Monarch Wings Across America

NACD Webinar
April 16, 2020

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www.pollinator.org
Pollinator Partnership
Protection for pollinators through habitat creation, collaboration, education, sound science, and sensible public policy
Managed honey bee colony losses increase

While winter losses were lower, summer losses – exceeding those of winter for the first time – resulted in an increased annual loss of 43.1 percent from April 2014 to April 2015.

Total annual managed honey bee colony losses

2014/2015 annual managed honey bee colony losses by state

From USDA 2015 Bee colony losses

North America

One quarter of all bumble bee species are in a threatened or near threatened category.

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Monarch Wings Across America
Monarch Wings Across Ohio (MWAO)
MWAO: Program Overview

• Created in response to the Presidential directive on supporting the monarch migration

• Diverse collation of partners to install monarch habitat research plots across partners' land in the following settings; urban ecosystems, agriculture, corporate lands, and public gardens throughout Ohio
• 18 plots established throughout northeast Ohio
• Monarch Wings Across Ohio specialty license plate
• 3 years of data collection
  • Each plot is visited once a month
  • Data resulted in findings for native plant preference for monarchs and other pollinators
• Informed technical guides for land managers
MWAO Technical Guides

Monarch Wings Across Ohio
Guide to Monarch Habitat on Corporate Land

Monarch Wings Across Ohio
Guide to Monarch Habitat on Rights-of-Way

Monarch Wings Across Ohio
Guide to Monarch Habitat on Farms
Monarch Wings Across California (MWAC)
1. Establishment of long-term habitat sites for migrating monarchs in California,

2. Improved understanding of the migration patterns and forage requirements of California monarch butterflies,

3. Collection of California monarch habitat restoration data to inform restoration efforts and indicate potential seed sources for future projects

Support from Wildlife Conservation Board, Monarch Joint Venture, and Hillsborough Garden Club
MWAC Progress
MWAC Accomplishments

- 3 long-term monarch butterfly habitat and research plots, with three more underway for 2020
- Over 50 individuals in planting demonstrations and activities

Upcoming
- Hiring part-time coordinator
- Monitoring through March 2022
- Demonstration plots for landowner workshops
- Large-scale seeding to enhance 3,000 acres in Central Valley
Monarch Wings Across the Eastern Broadleaf Forest

December 2016 - March 2019

Increase Quality Monarch Habitat in EBF-CP Ecoregion
Program Goals and Objectives

• Establish a ecoregional seed collection and plant materials development program

• Provide technical guidance and educational support to public and private land managers

• Secure minimum of 4,688 acres long-term monarch habitat
Seed Collection and Volunteer Training

Seed Collection Protocols Rooted in SOS Model

In-person Workshops and Online Training

- 327 Volunteers Trained
- 2,792 Volunteer Hours
- 368 Seed Collections
- 100 lbs. Clean Seed
Habitat Management and Technical Training

In-person Workshops and Online Training

- 5 Habitat Management Workshops Across Region
- 175 Public Agency and Private Land Manager Participants
- 7-part Habitat Creation and Management Webinar Series
Secured Long-term Habitat and Monarch Habitat Enhancement

Site Visits
- 97 Habitat Evaluation and Consultation Visits

Plant Material Awards for Habitat Enhancement
- 65 Projects
- 100 lbs. Clean Seed Redistributed
- 11,482 Plugs Grown
- Additional $37,900 in Awards for Seed, Plugs, and Invasive Species Control

Secured Habitat
- 27,731 Acres Signed into Long-term Management Agreements (surpassed original goal of 4,688 acres)
Project Wingspan

December 2018 – December 2020

A Regional Seed Collection

and

Native Plant Materials Development Program

Across the Midwestern

and

Great Lakes Landscape
Program Goals and Objectives

- Increase quality, quantity, and connectivity of habitat across Midwest and Great Lakes Region
- Provide increased floral resource benefits for monarchs, rusty-patched bumble bees, and other rare pollinator species
- Make 1000 seed collections/250 lbs. clean seed
- Secure a minimum of 10,000 acres long-term habitat
Increased Habitat and Habitat Connectivity

Arkansas, Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, Pennsylvania, Wisconsin
### Increased Floral Resources

#### Refined and Expanded Target Species List

- 29 species inc. 5 milkweed and 1 woody
- Species cover full bloom period
- Species widely distributed
- Common occurrence
- Considered Coefficient of Conservatism
- Vetted by partners and advisors

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Note: N/A PA indicates not applicable or not in the area.
Volunteer Training

In-person Workshops and Online Training

• Plant identification
• How to scout a population
• Seed collection BMPs
• Viability testing
• Data collection protocol
• How to label, dry, and ship seed
Collection Protocols

Developed from BLM-SOS Guidelines

• Collect from populations in excess of 50 individuals

• Only collect 20% of viable seed (available day of collection)

• Collect widely throughout the whole site

• Aim for high genetic diversity within collections
  ➢ Include plants growing in different microhabitats throughout the site
  ➢ Include plants that differ in appearance, size, stature, etc.

• Come clean, leave clean
Volunteer Online Training

www.pollinator.org/wingspan/seed-collection
Seed Collection and Redistribution Zones
Data Collection

Survey 123: ArcMap

• UARK Center for Advanced Spatial Technology
• Capture GPS coordinates for seed collections
• Database for site and plant photos
• Database will help with the seed distribution effort
• Providing valuable modeling information to CAST
Data Collection

Survey 123: ArcMap
Secure a Minimum of 10,000 acres as Long-term Habitat

- Preliminary online habitat survey
- Conduct in-person site visits and work with conservation authorities to confirm habitat
- Collect signed long-term habitat management agreements
- Award seed and plug plant materials
Project Wingspan Habitat Survey: Habitat Wanted

Are you interested in pollinator conservation while visually, ecologically, and environmentally enhancing your private or public landscapes? Have you already enhanced your land for pollinators? If so, PLEASE TAKE THE SURVEY BELOW for the chance to be a part of Project Wingspan! If chosen, our Pollinator Habitat Coordinator will visit your site, free of charge, to evaluate your habitat landscape. We are seeking sites on public, private, and private working lands in OH, IN, IL, MI, PA, and WI. With your help, we can protect imperiled pollinators.

Monarch, Rusty Patched Bumble Bee, and Other Imperiled Native Pollinator Habitat Survey

Thank you for your interest in Pollinator Partnership's Monarch, Rusty Patched Bumble Bee, and other imperiled native pollinator habitat survey! Please fill it out only if you have at least 1 acre of habitat. Participation in this survey may result in a free site evaluation and consultation by our Monarch and Pollinator Habitat Coordinator.

Please note: If your habitat area received an in-person site visit in 2018 and has not added new acreage please do not re-submit this form.

Completion of this survey should take less than 5 minutes.
Please Join Us!

- Gain skills and education in native plant and pollinator conservation
- Volunteer requirements for hour criteria fulfilled
- Gain improved understanding of the vegetation community
- Connect to the broader pollinator/wildlife conservation community
- Contribute to a landscape-scale habitat project aimed to restore connectivity of vital native habitat.
- Potential to receive native plant materials and management recommendations for your land

https://www.pollinator.org/monarch/mwaa