

Long-lost holotypes and other forgotten treasures in the Ralph L. Chermock collection, with biographical notes

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Ralph Lucien Chermock (1918-1977) (Fig. 1) and his older brother, Franklin (Frank) Hugo Chermock (1906-1967), described over 50 taxa of Lepidoptera between 1927 and 1963. In 1980, Frank's Lepidoptera collection of over 56,000 specimens (Fig. 13) was acquired by the Allyn Museum of Entomology (Sarasota, Florida; AME) (Anonymous 1980, Miller 1983). The holdings of the Allyn Museum were transferred in 2004 to the new McGuire Center for Lepidoptera and Biodiversity (Florida Museum of Natural History, Gainesville, Florida; MGCL). Together, the Chermock brothers coauthored several original descriptions. Frank was the senior author of nearly all those descriptions, thus it was assumed that any surviving holotypes would be preserved in his collection. However, the holotypes of *Cercyonis alope ochracea* and

Cercyonis alope carolina were not received with the rest of Frank's material. Miller and Brown (1981) and Pelham (2008, 2014) referred only to syntypes of these taxa at AME and MGCL. I failed to find either of these holotypes during an exhaustive search of MGCL in 2014. As defined by the Code (ICZN 1999), a holotype represents the single specimen "designated or otherwise fixed as the name-bearing type of a nominal species or subspecies when the nominal taxon is established." The holotype essentially embodies the concept of a species or subspecies as perceived by its author(s). The rediscovery of "lost" holotypes is of tremendous importance.

For many years, Ralph Chermock served as the director of the Alabama Museum of Natural History (UANH) at the University of Alabama. Ralph's Lepidoptera collection was bequeathed to the museum upon the death of his widow in 1992. The donation of the collection was not well publicized, thus few researchers know of its existence. Bright and Ogard (2010) and Bright et al. (2013) mentioned the collection, but access was restricted under previous museum management. Through the kind hospitality of staff members Lydia Ellington and Mary Beth Prondzinski, my wife and I visited the museum in early December 2014. Within minutes, I located the missing *Cercyonis* holotypes, which I will soon figure in a forthcoming paper. It is thought that no other lepidopterists have examined the collection since it arrived at UANH.

Estimated to comprise 30,000 specimens, Ralph Chermock's Lepidoptera collection is currently stored on the third floor of Mary Harmon Bryant Hall (formerly the Scientific Collections Building), next door to Smith Hall, where the Alabama Museum of Natural History is housed. During Ralph's tenure at UA, the collection was kept in room 318 of nearby Nott Hall, where the Department of Biology was located for many years (Anonymous 1957). Representing the largest assemblage of terrestrial insects at the university, Ralph's collection is preserved in ten steel cabinets (Figs. 2, 3) containing over 200 of his custom-made wooden drawers, which are still arranged as he had left them with specimens pinned in tight overlapping columns (Figs. 4-6). Most of the material is North American, but a sizable number of foreign species are also represented. Many of the specimens bear printed labels reading "R. L. Chermock Collection" or "Chermock Collection" (Fig. 5, inset). Two cabinets of drawers hold thousands of papered specimens awaiting preparation (Fig. 7). Despite being

