

## OBITUARY

ANDRÉ BLANCHARD (1896-1986)

At 0730, 17 October 1986, the international lepidopterist community lost one of its most dedicated and capable amateurs. André Blanchard had been confined to his home at 3023 Underwood, Houston, Texas, for several years due to fibrosis of the lungs. Failing health made it necessary to discontinue in mid-November 1977 his most successful and rewarding field work on the Lepidoptera. Although confined, his interest in Lepidoptera did not diminish. Instead, he began studying in more detail the material at hand which resulted in the publication of 34 papers. In a personal communication dated 19 August 1985 referring to a paper in preparation on *Chlamydstis*, he remarked: "This paper will almost certainly be my last". It was. A year later on 20 August 1986 he fell in his home, fracturing a hip. He underwent surgery to repair the fracture, but after two months' hospitalization the fracture did not heal, and due to general infection he passed away. His wife May Elise was at his bedside throughout the long hospital stay. Interment was in Calvary Cemetery, Houston, Texas, as he wished.

André was born 11 June 1896 at Marennes (Charente Maritime), France, the youngest of two sons and a daughter (Suzanne) born to François Issac Blanchard and Marie Voyer. His father was affiliated with a banking facility. His older brother René was killed in action in World War I. In 1914 at age 18, through competitive examination, André was admitted to the Ecole Navale (French Naval Academy). Following graduation in 1917 he served with the French Navy until 1929.

While on active duty during World War I, André served on a battleship in the Mediterranean, and a destroyer in the North Sea. During his last war year (1918), André was a seaplane pilot escorting ship convoys from Brest (Brittany) to Penzance (Cornwall). Early in 1919, following termination of the war, André was dispatched to New York to join the French battlecruiser Marseillaise. This marked his first visit to the New World which he found most enjoyable. In mid-1919 he returned to France and joined a group working under the leadership of Paul Langevin, a physicist doing research on the newly invented sonar. In April 1921, at his own request, André spent the next 12 months at Ecole Supérieure de Radiotechnique in Paris where he became a radio engineer. The remainder of his military career was at the Laboratoire du Centre d'Etudes de la Marine in Toulon, France. Here he not only taught radio but wrote the text which was later used at the Naval Academy. For two years (October 1927 to October 1929) he was commander of the 900-ton ship Les Eparges, especially equipped as the floating laboratory of the Centre d'Etudes.

Military honors received included the Croix de Guerre, 20 May 1917; Chevalier of the Legion of Honor, 8 January 1927; Officer of the Legion of Honor, 31 December 1950.

In October 1929, Michelin Tire Company, Clermont-Ferrand, France, made André an offer which he could not refuse. He was placed in charge of the Company's physics laboratory where he directed significant research on rubber, carbon black, heat-treatment of steel, and steel wire drawing. At the outbreak of World War II, André became head of the department that produced the new "metallic tire". Thinking the patents might be sold to American tire companies in connection with the war effort, André was one of a delegation of five who left France in January 1941 for the United States to present the Michelin proposal. The deal failed and the delegation was denied exit visas until the end of the war. Not willing to remain inactive due to circumstances beyond his control, André went to work for the United States War Department translating from English to French military manuals ranging from Aerial Celestial Navigation to Optical Rangefinders. Meantime in France, his wife and two daughters were being well cared for by Michelin. In October 1943, Schlumberger Well Services became aware of André's availability, and hired him for the duration. After the armistice in Europe, André returned to France, his family, and Michelin. However, an overriding bond had been developed between André and Schlumberger; as a result, he returned to the United States in August 1946 with his family. Here he was again employed by Schlumberger, first as Manager of Engineering, later as Vice President of Engineering, and finally as Vice President of Research and



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Development. He retired 30 June 1961 at age 65, but remained a paid consultant with Schlumberger for four more years.

André's family life began 22 April 1921 when he married Marguerite Normand at Loches, France. Born to this marriage were two daughters, Simone Blanchard Gérard, and Michelle Blanchard Gaymard. In 1958, following a long illness, Marguerite died, and on 9 May 1959 André and May Elise Moraud of Houston were married. No children were born to this union. André is survived by his devoted wife, May Elise, two daughters (Simone and Michelle), eight grandchildren and eight great-grandchildren.

André's avocation as a lepidopterist began in about 1925 when his wife, Marguerite, suggested that they should have a hobby. After thoughtful consideration they chose butterfly collecting. To house the European butterflies they would catch, some 30 glass-top specimen cases with cork pinning bottoms were manufactured. Collections were made as time permitted during the remaining years they spent in Europe. Unfortunately, there

was little time in his busy schedule to properly curate the collection, and it was virtually destroyed by dermestids. Nevertheless, when André and his family moved to the United States, the specimen cases came along and served as initial storage for his collection of Texas specimens.

André joined the Lepidopterists' Society in 1957. His primary interest at that time was butterflies. It was a paper of mine in 1959 (J. Lepid. Soc. 13:221-228) that brought us together. On 30 October 1960 he wrote, "I have been myself hoping for two to three years to find the foodplant of *Phyciodes texana*. I have not been as lucky as you but I feel very definitely that one more plant should be added to your list of four—*Dicliptera brachiata*." On 26 November 1960 we met and together in Memorial Park (Houston, Texas) learned that indeed *Dicliptera brachiata* is used in nature by this species. That meeting marked the beginning of a most enjoyable friendship between our two families for more than 25 years. During one of our early meetings, André remarked: "There is no need for both of us to work on the butterflies of Texas, I'm going to work on the moths."

Upon retirement André began collecting both seriously and enthusiastically. At first he used bait traps, UV and mercury-vapor lights set on a white bedsheet. In 1962 the late Perry A. Glick showed André a light trap used by the U.S. Department of Agriculture for sampling economic nocturnal insects. On 24 February 1963 he visited Joe P. Hollingsworth, College Station, Texas, who was working on a new model light trap for the Department. Measurements were taken and a sketch made of the new model; four days later André had his light trap. After putting the trap into use he learned that during certain times of the season many Coleoptera would come to the light, and because beetles are so slow to die they would virtually destroy Lepidoptera in the trap. This problem was essentially solved by a novel modification he made which separated most Coleoptera from Lepidoptera.

Now, using three modified light traps, André started sampling nocturnal Lepidoptera statewide. Field trips were planned following the new moon which provided the longest periods of darkness. During the 16 years that followed many field trips were made throughout Texas resulting in the first statewide survey of noneconomic Lepidoptera (moths). May Elise accompanied him on every field trip, helped set up the traps in the evening, and helped pick them up early the following morning. After sorting the catch, specimens to be kept were placed in a relaxer, later pinned and spread in the field. Spread specimens were placed immediately in a dryer. Thus, except for the last catch of the trip, specimens taken were ready to be labeled and placed in the collection upon returning home. Many of the unwanted specimens were papered by May Elise to be given to correspondents or to museums.

In early 1962 André was already thinking of preparing a checklist for Texas moths. To this end, a card file of species recorded from the State was initiated. At the same time additional specimen cases were being made to house the eventual collection of some 60,000 spread specimens. He also began learning the technique of dissecting genitalia. A special collection of literature was accumulated. He was already expert at photography.

Almost from the beginning of his intensive work on the moths of Texas, it became apparent that certain families and genera were in need of revision. As undescribed species accumulated this situation became a problem. He then began seeking help and advice from professional lepidopterists. Both he and his work were greatly respected within professional circles, thus the help needed came easy, although much too slow at times to please him. With the publication in 1983 of the *Check List of the Lepidoptera of America North of Mexico*, the way was cleared for at least a tentative State list but it came too late. Failing health demanded that he limit his activities to describing some of the new species he had collected.

On 15 August 1977, André informed me that Edward C. Knudson, M.D., another amateur Texas lepidopterist, had visited him the day before, bringing along a box of moths for determination. He had been greatly impressed both by Knudson and the specimens brought for examination. As it turned out, this was the beginning of a continuing and deepening friendship between them. They worked together perfectly, and their manuscript production speaks for itself. Knudson will continue the statewide survey; he has prepared a tentative checklist representing more than 3000 moth taxa.

André's lepidopterological affiliations included: American Museum of Natural History (life member); The Lepidopterists' Society, regular and sustaining member (1957–86), member-at-large of the Executive Council (1971–73), president (1975–his presidential address, *J. Lepid. Soc.* 30:1–4); The Lepidoptera Research Foundation (charter and regular member to July 1985); The Entomological Society of Washington (regular member 1968–86); Southern Lepidopterists' Society (regular member 1985–86) from which he received the John Abbot Award 19 October 1985 for significant research on the Lepidoptera of Texas.

Currently, fellow lepidopterists have described eighteen species honoring André and May Elise. Doubtless others will follow. A list of these patronyms together with other pertinent data is given in a later section.

