

SFI Biodiversity Species Fact Sheet

Frosted Elfin (*Callophrys irus*)

Globally Imperiled Butterfly Species; State Rank: S1S2 (imperiled) Global Rank: G2G3 (imperiled to vulnerable)

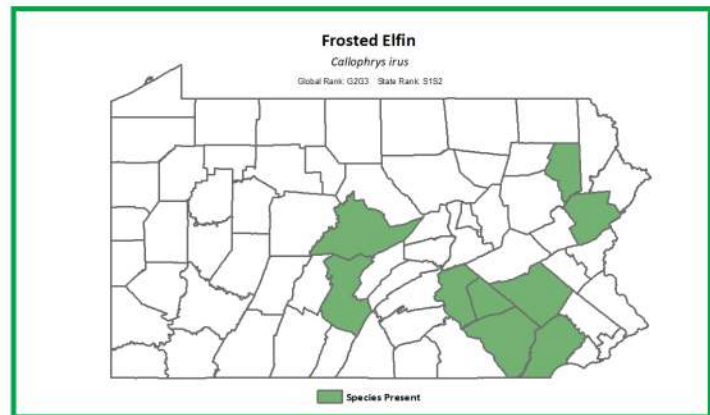
Identification

Frosted elfin is a gray brown butterfly with a wingspan about 1 inch to 1.25 inches. Males and females are similar. The upper side is a dark gray brown. The hindwing has a black spot above a single short tail. The underside of the wing is gray brown, but somewhat variegated. The outer margin of the hindwing has scales that are whitish giving them a frosted appearance. There is an irregular postmedian line that divides the darker scales from the “frosted” scales.



Biology-Natural History

The entire lifecycle of a frosted elfin is completed within one year. Adults emerge in spring and lay eggs, eggs hatch into larvae that rely on specific host plants of wild lupine (*Lupinus perennis*) or wild indigo (*Baptisia* spp.), larvae pupate by late July on or near host plants and remain in this state until the following spring.



Distribution & Habitat

The frosted elfin was historically found in the eastern U.S. from Texas and Florida to Ontario. It is now likely extirpated from Canada, and likely extirpated from some states. The key habitat feature is an abundance of the foodplant or, perhaps, many moderate-sized patches of the foodplant within a few hundred acres or more. This species is often associated with remnant pine barrens, oak savannas, or dry oak forest. Frosted elfin habitat is also used by many other species such as whip-poor-will, eastern towhee and eastern hognose snake.

Conservation Concerns

Threats include habitat loss, degradation, and fragmentation, invasive species, severe weather (drought, late frost, or late snow), fire suppression, inappropriate habitat management, mosquito spraying and the use of other insecticides, and browsing of foodplants (and eggs and larvae) by herbivores, primarily by deer. Habitat fragmentation may be the greatest threat in locations where potentially viable metapopulations still occur.

Management Practices

Frosted elfin habitats require disturbance, such as fire or mowing, to keep the areas open. Where fire is used, it is important to leave unburned habitat patches where frosted elfin can escape the fire. Prescribed burns should be timed to avoid time periods when egg and larvae are present. Winter mowing is a proven management option but use as few passes as possible to avoid crushing the pupae. Avoid mowing in spring (e.g., along highways) where host plants are present as this will likely kill larvae and greatly reduce available foodplants.