

## Milkweeds at Chiwaukee Prairie

Growing in Chiwaukee Prairie are nine different kinds of milkweed plants. Asklepios, the Greek god of healing, is the source of the word Asclepiadaceae, the Latin name for the milkweed family. Both Europeans and Native Americans considered milkweeds potent medical plants because of the heart stimulating cardiac glycosides found in the plant tissues. Milkweeds are the host plant for monarch butterflies, whose larva will only eat the leaves of various milkweeds. As the leaves are consumed the larva also retains the cardiac glycosides making both the larva and the butterfly toxic to predators.

**Asclepiadaceae:** Family characteristics include usually having milky juice, leaves that are usually opposite, entire and simple, flowers in terminal umbel-like clusters and fruits a long pod which splits to reveal many seeds on silky hairs. Flowers have 5 joined reflexed petals, 5 sepals, and, often above, is a five-parted cup with 5 small horns that usually have a hood protecting them. This hood also protects the pollen. Milkweeds had many uses for various Native American groups including a tea to provide temporary sterility, worm expellant, and seed tea to draw out poison of rattlesnake bite. Some tribes cultivated milkweeds as a food crop. It is important to note that recipes often include specific instructions for collecting or cooking to negate the effects of the cardiac glycosides found in all parts of the plants. Flowers and buds were used in soups, made into preserves, and pods were cooked with buffalo meat. Common milkweed flowers were a source of brown sugar. Young shoots can be eaten like asparagus.

Latin flower names are two parted. The first name is capitalized and is called the genus. The second name is not capitalized and is the species or specific epithet and usually supplies some characteristic of the plant. In the following list of milkweeds at Chiwaukee Prairie I have put the Latin names in parentheses and commented on the meaning of the epithets. Eight of the milkweeds described have the genus *Asclepias* from the Greek god of healing.

- Black swallow-wort (*Vincetoxicum nigrum*): This milkweed genus name means to conquer poison for its use as a cure for snakebite. The species name means black and describes the flower color. It is an ecologically invasive alien non-native vine. It has opposite, toothless, shiny, smooth and short-stalked leaves and small 5-parted black flowers in a cluster that forms long narrow pods. Monarch butterflies lay eggs on the leaves but the larva can't use this plant.
- Common milkweed (*Asclepias syriaca*): *Syriaca* means from Syria and must have reminded the person who named it of a similar plant in Syria. It has inwardly curved horns that are shorter than the pale purple hood and a drooping flower cluster.
- Purple milkweed (*A. purpurascens*): *Purpurascens* stands for the color purple and these flowers are a deeper hue than the pale pink blooms of the common milkweed. It has one or few erect umbels. Endangered in WI.

- Clasping milkweed (A. amplexicaulis): Amplexicaulis indicates stem clasping and the stalkless leaves do clasp the stem. Flowers pinkish green and are not crowded in the cluster. Horns are attached well below the hoods.
- Swamp milkweed (A. incarnata): Incarnata is Latin for the color of the flowers. Horns much taller than the hoods.
- Butterfly milkweed (A. tuberosa): Tuberosa means tuberous roots. Juice is not milky. The flowers are orange to yellow and very showy, leaves are alternate but opposite on the branches.
- Whorled milkweed (A. verticillata): Verticillata means whorled. This short plant is 8 to 20 inches tall. Flowers white, awl shaped horns are longer than hoods. Flowers are arranged in stalked umbels from upper leaf nodes.
- Tall green milkweed (A. hirtella): Hirtella means having very small, coarse, stiff hairs. These green to white flowers have no horns. The petals are distinctly separated from the hoods and plant has erect stalked umbels, or flower clusters.
- Green-flowered milkweed (A. viridiflora): Viridiflora tells us the flower is green. Weakly erect, often falling over. Petals and hoods touching, and the umbels are short stalked or stalkless.

I really enjoy the milkweeds at Chiwaukee. I love the fragrance of a colony of common milkweed in blossom, the elegance of the tall green milkweed with its green and white flowers in the leaf axils, swamp milkweed adding flashes of red in the wetlands, the showy flowers of butterfly milkweed, the surprise of seeing a sprawling green-flowered milkweed where not much else is growing, and the late blooming delicate stems of the whorled milkweed. This past summer I watched a clear-wing moth delicately inserted its long proboscis into the tight slot between the hoods to sip the nectar and, while going from flower to flower, transferring pollen to pollinate the plant. I have seen a monarch butterfly bend its body into a horseshoe shape to lay an egg on the underside of the leaf and leaves gnawed clean by the hungry caterpillar. These observations are a constant source of wonder to me and keep me returning again and again to Chiwaukee.

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