André prearranged disposition of his specimens, and "tools" for collecting and studying Lepidoptera. His primary collection of Texas insects went to the National Museum of Natural History (USNM), Smithsonian Institution, Washington, D.C. Based on an inventory by that institution (*J. Lepid. Soc.* 39:235–236), the collection totaled 76,852 specimens of which 16,305 were Coleoptera and 60,233 Lepidoptera. The latter, largest single accumulation of Lepidoptera ever made from Texas, included 82 holotypes, 700 paratypes, and 4600 microslides, mostly of genitalia. Both micro- and macro-Lepidoptera are represented with more than 65 percent in four family groups: Noctuidae 18,500+, Pyraloidea 9000+, Geometridae ca. 8000 and Tortricidae ca. 4000 specimens. Frederick H. Rindge, American Museum of Natural History (AMNH), New York, New York, advised (21 November 1986) that from 1958 through 1976 the AMNH received from Blanchard 16,500 specimens of Texas Lepidoptera, and before this, about 1943, a number of specimens from the islands of Martinique and Guadeloupe were donated by him. Of course many other institutions and individuals received small numbers of specimens, including paratypes, which André had collected or described.

André's "tools" for studying Lepidoptera included library material, optical equipment, photographic equipment, a card file of species taken or recorded from Texas, correspondence dealing with Lepidoptera, specially designed spreading boards, UV light traps, and specimen cases. The library material was given to Rice University, Edward C. Knudson, and Roy O. Kendall; the optical equipment and spreading boards to Knudson and Kendall; specimen cases (31) brought from France, to Kendall, other cases to USNM with the primary collection; all remaining "tools" to Knudson.

Finally, on behalf of André's friends, I paraphrase in part a classical eulogy: Rest, dear friend, lie down for an aeon or two until the Master of all good Lepidopterists shall put you to collecting anew. You will long be remembered by those of us who knew you, and your scientific contributions to the advancement of lepidopterology will live forever, but we think you knew that.

#### PATRONYMS

Lepidopterists have described eighteen species honoring André and May Elise Blanchard. It seems appropriate that the list include those named for May Elise as well as André because they worked together in the field as a team. Still other patronyms honoring Blanchard will probably appear. The list of patronyms should be seen as a tribute to Blanchard for his significant contribution to the scientific advancement of lepidopterology, especially in Texas. No other individual has contributed so much toward a better understanding of the Lepidoptera of Texas.

#### Gelechiidae

*Dichomeris blanchardorum* R. W. Hodges 1986. Gelechioidea, Gelechiidae (in part), in Dominick, R. B., et al., *The Moths of America North of Mexico*, Fasc. 7.1:43. Type Locality (TL): Texas, Cameron Co., Laguna Atascosa [National Wildlife Refuge]. Holotype ♂ in USNM.

#### Geometridae

*Plataea blanchardaria* E. C. Knudson 1986. *Proc. Entomol. Soc. Wash.* 88:351–353. TL: Texas, Duval Co., 13 km W of Premont. Holotype ♂, 30 June 1985, in USNM.

- Sicyopsis blanchardata* D. C. Ferguson 1983. *J. Lepid. Soc.* 37:24–28. TL: Texas, Culberson Co., Guadalupe Mountains [National Park], Smith Canyon, 1753 m. Holotype ♂, 22 May 1973, in USNM.
- Stenoporpia blanchardi* F. H. Rindge 1968. *Bull. Am. Mus. Nat. Hist.* 140:65–134 (116, 117). TL: Texas, Brewster Co., Big Bend National Park, Basin. Holotype ♂, 9 April 1967, allotype-topotype ♀, 4 October 1967, both in AMNH.

## Glyhipterigidae

- Drymoana blanchardi* J. B. Heppner 1985. *The Sedge Moths of North America* (Handbook No. 1). Flora & Fauna Publ., Gainesville, Florida, x + 254 pp. (49–53). TL: Texas, Jackson Co., Deutschburg [nr. Carancahua Creek, S of Francitas]. Holotype ♂, 7 October 1974, in USNM.

## Lasiocampidae

- Apotolype blanchardi* J. G. Franclemont 1973. *Mimallonoidea, Bombycoidea* (in part), in Dominick, R. B., et al., *The Moths of America North of Mexico*, Fasc. 20.1:48, 49. TL: Texas, Cameron Co., Brownsville. Holotype ♂, 7 November 1969, in USNM.
- Tolype mayelisae* J. G. Franclemont 1973. *Mimallonoidea, Bombycoidea* (in part), in Dominick, R. B., et al., *The Moths of America North of Mexico*, Fasc. 20.1:37, 38. TL: Texas, Brewster Co., Alpine. Holotype ♀, 2 October 1963, in USNM.

## Noctuidae

- Basilodes* [*Stiria*] *blanchardi* C. L. Hogue 1966. *J. Res. Lepid.* 4:275–280. TL: New Mexico, Eddy Co., Carlsbad Caverns National Park. Holotype ♂, 17 September 1963, in Los Angeles County Museum of Natural History.
- Grotella blanchardi* R. R. McElvare 1966. *J. Lepid. Soc.* 20:91, 92. TL: New Mexico, Eddy Co., White City. Holotype ♂, 17 September 1963, in USNM.
- Opsigalea blanchardi* E. L. Todd 1966. *Proc. Entomol. Soc. Wash.* 68:149–151. TL: Texas, Brewster Co., Alpine. Holotype ♂, 9 September 1963, in USNM.

## Pyalidae

- Acrobasis blanchardorum* H. H. Neunzig 1973. *Proc. Entomol. Soc. Wash.* 75:165–169. TL: Texas, Culberson Co., Sierra Diablo Wildlife Management Area, 1829 m. Holotype ♂, 5 June 1969, in USNM (type no. 72179).
- Homosassa blanchardi* J. C. Shaffer 1976. *Proc. Entomol. Soc. Wash.* 78:431–434. TL: Texas, Harris Co., Houston. Holotype ♂, 5 June 1967, in USNM (type no. 72179).
- Mojaviodes blanchardae* E. G. Munroe 1972. *Pyraloidea* (in part), in Dominick, R. B., et al., *The Moths of America North of Mexico*, Fasc. 13.1B:188. TL: Texas, Presidio Co., Shafter. Holotype ♂, 9 September 1969, in USNM.
- Pyrausta andrei* E. G. Munroe 1976. *Pyraloidea* (in part), in Dominick, R. B., et al., *The Moths of America North of Mexico*, Fasc. 13.2B:127, 128. TL: Texas, Brewster Co., Big Bend National Park, Green Gulch. Holotype ♀, 28 March 1971, in USNM.
- Scoparia blanchardi* E. G. Munroe 1972. *Pyraloidea* (in part), in Dominick, R. B., et al., *The Moths of America North of Mexico*, Fasc. 13.1A:39, 40. TL: Texas, Jeff Davis Co., Davis Mountains, Mount Locke. Holotype ♂, 6 September 1969, in USNM.

## Saturniidae

- Sphingicampa blanchardi* D. C. Ferguson 1971. *Bombycoidea (Saturniidae)*, in Dominick, R. B., et al., *The Moths of America North of Mexico*, Fasc. 20.2:47–50. TL: Texas, Cameron Co., Brownsville, Esperanza Ranch [now city housing]. Holotype ♂, no date, in USNM (type no. 71494).

## Sphingidae

- Amplipterus* [*Adhemarius*] *blanchardorum* R. W. Hodges 1985. *Proc. Entomol. Soc. Wash.* 87:323–328. TL: Texas, Brewster Co., Big Bend National Park, Chisos Mountains, Panther Pass, 1829 m. Holotype ♂, 4 June 1973, in USNM.

## Tortricidae

*Rhyacionia blanchardi* W. E. Miller 1978 in Powell, J. A. & W. E. Miller, U. S. Dept. Agric. Handbook 514, 51 pp. (19-21). TL: Texas, Montgomery Co., Conroe. Holotype ♂, 10 March 1968, allotype-topotype ♀, 9 March 1971, both in USNM.

## BIBLIOGRAPHY

At the time of his death two additional papers had been drafted in which Blanchard was junior author: 1) With R. W. Poole, describing two new genera and two new species of Noctuidae from Texas; and with J. G. Franclemont on the noctuid genus *Protoperigea*.

The bibliography is divided into two sections, one dealing with European Lepidoptera (I-VIII), the other with North American Lepidoptera (1-59). Species treated in the latter are indexed under two headings: New Genera and Species, and Rare and Interesting Records. In each instance the new genera and species are arranged alphabetically and keyed to the numbered paper in the bibliography.

