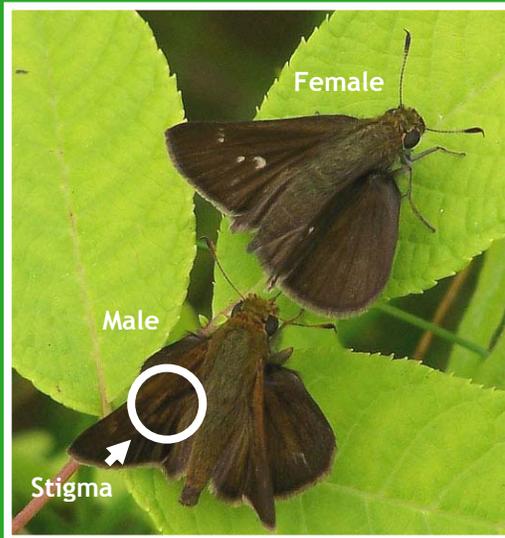


BC's Coast Region: Species & Ecosystems of Conservation Concern

Dun Skipper (*Euphyes vestris*)

Global: G5 Provincial: S3 COSEWIC:T BC List: Blue



Notes on *Euphyes vestris*: A member of the family Hesperiidae (“Skippers”). Skippers derive their name from their rapid, darting flight patterns. Skippers are typically a small to medium sized butterfly with limited colour variation (usually orange, grey, brown or black with white patterning), though a few species have brighter iridescent colouration.

Description

Wingspan: 2.3-2.7 cm. Skippers tend to have large, dark eyes relative to the size of the head, stout bodies and short antennae, often with hooked antennae “clubs” (tips). The proboscis (tubular feeding appendage), is long when uncurled. Males have a black, amber-haloed patch of pheromone producing scales (“stigma”) on the chocolate coloured fore wings. Females have small, white, inconspicuous spots on both the fore wing and upper side of the hind wing. The undersides of the hind wings have a pale purplish crescent. Males locate receptive females by perching on lower growing plants such as grasses and sedges. Eggs are laid singly on host plants and are pale green, globular and smooth when laid but change to a reddish colour before hatching. Early and late phase “instars” (developmental stage of larvae between molts) are soft green with numerous thin, white or light coloured horizontal lines running from the head to the rear feet. The head is white with dark vertical stripes. Larvae curl or bind leaves to create shelters while feeding as well as for sleeping and overwintering.

Diet

Dun Skipper larvae utilize sedge species (e.g. yellow nut-grass), as host plants. Though the diversity of sedge species that may be available at a given site may be high, host plant specificity may be only one or two species. Adults utilize a range of flowering perennials and annuals typically those with white, pink or purple flowers including species in the vetch, borage and mint family. Both native wildflowers and cultivated ornamentals are exploited.

Look's Like?

