Journal of the Lepidopterists' Society 44(1), 1990, 45–55

OBITUARY

JAMES WILSON TILDEN (1904–1988) A REMEMBRANCE

J. W. "Bill" Tilden passed away on 27 December 1988. He will be missed in many ways by all who knew him. Bill was a walking encyclopedia of entomological information. A simple question about insects from student or colleague would invariably bring an informed and detailed response replete with facts and figures. Arnold "Bud" Applegarth reported that his stock answer for students asking difficult questions was always, "Go down the hall and ask Dr. Tilden. He'll be able to tell you that." Bill's expertise was not confined to insects, however. He was also knowledgeable about other invertebrates, birds, plants, rocks and minerals, and vector control as well.



J. W. "Bill" Tilden, 1986 (photograph by Hazel Tilden).

Bill was possessed of an inquiring mind from an early age and his curiosity knew no bounds. His personal living "computer" was loaded with information on many subjects beyond biology. How broad the spectrum and how readily facts were recalled was impressed upon my wife Eileen and me during the final months of work on A Field Guide to Western Butterflies. During this period Bill drove down from San Jose to Watsonville almost every day and we put in long hours on the manuscript, legends, and plates. However, we did take time out to eat and butterflies were ignored for a time. Lunchtime conversation ranged far and wide. Among the favored topics were the big bands and their vocalists, early radio programs, classical music and opera, and movies of the 20's, 30's, and 40's. Early writers and their publications came in for discussion often. Because of the fruit we were eating for lunch, old, rare varieties of apples, pears, plums, and peaches were remembered. Bill had been a "fruit tramp" for several years starting in the late 20's and I was now growing many of those old varieties remembered from childhood in Placer County.

Regardless of the subject that came up, Bill was able to reach back into the deep recesses of his memory and resurrect the basic facts about the specific subject under discussion. For a popular song of the 20's, 30's, or 40's he might recall such things as the band and vocalist responsible for its popularity, the year it was introduced or revived, the names of the members of the band and instrument each played, and in many cases the name of the hotel or nightclub where the group played regularly. Bill learned to play the slide trombone in the early 20's, joined the San Francisco Musician's Union in the late 20's, and during the 30's and 40's played professionally from time to time with jazz bands in the Monterey Bay area, the San Francisco Bay area, and at Lake Tahoe.

Rarely did a meal go by without Bill being reminded of a poem or a passage from a writer such as Burns, Kipling, Tennyson, Whittier, Shakespeare, or perhaps Robert W. Service. After a moment Bill would recite the passage word for word. As a result of this indulgence in nostalgia, Eileen and I began to keep what we called our "Ask Bill" list of questions on a pad near the phone. So we, along with his many friends, miss Bill in many ways.

Details concerning the Tilden family, Bill's early life, education, and professional career have appeared in the March/April 1989 issue of the *News of the Lepidopterists' Society* (Smith, A. C., 1989, No. 2, p. 38) and will not be repeated here.

Bill started collecting Lepidoptera seriously in Santa Cruz in 1927 through the influence of E. A. Dodge and J. P. Strohbeen. His first exchange of specimens took place with Hugh Gibbon of Miniota, Manitoba, Canada a few years later. When I started corresponding and exchanging with Bill in 1933 he sent me his "Exchange list of duplicates," which then consisted of 158 species of butterflies, 10 moths (saturniids and sphingids), many skippers, and many noctuids, geometrids and micros. At that time he was also corresponding and exchanging specimens with W. D. Field and V. F. Calkins in Kansas, A. E. Brower and L. P. Grey in Maine, O. E. Booth in Iowa, H. Glazbrook in Texas, and Lowell Hulbirt and Dale Bulgrin in California, among others. I first met Bill in the fall of 1933 when he was working in a cannery in San Leandro.

In 1933 Bill and his brother Tom went to work collecting insects of all orders in large numbers for L. M. McQuesten of the National Insect Company, Davis, California. Mr. McQuesten then made up a set of ten large Riker mounts to demonstrate the different orders of insects, which he sold to schools. Bill continued to supply insect specimens to McQuesten from time to time for several years.

