

ADULT MONARCHS

Male and female monarchs can be distinguished easily. Males have a black spot (indicated by a red arrow) on a vein on each hind wing that is not present on the female. The ends of the abdomens are also shaped differently in males and females, and females often look darker than males and have wider veins on their wings.



Male Monarch Butterfly
(photo courtesy of Michelle Solensky)



Female Monarch Butterfly
(photo courtesy of Barbara Powers)

EGGS AND CATERPILLARS



Monarch egg on milkweed leaf — The egg is a little more than 1 millimeter tall.
(Photo courtesy of Lynda Andrews)



Close-up of monarch egg — Note the pointed shape, the glossy color, and the vertical striping.
(Photo courtesy of Michelle Solensky)



Monarch egg (left) and latex drop (right)
(Photo courtesy of Anurag Agrawal)



Live monarch egg about to hatch
(Photo courtesy of Valerie Evanson)



Dead monarch egg — Note the “puddle” of dead larva in the bottom of the egg.
(Photo courtesy of Valerie Evanson)



Monarch first instar consuming eggshell — Note the dull greenish-grey color, and the size (not much bigger than the egg).
(Photo courtesy of Mary Holland)



First instar feeding damage — This circular feeding pattern is an indication that a monarch first instar was on the plant at some point.
(Photo courtesy of Tom Collins)



Monarch second instar — Second instar larvae have a distinct pattern of black, white, and yellow band, and the body no longer appears transparent and shiny.
(Photo courtesy of Monarch Lab)



Monarch third instar — This third instar monarch has just molted. As monarch larvae develop, they increase in size and their stripes become more distinct. Third instar larvae usually feed using a unique cutting motion on leaf edges.

(Photo courtesy of Monarch Lab)



Monarch fourth instar — Fourth instar monarchs front tentacles extend beyond the tip of the head. Internal changes, including the development of reproductive structure, begins to occur in late instar monarchs.

(Photo courtesy of Monarch Lab)



Monarch fifth instar — Older monarch larvae have bright yellow, black and white striping and 2 pairs of tentacles (on front and back ends).

(Photo courtesy of Richard Hicks)



Monarch instars — The entire larval stage in monarchs lasts from 9-14 days under normal summer temperatures. The speed of monarch development is temperature dependent.

(Photo courtesy of Monarch Lab)

DATASHEET: ONE TIME MILKWEED AND MONARCH OBSERVATIONS

Date: _____ Observers: _____

City, State, Zip Code: _____

Record the total number of milkweed plants you observe, even if you did not find monarchs on them. _____

Record the total of each monarch stage you find in your milkweed patch in the boxes below.

# Eggs	# 1 st Instars	# 2 nd Instars	# 3 rd Instars	# 4 th Instars	# 5 th Instars	# Pupae	# Adults

Milkweed species on which monarchs were observed:

What is the area of the site you checked for monarchs?

Other Notes:
