

Monarch Life Cycle and Migration

1. Metamorphosis..... There's no morphin' like metamorphin'
2. Egg..... The incredible, edible monarch egg
3. Larva – first instar The first cut is the bleakest
4. Larva – second instar..... Same frass, different instar
5. Larva – third instar..... Close encounters of the third *time*
6. Larva – fourth instar..... I proclaim this to be the season of *gorge!*
7. Larva – fifth instar (*pre-pupa*)..... It's the end of the world as we know it
8. Pupa (*chrysalis*)..... Free at last, free at last, I'm out of the pupa and I'm free at last!
9. Adult (*imago*)..... *IMAGINE* all the monarchs, living in harmony
10. Born on the Fourth of July..... Happy Emergence Day!
11. Classification of Monarchs..... Lord of the Wings
12. Worldwide Map of Milkweed Butterflies..... Wild thing, you make my ♥ heart ♥ sing
13. Milkweed Family Butterflies & Moths..... *I got Kingdom, I got Phylum*
14. Differences in Butterflies and Moths..... One flew over the cocoon's address
15. Physiology of Monarchs..... Nothing beats three great pair of legs
16. Courtship and Mating..... Nothing's quite as pretty as a Mariposa in the morning
17. Puddling for Salts..... Carpe Sodium! Seize the salt!
18. Egg laying..... Such is the stuff proteins are made of
19. Sensory Organs for Larvae and Adults..... Everybody's talkin' at me; can't hear a word they're saying
20. Flight..... I've looked at clouds from both sides now
21. Antennae..... Lust in the wind, pheromones are lust in the wind
22. Natural Predators on monarchs..... Crouching larvae; hidden assassin
23. Parasitoids and *O. e.*..... O, my pupae look so sick, *O.e, O.e., o*
24. Mimicry..... We will, we will, mock you, mock you
25. Viceroy Butterfly..... Winner of the Good Housekeeping Award
26. Fall and Spring Monarch Migration Maps..... Some fall morning I'll fly away
27. Fall Migration..... Good, good, good, good migrations
28. Remigration into Texas and Gulf..... Oh *Danaus* boy, come ye back when summer's in the meadow
29. Map of México..... Road trip!! Road Trip!!
30. Weather Thermals..... Your thermal is lifting me higher - than I've ever been lifted before
31. Monarchs in Canada..... Changes in latitude, eh?
32. Milkweed Beetles..... I only have four eyes for you
33. Milkweed Bugs..... Doctor says I only have a month to live
34. *Spotlight*: Two critters in the milkweed patch..... I've grown accustomed to this lace
35. Historic records of migration..... Don't know much about history; don't know much about biology
36. Important Monarch Dates..... Saluting the work of those who have gone before
37. California Overwintering Sites..... Muir Power to you
38. Eucalyptus in California..... Wish they all could be California pines
39. *A Sense Of Place*: Don't Mess with Texas Monarchs..... Houston, we have a problem
40. *A Sense Of Place*: Gulf Of México..... Desperately seeking outrage
41. *A Sense Of Place*: The Florida conundrum..... I was born (and stay) in the USA
42. Threats to US summer breeding grounds..... Mamas, don't let your babies grow up to kill Milkweeds
43. Threats to Mexican overwintering forest reserves..... Here's the achy, breaky part
44. Threats to monarchs from natural causes in México..... Of mice and men and birds and herds
45. Overwintering Sites for the Eastern Populations..... Forgive us, Padre, for we have thinned
46. Map of Monarch Overwintering sites in México..... The map is not the territory
47. Overview of México's Monarch Sanctuaries' Core Zones..... The ♥ corazon ♥ of ♥ the ♥ matter
48. *One-page Fact Sheet* on monarch biology..... Just the facts, ma'am
49. *Spotlight*: Fred and Norah Urquhart..... Look for the Urquhart label
50. *Spotlight*: Ken and Catalina Brugger..... OMG, you've thrilled Kenny!
51. *Spotlight*: Monarch Conservationists..... League of *Extraordinary* Ladies and Gentlemen
52. México Country Info..... I'll take México for \$1000, Alex
53. Biodiversity in México..... Mutiny of the Bounty
54. Tips for a Pilgrimage to the sanctuaries in México..... Just some souvenirs of our trip around the sun
55. Evergreen Trees in the monarch sanctuaries..... *Pinus* from Heaven