

Time Out for Monarchs!



LLI/NOVA - Woodleigh Chase Senior Living

July 1, 2025

Mary Alexander, Naturalist

Why Focus on the Monarch?

- ▶ Beautiful iconic charismatic creature
- ▶ Indicator species
- ▶ Strong & Resilient
- ▶ Symbol of conservation
- ▶ Spectacular migration cycle
- ▶ Official insect of 7 US states (incl WV)
- ▶ Important pollinator & food source







MONARC™
CONSTRUCTION INC.



Photo by Bryan Pfeiffer



Photo: Margaret Reynolds

Characteristics

- Black, orange & white wing pattern
- Males slightly larger; veins narrower
- Pheromone patch on males
- Flap, flap, glide slow flight pattern



Male Monarch



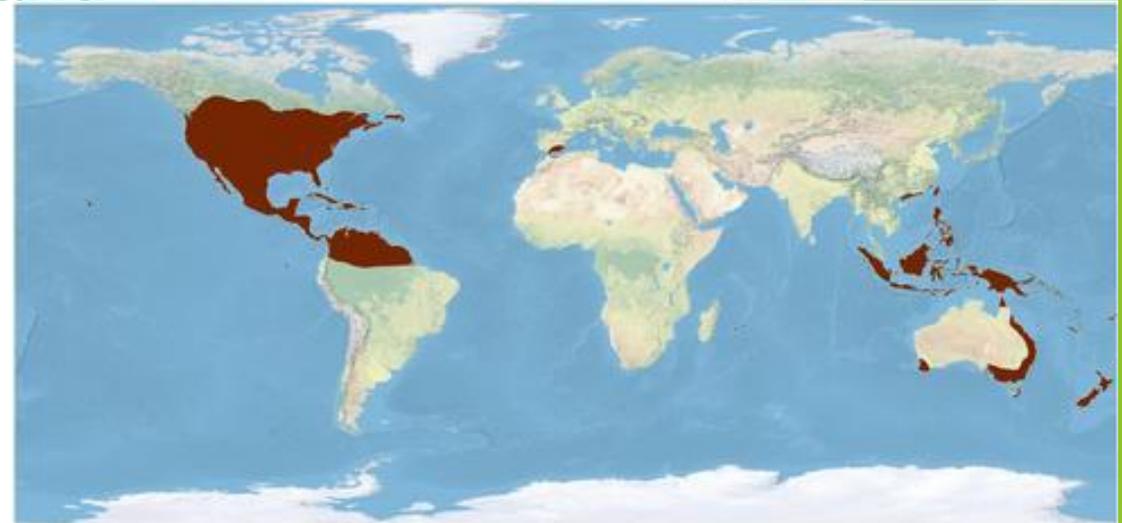
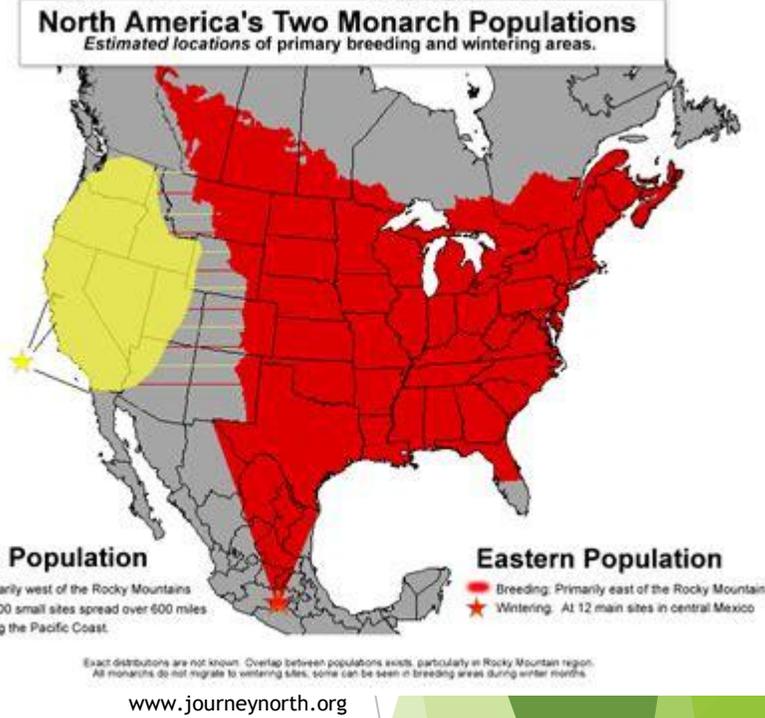
Female Monarch



A small black spot appears on one vein in the center of the hindwings on the male but not on the female.