Again in the summers of 1963 and 1964 Bill took on a professional collecting job for the newly established California State College (now University), Hayward. He signed a contract to provide a synoptic collection of mounted and identified San Francisco Bay Region insects, and large numbers of mounted and preserved (in alcohol) specimens in certain orders for classroom use, about 4000 specimens altogether. For the most part, though, Bill collected butterflies, moths, and beetles for his own research and enjoyment and to discover and publish new information about their distribution, life history, ecology, habits, and habitats.

Bill had planned to go to the University of California in Berkeley when he graduated from high school in 1922 but that did not work out. Nevertheless he continued to hope that it would be possible to continue his education. Over the years several older friends, including Charles Bowles, M. Soutar, and Dr. Holman suggested repeatedly that he should get a college education. In the spring of 1938 Bill stopped by our apartment in San Jose. During the visit he asked us what we (I am not using the editorial plural, but the twin "we," as all events prior to 1944 included my twin brother, Edgar A. Smith) thought of San Jose State and especially its entomology courses. Needless to say, we praised everything about it highly, especially the teacher, Dr. Carl D. Duncan. We went on to tell him that the Pacific Coast Entomological Society was having its annual field trip meeting at Alum Rock Park, hosted by San Jose State's Comstock Entomology Club on the following Saturday—9 April 1938. We invited him to come and meet Carl Duncan. Bill came, we introduced him, and he and "Dunc" spent a good part of the afternoon getting acquainted. They took to each other at once. Bill was favorably impressed and soon made his decision



Spring collecting trip to Patagonia Mountains, Arizona, 1939. From left to right: Ed Smith. J. W. "Bill" Tilden, Darrel Welch, and Art Smith, standing in front of the 1937 Chevrolet that was flooded while crossing the Sonoita River (photograph by Art and Ed Smith).

to attend San Jose State. We invited Bill to share our apartment and he moved in with us for his freshman year and our senior year.

In the late 20's, the 30's, and early 40's, Bill managed to collect throughout most parts of California. By the late 30's he was also collecting in the adjacent states. As a matter of fact, one collecting expedition to Arizona during spring vacation in 1939 came very close to ending the careers of Bill Tilden as well as Art and Ed Smith and Darrel Welch. a volunteer assistant. We had had excellent weather and very good collecting in Sabino Canyon, Madera Canyon, and in the Nogales area. We then headed up a dirt road from Sonoita that wound up into the Patagonia Mountains along the Sonoita River. It was warm and sunny when we started and the stream we crossed and recrossed was only a few inches deep. As we proceeded higher into the mountains the sun disappeared, we saw a huge black cloud ahead to the south, and the stream crossings seemed to be a few inches deeper. Thunder and lightning accompanied by light rain then began. We came to a very broad crossing, but were cautious enough to stop, wade out and check the water depth. It only seemed deep enough to reach the running board at that time so we proceeded slowly in low gear. About midstream we could see the water rising rapidly on all sides. Suddenly the engine drowned out and we sputtered to a halt. We quickly put Darrel (the lightest person) behind the wheel with instructions to keep it in low gear and keep pressing the starter (in those days you pressed it with your foot). The remaining three of us had jumped out and were frantically pushing as hard as we could. By then the water was above our knees and a few moments later a crest brought it above our hips. With the combination of pushing and aid from the starter we finally made it to the other side just before the highest crest of the flash flood arrived. A few minutes later and we certainly would have been swept away and washed down the canyon. An hour later the sun was out and drying our belongings, which were spread all over the landscape. A ring of mud on the inside of the car right up to the lower edge of the windows showed how deep the water had been and how fortunate we had been!

