

**NOTE****First record of the Fiery Skipper, *Hylephila phyleus* Drury (Lepidoptera: Hesperiiidae) from New Brunswick, Canada**

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The Fiery Skipper (*Hylephila phyleus* Drury, 1773) (Lepidoptera: Hesperiiidae) is a medium-sized skipper (ca. 2.2–3.3 cm wingspan) commonly found on both American continents. Moths typically fly from early September to late October (Massachusetts Butterfly Atlas 2009). Adults of *Hylephila phyleus* are known to feed on the nectar of various plants such as swamp milkweed (*Asclepias incarnata* Linnaeus (Apocynaceae)), sneezeweed (*Helenium* spp. Linnaeus (Acanthaceae)), knapweed (*Centaurea* spp. Linnaeus (Asteraceae)), and various thistles. They are also known to fly in grassy habitats; the larvae are considered lawn pests, typically feeding on grasses such as bermudagrass (*Cynodon* spp. Richard (Poaceae)) and bentgrass (*Agrostis* spp. Linnaeus (Poaceae)) (Tashiro and Mitchell 1985; Layberry et al. 1998). Although males and females can typically be distinguished by the wings, this distinction can be tricky given the high degree of intraspecific variation within this species. Klots (1951) suggested that males have bright orange-yellow wings on top with a pale yellow underside containing sub-marginal dark spots, while the upper surface of the female wings are primarily dark-brown and the underwing similar but dusty colored. Conversely, Layberry et al. (1998) describe the male underside as being orange and the female underside greyish brown.

In North America, this species is resident only in the southern United States, but is known to wander north, with observations recorded in the United States as far afield as California, Connecticut, Michigan, Massachusetts, Nebraska, and Wisconsin (Klots 1951; Okumura 1959; Tashiro and Mitchell 1985; Maritimes Butterfly Atlas 2011; Wisconsin Butterflies 2012). Although *Hylephila phyleus* is known to regularly cross the Canadian border into southwestern Ontario (Layberry et al. 1998). However, in the Maritimes, this species is previously known only from a single specimen in the Canadian National Collection, obtained at Charlottetown, Prince Edward Island, 29 July 1947. Layberry et al. (1998) accept this record because "migrants flying northwards towards the northeastern states quite likely follow the coast to some extent, and could have been carried into the Maritimes by strong south winds." Moreover, although *Hylephila phyleus* has been observed in copula in Canada, it is thought that their larvae are incapable of withstanding the cold winters, making the possibility of an established Canadian population highly unlikely (Layberry et al. 1998).

Although *Hylephila phyleus* has been divided into three subspecies in its resident geographic range, Layberry et al. (1998) suggested that only the nominate subspecies (*Hylephila phyleus phyleus*) enters Canada. On 26 August 2012, I photographed and collected a single female Fiery Skipper (Figure 1a,b) at the northeastern end of Lily Lake, Rockwood Park, Saint John, New Brunswick (45°17'28.63"N, 66°03'17.02"W). The skipper was flying in an area of trailside grass and alders. The park, designed and established in the late 19th century, is one of Canada's largest urban parks, spanning 890 hectares of mixed forest land. Various habitats are present throughout the park, including trailside grassy areas, well developed secondary mixed forest, and freshwater ponds and lakes. The specimen has been spread, pinned and deposited in the insect collection of the New Brunswick Museum as NBM 33431.

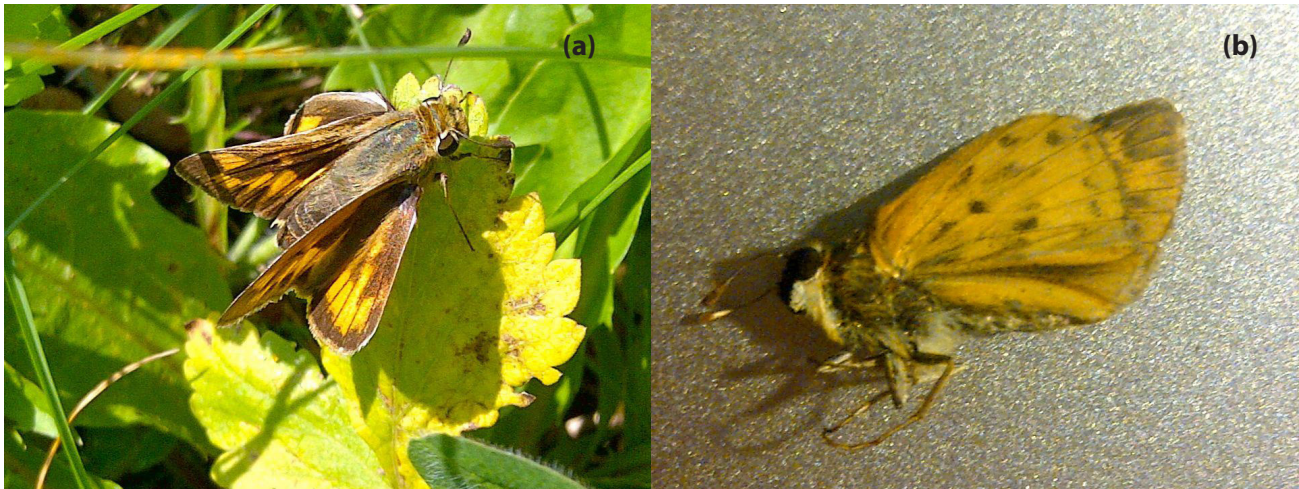
Hylephila phyleus can be considered a rare migrant in the Maritime Provinces. Observations of this species may increase in the region in the future if the unseasonably warm and dry weather patterns of 2012 continue. Layberry et al. (1998)

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Figure 1. Dorsal (a) and ventral (b) view of the wings of the Fiery Skipper (*Hylephila phyleus*) collected at Lily Lake, Saint John, New Brunswick, on 26 August 2012.



also suggested that a prevalence of southern winds could contribute to an increase in such rare records; a potential explanation given that Saint John winds are predominantly southern between May and October (Environment Canada 2012). Moreover, changes in overwintering conditions in the resident range of *Hylephila phyleus* due to climate change could ultimately increase flight range and contribute to more Maritime recordings (Dennis 1993). Other notable reports of Lepidoptera coincident in the region with the warm and dry weather patterns, including the second record of the Giant Swallowtail (*Papilio cresphontes*; Cramer, 1777 (Lepidoptera: Papilionidae)) from New Brunswick in 2012 and the second records of the American Snout (*Libytheana carinenta* Cramer, 1777 (Lepidoptera: Nymphalidae)) and Common Buckeye (*Junonia coenia* Hubner, 1822 (Lepidoptera: Nymphalidae)) from Nova Scotia in 2012 (J. Klymko, Atlantic Canada Conservation Data Centre (ACCDC), personal communication), suggest that such weather patterns may indeed play a role in increased presence of vagrant lepidopterans at unusually northern latitudes.

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