

Hesperia colorado oregonia

English name Western Branded Skipper, subspecies *oregonia*

Scientific name *Hesperia colorado oregonia*

Family HesperIIDae (Skippers) **Subfamily** HesperIinae (Grass Skippers)

Other English names Oregon Branded Skipper

Other scientific names *Hesperia comma oregonia*; *Hesperia comma manitoba*

Risk status

BC: imperilled (S2S3); blue-listed; Conservation Framework Highest

Priority – 2 (Goal 3, Maintain BC diversity)

Canada: COSEWIC – under assessment (2011)

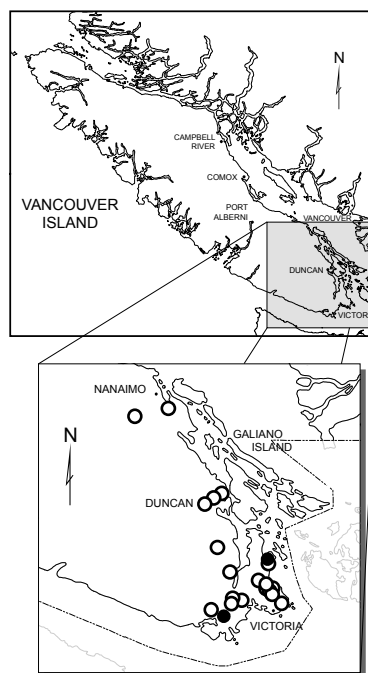
Global: vulnerable (G5T3T4)

Elsewhere: California and Oregon – not assessed; Washington – imperilled (S2) (monitored as a taxon of special concern)

Range/Known distribution

Western Branded Skipper (subspecies *oregonia*) is known from southeastern Vancouver Island through the Puget Trough (including the San Juan Islands) and west Cascades, to the Siskiyou Mountains of northern California. In Canada, it was once thought to be the same species as *Hesperia* skippers found at higher elevations in the mountains of Vancouver Island. However, these higher elevation populations are now thought to be a separate species (*H. comma*, subspecies undetermined).

In British Columbia, the historic distribution of Western Branded Skipper (subspecies *oregonia*) included at least 17 locations from Nanaimo south to the Sooke Hills. Only two populations are currently known in British Columbia: one in Metchosin and one on the Saanich Peninsula.



Distribution of *Hesperia colorado oregonia*

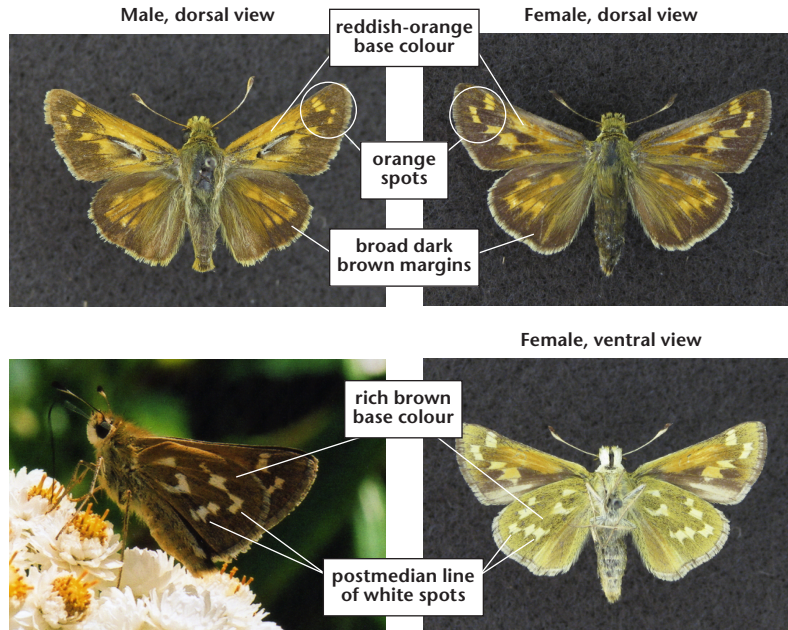
● Recently confirmed sites

○ Unconfirmed or extirpated sites

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Hesperia colorado oregonia



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All photos: James Miskelly

Field description

Western Branded Skipper (subspecies *oregonia*) is a **medium-sized, reddish-orange or tawny, fast-flying butterfly**. Wingspan ranges from 2.8 cm to 3.7 cm. Females are typically larger than the males. Males have distinct black stigma (streak or patch) on the dorsal forewing. In both sexes, **dorsal wing surfaces have a reddish-orange base colour, broad dark brown margins, and orange spots**. Ventral wing surfaces tend to appear grey or greenish in flight and the ventral hindwing has a **rich brown base colour and post-median line of distinctive white spots that are regularly aligned**. Spots are small in proportion to the overall wing size.

