

- EHRlich, P. R., & H. K. CLENCH, 1960. A new subgenus and species of *Callophrys* (s.l.) from the southwestern United States. Ent. News, 71: 137-141.
- SCHULZ, E. D., 1928. Texas Wild Flowers. Laidlaw Bros., Chicago.
- STALLINGS, D. B., J. R. TURNER, & P. R. EHRlich, 1959. A "hit and run" trip to Texas and New Mexico. Jour. Lepid. Soc., 13: 99-100.
- STALLINGS, D. B., J. R. TURNER, & P. R. EHRlich, 1962. Preliminary notes on the life history of *Callophrys* (*Sandia*) *macfarlandi*. Jour. Lepid. Soc., 16: 55-57.
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MORE OBSERVATIONS ON THE ATTRACTION OF DIURNAL LEPIDOPTERA TO LIGHT

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The phenomenon of butterflies being attracted to lights seems to be of keen interest to lepidopterists. Observations are often recorded and the specimens given an honored place in the captor's collection. With the recent advent of ultraviolet light as a popular medium for moth collecting, records of butterflies attracted to lights have greatly increased. It is quite apparent that ultraviolet light attracts and holds butterflies to a much higher degree than incandescent light. During five years of collecting with a standard 20-watt ultraviolet light and moth sheet I have taken 50 butterflies. In the last 16 years I have found only four butterflies attracted to other light sources.

Undoubtedly a large percentage of the specimens collected at light are startled from their resting places in nearby trees or bushes by the collector or some of the larger insects attracted to the light. There is some evidence that occasional specimens are drawn from a considerable distance. For example, on the evening of August 16, 1964 I was collecting moths in a state wildlife area near Moberly, Missouri. The moth sheet was hung on a tree facing a large open field. I was standing about 50 feet in front and to the side of the sheet watching for sphingids and *Catocala* which frequently fly in and settle on the ground as much as 30 or 40 feet from the sheet. I observed what appeared to be a *Catocala* coming in a skipping zigzag flight toward the sheet. Instead of dropping to the ground it flew directly to the sheet and settled near the light. To my surprise I found it was a worn *Cercyonis pegala* (Fabricius). When first observed it was about 80 to 90 feet from the sheet. The field was recently plowed with only a trace of fresh growth. About 200 feet further were brushy areas which would seem to be the logical source of the butterfly. Perhaps it was startled from its resting place by some wan-

dering creature of the night and then drawn by the compelling glow of the light or perhaps the light itself was the stimulus which drew it from its retreat. Butterflies attracted to ultraviolet light are usually comparatively unwary and easily collected with the killing jar.

The following records include every major family of the area with the exception of the Papilionidae. There is no apparent reason for this absence as we have six species of *Papilio* present and in many cases they are abundant diurnal insects. In the following list condition of the specimens is indicated by (F) fresh, (W) worn, or (B) battered.

Species taken at incandescent light sources:

Erynnis horatius (Scud. & Burg.) 1 ♀ (F) 3 Sept. 64, Fort Scott, Arkansas.

Pieris protodice Bdv. & LeC. 1 ♂ (F) 9 June 58, Sugar Creek, Missouri.

Strymon cecrops (Fabricius) 1 ♀ (B) 3 Sept. 61, Rogers, Arkansas.

Asterocampa celtis (Bdv. & LeC.) 1 ♂ (F) 14 Aug. 48, Independence, Missouri.

Species taken at ultraviolet light:

Amblyscirtes nysa Edwards 1 ♀ (F) 28 Aug. 64, Independence, Missouri.

Atalopedes campestris (Boisduval) 1 ♀ (W) 1 Aug. 60, 1 ♀ (W) 21 Aug. 60, 1 ♀ (B) 23 Aug. 60, 1 ♀ (F) 24 Aug. 61, 1 ♂ (B) 26 Aug. 61, 1 ♂ (F) 3 Aug. 62, 1 ♂ (W) 6 Oct. 62, 1 ♀ (F) 31 July 63, 2 ♀ (F) 2 Aug. 63, 1 ♂ (B) 2 Aug. 63, 1 ♀ (F) 3 Aug. 63, Independence, Missouri.

Euphyes vestris (Boisduval) 1 ♂ (B) 27 June 60, Warsaw, Missouri.

Polites themistocles (Latreille) 1 ♀ (W) 17 Aug. 62, Independence, Missouri; 1 ♀ (W) 1 Aug. 64, Moberly, Missouri.

Thorybes bathyllus (Smith) 1 ♂ (F) 16 Aug. 64, 2 ♀ (F) 16 Aug. 64, 1 ♀ (B) 16 Aug. 64, Moberly, Missouri.

Thorybes pylades (Scudder) 1 ♀ (B) 28 June 64, Warsaw, Missouri.

Epargyreus clarus (Cramer) 1 ♂ (B) 31 Aug. 61, Independence, Missouri.

Strymon cecrops (Fabricius) 1 ♀ (F) 9 July 62, Warsaw, Missouri.

Strymon melinus Hübner 1 ♀ (F) 14 Oct. 61, Independence, Missouri; 1 ♀ (F) 26 July 64, Warsaw, Missouri; 1 ♂ (F) 16 Aug. 64, Moberly, Missouri.

Everes comyntas (Godart) 1 ♂ (W) 9 May 60, Independence, Missouri.

Asterocampa celtis (Bdv. & LeC.) 1 ♀ (F) 16 Aug. 60, 1 ♂ (B) 26 Aug. 60, Independence, Missouri; 1 ♂ (F) 1 Sept. 60, Rogers, Arkansas; 1 ♂ (F) 6 Aug. 62, 1 ♂ (F) 4 Sept. 62, Warsaw, Missouri.

Asterocampa clyton (Bdv. & LeC.) 1 ♂ (B) 31 Aug. 60, 1 ♀ (F) 3 Sept. 60, Independence, Missouri.

Vanessa atalanta (Linn.) 1 ♂ (W) 5 Aug. 61, 1 ♂ (W) 9 June 62, 1 ♂ (W) 2 June 63, Independence, Missouri; 1 ♀ (F) 10 May 64, Warsaw, Missouri.

Vanessa cardui (Linn.) 1 ♀ (F) 27 July 60, Independence, Missouri.

Polygonia interrogationis (Fabricius) 1 ♀ (F) 25 May 62, 1 ♂ (W) 3 Aug. 63, Independence, Missouri.

Polygonia comma (Harris) 1 ♀ (W) 20 July 62, 1 ♂ (F) 30 July 62, Independence, Missouri.

Phyciodes tharos (Drury) 1 ♂ (W) 17 July 60, Independence, Missouri.

Danaus plexippus (Linn.) 1 ♂ (W) 21 March 62, Cd. Victoria, Mexico; 1 ♀ (F) 18 Aug. 62, Birmingham, Missouri.

Lethe portlandia (Fabricius) 1 ♂ (W) 18 Aug. 62, 1 ♂ (W) 23 Aug. 63, Birmingham, Missouri.

Cercyonis pegala (Fabricius) 1 ♂ (F) 28 June 64, 1 ♂ (W) 16 Aug. 64, Moberly, Missouri.