Bill soon began to collect throughout the country and, in fact, everywhere he traveled. After signing the contract for the Peterson field guide to western butterflies, Bill began a program of extensive trips to visit the areas covered by the book—from the middle of Kansas to Hawaii, and from the Mexican border to Alaska and western Canada. During the period from 1969 to 1986 Bill, alone or with Hazel and sometimes Bruce as well, traveled more than 210,000 miles in their van on collecting and field survey expeditions. This included three trips to Alaska, and numerous trips to the states along the Mexican border, the northwest, the Rocky Mountains, and the prairie states. He visited every state and province in the area designated at least once and most of them many times.

During the 60's and 70's Bill collected many interesting butterflies in the Lower Rio Grande Valley of Texas. Among them were a number that represented new United States records for Mexican species. A representative collection of all those taken at the Santa Ana National Wildlife Refuge, Hildago County, Texas was deposited with the Refuge and has now been added to the National Museum of Natural History collection in Washington, D.C.

After Bill's heart surgery in 1971, I visited him at Stanford Hospital. He looked up at me from his hospital bed and said, "Well, Art, I guess I'll never collect another butterfly." And he didn't for some time. Then one day, parked by the roadside, Bill saw something "choice" (as he would say) fly across the road. He grabbed a net and said to Hazel, "If I can't go after that butterfly, life just isn't worth living." And off he went. He continued to collect until his legs failed to cooperate in 1986.

The J. W. Tilden Lepidoptera Collection was left to the California Academy of Sciences in San Francisco. Actually, Bill had been transferring portions of his collection to the Academy since 1946. The total number of Lepidoptera donated to the Academy to date is 43,547. The collection is very strong in North American butterflies, with Bill's favorite families, the Hesperiidae and the Lycaenidae, especially well represented. In the moths, the Saturniidae, Sphingidae, Arctiidae, and Noctuidae (especially the underwings) are most numerous. Many exotics from Southeast Asia, Europe, Japan, and Latin America are also included. Unmounted butterflies and moths in papers, numbering between five and six thousand specimens will also be turned over to the Academy. Insects of other orders and miscellaneous other terrestrial arthropods add another 1648 specimens to the collection.

The Tilden collection includes 95 paratypes in the families Papilionidae, Nymphalidae, Satyridae, Hesperiidae, Pieridae, and Lycaenidae. One is Mexican, five Canadian, and the remainder are from the United States.

The specimens (representing over 500 species) used to make the photographic illustrations for the plates in the Houghton Mifflin book, *A Field Guide to Western Butterflies* by J. W. Tilden and Arthur C. Smith, are being kept in a separate collection. Plate specimens from the Smith Collection, including the rare (only 10 others known) hybrid between the West Coast Lady and the Red Admiral, will go to the Academy at a later date.

The J. W. Tilden Coleoptera Collection of some 8000 specimens is now on permanent loan to the California Academy of Sciences and title will be transferred to the Academy at a future time. Approximately the same number of beetles had been presented by Bill to the Academy in earlier years, starting in 1946.

Bill was active in many organizations, environmental and historical, as well as biological in nature. In addition to The Lepidopterists' Society (Charter Member, 1947; President, 1978) he belonged to the Pacific Coast Entomological Society (Life Member, 1943; President, 1960), California Academy of Sciences (Elected Life Fellow, 1968), Entomological Society of America, Coleopterists' Society, Xerces Society, California Native Plant Society, Santa Cruz Bird Club (Honorary Member), Santa Clara Valley Audubon Society, Point Reyes Bird Observatory, Santa Cruz Museum Association, Sierra Club, Bohart Museum Association, Coyote Creek Riparian Station, San Jose Historical Museum Association, California Pioneers of Santa Clara County, Santa Cruz County Historical Trust, National Trust for Historical Preservation, Sigma Xi, and the Explorer's Club, as well as others.

NEW TAXA DESCRIBED BY JAMES WILSON TILDEN

Lepidoptera-Lycaenidae

- 1. Schellbach's Copper. Tharsalea arota schellbachi Tilden. 1955. TL: North Rim, Grand Canyon, Arizona.
- 2. Lembert's Hairstreak. Callophrys lemberti Tilden. 1963. TL: W. above Tioga Pass, Yosemite National Park, California.

