Kasey Hartz Natural Area Reference Sheet



Solidago spp. Goldenrod

Compositae (Sunflower Family)

Blooming season: Mid-August through September

Plant:

Pictured is bluestem goldenrod (Solidago caesia)

Perennial, erect herbs, simple or with few branches.

Heights vary from 0.9 - 2.4 m.

As a group easy to identify, but much variation between **and** within species.

Distinguishing between species depends on very technical characters. Hybridizes with some frequency.

Voss (1996) lists 22 species in Michigan.

Some species are allelopathic (producing chemicals that prevent some other plants from growing near them.)



Alternate, toothed (some entire).

Shape varies among species from lanceolate to ovate.

Flower:

Yellow (some few white) Local species are all yellow.

Inflorescence in 3 main shapes: flat-topped; cylindrical; pyramidal. Variation within a species common; inflorescence can be open or well filled.

Panicles terminal and/or axillary.

Under magnification individual flowers can be separated into typical *Compositae* disk and ray flowers.

Disk flowers usually perfect; ray flowers pistillate (House 1923 Part 2, p. 292).

Some species start flowering from the top, others from the bottom, thought to help some attract pollinating insects (Sanders 2003).

Fruit:

Achenes, usually ribbed.

Ripen in fall; many persist through winter within the dried flower heads.



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Solidago spp. 2
Goldenrod

Geographic range:

Type specimen location: Along Kasey Hartz trail in the upland oak area.

State: Throughout.

Regional: Newfoundland to California. Some species very local.

Habitat:

Local: Upland, and drier path in riparian area.

Regional: Sand dunes to mountains, prairies to bogs; some species specialized, others very tolerant.

<u>Common local companions</u>:

Oaks, huckleberry, blueberry, and greenbrier.

Usages:

Human: At one time goldenrod was proposed for the national flower. Prized as a European garden flower, in the United States it is often blamed, unfairly, for causing or aggravating hay-fever - its pollen is too heavy and sticky to be wind carried. The flowers, steeped, have been used as a diuretic. The leaves have been used as a tea, both as a table tea, and medicinally by Native Americans for intestinal gas, wound care, and toothache. At one time the leaves were exported to China for use as a tea. Thomas Edison did some experimenting with *Solidago* species as a source of latex to make rubber; his recommendations were never commercially followed up on (Sanders 2003). The flowers are prized by dyers using natural dyes for the shades of yellow they produce, and the green possible when used with indigo.

Animal: *Solidago* spp, require insects for pollination. They also are used by many insects as sites for egg laying, creating galls as the plant walls off the developing larvae. The common spherical galls are often created by the small fly *Eurosta solidaginis* Fitch.; more elongated galls are formed by a tiny moth, *Gnorimoschema gallaesolidaginis* (Riley). Additional insects use the stems, leaves, and roots in similar ways. *Solidago* spp. are important late season nectar and pollen sources for bees.

Why is it called *that*?

The Latin *solido* means "to make whole", an "allusion to reputed healing qualities" (Smith 1963, 1997 p. 316). Goldenrod refers to the flowering plants appearance as a golden scepter.

Prepared by: Barbara Lukacs Grob December 2007