

## REDISCOVERY OF *DICHANTHELIUM RAVENELII* (POACEAE) IN MARYLAND

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### ABSTRACT

Eleven species of *Dichanthelium* in the state of Maryland are considered rare by the Maryland Natural Heritage Program, including *D. ravenelii*. This species was considered a historical component of the flora documented by a few collections from the Piedmont and Atlantic Coastal Plain west of the Chesapeake Bay. Here we report a new and modern-day collection of this species from the Eastern Shore of Maryland at the species' northern range limit on the Atlantic Coast.

*Dichanthelium ravenelii* (Lamson-Scribner & Merrill) Gould is a species of sandy or rocky woodlands distributed from Maryland south to Florida and Texas and north in the Central Lowlands to Illinois and Iowa. 78 taxa are included in LeBlond's (2022) treatment for the southeastern USA. There are few collections of *D. ravenelii* from the Coastal Plain east of the Chesapeake Bay (Delaware and the Eastern Shore of Virginia). A mixed collection (*Canby s.n.*, NY) from Delaware labeled only as "woodlands, Delaware" collected in July 1870, may in fact be from the Piedmont of Delaware, and another specimen with no collection number or date (*Canby s.n.*, F) is labeled as "New Castle Co., woods." And lastly, a modern-day collection from Northampton Co., Virginia (McAvoy 4536, WILLI) was made in 1999, where the species could not be relocated (McAvoy site surveys in 2022). We discovered no collections from the Eastern Shore of Maryland using a combination of online and physical searches of mid-Atlantic herbaria.

During a September 2021 field trip to Maryland's Chicone Woods Natural Area in Dorchester Co., Maryland, and unrelated to *Dichanthelium* surveys, Justin Thomas identified a sprig of *Dichanthelium* collected from the roadside by a field trip participant as probable *D. ravenelii*, which was the first observation of the species on Maryland's Eastern Shore. Chicone Woods is located within the principal Late Woodland territory of the Nanticoke Indians, where fire and digging-stick agriculture created an open woodland landscape particularly abundant in oaks (Rountree & Davidson 1997). Approximately 8 hectares of low-lying, dry sand dunes along a section of Chicone Road have been selected for restoration of oak woodland habitat (Tyndall & Groller 2006). Chicone Woods is habitat for several of Maryland's Rare, Threatened, and Endangered plant species (Maryland Natural Heritage Program 2021).

Frye sampled *Dichanthelium* diversity at Chicone Woods in 2021, collecting from the interior of the restoration area (e.g., from the units managed by fire). The inventory discovered 6 *Dichanthelium* taxa but not *D. ravenelii*. In June 2022, Frye and McAvoy followed up on Thomas' observation, this

time focusing on the roadside, where many rare plants had been restricted prior to restoring fire to the landscape. We located a linear population comprised of approximately 60 clumps of *D. ravenelii* along approximately 200 meters of the roadside in dry sands. Associated species were *Desmodium laevigatum*, *Asclepias amplexicaulis*, *A. variegata*, *Dichantheium commutatum* subsp. *commutatum*, *D. bosci*, *D. oligosanthes*, *Toxicodendron pubescens*, and *Rhus copallinum* under a thin canopy of *Quercus velutina* and *Q. falcata*.

**Voucher specimens. Maryland.** Dorchester Co.: Chicone Woods Natural Area, Chicone Road, in dry sands of oak woodland, 7 Jun 2022, *Frye 8360* (TAWES), *Frye 8361* (NY); same location and date, *McAvoy 8142* (DOV).

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