IDENTIFICATION TIPS

Skippers, as a family, are characterized by their rapid, darting flight pattern, forewings that are distinctly triangular, and antennae that have an expanded tip. Compared to Western Branded Skipper (subspecies *oregonia*), *H. comma* (subspecies undescribed) from the mountains of Vancouver Island have a darker base colour on the ventral hindwings and medial markings that are

Species at Risk in Garry Oak and Associated Ecosystems in British Columbia

Hesperia colorado oregonia

wider and darker. On the dorsal surface, the brown margins are wider and darker and the marginal apical spots (at the wing tips) are smaller. Adults are also smaller in size (forewing length = 12.0-14.0 mm vs. 13.6-15.2 mm for *H. colorado oregonia*). Woodland Skipper (*Ochlodes sylvanoides*), a more common species throughout southern British Columbia, has larger, distinctly yellow spots on the ventral hindwings. European Skipper* (*Thymelicus lineola*) is also tawny in colour but has thin black margins and lacks spots on both the dorsal and ventral wing surfaces.

Immature stages: Larvae (caterpillars) have been described as green to tan with dark brown or black heads.

Life history

Populations of Western Branded Skipper (subspecies *oregonia*) in British Columbia have a single generation per year and fly from mid-July to late August.

Egg laying has been recorded on Long-stoloned Sedge (*Carex inops*) and California Oatgrass (*Danthonia californica*) in populations in south Puget Sound prairies. Native bunchgrasses, such as Roemer's Fescue (*Festuca roemerii*) and Red Fescue (*Festuca rubra*), are suspected larval host plants at the remaining Canadian sites but their use has not been confirmed. Other non-native grass species, such as ryegrasses* (*Lolium* spp.) and bromes* (*Bromus* spp.), have been utilized in captivity. This subspecies overwinters as an egg and hatches in early spring to feed. Larvae are known to construct small tent-like structures for refuge.

Habitat

Butterfly and skipper populations are very closely linked to the availability of larval foodplants and adult nectar sources. Western Branded Skippers (subspecies *oregonia*) may be found in dry meadows with an abundance of native bunchgrasses. Many historical locations were strongly associated with Garry Oak ecosystems. At least one extant and one historic population are known from coastal sand habitats (dunes) on the Saanich Peninsula.

Why this species is at risk

Urban development on southeastern Vancouver Island has eliminated much of the available dry meadow habitat for this skipper. In remaining habitats, the abundance of native bunchgrasses and adult nectar sources has been reduced by the introduction of non-native grasses, Scotch Broom* (*Cytisus scoparius*), or other invasive plants. No populations of this subspecies are known from sites that are dominated by non-native grasses. Historically, First Nations peoples set fires that maintained open Garry Oak meadows. Some open areas are filling in with trees and shrubs as a result of fire suppression since European settlement.

Species at Risk in Garry Oak and Associated Ecosystems in British Columbia





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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.**

Protecting open dry meadows and native bunchgrasses in known habitats, and ensuring these sites are not over-run with trees and shrubs, will help to maintain remaining populations of Western Branded Skipper (subspecies *oregonia*) in Canada. Mowing or grazing of sites should generally be avoided as it is likely to disturb suitable habitat and harm larvae, although it may be beneficial under some circumstances. Limit recreation use of occupied sites, particularly use by ATVs. Avoid impacts to site hydrology in areas with larval food plant populations. Avoid the use of pesticides.

At other historically occupied sites, actions should be taken to reduce encroachment by Douglas-fir (*Pseudotsuga menziesii*) trees, ensure habitat does not become overrun with Scotch Broom*, and maintain populations of larval food plants and adult nectar sources. Maintaining suitable habitat in these other areas may eventually permit natural re-colonisation or human assisted re-introduction of this species and will also benefit other native species that rely on these habitats.

If you see this subspecies, **DO NOT CAPTURE** it, but take clear photographs if possible and record other pertinent information. Detailed information should be given to the BC Conservation Data Centre (www.env.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.
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- Miskelly, J.W. 2009. Notes on the taxonomy and status of the genus *Hesperia* (Lepidoptera: Hesperidae) on Vancouver Island. J. Entomol. Soc. Brit. Columbia 106: 83-84.
- Miskelly, J.W. 2011. Personal communication. Entomologist, Victoria, BC.

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.

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