## Early Publications on Lepidoptera of France

- I. 1937. *Thaïs rumina* dans la vallée de la Jonte. L'Amateur de Papillons 8:252.
- II. 1937. *Parnassius mnemosyne* dans le Puy-de-Dôme. L'Amateur de Papillons 8: 252, 253.
- III. 1938. Un arc-en-ciel d'écailles de papillons. Rev. Franç. Lépid. 9:11-14.
- IV. 1938. L'Elevage de *Macrothylacea rubi* Linné. Rev. Franç. Lépid. 9:57-61.
- V. 1938. Capture en Auvergne d'*Heodes amphidamas* Esp. (Lycaenidae). Rev. Franç. Lépid. 9:147-148.
- VI. 1940. Contribution a la connaissance de la faune des Lépidoptères du Puy-de-Dôme. Rev. Sci. Nat. d'Auvergne 6:18-20.
- VII. 1940. Faune des Lépidopteres d'Auvergne. Rev. Sci. Nat. d'Auvergne (N.S.) 6(1-2):18-20.
- VIII. 1940. Observations sur quelques lépidoptères d'Auvergne. Rev. Sci. Nat. d'Auvergne (N.S.) 6(3-4):81-88.

## Publications on Lepidoptera of North America

1. 1963. Contribution to the life history of *Schoenobius maximellus* (Pyrilididae). J. Lepid. Soc. 17:234-235.
2. 1964. The food plants of *Syssphinx heiligbrodti* (Saturniidae) in Texas. J. Lepid. Soc. 18:42.
3. 1966. A new species of *Glaucina* (Geometridae) from Texas. J. Lepid. Soc. 22:247-250.
4. 1968. New moths from Texas (Noctuidae, Tortricidae). J. Lepid. Soc. 22:133-145.
5. 1969. A gynandromorphic *Phaeoura mexicanaria* (Geometridae). J. Lepid. Soc. 23: 274-275.
6. 1970. Observations on some Phycitinae (Pyrilidae) of Texas with descriptions of two new species. J. Lepid. Soc. 24:249-255.
7. 1971. Notes on three species of *Heterocampa* Doubleday with description of a new species. (Lepidoptera: Notodontidae). Proc. Entomol. Soc. Wash. 73:249-254.
8. 1971. A new species in the genus *Ursia* Barnes & McDunnough (Lepidoptera: Notodontidae). Proc. Entomol. Soc. Wash. 73: 303-305.
9. 1972. More new moths from Texas (Noctuidae). J. Lepid. Soc. 26:56-63.
10. 1972. A new species of the genus *Pyromorpha* Herrich-Schaeffer (Pyromorphidae). J. Lepid. Soc. 26:79-82.
11. 1973. Record and illustration of some interesting moths flying in Texas (Sphingidae, Ctenuchidae, Noctuidae, Notodontidae, Geometridae, Pyralidae, Cossidae). J. Lepid. Soc. 27:103-109.
12. 1973. A new species of the genus *Glenoides* McDunnough (Geometridae). J. Lepid. Soc. 27:141-143.
13. 1973. Two new species of Phycitinae from Texas, with description of two new genera (Pyrilidae). J. Lepid. Soc. 27:219-225.

14. 1973. *Erratum*. J. Lepid. Soc. 27:278. (Corrects a name in J. Lepid. Soc. 24:249–255; *Dioryctria auranticella* (Grote) should be *Dioryctria rossi* Munroe.)
15. 1975. A new phycitine genus and species (Pyraloidea). J. Lepid. Soc. 29:95–97.
16. 1975. A new schoenobine genus and species (Pyraloidea). J. Lepid. Soc. 29:98–101.
17. *Rostrolaetilia*—A new North American genus of the subfamily Phycitinae, with descriptions of seven new species (Pyralidae). J. Lepid. Soc. 29:131–150.
18. 1976. Presidential address 1975—To my fellow amateurs. J. Lepid. Soc. 30:1–4.
19. 1976. The genus *Copablepharon* in Texas, with description of three new species (Noctuidae). J. Lepid. Soc. 30:116–120.
20. 1976. A new species of the genus *Bertella* Barnes & McDunnough (Pyralidae). J. Lepid. Soc. 30:211–213.
21. 1976. Two new species of phycitine moths with description of a new genus (Pyralidae). J. Lepid. Soc. 30:284–288.
22. 1976. *Oenobotys texanalis*. (With Eugene Munroe sr. author.) Pyraloidea (in part), in Dominick, R. B., et al., *The Moths of America North of Mexico*, Fasc. 13.2A:18–19.
23. 1978. *Atopothoures* A. Blanchard a synonym of *Goya* Ragonot (Pyralidae). J. Lepid. Soc. 32:55–56.
24. 1978. The status of *Ollia parvella* Dyar: Redescription in a new genus (Pyralidae). J. Lepid. Soc. 32:103–106.
25. 1979. New status for *Epiblema minutana* (Kearfott) and new species of *Epiblema* Hübner and *Sonia* Heinrich (Tortricidae). J. Lepid. Soc. 33:179–188.
26. 1980. Five new species of the tribe Eucosmini (Tortricidae). J. Lepid. Soc. 33:209–215.
27. 1981. A new species of the genus *Peoria* Ragonot (Pyralidae). J. Lepid. Soc. 34:338–339.
28. 1981. *Charadra ingenus* Smith in West Texas (Lepidoptera: Noctuidae: Pantheinae). (With J. G. Franclemont jr. author.) Proc. Entomol. Soc. Wash. 83:797–798.
29. 1982. A new species of *Zale* Hübner from Texas and New Mexico (Lepidoptera: Noctuidae: Catocalinae). (With J. G. Franclemont jr. author.) Proc. Entomol. Soc. Wash. 84:134–137.
30. 1982. Two new species of the tribe Eucosmini (Tortricidae). (With E. C. Knudson jr. author.) J. Lepid. Soc. 35:169–172.
31. 1982. Two new species of *Eucosma* Hübner (Tortricidae) from Texas. (With E. C. Knudson jr. author.) J. Lepid. Soc. 35:173–178.
32. 1982. A new species of *Ozamia* Ragonot (Pyralidae) from Texas. (With E. C. Knudson jr. author.) J. Lepid. Soc. 35:233–235.
33. 1982. *Marilopteryx carancahua*, a new genus and new species from East Texas (Lepidoptera: Noctuidae: Hadeninae). (With J. G. Franclemont jr. author.) Proc. Entomol. Soc. Wash. 84:270–276.
34. 1982. A new species of *Symmetrischeria* Povolny (Lepidoptera: Gelechiidae) from Texas. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 84:628–631.
35. 1983. Two new species of Pyralidae (Lepidoptera) from Texas. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 85:59–63.
36. 1983. A new species of *Dioryctria* Zeller (Lepidoptera: Pyralidae) from Texas. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 85:116–120.
37. 1983. A new species of *Gloanna* Nye (Lepidoptera: Noctuidae) from West Texas. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 85:174–176.
38. 1983. A new genus and species of Geometridae (Lepidoptera) from Big Bend National Park, Texas. (With D. C. Ferguson sr. and E. C. Knudson jr. authors.) Proc. Entomol. Soc. Wash. 85:552–556.
39. 1983. A new species of *Psorosina* Dyar (Lepidoptera: Pyralidae) from Texas. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 85:619–621.
40. 1983. Two new species of the tribe Eucosmini (Tortricidae) closely related to *Phaneta granulata* (Kearfott). (With E. C. Knudson jr. author.) J. Lepid. Soc. 37:140–145.
41. 1983. New North American species of Eucosmini (Lepidoptera: Tortricidae). (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 85:845–852.

42. 1984. A new species of *Hypomecis* Hübner (Lepidoptera: Geometridae) from Texas and Florida. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 86:291-294.
43. 1984. A new *Stibadium* from Texas and a redescription of *Striodes edentatus* (Grote) (Noctuidae: Lepidoptera). (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 82:346-348.
44. 1984. Three new tortricids (Lepidoptera) from Texas. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 86:446-451.
45. 1984. A new species of *Tripudia* Grote (Lepidoptera: Noctuidae) from western Texas. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 86:639-642.
46. 1984. A new species of *Neodavisia* Barnes & McDunnough (Lepidoptera: Pyralidae) from southern Texas. (With D. C. Ferguson sr. and E. C. Knudson jr. authors.) Proc. Entomol. Soc. Wash. 86:769-772.
47. 1984. A revision of the genus *Aleptina* (Lepidoptera: Noctuidae). (With E. L. Todd sr. and R. W. Poole jr. authors.) Proc. Entomol. Soc. Wash. 86:951-960.
48. 1985. New species of Phycitinae (Lepidoptera: Pyralidae) from Texas, with description of a new genus. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 87:231-238.
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51. 1985. Two new Phycitinae (Lepidoptera: Pyralidae) from Texas and Alabama. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 87:475-479.
52. 1985. The *Eupithecia* (Lepidoptera: Geometridae) of Texas, with the description of a new species. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 87:662-674.
53. 1985. *Epiblema luctuosana* A. Blanchard, a homonym, is changed to *Epiblema luctuosissima*, new name. J. Lepid. Soc. 38:245.
54. 1985. *Ethmia angustalatella* Powell (Lepidoptera, Oecophoridae): Description of the female and first U.S. records. Proc. Entomol. Soc. Wash. 87:680-681.
55. 1985. Checklist of Lepidoptera of the Rob and Bessie Welder Wildlife Refuge near Sinton, Texas. (Blanchard et al.) Southwest. Entomol. 10:195-214.
56. 1985. New U.S. records and other interesting moths from Texas. (With E. C. Knudson jr. author.) J. Lepid. Soc. 39:1-8.
57. 1985. Two new species of *Hexorthodes* (Lepidoptera: Noctuidae) from Texas and Arizona. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 87:777-782.
58. 1986. Four new moths from Texas (Lepidoptera, Geometridae, Noctuidae). (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 88:134-141.
59. 1986. A new *Chlamydastis* (Oecophoridae, Lepidoptera) from Texas. (With E. C. Knudson jr. author.) Proc. Entomol. Soc. Wash. 88:185-188.

