

## Spiked Saxifrage, *Saxifraga spicata*, Rediscovered in Canada After 110 Years

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*Saxifraga spicata* (*Micranthes spicata* (D. Don) Small), a large perennial showy saxifrage endemic to the unglaciated regions of Alaska and Yukon, was rediscovered after not having been seen in Canada for 110 years.

Key Words: Spiked Saxifrage, *Saxifraga spicata*, *Micranthes spicata*, Yukon Territory, endemism, rare vascular plant.

Stu Withers and Grant Lortie rediscovered the Spiked Saxifrage, *Saxifraga spicata* (D. Don) Small, on 15 July 2009 at Donahue Creek, Yukon Territory (63.21°N 139.51°W), near the creek's confluence with the Yukon River. This population is approximately 95 km up the Yukon River from the vicinity of the only previous Canadian collection and about 300 km (430 km by river) southeast of the next known extant population in Yukon-Charley Rivers National Park & Reserve, Alaska (University of Alaska, 2009).

It was first collected in Canada by John Berry Tarleton on an expedition to the Upper Yukon River in 1899. Tarleton spent the summer traveling from Skagway to Dawson collecting plants along the Yukon River. His collections are now housed at the New York Botanical Gardens. The exact location of this original collection remains a mystery, though we know it was collected "along mountain streams, near Indian River, August 3, 1899 (Tarleton, no. 176)." His collection was described as a new species – *Saxifraga galacifolia* Small (Britton and Rydberg 1901).

Eric Hultén in his valuable work, *Flora of Alaska and Yukon* (1941–1950), placed this new species in synonymy with *Saxifraga spicata* stating "The plant described by Small as *S. galacifolia* in no way differs from the rest."

*Saxifraga spicata* was described by David Don in 1822, from a collection made in 1778 by David Nelson, a member of Captain Cook's third voyage. It was collected on Sledge Island, Alaska on the southwest tip of the Seward Peninsula in the Bering Strait. The original collection was deposited in Sir Joseph Bank's Herbarium which is now found in the Natural History Museum (BM) in London, England (Figure 1).

Withers found fewer than 100 plants at Donahue Creek, a remote site that is only easily accessed by river, being over 100 km from the nearest road. Spiked Saxifrage grows on moist shaded stable stream banks and gravelly slopes that are usually not ice scoured, often under alders, though it is also known from moist ericaceous tundra in Alaska. It was found growing along the banks of the creek with shrubs including



FIGURE 1. Holotype of *Saxifraga spicata* D. Don. Courtesy of the Natural History Museum (BM) London, England.

*Alnus viridis*, *Viburnum edule*, *Rosa acicularis*, and *Ribes hudsonianum* and herbs such as *Aquilegia brevistyla*, *Galium boreale*, *Equisetum arvense*, and *Mertensia paniculata*. Spiked Saxifrage can grow 70 cm tall (Cody, 1996), has cream to yellow flowers about 1 cm across and rounded, serrated, hairy leaves up to 15 cm broad.

Though it had not been seen in over 100 years, botanists had not given up hope of rediscovering it. The plant is uncommon but not particularly rare in Alaska. There are still many areas of suitable habitat to search in Yukon and future surveys may reveal further populations. The collections will be housed at Agriculture and Agri-Food Canada (DAO) and B. A. Bennett (personal herbarium).

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