

Thelypteris noveboracensis (New York fern) new to Missouri from the Southeastern Missouri Ozarks

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ABSTRACT. — *Thelypteris noveboracensis* (= *Parathelypteris noveboracensis*) is reported new for Missouri from wetlands in Wayne County, in the southeastern Missouri Ozarks.

Thelypteris noveboracensis (L.) Nieuwland (Thelypteridaceae; = *Parathelypteris noveboracensis* (L.) Ching) is a common terrestrial fern of eastern North America from Alabama and Mississippi into Canada, reaching its northern limits in Newfoundland. Arkansas, Oklahoma, and Illinois are on the western fringes of its range. According to Yatskievych (1999), it “may eventually be found growing in Missouri.”

In September 2018, while the author was revisiting a Missouri Natural Features Inventory potential natural features site (Wayne County PNFS No. 63), a population of New York fern was discovered. The site is a privately-owned stream-head seep-fen complex located around the junction of Little Creek and Dunaway Hollow. The area is currently partially impacted by grazing. Other rare species (Missouri Department of Conservation 2018) documented during the revisits to this complex are *Saccharum giganteum* (Walter) Persoon and *Platanthera clavellata* (Michaux) Luer. Other associates include *Juncus subcaudatus* (Engelm.) Coville, *Pedicularis lanceolata* Michx., *Phlox glaberrima* L. subsp. *interior* (Wherry) Wherry, *Rudbeckia fulgida* Aiton var. *fulgida*, and *Salix sericea* Marshall.

Two species of *Thelypteris* are now known from Missouri — *Thelypteris noveboracensis* and *Thelypteris palustris* Schott var. *pubescens* (Lawson) Fernald. The name *Parathelypteris noveboracensis* has recently been applied to New York fern (e.g. Kartesz 2015). The two species are easily separated: *T. noveboracensis* has fronds tapered at both ends (Strausbaugh and Core 1977), with the proximal pinnae greatly reduced (Figure 1), while in *T. palustris* var. *pubescens* the fronds are deltoid and the proximal pinnae are not reduced or only slightly so (Smith 1993). Both species form colonies and have thin, 1-3 mm diameter creeping dark rhizomes and generally occur in wet soils.

Voucher specimen: U.S.A. Missouri: WAYNE CO.: Acid seep near mouth of Dunaway Hollow above Little Creek; open and partial shade, saturated soil; 14 September 2018, 37.29572⁰N, 90.29644⁰W, Brant 8934 (MO).

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New York fern should be considered for State Listing as a species of conservation concern (SOCC) in Missouri as S1 since it is currently known from a single Missouri location.



Figure 1. *Thelypteris noveboracensis*, Wayne Co., Missouri, showing fronds tapering at both ends and reduced proximal pinnae (Brant 8934).

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LITERATURE CITED

- Core, E.L. 1977. *Thelypteris*. pp. 24-25 in Strausbaugh, P.D. and E.L. Core. Flora of West Virginia, 2nd Edition. Morgantown, WV: Seneca Books. 1079 pp.
- Kartesz, J.T. 2015. North American Plant Atlas. The Biota of North America Program (BONAP) (<http://bonap.net/napa>). Chapel Hill, NC. [maps generated from Kartesz, J.T. 2015. Floristic Synthesis of North America, Version 1.0 Biota of North America Program (BONAPS) (in press)].
- Missouri Department of Conservation. 2018. Missouri species and communities of conservation concern checklist. Jefferson City: Missouri Department of Conservation. 56 pp.
- Smith, A.R. 1993. Thelypteridaceae. In: Flora of North America Editorial Committee, eds. Flora of North America North of Mexico. New York and Oxford: Oxford University Press. Vol. 2: 206-222.
- Yatskievych, G. 1999. Steyermark's Flora of Missouri, vol. 1. Jefferson City: Missouri Department of Conservation. 991 pp.