Range

- North American native
- Separate western & eastern populations
- Found year-round in Florida & Arizona
- Populations also in the UK, South America, India, Philippines & Australia/New Zealand



One female monarch butterfly will lay an average of 300-500 eggs in the wild. The highest recorded number of eggs laid in captivity is 1179!



save our monarchs

Host Plant - Milkweed

Monarch butterflies smell and taste with their antennae and legs which are covered with sensory cells called chemoreceptors. These chemoreceptors help Monarchs find milkweed to lay their eggs on.





Swamp Milkweed



Common Milkweed

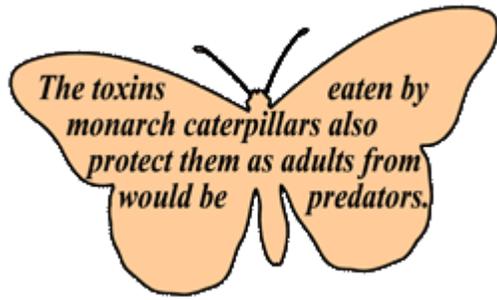


Butterfly Weed



Purple Milkweed





So Why Milkweed? - Protective Chemistry

- Contains cardiac glycoside a chemical compound making caterpillars poisonous to predators
- Hurts most vertebrates but not monarch caterpillar
- Similar to Foxgloves (*Digitalis*)





Protective Coloration

- Butterfly & caterpillar both brightly colored to warn potential predators they are poisonous
- Unsuspecting predators only taste once to learn “never again”
- The Viceroy butterfly “mimics” Monarch coloration as means of protection
- With similar coloration, the viceroy is safe from these “educated” predators







Parasitized Caterpillar



<https://www.pubs.ext.vt.edu>

Eating Machine

- Yellow, green & black bands
- Molts 5 times
- Eats egg case & molted skin





The Monarch's studded gold chrysalises are created by carotenoid pigments that they acquire from their diet of milkweed and hill-like structures that reflect light.