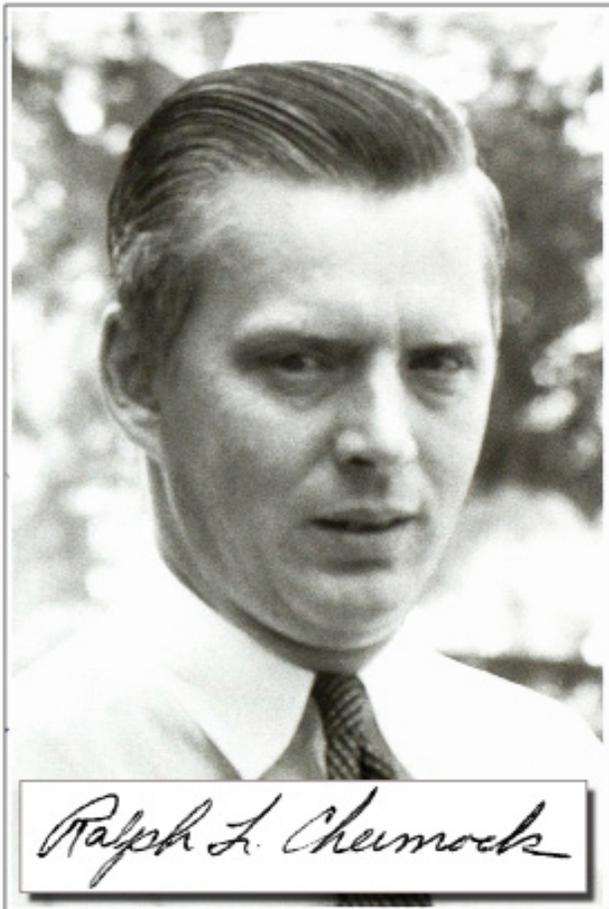


Fig. 1. Ralph L. Chermock, 1961 (courtesy UA Museums). His signature is from a document signed in 1950.



Figs. 2-9. The R. L. Chermock collection. 2) Collection sign. 3) Steel cabinets containing the collection. 4) Drawers in cabinets. 5) Pierid butterflies.* 6) Lycaenid butterflies,* with Chermock's printed specimen label. 7) Drawer of papered specimens. 8) Holotype and "allotype" of *L. e. appalachia*. 9) Holotype and "allotype" of *E. r. cheneyorum*. (*Courtesy UA Museums).

moved a number of times during and after Ralph's lifetime, the collection is in very good condition.

In addition to the *Cercyonis* types, Ralph's collection contains at least two other "lost" holotypes: those of *Letho eurydice appalachia* R. Chermock (= *Letho a. appalachia*) and *Euptychia rubricata cheneyorum* R. Chermock

(= *Megisto r. cheneyorum*). Miller and Brown (1981) suggested that the holotype of *appalachia* may be in the "R. Chermock colln," but they did not specify where the collection was located (it was still in the possession of his widow at that time). They did not find the holotype of *E. r. cheneyorum*, nor did they suggest where it may be. Pelham (2008, 2014) stated that the holotype of *appalachia*