VOLUME 44, NUMBER 1

- 3. Mansfield's Hairstreak. *Mitoura siva mansfieldi* Tilden. 1951. TL: Seven miles west of Simmler, San Luis Obispo Co., California.
- 4. Pallid Blue. Euphilotes rita pallescens (Tilden & Downey). 1955. TL: Little Granite Mtns., Dugway Proving Grounds, Tooele Co., Utah.
- 5. Boharts' Blue. *Philotiella speciosa bohartorum* (Tilden). 1968. TL: Briceberg, Mariposa Co., California.
- 6. Behr's Blue. *Glaucopsyche lygdamus incognita* Tilden. 1974. TL: Alum Rock Park, Santa Clara Co., California.

TAXA NAMED IN HONOR OF JAMES WILSON TILDEN

Lepidoptera-Nymphalidae

1. Basilarchia tildeni Field. 1934. TL: Vic. Lawrence, Kansas. [Now a synonym of arthemis astyanax (Fabricius)].

Lepidoptera-Hesperiidae

2. Hesperia comma tildeni Freeman. 1956. TL: Cherry Flat Reservoir, Santa Clara County, California.

Lepidoptera-Lycaenidae

3. Euphilotes enoptes tildeni (Langston). 1964. TL: Del Puerto Canyon, 22 mi. W. Patterson, Stanislaus County, California.

Coleoptera-Cerambycidae

4. *Tanyochraethes tildeni* Chemsak & Linsley. 1965. TL: Welder Wildlife Refuge, San Patricio County, Texas.

Lepidoptera-Gelechiidae

5. New Genus, Tildenia Povolny. 1967. Type Species-Tildenia glochinella (Zell. 1873).

Hymenoptera-Andrenidae

6. Andrena tildeni Ribble, 1974. TL: Soboda Hot Springs, Riverside County, California.

Lepidoptera-Gracillariidae

7. Cameraria tildeni Opler & Davis. 1981. TL: Kings Mountain, San Mateo County, California.

Additional new insect taxa associated with the name of J. W. Tilden will continue to appear in the literature for a time as work in progress is completed. These names will include patronyms and taxa carrying the name Tilden as co-author.

PRESENTATIONS BY J. W. TILDEN AT MEETINGS OF THE PACIFIC COAST ENTOMOLOGICAL SOCIETY: SUMMARIZED IN THE PROCEEDINGS, AND PUBLISHED IN THE PAN-PACIFIC ENTOMOLOGIST

- 1. 1942. Tilden, J. W. and E. G. Linsley. Range Extensions in Pleocoma. 18:39.
- 2. 1949. The Insect Fauna of Baccharis pilularis. 25:42. (Formal address.)
- 3. 1954. Philotes rita associated with Eriogonum wrightii. 30:84.
- 4. 1959. Alpine Butterfly Associations at Tioga Pass, Yosemite National Park. 35:56. (Formal address.)
- 5. 1964. Stylopized Wasp. 40:61.
- 6. 1967. Food Plant of Vanessa tameamea. 43:91.
- 7. 1967. The Kauai Green Sphinx Moth, Tinostoma smaragditis. 43:91.

SCIENTIFIC PAPERS, NOTES, AND BOOKS BY JAMES WILSON TILDEN

1940

1. Preliminary List of the Butterflies and Skippers of Santa Clara and Santa Cruz Counties, California (mimeographed). Natural Science Department, San Jose State College, San Jose, California.

1941

- 2. Collectors' Calendar for Santa Clara and Santa Cruz Counties, California, and Preliminary List of the Butterflies and Skippers of Santa Clara and Santa Cruz Counties. Entomologists' Exchange News 6(4):1–6.
- 3. Tilden, J. W. and G. S. Mansfield. Some Observations and Captures of California Lepidoptera. Pan-Pacific Entomologist XVII (3):113–114.