save our monarchs







Nectar Flowers







6 Monarch Sanctuaries in Mexico





Oyamel Forest in Sierra Madre Mountains

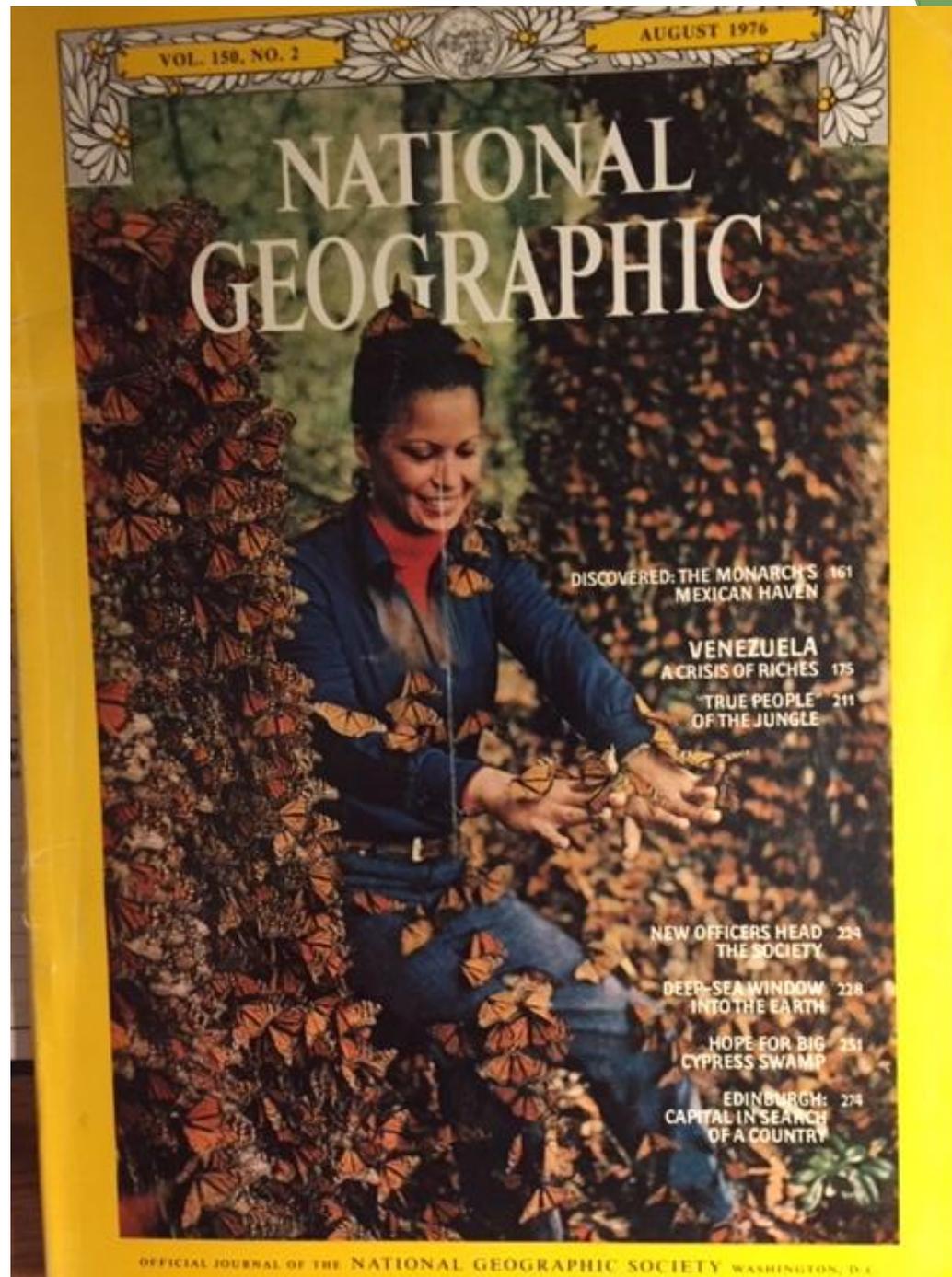








August 1976 cover of
National Geographic:
“Discovered the Monarch’s
Mexican Haven”





