



Apocynaceae

Dogbane Family

(subfamily – Asclepiadaceae)

The Milkweed Family

Members of the Family

- *Asclepias* (milkweed)
 - 13 members of *Asclepias* in Kentucky
 - According to Nature Serve, all members are globally secure.
 - OKNP doesn't list any species with a state listed designation
 - Plant Life of Kentucky, Dr. Ron Jones 2005, lists 1:13 as rare, 5:13 as infrequent, and 7:13 as frequent throughout Kentucky



Members of the Family

- *Ampelamus* (sandvine or honeyvine or bluevine - *Ampelamus albidus*)
 - 1 member of *Ampelamus* in Kentucky
 - Mesic to wet woods, often weedy, according to Plant Life of Kentucky
 - Globally secure, according to Nature Serve
 - Vine
 - Corolla 4-6mm
 - Corona with slender lobes
 - A variety of insects, including halictid bees, masked bees, wasps, flies, Monarch butterflies (including the larvae) are pollinators or feed on the foliage of the vine. Swamp milkweed beetles can also be found feeding on the plant as well. Mammals avoid the plant.



Members of the Family

- *Matelea* (Milkvine)
 - 3 members of *Matelea* in Kentucky
 - According to Nature Serve, all members are globally secure or apparently secure.
 - OKNP lists one species with a designation of State Endangered (*Matalea carolinensis* – Carolina milkvine) – Clinton, Russell, Cumberland, and McCreary
 - Plant Life of Kentucky, Dr. Ron Jones, lists 1:3 as endangered and 2:3 as infrequent.



Image provided by Western Carolina Botanical Club
Carolina milkvine (*Matalea carolinensis*)



‘Tis the Beginning of Milkweed Season

- Milkweeds, depending on the species, can be toxic to several animals.
- Butterflies, and other insects, have developed a taste for milkweeds which protect them from being consumed during egg and larval stages of development, but may protect them as emerging adults.



Our Milkweeds (*Asclepias* sp.)

- ***Asclepias amplexicaulis*** – clasping milkweed
- ***Asclepias exaltata*** – poke milkweed or tall milkweed
- ***Asclepias hirtella*** – prairie milkweed
- ***Asclepias incarnata*** – swamp milkweed
- ***Asclepias perennis*** – smoothseed milkweed
- ***Asclepias purpurascens*** – purple milkweed
- ***Asclepias quadrifolia*** – four-leaved milkweed
- ***Asclepias syriaca*** – common milkweed
- ***Asclepias tuberosa*** – butterfly milkweed
- ***Asclepias variegata*** – white milkweed
- ***Asclepias verticillata*** – whorled milkweed
- ***Asclepias viridiflora*** – green milkweed
- ***Asclepias viridis*** – Ozark milkweed or green antelope horn milkweed



What Makes Them Interesting and Useful?

