

# BOGDIVERSITY THURSDAY



—*from Head Naturalist Clinton*

## Gentians

POST #77—August 31, 2023

Happy National Moth Week!

Late season wildflowers don't often get as much attention as those wildflowers that first appear during the spring. Perhaps this is because migration is starting and folks are getting excited with renewed bird activity after the quiet of the post-breeding period. There are a few spectacular species that bloom during late-August and September in our area and today's post will profile one of those groups: Gentians!

There are three species of gentian in the Sax-Zim Bog, each holding a unique place in the flora of the region and within their family. This family of plants typically has a waxy appearance to their leaves, which are opposite along a strong stem. These plants often have very large and gaudy flowers in purple and blue tones, with a few species with white, cream, or pink colored flowers. Gentians are a widespread in temperate regions, with around 1600 species globally. In Minnesota, there are a total of 9 species

of gentian. Most gentians in Minnesota start blooming sometime in August and linger through September.

Gentians are a really unique group of plants that are primarily pollinated by bees! Many gentians have closed or partially closed flowers that only larger insects can open. Bumble bees and beetles are often the most effective pollinators of gentians as their strong legs can pry open the flowers to access nectar. If you see a gentian flower wobbling, spend a moment to see what pollinator pops out!

The least observed and less flashy of the gentians in the Sax-Zim Bog is Spurred Gentian. Spurred Gentian doesn't have showy flowers and in fact has flowers that hardly resemble flowers at all! This species seems to prefer sandy substrates in our region, though they do grow in mossy, damp forests and bogs. Typical of other gentians, this species has clusters of flowers with fused petals even if those flowers are not terribly showy.

From the least showy to the most showy! Greater Fringed Gentian is a spectacular species of gentian, featuring large, bright purple flowers with delicately fringed petals. This showy species is not very common, though can be locally abundant. From the initial location at Fringed Gentian Bog (hence the name!), we have only been able to find this species in 2 additional locations through the vastness of the Sax-Zim Bog. While Spurred Gentian prefers to be dry in our region, Greater Fringed Gentian prefers to be wet!

Our last gentian to consider in the Sax-Zim Bog is a cryptic species, nearly a Great Lakes regional endemic, and wide spread in the Sax-Zim Bog! Whether you know it as Great Lakes Gentian, Red-stemmed Gentian, or Closed Gentian, *Gentiana rubricaulis* is a special plant. This species is primarily found in states that border the Great Lakes, especially Minnesota, Wisconsin, Michigan, and Ontario. There are populations found in southeastern Manitoba, as well as New Brunswick and Maine. Another species of wet meadows, look for this species along the roadsides and sedge meadows or take a hike at Auggie's Boardwalk to see a number of these lovely gentians.

More information can be found with the photos below.

(Photos by Head Naturalist Clinton)



Greater Fringed Gentian has large, showy, and downright spectacular flowers! Typical of gentians, this species has waxy green leaves and stems, topped with bright flowers.



Spurred Gentian is an odd plant. The flowers are edged by four short spurs and have seed pods that look like small horns! An odd species to be sure, you can reliably find this species in sandy areas of the bog.



Great Lakes Gentian, aka Red-stemmed Gentian or Closed Gentian, can be found in a wide range of colors. This individual is quite atypical, featuring a spiral of white breaking up the typical purple tones.