

A Guide to Common Milkweeds of Nevada



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

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.

Thirteen species of milkweed are native to Nevada. The majority of them are documented to be used as larval host plants by the monarch butterfly. This guide covers the five most common species.

Asclepias asperula ssp. *asperula* (spider milkweed)

Asclepias cryptoceras (pallid milkweed, Davis' milkweed)

Asclepias erosa (desert 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.

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 Nevada, 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.

The other eight species of milkweed found in Nevada are either uncommon or have a restricted distribution. If you have seen milkweed plants that do not match the five species in this guide and would like to identify them, you can view photos of many of the remaining eight species on CalPhotos (<http://calphotos.berkeley.edu/flora/>) and the USDA PLANTS database (<http://plants.usda.gov>), where you can also view county-level distribution maps. The species are *A. cordifolia* (heartleaf milkweed), *A. hallii* (Hall's milkweed), *A. incarnata* (swamp milkweed), *A. nyctaginifolia* (Mojave milkweed), *A. rusbyi* (Rusby's milkweed), *A. subulata* (rush milkweed), *A. subverticillata* (western whorled milkweed), and *A. uncialis* ssp. *ruthiae* (Ruth's milkweed).

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.

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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.

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Cover photos

Top: desert milkweed (*Asclepias erosa*), © 2005 Brent Miller; 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 asperula ssp. *asperula*

spider milkweed

Distribution in Nevada

Widely distributed across eastern areas.

Habitat description

Gravelly and rocky soil or on exposed talus, in pinyon-juniper woodland and open ponderosa pine woods.

Flowering period

May – July

Plant characteristics

Growth form

- up to 3 feet (90 cm) tall
- Plants are generally low-growing and often form dense clumps

Flowers

- Corona purple and white
- Corolla yellowish-green
- Unlike most other milkweed species, the corolla of the flower surrounds the corona, rather than being bent backward
- Flowers are arranged in ball-shaped clusters

Leaves

- Much longer (3 – 7 inches [8 – 18 cm]) than wide (less than one inch)
- Usually folded lengthwise into a V-shape
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Fruits

- 2 – 4 inches (5 – 10 cm) long
- Slightly curved
- Sometimes have a striped pattern



Source: USDA-NRCS PLANTS Database



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



Photo: Patrick J. Alexander @ USDA-NRCS PLANTS Database



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

Asclepias cryptoceras

pallid milkweed
Davis' milkweed

Distribution in Nevada

Found in most of the state.

Habitat description

Dry, open, barren places in clay, sand, gypsum, and serpentine soils, from the sagebrush or shadscale zones to the pinyon-juniper and aspen zones.

Flowering period

May – 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 (1 – 2.5 inches [3 – 6 cm]) 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 *A. cryptoceras*

There are two subspecies of *A. cryptoceras* in North America, ssp. *cryptoceras* and ssp. *davisii*; both are found in Nevada. The photos on this page show ssp. *cryptoceras*, which is more widespread in Nevada. The most apparent difference between the two subspecies is in the length and shape of the hoods, but for the purposes of this survey there is no need to separate the two subspecies. The distinctive combination of corolla and corona colors and broad leaves mean that neither subspecies can be confused with other milkweed species 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 erosa

desert milkweed

Distribution in Nevada

Found from north to south through the center of the state.

Habitat description

Dry washes, gulches, canyons, and roadsides in open deserts; in creosote bush, shadscale, and sometimes sagebrush communities.

Flowering period

April – August

Plant characteristics

Growth form

- up to 6 feet (180 cm) tall
- Erect

Flowers

- Corona cream or yellow
- Corolla pale green or yellow
- Buds covered in fine hairs

Stems

- Covered in fine hairs
- Stout

Leaves

- Large (4 – 8 inches [10 – 20 cm] long), and broad (1 – 4 inches [3 – 10 cm])
- Opposite each other on the stem
- Covered in fine hairs

Fruits

- Covered in fine hairs



Source: USDA-NRCS PLANTS Database



Photo: © 2005 Brent Miller



Photo: © Brother Alfred Brousseau, St. Mary's College

Asclepias fascicularis

narrow-leaved milkweed

Distribution in Nevada

Scattered across north and central areas of state.

Habitat description

Streambanks, roadsides, agricultural areas, and other moist to dry places, including irrigation ditches and fallowed fields.

Flowering period

June – August

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 Nevada

May be found in almost every county.

Habitat description

Moist or moderately moist soil in open, sunny areas including wetlands, meadows, cultivated fields, pastures, forest clearings, and along roadsides, railways and waterways. Widely tolerant of alkaline soils.

Flowering period

May – 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) Harter, Bugwood.org



Photo: Rod Gilbert



Photo: Eric Eldredge, USDA-NRCS



Photo: Brianna Borders, The Xerces Society for Invertebrate Conservation

Asclepias curassavica

tropical milkweed
bloodflower

Tropical milkweed is not native north of Mexico, 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

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