## NEW GENERA AND SPECIES

Items are arranged alphabetically and keyed to the bibliography.

## Genera

<i>Atopothoures</i> [= <i>Goya</i> Ragonot 1888]	Pyralidae: Peoriinae	15, 23
<i>Carectocultus</i>	Pyralidae: Schoenobiinae	16
<i>Glyphocystis</i>	Pyralidae: Phycitinae	13
<i>Pimodes</i>	Pyralidae: Phycitinae	21
<i>Pseudocabotia</i>	Pyralidae: Phycitinae	48
<i>Rostrolaetilia</i>	Pyralidae: Phycitinae	17
<i>Triozosneura</i>	Pyralidae: Phycitinae	13
<i>Welderella</i>	Pyralidae: Phycitinae	24

## Species

- adusta*, *Euamiana* Noctuidae **58**  
 TL: Texas, Jeff Davis Co., Davis Mountains, Madera Canyon. Holotype (HT) ♂, 17 August 1984, in USNM.
- albisericea* [*albisericeum*], *Copablepharon* Noctuidae **19**  
 TL: Texas, Hemphill Co., nr. Canadian, Gene Howe Wildlife Management Area. HT ♂, 27 September 1968, in USNM (type no. 73431).
- anaimella*, *Meroptera* Pyralidae **48**  
 TL: Texas, Presidio Co., Shafter. HT ♂, 9 July 1969, in USNM.
- apicigrammella*, *Melitara* Pyralidae **48**  
 TL: Texas, Terrell Co., Sanderson. HT ♂, 28 September 1980, in USNM.
- arenella*, *Eoreuma* Pyralidae **35**  
 TL: Texas, [Kleberg Co.], Padre Island National Seashore. HT ♂, 19 July 1976, in USNM.
- argutipunctana*, *Phaneta* Tortricidae **40**  
 TL: Texas, Hemphill Co., Canadian. HT ♂, 15 August 1971, in USNM.
- atascosana*, *Eucosma* Tortricidae **26**  
 TL: Texas, Cameron Co., Laguna Atascosa National Wildlife Refuge. HT ♂, 22 November 1973, in USNM (type no. 75821).
- atratella*, *Salebriaria* Pyralidae **51**  
 TL: Texas, Hunt Co., Lake Twakoni, Wind Point Park. HT ♂, 15 July 1984, in USNM.
- auripurpura*, *Hydroecia* Noctuidae **4**  
 TL: Texas, [Brewster Co.], Big Bend National Park, Green Gulch, 1613 m. HT ♂, 11 October 1966, in USNM (type no. 68160).
- balconiensis*, *Pseudocabotia* Pyralidae **48**  
 TL: Texas, Kerr Co., 10 miles west of Hunt. HT ♂, 4 September 1981, in USNM.
- benitensis*, *Heterocampa* Notodontidae **7**  
 TL: Texas, Cameron Co., Brownsville. HT ♂, 8 August 1967, in USNM (type no. 64647).
- bucurvata*, *Astalotesia* Geometridae **38**  
 TL: Texas, Brewster Co., Big Bend National Park, Chisos Basin. HT ♂, 29 March 1982, in USNM.
- caelebs*, *Pyromorpha* Zygaenidae **10**  
 TL: Texas, Jeff Davis Co., Fort Davis, Hospital Canyon. HT ♂, 18 May 1971, in USNM (type no. 71981).
- caesirufella*, *Dioryctria* Pyralidae **36**  
 TL: Texas, Kerr Co., Kerrville State Park. HT ♂, 19 August 1980, in USNM.
- caesium*, *Stibadium* Noctuidae **43**  
 TL: Texas, Cameron Co., south Padre Island. HT ♂, 24 October 1982, in USNM.
- callaisata*, *Paramiana* Noctuidae **9**  
 TL: [Texas, Culberson Co.], Guadalupe Mountains [National Park], Pine Spring Canyon, 1737 m. HT ♂, 28 August 1967, in USNM (type no. 68149).
- carancahua*, *Marilopteryx* Noctuidae **33**  
 TL: Texas, Jackson Co., Deutschburg nr. Carancahua Creek. HT ♂, 6 March 1975, in USNM.
- chihuahua*, *Tripudia* Noctuidae **45**  
 TL: Texas, Brewster Co., Big Bend National Park, Chihuahuan Desert nr. Nugent Mountain. HT ♂, 8 October 1969, in USNM.
- chisosensis*, *Zale* Noctuidae **29**  
 TL: Texas, Jeff Davis Co., Davis Mountains, Mt. Locke, 2042 m. HT ♂, 10 June 1969, in USNM.
- citeria*, *Hexorthodes* Noctuidae **57**  
 TL: Texas, Jeff Davis Co., Fort Davis. HT ♂, 11 June 1969, in USNM.
- clarkei*, *Phaneta* Tortricidae **41**  
 TL: Texas, Hemphill Co., Canadian National Grassland, Lake Marvin. HT ♂, 9 October 1982, in USNM.
- collilonga*, *Pelochrista* Tortricidae **44**  
 TL: Texas, Brown Co., Lake Brownwood State Park. HT ♂, 21 April 1966, in USNM.

- coloradella*, *Rostrotaetilia* Pyralidae 17  
 TL: Colorado, [Pueblo Co.], Pueblo. HT ♀, July, in USNM (type no. 73284).
- cottami*, *Oncocnemis* Noctuidae 9  
 TL: Texas, [Brewster Co.], Big Bend National Park, Basin, 1676 m. HT ♂, 10 May 1966, in USNM.
- cruentana*, *Phaneta* Tortricidae 30  
 TL: Texas, Anderson Co., nr. Tennessee Colony, [Gus] Engeling Wildlife Management Area. HT ♂, 28 June 1978, in USNM (type no. 76733).
- diabolana*, *Eucosma* Tortricidae 26  
 TL: Texas, Culberson Co., Sierra Diablo Wildlife Management Area, 1829 m. HT ♂, 31 March 1970, in USNM (type no. 75820).
- dominicki*, *Carectocultus* Pyralidae 16  
 TL: Texas, Jackson Co., Deutschburg. HT ♂, 31 July 1972, in USNM (type no. 73242).
- dorsonotata*, *Triozosneura* Pyralidae 13  
 TL: Texas, [Jeff Davis Co.], Davis Mountains, Mt. Locke, McDonald Observatory grounds. HT ♂, 27 August 1970, in USNM (type no. 72379).
- dupla*, *Bertelia* Pyralidae 20  
 TL: Texas, Presidio Co., Shafter. HT ♂, 19 October 1973, in USNM (type no. 73530).
- emendata*, *Hexorthodes* Noctuidae 57  
 TL: Texas, Jeff Davis Co., Fort Davis. HT ♂, 11 June 1969, in USNM.
- eureka*, *Rostrotaetilia* Pyralidae 17  
 TL: Utah, Eureka. HT ♂, 14 August 1911, in USNM (type no. 73285).
- exulta*, *Paramiana* Noctuidae 58  
 TL: Texas, Jeff Davis Co., Mount Locke. HT ♂, 20 August 1984, in USNM.
- fergusonella*, *Psorosina* Pyralidae 39  
 TL: Texas, Anderson Co., nr. Tennessee Colony, [Gus] Engeling Wildlife Management Area. HT ♂, 19 June 1982, in USNM.
- franclemonti*, *Oxycnemis* Noctuidae 4  
 TL: Texas, [Brewster Co.], Big Bend National Park, Green Gulch, 1646 m. HT ♂, 3 April 1965, in USNM (type no. 68162).
- fritillana*, *Eucosma* Tortricidae 30  
 TL: Texas, Anderson Co., nr. Tennessee Colony, [Gus] Engeling Wildlife Management Area. HT ♂, 28 June 1978, in USNM (type no. 76734).
- furtiva*, *Ursia* Notodontidae 8  
 TL: [Texas, Brewster Co.], Big Bend National Park, Pine Canyon, 1585 m. HT ♂, 2 September 1964, in USNM (type no. 64648).
- garneri*, *Drepanulatrix* Geometridae 58  
 TL: Texas, Uvalde Co., Garner State Park. HT ♂, 24 March 1985, in USNM.
- gillaspyi*, *Copablepharon* Noctuidae 19  
 TL: Texas, Kleberg Co., Padre Island National Seashore. HT ♂, 28 September 1973, in USNM (type no. 73433).
- graziella*, *Eucosma* Tortricidae 4, 26  
 TL: Texas, [Brewster Co.], Big Bend National Park, Green Gulch. HT ♂, 11 October 1966, in USNM (type no. 68164).
- griselda*, *Eucosma* Tortricidae 31  
 TL: Texas, Brewster Co., Big Bend National Park, Chisos Basin. HT ♂, 7 April 1967, in USNM.
- guttulana*, *Eucosma* Tortricidae 26  
 TL: Texas, Kleberg Co., Padre Island National Seashore. HT ♂, 19 July 1976, in USNM (type no. 75819).
- habrolepis*, *Chlamydistis* Oecophoridae 59  
 TL: Texas, Cameron Co., Laguna Atascosa [National Wildlife Refuge]. HT ♂, 1 April 1978, in USNM.
- hecate*, *Gloanna* Noctuidae 37  
 TL: Texas, Culberson Co., Sierra Diablo Wildlife Management Area. HT ♂, 11 June 1982, in USNM.

