

NEW CANADIAN RECORDS FOR *THYMELICUS LINEOLA*
(HESPERIIDAE)

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While vacationing along the north Lake Superior route via the Trans-Canada Highway during the summer of 1965, I unexpectedly collected specimens of *Thymelicus lineola* (Ochsenheimer) in the two widely separated locations in Ontario, Canada: Saulte Ste. Marie and Fort William. These records appear to represent a significant western range extension of the European skipper, subsequent to its collection at Sudbury, Ontario (Riotte, 1962), and a substantial northern extension from the site of the skipper's introduction at London, Ontario in 1916 (Klots, 1951). This species has also extended its range easterly, having been recorded from New Jersey (Muller, 1958), Connecticut (Apter & Burns, 1965), and New Brunswick (Hensel, 1966).

My first collection occurred in the city of Saulte Ste. Marie on July 26 at midday. A fresh male flew into my parked automobile on the north side of town. Other individuals were observed flying nearby. There were several large fields nearby which would offer an ideal habitat for this species; however, circumstances did not permit additional collecting in this location.

No further observations of this skipper were made along 440 miles of King's Highway 17 until arriving at Fort William, on the northwest shore of Lake Superior. On July 31, after an all-day rain, I spotted a fresh male *lineola* resting on a motel's brick front. At first, I assumed it may have just arrived there by way of one of many tourist automobiles from southern Ontario or Michigan, two areas where *lineola* abounds. The thought occurred to me that this skipper might have come from Saulte Ste. Marie, where it was observed in fair numbers just a few days before. However, shortly after our arrival in Fort William at 6:00 P.M., I took 20 additional specimens, all resting on wet grasses and miscellaneous weeds in a vacant lot. This sample area measured approximately 15 feet square and was typical of many fields and city lots in southern Michigan where the writer has collected *lineola* over a 20-year period. A total of 13 males and seven females in fresh condition were taken merely by using a small cyanide jar. Most of the skippers were clinging to grasses about 12 to 18 inches above the ground. When disturbed, they would fall to the ground without struggling to fly. Most of these specimens have now been deposited in the Royal Ontario Museum at Toronto.

It is interesting to speculate on how this population arrived and how long it has been established at Fort William; likewise, one may wonder whether or not the species will persist in this rather cold climate. Several of the new locations of *lineola* have been reported along main highways or railroads (Thomas, 1952). The Fort William collecting site is located between Highway 61 and tracks of the Canadian Pacific Railroad, both main arteries of tourism and commerce. Also, the site is a few city blocks from the largest grain terminal on the Great Lakes, which receives ships from all over the world, many passing through *lineola*-populated southeastern Michigan and Ontario. The railroad might offer the most likely route of introduction, in the form of eggs, larvae, or pupae, in hay shipped separately or used to feed livestock en route. Furthermore, empty boxcars or touring automobiles could offer a mode of transportation, for trapped adults from the population at Sault Ste. Marie, about two days' travel.

It appears that *A. lineola* could be making an appearance in other communities in the upper Great Lakes in the coming years. Collectors in northern Minnesota and Wisconsin, as elsewhere in Ontario, should be on the alert for this skipper, especially in those communities along principal routes of travel. No field or city lot is too small to harbor this species. Perhaps it is just a matter of time before this minute traveler reaches the Mississippi River and points farther west.

LITERATURE CITED

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- HENSEL, H., 1966. A colony of the European skipper *Thymelicus lineola* (Hesperiidae) at Edmundston, New Brunswick. Jour. Lepid. Soc., 20(1): 28.
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BOOK NOTICE

BUTTERFLIES OF THE DELAWARE VALLEY, by Arthur M. Shapiro. 79 pp., illus. Special Publication of the American Entomological Society. 1966. Available from the Society, 1900 Race Street, Philadelphia. \$1.50.

This work deals primarily with the 126 species of butterflies and skippers found within 35 miles of Philadelphia, in Pennsylvania and New Jersey, and emphasizes local distribution and habitats. Keys and drawings should permit identification of almost all species. A far more valuable publication than most local lists, and one which any entomologist in the area would find useful.—PETER F. BELLINGER, *San Fernando Valley State College, Northridge, California*.