

A Guide to the Native Milkweeds of Oregon



Milkweeds are a critical part of the monarch butterfly's life cycle. To protect monarchs in western North America, the Xerces Society for Invertebrate Conservation has launched an initiative to locate milkweed stands that serve as breeding areas for monarchs. If you know where milkweed grows, please help us by completing a brief survey at:

www.xerces.org/milkweedsurvey



THE XERCES SOCIETY
FOR INVERTEBRATE CONSERVATION



MONARCH
JOINT VENTURE



Introduction

This guide was created to support a web-based survey developed to gather information about milkweed stands in the western states that potentially serve as important monarch breeding areas. If you would like to contribute to our understanding of the migration and breeding dynamics of the western monarch by submitting information about milkweed occurrences in your region, you can complete the survey on the Xerces Society's website, at www.xerces.org/milkweedsurvey.

Five species of milkweed are native to Oregon. This guide includes profiles of the four most common species, all of which are used as a larval host plant by the monarch butterfly.

Asclepias cordifolia (purple milkweed, heartleaf milkweed)
Asclepias cryptoceras ssp. *davisii* (Davis' milkweed)
Asclepias fascicularis (narrow-leaved milkweed)
Asclepias speciosa (showy milkweed)

A profile of each of these species includes descriptions of flowers, leaves, and seed pods, accompanied by photos and distribution maps. Supporting these profiles is a simple guide to identifying milkweeds based on their distinctive flowers and fruits.

A fifth native species, serpentine milkweed (*Asclepias solanoana*) is known to grow on serpentine outcrops of the

Siskiyou Mountains in southern Oregon. Although the species has not been documented in the state by a voucher herbarium specimen, there are anecdotal observations of it. As its common name implies, this milkweed grows exclusively on serpentine soils. You can view photos of *A. solanoana* on CalPhotos (<http://calphotos.berkeley.edu/flora/>).

In addition to these native species, we have included a profile of *Asclepias curassavica* (tropical milkweed), a nonnative species that is becoming established in some states. Although it is not yet established in Oregon, by looking for it now, we may be able to get an early warning of its arrival in this state.

To document the distribution of available monarch breeding habitat, it is not necessary to distinguish one milkweed species from another. However, if there is a need to collect seed from or monitor populations of any particular milkweed species in the future, it will be useful to have information on the distribution of individual species.

This survey is being conducted by the Xerces Society for Invertebrate Conservation. The Society's milkweed conservation work is supported by the Monarch Joint Venture and the USDA Natural Resources Conservation Service.

© 2012 by The Xerces Society for Invertebrate Conservation



The Xerces Society for Invertebrate Conservation is a nonprofit organization that protects wildlife through the conservation of invertebrates and their habitat. Established in 1971, the Society is at the forefront of invertebrate protection worldwide, harnessing the knowledge of scientists and the enthusiasm of citizens to implement conservation programs. The Society uses advocacy, education, and applied research to promote invertebrate conservation.

The Xerces Society for Invertebrate Conservation
628 NE Broadway, Suite 200, Portland, OR 97232
Tel (855) 232-6639 Fax (503) 233-6794 www.xerces.org

Regional offices in California, Minnesota, Michigan, North Carolina, and New Jersey.

Acknowledgements

Our thanks go to Priya Shahani, coordinator of the Monarch Joint Venture, and Karen Oberhauser of the University of Minnesota for their advice and guidance with preparing the survey and milkweed guides. Guide prepared by Brianna Borders. Editing and layout by Matthew Shepherd.

Cover photos

Top: showy milkweed (*Asclepias speciosa*), © Rod Gilbert; bottom left: monarch (*Danaus plexippus*) adult, © Eric Eldredge, USDA-NRCS; bottom right: monarch caterpillar, © William M. Ciesla, Forest Health Management International, Bugwood.org.

Tips for Milkweed Identification

Unless you are already familiar with the native milkweeds of your region, it's unlikely that you'll be able to identify different species if they are not flowering or bearing fruits. Milkweed flowers and fruits are very distinctive and can be easily recognized, allowing confident identification when they are present.

