variable due to genetic differences in plants involved in specific hybridization events; backcrossing, and the occasional occurrence of sterile tetraploid hybrids.

**Status in Other States:** S1 in PA, MD, VA, NC and GA; S2 in OH and AL; S3 in WV; S4 in KY

**Global Status:** G5

**Rationale for Change:** Limited number of historical sites, only one known extant site.

**Sources/References:**

Flora of North American Editorial Committee. 1993. *Flora of North America North of Mexico, Volume 2*. Oxford University Press, New York, NY.

Morris Arboretum Herbarium (MOAR)

NatureServe, <http://www.natureserve.org/explorer/>, accessed 3/3/2010.

Pennsylvania Flora Database, [www.paflora.org](http://www.paflora.org), accessed 3/3/2010.

PNHP Database, accessed 12/16/2009.

Rhoads, Ann Fowler and Timothy A. Block. 2007. *The Plants of Pennsylvania, An Illustrated Manual*, second edition. University of Pennsylvania Press, Philadelphia, PA.