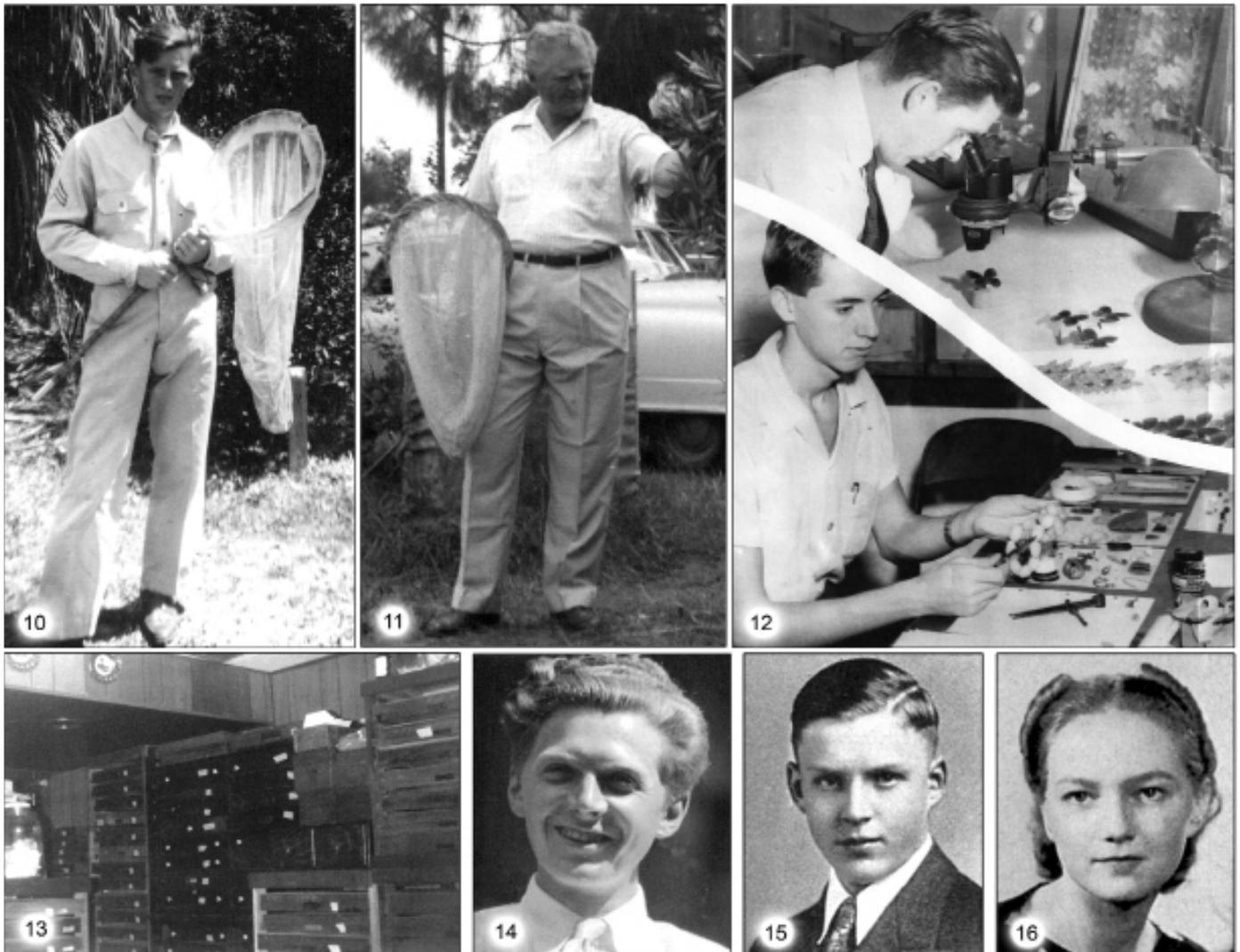
is probably at MGCL, while that of *cheneyorum* may be at Cornell University (Ithaca, New York), where Ralph received his doctorate degree (see below). The original descriptions of these taxa did not include illustrations, thus I figure the male holotypes and female "allotypes" for the first time (Figs. 8, 9). Although no other missing Chermock holotypes were found in the collection, paratypes of several Chermock taxa are present, as are a few paratypes of other taxa that Ralph received from correspondents.

Because the Chermocks described so many taxa, it is important to understand how Ralph personally arranged and interpreted specimens in his collection. Taxa are tightly grouped, often by locality, above typescript identification labels. Type specimens are denoted by colored labels: red for holotypes/paratypes and blue for topotypes. Small type labels are also affixed to the specimens themselves.

Biography of Ralph L. Chermock (1918-1977)

Masters (1968) offered a brief biography of Frank Chermock (Figs. 11, 14), but no similar account of Ralph's life was published. The following information was extracted from newspaper articles, including his obituary (Anonymous 1977), and other published sources, including Cattell (1949, 1955, 1965) and Martindell (1966, 1968). Several unpublished documents were also consulted.

Ralph L. Chermock was born 25 August 1918, in Pittsburgh, Pennsylvania, to parents Hugo Lucien Chermock (1880-1958) and Barbara H. Chermock (née Merhaut) (1885-1970). The Chermocks were relatives of the Austrian agronomist Erich von Tschermak-Seysenegg (1871-1962), who was a co-rediscoverer of Mendelian genetics (Wilson 1994). Hugo Chermock collected insects for many years (Chermock & Chermock 1940) and undoubtedly cultivated



Figs. 10-16. The Chermocks. 10) Ralph L. Chermock, April 1943, Miami Beach, FL.* 11) Franklin H. Chermock, c. 1955.* 12) R. L. Chermock: top, at UA 1954; bottom, at home c. 1936 (Courtesy UA Museums). 13) F. H. Chermock collection, c. 1975.* 14) F. H. Chermock, c. 1940.* 15) Ralph L. Chermock, 1935 (AHS 1935). 16) Otilie D. Chermock (Cheney), 1937 (MLHS 1937). (*Courtesy L. C. Hassinger).