Flowers

Milkweed flowers are arranged in clusters. Depending on the species, the stalk that bears the flowers can be either erect or drooping. The showy, upper part of each flower, called the **corona**, consists of five hoods, where nectar is stored. The shape of the hoods is variable between species. Five petals, which together are called a **corolla**, form the lower part of the flower and in most species, are bent backwards.

Fruits

Milkweed fruits ("pods") are also very distinctive though they are variable in size and shape between species. When the fruits are mature, they split open lengthwise, releasing the seeds. Each seed is attached to fluffy hairs that aid in wind dispersal.

Milky sap

Milkweeds are named for their milky, latex sap, which oozes from the stems and leaves when plants are injured. Milkweeds are not the only plants that have milky sap, but in combination with the unique flower shape, this can help to positively identify a milkweed plant. To check for the sap, tear off a small piece of leaf to see if it oozes from the torn area. Avoid any contact of the sap with your skin, eyes, or mouth.

Photo: Gary A. Monroe @ USDA-NRCS PLANTS Database



Pallid milkweed (*Asclepias cryptoceras* ssp. *cryptoceras*): The corona is purple and the corolla is pale green.

Photo: Mary Ellen (Mel) Harte, Bugwood.org



Narrow-leaved milkweed (*Asclepias fascicularis*): The corona is white and the corolla is pink.

Photo: Eric Eldredge, USDA-NRCS



Showy milkweed (*Asclepias speciosa*): This species' fruits have a woolly texture and sometimes have warty projections.

Photo: John Anderson, Hedgerow Farms



Narrow-leaved milkweed (*Asclepias fascicularis*): This species' fruits are hairless and have an elongated, tapered shape.

Asclepias cordifolia

purple milkweed
heartleaf milkweed

Distribution in Oregon

Limited to south and southwest areas of the state.

Habitat description

Dry, rocky slopes and hillsides, open woods.

Flowering period

May – June

Plant characteristics

Growth form

- Up to 2 feet (60 cm) tall

Flowers

- Corona pink or white
- Corolla dark pink to dark purple

Stems

- Mostly hairless

Leaves

- 2 – 4 inches (5 – 10 cm) long
- Heart-shaped; wider at the base and tapering to the tip
- Attached directly to the stem
- Opposite each other on the stem
- Mostly hairless
- Waxy coating gives them a frosted appearance

Fruits

- 2 – 3 inches (5 – 8 cm) long
- Lance-shaped, tapering to a sharp point
- Smooth-textured
- Hairless



Source: USDA-NRCS PLANTS Database



Photo: Dr. Robert T. and Margaret Orr © California Academy of Sciences



Photo: John Anderson, Hedgerow Farms



Photo: John Anderson, Hedgerow Farms

Asclepias cryptoceras *ssp. davisii*

Davis' milkweed

Distribution in Oregon

Scattered in central and eastern areas of state.

Habitat description

Sand, gravel, clay, or shale on slopes and hillsides.

Flowering period

April – June

Plant characteristics

Growth form

- Up to 1 foot (30 cm) tall
- Decumbent and low growing, rather than erect

Flowers

- Corona purple
- Corolla pale green

Stems

- Hairless
- Waxy coating gives stems a frosted appearance

Leaves

- 1.5 – 3 inches (4 – 8 cm) long
- Nearly as wide as long
- Opposite each other on the stem
- Hairless
- Waxy coating gives them a frosted appearance

Fruits

- 1.5 – 3 inches (4 – 8 cm) long
- Oval-shaped
- Smooth-textured
- Hairless

Note about the photos

There are two subspecies of *A. cryptoceras* in North America, *ssp. cryptoceras* and *ssp. davisii*. Only the latter is recorded in Oregon. However, the photos on this page show *ssp. cryptoceras*. The most apparent difference between the two subspecies is in the length and shape of the hoods, but the distinctive color combination of corolla and corona mean that neither subspecies can be confused with other milkweeds in the field.



Source: USDA-NRCS PLANTS Database



Photo: Gary A. Monroe @ USDA-NRCS PLANTS Database



Photo: Gary A. Monroe @ USDA-NRCS PLANTS Database



Photo: Conservation Seeding & Restoration, Inc. Biology Team, csr-inc.com

Asclepias fascicularis

narrow-leaved milkweed

Distribution in Oregon

Scattered across much of state.