1942

- 4. *Erynnis lacustra* (Wright) from Near The Type Locality (Lepidoptera, Hesperiidae). Pan-Pacific Entomologist XVIII(1):8.
- 5. Tilden, J. W. and G. S. Mansfield. A Capture of *Lerodea eufala* Edwards at Light (Lepidoptera, Hesperiidae). Pan-Pacific Entomologist XVIII (1):26.
- 5. An Unusual Record for Ochlodes yuma (Edwards) (Lepidoptera, Hesperiidae). Pan-Pacific Entomologist XVIII(1):29.

1944

- 6. Tilden, J. W. and G. S. Mansfield. Notes on Three Species of *Coenonycha* Horn (Coleoptera, Scarabaeidae). Pan-Pacific Entomologist XX(3):115-117.
- 7. Breeding of *Phoebis sennae marcellina* Cram. in San Jose, California (Lepidoptera, Pieridae). Pan-Pacific Entomologist XX(3):115-117.

1945

- Notes on Redwood Cerambycidae (Coleoptera). Pan-Pacific Entomologist XXI(1): 30-31.
- Notes on Some Moths of the Family Saturniidae (Lepidoptera). Pan-Pacific Entomologist XXI(1):32–33.

1946

 An Occurrence of Schizopus in Monterey County, California (Coleoptera, Buprestidae). Pan-Pacific Entomologist XXII(2):60.

1947

- 11. Mansfield, G. S. and J. S. Tilden. An Additional Locality for Aulicus terrestris (Coleoptera, Cleridae). Pan-Pacific Entomologist XXIII(1):34
- 12. An Occurrence of the Pupa of *Glaucopsyche lygdamus behrii* (Edwards) in an Ant Nest (Lepidoptera, Lycaenidae). Pan-Pacific Entomologist XXIII(1):42-43.

1948

- 13. Aestivation in Larvae of *Arachnis picta picta* Packard (Lepidoptera, Arctiidae). Pan-Pacific Entomologist XXIV(1):31.
- 14. The Insect Community on *Baccharis pilularis* De Candolle. Doctoral Dissertation, Stanford University. 408 pages. Copies at Stanford University and in Tilden Library.

1949

 Notes on Parasites of Certain Microlepidoptera (Gracilariidae). Pan-Pacific Entomologist XXV(1):27-28.

- A Note on Caicella mysie (Dyar) (Lepidoptera, Hesperiidae) with a figure of the Male Genitalia. Bulletin of the Southern California Academy of Sciences XLV111 (1):4-6.
- 17. Note on *Tragidion armatum* (Lee) (Coleoptera, Cerambycidae). Pan-Pacific Entomologist XXV(1):37.
- Occurrences of Diurnal Lepidoptera at Light. Pan-Pacific Entomologist XXV(2): 94-96.
- Oviposition of Cryptocephalus confluens Say (Coleoptera, Chrysomelidae). Entomological News LX:151-154.
- 20. Oviposition and Hatching of *Pselliopus spinicollis* Champion (Hemiptera, Reduviidae). Pan-Pacific Entomologist XXV(4):190-192.

- 21. Microlepidoptera Associated with *Baccharis pilularis*. 1. Pterophoridae. The Wasmann Journal of Biology 8(1):81–88.
- Biological Notes on Corythuca morilli O. & D. (Hemiptera, Tingidae). Entomological News LXI:135–137.
- 23. Notes on Oxygrillus ruginasus (Lec.) (Coleoptera, Scarabaeidae) and Xylotrechus undulatus (Say) (Coleoptera, Cerambycidae). Pan-Pacific Entomologist XXVI:37, 46.
- 24. Oviposition and Behavior of *Liriomyza pusilla* (Meigen) (Diptera, Agromyzidae). Pan-Pacific Entomologist XXVI(3):119-121.
- 25. Notes on the Habits of *Phylobaenus scabra* (Le Conte) (Cleridae). The Coleopterists' Bulletin IV(2):17–19.
- 26. The Feeding of *Podabrus pruinosus* Le Conte (Cantharidae). The Coleopterists' Bulletin IV(6):92.

