A BRIEF HISTORY OF LEPIDOPTEROLOGY IN ILLINOIS

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ABSTRACT.—Information is presented regarding the principal lepidopterists, past and present, who have worked in Illinois. The present location of their collections, if known, is given.

For several years, Dr. John C. Downey and the author have been collaborating in a distributional study of the butterflies of Illinois. During this project, much information concerning the history of butterfly collecting and study in Illinois has been obtained which, while too detailed for inclusion in a faunal check list, should be placed on record.

Mills (1958) and Ross (1958) present excellent accounts of the general history of biological research and faunistic surveys in the state. Their accounts do not make specific reference to butterflies, but several historical figures they discuss made important contributions to lepidopterology at an early period, when Illinois was still looked upon as the "West." A number of butterfly taxa were discribed from Illinois material during this early period; although some names are synonyms, many are still valid.

Botanical collecting took place in Illinois as early as 1795 (Jones and Fuller, 1955, p. 1), to which it is speculated that some entomological observations may well have been incidental. The earliest recorded butterfly observation and collecting was done by Edward Doubleday, an eminent English entomologist, who visited Illinois in the late autumn of 1837, during a two-year visit to the United States (1837-1838). He entered the state at Shawneetown, on the Ohio River, and made Salem, Carlyle and Belleville. From his way to St. Louis by way of Carmi, St. Louis he ascended the Mississippi River to Alton, thence up the Illinois River, passing Peoria, Peru and Ottawa, which he described. From the Illinois he reached Chicago, passing through Plainfield, and at Chicago he embarked on a lake vessel. His account of the trip (Doubleday, 1838) is delightfully written, but contains little entomological observation; it is mostly a commentary on the Illinois country, which was still in the stage of pioneer settlement at that early period. The insects which Doubleday collected during his journey are now in the British Museum.

The earliest resident worker to make significant contributions to the knowledge of the Illinois butterfly fauna was Benjamin Dann Walsh. The first official State Entomologist of Illinois, he began his studies in 1860 and continued then until his death nine years later. He was a correspondent of W. H. Edwards and supplied the latter with much Illinois material, from which Edwards described several butterfly taxa. These descriptions are among the earliest specific references to Illinois butterflies. The main portion of Walsh's collection, following his death, was deposited in the Chicago Academy of Sciences, where it was destroyed in the Chicago Fire of 1871. Some of it, however, had been retained by his successor as State Entomologist, William Le Baron, and became the nucleus of the present collection of the Illinois Natural History Survey. Although some of his material may even now be extant in that collection,

it is unfortunately unrecognizable, as many of the older specimens in the collection lack data.

Le Baron and Cyrus Thomas, the second and third State Entomologists of Illinois, published notes and incidental references to butterflies, chiefly from an economic point of view, in their official reports. Like those of Walsh, some of their specimens may still exist in the Natural History Survey collection, but cannot be identified.

G. M. Dodge lived and collected in Ohio Township, Bureau County, for some years before moving to Nebraska about 1874. His collecting furnished the basis for several records published by Edwards and Scudder, and he described *Hesperia illinois,* a synonym of *Euphyes bimacula* (Grote and Robinson), from Bureau County.

Charles E. Worthington of Chicago was a very active collector in northern Illinois in the 1870's and 1880's, but we have been unable to locate any biographical information about him. There is a letter in the Herman Strecker correspondence in the Field Museum of Natural History, which he wrote to Strecker on November 25, 1878, on the letterhead of J. B. Tascott and Sons, a paint manufacturer in Chicago; possibly Worthington was associated with this firm. He was the author of one of the two previously published lists of the butterflies of Illinois (Worthington, 1880). Like Walsh, he was a correspondent of W. H. Edwards, and provided material from which Edwards erected new butterfly taxa, among them *Cercyonis pegala olympus,* described from specimens reared from eggs sent to Edwards by Worthington from Chicago. Worthington himself proposed several new butterfly names, but all are synonyms with the exception of *Phocides pigmalion okeechobee.* We do not know the fate of his collection.

J. R. Muhleman collected in Macoupin County in the latter part of the 19th Century (Edwards, 1880: 113).

Thomas E. Bean lived at Galena, Jo Daviess County, in the late 1870's, and sent local material to Edwards, including a part of the type series of *Speyeria aphrodite alcestis.* Later he moved to Laggan (now Lake Louise), Alberta, continuing to supply material to Edwards from there.

George Hazen French served for many years on the faculty of Southern Illinois University at Carbondale, and did considerable local collecting. Some of his material is extant in the Field Museum of Natural History, the Illinois Natural History Survey, and the American Museum of Natural History, but none remains at the University. Although much of his taxonomic work was with the moths, he prepared the first published list of Illinois butterflies (French, 1879), in the form of a key to 113 species. An enlargement of this list formed the nucleus of his well-known popular manual "Butterflies of the Eastern United States" (French, 1885) which he produced while at Carbondale.