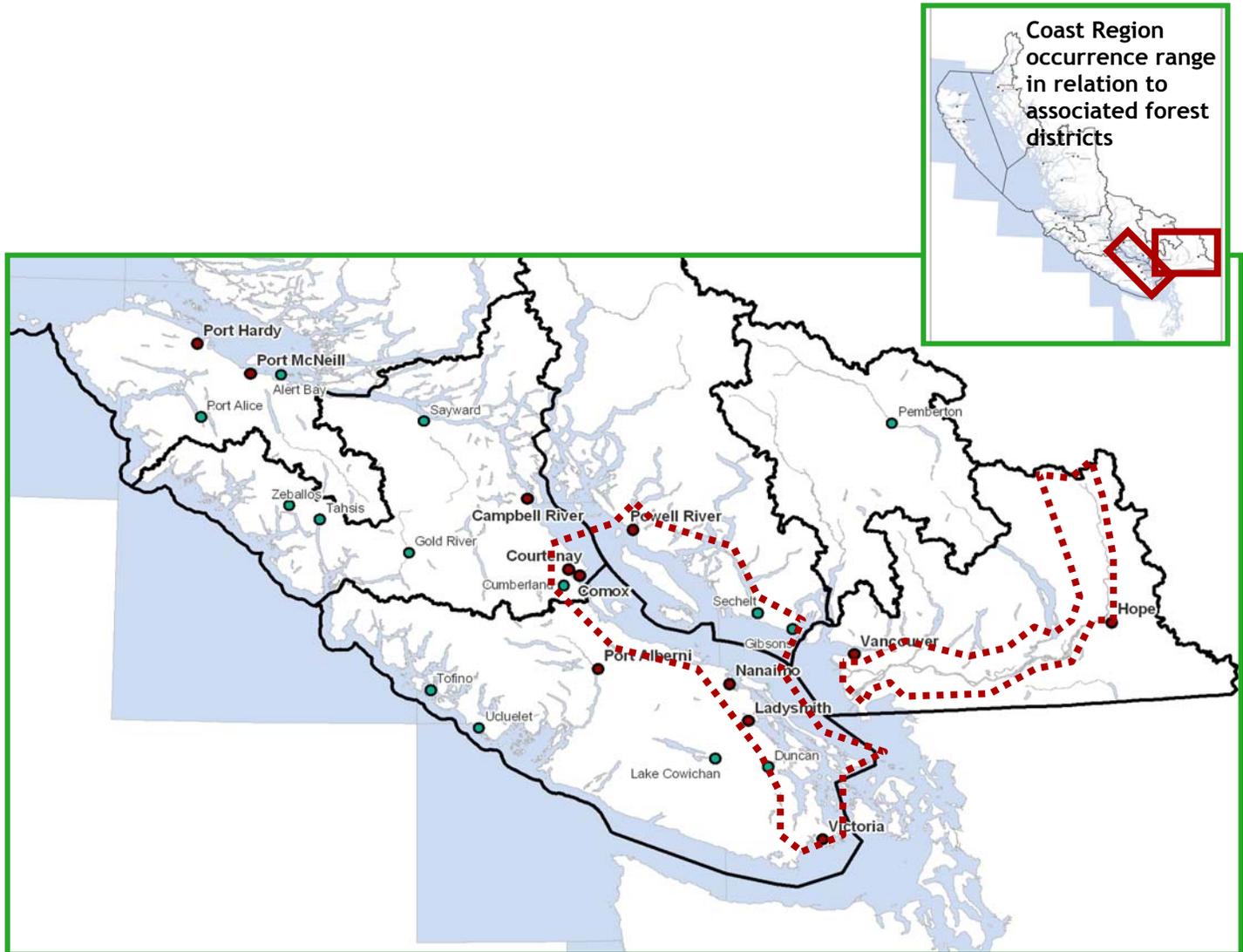
Skippers are a diverse group in BC and many species have overlapping distribution with one another. In the Lillooet area Dun Skipper overlap with Tawny-edged Skipper and on the South Coast and Vancouver Island (especially in urban areas), the species overlaps with Woodland Skipper.



Woodland Skipper

Distribution

The western population of Dun Skipper is distributed from California north through Oregon and Washington into southwestern BC (South Coast and Vancouver Island). Coast Region populations are separated into southeastern Vancouver Island and the Fraser Lowlands and Fraser Canyon west into Lillooet. On Vancouver Island, Dun Skipper range from the Greater Victoria area north to Courtney/Comox. A few records occur from the Gulf Islands (Saltspring and Hornby Island). On the South Coast, occurrences range from Burns Bog to Sumas Mountain, northeast from Hope to Boston Bar and the Morrison and Nahatlatch Valleys and west to Lillooet. Additional records for the South Coast include the Sunshine Coast to Powell River.



Dun Skipper (*Euphyes vestris*), potential occurrence range (based on historic and recent occurrences), for the Coast Region.

Habitat Preferences

Dun Skipper are primarily found in wet meadows, moist grassy openings, fens and bogs. This species has often been observed utilizing disturbed habitats such as roadside edges, constructed drainages, utility corridors and other habitats wet enough to support sedge communities.



Critical Features

Little is known about the connectivity requirements for communities supporting preferred larval and adult food plants. This species is not typically found in large numbers. Most observations are usually breeding pairs or individuals, making abundance difficult to assess.

Seasonal Life Cycle

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
					Adult emergence, Breeding / Egg Deposition						
Larval development and maturation stages. Larvae hibernate in the third stage of development (usually September), emerge the following spring to complete development, then pupate.											

