

BRIEF NOTE

TRILLIUM RECURVATUM BECK (LILIACEAE): A NEW STATION FOR THE PRAIRIE TRILLIUM IN OHIO¹

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Trillium recurvatum is essentially a mid-western species and has a wide distribution (Freeman 1975). It generally ranges west of the Indiana-Ohio boundary and the southward extension of that boundary through Kentucky and Tennessee, and generally east of the eastern edge of Iowa, the eastern half of Missouri, across Arkansas, and into extreme east-central Texas. In the north, the prairie trillium enters southwestern Michigan and southern Wisconsin, while in the south it ranges through the northern halves of Louisiana and Mississippi and across northwestern Alabama. The species appears to be most abundant in Indiana and Illinois.

There are old, valid records with specimens of *T. recurvatum* deposited in herbaria from only 2 Ohio counties: southwestern Hamilton County in the southwest corner of the state bordering on Indiana and on the Ohio River, and western Auglaize County in the second tier of counties east of Indiana in west-central Ohio. According to Braun (1967), "*T. recurvatum* was very rare, or perhaps extinct in Ohio; no records since 1897; found throughout Indiana; abundant in woods but a few miles west of the Ohio State line". It was, therefore, a very real surprise to learn of the existence of an extensive colony of this species in eastern Clermont County, the county adjacent to and east of Hamilton County. The plant was collected on 25 April 1977 by Paul R. Kaucher, Jr., in an open woods along the slopes of a rather steep-sided, essentially north-south running ravine north-west of Bethel. Voucher speci-

mens have been deposited in the University of Cincinnati herbarium (CINC). *Trillium sessile* L., also very abundant, and *Trillium flexipes* Raf., much less abundant, occurred in the same association.

This new station lies along the south edge of the East Fork (Little Miami River) Reservoir and may be flooded by the filling of the reservoir. The station is also the farthest east known advance of the species in the north or north-central part of its range and possibly its entire range. The nearest known station is in Indiana about 45 miles to the northwest. Other extensive colonies exist to the west and northwest in Indiana and at greater distances to the southwest in Kentucky. The same association of *Trillium recurvatum*, *T. sessile*, and *T. flexipes* occurs at the nearest Indiana station in the same relative order of abundance.

How the species got to the East Fork Reservoir location and how its presence there escaped detection for such a long time are both matters for speculation. Hamilton County and adjacent parts of western Clermont County have been extensively botanized during the past 150 years. Eastern Clermont County and most of Brown County, however, were somewhat neglected over the years, being largely bypassed in favor of Adams County, the next county to the east along the Ohio River. This negligence may explain why *T. recurvatum* was previously missed. How the species got there is not easy to explain, except that it does not appear to be an escape from cultivation.

Most *Trillium*, including *T. recurvatum*, are myrmecochorus (Berg 1958), and I have observed ants carrying off seed from

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dehisced fruit of this species. Since ants usually do not forage at great distances from their nests, the spread of *Trillium* is a slow process, and some remnants of a distinct path leading from one colony of plants to the next should be evident. These remnants are absent in Hamilton County, although if formerly present, they could have been eliminated by the expansion of *Cincinnati*. The typical associates *T. sessile* and *T. flexipes* still flourish in Hamilton County, however, and much suitable cover is available on the western edge of the county adjacent to Indiana and on the eastern edge adjacent to Clermont County.

T. recurvatum occurs on various substrates including clay, limestone, sandstone, and alluvium. Both the nearest Indiana station and the new station at the East Fork Reservoir lie just south of the farthest advance of Wisconsin glaciation, but glaciation is probably not a factor in the virtual absence of the species east of the Indiana-Ohio boundary since it has spread northward to Michigan, a distance

many times that necessary to spread into adjacent Ohio, in post-glacial migration. It would appear that the presence of *T. recurvatum* at the East Fork Reservoir is due either to its being a relict population with all evidence of migrational route destroyed or being a disjunct with the seed being deposited in the recent past by a bird in a rare instance of zoochory, followed by normal spreading. The latter speculation seems more probable, and in the absence of any evidence to the contrary, it would also seem normal to assume that the seed came from one of the nearby Indiana stations.

LITERATURE CITED

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