- heppneri*, *Petrophila* Pyralidae 35  
TL: Texas, Kerr Co., [16.1 km] W of Hunt. HT ♂, 1 September 1980, in USNM.
- heterogena*, *Oncocnemis* Noctuidae 9  
TL: Texas, [Brewster Co.], Big Bend National Park, Green Gulch. HT ♂, 27 August 1965, in USNM (type no. 68148).
- hieroglyphana*, *Grapholita* Tortricidae 44  
TL: Texas, [Culberson Co.], Guadalupe Mountains, Nickel Creek. HT ♂, 10 July 1968, in USNM.
- insularis*, *Pimodes* Pyralidae 21  
TL: Texas, Kleberg Co., Padre Island National Seashore. HT ♂, 29 September 1975, in USNM (type no. 73652).
- junctimacula*, *Aleptina* Noctuidae 47  
TL: Texas, [Brewster Co.], Big Bend National Park, Dugout Wells. HT ♂, 29 August 1965, in USNM.
- kendalli*, *Bucculatrix* Lyonetiidae 49  
TL: Texas, Bexar Co., Ebony Hill Research Station (Kendall residence). HT ♂, 19 September 1984, in USNM.
- kendalli*, *Zamagiria* Pyralidae 6  
TL: Texas, Jeff Davis Co., Fort Davis, Hospital Canyon, 1524 m. HT ♂, 11 July 1969, in USNM (type no. 71004).
- kendallorum*, *Symmetrischema* Gelechiidae 34  
TL: Texas, Nueces Co., north Padre Island. HT ♂, 17 September 1981, in USNM.
- lenticuligera*, *Glenoides* Geometridae 12  
TL: Texas, Hidalgo Co., Santa Ana National Wildlife Refuge. HT ♂, 15 February 1971, in USNM (type no. 72326).
- linitipunctana*, *Phaneta* Tortricidae 40  
TL: Texas, Nueces Co., north Padre Island. HT ♂, 9 September 1974, in USNM.
- longipectinaria*, *Hypomecis* Geometridae 42  
TL: Texas, Montgomery Co., Conroe. HT ♂, 30 April 1970, in USNM.
- luctuosana*, *Epiblema* Tortricidae (homonym—see *luctuosissima*) 25, 53
- luctuosissima*, *Epiblema* Tortricidae 25, 53  
TL: Texas, Nueces Co., north Padre Island. HT ♂, 6 April 1978, in USNM (type no. 75822).
- margueritaria*, *Grotella* Noctuidae 4  
TL: Texas, [Brewster Co.], Big Bend National Park, Chihuahuan Desert nr. Nugent Mountain, 914 m. HT ♂, 8 October 1966, in USNM (type no. 68163).
- mayelisana*, *Phaneta* Tortricidae 26  
TL: Texas, Cottle Co., nr. Paducah, Matador Wildlife Management Area. HT ♂, 17 April 1968, in USNM (type no. 75817).
- mayelisaria*, *Glaucina* Geometridae 3  
TL: [Texas, Brewster Co.], Big Bend National Park, Government Spring. HT ♂, 29 September 1965, in AMNH.
- melusina*, *Neodavisia* Pyralidae 46  
TL: Texas, Starr Co., Roma. HT ♂, 4 April 1978, in USNM.
- mendaciana*, *Suleima* Tortricidae 41  
TL: Texas, Brewster Co., Big Bend National Park, Dugout Wells. HT ♂, 28 September 1981, in USNM.
- mephisto*, *Neperigea* [*Properigea*] Noctuidae 4  
TL: Texas, Culberson Co., Sierra Diablo Wildlife Management Area, Sierra Diablo Mountains, NNW of Van Horn, 1676 m. HT ♂, 22–23 June 1965, in USNM (type no. 68161).
- minimella*, *Rostrolaetilia* Pyralidae 17  
TL: California, Inyo Co., Olancho. HT ♂, "June 24–30" in USNM (type no. 73281).
- multistriatella*, *Ozamia* Pyralidae 32  
TL: Texas, Jeff Davis Co., Fort Davis. HT ♂, 25 March 1968, in USNM.

- musetta*, *Phaneta* Tortricidae **41**  
 TL: New Mexico, Socorro Co., Gran Quivara National Monument, 2012 m. HT ♂, 1-3 July 1964, in USNM.
- nymphana*, *Gretchena* Tortricidae **41**  
 TL: Texas, Anderson Co., nr. Tennessee Colony, Gus Engeling Wildlife Management Area. HT ♂, 15 April 1968, in USNM.
- ovaliger*, *Atopothoures* [= *Goya* Ragonot 1888] Pyralidae **15, 23**  
 TL: Texas, [Kimble Co.], Junction. HT ♂, 21 August 1973, in USNM (type no. 73241).
- padreella*, *Peoria* Pyralidae **27**  
 TL: Texas, Kleberg Co., Padre Island National Seashore. HT ♂, 24 June 1976, in USNM (type no. 76140).
- paraplesiana*, *Sonia* Tortricidae **25**  
 TL: Texas, [Harris Co.], Houston. HT ♂, 5 June 1968, in USNM.
- parvalbum*, *Homoeosoma* Pyralidae **48**  
 TL: Texas, Brewster Co., Big Bend National Park, Hot Springs. HT ♂, 4 April 1984, in USNM.
- peorinella*, *Anderida* Pyralidae **51**  
 TL: Texas, Brewster Co., Big Bend National Park, K-Bar Research Station. HT ♂, 1 April 1984, in USNM.
- pinalensis*, *Rostrolaetilia* Pyralidae **17**  
 TL: Arizona, [Gila Co.], Pinal Mountains, 1524 m. HT ♂, 15-30 April 1925, in USNM (type no. 73287).
- placidissima*, *Rostrolaetilia* Pyralidae **17**  
 TL: Utah, Stockton. HT ♂, "IX.1.4", in USNM (type no. 73282).
- salaciana*, *Eucosma* Tortricidae **31**  
 TL: Texas, Nueces Co., north Padre Island. HT ♂, 13 October 1979, in USNM.
- salmocolor*, *Dasyopyga* Pyralidae **6**  
 TL: Texas, Culberson Co., Sierra Diablo Wildlife Management Area, 1829 m. HT ♂, 1 September 1969, in USNM (type no. 71005).
- septuosa*, *Tarachidia* Noctuidae **58**  
 TL: Texas, Cameron Co., Laguna Atascosa [National Wildlife Refuge]. HT ♂, 16 May 1974, in USNM.
- serraticornis* [*serraticorne*], *Copablepharon* Noctuidae **19**  
 TL: Texas, Cottle Co., nr. Paducah, Matador Wildlife Management Area. HT ♂, 8 September 1966, in USNM (type no. 73432).
- sierrae*, *Eucosma* Tortricidae **41**  
 TL: Texas, Culberson Co., Sierra Diablo Wildlife Management Area, 1951 m. HT ♂, 30 August 1970, in USNM.
- signifera*, *Macrorrhinia* Pyralidae **21**  
 TL: Texas, Tyler Co., Town Bluff. HT ♂, 7 August 1975, in USNM (type no. 73651).
- texanalis*, *Oenobotys* Pyralidae **22**  
 TL: Texas, Jeff Davis Co., Fort Davis. HT ♂, 5 October 1969, in CNC (type no. 13919); allotype-topotype ♀ in USNM.
- texanella*, *Rostrolaetilia* Pyralidae **17**  
 TL: Texas, Jeff Davis Co., Davis Mountains, Mt. Locke. HT ♂, 4 July 1969, in USNM (type no. 73286).
- texasana*, *Anopina* Tortricidae **44**  
 TL: Texas, Jeff Davis Co., [Davis Mountains], Mt. Locke, 2042 m. HT ♂, 26 April 1981, in USNM.
- toddi*, *Oncocnemis* Noctuidae **4**  
 TL: Texas, [Brewster Co.], Big Bend National Park, Chihuahuan Desert nr. Dugout Wells, 914 m. HT ♂, 28 September 1965, in USNM (type no. 68165).
- ustulatana*, *Eucosma* Tortricidae **41**  
 TL: Texas, Washington Co., Brenham. HT ♂, 4 June 1979, in USNM.
- utahensis*, *Rostrolaetilia* Pyralidae **17**  
 TL: Utah, Richfield. HT ♀, 15 June 1930, in USNM (type no. 73283).

