



Sonora Skipper



Photo: © Tom Murray

Scientific name

Polites sonora

Taxon

Arthropods

COSEWIC Status

Not at risk

Canadian range

British Columbia

Reason for Designation

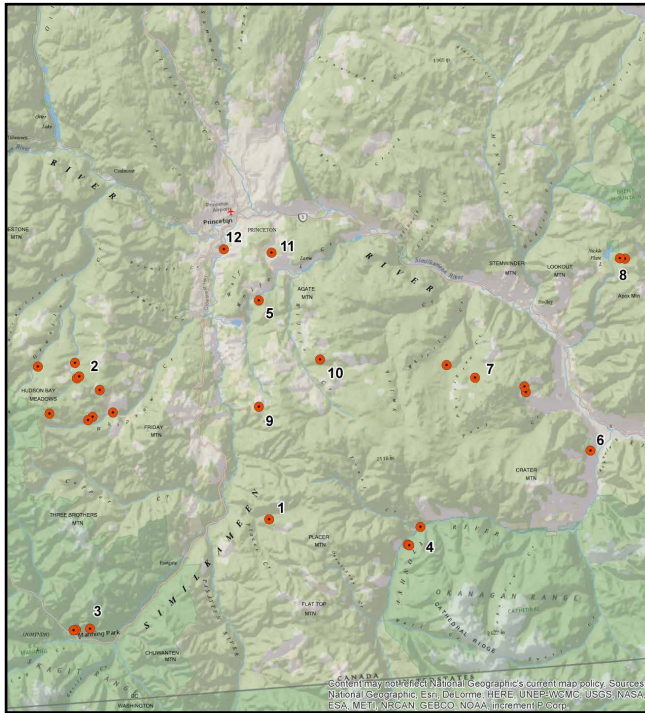
This butterfly has a small range in the southern interior of British Columbia. Since it was last assessed, new information has been gathered on its distribution, habitat, host plants, natural history and threats. It is now known to occur in a greater number of natural and disturbed sites, including meadows, roadsides and clearcuts that typically have wet seepages or some form of standing water. It also has much broader host plant preferences than previously known and some ability to use non-native species to complete life stages. Threats remain low and some potential impacts such as clear-cut logging can result in habitat creation and corridors for dispersal for this butterfly.

Wildlife Species Description and Significance

Sonora Skipper (*Polites sonora*) is in the family Hesperiidae, the skippers. Adults have a wingspan of 25 to 30 mm. The wing uppersides are a combination of rusty orange and brown with blackish wing borders. The forewing undersides have a basal black patch, tawny and pale areas in the median area, and a dark brown border. The ventral surface of the hindwings is ochre brown with a distinct semicircular band of pale spots. There are at least eight possible Sonora Skipper subspecies across its range. The Canadian population may belong to a ninth and undescribed subspecies although the taxonomic work has not been completed. Regardless of the subspecies-level taxonomy, only one subspecies exists in Canada, and the entire species is the subject of this status report.

Distribution

Sonora Skipper, as a species, is widely distributed in western North America, from southern British Columbia (BC) south to Baja California and east in the United States to Wyoming and Colorado. The Canadian population has a small restricted range in the north Cascade Mountains and adjacent Thompson Plateau within southern BC and adjacent to the international border. There are twelve extant subpopulations of Sonora Skipper in Canada; some subpopulations are composed of multiple sites.



Distribution of Sonora Skipper in British Columbia.

Subpopulations are:

1. Placer Creek;
2. Corral Creek (Whipsaw Creek);
3. Twenty Minute Lake, E.C. Manning Provincial Park;
4. 2.6 km north of McBride Creek;
5. Verde Creek (Wolfe Creek);
6. Red Bridge Lake (Crater Mountain);
7. North of Paul Creek;
8. Apex Mountain;
9. 1.8 km east of Sunday Creek;
10. Southwest of Wilbert Hills;
11. South of August Lake;
12. Northwest of Allenby.

Habitat

Sonora Skipper habitats include open moist and mesic grassy forest openings and flowery meadows, gentle slopes, open roadside areas, open streamside banks, fallow agricultural meadows, grassy forest openings of southern exposure, some bordered by forest, clear-cuts or denser vegetation. Sonora Skipper has been recorded from anthropogenic semi-natural areas such as hay fields and old logged areas that have turned to meadows. Sites are typically on a level bench or gentle slope and have wet seepages with some form of standing water (i.e., puddles, pools, dripping seepages).

Biology

Sonora Skipper has four life stages, one generation per year and an adult life-span of seven to ten days. In BC, adults have been recorded from late June to mid-August. Females lay eggs while flying low, within close proximity to host plants. The larval host plants are unconfirmed in BC. However, females were observed at one BC site dropping multiple eggs onto non-native Redtop Bentgrass and non-native Common Timothy grass. Elsewhere within the skipper's global range, larvae have been successfully reared on non-native Yellow Bristlegrass, native Idaho Fescue, non-native Common Timothy and native Kentucky Bluegrass. Eggs hatch into larvae within 7-8 days of oviposition. The larvae build and take refuge in silken shelters, emerging to feed on their host plants. Each larval instar builds a new shelter. Larvae overwinter at the fourth instar, break diapause in the spring (April/May) and continue to feed for approximately a month before pupation (fifth instar).

Population Sizes and Trends

To date, surveys have focused on recording new populations, natural history and habitat information and there are few data from which to estimate Sonora Skipper abundance, population size or trends at extant sites. Most records are one or two individuals. The largest number of Sonora Skipper was recorded in 2014 from a site along Granite Forest Service Road (#2 Corral Creek) where 25 butterflies were observed on July 24, 2014. The natural population fluctuations in butterflies are a result of factors such as parasites, predators, and the previous years' weather. Sonora Skipper does not likely experience extreme fluctuations although there is insufficient information to estimate population fluctuations or trends for Sonora Skipper in Canada or elsewhere in the species' range. Many sites have been visited over multiple years to confirm the species' presence and record number of individuals. However, these sites were only visited on one or two dates of a field season.

Threats and Limiting Factors

Threats to Sonora Skipper subpopulations are considered low and site-specific without any immediate range-wide threat. Specific low threats include habitat loss from recreational ski hill development; timing of annual or biannual haying that could kill both eggs and larvae; and inappropriate cattle grazing regimes.

Most of the range of Sonora Skipper (excluding provincial parks) is within active timber supply areas. Clear-cut logging may provide temporary habitat (< 10 years), provided the appropriate host plants and suitable moisture conditions are present. These same habitats may provide corridors with other suitable habitats or isolated subpopulations. At some extant sites, past logging appears to have opened habitat: the forest has not regenerated and remained a wet meadow in which Sonora Skipper subpopulations have remained.

Protection, Status, and Ranks

Sonora Skipper subpopulations are protected at E.C. Manning Provincial Park under the *BC Park Act*. The *BC Forest and Range Practices Act* lists the Sonora Skipper as Identified Wildlife enabling the species to be protected from forestry and grazing threats through the establishment of Wildlife Habitat Areas. The species is listed as Special Concern under the federal *Species at Risk Act*.

Source: COSEWIC. 2016. COSEWIC assessment and status report on the Sonora Skipper *Polites sonora* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 35 pp.

For more information, please visit
www.sararegistry.gc.ca.

Cat. No.: **CW69-14/727-2016-1E-PDF**
ISBN: **978-0-660-07300-2**

For information regarding reproduction rights, please contact Environment and Climate Change Canada's Public Inquiries Centre at 1-800-668-6767 (in Canada only) or 819-997-2800 or email to ec.enviroinfo.ec@canada.ca.