1951

- 27. Notes on *Chrysobothris bacchari* Van Dyke (Buprestidae). The Coleopterists' Bulletin V(1):1–3.
- 28. Observations on *Rhopalomyia californica* Felt (Diptera, Itonididae). Pan-Pacific Entomologist XXVII(1):20–22.
- 29. The Insect Associates of *Baccharis pilularis* De Candolle. Microentomology 16(1): 149–188.
- Microlepidoptera Associated with *Baccharis pilularis*. II. Tortricidae, Phaloniidae, Gelechiidae. The Wasmann Journal of Biology 9(2):239–254.
- 31. Biological Notes on Two Species of Chrysopidae (Neuroptera). Entomological News LXII:224-226.
- 32. On the Distribution of *Heliopetes domicella* (Erichson) (Lepidoptera Hesperiidae). The Lepidopterists' News V(6-7):70.
- A New Subspecies of *Mitoura siva* Edwards (Lepidoptera, Lycaenidae). Bulletin of the Southern California Academy of Sciences 50(2):96–98.
- 34. A Note on the Manner of Feeding of Agulla adnixa Hagen (Raphidiodea, Raphidiidae). Pan-Pacific Entomologist XXVII(4):192.
- 35. Concerning the Identity of *Mitoura nelsoni muiri* (Lepidoptera, Lycaenidae). The Lepidopterists' News 6(6-8):95-96.

1952

- 36. Range Extension of *Pholisora libya* Scudder (Lepidoptera, Hesperiidae). Pan-Pacific Entomologist XXVIII(2):92.
- 37. Observations on the Habits of Certain Syrphids (Diptera). Entomological News LXIII:39-43.

1953

 Observations on the Biology of *Psoa maculata* Le Conte (Psoidae). The Coleopterists' Bulletin VII(2):9–12. Biological Notes on Trirhabda flavolimbata (Chrysomelidae). The Coleopterists' Bulletin VII(3):20-23.

1954

- 40. Tilden, J. W. and J. C. Downey. A New Species of *Philotes* from Utah (Lepidoptera, Lycaenidae). Bulletin of the Southern California Academy of Sciences 54(1):25–29.
- 41. Microlepidoptera Associated with *Baccharis pilularis*. III. Aegeriidae, Coleophoridae. The Wasmann Journal of Biology 12(1):43–52.
- 42. New Santa Clara County Mosquito Records. California Vector Views 1(5):3.

1955

- 43. Interspecific Cannibalism in *Brennus* Mots. (Coleoptera, Carabidae). The Coleopterists' Bulletin IX(1):10.
- 44. Collecting Acmaeodera in Santa Clara County, California (Coleoptera, Buprestidae). The Coleopterists' Bulletin IX(2):23–25.
- 45. A Revision of *Tharsalea* (S.Str.), with Description of a new Subspecies (Lepidoptera, Lycaenidae). Bulletin of the Southern California Academy of Sciences 54(2):67-77.
- 46. Tilden, J. W. and J. St. Germaine. Flies of Public Health Interest in Santa Clara County. 1. Chicken Manure. California Vector Views 2(3):12.
- 47. _____. Flies of Public Health Interest. 11. Walnut Hulls. California Vector Views 2(4): 18.
- Flies of Public Health Interest. 111. Cow Manure. California Vector Views 2(5):25.
- Common Pest Ants. In Proceedings, California Structural Pest Control Operators Annual Conference, 1955. Chapter 7, 11 pages. California Polytechnical College, San Dimas, California.

