



© James Bailey some rights reserved (CC-BY-NC)

THE IOWA SKIPPER: MORE THAN JUST A BUTTERFLY

THE IOWA SKIPPER (scientific name *Atrytone arogos iowa*), may be found across the Great Plains and Midwest, spanning 14 states from eastern Montana to Illinois and south to Texas, where it is patchily distributed throughout prairies/grasslands.¹

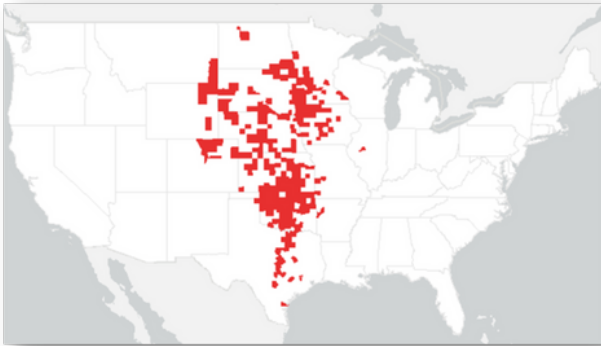


Figure 1. Map of Iowa skipper's nationwide range.

Unfortunately, just like the American prairie habitat, the Iowa skipper's population is rapidly declining. The Iowa skipper's survival continues to be threatened by the destruction, fragmentation, and modification of its remaining habitat, as well as by pesticides, climate change, invasive species, and the additive and synergistic effects of these threats. **The skipper is no longer common or secure in any state and the species may have already disappeared from Iowa and Minnesota, where it has not been seen since 2009.** NatureServe, a non-profit conservation organization which partners with the U.S. Fish and Wildlife Service (FWS) to rank rare and endangered species based on threats to their survival, ranked the Iowa skipper as Imperiled (T2), meaning it is "at high risk of extirpation in the jurisdiction due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors."⁴

But what is it that makes this little butterfly so important? The Iowa skipper is a prairie-specialist butterfly, making it an indicator of high-quality prairie habitat.² In other words, the sighting of an Iowa skipper in an area points towards the existence of a biodiverse and flourishing prairie biome as well. As grasslands and prairies worldwide have been converted into agricultural land, they have become one of the most threatened biomes on the planet.³ **About 99% of the U.S.'s 148 million acres of tallgrass prairie habitat has been destroyed** since European settlement. Recent habitat losses stem from biofuel demand driven by federal policies that promote fuel made from corn, high crop prices, and government subsidies.

That's why at Center for Food Safety, we're petitioning the FWS to list the Iowa skipper as an endangered species. The Iowa skipper urgently needs the protections that Endangered Species Act listing will provide. **Without these protections, the Iowa skipper will continue to decline and be at risk of extinction.** We know this strategy will work. As a result of our work with partners on a petition and lawsuit, several species of bumblebees were protected as candidate species under the California Endangered Species Act, a first for invertebrates. Our petition and lawsuit, in partnership with the Center for Biological Diversity and the Xerces Society, also pushed the FWS to add the iconic Monarch butterfly to the candidate waiting list for the Endangered Species Act, where it is awaiting approval.



©Alex Hartman some rights reserved (CC-BY-NC)

THREATS TO THE SURVIVAL OF THE IOWA SKIPPER

INDUSTRIAL AGRICULTURE AND PESTICIDES

Industrial agriculture, and the spraying of toxic pesticides that accompany it, are the main drivers of the threat of extinction for the Iowa skipper. The skipper's increasing scarcity is akin to a canary in a coalmine for industrial agriculture - a warning that the worst harms of our extractive food system are yet to come.

- Massive declines of insects since World War II are **directly related to the spread and intensification of industrial agriculture**, through habitat destruction and the widespread use of synthetic pesticides.
- The primary threat to the Iowa skipper's survival is the massive destruction of its prairie habitat, which has been **largely converted to intensive row crop agriculture**, and the **increasing use of toxic pesticides accompanying that conversion**.
- As much as **99 percent of the U.S.'s 148 million acres of tallgrass prairie habitat has been destroyed**, leaving the Iowa skipper's populations small and fragmented, and thus unable to respond robustly to other threats.
- The increased spraying of toxic pesticides as a result of the intensification of industrial agriculture in the habitat of the Iowa skipper is a major factor contributing to its past and continuing declines due to these chemicals' **direct harm to the skipper and its surrounding prairie habitat**.

For more information on how pesticides affect non-target species, and how the Endangered Species Act can help, visit the links below.

[The Role of Pesticides in the Extinction Crisis](#)

[About the Endangered Species Act](#)

CLIMATE CHANGE

- Insects are expected to show rapid responses to climate change since they have short life cycles and are strongly influenced by temperature.⁵
- As the Iowa skipper occupies a highly specific habitat, and the minimal range that habitat covers is already severely fragmented, **their ability to adapt to a changing climate by migrating to an area with a more favorable climate is severely impacted**.
- When combined with ongoing habitat deterioration and fragmentation, the effects of climate change and land use change interactions can lead to **collapses in butterfly populations**.⁶
- Increasing probability of **extreme weather events** like droughts or flooding due to climate change is also a major stressor on the viability of Iowa skipper populations.
- The Iowa skipper may suffer impacts via the effects of climate change on plants that serve as their larval hosts and sources of nectar for adults, as these plants may become less common or the timing of their flowering may change, **shifting out of balance with the butterfly species' life cycle**.⁷

INVASIVE SPECIES

- Invasive grasses, such as the smooth brome (*Bromus inermis*) and Kentucky bluegrass (*Poa pratensis*) **threaten the native grasses** which make up the prairie habitat of the Iowa skipper.
- Butterfly larvae which develop on non-native host plants have **overwhelmingly lower survival rates** than larvae which develop on native plants.⁸

Join us to aid in our fights against the harms of industrial agriculture and to help save species like the Iowa skipper.