

MID-TO LATE SUMMER WILDFLOWERS IN HIGH PARK SAVANNA

High Park's black oak savanna has a few native wildflowers not reported elsewhere in Toronto. These include two rather inconspicuous species of Leguminosae (pea or bean family) and a brightly coloured species of Asteraceae (sunflower family).

The Leguminosae is the third largest plant family, with over 20,000 species. Many are of importance as sources of food directly, e.g. various pea and bean species, or indirectly, e.g. as sources of pollen for honey bees, or because of associated nitrogen-fixing bacteria that increase soil fertility. Family representatives in High Park include two bush clovers: round-headed (*Lespedeza capitata*) and hairy (*L. hirta*). *The ROM Field Guide to Wildflowers of Ontario* identifies the habitat for both species as dry tallgrass prairies or roadsides and fields in relict or former prairies. Both species are reported by the ROM to occur from the Lake Simcoe-Rideau ecoregion south.

The *ROM Field Guide* notes that *L. hirta* may be up to 1.5 m tall and *Newcomb's Wildflower Guide* confirms similar heights for both species. However, in High Park, amidst the shorter grasses of the savanna, the bush clovers are equally short, having no need to expend energy to become tall. These two species have clusters of almost identical small flowers (8-12 mm long in *L. capitata*, 6-9 mm in *L. hirta*). In High Park they avoid competition for pollinators by blooming at different times: according to my records early August for *L. capitata* and early July for *L. hirta*.

The Asteraceae family is the world's largest, including some 22,000 to 26,000 species. Botanists have divided it into three sub-families and a number of tribes. Why a tribe is a subdivision of a sub-family is a mystery to me! Our High Park species is *Liatis cylindracea*, one of 18 species of *Liatis* (blazing star) occurring in eastern North America. The genus *Liatis* is included in the tribe *Eupatorieae*, type genus *Eupatorium* (several local species). The common characteristic of the Asteraceae family is inflorescences made up of many small flowers, called florets. Species may have a central core of disk flowers with a ring of petal-like ray flowers or only disk flowers or only ray flowers. *Liatis* species only have disk flowers.

In High Park I've seen *L. cylindracea* in bloom from late July to mid-August. *L. spicata*, not native to our area, has been introduced in the park. The species can be readily distinguished as *L. cylindracea* has few or solitary inflorescences, each with 20 or more florets, and *L. spicata* has a spike of numerous closely spaced inflorescences, with 5 to 9 florets in each.

Put your binoculars to good use. Search for small plants in the savanna!

Peter Money



Top: round-headed bush clover
Middle: hairy bush clover
Below: cylindrical blazing-star
Photos: Peter Money

