



Position Statement on Monarch Butterflies and Milkweeds in Florida

This position statement was prepared by the Florida Native Plant Society's (FNPS) Science Committee and is endorsed by the Florida Wildflower Foundation and the Florida Association of Native Nurseries. This Position Statement was approved initially by the Florida Native Plant Society's Board of Directors on May 8, 2024, and amended at the Board's direction on July 17, 2025, to reflect the designation of tropical milkweed as an invasive species.

The Florida Native Plant Society (FNPS) supports the conservation of native plants and native plant communities. FNPS adopts formal Position Statements based on the best information available at the time of adoption. They may be amended over time as new information becomes available or in response to changing circumstances.

Native insects, including pollinators, are critical components of native ecosystems. It is widely recognized that many insect populations are in decline, including the monarch butterfly (*Danaus plexippus*). The monarch is a charismatic insect whose unique migration attracts much attention.

Recently, a controversy regarding monarch butterflies and milkweeds in Florida has raised concerns. Claims that native milkweeds planted in yards and gardens—or even those growing in natural areas—are damaging to monarch populations are not consistent with current scientific consensus. This discussion has occurred primarily on social media, but consideration of published scientific literature is needed to frame FNPS recommendations.

Populations of monarch butterflies at their winter roosting sites have been declining for some time (Boyle et al. 2019, Pelton et al. 2019). Summer populations from 1993 to 2018 (Crossley et al. 2022) appear more stable, but there are various threats to the population. Threats include habitat loss, pesticides, herbicide impacts to milkweed populations, and climate change. Concern over the decline in monarch populations has led to increased monitoring and research, increased cultivation of their host plants (*Asclepias* spp., milkweed), and captive rearing by some.

One of the threats to monarchs is the protozoan parasite *Ophryocystis elektroscirrha* (OE). Spores of this parasite are ingested by caterpillars feeding on milkweeds and passed to the adult butterflies. Females laying eggs on milkweeds deposit the parasite on the plant, continuing the cycle. Although this parasite is naturally occurring, its prevalence has increased in recent years (Majewska et al. 2022). Infection can weaken



and kill individuals, but many still reproduce. In temperate areas, winter breaks this cycle as monarchs migrate and milkweeds go dormant.

Planting of tropical milkweed (*Asclepias curassavica*) in Florida and elsewhere in the Southeast has provided monarchs a year-round food source in some areas, allowing non-migratory populations to occur where they were not previously possible.

Unfortunately, this leads to a high prevalence of OE infection (Satterfield et al. 2015).

Tropical milkweed also escapes from cultivation and is now widespread in Florida (Wunderlin et al. 2024). Tropical milkweed is available in the nursery trade. In June 2025, tropical milkweed was listed by the Florida Invasive Species Council (FISC) (www.floridainvasivespecies.org) as a Category II invasive plant. They note that it is invasive in north, central, and south Florida. FISC defines Category II invasive plants as:

“Category II invasive plants have increased in abundance or frequency but have not yet altered Florida plant communities or ecological function to the extent shown by Category I species.”

Listing by FISC indicates existing and potential ecological damage, but it does not prevent cultivation or sale of a plant; therefore, tropical milkweed is likely to remain available for purchase in the near term.

FNPS recommends that tropical milkweed not be planted and that it be removed from gardens and yards where it occurs. Land managers of natural areas are encouraged to remove it from their sites.

Native milkweeds have been planted as an alternative to tropical milkweed in yards and gardens. Most native milkweeds are expected to go dormant in winter. An exception is swamp milkweed, *Asclepias perennis*, which may not senesce in North and Central Florida. There are no models or data that would justify the removal of native milkweeds from yards and gardens at this time. Homeowners and gardeners may want to include milkweeds native to their region along with a variety of other native plants to provide resources for multiple species.

FNPS does not recommend removal of native milkweeds from gardens. FNPS recommends that native milkweeds may continue to be planted within their native ranges along with a variety of other native plants.

There are at least 21 native species of milkweed in Florida, including two endemic species (*Asclepias curtissii* and *A. feayi*) (Wunderlin et al. 2024). Native milkweeds occur in upland and wetland habitats and have varying ranges (Wunderlin et al. 2024). Native milkweeds are important components of many native ecosystems, supporting native pollinators and other species. There is no credible evidence that native milkweeds in native habitats pose an increased risk to monarchs.



FNPS does not recommend removal of native milkweeds from natural areas.

Continued monitoring of the health of monarch populations and the occurrence of OE is needed to improve understanding of this situation. Citizen science is an important component of this effort. Project Monarch Health (www.monarchparasites.org) provides information on how to participate in this effort.