*valliscola*, *Acrionicta* Noctuidae 4

TL: Texas, [Brewster Co.], Big Bend National Park, Green Gulch, 1585 m. HT ♂, 10 May 1966, in USNM (type no. 68159).

*verecundana*, *Phaneta* Tortricidae 26

TL: Texas, Hemphill Co., Gene Howe Wildlife Management Area nr. Canadian. HT ♂, 15 August 1971, in USNM (type no. 75818).

*viridivallis*, *Glyphocystis* Pyralidae 13

TL: Texas, [Brewster Co.], Big Bend National Park, Green Gulch. HT ♂, 28 March 1971, in USNM (type no. 72380).

## RARE AND INTERESTING LEPIDOPTERA

Species are arranged alphabetically and keyed to the bibliography.

- addens*, *Eulepidotis* Noctuidae (first TX & US, ♀ fig.) 56  
*admixta*, *Quasisalebria* Pyralidae (first TX) 6  
*alatella*, *Myelopsis* Pyralidae (first TX) 6  
*albiplegiatella occidentalis*, *Pima* Pyralidae (first TX) 6  
*aleptivoides*, *Aleptina* Noctuidae (new comb., ♂, ♂ & ♀ genit. fig.) 47  
*alpinata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*anartoides*, *Radara* [*Matiloxis*] Noctuidae (first TX & US (?), ♂ fig.) 11  
*angustalatella*, *Ethmia* Oecophoridae (first TX & US, ♂, ♀ & genit. fig.) 54  
*ardiferella*, *Rostrolaetilia* Pyralidae (HT ♀, ♂ & ♀ genit. fig.) 17  
*arizonensis*, *Daulia* Pyralidae (♂ fig.) 56  
*atalanta*, *Scordylia* [*Heterosia*] Geometridae (first TX & US (?), ♀ fig.) 11  
*auranticella*(=rossi, corrected in #14), *Dioryctria* Pyralidae (first TX) 6  
*australalla*, *Zamagiria* Pyralidae (TX TL conf.) 6  
*baracoalis*, *Lamprosema* Pyralidae (♀ fig.) 56  
*basipunctaria*, *Sigela* Noctuidae (first TX (?), ♂ fig.) 11  
*belfragei*, *Heterocampa* Notodontidae (comp. with *H. benitensis*) 7  
*bolteri*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*brillians*, *Miracavira* Noctuidae (♂ fig.) 56  
*cana*, *Sparganothis* Tortricidae (♂ fig.) 56  
*clinopetes*, *Aleptina* Noctuidae (new comb., ♂, ♂ & ♀ genit. fig.) 47  
*cocoata*, *Eupithecia* Geometridae (first TX) 52  
*coloradensis*, *Eupithecia* Geometridae (first TX) 52  
*collaris*, *Nystalea* Notodontidae (larval foodplant, ♀ fig.) 56  
*concors*, *Glymptis* Noctuidae (TX records, ♂ fig.) 11  
*condigna*, *Anadelosemia* Pyralidae (first TX) 6  
*consimilis*, *Evergestis* Pyralidae (TX records, ♂ fig.) 11  
*costata*, *Stemorrhages* Pyralidae (♂ fig.) 56  
*cucullidea*, *Emariannia* Noctuidae (TX records, ♂ fig.) 11  
*daemonalis*, *Iscadia* Noctuidae (TX records, ♂ fig.) 11  
*dissimulatrix*, *Actrix* Pyralidae (first TX) 6  
*donyza*, *Amplipterus* Sphingidae (first TX & US, ♀ fig.) [= *Adhermarius blanchardorum* Hodges 1985] 11  
*eburneata*, *Scopula* Geometridae (♂ fig.) 56  
*edentatus*, *Stiriodes* Noctuidae (first TX, ♂ fig.) 43  
*edna*, *Eupithecia* Geometridae (♂ & genit.) 52  
*electrica*, *Gontiocarsia* Noctuidae (♀ fig.) 56  
*erronella*, *Unadilla* Pyralidae (first TX & US) 6  
*eudoreella*, *Diviana* Pyralidae (♂ fig.) 56  
*formularis*, *Lesmone* Noctuidae 56  
*fredericki*, *Eupithecia* Geometridae (OD, ♂ & genit. fig.—Knudson) 52  
*fufius*, *Lesmone* Noctuidae (♂ fig.) 56  
*funeralis*, *Acrionicta* Noctuidae (first TX, ♂ fig.) 56  
*grandis* [*grande*], *Copablepharon* Noctuidae (TX records) 19

- granitella*, *Pima* Pyralidae (first TX) 6  
*graziella*, *Eucosma* Tortricidae (♀ genit. fig.) 26  
*grisella*, *Bertelia* Pyralidae (first TX) 6  
*heiligbrodti*, *Syssphinx* [*Sphingicampa*] Saturniidae (larval foodplants) 2  
*huachuca*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*idella*, *Hemispraguei* Noctuidae (♂ fig.) 56  
*ignobilis*, *Fundella* Pyralidae (first TX & US) 6  
*impressale*, *Homoeosoma* Pyralidae (first TX) 6  
*inca*, *Aleptina* Noctuidae (generic rev., ♂ & genit. fig.) 47  
*ingenua*, *Charadra* Noctuidae (first TX, ♂, ♂ & ♀ genit.) 28  
*inornata*, *Episcepsis* Ctenuchidae (first TX & US (?), ♀ fig.) 11  
*insignis*, *Eremberga* Pyralidae (first TX & US) 6  
*iole*, *Eriopyga* Noctuidae (first TX & US, ♂ fig.) 56  
*jejunata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*kearfottella*, *Acrobasis* Pyralidae (first TX) 6  
*libya*, *Xylophanes* Sphingidae (first TX & US, ♂ fig.) 56  
*longidens kerrvillaria*, *Eupithecia* Geometridae (♂ genit. fig.) 52  
*maestosa*, *Eupithecia* Geometridae (first TX) 52  
*masoni*, *Psychonoctua* Cossidae (new comb., first TX & US, ♂ & genit. fig.) 50  
*matheri*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*maximellus*, *Schoenobius* Pyralidae (life hist., larval foodplant, larva & pupa fig.) 1  
*melanthus*, *Syntomeida* Ctenuchidae (first TX & US (?), ♂ fig.) 11  
*mexicanaria*, *Phaeoura* Geometridae (gynandromorph, adult & genit. fig.) 5  
*minutana*, *Epiblema* Tortricidae [syn. of *strenuana*] (rev. status) 25  
*miserulata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*mulina*, *Eriopyga* [*Protorthodes*] Noctuidae (first TX & US (?), ♀ fig.) 11  
*nigromaculella*, *Rostrolaetilia* Pyralidae (HT ♀, ♂ & ♀ genit. fig.) 17  
*nonparilella*, *Sospatra* Pyralidae (♀ fig.) 56  
*nyssaecolella*, *Actrix* Pyralidae (first TX) 5  
*obtusus* [*obtusus*], *Stiriodes* Noctuidae (comp. with *S. edentatus*) 43  
*olivata*, *Aeschropteryx* [*Prochoerodes*] Geometridae (first TX & US (?), ♂ fig.) 11  
*ornata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*packardella*, *Rhagea* Pyralidae (first TX) 6  
*palmata*, *Hypoptya* Cossidae (♂ fig.) 56  
*parallela*, *Hemiplatytes* Pyralidae (♂ fig.) 56  
*parvella*, *Ollia* Pyralidae (to new genus *Welderella*) 24  
*peckorum*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*persimulata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*pertusata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*pharaxalis*, *Bocchoropsis* Pyralidae (first TX & US, ♀ fig.) 56  
*pimensis*, *Euxoa* Noctuidae (first TX, ♂ fig.) 56  
*placidata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*placidella*, *Rostrolaetilia* Pyralidae (LT ♂, ♂ & ♀ genit. fig.) 17  
*prolongalis*, *Microthyris* Pyralidae (♂ fig.) 56  
*prona*, *Orthogramma* [*Epitaua*] Noctuidae (first TX & US (?), ♂ fig.) 11  
*prostrata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52  
*psegmapteryx*, *Matigramma* [*Toxonprucha*] Noctuidae (first TX & US (?), ♂ fig.) 11  
*pusillata interruptofasciata*, *Eupithecia* Geometridae (TX from type only) 52  
*redenbacheri*, *Givra* [*Comadia*] Cossidae (first TX & US, ♂ fig.) 11  
*respondens*, *Neophanis* Noctuidae (first TX & US (?), ♀ fig.) 11  
*ridingsana*, *Eucosma* Tortricidae (comp. with *E. griselda*) 29  
*rosea*, *Oncocnemis* Noctuidae (first TX, ♂ fig.) 56  
*rossi*, *Dioryctria* Pyralidae (first TX) 14  
*ruthaea*, *Cropia* Noctuidae (first TX & US, ♂ fig.) 56  
*sanguinalis*, *Polygrammodes* Pyralidae (first TX & US, ♂ fig.) 11  
*semiatra*, *Aleptina* Noctuidae (new comb., ♂, ♂ & ♀ genit. fig.) 47  
*semicana*, *Patriciola* Pyralidae (first TX) 6

