of copper-plate fineness. When we consider the meager educational opportunities offered in the schools of Texas of that day, his achievement in this regard stamps him as possessed of considerable native ability. He amassed a substantial collection of historical materials which were deposited, for safe keeping, in the Fort Bend County court house, at Richmond. There they were destroyed in a fire (January 5, 1887), which burned the building to the ground.

## The Hesperiidae (Lepidoptera) of Arkansas

H. A. Freeman

The present list, based on nineteen years' collection and study of the Hesperiids of Arkansas, records 49 species and subspecies, in 22 genera, in that State. All, with the possible exception of Amblyscirtes nysa Edwards and Erynnis funeralis (Scud. & Burg.), are native to Arkansas. One new species (Amblyscirtes linda Freeman) and one new subspecies (Polites verna sequoyah Freeman) were described from Arkansas specimens; and were found, after considerable collecting, to be rather abundant (during brief periods) in very restricted habitats.

This paper seeks to furnish collection-data to other entomologists who desire to collect some of these species for themselves. Exact data are given only for the rarer species. Unless otherwise indicated, data are given from my own collecting experience.

The taxonomy and arrangement of species and subspecies follow Bell's monograph on the Hesperioidea. The list follows:

*Proteides clarus* (Cram.) Commonly and widely distributed over the state during the summer months.

*Urbanus proteus* L. Only a very few individuals of this species were collected in Arkansas, near the Arkansas River at North Little Rock, during July and August.

Achalarus lyciades (Geyer.) Common over the entire state, during spring to early fall.

<sup>&#</sup>x27;References to cited papers are given in extenso in the "Literature" at the end of this paper.

Autochton cellus (Bvd. & LeC.) My only Arkansas specimens were collected in August at a locality twelve miles north of Ozone, by Dr. J. L. McClurkin.

Thorybes bathyllus (A. & S.) Common over most of the state.

Thorybes confusis Bell. Most of my individuals were collected during July and August in Faulkner County.

Thorybes pylades (Scud.) Very abundant over the entirestate.

*Pyrgus syrichtus* f. *montivagus* Reakirt. I collected one female near the Arkanas River at North Little Rock, on Sept. 10, 1929. I believe this is the only record for Arkansas.

Pyrgus communis (Grote). Common over the entire state. Pholisora catullus (Fabr.) Common over the entire state.

*Pholisora hayhurstii* (Edw.) During the summer and early fall months, this species occurs rather commonly over the state.

*Erynnis icelus* (Scud. & Burg.) I collected two males of this species at Pinnacle Springs, Faulkner County, on July 7, 1944.

Erynnis brizo (Bvd. & LeC.) An early spring species in Arkansas, rather commonly distributed over the state.

Erynnis persius (Scud.) I have seen two individuals (July) from Faulkner County.

Erynnis baptisiae (Forbes.) One male of this species found at Hope Hill Farm, Faulkner County, July 1, 1933.

Erynnis martialis (Scud.) This species occurs over central Arkansas, but never abundantly.

Erynnis juvenalis (Fabr.) Common over the state during the spring and early fall months.

Erynnis horatius (Scud. & Burg.) Very common over the entire state.

Erynnis funeralis (Scud. & Burg.) My only individual of this species from Arkansas (a female) was given to me by Mr. Don B. Stallings, who collected it at Osage, July 3, 1939.

Ancyloxypha numitor (Fabr.) Is fairly evenly distributed over the state, usually in July and August.

Copaeodes aurantiaca (Hew.) Rare in Arkansas. My only specimens were found (October, 1931) along the Arkansas River at North Little Rock.

Copaeodes minima (Edw.) One male of this species at North Little Rock (October 15, 1931); several individuals were collected at Hope during July to September.

Hesperia metea belfragei Freeman. Two females of this Southern subspecies were collected at Hope Hill Farm, Faulkner County, during April, 1933. At that time, belfragei had not been named. The two individuals were sent to the late Dr. Eugene Murray-Aaron. He was not able to place them correctly, but said that they resembled the unique type of horus Edw. I am inclined to believe that horus and belfragei are the same.

Hesperia meskei (Edw.) Two females of this rare species were collected in Arkansas: one (June 30, 1930) at North Little Rock; and the other (August 22, 1933) at Hope Hill Farm, Faulkner County. So far as I know, these are the only individuals recorded from this state.