Morelia, Mexico





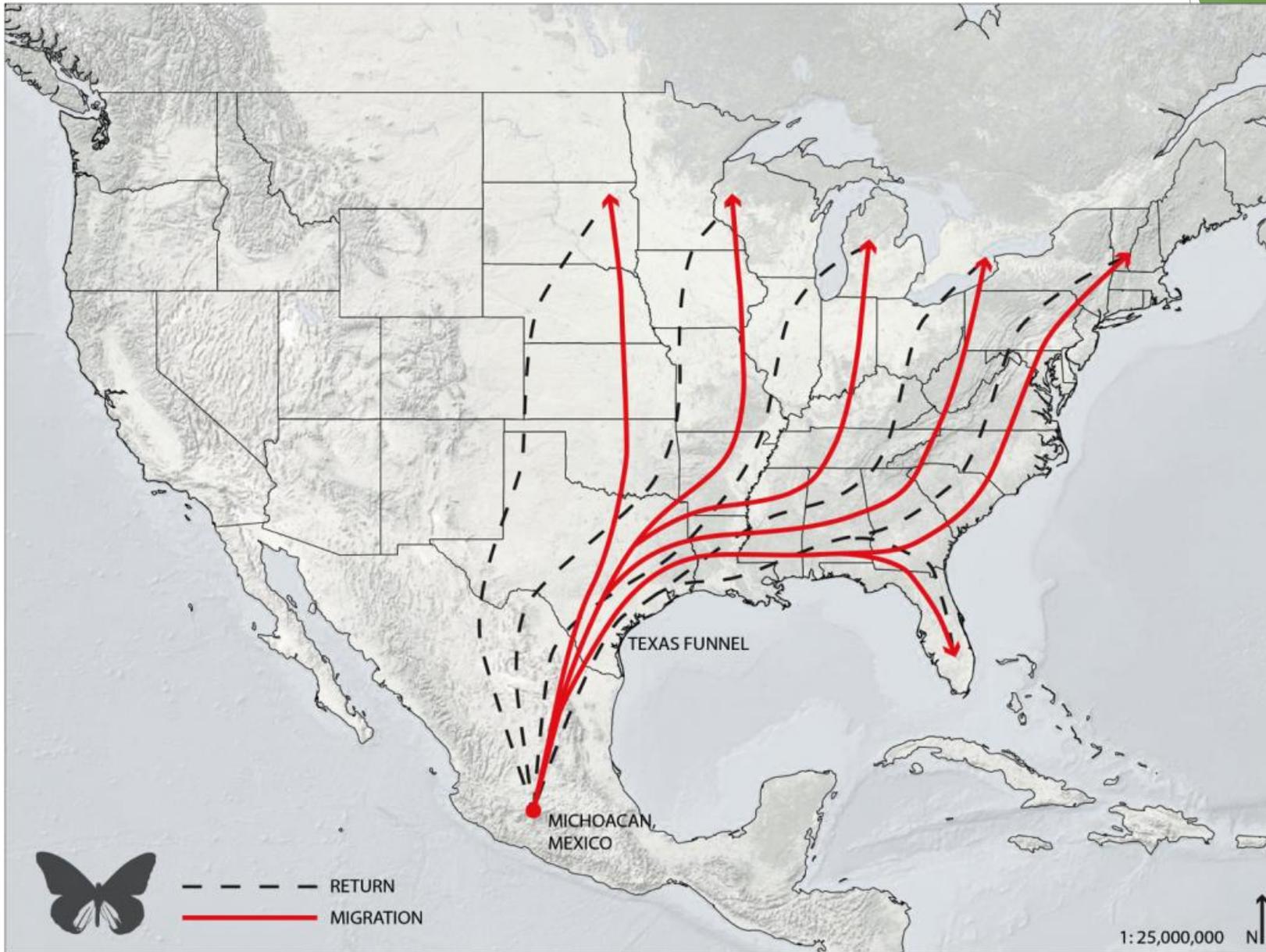














Courtesy of Homero Gomez

JourneyNorth.org



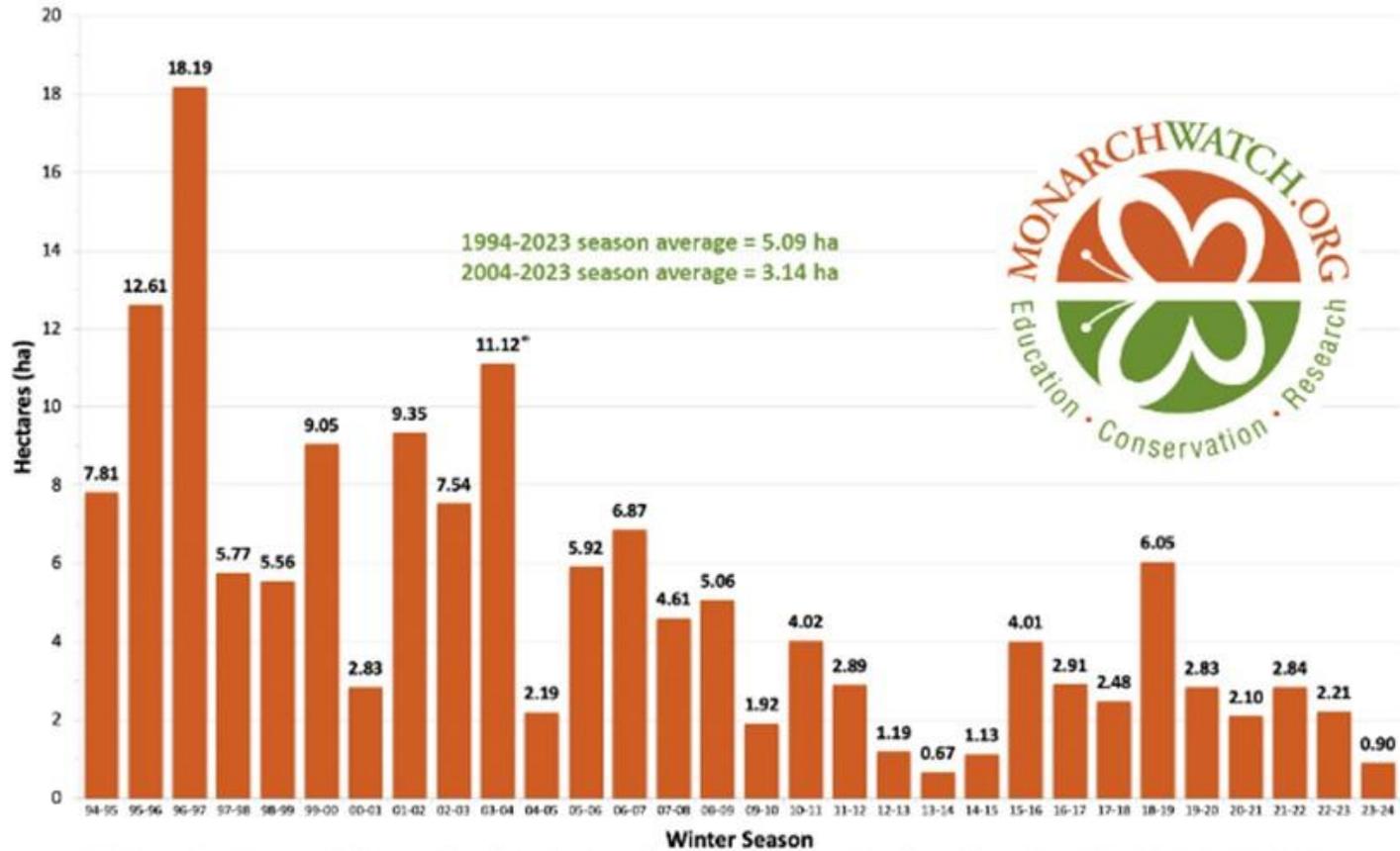
Estela Romero

JourneyNorth.org



VOA

Total Area Occupied by Monarch Colonies at Overwintering Sites in Mexico



1994-2003 data collected by personnel of the Monarch Butterfly Biosphere Reserve (MBBR) of the National Commission of Natural Protected Areas (CONANP) in Mexico. 2004-2023 data collected by World Wildlife Fund Mexico in collaboration with the National Commission of Natural Protected Areas (CONANP), the National Autonomous University of Mexico (UNAM), and the MBBR. * Represents colony sizes measured in November of 2003 before the colonies consolidated. Measures obtained in January 2004 indicated the population was much smaller, possibly 8-9 hectares. CT

