Pollinator Decline

Pollinators have been on the decline globally, as well as on the Huron-Manistee National Forests, due to habitat loss. Over the past century, savannas and other open areas have been replaced by mature forests, due to reforestation and fire suppression efforts. Loss of savannas and open areas means a loss of the flowering nectar plants that pollinating species depend on. What open habitat remains is often too isolated for pollinators to successfully reproduce.

Habitat with Lupine

Endangered and Threatened Species Recovery

The Baldwin/White Cloud Ranger District is working to prevent the extinction of the federally listed endangered Karner blue butterfly (KBB) by restoring and maintaining 20,300 acres of savanna within four designated KBB meta-population areas over the next 50 years. The District's restoration efforts also benefit other Endangered, Threatened or Sensitive Species (ETS) pollinator species such as dusted skipper, Persius duskywing, frosted elfin, ottoe skipper, sprague's pygarctia, and rare savanna plants such as Hill's thistle and prairie smoke.

Contact Information

Toll Free: 1-800-821-6263
Website: http://www.fs.usda.gov/hmnf/
Email: r9_hmnf_website@fs.fed.us

Baldwin Ranger Station
Phone: (231) 745 - 4631
TTY: 771+Phone #

Supervisor's Office
Phone: (231) 775 - 2421
TTY: 771+Phone #

Prickly Pear

Non-Discrimination Policy

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Huron-Manistee *National Forests*

United States Department of Agriculture
Forest Service

Reversing the Loss of

Pollinators

Karner Blue Butterfly

Honey Bee

Aphrodite

Savanna Restoration

To reverse the decline in rare savanna species, including the KBB, the District has dramatically increased it's restoration efforts.

Since 2006, there has been an 8-fold increase in management activities, such as: hand cutting, prescribed burning, mechanical removal of vegetation, seeding/planting, and road closures within the four KBB meta-population areas.

Our objective in these restoration treatments is to reduce tree and shrub density, protect savanna remnants, and promote the growth of native grasses and nectar plant species, especially wild lupine- the sole food for the KBB caterpillar.

To reach the Forest's goal of restoring 20,300 acres of savanna, the District plans to increase its restoration activities to a minimum of 400 acres per year. The District also has increased its KBB monitoring effort by 3-fold since 2006.

The District annual monitors the status of the KBB to determine how far populations have progressed toward recovery goals, and to evaluate the effectiveness of different management strategies for restoring savanna.

The dramatic increase in the District's monitoring effort was possible due to volunteer participation. Volunteer participation has been a key factor in successful restoration efforts. Since 2009, volunteers have helped with seeding, planting, weeding, and seed collection activities, improving over 65 acres of savanna habitat.

Savanna creation prescribed fire

Native Plant Materials

Pollinators have co-evolved with plants in their locale. Many pollinators have distinct biochemical needs for specific plants. Decline of native nectar or other food species is a major factor in pollinator decline. To address this, the District collects native seed on the District and at the pollinator gardens for use in pollinator habitat restoration. Since 2012 over 20 lbs of seed have been collected.

M-20 Motorsport Trailhead Pollinator Garden

Pollinator Gardens

Pollinator gardens are located at several sites on the Baldwin/White Cloud District. These gardens serve as pollinator habitats, sources of native plant seed for restoration on the District, and as educational sites for the public. Signage is present at several of the sites.

Volunteers and Partners

Our Pollinator Program is possible due to the dedicated partnerships and volunteers who work with us in our efforts. Between 2007 and 2012, individuals from 34 partner organizations contributed 1,445 volunteer days, or over 5,000 hours of time, valued at $183,800.

Butterfly Weed

Our Volunteers and Partners

- U.S. Fish & Wildlife Service
- The Pollinator Partnership
- Michigan Department of Natural Resources
- Michigan Entomological Society
- The Nature Conservancy
- Michigan Wildlife Conservancy
- Land Conservancy of West Michigan
- Garden Clubs of Michigan
- Michigan State University
- Ferris State University
- Grand Valley State University
- Central Michigan University
- Wayne State University
- Michigan Conservation Foundation
- Little River Band of Ottawa Indians
- Pine River Audobon Society
- 9 area middle and senior high schools
- Over 5,000 volunteer hours donated since 2007 by people across Michigan