his sons' interest in entomology. Like his brother, Ralph became a student of natural history at a young age (Fig. 12, bottom). In 1934, he won second prize in a contest to identify mounted specimens of trees, insects, birds, and animals (Anonymous 1934). Ralph was a popular senior at Allegheny High School in Pittsburgh (Fig. 15), where he was an honor roll student, vice president of his room, a member of the yearbook staff, and "a whiz" at physical geography (AHS 1935). By 1940, Ralph's Lepidoptera collection reportedly comprised 90,000 specimens (Anonymous 1940), though this may be an exaggeration.

Ralph attended the University of Pittsburgh, earning a bachelor's degree with honors in zoology in 1939. While a senior at UP, he became engaged to Otilie Diana Cheney (Fig. 16), who was a sophomore at the school. In 1939, Ralph received a master's degree in zoology from Duquesne University in Pittsburgh. His first paid teaching position was as a biology instructor during 1941-1942 at Beaver College in Glenside, Pennsylvania (renamed Arcadia University in 2001). In 1942, Ralph was elected as the eastern section vice-president of the Pennsylvania Academy of Science.

Ralph enlisted in the U.S. Army Air Forces (USAAF) in July 1942 and served in Miami, Florida. He was promoted to the rank of sergeant by April 1943. He and Otilie married on 11 October 1943 and they had one child, Claudia Diane Chermock, born 16 November 1944. While stationed in Florida, Ralph could not resist the tropical surroundings and he took every opportunity to collect butterflies, even in his uniform (Fig. 10).

Following his discharge from the military in January 1946, Ralph enrolled at Cornell University, where in 1947 he received a Ph.D. with a major in entomology and a minor in vertebrate taxonomy. His dissertation, *A Generic Revision of the Limnitiinae of the World*, reflected his interest in Lepidoptera and was later published (Chermock 1950). Soon after graduating from Cornell, Ralph accepted a position as an assistant professor of biology at the University of Alabama. He became an associate professor in 1951 and received full professorship in 1957. The university was proud to have such a distinguished lepidopterist on staff, boasting that he possessed the largest private collection of butterflies in North America (Anonymous 1957) (Fig. 12, top).

Ralph was a charter member of the Lepidopterists' Society, whose membership directories listed his interests as Satyridae, taxonomy, and biogeography. From 1948 to 1953 he served as the society's first southeastern zone coordinator for the annual Field Season Summary. In 1949, he agreed to serve as the satyrid section editor for a series of monographs on Nearctic butterflies to be published by the Lepidopterists' Society (Brown 1949). Unfortunately, this project was short-lived and never completed. Five years later, Ralph received a University Research Committee grant to study the distribution and

classification of the butterflies of the southeastern United States (Anonymous 1954).

Shortly after joining the UA faculty in 1947, Ralph began an intensive program to study Alabama's flora and fauna. He founded and was the first curator (1947-1957) of the school's fish collection. His interest in herpetology inspired him to author the booklet *A Key to the Amphibians and Reptiles of Alabama* (Chermock 1952). Through his efforts, UANH added about 15,000 herpetological specimens, 25,000 fish, 1200 mammal skins, 300 birds, 10,000 insects, and 5000 plants (Harris 2006). Ralph established the school's herbarium and personally contributed several thousand specimens. He acted as the director of both the Marine Science Laboratory and the Tanglewood Field Laboratory, and was assistant director of the University of Alabama Arboretum. He was a part-time director of the Arts and Sciences Extension Service and served as the president of the Alabama Academy of Sciences 1955-1956. From 1959 to 1961, Ralph was a program director for the National Science Foundation. He was instrumental in adding the first conservation courses to the UA curriculum (Anonymous 1957) and was active for many years in the local Black Warrior Council of the Boy Scouts of America in Tuscaloosa. While juggling his many responsibilities, he somehow managed to make a brief trip to Costa Rica in 1961 (SSB 1968).

