

Oarisma poweshiek

The Poweshiek skipperling

This prairie obligate butterfly has disappeared from many known locations in Minnesota, Iowa, and the Dakotas within the past few years.

Populations, once thought relatively stable, were noted to have crashed on a landscape scale sometime between 2000 and 2005.



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For more information:
www.poweshiekskipper.org

Oarisma poweshiek has one generation per year. The adults emerge in late June or early July and live for a week or two. During this time they mate and lay eggs.

The preferred host plant of the caterpillar seems to be prairie dropseed, although other grasses are used as well.

The butterfly spends the winter in the caterpillar stage, tightly attached near the bottom of a blade of grass.

Scientists are trying to figure out all the details of the life cycle of this butterfly. But it is not easy to study in the wild—the butterfly is rare and hard to find, as are the other stages of the life cycle. It is also not easy to study in captivity—raising it to the adult stage has happened only rarely.



WHY DID IT DISAPPEAR?

The bottom line is that we don't really know.

Loss of habitat is the underlying cause. Intact prairies are very small and isolated from other suitable habitats. If the butterfly disappears from one, others are not close enough to re-populate the habitat.

Prairies have been historically managed with fire—"controlled burns" or "prescribed fire." While this can stop or slow encroachment of woody vegetation, it has been shown to have adverse effects on prairie invertebrates. Prairie obligate butterflies have been wiped out from prairies improperly managed with fire.

Landscapes where prairies are found are dominated by agriculture. Pesticides are suspected, particularly landscape scale spraying of insecticides in response to soybean aphid outbreaks. Tracking of pesticide usage was not (and is still not) good enough to show exposure levels in isolated prairies.

Other factors such as new alien pests, weather, and other unknowns might also be responsible.

The butterfly was described by Henry Webster Parker, a published poet and author, and a professor at Iowa College (later called Grinnell College). It was found near Grinnell and named after the county in which it was found.



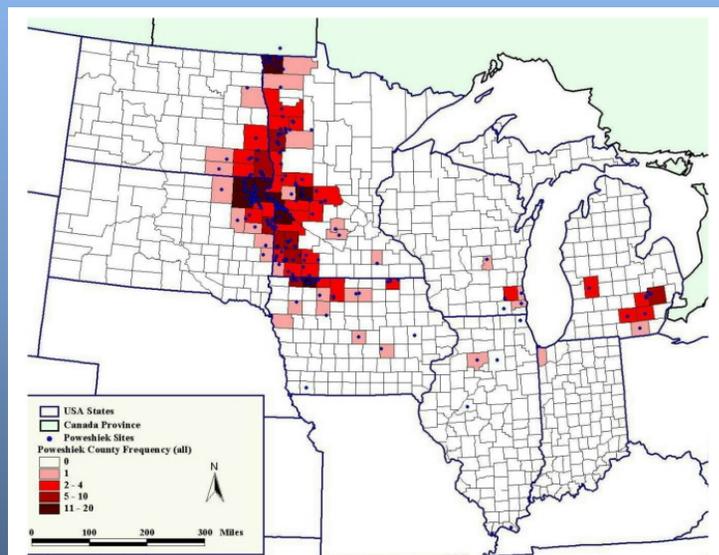
But maybe Henry's wife Helen had a lot to do with finding the butterfly. She was also a published author, and wrote three books for Sunday-School audiences about natural history. She clearly was a talented naturalist—maybe more so than Henry.



Chief Poweshiek, mentioned in the description as “a friendly chief from territorial times” was the leader of the Meskwaki tribe of Native Americans from about 1830 to 1850, a time when the tribe was removed from ancestral lands to a reservation in Kansas.

He became chief by default when about a dozen of his village's leaders were massacred. He signed treaties for the tribe's removal, and carefully led the tribe back into Iowa on at least a couple of occasions after removal.

He relinquished power to a younger leader. One of his sons was among the group who purchased land to settle back in Iowa, near Tama.



This map, from a U.S. Fish and Wildlife Service Report, shows the historic range of *O. poweshiek*.

It seems to have disappeared from Iowa, Minnesota, and the Dakotas recently, however. It has not been seen in Indiana or Illinois in recent history.