English name Propertius duskywing

Scientific name Erynnis propertius

Family Hesperiidae (Skippers), subfamily Pyrginae (Spread-wing Skippers)

Other scientific names none

Risk status

BC: vulnerable (S3); blue-listed

Canada: COSEWIC: candidate for assessment (low priority)

Global: secure (G5)

Elsewhere: California – apparently secure (S4); Nevada– unranked (S?); Oregon – unranked (S?); Washington – vulnerable (S3), state monitoring as

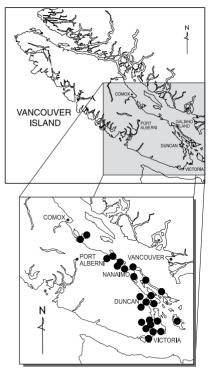
species of concern

Range/Known distribution

Propertius duskywings are found along the Pacific coast, from southern British Columbia, through Washington, Oregon, Nevada and California into Baja California, usually in association with oak species.

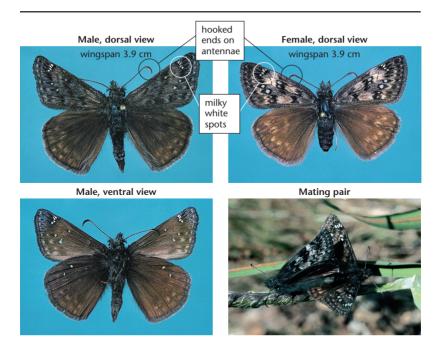
In British Columbia, their range is limited to the Garry oak ecosystems of southeastern Vancouver Island and adjacent Gulf Islands (as far north as Hornby Island) and an isolated Garry oak site on Sumas Mountain. A few small populations have also been recorded at non-Garry oak sites in the Lower Mainland, north to Mount Currie.

Although vulnerable, Propertius duskywings are still found in moderate numbers. They are the most common duskywings on the coast of southern British Columbia.



Distribution of Erynnis propertius

known sites for Georgia Depression populations



Erynnis propertius

All photos: Crispin Guppy

Field Description

Propertius duskywing are large, dark brown skippers with hooked antennae, and are the largest duskywings (wingspan 3.0-3.9 cm) occurring in British Columbia. Males and females have different forms. The dorsal wings of females are a lighter colour and have larger spots. Males have costal folds (bulges on the leading edge of the forewings). Duskywings have the characteristically erratic flight patterns of skippers.

IDENTIFICATION TIPS

The Propertius duskywing is similar to the dreamy duskywing (*Erynnis icelus*) and the Persius duskywing (*E. persius*) which are found in this area, but **both** of these species are smaller than the Propertius duskywing (2.3-3.0 cm and 2.4-3.1 cm respectively) and also less common in Garry oak habitats. The dreamy duskywing lacks the milky white spots on the forewing. Accurate identification is difficult: examination of male genitalia with a microscope provides the only reliable means of identification.

Immature stages: The heads of the mature larvae (caterpillars) are flesh-coloured with orange spots on each side, and covered with fine hair. The bodies are sage green, with yellow subdorsal lines and intersegmental rings, and white spiracles (lateral pores).

Life History

Propertius duskywings generally have only one generation per year, although there may occasionally be a second brood. Adults are most commonly seen on the wing in April and May, almost exclusively in association with Garry oaks (*Quercus garryana*). Males perch on sunny hilltops to find females. Adults sip nectar from a variety of meadow flowers, including camas (*Camassia* spp.), vetch (*Vicia* spp.) and Hooker's onion (*Alium acuminatum*).

Little is known about the larval stages of Propertius duskywings, but larvae are known to feed on the leaves of Garry oaks and to overwinter in oak leaf litter

Habitat

Butterfly and skipper populations are very closely linked to the availability of larval and adult foodplants. Propertius duskywings may be found in oak habitats from sea-level to middle elevations, including woodland clearings, forest edges, open meadows and hillsides. They may also be seen on mud. Some outlier populations of Propertius duskywings are found in non-Garry oak areas. It is not clear what these populations are using as adult or larval foodplants.

Why the species is at risk

Propertius duskywings are disappearing along with their Garry oak habitats, especially in rapidly urbanising areas. These duskywings disappear from urban areas even where Garry oak trees are left standing, perhaps because of pesticide use and in part because of the "cleaning up" of leaf litter containing overwintering pupae.

Duskywings often land on the ground (rather than on plants) which may make them more vulnerable to some predators such as domestic cats.

What you can do to help this species

Management practices should be tailored to the needs of this species and its habitat. Potential management tools will depend on the specific circumstances and may require experimentation prior to implementation. Before taking any action, expert advice should be obtained, and no action taken without it. Please refer to the introductory section of this manual.

The best way to preserve this species is to protect large areas of Garry oak woodland and keep them clear of invasive species such as Scotch broom* (*Cytisus scoparius*) and non-native grasses. Leaf litter should be left around the base of Garry oak trees for overwintering larvae, and surrounding grasslands left in a natural state. Avoid the use of pesticides.

If you see this species, DO NOT CAPTURE it, but take clear photographs if possible and record other pertinent information. Detailed information should be given to the Conservation Data Centre in Victoria (srmwww.gov.bc.ca/cdc).

References

Guppy, C.S. and J.H. Shepard. 2001. *Butterflies of British Columbia*. UBC Press, Vancouver, British Columbia in collaboration with the Royal British Columbia Museum.

For further information, contact the Garry Oak Ecosystems Recovery Team, or see the web site at: www.goert.ca.

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*Refers to non-native species.