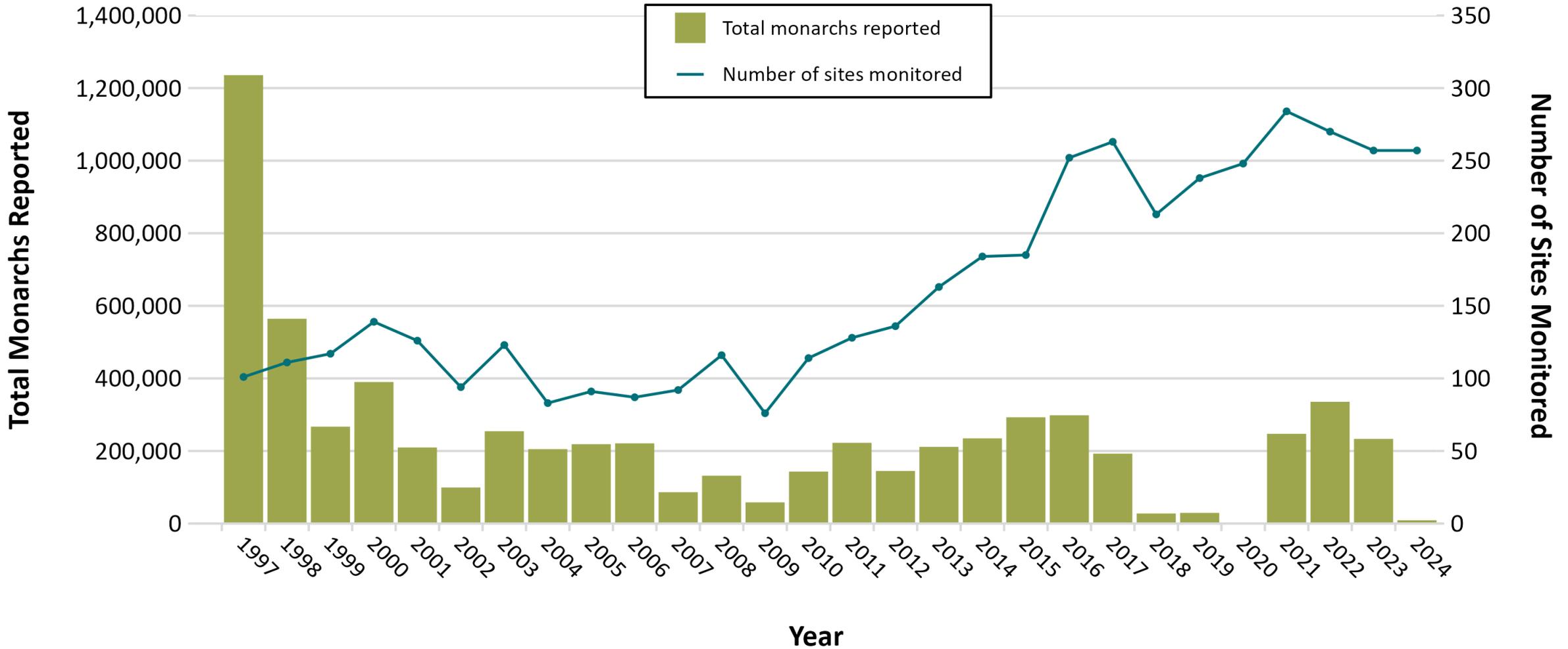
Figure 1. Total Area Occupied by Monarch Colonies at Overwintering Sites in Mexico.

Reprinted with permission: Monarch Watch

See post: [Monarch Population Status](#) (Wednesday, February 7th, 2024 @ 12:14 pm by Monarch Watch | [Monarch Population Status](#))

Western Monarch Count

Total monarchs reported and number of sites monitored from 1997-2024.
Data Available at: WesternMonarchCount.org



Monarch - Endangered?

- Dec 2024 - FWS proposes listing Monarch as “threatened” under the Endangered Species Act
- Populations declining due to habitat loss, pesticide use & climate change
 - Eastern - 85%
 - Western - 90%





A large flock of monarch butterflies is shown in flight against a dark, blurred background. The butterflies are densely packed, creating a textured, golden-brown and white pattern. The overall scene is dynamic and captures the essence of a massive migration.

THE GREAT

MONARCH
MIGRATION

What Can You Do?

- Create monarch habitat for food & nectar -
“Monarch Waystation”
- Plant native milkweed
- Avoid or limit pesticide & herbicide use - neonicotinoids
- Limit mowing in late summer
- Report observations - Witness Nature
- Tag migrating monarchs
- Support beneficial farming practices
- Build community support
- Contribute to conservation efforts

MONARCH BUTTERFLY RESOURCES

- Journey North
- Make Way for Monarchs
- Monarch Watch
- National Wildlife Federation
- Save our Monarchs Foundation
- US Fish and Wildlife Service
- US Forest Service
- Wild Ones for Monarchs
- World Wildlife Fund
- Xerces Society



TOUR GROUPS SAMPLES

Natural Habitat Adventures

<http://www.nathab.com/central-america/monarch-butterfly-tour/>

G Adventures

<https://www.gadventures.com/trips/mexico-monarch-butterfly-trail/2808/>

Authentic Mexican Travel

<http://authenticmexicotravel.com/monarch-butterfly-tours/monarch-itinerary/>

Journey Mexico

<http://www.journeymexico.com/itinerary/morelia-and-the-monarch-butterfly-migration>

S and S Tours

<http://ss-tours.com/monarch-butterfly-sanctuary>

MMG Tours

www.MMG.com.mx

Mexperience

<http://www.mexperience.com/travel/outdoors/monarch-butterflies-mexico/>

