New Jersey Monarch Butterfly Conservation Guide

Executive Summary

The annual migration of the monarch butterfly through New Jersey is a much anticipated phenomenon, one that holds environmental, educational, and economic value to the state.

Yet the monarch butterfly is facing severe decline, with the unique and fascinating migration of the eastern monarchs through New Jersey having dwindled markedly. People once flocked to Cape May to see these marathon flyers pass through the region on their grand journey to Mexico but in recent years the spectacle has been reduced to a fraction of its former grandeur, and the tourism it brought to the area has fallen with it.

Monarch butterflies are among the group of native pollinators that aid in the successful reproduction of many key fruit and vegetable crops across the state that are crucial to New Jersey's agricultural and economic success. Monarchs are also an indicator species for environmental health. The significant and rapid decline of the butterflies signals a need for awareness and action.

The New Jersey Department of Environmental Protection has a mission to protect the wildlife and natural resources in the state for continued benefit of the public. The intent of this **New Jersey Monarch Butterfly Conservation Guide** is to both educate about the monarch butterfly and to provide recommendations to enhance its habitat health and availability. An overview of the monarch lifecycle and migration pattern is followed by a review of habitat needs in its overwintering sites and in its summer breeding range, including New Jersey. The significance of the monarch butterfly, culturally and environmentally, is described. The report summarizes the many factors contributing to population decline as well as the assortment of efforts that have been made across the continent in the areas of monarch research, conservation, and public education. A number of the efforts that have been undertaken in New Jersey thus far are noted.

The final section contains actionable recommendations that governments, businesses, educational institutions, nonprofits and individuals in New Jersey can utilize in their efforts to aid the monarchs.

Governments at all levels can assist in the recovery of monarchs by planting native milkweed and nectar plants and adopting pollinator-friendly land management practices on public lands. Pollinator-friendly practices include eliminating or reducing pesticide use (particularly glyphosate and neonicotinoid products) near and in monarch habitat and, forming designated "no mow" areas particularly during spring and summer blooming periods in order to preserve naturally growing milkweed and nectar plants for monarchs. Governments can further promote conservation efforts by maintaining land as certified monarch waystations as part of the Monarch Watch *Monarch Waystation Program*. Government policies promoting similar actions on non-government lands can also be effective stimulants for

monarch conservation. Positive incentives, such as a designation system to recognize monarch-friendly organizations and businesses, or facilitating the management of lands to foster pollinators (e.g. use of utility easements or rights-of-way), are feasible ways to enhance pollinator protection.

Businesses that manage land are also recommended to follow the land management practices detailed above. Farmers in particular are requested to do so, as much of the monarch habitat lost in recent decades was lost due to pesticide use in agricultural areas. Even businesses that do not own property can contribute to monarch conservation by educating consumers, giving back to the community by sponsoring community butterfly gardens or public educational events, distributing milkweed seeds to patrons, and discussing conservation efforts with business partners. Plant nurseries and related businesses are encouraged to propagate native milkweed, and can help appreciably by raising plants that are not exposed to neonicotinoid pesticides.

Universities can contribute greatly to research regarding monarch biology, health and population trends. Educational institutions at all levels are encouraged to incorporate monarch butterflies into education by rearing captive butterflies, planting monarch gardens, and engaging in citizen science tagging initiative such as the *Monarch Monitoring Project* at Cape May or the *tagging program* hosted by Monarch Watch.

Any nonprofit with property and/or an interest in furthering education, volunteerism or other helpful aspects of fostering monarchs can play an important role in monarch conservation. Faith-based organizations, garden clubs, and scouts are just a few examples.

Individuals are encouraged to plant milkweed and native nectar plants to create monarch habitat, and to adopt the pollinator-friendly land management practices as noted above. Participation in local "seed swap" events and paying strict attention to labels can help consumers avoid plants contaminated with neonicotinoid pesticides. Volunteering with community pollinator gardens, donating to monarch conservation organizations, tracking monarch habitat through the *Milkweeds of the National Park***Service** site and participating in monarch monitoring and tagging programs like those listed above are additional ways that individuals can bolster the monarch butterfly population.

The guide provides many resources and links to help anyone wishing to foster the recovery of monarchs.

Through a variety of efforts by many, New Jersey can do its part to help the monarch butterfly rebound so that it may continue to do its important pollinating work, brighten the landscape, and amaze with its phenomenal treks across the continent.