

***Hesperia dacotae* (Skinner), 1911**
Dakota Skipper
(Hesperiidae: Hesperinae)



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SUMMARY

The Dakota Skipper, a butterfly species native to tallgrass and mixed grass prairies of the northern Great Plains, has always been considered rare and has been the focus of much conservation attention for many years. It faces loss and degradation of its prairie habitat due to certain harmful burning, haying, grazing, and pesticide use practices. Invasion of prairie by alien plants, natural succession, and habitat loss through agricultural and commercial development are also factors implicated in the decline of this species.

CONSERVATION STATUS

Xerces Society Red List Status: Imperiled

Other Rankings:

Canada – Species at Risk Act:	Threatened
Canada – provincial status:	MB: Endangered
Mexico:	N/A
USA – Endangered Species Act:	Candidate
USA – state status:	IA: Endangered; MN: Threatened
NatureServe:	G2
IUCN Red List:	VU

SPECIES PROFILE

DESCRIPTION

The Dakota Skipper (*Hesperia dacotae*) is a small to medium-sized butterfly with a wingspan of 2.4 to 3.2 centimeters. The dorsal surface of adult male wings varies in color from tawny-orange to brown, with a prominent mark on the forewing. The ventral surface is dusty yellow-orange. The dorsal surface of adult female wings is darker brown with diffused tawny orange spots and a few diffused white spots on the margin of the forewing. The ventral surface is dusty gray-brown with a faint white spot band across the middle of the wing. While Dakota Skippers may be confused with Ottoe Skippers (*Hesperia ottoe*), the Ottoe Skipper is somewhat larger with slightly longer wings.

TAXONOMIC STATUS

Hesperia dacotae (Skinner), 1911.

LIFE HISTORY

The Dakota Skipper is considered an obligate of undisturbed native prairie. The butterfly inhabits wet lowland prairie dominated by bluestem grasses and dry upland prairie dominated by mixed bluestem and needle stem grasses. Both habitat types contain an abundance of flowering plants and have alkaline soils.

Dakota Skippers complete one generation per year. They overwinter as mid-instar larvae in shelters at or below ground level. The larvae emerge from hibernation in the spring to complete their development, eventually pupating in June. The adults emerge in mid-June to early July, depending on weather, and mate during a flight period that lasts for about three weeks. Females lay eggs on a range of broadleaf plants and grasses, although a preference for little bluestem grasses has been documented. Dakota Skipper larvae prefer little bluestem as a food source, although several grass species are known to be consumed. Recorded nectar sources for adults include purple coneflower (*Echinacea* sp.), white prairie clover (*Dalea candida*), fleabanes (*Erigeron* sp.), blanketflowers (*Gaillardia* sp.), black-eyed Susans (*Rudbeckia* sp.), and evening primrose (yellow sundrops, *Calylophus serrulatus*). However, the Dakota Skipper seems to prefer purple coneflowers as nectar sources.

DISTRIBUTION

The Dakota Skipper was once widely distributed throughout the northern tallgrass, Dakota mixed grass, and a portion of the central tallgrass prairie ecoregions. Its distribution previously included tallgrass and mixed grass prairies of Illinois, Iowa, Minnesota, South Dakota, North Dakota, Manitoba, and Saskatchewan. The distribution of the Dakota skipper is now largely centered in western Minnesota, northeastern South Dakota, and the eastern half of North Dakota.

THREATS

The main threat to the Dakota Skipper is the loss and degradation of their prairie habitat due to certain harmful burning, haying, grazing, and pesticide use practices. Invasion of

prairie by alien plants, natural succession, and habitat loss through agricultural and commercial development are also factors implicated in its decline.

CONSERVATION STATUS

Due to the extensive loss and degradation of prairie habitat over the past decades, the distribution of the Dakota Skipper has become fragmented and greatly reduced. The Dakota Skipper is now extirpated from the states of Illinois and Iowa (where it remains on the state’s endangered species list), where the species was last recorded in 1888 and 1992 respectively. Additionally, it is no longer believed to occur in far eastern Montana. In western North Dakota and northern Minnesota (it is a state threatened species), the status of the Dakota skipper is considered to be “tenuous,” with most populations highly isolated and vulnerable to, or threatened with, extirpation. In Canada, the Dakota Skipper is listed as threatened under the Manitoba Endangered Species Act. The status of populations in Saskatchewan is unknown, although the species is considered rare and receives little or no protection.

It is a U.S. Endangered Species Act candidate species (67 *Federal Register*: 40657-40679, 2002). There is a pending petition (filed on May 6, 2003) to list the species as threatened or endangered—the U.S. Fish and Wildlife Service allocated it a listing priority of 11 in May 2004 (69 *Federal Register*: 24876-24904)—and the USFWS is developing a Candidate Conservation Plan for the species.

CONSERVATION NEEDS

The habitat for every known population should be protected and appropriately managed. Much of the habitat of this butterfly is on private lands, so efforts should be made to work with private land owners.

RESEARCH NEEDS

Surveys should be conducted to confirm existing populations and search for additional ones on suitable habitat within the historical range. The draft Candidate Conservation Plan includes mapping all essential habitat, surveys, and research. At present there are no funds to implement the strategy.

RESOURCES

CONTACTS

U.S. Fish and Wildlife Service:

Minnesota – Phil Delphey, Twin Cities Field Office, 4101 E. 80 St., Bloomington, MN 55425. Telephone: (612) 725-3548 ext. 206; email: Phil_Delphey@fws.gov

North Dakota – North Dakota Field Office, 3425 Miriam Avenue, Bismarck, ND 58501. Telephone: (701) 250-4481; email: Karen_Kreil@fws.gov

South Dakota – South Dakota Field Office, 420 South Garfield Ave., Suite 400, Pierre, SD 57501. Telephone: (605) 224-8693; email: Jodi_Whittier@fws.gov

Minnesota Department of Natural Resources: Dr. Robert Dana, St. Paul, MN.

Biodiversity Conservation Alliance: Jeremy Nichols, P.O. Box 1512, Laramie, WY 82073. Telephone: (307) 742-7978

The Xerces Society: Scott Hoffman Black, 4828 SE Hawthorne Blvd., Portland, OR 97215. Telephone: (503) 534-2706; email: sblack@xerces.org

The Nature Conservancy, Minnesota Chapter: 1313 5th Street SE, Minneapolis, MN 55414.

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Biodiversity Conservation Alliance; Petition to Protect Prairie Butterfly: Dakota Skipper

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