- serrata* [*serratum*], *Copablepharon* Noctuidae (comp. with *C. serraticornis* & *C. gil-laspyi*) 19
- servia*, *Rhescipha* [*Goniapteryx*] Noctuidae (first TX (?), ♂ fig.) 11
- sicheas*, *Gonodonta* Noctuidae (first TX & US (?)) 11
- sierrae*, *Eupithecia* Geometridae (♂ & genit. fig.) 52
- sinaldus*, *Gonodonta* Noctuidae (first TX & US (?), ♂ fig.) 11
- sincera*, *Salobrena* Pyralidae (♂ fig.) 56
- sonorella*, *Anderida* Pyralidae (first TX) 6
- stercorea*, *Ancylostomia* Pyralidae (first TX) 6
- stigmaphiles*, *Herminodes* [*Rhosologia*] Noctuidae (first TX & US (?), ♀ fig.) 11
- stigmella*, *Acrobasis* Pyralidae (first TX) 6
- subulalis*, *Araschnopsis* Pyralidae (first TX & US, ♀ fig.) 56
- superba*, *Heterocampa* Notodontidae (comp. with *H. benitensis*) 7
- swettii*, *Eupithecia* Geometridae (♂ & genit. fig.) 52
- terminalis*, *Oncocnemis* Noctuidae (first TX, ♂ fig.) 56
- titan*, *Meropleon* Noctuidae (first TX & US (?), ♂ fig.) 11
- valta*, *Pentobesa* Notodontidae (first TX & US (?), ♂ fig.) 11
- wellingtoniana*, *Anopina* Tortricidae (LT desig.) 44
- woodgatata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52
- xasta*, *Euxoa* Noctuidae (first TX (?), ♂ fig.) 11
- xylia*, *Letis* Noctuidae (first TX & US, ♂ fig.) 56
- xygadeniata*, *Eupithecia* Geometridae (♂ & genit. fig.) 52

## INTENSIVELY WORKED COLLECTING LOCALITIES

Although some collections were made in other states (Colorado and New Mexico), Texas was of primary interest and intensively worked by Blanchard. In early 1962 he began preparing a card index of species found in Texas. Taxonomic arrangement was primarily that of McDunnough's 1938 and 1939 Check Lists. For each of more than 3000 species he cited the original description, other significant taxonomic references, and listed specific records including his own captures. The card file was designed for his personal use and as a memory jogger. Locality data rarely included details.

Because these localities apply to approximately 100,000 specimens in various museums and private collections, and because future workers will be interested in specific localities for spatial distribution and life history studies, more complete locality data are provided here. During one of our last visits André permitted me to make photocopies of his "Lepidoptera Card File" for my own data-bank. It was his wish, however, that the file eventually go to Edward C. Knudson, coauthor of about half of his published papers. It did. Collections were made in more than 57 counties; there are 254 in the State, thus the sample size was 22% or more of the total.

Locations are arranged alphabetically, and each includes Texas county and other details.

Addicks. Harris Co., W of Houston off IH-10.

Aguja Canyon. Jeff Davis Co., Davis Mountains, Tx Ranch road 1832, 18 km W of Tx Hwy 17 at Boy Scout Camp.

Alpine. Brewster Co., within city of Alpine or nearby.

Alpine Girl Scout Camp. Jeff Davis Co., off Tx Hwy 118, 23 km NNW of Alpine nr. Miter Peak.

Aransas National Wildlife Refuge. Aransas Co., 11 km S of Austwell (133,982+ ha).

Artesia Wells. Dimmit-LaSalle counties, Chaparral Wildlife Management Area, N of Farm Road 183, 8 km W of Artesia Wells. (Collections mostly in LaSalle Co.)

Balmorhea State Park. Reeves Co., Tx Hwy 17 nr. Toyahavale.

Bastrop State Park. Bastrop Co., Tx Hwy 21 nr. Bastrop.

Bear Canyon. (See Guadalupe Mountains National Park.)

Bear Creek. Harris Co., Bear Creek Park, recreation area in NW Houston.

Belton Reservoir. Bell Co., Lake Belton nr. Belton.

Big Bend National Park. Brewster Co. (1,746,997 ha)

Basin

- Chihuahuan Desert nr. Nugent Mountain (Nugent Mt. draw)  
 Chisos Mountains (principal mts. within Park)  
 Croton Spring  
 Dugout Wells  
 Government Spring  
 Grapevine Hills & Spring  
 Green Gulch  
 K-Bar Research Station (old ranch house nr. Hq.)  
 Oak Spring  
 Old Ranch (Burro Messa, road to Castilon)  
 Panther Canyon (draw, spring) below Park Hq.  
 Panther Junction  
 Pine Canyon  
 Rio Grande Village  
 San Vicente Crossing  
 (All locations indicated on maps available at Park Hq.)  
 Black Gap. Brewster Co., Black Gap Wildlife Management Area, Ranch road 2627, 56 km SE of Marathon (254,513+ ha).  
 Blanco State Park (or only Blanco). Blanco Co., on Blanco River at Blanco city.  
 Brazos River. (See Spivey Crossing.)  
 Caddo Lake State Park (or only Caddo Lake). Harrison Co., nr. Kanak.  
 Camp Strake. (See Conroe.)  
 Canadian. (See Gene Howe Wildlife Management Area.)  
 Chihuahuan Desert nr. Nugent Mt. (See Big Bend National Park.)  
 Churchill Bridge. Brazoria Co., SW of Brazoria off Tx Hwy 36 at San Bernard River.  
 Clebourne State Park (or only Cleburne). Johnson Co., SW of Clebourne off US Hwy 67.  
 Coldspring. San Jacinto Co., Sam Houston National Forest, Tx Hwy 2025, 5 km S of Coldspring, Double Lake recreation area.  
 College Station. Brazos Co., joins city of Bryan.  
 Conroe. Montgomery Co., Camp Strake, private recreation area at Conroe.  
 Cypress & Cypress Lake. Harris Co., NW of Houston, US Hwy 290/Tx Hwy 6.  
 Dam B (now Steinhagen Lake). Tyler Co., 29 km E of Woodville on Neches River. (Traps were usually set near the spillway or along W bank of reservoir.)  
 Deussen Park. Harris Co., Alexander Deussen Park, Houston (N Lake Houston Parkway on Lake Houston).  
 Deutschburg. Jackson Co., a community nr. Carancahua Creek S of Francitas.  
 Dewalt. Fort Bend Co., small community on Tx Hwy 6.  
 Don George Lake. Fort Bend Co., 16 km SE of Richmond.  
 Eagle Lake. Colorado Co., US Hwy 90-A.  
 Eagle Pass. Maverick Co., private property nr. Eagle Pass.  
 El Rancho Cima. Comal/Hays counties, Tx Hwy 32, 24 km W of San Marcos, Boy Scout Camp. (Most collections were made in Hays Co.)  
 Falcon Heights. Zapata Co., nr. Falcon Reservoir on Rio Grande.  
 Falcon State Park. Zapata Co., off US Hwy 83 on Falcon Reservoir.  
 Frijoles. (See Guadalupe Mountains National Park.)  
 Garner State Park (or only Garner). Uvalde Co., off US Hwy 83 40 km N of Uvalde.  
 Gene Howe Wildlife Management Area. Hemphill Co., FM road 2266, 10 km E of Canadian (14,383+ ha).  
 George West. Live Oak Co., private property nr. George West.  
 Goodrich. Polk Co., S of Livingston. (Collection in Sam Houston National Forest.)  
 Gray Ranch. (See Jeff Davis Co.)  
 Guadalupe Mountains National Park. Culberson & Hudspeth counties off US Hwy 62/180 (191,546+ ha). (All collections made in Culberson Co.)  
 Bear Canyon  
 Frijoles, nr. Manzanita Spring  
 McKittrick Canyon

