

Noteworthy Collections

First Record of *Clematis fremontii* S. Watson from Arkansas

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Clematis fremontii S. Watson (RANUNCULA-
CEAE)—**Fulton County:** 1 May 2015, *Gary R. Graves* (US National Herbarium 3679241); 25 August 2014, *Gary R. Graves* (US National Herbarium 3679242). Geographic coordinates are being withheld until the highly vulnerable population can be adequately protected by the Arkansas Natural Heritage Commission.

Significance. This constitutes the first record of *Clematis fremontii* for Arkansas and the southernmost record for the Ozark Plateau. Before this report, the known range extended from prairie outcrops of limestone and chalk in Nebraska and Kansas (Albertson 1937) to dolomitic cedar glades in Missouri (Erickson 1945) and from small, disjunct populations in a calcareous cedar glade in eastern Tennessee and in a calcareous flatwoods in northwestern Georgia (Horn and Shaw 2007, Montgomery and Shaw 2012). The nearest known population to the newly discovered Fulton County site is a disjunct station in Ozark County, Missouri (Steyermark 1963, Yatskievych 2013). The species is listed as threatened (S3) in Missouri (Missouri Natural Heritage Program 2016) and as critically imperiled (S1) in Arkansas (Witsell, pers. comm.).

Flowering plants were discovered in full sun and partial shade on a calcareous glade (Powell dolomite) on 8 May 2014 (Figures 1–2). Additional site visits were made on 25 August 2014, 1 May 2015, and 9–10 May 2016. A high count of 307 plants was tallied in a scythe-shaped area (approximately 2.3 ha), mostly on the right-of-way of an unpaved, county road. The greatest distance between plants was 490 m. Soils were uniformly rocky and most *Clematis* plants were growing in thin soils covered by rock slabs and cobble (Figure 1). Associated plants included *Baptisia australis* (L.) R. Br., *Cotinus obovatus* Raf. (new country record), *Juniperus virginiana* L., *Oenothera macrocarpa* Nutt., *Penstemon cobaea* Nutt., *Quercus muehlenbergii* Engelm., and *Rhus aromatica* Aiton.

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Figure 1. *Clematis fremontii* growing in dolomitic glade in Fulton County, Arkansas.



Figure 2. Flower color variation in *Clematis fremontii* in Fulton County, Arkansas.

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