Habitat description

Dry to moist soil in meadows, fields, roadsides, open woods, and along waterways.

Flowering period

June – September

Plant characteristics

Growth form

- Up to 3 feet (90 cm) tall

Flowers

- Corona white
- Corolla pink

Leaves

- 2 – 5 inches (5 – 12 cm) long
- Narrow
- Numerous
- Opposite each other on the stem or in a whorled pattern around the stem

Fruits

- 2 – 4 inches (5 – 10 cm) long
- Narrow
- Smooth-textured
- Hairless



Source: USDA-NRCS PLANTS Database



Photo: John Anderson, Hedgerow Farms



Photo: Mary Ellen (Mel) Harte, Bugwood.org



Photo: John Anderson, Hedgerow Farms



Photo: Eric Eldredge, USDA-NRCS

Asclepias speciosa

showy milkweed

Distribution in Oregon

Widespread; found in most of state.

Habitat description

Dry to moist soil in meadows, fields, roadsides, open woods, and along waterways.

Flowering period

June – August

Plant characteristics

Growth form

- Up to 4 feet (120 cm) tall
- Stout and erect
- Sometimes grows in stands of several hundred plants

Flowers

- Corona pink or white
- Corolla pink
- Hoods of corona very elongated; form 5-pointed star

Stems

- Covered in soft hairs, often matted

Leaves

- 3 – 7 inches (8 – 18 cm) long
- Broad (1.5 – 3 inches [4 – 8 cm])
- Opposite each other on the stem
- Covered in soft hairs, often matted

Fruits

- 2 – 3 inches (5 – 8 cm) long
- Covered in dense, woolly hairs
- Some have warty projections