- Pine Spring Canyon (or only Pine Canyon)  
Smith Canyon  
(Local National Park map shows all locations.)
- Guadalupe River. Comal Co., on Guadalupe River NNW of New Braunfels, private recreation camp nr. 4th crossing of river.
- Gus Engeling Wildlife Management Area. Anderson Co., US Hwy 287, 32 km NW of Palestine nr. Tennessee Colony (26,392+ ha).
- Harlingen. Cameron Co., private property nr. Harlingen.
- Hempstead. Waller Co., US Hwy 290/Tx Hwy 6.
- Huntsville State Park (or only Huntsville). Walker Co., off Tx Hwy 19, 8 km S of Huntsville.
- Houston. Harris Co., unless otherwise indicated, 3025 Underwood Street, Blanchard's residence.
- Indian Village. Polk Co., Alabama & Coushatta Indian Reservation, off US Hwy 190, 24 km E of Livingston.
- Jeff Davis Co.  
Fort Davis  
Hospital Canyon, behind Old Fort Davis Historic Site  
Limpia Canyon, Tx Hwys 17 & 118 nr. Fort Davis  
Mt. Livermore, off Tx Hwy 166, 8 & 13 km SE of, on Friend's Ranch (private)  
Tom R. Gray Ranch, Tx Hwy 166 WSW of Fort Davis (private)  
W. B. Sharp Ranch, Tx Hwy 17 NNE of Fort Davis (private)
- Junction. Kimble Co., V. H. Ranch, US Hwy 377, 14 km SW of Junction on South Llano River.
- Kerrville State Park (or only Kerrville). Kerr Co., on Guadalupe River at Kerrville.
- Kerr Wildlife Management Area. Kerr Co., Tx Ranch road 1340, 45 km W of Kerrville (16,044+ ha).
- Laguna Atascosa. (See Laguna Atascosa National Wildlife Refuge.)
- Laguna Atascosa National Wildlife Refuge. Cameron/Willacy counties on Laguna Madre (111,558+ ha). (All collections made in Cameron Co.)
- Laguna Park. Hill Co., small town, collections on grounds of local motel.
- Lake Brownwood State Park. Brown Co., off Tx Hwy 279, 26 km NNW of Brownwood.
- Lake Corpus Christi State Park. San Patricio Co., off Tx Hwy 359, 6 km SW of Mathis.
- Lake o' the Pines. Marion Co., private recreation area, N side of lake.
- Lake Travis. Travis Co., recreation area on Lake Travis nr. Bee Cave off Tx Hwy 71.
- Lake Walk. Val Verde Co. Before 1969 this and Devils Lake were flood control reservoirs on the Devils River 11 and 16 km above the Rio Grande. Following completion of Amistad Dam and Reservoir on the Rio Grande, both Lake Walk and Devils Lake ceased to exist, having been inundated by water from Amistad.
- Livingston. Polk Co.
- Matador Wildlife Management Area. Cottle Co., W of US Hwy 83, 18 km NW of Paducah (69,242+ ha).
- Mathis. San Patricio Co., private property nr. Mathis.
- McKittrick Canyon. (See Guadalupe Mountains National Park.)
- Memorial Park. Harris Co., Houston city park.
- Morgan's Point. Harris Co., E of Pasadena on San Jacinto Bay.
- Mount Locke. Jeff Davis Co., Davis Mountains, off Tx Hwy 118, 26 km NW of Fort Davis, grounds of McDonald Observatory.
- New Waverly. Walker Co., Sam Houston National Forest, Stubblefield recreation area W of New Waverly.
- Nickel Creek. Culberson Co., US Hwy 62/180, a small community 8 km NE of Pine Springs. (Collections made in Guadalupe Mountains National Park.)
- Padre Island (Tx offshore island spanning 5 counties).  
North Padre Island. Nueces Co.  
Padre Island National Seashore. Kleberg and Kenedy counties. (Collections made in Kleberg Co.)

- South Padre Island. Willacy Co. (north) and Cameron Co. (south). (Collections made in Cameron Co.)
- Paducah. (See Matador Wildlife Management Area.)
- Palo Duro Canyon State Park. Randall Co., Tx Hwy 217, 19 km E of Canyon.
- Pedernales Falls State Park. Blanco Co., Tx Farm road 2766, 13 km E of Johnson City on Pedernales River.
- Point Comfort. Jackson Co., private property on Lavaca Bay.
- Port Alto. Calhoun Co., W shore Carancahua Bay. Blanchard had a beach house here destroyed by Hurricane Celia 3 August 1970.
- Port Lavaca. Calhoun Co., on Lavaca Bay.
- Possum Kingdom. Palo Pinto Co., Possum Kingdom State Park, on W shore of Possum Kingdom Reservoir.
- Raymondville. Willacy Co., private property nr. Raymondville.
- Richmond. Fort Bend Co., private property, E bank of Brazos River off US Hwy 59.
- Rio Frio. Real Co., small village on Frio River off US Hwy 83, 13 km S of Leakey.
- Rosenberg. Fort Bend Co., nr. Rosenberg (private).
- Ruidosa-Hot Spring. Presidio Co., 10 km ENE of Ruidosa on Hot Springs Creek, private recreation area.
- Sabinal. Uvalde Co., private recreation area nr. Sabinal.
- San Antonio. Bexar Co., Mountain View Acres, 5598 Mt. McKinley Drive NE (R. O. & C. A. Kendall residence which they dubbed Ebony Hill Research Station, "EHRS").
- San Benito. Cameron Co., private property nr. San Benito.
- Santa Ana Refuge (or Santa Ana). Hidalgo Co., Santa Ana National Wildlife Refuge, off US Hwy 281 S of Alamo (4885+ ha).
- Santa Rosa. Cameron Co., Las Palomas Wildlife Management Area—Longoria Tract, Tx Farm road 506, 6 km N of Santa Rosa.
- Sealy. Austin Co., US Hwy 90 at Brazos River (private).
- Shafter. Presidio Co., private property, recreation area.
- Sharp Ranch. (See Jeff Davis Co.)
- Sheffield. Pecos Co., Tx Hwy 349 at US Hwy 290 nr. Pecos River.
- Sheldon. Harris Co., Sheldon Wildlife Management Area, US Hwy 90, 16 km E of Houston (6046+ ha).
- Shepherd. San Jacinto Co., small community on US Hwy 59. (Collections in Sam Houston National Forest.)
- Sierra Diablo. Culberson Co., Sierra Diablo Wildlife Management Area, 51 km NW of Van Horn (19,251+ ha).
- Smith Point. Chambers Co., small community on E shore of Trinity Bay.
- Spivey Crossing. Hill Co., 11 km SE of Laguna Park, Tx Farm road 2114 at Brazos River, J. W. Glenn Ranch.
- Spring. Harris Co., small town on US Hwy 75 N of Houston (private property).
- Tennessee Colony. Collections made at Gus Engeling Wildlife Management Area.
- Town Bluff. Tyler Co., small village adjacent to Steinhagen Lake dam (formerly Dam B), Tx Farm road 92.
- Utopia. Uvalde Co., Tx Hwy 187, NE corner of county, 2 km S of Utopia, Old Waresville River Resort.
- Van Horn. Culberson Co., private property near Van Horn.
- Voshell. Cameron Co., Las Palomas Wildlife Management Area—Voshell Tract, Tx Farm road 511, 4 km SE of Brownsville.
- Warren. Tyler Co., US Hwy 69/287, small town.
- Welder Wildlife Foundation Refuge. San Patricio Co., US Hwy 77, 13 km NE of Sinton (19,768 ha).
- Westfield. Harris Co., small community off IH-45 N of Houston.
- Zapata. Zapata Co., private property nr. town.

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ROY O. KENDALL, 5598 Mt. McKinley Drive NE, San Antonio, Texas 78251-9609. Research Associate, Florida State Collection of Arthropods, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, and Allyn Museum of Entomology of the Florida State Museum, Sarasota, Florida.