

## Natives to Know: Milkweed (*Asclepias* species)

By Joyce Tuharsky

Milkweed is the common name for a group of herbaceous perennials that belong to the *Asclepias* genus. Named for its milky juice, milkweeds have flowers in umbel-like clusters, opposite or whorled simple leaves, and tufted seeds in long pointed seedpods. When the pods ripen and split open, the seeds are dispersed by the wind.

Most milkweed species contain toxins in the sap of the leaves and stems. The amount of toxins varies by species. Some species contain almost none, while others contain so much that they are lethal even to monarch caterpillars. The sap of some species causes skin irritation in humans. Sensitivity to a toxin varies with a person's age, weight, physical condition and individual susceptibility. Children are most vulnerable because of their curiosity and small size. Toxicity can vary in a plant according to season, the plant's different parts and its stage of growth. They can also absorb toxic substances, such as herbicides, pesticides and pollutants from water, air and soil.

Milkweed flowers have a unique pollination mechanism. The pollen grains are packaged into sacs with slits that attach to the leg of foraging insects. Once removed from the flower, the sacs re-orient as they dry to become properly positioned to pollinate another flower. Milkweed flowers also have modified anthers enclosed within a whorl of five "horns." The horns of some species are long, while the horns of others can barely be seen.

Milkweeds are not just another native plant. They are critical to our natural food web, because they provide a major food source for so many insects. It is the sole food source for monarch butterfly larvae, and the nectar is a key food source for honey bees and other nectar seeking insects. Hummingbirds use the seed pod floss to line their nests.

Milkweed populations are declining across the country as a result of development and agricultural herbicides. The monarch butterfly population, in turn, is also dwindling. Conservation organizations, like Wild Ones and Monarch Watch, are urging that milkweeds be planted in gardens, fields, and along roadsides to rebuild monarch habitat. Milkweed seeds should be sown outdoors in November, since many species require exposure to cold before germinating in spring.

There are about 110 native species of milkweed in North America, having an amazing diversity of foliage and flower colors. According to the U.S. Dept. of Agriculture, 11 species are native to Michigan. Below is a list of the species found in Western Michigan:



**Clasping Milkweed**, *Asclepias amplexicaulis*. 1-4' tall; mostly opposite leaves; pinkish-white flowers like the Common milkweed, but cluster is less dense; blooms in spring. Habitat: dry fields and open woods, usually in sandy soil. Distinguishing feature is the wavy edges of the leaves. This species is uncommon and or protected in some states.

**Common Milkweed**, *Asclepias syriaca*. 2-6' tall; blooms in summer, pink to reddish purple flowers; opposite leaves up to 8" long; seedpods 3-4" long; tolerates a variety of soil types; distinguished by its prickly seedpods. Michigan's most common milkweed.

**Green Comet Milkweed**, *Asclepias viridiflora*. 2' stems are mostly solitary or in pairs and bear opposite leaves up to four inches long. Leaves are variable in shape with plants from dry sites having long narrow leaves and those from moist sites having round leaves. 20-80 pale green flowers occur in two inch clusters in upper leaf axils. The pods are about four inches long and pointed at both ends.

**Poke Milkweed**, *Asclepias exaltata*. 2-6' tall; opposite leaves up to 10" long, narrow with sharp tips. Flowers are relatively fewer, bi-colored: pale purple with whiter pink hoods that weep down on long umbels; blooms in summer. Habitat: forest edges with dappled sunlight, rich or sandy loam with organic matter. Our only true forest understory species.

**Purple Milkweed**, *Asclepias purpurascens*. 2-3' tall; opposite leaves up to 6" long with sharp tips, often curl upward; deep purplish-red flowers; blooms in late spring; seedpods up to 6" long. Habitat: sandy or rocky soils, edges near woodland, rather than in open prairie. An oak-hickory savannah indicator species.

**Swamp Milkweed**, *Asclepias incarnate*. 2-4' tall; mostly opposite narrow leaves up to 4" long; rosy red and white flowers; shallow root system; blooms in summer. Habitat: banks of rivers, wet prairies, swamps, flood plains. Our only milkweed of truly wet ground (but adaptable to garden soils.)

**Whorled Milkweed**, *Asclepias verticillata*: 6-15" tall; very narrow needle-like, whorled leaves, 1-2" long; shallow root system; white to greenish flowers. Habitat: nutrient poor, sandy, clay or rocky soils of prairies, roadsides, or open woods. A distinctive slender plant, one of the first to come back after a prairie fire.



Monarch on Swamp Milkweed  
*Photo courtesy of en.wikipedia.org*



Poke Milkweed  
*Photo courtesy of www.ourhabitatgarden.org*