C. V. Riley lived in Illinois between 1860 and 1868, but appears to have done little if any butterfly work during that time.

W. E. Longley collected, mostly in and near Oak Park, at least between 1869 and 1905. A few Longley specimens are in the Field Museum, the Illinois Natural History Survey, the Carnegie Museum, and the United States National Museum.

Augustus H. Mundt collected at Fairbury, Livingston County, during the 1870's and 1880's. He corresponded and exchanged butterflies with Edwards, and published several short articles during that period. A biographical sketch was published by the present author (Irwin, 1966).

Selim Hobart Peabody taught high school physics in Chicago between 1865 and 1871, and from 1874 until 1878; in the interim, he served as professor of physics at the Massachusetts Argicultural College in Amherst. He came to the University of Illinois in 1878, and was Regent from 1880 until 1891. He too corresponded and exchanged butterflies with Edwards, and while in Chicago, wrote a popular book on insects for children (Peabody, 1869). His collection, including some of the butterflies he received from Edwards, is in the Natural History Survey, but is almost completely lacking in data.

A. J. Snyder, a high school teacher, collected during the 1890's, principally at Evanston. He published a local list (Snyder, 1896) and a revision of North American *Argynnis (Speyeria)* (Snyder, 1900). His collection was acquired by the Field Museum in 1904.

One of the largest and best-known collections of North American Lepidoptera was that of Dr. William Barnes of Decatur. At various times such prominent figures in American lepidopterology as Drs. James H. McDunnough, A. W. Lindsey and Foster H. Benjamin acted as curators of the collection. The emphasis of Dr. Barnes and his curators was on the butterflies of other parts of the United States, and largely on the moths. The collection was acquired by the United States National Museum in 1931.

Judge Richard M. Barnes, not related to the foregoing, collected in Marshall, Putnam and Woodford counties from the early 1920's until about 1944. It appears that he had other individuals, not themselves lepidopterists, collecting for him in this area at the same time. Irwin (1966) gave an account of his life and the disposition of his collection, the largest part of which is in the Illinois State Museum, with most of the remainder in the Illinois Natural History Survey.

Charles Robertson of Carlinville, a hymenopterist, made an insect collection from that area during the latter 19th Century. This collection, including many butterflies, is now in the Illinois Natural History Survey.

The collection of Andreas Bolter, principally of Lepidoptera and Coleoptera, is also in the Survey. It contains some interesting state records, but like many of his contemporaries, Bolter placed inadequate data on his specimens.

W. A. Nason of Algonquin also assembled a general collection of the insects of that area, which is in the Natural History Survey. His data are generally adequate.

The acknowledged dean of Illinois lepidopterists for many years was Alex K. Wyatt (Alexander Kwiat) of Chicago. He commenced his collecting activities as a young man about 1896 and continued them until the late 1950's. Wyatt's contributions to the study of Lepidoptera are extensive and well known. He served for a number of years as research associate at the Field Museum. He specialized in the Noctuidae, but his butterfly collecting, mostly in the Chicago area, yielded many rarities for the state. He turned over his fine collection to the Field Museum in 1957, incorporating it himself into the general study collection. Wyatt died May 14, 1971, at the age of 92.

A. G. Lauck collected near Alton for a number of years. His collection was acquired by Colin W. Wyatt of Surrey, England.

Oliver S. Westcott was a high school teacher in Chicago, and served for many years as principal of what is now Waller High School. He form-

ed a large insect collection, which was deposited in the State College of Washington at Pullman (Anonymous, 1920). An elementary school in Chicago now bears his name.

John L. Healy of Chicago was an organizer of the old Chicago Entomological Society and was its president at the time of his death in 1926. He had placed his collection in the Chicago Academy of Sciences shortly before his death (Wyatt, 1926).

Other collectors active in Illinois early in the present century, mostly in the Chicago area. included E. F. Lustig, A. Sala, A. Herz and A. L. McElhose, whose collections are in the Field Museum, and Emil Beer, whose material has been deposited in the Illinois Natural History Survey. The collection of Adolph Mares was divided between the two institutions; his North American butterflies went to the Natural History Survey and the exotics to the Field Museum. W. J. Gerhard, for many years curator of insects at the Field Museum, and Emil Lilieblad, assistant curator of insects there, collected Lepidoptera in the Chicago area and elsewhere in Illinois, although both were specialists in other orders. Early collectors about whom relatively little is presently known were E. B. Chope, C. Krueger and J. Tough; some of their specimens are in the Field Museum.

