Poweshiek Skipperling

Oarisma poweshiek

The Poweshiek skipperling is listed as endangered under the Endangered Species Act. Endangered species are animals and plants that are in danger of becoming extinct. Identifying, protecting and restoring endangered species is a primary objective of the U.S. Fish and Wildlife Service's endangered species program.

What is the Poweshiek skipperling?

Appearance: The Poweshiek skipperling is a small butterfly with a wing-span of about 1 inch. It is dark brown above with some light orange along the wing margins and a lighter orange head. The underside of the wings, which can be seen when it's at rest, are dark to light brown with very prominent white veins that may make the wing look striped.

Habitat: Poweshiek skipperlings live in high quality tallgrass prairie in both upland, dry areas as well as low, moist areas. In Michigan they are found mainly in prairie fens, a type of wet prairie.

Reproduction: Poweshiek skipperling larvae (caterpillars) hibernate during winter on the ground; they resume activity in spring and continue developing until they pupate and emerge as adult butterflies. Adults have a short lifespan of only one to two weeks and can be seen between mid-June and mid-July. During that time they mate and lay eggs. Larvae hatch during late summer; they feed and develop through early fall and then overwinter to continue development the following spring.

Feeding Habits: Adult butterflies feed on nectar from prairie flowers such as purple coneflower (*Echinacea angustifolia*), blackeyed susan (*Rudbeckia hirta*) and palespike lobelia (*Lobelia spicata*). Because limited research has been done on the Poweshiek skipperling, we are not certain which plant species are necessary for the larvae to develop although we know they select native, fine-stemmed grasses and sedges such as little bluestem (*Schizachyrium scoparium*) and prairie dropseeed (*Sporobolus heterolepis*).

Range: Historically, Poweshiek skipperlings were found in tallgrass prairie and prairie fens from Manitoba to Iowa, with populations also found in Michigan and Wisconsin. Unfortunately, the range is now much less and has been declining for some time. The Poweshiek skipperling may have been extirpated from the Dakotas, Minnesota and Iowa within the last 10 years – an area that, until recently, contained the vast majority of the surviving populations. It is now known only from Wisconsin, Michigan and Manitoba. During surveys in 2014, the species could be found only at a few sites in a single Michigan county, in very limited numbers at one site in Wisconsin, and in Canada at the single Manitoba site.

Why is the Poweshiek skipperling an endangered species?

Habitat Loss and Habitat Fragmentation: Only about 4 percent of the original tallgrass native prairie in the United States remains. Much of what is left is in small, isolated sites, so the butterfly generally cannot move from site to site. If the Poweshiek skipperling is lost at a site, there are often no nearby populations to recolonize.

Habitat Management: In addition to the loss of large blocks of contiguous prairie, the native grasslands that remain are often not managed in ways that can support Poweshiek skipperlings. Historically, wildfire helped maintain the treeless nature of prairies. Today, grazing, haying and prescribed burns may replicate that effect. However, grazing or burning

that is too intense, too frequent or conducted during the wrong time of the year may not create conditions suitable for the Poweshiek or may kill too many of the butterflies to sustain the population.

What is being done to conserve the Poweshiek skipperling?

Listing: Listing the Poweshiek skipperling as endangered under the Endangered Species Act will help focus attention and funds on the butterfly and the habitat that it needs to survive.

Research: We have limited information on the Poweshiek skipperling's life history and exact habitat requirements. Research is needed to determine land management regimes that will help this butterfly survive and provide information that may allow us to reintroduce it into formerly occupied habitats. A study is ongoing to understand the genetic diversity of surviving populations. This information will help us determine if management is needed to increase diversity of remaining populations and will help ensure any captive propagation will result in genetically robust populations. In addition, researchers are looking into potential causes for the sharp and widespread decline of the species that have occurred during the past 10 to 20 years.

Habitat Protection and Management: Where possible, high quality prairie and prairie fens need to be protected and appropriately managed. These may be publicly owned lands or they may be protected through easements and financial incentives on private lands. In light of the species' highly endangered status, its conservation in the wild may only be secured by placing a high priority on conserving remaining populations. Attempts are being made to develop methods to propagate the species in captivity, but it will be unusually difficult to keep in captivity. Therefore, conservation of the few remaining wild populations is extremely important. The Service will cooperate with its conservation partners to control and remove invasive species, such as glossy buckthorn (*Frangula alnus*), and to undertake other actions that will alleviate other threats to the remaining populations and that maximize their viability.

What can I do to help prevent extinction of the species?

Spread the Word: Learn more about the Poweshiek skipperling and other rare and declining species. Understand how the destruction of habitat leads to loss our nation's plant and animal diversity. Tell others what you have learned.

Join: Join a conservation group; many have local chapters, or volunteer at a local nature center, zoo or National Wildlife Refuge.

Native plants: Provide habitat for butterflies by planting native vegetation in your yard. Avoid using invasive non-native plants like purple loosestrife and dame's rocket and remove invasive non-natives, like buckthorn and honeysuckle if they invade your yard.

Minimize: Use as little herbicide, insecticide and fertilizer as possible or avoid pesticides and insecticides entirely. Pesticides may harm butterflies and other pollinators and, along with fertilizers, can harm water quality.