



The Diana Project

Can you help Arkansas's threatened state butterfly?

Shawn Hunter, Co-Founder The Diana Project, NWA Master Naturalist & Ozark Wild One

Known affectionately as "The Diana", Arkansas's State Butterfly is the Diana Fritillary (Argynnis diana). Once considered common in the central and eastern United States and described as "the most magnificent and splendid species of the genus". The Diana has seen a steady decline in range and population since the 1900s¹ and is now considered a species of conservation concern by the US Forest Service². As of 2011, the Arkansas range included only the Ozark Plateau, the Ouachita Mountains and several counties in the Delta and Coastal Plain³. There is also indication they may be more widespread than assumed, but sightings data are lacking.



"The fritillary butterflies and their larval food plants, violets (Viola), are among the most sensitive organisms in native ecosystems, and are among the first to be exterminated as a result of widespread human disturbance".4

A recent study indicated The Diana's habitat could decrease by 90% by 2050.⁵ Multiple studies infer various causes of decline, including loss of habitat, urbanization, pesticide and herbicide use, strip mining, fragmented range and forest fire suppression.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6164860/
https://www.fs.usda.gov/research/research/29018
The Diana Fritillary, Arkansas's State Butterfly, Lori A. Spencer, 2011
Distribution of the Diana Fritillary, Speyeria Diana (Nymphalidae) in Arkansas, with notes on nectar plant and habitat preference, October 2002.journal of the Lepidopterists' Society
https://exploren.ratureserve.org/Taxon/ELEMENT_GLOBAL2.112513/Argynnis_diana







No cause stands out as conclusive among these reports but the solution most often recommended is the need to 1) determine where major occurrences are located, 2) determine the health of those communities and 3) create or protect viable habitat.

There are many entities in Arkansas working toward these 3 solutions. Two of these agencies, Arkansas Game and Fish Commission (AGFC) and Arkansas Monarch Conservation Partnership (AMCP), have been instrumental in influencing the efforts of The Diana Project (TDP).

In the 2015 publication of AGFC's Arkansas Wildlife Action Plan, ⁶ The Diana is listed as being between threatened and imperiled, meaning at moderate to high risk of extinction. Currently, AGFC has "identified conservation actions and are working to restore habitats across the state to benefit this [The Diana] and other species". Nicholas Goforth, AGFC Wildlife Diversity Program Coordinator, gave us at The Diana Project this advice regarding The Diana and our efforts:

"Right now, promoting the creation and protection of woodland and grassland habitats and native gardens and responsible pesticide/herbicide use and the importance of all of this through outreach/education seems to be the best actions."

The AMCP gathered agencies, individuals and faculty to develop the Arkansas Monarch and Pollinator Conservation Plan in 2019 to determine the best actions for all Arkansas pollinators⁸. TDP has incorporated this entity's goals of statewide collaboration, supporting existing work and boosting all pollinator species into our own plan. Leslie Cooper, Arkansas Monarch and Pollinator Coordinator, has been instrumental in guiding and encouraging The Diana Project's efforts.



The Diana Project (TDP) incorporates AGFC and AMCP goals via public outreach and statewide collaboration with the support of the Northwest Arkansas Master Naturalists. TDP is a 3 year plan to utilize conservation, education and citizen science that supports existing efforts in two ways:

- 1) Create public awareness of The Diana's plight, solutions they can incorporate, and cooperative efforts already in place for Arkansas pollinators.
- 2) Recruit, teach and organize citizen scientists to gather sightings, breeding and feeding habits via the iNaturalist application to assist decision makers.

TDP offers slideshow presentations and interpretation table demonstrations to teach about The Diana's unique lifecycle to





https://drive.google.com/file/d/1736V6TbMlgQBgl72hcEpVivohnBMgR9u/view 7 Nicholas Goforth, AGFC Wildlife Diversity Program Coordinator, email June 2, 2023 https://www.arkansasmonarchs.org/





community partners. We also offer a list of resources directing landowners toward information about protecting and creating wildlife habitat. Through collaborating with local and state entities to offer classes in citizen science via the iNaturalist and SEEK applications we are increasing data for all pollinator studies. TDP also offers information on creating "The Diana Patch" – a way-station that is specific to the habitat and nectar needs of The Diana and yet can benefit many other pollinators.



YOU CAN HELP! Here are several ways for you to get involved:

- 1. Visit us at www.TheDianaProject.org for social media links, contact info and "The Diana Patch".
- 2. Help spread the word on social media.
- 3. Add your expertise to the planning committee.
- 4. Invite us to present a slideshow or present the interp table at your event.
- 5. Learn how to incorporate "The Diana Patch" into your space. No matter how small or large you can utilize native plants!
- 6. **Save the dates June 17-23, 2024** for <u>Pollinator Week!</u> We are organizing a statewide effort to gather as many sightings as possible and report them to iNaturalist. These data will be submitted to AGFC and AMCP to aid in developing new programs for pollinator protection.
- 7. If you want to help but aren't sure how, reach out and let's figure it out together: citizenscienceNWA@gmail.com.

