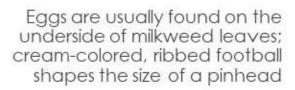
# Identifying Monarchs by Life Stage

When checking milkweed plants for signs of monarch activity, it is helpful to look for specific signs that relate to the various life stages.







Larvae are black, yellow, & white banding; 2 head filaments, 2 rear filaments; each growth stage (instar) is distinctive in size & shape



Development from egg to adult takes ~30 days



Adults emerge 10-14 days after forming a chrysalis, once pigmented scales become visible





Chrysalis forms after 5<sup>th</sup> instar; bright mint-green with gold studs that aid in camouflage

### How and where to look for eggs:

- Eggs are often found on newest growth, often the tiniest plants at the edges of a patch
- Often on the bottom side of a leaf (out of direct sunlight)
- May be found on shaded plants, especially when it's warmer
- If milkweed is scarce, eggs may be found on older plants under the youngest leaves
- Occasionally a female will lay more than one egg to a leaf or plant if milkweed are limited

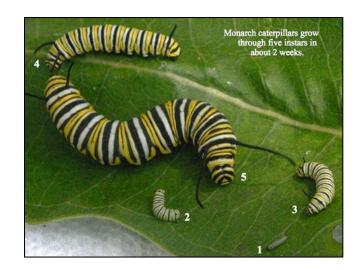
 It is possible to mistake beads of latex on the leaf as monarch eggs, so a magnifying glass or a close-up photo can help give you more detail

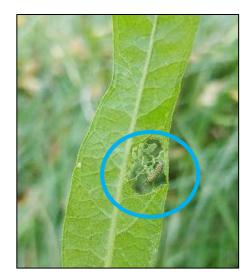




### How and where to look for caterpillars:

- Monarch caterpillars have distinct black, white, and yellow bands, with two pairs of black filaments (one pair on the head and one pair on the rear)
- After each molt, the caterpillar is in a later instar, or development stage
- They consume a lot of plant material as they grow
- Milkweed leaves with caterpillars are damaged and eaten
- Younger caterpillar instars eat shallow holes in leaves
- Small, dark caterpillar poop (frass) is visible on leaves
- Late-instar caterpillars often move to nearby plants or trees to pupate and can be very difficult to locate







### How and where to look for chrysalises:

- This life stage is extremely vulnerable for a monarch, so the chrysalises are meant to be camouflaged
- The jade green chrysalis will be difficult to spot!
- Pupae may be found on milkweed branches
- Search for nearby taller plants or structures within 30 feet, especially if you are certain that a caterpillar was nearing its pupation
- Do not remove chrysalises from their anchor points or handle them



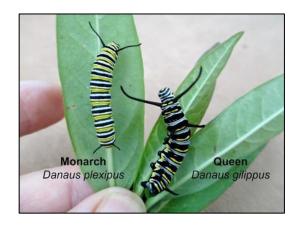






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## Identifying Monarchs from Look-alikes:



Closely-related queen caterpillars are darker with 3 pairs of tentacles, and pupae are much smaller



# Adult males have a black spot on hind wing Adult females have thicker black veins

### Comparing adults to similar-looking butterflies:



Viceroy butterflies have a characteristic black band across each hind wing

Queen butterflies are dark reddishorange, with white spots on orange (not on black)