

## What is being done?

At Wilton Wildlife Preserve & Park, we support the work of our partners, the New York Department of Environmental Conservation, the Town of Wilton, Saratoga County, and the Nature Conservancy who are managing the protected lands in the Saratoga Sandplains ecosystem. Their work to ensure the health and growth of the blue lupine creates stable habitats where the frosted elfin can thrive. Due to the frosted elfin's threatened status, we work with our partners to establish new habitats and protect existing ones from development.



*Photo by Shari Crocker*

## What can you do?

The best way to protect the frosted elfin butterfly is to support organizations and efforts that work for their conservation. At Wilton Wildlife Preserve & Park, we work with our landowning partners, to manage and restore these ecosystems and welcome volunteers to help our efforts!



## Opportunities to get Involved

We welcome spring, summer, and fall volunteers to help with seed picking of the blue lupine and other important plant species, planting of the blue lupine seeds, and habitat management in the meadows. Contact us if you are interested in joining in on any of these opportunities.

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Email: [info@wiltonpreserve.org](mailto:info@wiltonpreserve.org)

Our mission is to conserve ecological systems and natural settings, while providing opportunities for environmental education and outdoor recreation.

Sources:

NYS Department of Environmental Conservation, The Xerces Society, and U.S. Fish & Wildlife Service.

Photos courtesy of our volunteers and Annual Photography Contest participants.

# The Frosted Elfin Butterfly

*Callophrys irus*



*Photo by Mike Hale*

Wilton Wildlife Preserve & Park is one of the few environments in New York State where the threatened frosted elfin butterfly still exists. Due to the frosted elfin's dependency on oak savanna and pine barren ecosystems, habitat destruction has led to a decline in the frosted elfin's population size.

## Description

The frosted elfin butterfly gets its name from the gray coloring on the edges of the hindwing which gives them a frosted look.

Its wingspan is 1 to 1.25 inches. The forewing of both sexes is brown in color, while the hindwing is marked with a black spot above the tail. The caterpillars are blue-green and have white lines down their backs.



*Photo by Wayne Jones*

## Life Cycles

The females lay eggs on their host plant, typically the wild blue lupine or wild blue indigo. Once hatched, the caterpillars feed on lupine flowers and the developing seedpods. Caterpillars are present for roughly three weeks, consuming the lupine flowers and seedpods as they move down the plant to pupate. They remain as a chrysalis throughout the summer and overwinter in the litter beneath the wild blue lupine. Since they overwinter as a chrysalis, the adult butterflies emerge in early spring. There is only one brood per year. In this area, they are seen in early May to early June.

## Diet

At WWPP, the caterpillar of the frosted elfin butterfly eats wild blue lupine. On Long Island and further south, caterpillars may eat wild indigo instead. Adult frosted elfin butterflies eat nectar from a variety of early spring flowers.

The frosted elfin's use of the wild blue lupine complements the Karner blue butterfly's. The frosted elfin larvae feed on the flowers and seedpods and the Karner blue larvae feed on the leaves.

## Habitat

The frosted elfin butterfly is found in oak savanna and pine barren habitats with wild blue lupine or wild blue indigo present. The wild blue lupine is a perennial plant that grows in dry, sandy soils, preferring open or partially shaded areas. The male frosted elfins are highly territorial of these areas and will position themselves at the edges of their habitat or along pathways to the habitat. Meadows with wild blue lupine were historically created and maintained by natural forces, such as wildfires. Human impacts including fire suppression have resulted in habitat loss. At Wilton Wildlife Preserve & Park, management is done through mowing on a regular basis to prevent trees from growing in the open meadows and shading out the lupine.



*Photo by Terry DeCorah*

## Why are they threatened?

One reason for the frosted elfin butterfly's population decline is loss of habitat.

Without the natural wildfires that occurred in the dry, hot meadows, trees grow and shade out the wild blue lupine which is the only food source for these butterflies. Along with fire suppression, their meadow habitat is being lost and fragmented due to commercial and residential development as well as land clearing for agriculture. The frosted elfin is also threatened by climate change. As our climate becomes warmer and more unstable, species move northward which affects the wild blue lupine which then affects frosted elfin populations. Rising deer populations also play a role in the decline of the frosted elfin butterfly. Deer eat the wild blue lupine flower stalks where female frosted elfin lay their eggs. This can severely decrease the numbers in a generation of frosted elfins.