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SYMPHYOTRICHUM PRATENSE (ASTERACEAE) REDISCOVERED IN NORTH CAROLINA

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ABSTRACT

Recent field work has led to the rediscovery of *Symphyotrichum pratense* (Raf.) Nesom to the native North Carolina flora. A 2018 collection from Buncombe County is perhaps at or near the original locality, where it was collected over 200 years ago.

Symphyotrichum pratense (Raf.) Nesom is chiefly Coastal Plan in distribution, but its range extends into the Interior Low Plateaus, the Appalachian Plateau, and the Valley and Ridge of the central and eastern USA (Jones et al. 2008). The species occurs as far east as western Virginia, where it is known from Russell and Wise counties in dry, rocky woodlands and barrens over limestone and dolomite (Ludwig 1999; Virginia Botanical Associates 2019). Its presence in North Carolina is confirmed here.

Voucher. **North Carolina.** <u>Buncombe</u> Co.: Pisgah National Forest ca. 12 km (7.4 mi) NNE the city of Asheville, between Shope Creek Rd and Long Branch Rd, open glades in full sun, rare but patch dominant, usually over seepage on rock, 35.6480° -82.4289, elev. 3700 ft, 20 Sep 2018, *Knapp & Kelly 6100* (NCU); 24 Sep 2018, *Knapp et al. 6111* (NCU).

Before the collection reported here, there was a single, undated collection (*Gibbs s.n.*, NY) from "Buncombe, N. Car", in the Blue Ridge Physiographic Province of North Carolina. In 1816 Thomas Nuttall traveled from Tennessee to Asheville, Morganton, and Rutherfordton, North Carolina (Graustein 1967). Two years later (Nuttall 1818) he described *Aster montanus* Nutt. and cited the Gibbs collection referenced above. The original discovery of *Symphyotrichum pratense* in North Carolina was widely overlooked and the species was not included in North Carolina floras (Radford et al. 1968; Weakley 2015) until Jones et al. (2008) noted its historical presence. Thus, the 2018 collection marks the first documentation of this species from North Carolina and the Blue Ridge Physiographic Province in over 200 years.

The 2018 collection is from the same county as the historical Gibbs collection. It is even possible that this is the same location as the Gibbs collection, but access to this area is difficult and there are no nearby roads.

The range of habitats for *Symphyotrichum pratense* includes prairies, oak woodlands, pine-oak scrub, fields, and roadsides, often with a calcareous influence (Brouillet et al. 2006; Jones et al. 2008). The habitat in North Carolina is best described as Low Elevation Basic Glades – Montane Subtype (Schafale 2012). These glades are characterized as having a sparse tree and shrub canopy with patches of bare rock, mats of the spikemoss *Bryodesma rupestre* and various basophilic indicator plants such

as *Myriopteris lanosa* and *Hylotelephium telephioides*. Low Elevation Basic Glades generally have a southerly or westerly aspect and can be steep or gently sloping.

Symphyotrichum pratense is rare on these glades but forms patches of over 100 plants in limited areas of seepage over bedrock. These glades are considered a globally rare natural community, ranked as G2 (Schafale 2012). Nine species tracked by the North Carolina Natural Heritage Program (Robinson 2018) also are found on or immediately surrounding these glades, and include Allium allegheniense, Arabis pycnocarpa var. adpressipilis, Draba ramosissima, Primula meadia, Packera millefolium, Phlox subulata, and Rudbeckia triloba var. beadlei. Carex roanensis and Silene ovata also are found in the open woodland surrounding these glades. If added to the North Carolina tracking list, Symphyotrichum pratense will become the 13th species of the genus tracked in the state.

Interestingly, these Buncombe County glades have been surveyed repeatedly yet the *Symphyotrichum* has not been documented (NCNHP Biotics Database 1985, 2007, 2008). When not in flower, *S. pratense* is easy to overlook as the leaves blend in with the abundant vegetation at the site, but when in flower, the deep magenta corollas, and large size of the plants are nearly impossible to overlook (Fig. 1, Fig. 2, & Fig. 3).

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Figures 1 (top) and 2 (bottom). Symphyotrichum pratense at the Buncombe County locality.



Figure 3. Symphyotrichum pratense at the Buncombe County locality.