1956

50. San Francisco's Vanishing Butterflies. The Lepidopterists' News 10(3-4):113-115.

1957

- 51. A Record of Stanleya as a Food Plant of Pieris beckerii (Lepidoptera, Pieridae). Pan-Pacific Entomologist XXXIII(4):169.
- 52. Taxonomic History and Distribution of Ochlodes yuma (Hesperiidae). The Lepidopterists' News 11(4-5):151-152.
- 53. Carterocephalus palaemon in California (Hesperiidae). The Lepidopterists' News 11(1-3):43.
- 54. Flies from Major Sources. California Vector Views 4(4):24, 27.

1958

- 55. Notes on the Life History of *Euphydryas editha bayensis*. The Lepidopterists' News 12(1-2):33-35.
- Tilden, J. W. and Carl D. Duncan. The Monarch Butterfly and its Migrations. Turtox News 36(9):203–204.
- 57. Distributional Oddities. The Lepidopterists' News 12(5-6):203-204.

1959

- 58. Microlepidoptera Associated with *Baccharis pilularis*. IV. Gracillariidae. Lyonetiidae, Oinophilidae. The Wasmann Journal of Biology 17(1):43-54.
- 59. The Butterfly Associations of Tioga Pass. The Wasmann Journal of Biology 17(2): 249-271.
- Schoening, Ernest H. and J. W Tilden. Anoplodera laetifica Le Conte and Ergates spiculatus Le Conte from Knob-cone Pine (Coleoptera, Cerambycidae). Pan-Pacific Entomologist XXXV(3):167–168.

- 61. A Record of *Pyramidobela angelarum* Keifer (Lepidoptera, Ethmiidae) from Santa Cruz, California. Pan-Pacific Entomologist XXXV(4):211.
- Book Review—Laboratory Manual for Introductory Entomology. Pan-Pacific Entomologist XXXV(4):211.

63. An Additional Note on the Life History of *Mitoura spinetorum* (Lepidoptera, Lycaenidae). Pan-Pacific Entomologist XXXVI(1):40.

1961

- 64. Certain Comments on the Subspecies Problem. Systematic Zoology 16(1):17-23.
- Studies in the Genus Ochlodes Scudder. II. The Type Material of the North American Species (Lepidoptera, Hesperiidae). Entomological News LXXII(2):37–45.

1962

- 66. General Characteristics of the Movements of Vanessa cardui (L.) (Nymphalidae). Journal of Research on the Lepidoptera 1(1):43-49.
- 67. Additional Records of Satyrium behrii (Lycaenidae) from Oregon. Journal of the Lepidopterists' Society 16(3):199-200.

1963

- 68. The Argynnis Populations of the Sand Creek Area, Klamath Co., Oregon. Journal of Research on the Lepidoptera 1(2):109-113.
- 69. An Analysis of the North American Species of the Genus Callophrys. Journal of Research on the Lepidoptera 1(4):281-300.
- Garth, John S. and J. W. Tilden. Yosemite Butterflies. Journal of Research on the Lepidoptera 2(1):1-96.

1964

71. Two Species of Hesperiidae Previously Unrecorded from the United States. Journal of the Lepidopterists' Society 18(4):214-216.

1965

- Urbanus procne and Urbanus simplicius Hesperiidae. Journal of the Lepidopterists' Society 19(1):53-55.
- 73. A Note on Pyrgus communis and Pyrgus albescens (Hesperiidae). Journal of the Lepidopterists' Society 19(2):91-93.
- 74. The Genus Panoquina Occurring in Texas. Journal of Research on the Lepidoptera 4(1):37-40.
- 75. Butterflies of the San Francisco Bay Region. California Natural History Guides: 12. 88 pages, 8 plates. Berkeley: University of California Press.
- An Apparently New Dragonfly Record for California (Odonata, Libellulidae). Pan-Pacific Entomologist 41(3):179.

1967

- 77. A Previously Unrecognized Subspecies of *Philotes speciosa*. Journal of Research on the Lepidoptera 6(4):281-284.
- 78. Obituary-Carl Dudley Duncan. Pan-Pacific Entomologist 43(2):97-99.

