English name Moss' elfin, subspecies mossii

Scientific name Incisalia mossii mossii

Family Lycaenidae (Gossamer Wings), subfamily Theclinae (Hairstreaks)

Other English names stonecrop elfin, Moss's elfin

Other scientific names Callophrys mossii

Risk status

BC: vulnerable (S3): blue-listed

Canada: COSFWIC: candidate for assessment

Global: apparently secure (G4T4)

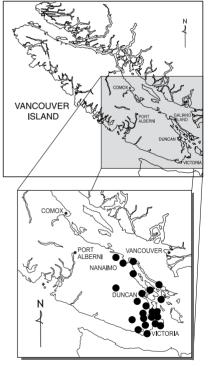
Elsewhere: Oregon – unranked (S?); Washington – unranked (S?), state

monitoring as species of concern

Range/Known distribution

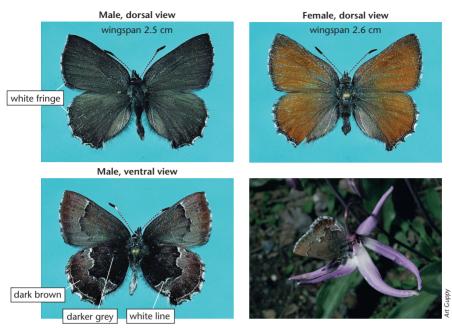
Moss' elfins (subspecies *mossii*) are found predominantly in southwestern British Columbia, although there are also isolated records from Washington and Oregon. In British Columbia, they are found only on southern Vancouver Island.

Populations have been greatly reduced but this subspecies is not yet considered to be in immediate danger.



Distribution of Incisalia mossii mossii

known sites



Incisalia mossii mossii
All photos: Crispin Guppy excepted as noted

Field Description

Elfins are tiny brown butterflies that seem to magically appear and disappear, and are easily overlooked. The *mossii* subspecies of Moss' elfin has ventral hindwings that are **dark brown at the edges**, **while the inner halves are a darker grey**. Females are slightly larger than the males.

IDENTIFICATION TIPS

This is the only subspecies of Moss' elfin on Vancouver Island. It differs from similar species in the area (western elfin, *Incisalia iroides*, and western pine elfin, *I. eryphon*) in having white fringes on the wing margins and a white line separating the brown and grey areas on the ventral hindwings. Ventrally the wings of the western elfin are more uniform reddish-brown and those of the western pine elfin have a distinctive series of chevron markings.

Immature stages: The eggs are pale pastel green, 0.75 by 0.33 mm, with a hoary appearance formed by translucent margins on the sculptured surface. Mature larvae (caterpillars) are greenish yellow, 16-17 mm long, and may have white-edged dorsal stripes and/or a white spiracular fold on the sides. Pupae (11 by 17 mm) are a pale yellow colour at first, becoming a dark chocolate brown with a pale dorsal line, white spiracles (lateral pores) and a double row of small brownish-grey dots on each side.

Life History

Moss' elfins have only one generation per year. Adults fly from mid-April to late May, emerging soonest in warm, early springs. The butterflies skim the ground looking for broad-leaved stonecrop (*Sedum spathulifolium*) plants and feeding on the nectar. Males sip moisture from patches of damp earth.

Development from egg to pupa takes no more than six weeks. Eggs are laid at the base or on the leaves of broad-leaved stonecrop, hatching in just a few days. Young larvae rapidly consume the stonecrop flower buds and then pupate on the ground among plant litter. New adults emerge the following spring.

Habitat

Butterfly and skipper populations are very closely linked to the availability of larval and adult foodplants. Moss' elfins may be found on dry bluffs, rocky outcrops and forest openings where broad-leaved stonecrop grows.

Why the species is at risk

Urban development on southeastern Vancouver Island has eliminated much of the available habitat for this species. Stonecrop populations have been reduced by invasive shrubs such as Scotch broom* (*Cytisus scoparius*), heavy grazing by the increased deer population, and recreational use of rock faces for climbing, bicycling and hiking.

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.

Protection of suitable habitat and food sources may help to reduce the decline of this species. Populations of Moss' elfins persist in a number of parks on southern Vancouver Island because the native habitat has been protected from development, but recreational usage is a concern at these sites. When hiking in rocky areas, stay on the trails to minimise damage to native vegetation such as stonecrop.

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 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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