After serving as an honorary curator of UANH for several years, Ralph was formally appointed as its director in 1961. This position included overseeing Mound State Monument at Moundville, Alabama (Anonymous 1961). Ralph strove to modernize the museum and enhance its public appeal. He updated exhibits and introduced many new displays to its galleries, which attracted more than 100,000 visitors annually (Anonymous 1962, Brown 1962, Looser 1962).

An evolutionary entomologist, Ralph considered Ernst Mayr's *Systematics and the Origin of Species* (1942) to be a "sacred text" (Wilson 1994). With this book he introduced the concept of evolution to multitudes of students at UA. One such student would become the celebrated biologist and ecologist E. O. Wilson (1929-), who received his bachelor's and master's degrees from the school in 1949 and 1951, respectively. Wilson (1994) described the then 30-year-old Ralph as "physically impressive, an amateur boxer with a compact gymnast's body and thick arms, who occasionally performed one-arm pushups on his office floor to intimidate his followers." According to his Army records, Ralph was of average height, standing 5 feet 9 inches tall. Wilson (1994) added that Ralph was "a tense man who chain-smoked and often snorted and giggled when he laughed," and had "the disconcerting habit of listening intently to everything you had to tell him, head cocked and wearing an inviting but quizzical smile, like a psychiatrist or a skeptical job interviewer." Although Ralph professed, "You're not a real biologist until you know the names of ten thousand species" (Wilson 2006), he probably failed to personally achieve such an idealistic obligation.

Nonetheless, Ralph strongly believed in the value of field work. His students, who reverentially christened themselves "the Chermockians," traversed Alabama in search of new specimens of amphibians, reptiles, and insects (Wilson 2006). Although Ralph took every opportunity to grind his students' egos down to size, E. O. Wilson regarded him as a mentor and one of his best instructors. His teaching prowess aside, Ralph evidently did not care to have his portrait taken, even as a youth (Fig. 15). He rarely smiled in photographs and his expressions convey annoyance or utter disdain (Fig. 1).

Ralph witnessed firsthand the social and political turmoil that erupted during the 1960s at the University of Alabama (see Tilford 2014). On 11 June 1963, Alabama Governor George C. Wallace defied U.S. policy on racial integration in public schools by performing his infamous "Stand in the Schoolhouse Door" on the steps of Foster Auditorium, just a short distance south of Ralph's office in Nott Hall. Possibly motivated by continuing unrest, Ralph and his family relocated to Iowa in 1966, where he accepted a position as chairman and professor of the Department of Biology at Parsons College in Fairfield.

After a long career in academia, Ralph returned to Alabama in 1973 to head the newly established Environmental Division of the Geological Survey of Alabama, a job he held until his death. This division was responsible for gathering, analyzing, interpreting, and disseminating data on plants and animals and their environments. Not surprisingly, these activities mirror Ralph's own endeavors as a scientist.

Ralph authored and coauthored over 50 scientific papers on plants, animals, and ecology. He was a member of several honor societies, including Beta Beta Beta, Sigma Xi, Pi Tau Phi, Phi Kappa Phi, and Alpha Epsilon Delta. In addition to the Lepidopterists' Society, he was a member of the Entomological Society of Washington, Lepidoptera Research Foundation, Entomological Society of Canada, Society for the Study of Evolution, Society of Ichthyologists and Herpetologists (vice pres. in 1942), and the American Association of Museums. He was also an honorary member of the American Museum of Natural History. His interests included physiology of the central nervous system and micro-techniques in biology. An endemic Alabama fish, a rare species of salamander, and a species of beetle in Arizona are named *chermocki* in Ralph's honor.

