

***Oarisma poweshiek* (Parker), 1870**
Poweshiek Skipperling
(Hesperiidae: Hesperinae)



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SUMMARY

As with other prairie-dependent species, the Poweshiek Skipperling has been in severe decline as the prairies have been destroyed. The historic range was from Manitoba to Iowa, with disjunct fen populations in parts of Michigan, Minnesota, and Wisconsin; however, it is now much reduced due to conversion and fragmentation of the prairies. Threats include agricultural conversion of prairie, degradation of prairie due to grazing and haying, invasive weeds and neglect, and poor fire management. The latter is a key issue on many prairies now managed for wildlife.

CONSERVATION STATUS

Xerces Red List Status: Imperiled

Other Rankings:

Canada – Species at Risk Act:	Threatened
Canada – provincial status:	None
Mexico:	N/A
USA – Endangered Species Act:	None
USA – state status:	WI: Endangered IA, MI: Threatened MN: Species of Concern

NatureServe:
IUCN Red List:

G2G3
N/A

SPECIES PROFILE

DESCRIPTION

The Poweshiek Skipperling is a small butterfly in the family Hesperidae (skippers). Its wingspan is 1 to 1¼ inches (2.5 to 3.2 cm).

The upperside of the wings is very dark brown (often appearing black) with orange over-scaling along the front edge of the forewing and along the veins. The underside of the wings is also dark brown (black), with orange along the front margin and a distinctive pale area on the hindwing, within which the veins are white.

TAXONOMIC STATUS

Oarisma poweshiek (Parker), 1870. Common names include Hespérie de Poweshiek.

LIFE HISTORY

The Poweshiek Skipperling is an obligate resident of undisturbed tall-grass prairies. It is often associated with wetter prairies (for example, alkaline fens in Michigan and wet prairie in Manitoba), but it is possible that this is because dry areas are rendered unsuitable by too-frequent fires rather than a preference for wet areas. The larval hostplant is generally slender spike rush (*Eleocharis elliptica*), but in Wisconsin it is reported to feed primarily on prairie dropseed (*Sporobolus heterolepis*) and little bluestem (*Schizachyrium scoparium*).

There is one brood between June and August. Males seek females by patrolling close to the ground. Females lay eggs singly on leaves of hostplants. Caterpillars hibernate as fifth instar larvae.

Abundant nectar is an important requirement for adult skippers. Poweshiek Skipperlings drink nectar from a range of flowers, including black-eyed Susans (*Rudbeckia* sp.), purple coneflower (*Echinacea* sp.), ox-eye daisy (*Leucanthemum vulgare*), and stiff-leaved coreopsis (*Coreopsis*).

DISTRIBUTION

The historic range was from Manitoba to Iowa, with disjunct fen populations in parts of Michigan, Minnesota, and Wisconsin. Now the range is much reduced to one area in both Michigan and Iowa, several sites in western Minnesota, Wisconsin, and the Dakotas, and a single metapopulation in Manitoba. It is probably extirpated from Illinois.

THREATS

The Poweshiek Skipperling is a prairie-dependent butterfly, and massive loss of prairies has been the biggest cause of its decline. It is estimated that since the 1850s, over 99

percent of its tall-grass prairie habitat has been converted to agricultural uses; for example, in Canada, only about 50 km² of the original 6,000 km² of tall-grass prairie remains.

The loss, fragmentation, and degradation of the remaining prairie continues to be the principle threats. Conversion of prairie to row crops is an obvious threat: the wild flowers that survive do not represent enough of the prairie flora to support the skipperling. Conversion of the prairie to grazing may be less obvious but not less of a threat. Grazing will alter the species and structural diversity of the grassland and the associated use of herbicides and fertilizers can impoverish the flora. Use of prairie for haying can also impact the butterflies depending on timing of operations.

Even when prairie is protected as wildlife habitat it may not provide a safe haven for the Poweshiek Skipperling and other prairie-dependent butterflies such as the Ottoo Skipper (*Hesperia ottoe*; see Red List profile for more information). Prescribed burns can severely impact butterfly populations when it is done too frequently or over too great of an area. Similarly, neglect of the prairie can impact butterflies by allowing scrub to develop or for exotic weeds to invade. Purple loosestrife (*Lythrum salicaria*) is potentially a major threat to wet prairie habitats, for example.

CONSERVATION STATUS

As with other prairie-dependent species, the Poweshiek Skipperling has been in severe decline as the prairies have been destroyed. It was probably once frequent across the landscape but now confined to a small number of scattered locations. With prairie fragmentation, populations have become isolated and some of the smaller and more isolated ones will likely not persist.

In Canada, the Poweshiek Skipperling is listed at the federal level as threatened by COSEWIC. In the U.S., there is no federal protection but it is listed as endangered by Wisconsin, as threatened by Iowa and Michigan, and it is a species of concern in Minnesota.