Hesperia leonardus stallingsi Freeman. This subspecies was described as a form of leonardus, but in its southern range it becomes a subspecies. I have seen some individuals that were collected (August) at Rogers, by Mr. A. M. Merrill.

Hylephila phyleus (Drury.) Common over the state during the summer and fall months.

Atalopedes campestris (Bdv.) The most common of all North American skippers, found over the entire state.

Polites themistocles (Latr.) Common over the entire state.

Polites manataaqua (Scud.) Common over the northern and central parts of the state during the spring and fall.

Polites vibex (Geyer.) A female of this tropical species was caught at Little Rock, August 2, 1941.

Polites verna sequoyah Freeman. This rather rare subspecies was collected at Little Rock, Hope Hill Farm, and Pinnacle Springs, during July and August.

Wallengrenia otho (A. & S.) Common over the entire state.

Wallengrenia otho egeremet (Scud.) This northern subspecies occurs as a form in Arkansas. Most of my specimens were collected at Hope Hill Farm during June.

*Poanes hobomok* (Harris.) One male and one female were collected at Mount Sequoyah, near Fayetteville, during July, 1929.

Poanes zabulon (Bdv. & LeC.) Common over central and southern Arkansas, during the summer months.

Atrytone logan (Edw.) Common over the state during spring, summer, and fall months.

Atrytone dion alabamae Lindsey. Three individuals of this rare Southern subspecies were caught at North Little Rock: one male (June 13, 1930), one female (July 17, 1930), and a second female (July 27, 1930).

Atrytone ruricola (Bdv.) Common over the entire state. Lerema accius (A. & S.) Not uncommon during the summer and fall months in the central and southern parts of the state.

Amblyscirtes vialis (Edw.) Common over the entire state during spring to fall.

Amblyscirtes nysa Edw. W. D. Field states (in his manual of Kansas butterflies, 1938, p. 265) that he had "a specimen also from Beaver in Carroll County, Arkansas." This is the only collection-record of this species in the state.

Amblyscirtes linda Freeman. I have found this recently-described species at Hope Hill Farm during the last week of June and the first week of July. In this period (1945), I caught fifty individuals in a very small area near a waterfall, about a fourth-mile behind the house. I have also seen this species at Pinnacle Springs, and near Enders. Mr. Don B. Stallings has also sent me several individuals of this species from Cache, Okahoma.

Amblyscirtes belli Freeman. I have collected several individuals at Hope Hill Farm, Pinnacle Springs, North Little Rock, and Little Rock, during June to August.

Lerodea eufala (Edw.) A very common species over the entire state, during late summer and fall.

Lerodea l'herminier (Latr.) Common during June and July, over northern, central, and eastern Arkansas.

Calpodes ethlius (Cram.) I collected and reared several individuals of this fine species at North Little Rock, during July and August, 1930. Since that time, I have not seen any other individuals from Arkansas.

Panoyuina ocolo (Edw.) Two males of this species were collected along the Arkansas River, near North Little Rock,

during October, 1929. Since that time, I have seen no other Arkansas individuals of this species.

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## John Wright Glenn (1836-92), Early State Geologist of Texas

S. W. Geiser

The first State Geological Survey of Texas (the "Shumard-Moore-Buckley Survey") owed its existence to an act of the legislature of February 10, 1858. Its operations extended intermittently over the years from 1858 to 1867. The second geological survey (the "Glenn-Buckley Survey"), established by legislative act of August 13, 1870, extended its work from 1873 to 1875. Under the first survey, Dr. B. F. Shumard (1820-69) was State Geologist, from August 28, 1858 to about November 1, 1860, when he was removed by Governor Sam Houston. In April, 1861, he was reinstated to complete his final report. To replace Shumard, Dr. Francis Moore, Jr., was appointed State Geo ogist of Texas about November 11, 1860. Five months later (on April 8, 1861) the survey, under Moore, was suspended, owing to war conditions. It continued in suspense during the War. In November, 1866, Governor James W. Throckmorton appointed as State Geologist one S. B. Buckley, former emplovee of Dr. Shumard and Dr. Moore. This was done over the protest of every man of competence who had been in any way associated with the early (Shumard) survey.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup>A. R. Roessler, "Reply to the charges made by S. B. Buckley, State Geologist of Texas, in his official Report of 1874, against Dr. B. F. Shumard and A. R. Roessler." [Pamphlet, privately printed, New York, 1875.]