## NOTES ON NINE IOWA BUTTERFLY SPECIES, INCLUDING FOUR NEW TO THE STATE

## by Lee D. Miller

Very little has been published on the butterflies of Iowa, indeed, very little collecting has been done, since the days of Lindsey in the first two decades of this century. At first glance Iowa is not too inviting a place for the lepidopterist; due to the preponderance of cultivated land there are relatively few good collecting spots in the state. At present the best places are generally within the confines of the woodland state parks, although a few patches of virgin prairie still exist, as do some fairly extensive wooded areas, especially along the major rivers.

The records which follow are from the various state parks and from some wooded patches near Des Moines.

Lethe eurydice fumosus Leussler. This subspecies (or form), originally described from eastern Nebraska, has been "lost" almost since its description, although a few specimens have been taken in Colorado and southwestern Pennsylvania that approach it. In the company of Messrs. B. C. Johnson, Ronald Royer, and Norris Young, the writer took a fine series of this butterfly in the only acid bog in Iowa at Pilot Knob State Park, Hancock Co., Iowa on July 22, 1960. These specimens agree with typical fumosus, being very large and dark above, the ground color almost as dark as L. portlandia. L. fumosus has never before been recorded from Iowa. I hesitate to decide as to the merits of the subspeciation of this form. It appears fumosus is a dweller of the bogs of the southwestern part of the range of the species, and perhaps as such, a valid subspecies. If this is the case, the butterfly must have once had a continuous distribution.

Strymon m-album Boisduval & Le Conte. The writer took a very fresh female of this species near an oak thicket at Waubonsie State Park, Fremont Co., in the southwest corner of Iowa on May 22, 1960. The condition of this specimen leaves the possibility that a small colony of the species may be established in the park.

S. caryævorus McDunnough. This species has been reported from Iowa on one previous occasion. A pair of specimens from the northeastern part of the state at Decorah were taken in 1909. An extremely fresh female from Waubonsie Park taken by the writer on June 27, 1960 was referred to this species by Mr. Harry K. Clench. Subsequent reexamination of the writer's series of S. falacer Godart revealed two more

specimens from the Des Moines area, a male taken in Des Moines, Iowa on July 1, 1960 and a female taken two miles north of Earlham, Dallas Co., Iowa on June 29, 1958. All these specimens were taken in hickory woods. It appears this species occurs locally throughout the state, since the records are now from northeastern, central, and southwestern parts of the state.

Achalarus lyciades Geyer. Klots reports this species from eastern Iowa, and the writer has specimens from Des Moines. It was surprising, however, when the writer, B. C. Johnson, and Ronald Royer took the species at Waubonsie Park on both May 15 and 22, 1960. This species was in the woodland clearings, each specimen guarding its own territory reminiscent of *Epargyreus clarus* Cramer. This represents a range extension for the species in Iowa of about 150 miles.

Pholisora hayhurstii Edwards, Hylephila phyleus Drury, and Poanes zabulon Edwards are all fairly well-established in the Des Moines area. It is probable that phyleus is reintroduced year after year, since it is a well-known migratory species. It seems to appear each year about the end of June and raise one brood. The other two species are uncommon, but apparently well-established in some of the river-bottom woodlands around Des Moines, hayhurstii appearing in June and August, and zabulon appearing in late May and August.

Poanes viator Edwards and Atrytone dion Edwards. Apparently neither of these species has been previously credited to the Iowa fauna. The writer in company of Messrs. Johnson, Royer, and Young took these species in the bog at Pilot Knob State Park on July 22, 1960, along with the beforementioned Lethe eurydice fumosus. A. dion was taken in small numbers throughout the bog, showing some preference to the cattails. A few more specimens of this species were taken in a swamp near Klemme, Hancock Co., Iowa on the same day. P. viator was taken by the score in the sedges along the margins of the bog. Unfortunately, no identification was made on the species of sedge, for the writer feels this may well be the foodplant of viator. The Iowa viator are somewhat atypical, but not enough to warrant naming; none were seen at Klemme.

The species recorded as probably new to the Iowa fauna are *Lethe eurydice fumosus* Leussler, and *Poanes viator* Edwards, recorded at Pilot Knob State Park, Hancock Co., Iowa on July 22, 1960, *Atrytone dion* Edwards, recorded at Pilot Knob State Park and near Klemme, Hancock Co., Iowa on July 22, 1960, and *Strymon m-album* Boisduval & Le Conte, taken at Waubonsie State Park, Fremont Co., Iowa on May 22, 1960.