Only 59 years old, Ralph died after an extended illness on 11 November 1977 at Druid City Hospital in Tuscaloosa. He was buried at Memory Hill Gardens, Tuscaloosa. Although Otilie Chermock continued to keep her late husband's Lepidoptera collection at home, she welcomed anyone who wished to view his specimens. After her death, the collection was transferred to UANH, where it was received in February 1993. In recognition of Ralph's many contributions to UA, the school established the Ralph L. Chermock Prize in 1998. Awarded each year, it recognizes

the most outstanding graduate student in natural history or evolutionary biology.

Ralph's tenure at UA benefited greatly from his wife's involvement. Otilie was born in Passaic, New Jersey, on 19 May 1920. She attended Mt. Lebanon High School in an affluent suburb of Pittsburgh. She shared Ralph's interest in natural history and early on set her sights on being a museum curator (Anonymous 1938). She attended the University of Pennsylvania, but moved with her family to Tuscon, Arizona, after her sophomore year. Otilie earned a bachelor's degree with honors in 1943 from the University of Arizona, where she served as a teaching fellow during the 1943-1944 school year (Cook 1968). She received a master's degree from the University of Alabama in 1950. From 1955 to 1966, Otilie was employed as an associate professor of biology at Stillman College, Tuscaloosa. She and Ralph travelled widely in search of natural history specimens. Many of the plants and animals they collected are preserved at UANH. Butterflies that she collected in Arizona were given to Ralph (Chermock 1954). Otilie authored and coauthored several articles on butterflies in the *Canadian Entomologist* and *Lepidopterists' News*. Her other interests included field biology, gardening, and reading (Cook 1968). Otilie died on 21 November 1992 in Tuscaloosa.

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Literature Cited

- AHS [Allegheny High School]. 1935. Wahoo. Annual of the Class of June 1935. Allegheny High School, Pittsburgh, Pennsylvania. [123] pp.
- Anonymous. 1934. Nature study test winners are named. *Pittsburgh Post-Gazette* (Pittsburgh, Pennsylvania). 22 June:8.
- _____. 1938. Pitt girl honor student wants to become curator. *Pittsburgh Press* (Pittsburgh, Pennsylvania). 28 Aug:6.
- _____. 1940. Two brothers foremost butterfly collectors. *Evening News* (Harrisburg, Pennsylvania). 22 Feb:18.
- _____. 1954. Distribution of butterflies. *Tuscaloosa News* (Tuscaloosa, Alabama). 17 Mar:12.
- _____. 1957. Famed lepidopterist is on university faculty. *Tuscaloosa News* (Tuscaloosa, Alabama). 19 May:12.
- _____. 1961. Dr. Chermock to direct Natural History Museum. *Tuscaloosa News* (Tuscaloosa, Alabama). 25 Oct:1.
- _____. 1962. Alabama museum adds new items. *Tuscaloosa News* (Tuscaloosa, Alabama). 15 Apr:21.
- _____. 1977. Deaths and funerals. Dr. Ralph Chermock. *Tuscaloosa News* (Tuscaloosa, Alabama). 15 Feb:9.
- _____. 1980. Allyn Museum nets big find. *Sarasota Herald-Tribune* (Sarasota, Florida). 26 Oct:E1.