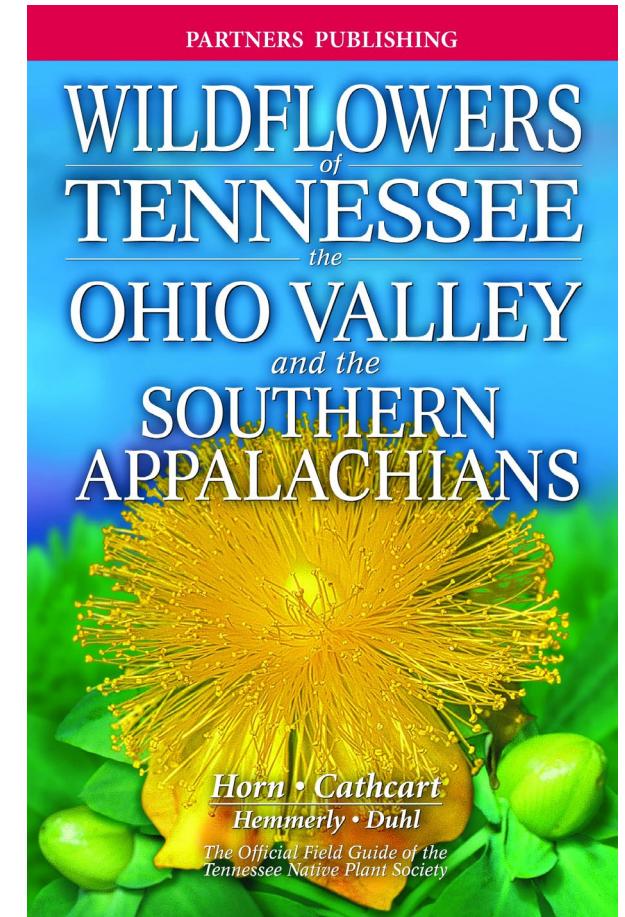
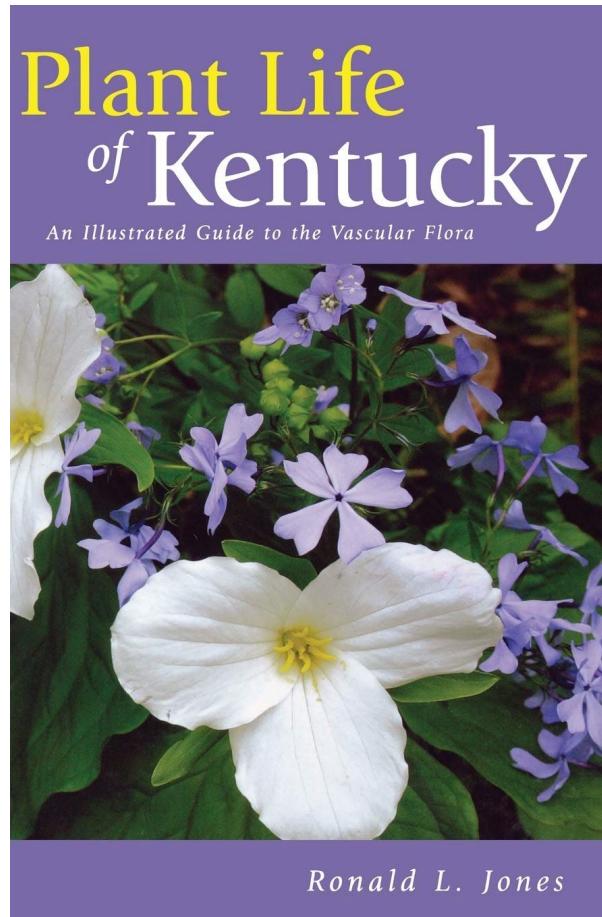
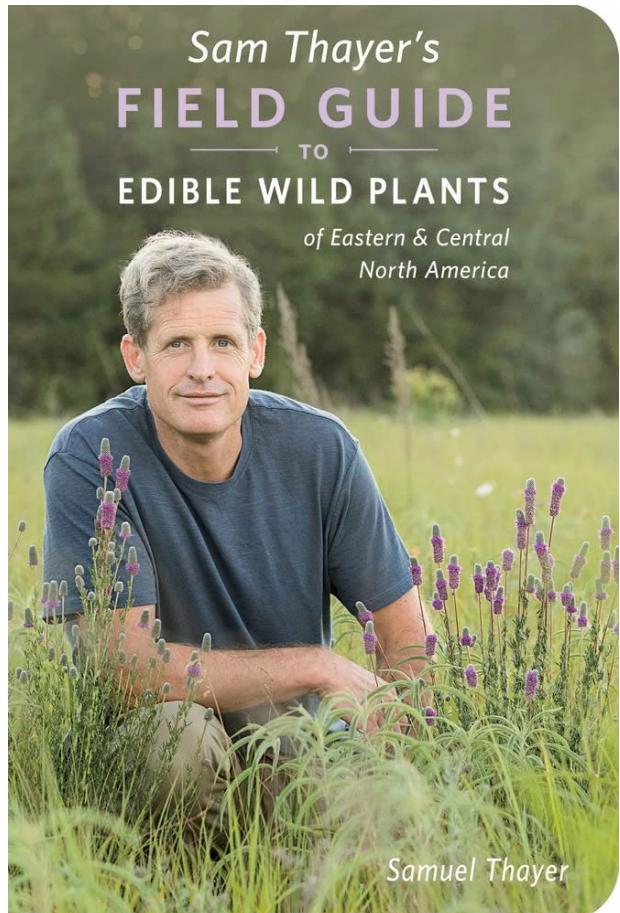
- Milkweed seeds were used as waste clean up for Native American papoose carriers.
- Tall milkweed (*A. exaltata*) flowers exude a sweet sugar from the flowers.
- Swamp milkweed (*A. incarnata*) can be broken down into fibrous materials for fishing line, sewing thread, and other materials for common and survival practices.
- Milkweed seeds were used as filler for WWII lifejackets. A few pounds of the silky seeds could float a 150-pound fighter pilot and could keep that person warmer as well.
- Goldfinches use the silky seeds to line their nests.
- Medicinal uses of milkweeds include treating asthma, dysentery, remove warts, and, for the people of Quebec, they were used as a contraceptive.
- As a food source for people, young flower buds can be used as a broccoli replacement, young sprouts can be eaten like asparagus, immature pods (after removing the silk) can be eaten whole, used in soups or casseroles, or served as a vegetable.

Wildflowers of Tennessee the Ohio Valley and the Southern Appalachians, Horn, Cathcart, Hemmerly, and Duhl; 2005
Field Guide to Edible Wild Plants, Samuel Thayer; 2023

What Makes Them Toxic or a Nuisance?

- Cardiac glycosides (disruption of molecular pumps) in insects. Three amino acids in proteins found in Monarchs.
- Protein softening compounds
- The pressing decision whether to protect it for the sake of the Monarch (and other butterflies) or eliminate from fields to reduce infringement on crop space and livestock-related issues.

Resources



Questions?