Leonard S. Phillips of Wheaton was an active collector in many parts of Illinois until his untimely death in 1968. Most of his collection was presented to Buena Vista College, in Storm Lake, Iowa; but a portion of it is still in the hands of Mrs. Phillips at the present time.

Dr. Charles L. Remington of Yale University collected and studied the butterflies of Elsah, Jersey County, from 1939 until 1943 (Remington, 1943).

Among presently active Illinois workers, Murray O. Glenn of Henry is prominent. He has collected in that area since 1913. Most of his research involves the microlepidoptera, of which he has a superb collection, but he also possesses a good local reference collection of butterflies.

Maurice L. Bristol of Elgin has an excellent collection; he has turned up a number of very interesting records in that area, including most of the known Illinois specimens of *Calephelis muticum* McAlpine.

Dr. John C. Downey was on the faculty of Southern Illinois University at Carbondale from 1956 until 1968, and he and his students collected intensively in southern Illinois. Their collections have been deposited at the University, and are the foundation of our knowledge of the present-day butterfly fauna of the lower third of the state.

The present author has collected in Illinois since 1941, principally in La Salle and Livingston counties near Streator and in the Chicago area, but has made collecting trips to all parts of the state. He has specialized in the study of Illinois butterfly distribution. Nearly all of his collection was turned over to the Natural History Survey in 1970.

Ogden T. Plumb of Streator collected in that area between 1942 and 1956, in collaboration with this author. His collection was acquired by the author and is now in the Natural History Survey.

Gary McCoy, who collected in the Streator area between 1962 and 1968, contributed many valuable records to the Illinois butterfly distributional study. Some of his material was obtained by the author and is now in the Natural History Survey, but most of it remains in McCoy's possession.

Theodore Ellis, Jr. of Danville has collected in that area for many years;

his records include the most recent Illinois capture of *Speyeria diana* (Cramer).

Other active collectors in Illinois include Richard A. Arnold of Hinsdale; Jackson Boughner of Chicago; Thomas G. Brady of La Grange Park; Patrick J. Conway of Chicago (Illinois material largely from Mercer County); Gregory Nielsen of Chicago; V. G. Sasko of Chicago (very large worldwide collection); Norman G. Seaborg of Lockport; and Thomas Taylor of Peoria (excellent representation from Peoria and Mason counties).

The author is aware that the above is not a complete account of all who have collected and studied Illinois Lepidoptera. Doubtless some collectors of an earlier day have been overlooked, while of present-day collectors and members of the Lepidopterists' Society who have not been mentioned, some he has not had the privilege of knowing personally and does not know what form their studies of the Lepidoptera have taken.

Literature Cited

Anonymous, 1920. Oliver Spink Westcott. Ent. News 31: 119-120.

Doubleday, Edward, 1838. Communications on the natural history of North America. Entomological Magazine 5: 199-206, 269-300.

Edwards, W. H., 1880. On certain species of Satyrus. Canad. Ent. 12: 109-115.

French, George H., 1879. Analytical tables of the butterflies of Illinois. pp. 30-42. *In* Annual report of the Principal of the Southern Illinois Normal University, with the accompanying reports of the several professors. Observer Print, Carbondale, Illinois. 44 pp.

_____. 1885. The butterflies of the eastern United States. J. B. Lippincott, Philadelphia. 402 pp.

Irwin, Roderick R., 1966. Notes on W. H. Edwards specimens in two midwestern collections. Jour. Lepid. Soc. 20: 156-162.

Jones, George N., and George D. Fuller, 1955. Vascular plants of Illinois. Museum Scientific Series, Vol. VI. University of Illinois Press, Urbana, and Illinois State Museum, Springfield. xii + 593 pp. 1375 maps.

Mills, Harlow B., 1958. From 1858 to 1958. *In* A century of biological research. Ill. Nat. Hist. Survey Bull. 27: 85-103.

Peabody, Selim H., 1869. Cecil's book of insects. Clarke and Company, Chicago. 228 pp.

Remington, Charles L., 1943. The Rhopalocera of Principia College. Trans. Ill. State Acad. Sci. 36: 179-180.

Ross, Herbert H., 1959. Faunistic surveys. *In* A century of biological research. Ill. Nat. Hist. Survey Bull. 27: 127-144.

Snyder, Arthur J., 1896. Local list. Ent. News 7: 99-103.

_____. 1900. The argynnids of North America. Occas. Mem. Chicago Ent. Soc. 1: 27-38.

Worthington, Charles E., 1880. A list of diurnal lepidoptera inhabiting the state of Illinois. Canad. Ent. 12: 46-50.

Wyatt, A. K., 1926. [John L. Healy]. Ent. News 37: 128.

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