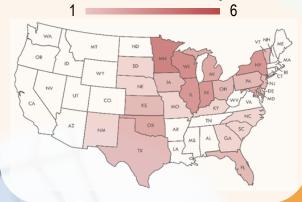


MONARCH 2022 Annual Summary BUTTERFLY

Introduction

2022 marked the third full year of implementing the Nationwide Candidate Conservation Agreement with Assurances for Monarch Butterfly on Energy and Transportation Lands (Monarch CCAA). The Monarch CCAA is a unique partnership between the University of Illinois Chicago (UIC), the U.S. Fish and Wildlife Service, and dozens of transportation agencies and energy companies. In exchange for voluntary conservation commitments, energy and transportation organizations (Partners) receive regulatory certainty and operational flexibility in the face of a potential federal endangered species listing. For more information, contact Megan Petraitis at mpetrait@uic.edu.

Concentration of Partners by State

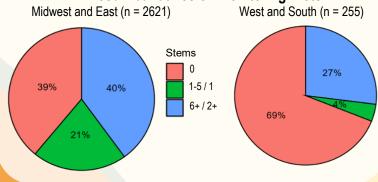




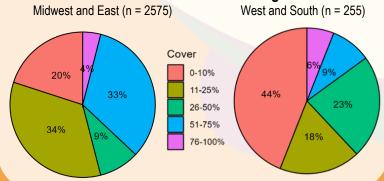
Conservation

- The Monarch CCAA reached 824,704 habitat acres, exceeding the 2022 target of 361,056 by 228%.
- Partners monitored 2,876 plots on habitat acres, an increase of 281% from 755 plots in 2021.
- Monarch butterflies were observed on 8% of survey plots.
- 40% of plots in the Midwest and East, and 27% of plots in the West and South met or exceeded the milkweed target of 6 stems.
- 80% of plots in the Midwest and East and 56% of plots in the West and South met or exceeded the nectar plant target of 10% cover.

Milkweed Abundance on Monitoring Plots



Nectar Plant Cover on Monitoring Plots



Administration

- In June 2022, UIC received an award from the U.S. Department of the Interior and USFWS for the Monarch CCAA at the Monarch Summit in Washington, D.C.
- UIC hosted six bimonthly meetings with Partners and other interested stakeholders to foster collaboration and learning.
- Conservation data from Monarch CCAA Partners was uploaded in bulk to the USFWS Monarch Conservation Database.
- The Monarch CCAA now has 30 executed Certificates of Inclusion.

Outreach

- UIC and collaborators submitted a manuscript to the 13th International Symposium on Environmental Concerns in Rights-of-Way Management that included a comprehensive analysis of CCAA enrollment and conservation trends.
- UIC partnered with Monarch Joint Venture to survey roadside managers on current vegetation monitoring practices. Results informed ongoing refinement of the Rights-of-Way as Habitat Working Group's Pollinator Scorecards.

Tools and Resources

UIC and collaborators have continued to develop and publicly publish the Monarch CCAA Toolkit, which included:

- Expand functionality of online annual reporting tool,
- Development of a Partners-by-State tool, and
- Publishing the <u>Landowner Guide</u> and <u>Buffer Zone Self</u>
 -Certification Form.

