

# Nature's Notebook Phenophase Photo Guide

## *Asclepias subverticillata* horsetail milkweed



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### Why Observe?

This species is part of the project Desert Refuge: Monarchs and Milkweeds in Arizona, which is a collaboration between the USA-NPN and Desert Botanical Garden. This project seeks to better understand the winter breeding behavior of monarchs and use of milkweed across the state. Your observations of leafing and flowering of *Asclepias subverticillata* will help answer the question of what life cycle stages do milkweeds experience during winter months and how might this affect monarchs.

This project is funded by a grant from Monarch Joint Venture and U.S. Forest Service International Programs.

### Tips for Identification

This species has whorled, linear leaves 2-12cm long and 1-4mm broad. Flowers are white, greenish or greyish purple. Found in open woodlands, grasslands, stream terraces, invading roadsides, pastures, yards, and gardens. (Source: [swbiodiversity.org](http://swbiodiversity.org))

Be aware there is variation from individual to individual within a species, so your plant may not look exactly like the one pictured. If you are uncertain whether or not a phenophase is occurring, report a "?" for its status until it becomes clear what you are observing after subsequent visits.



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### Initial growth

New growth of the plant is visible after a period of no growth (winter or drought), either from above-ground buds with green tips, or new green or white shoots breaking through the soil surface. Growth is considered "initial" on each bud or shoot until the first leaf has fully unfolded. For seedlings, "initial" growth includes the presence of the one or two small, round or elongated leaves (cotyledons) before the first true leaf has unfolded.

### Image Needed

email  
[photos@usanpn.org](mailto:photos@usanpn.org)



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### Leaves

One or more live, fully unfolded leaves are visible on the plant. For seedlings, consider only true leaves and do not count the one or two small, round or elongated leaves (cotyledons) that are found on the stem almost immediately after the seedling germinates. Do not include fully dried or dead leaves.

### Flowers or flower buds

One or more fresh open or unopened flowers or flower buds are visible on the plant. Include flower buds or inflorescences that are swelling or expanding, but do not include those that are tightly closed and not actively growing (dormant). Also do not include wilted or dried flowers.



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### Open flowers

One or more open, fresh flowers are visible on the plant. Flowers are considered "open" when the reproductive parts (male stamens or female pistils) are visible between or within unfolded or open flower parts (petals, floral tubes or sepals). Do not include wilted or dried flowers.

### Fruits

One or more fruits are visible on the plant. For *Asclepias subverticillata*, the fruit is large and pod-like and changes from green to reddish-green or yellowish-green to tan or brown and splits open to expose seeds with fluff. Do not include empty fruits that have already dropped all of their seeds.

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### Ripe fruits

One or more ripe fruits are visible on the plant. For *Asclepias subverticillata*, a fruit is considered ripe when it has split open to expose seeds with fluff. Do not include empty fruits that have already dropped all of their seeds.

**Phenophases not pictured:** Recent fruit or seed drop