This species is associated with a range of habitat types where sedge communities are well supported.

Dun Skipper produce one brood per year in BC. Larvae hatch shortly after eggs are laid in mid to late summer. Larvae pupate in long silken tubes at the base of host plants *Timing of adult emergence, larval maturation, and pupation/hibernation are affected by temperature and elevation and may vary by host plant growth periods.

Threats

- ◆ The preferred ecological associations of this species are geographically limited and subject to loss or suppression of natural or historic maintenance regimes (e.g. fire, flooding). Along with potential changes from climate change, these changes may increase loss of wetlands and wet meadows from succession to shrub thicket and forest.
- ◆ Habitat loss, encroachment and fragmentation may contribute to reduction in preferred adult and larval food plant availability and contribute to local extirpation events.
- ◆ Habitat loss, encroachment and fragmentation from urban development and agricultural can further exacerbate reduction in larval host plant availability.
- ◆ Impacts to all life stages as well as host plant communities from land management practices (e.g. pesticide application). In particular broadcast spraying for insect pests (e.g. use of Btk), or for noxious weed control may have significant impacts for non target invertebrate species and their food plants within application.
- ◆ Competition and extirpation impacts to larval host plant species as well as changes to host plant communities from introduced plant species.

Conservation & Management Objectives

- ◆ Apply conservation and management objectives for this species as set out in the “Status of Five Butterflies and Skippers in British Columbia”. Integrate key conservation recommendations that may benefit this species and its habitat as documented in “Recovery Strategy for Multi-species at Risk in Maritime Meadows Associated with Garry Oak Ecosystems in Canada” and “Recovery Strategy for Multi-species at Risk in Vernal Pools and Other Ephemeral Wet Areas in Garry Oak and Associated Ecosystems in Canada.” Investigate potential complimentary objectives identified in “Sentinels on the Wing: The Status and Conservation of Butterflies in Canada.”
- ◆ Inventory and assessment methods should at a minimum follow those set out in the RISC Standards #40 “Inventory Methods for Terrestrial Arthropods.” More recent collection and identification resources such as those found online through the Butterflies and Moths of North America or the Royal BC Museum’s “Living Landscapes: Pend-d Oreille Butterfly Survey” as well as other Provincial butterfly collection and reconnaissance inventory methods¹ should be investigated.

¹ Contact the provincial invertebrate specialist in Victoria.

Specific activities should include:

- ◆ Conduct outreach to raise awareness of this species and how to identify it to improve distribution knowledge. A targeted inventory is needed to determine if undiscovered populations exist elsewhere within the Coast Region.
- ◆ Where suitable habitat occurs, work with land managers and land owners to ensure development or recreational activities do not impact or decrease availability of host plants for larvae and nectar sources for adults.
- ◆ Encourage landowners and land use authorities to dedicate conservation covenants and cultivation/vegetation management easements to protect host plant associations. Work to recover populations into areas previously occupied or feasible for colonization.
- ◆ Improve understanding of larval host plant dependencies and ways in which host plants and their communities can be enhanced.
- ◆ Increase awareness about the value that host plant associations provide to other wetland dependent species.
- ◆ Effective long-term control and reduction in competition from invasive or aggressively spreading vascular plants (e.g. invasive shrubs and grasses), must form part of strategies to protect and recover populations. Disturbance to native rare plant species and communities must be minimized during control activities.
- ◆ Work to reduce the need for broadcast and cosmetic pesticide use that may be impacting non-target species through instituting integrated pest management programs.
- ◆ Consider implementation of controlled burning (where feasible) or other historic maintenance regimes that may have sustained host plant communities and their associations.

This species is listed under the Federal Species at Risk Act (SARA) and may be subject to protections and prohibitions under the BC Wildlife Act. Habitat for this species may also be governed under provincial and federal regulations including the Fish Protection Act and Federal Fisheries Act as well as Regional and local municipal bylaws.

Content for this Factsheet has been derived from the following sources

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Every effort has been made to ensure content accuracy. Comments or corrections should be directed to the South Coast Conservation Program: info@sccp.ca. Content updated March 2011.

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