Source: USDA-NRCS PLANTS Database



Photo: Mary Ellen (Mel) Harte, Bugwood.org



Photo: Rod Gilbert

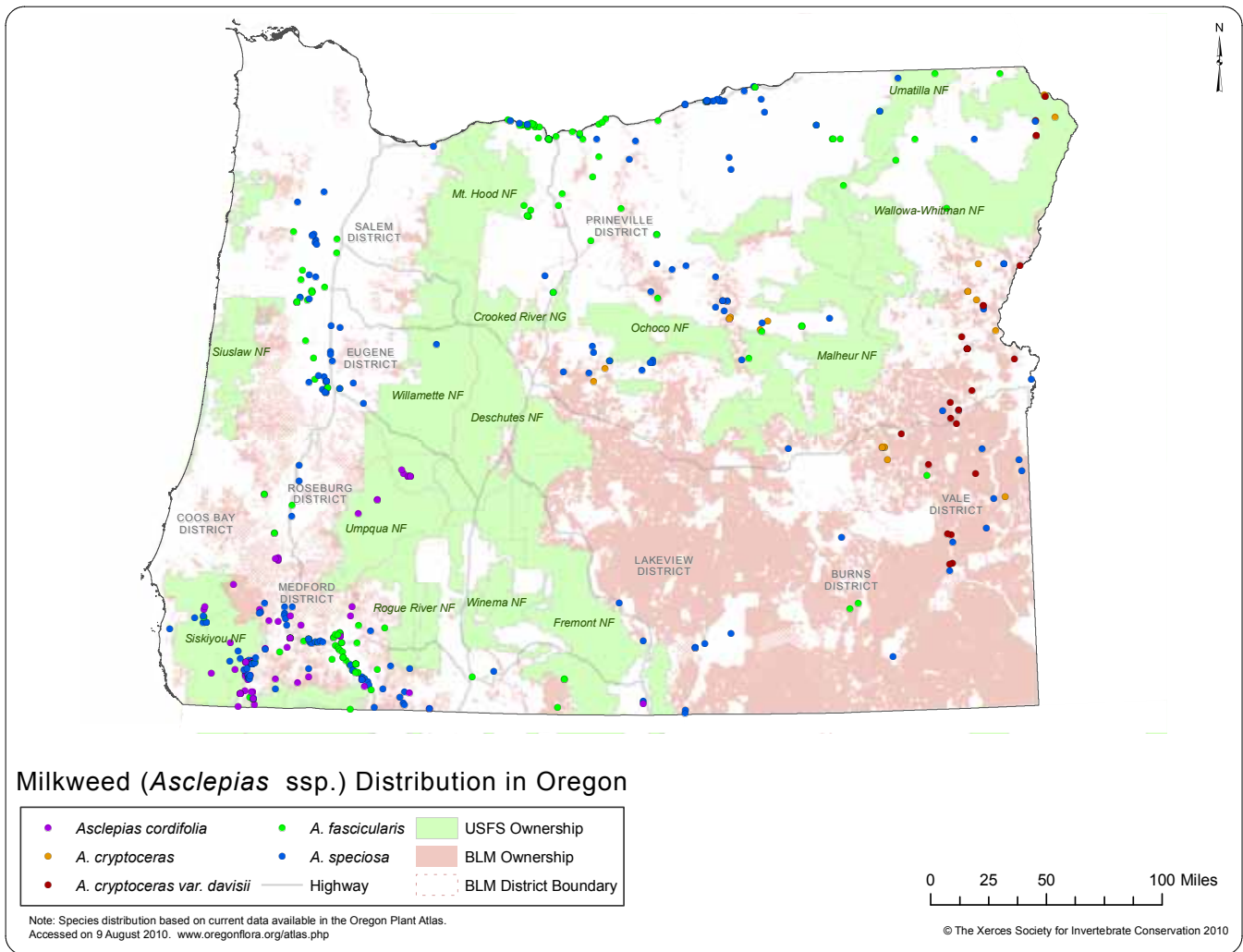


Photo: Eric Eldredge, USDA-NRCS



Photo: Brianna Borders, The Xerces Society for Invertebrate Conservation

Milkweed Distribution in Oregon



Asclepias curassavica

tropical milkweed
bloodflower

Tropical milkweed is not native to North America, but, due to its showy flowers and its ability to attract egg-laying monarchs, it has been widely planted in gardens. In Florida, the species has escaped from gardens and become established in natural areas. Scientists are concerned that this nonnative milkweed has negative impacts on monarchs because, unlike most North American native milkweeds, it will have foliage year-round when growing in areas with mild winters and adequate moisture. This can cause monarchs to lay eggs outside of their regular breeding season or persist in areas longer than they normally would, disrupting their migratory cycle. Year-round persistence of milkweed has also been found to result in dramatically higher parasitism rates in monarchs, and thus lower monarch survival. A better understanding of where this milkweed occurs in the landscape may facilitate study of its potential impacts or aid early eradication efforts.

Distribution

Documented in California; the extent of its occurrences in other western states is generally unknown. Also documented in Florida, Hawaii, Louisiana, Tennessee, and Texas.

Habitat description

Typically planted in gardens. Prefers moist soils. Colonizes disturbed sites.

Flowering period

Potentially blooms several times between spring and fall.

Plant characteristics

Growth form

- Up to 3 feet (90 cm) tall

Flowers

- Corona yellow/orange
- Corolla bright red

Leaves

- 5 – 6 inches (13 – 15 cm) long
- Narrow; pointed at both ends
- Opposite each other on the stem

Fruits

- 3 – 4 inches (8 – 10 cm) long
- Spindle shaped, with a smooth texture



Photo: Larry Allain @ USDA-NRCS PLANTS Database



Photo: R.A. Howard @ USDA-NRCS PLANTS Database

References

- Floridata. *Asclepias curassavica* species profile. 1/21/04. Available at http://www.floridata.com/ref/a/asc_l_cur.cfm [accessed 11/15/2011]
- Hickman, J. C. (editor). 1993. *The Jepson Manual: Higher Plants of California*. Berkeley: University of California Press. 1,424 pp.
- Hitchcock, C. L., and A. Cronquist. 1973. *Flora of the Pacific Northwest*. Seattle: University of Washington Press. 730 pp.

Peck, M. E. 1961. *A Manual of the Higher Plants of Oregon*. Portland: Binford and Mort. 936 pp.

USDA Natural Resources Conservation Service. 2011. The PLANTS Database (<http://plants.usda.gov>, October 2011). National Plant Data Center, Baton Rouge, LA 70874-4490, USA.