CONSERVATION NEEDS

The major need is protection and appropriate management of remaining prairie wherever this butterfly is found. The Poweshiek Skipperling is very susceptible to disturbance or alteration of its habitats. It is important that habitat supports both adult and larval food plants, plants that rarely occur in agricultural lands.

Fire is a key issue for this butterfly. Too-frequent, ill-timed fires can severely impact populations, as can burning too much of the habitat at one time. It is likely that fires of less than three- or five-year frequencies can result in extirpation of the Poweshiek Skipperling from a site. The Wisconsin Department of Natural Resources notes: “The poweshiek skipperling is fire-sensitive and burn management used to discourage woody plants and cool-season grasses in the open wet prairie community is best conducted with controlled infrequent burns affecting only a portion of the available habitat. Selective cutting and mowing may be better management tools for inhabited patches.”

(http://www.dnr.state.wi.us/org/land/er/invertebrates/butterflies_moths/pskipperling.htm; accessed 5/11/05).

RESEARCH NEEDS

Surveys of suitable habitat to inventory known populations and locate new ones are important. Monitoring of populations to track status and trends would be useful. Studies into the impacts of fire, including the ability of the Skipperling to recolonize burned areas would be valuable.

RESOURCES

CONTACTS

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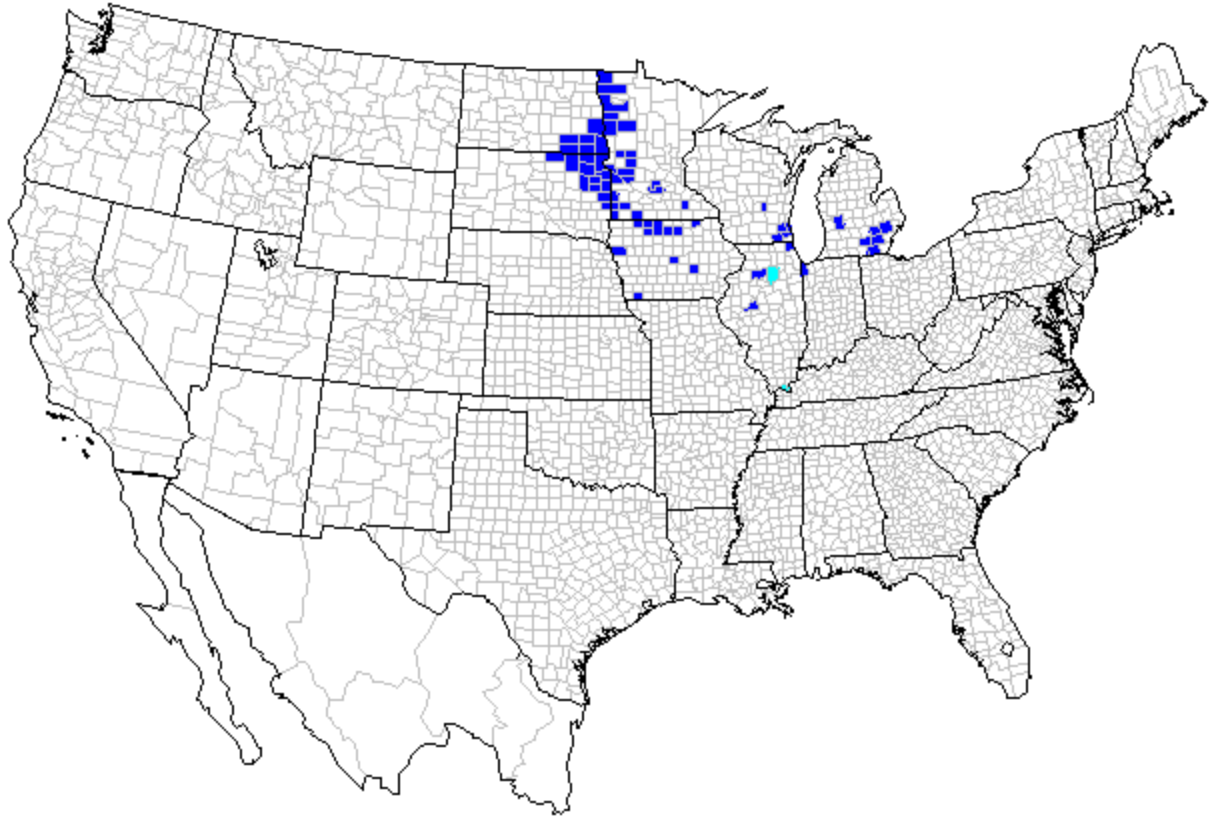
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DISTRIBUTION MAP (U.S. range)

(From: U.S. Geological Survey, Northern Prairie Wildlife Research Center.

<http://www.npwrc.usgs.gov/resource/distr/lepid/bflyusa/usa/515.htm>; accessed 5/11/05.)



■ Confirmed Records ■ Unconfirmed or Dubious Records ■ Data Not Yet Available