

UNUSUAL BUTTERFLIES IN NORTHERN PENNSYLVANIA

Following a few years' collecting as a boy in Tioga County, Pennsylvania in the mid 1920s, I again began to take an amateur interest in butterflies about ten years ago.

The reawakening of active interest really began when I discovered a colony of larvae of *Battus philenor* on a Dutchmans Pipe Vine (*Aristolochia macrophylla*) at my home in Wellsboro in late July 1959. This common southern butterfly is rare in northern Pennsylvania so the larvae were cared for until the adults emerged in late August. No other wild larvae or adults have been seen here since.

On May 15, 1960, I caught a single *Pieris virginiensis* while I was on a hiking trip in an open mixed hardwood forest about 8 miles southeast of Wellsboro. This led to an active search and since that time a number of colonies of varying sizes have been located in the area.

On July 6, 1963, while exploring an acid bog for orchids and other plants (*Polygonia ophioglossoides*, *Calopogon pulchellus*, *Sarracenia purpurea*, *Drosea rotundifolia*, *Menyanthes frifoliata* and *Vaccinium macrocarpon* are present) about thirty miles southwest of Wellsboro, I noted a small blue-gray butterfly which proved to be *Lycaena epixanthe*. In a mountain-top meadow near this bog, Arthur Shapiro scored a first for the area by netting a male *Colias interior* on July 11, 1968.

On May 19, 1968, while I was walking along a grassy woods road, about eight miles southeast of Wellsboro, in an area now grown up to mixed hardwood brush, a fresh female *Erora laeta* literally dropped into the road in front of me. Later that same year, on July 29th, a worn male was collected and another sighted on blossoming hardhack (*Spirea tomentosa*) in a nearby wet field.

Last season (1970) on June 25th, July 1st and July 5th, in two locations about twenty miles apart north and west of Wellsboro respectively, I collected a total of ten *Thymelicus lineola*, all males. These insects were feeding on the blossoms of common milkweed (*Asclepias syriaca*) but were very wary and difficult to approach. No females have been collected.

A number of large colonies of *Chlosyne harrisii liggetti* Avinoff occur here, flying from early June to early July.

The Tioga-Potter-Lycoming County area in north-central Pennsylvania can be classified as Transitional Zone with tendencies toward Canadian Zone in the higher elevations. Mountains are rounded with maximum elevations of approximately 2200'. Valley bottoms are about 1300' elevation. It is mostly heavily forested with second-growth hardwoods, principally maples, beech, cherry, ash, basswood and some oaks. There are scattered hemlocks and some red and white pine.

The presence of the *L. expixanthe* acid bog can possibly be attributed to pre-glacial times and the peculiar geological history of the area. Geologists agree that the edge of the last glacier was nearby and that previous to that time the region drained northward into the St. Lawrence River. The glacier halted this flow, however, and an entire new drainage system developed. A new water passage was cut through the then existing mountain barrier to the south forming what is now known as "Pennsylvania's Grand Canyon," a steep-sided gorge about fifty miles long and one thousand feet deep, draining into the Susquehanna River and thence into the Atlantic Ocean at Chesapeake Bay. In Potter County, about forty miles west of Wellsboro, there is now a three-way watershed, with drainage dividing into flowages to the north (St. Lawrence River), to the southwest (Mississippi River), and to the southeast (Susquehanna River).

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