- Bright, S. & P. H. Ogard. 2010. Butterflies of Alabama: glimpses into their lives. Univ. Alabama Pr., Tuscaloosa, Alabama. xvii+486 pp.
- Bright, S., V. Charny, & W. M. Howell. 2013. Butterflies: new records for Alabama. *J. Alabama Acad. Sci.* 84:37-42.
- Brown, E. 1962. UA Museum of Natural History takes on exotic look of Pacific's far reaches. *Birmingham News* (Birmingham, Alabama). 14 Oct:18.
- Brown, F. M. 1949. "The Nearctic butterflies." *Lepid. News.* 3:13.
- Cattell, J. (ed.). 1949. American men of science: a biographical directory. Eighth edition. Science Pr., Lancaster, Pennsylvania. 2836 pp.
- _____. 1955. American men of science: a biographical directory. Ninth edition. Vol. II. Biological sciences. Science Pr., Lancaster, Pennsylvania. 1276 pp.
- _____. 1965. American men of science: a biographical directory. The physical & biological sciences. A-C. Eleventh edition. R. R. Bowker Co., New York, New York. x+1089 pp.
- Chermock, F. H. & R. L. Chermock. 1940. New melanic moths from southwestern Pennsylvania. *Proc. Pennsylvania Acad. Sci.* 14:138-140.
- Chermock, R. L. 1950. A generic revision of the Liminitinae of the world. *Amer. Midl. Nat.* 43:513-569.
- _____. 1952. A key to the amphibians and reptiles of Alabama. *Geol. Surv. Alabama, Mus. Pap.* 33:1-88.
- Chermock, O. D. 1954. New records of Rhopalocera from southeastern Arizona. *Lepid. Soc. News* 8:25.
- Cook, R. C. (ed.). 1968. Who's who in American education. 1967-68. 3 vols. Who's who in American Education, Inc., Hattiesburg, Mississippi. 962 pp.
- Looser, D. 1962. At UA museum: past comes alive. *Tuscaloosa News* (Tuscaloosa, Alabama) 8 Sept:4.
- Harris, P. 2006. UAIC personnel. Webpage: <http://uaic.as.ua.edu/Personnel.html>.
- ICZN [International Commission on Zoological Nomenclature]. 1999. International code of zoological nomenclature. Fourth edition. *Intl. Trust Zool. Nomen.*, London. xxix+306 pp.
- Martindell, J. (publisher). 1966. Who's who in America: a biographical dictionary of notable living men and women. Vol. 34 (1966-67). Marquis - Who's Who Inc., Chicago, Illinois. xviii+2472 pp.
- _____. 1968. Who's who in America with world notables: a biographical dictionary of notable living men and women. Vol. 35 (1968-69). Marquis-Who's Who Inc., Chicago, Illinois. 2563 pp.
- Masters, J. H. 1968. In memoriam: Franklin H. Chermock 1906-1967. *Bull. Assoc. Minnesota Entomol.* 2:21-23.
- Mayr, E. 1942. Systematics and the origin of species from the viewpoint of a zoologist. Columbia Univ. Pr., New York, New York. xiv+334 pp.
- Miller, L. D. 1983. Chermock, Hovanitz and Weber collections donated to Allyn Museum. *J. Lepid. Soc.* 37:317-318.
- Miller, L. D. & F. M. Brown. 1981. A catalogue/checklist of the butterflies of America north of Mexico. *Lepid. Soc. Mem. No.* 2. vii+280 pp.
- MLHS [Mount Lebanon High School]. 1937. The Lebanon Log. The annual publication of the students of Mount Lebanon High School for the year 1937. Vol. VII. Mount Lebanon, Pennsylvania. 96 pp.
- Pelham, J. P. 2008. A catalogue of the butterflies of the United States and Canada, with a complete bibliography of the descriptive and systematic literature. *J. Res. Lepid.* 40:i-xiv, 1-652.
- _____. 2014. A catalogue of the butterflies of the United States and Canada, with a complete bibliography of the descriptive and systematic literature. Revised 22 June 2014. *In* Warren, A. D., K. J. Davis, E. M. Stangeland, J. P. Pelham & N. V. Grishin, *Butterflies of America*. Webpage: www.butterfliesofamerica.com.
- SSB [Subcommittee on Systematics and Biogeography]. 1968. Indexed list of North American systematists interested in the IBP. *Div. Biol. Agric., Nat. Acad. Sci.-Nat. Res. Council*, Washington, D.C. 422 pp.
- Tilford, E. H. 2014. Turning the tide: the University of Alabama in the 1960s. Univ. Alabama Pr., Tuscaloosa, Alabama. xviii+252 pp.
- Wilson, E. O. 1994. *Naturalist*. Island Pr., Washington, D.C. xii+380 pp.
- _____. 2006. *The creation: an appeal to save life on earth*. W. W. Norton & Co., Inc., New York, New York. viii+192 pp.



Neominois ridingsii curicata male (left) and *N. ridingsii coloalbiterra* male (right) (Nymphalidae); see article page 86 (photo by James Scott).