Concerned individuals may want to assist in the monitoring of OE occurrence as part of Project Monarch Health.

FNPS will follow research developments in this area and may revise recommendations based on future findings.

Responses to Common Questions

How credible is the research?

Dr. Davis is a professor at the University of Georgia and is an author or co-author of peer-reviewed scientific papers, including papers on monarch butterfly (*Danaus plexippus*) populations and the effects of *Ophryocystis elektroscirrha* (OE) infection. However, it is important to distinguish between what is established in peer-reviewed literature and what goes beyond that.

OE is a serious parasite of monarchs. It kills some and weakens others. This is well established.

OE is prevalent in Florida monarchs. Data from Project Monarch Health (www.monarchparasites.org), a citizen-science project centered at the University of Georgia Odum School of Ecology, indicate that OE is prevalent in Florida monarchs, particularly in and around urban areas. A limitation of these data is that urban areas are also where most observers and observations are located.

Non-migratory populations of monarchs frequently have high prevalence of OE (Satterfield et al. 2015). In Florida and some other areas of the Southeast Coastal Plain, cultivation of tropical milkweed (*Asclepias curassavica*) supports non-migratory monarchs. The lack of dormancy in this species allows OE to persist on the plants and to be transmitted between plants and monarchs.

In extreme south Florida, some native milkweeds may not go dormant. There is a resident non-migratory monarch population there that may be using tropical milkweed and native species. Climatic warming, and particularly the reduction in frost and freezing temperatures, may affect the phenology of some milkweeds, extending their growing



season. No assessment of that effect is currently known to exist. One of the native Florida milkweeds, *Asclepias perennis* (swamp milkweed), may not senesce within its Central and North Florida range. Such plants may be used by non-migratory monarchs, but the significance of this is not currently known.

Migration reduces OE infection, as the parasite weakens infected individuals who do not survive the journey (migratory culling) (Majewska et al. 2022).

Should native milkweeds be removed or avoided?

At this point, Dr. Davis appears to be the only researcher advocating removal of native milkweeds from gardens and advising against planting them. This recommendation seems to go well beyond the available data. The OE parasite will persist on native milkweeds, and monarch larvae can ingest it and become infected. If the plant dies back in fall, the infection cycle is broken. There are no data or models at this point showing that cultivated native milkweeds are contributing significantly to OE infection. The websites for the Odum School of Ecology and Project Monarch Health do not currently include recommendations to avoid planting or to remove native milkweeds.

Are native milkweeds in native habitats a risk to monarchs?

There are at least 21 native species of milkweed in Florida and one introduced species (*Asclepias curassavica*). Native milkweeds occur in upland and wetland habitats and have varying ranges (Wunderlin et al. 2024). Among the native milkweeds are two species endemic to Florida (*Asclepias curtissii* and *A. feayi*). Native milkweeds are important components of many native ecosystems, supporting native pollinators and other species. There is no credible evidence that native milkweeds in native habitats pose an increased risk to monarchs.

References

Boyle, J.H., H.J. Dalglish, and J.R. Puzey. 2019. Monarch butterfly and milkweed declines substantially predate use of genetically modified crops. *Proceedings of the National Academy of Sciences (USA)* 116(8): 3006–3011.

Crossley, M.S., T.D. Meehan, M.D. Moran, J. Glassberg, W.E. Snyder, and A.K. Davis. 2022. Opposing global change drivers counterbalance trends in breeding North American monarch butterflies. *Global Change Biology* 28:4726–4735.



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Majewska, A.A., A.K. Davis, S. Altizer, and J.C. De Roode. 2022. Parasite dynamics in North American monarchs predicted by host density and seasonal migratory culling. *Journal of Animal Ecology* 91:780–793.

Pelton, E.A., C.B. Schultz, S.J. Jepsen, S.H. Black, and E.E. Crone. 2019. Western monarch population plummets: Status, probable causes, and recommended conservation actions. *Frontiers in Ecology and Evolution* 7:258.

Satterfield, D.A., J.C. Maerz, and S. Altizer. 2015. Loss of migratory behavior increases infection risk for a butterfly. *Proceedings of the Royal Society B* 282: 20141734.

Wunderlin, R.P., B.F. Hansen, A.R. Franck, and F.B. Essig. 2024. Atlas of Florida Plants (<http://florida.plantatlas.usf.edu/>). [S.M. Landry and K.N. Campbell (application development), USF Water Institute.] Institute for Systematic Botany, University of South Florida, Tampa.