1968

79. Records of Two Species of Exotic Lepidoptera Captured in California. Journal of the Lepidopterists' Society 22(3):187.

- Cultivated Snapdragon a Host of Tobacco Budworm. Pan-Pacific Entomologist 44(3): 253.
- 81. Tilden, J. W. and Bruce A. Tilden. Predation by *Adelocera* and *Alaus* (Coleoptera, Elateridae). Pan-Pacific Entomologist 44(3):258.

82. Concerning the Names and Status of Certain American Members of the Genus *Phyciodes*. Journal of Research on the Lepidoptera 8(3):94–98.

1970

83. Comments on the Nearctic Members of the Genus Precis Huebner. Journal of Research on the Lepidoptera 9(2):101-108.

1971

 Aguna claxon (Hesperiidae) New to the United States. Journal of the Lepidopterists' Society 25(4):293.

1973

- 85. Specific Entities of the Subgenus *Icaricia* Nabokov (Lycaenidae). Journal of Research on the Lepidoptera 12(1):11–20.
- 86. A Name for *Glaucopsyche lygdamus behrii* Auct., not Edwards 1862. Journal of Research on the Lepidoptera 12(4):213-215.
- 87. Junonia and Precis—A Correction. Journal of Research on the Lepidoptera 12(4): 216.

1974

- Unusual and Interesting Butterfly Records from Texas. Journal of the Lepidopterists' Society 28(1):22–25.
- Melitaea pulchella Boisduval, 1852, a Replacement Name. Journal of the Lepidopterists' Society 28(4):252-253.

1975

- 90. An Analysis of the W. G. Wright Butterfly and Skipper Plesiotypes in the Collection of the California Academy of Sciences. Occasional Papers of the California Academy of Sciences, No. 118, 44 pages.
- 91. Hesperiid Notes. Journal of the Lepidopterists' Society 29(1):60-62.

1976

- 92. A Proposed Terminology for the Types of Diapause Occurring in the Order Lepidoptera. Journal of Research on the Lepidoptera 15(1):33-39.
- 93. Urbana simplicius (Stoll), a New Record for California. Journal of Research on the Lepidoptera 15(1):40.
- 94. Observations of Predation on Lepidoptera in Alaska. Journal of Research on the Lepidoptera 15(2):100.
- 95. Obituary-Peter J. Herlan (1909–1977). Journal of the Lepidopterists' Society 31(3): 213–214.
- 96. Tilden, J. W. and David H. Huntzinger. The Butterflies of Crater Lake National Park, Oregon. Journal of Research on the Lepidoptera 16(3):176–192.

1978

 Obituary—James H. Baker (1910–1978). Journal of the Lepidopterists' Society 32(3): 240.

- 99. Garth, John S. and J. W. Tilden. California Butterflies. Berkeley: University of California Press. 246 pages, 24 plates.
- 100. Tilden, J. W. and Arthur C. Smith. A Field Guide to Western Butterflies. Boston: Houghton Mifflin Company. 370 pages, 48 plates.

1987

101. Palmer, W. A. and J. W. Tilden. Host Specificity and Biology of *Prochoerodes truxaliata* (Guenee) (Geometridae), A Potential Biocontrol Agent for the Rangeland Weed *Baccharis halimifolia* L. in Australia. Journal of the Lepidopterists' Society 41(4):199–208.

Acknowledgments

I am especially grateful to Hazel Tilden and to Bill's brother Tom for much detailed information about Bill's interesting life and career. I am greatly indebted to Paul H. Arnaud, Jr., C. Don MacNeill, Paul A. Opler, and Jerry A. Powell for reviewing the manuscript and making many valuable suggestions. I also wish to thank those listed below for providing additional information and assistance: Arnold G. Applegarth, Charles A. Bridges, John A. Chemsak, Thomas Dimock, John Lane, Sterling O. Matoon, Edgar A. Smith, and Matthew F. Vessel.

ARTHUR C. SMITH, 1536 Green Valley Road, Watsonville, California 95076.