THE GRAND CANON
SPECIALIZED BIBLIOGRAPHY SERIES

ENTOMOLOGY

of the

GRAND CANYON REGION

(INSECTS, ARACHNIDS, AND OTHER ARTHROPODS)

THIRD EDITION

EARLE E. SPAMER

RAVEN'S PERCH MEDIA • 2025

BIBLIOGRAPHY OF ENTOMOLOGY OF THE GRAND CANYON REGION
(INSECTS, ARACHNIDS, AND OTHER ARTHROPODS)

Citations are extracted from

THE GRAND CANON

A WORLDWIDE BIBLIOGRAPHY OF THE
GRAND CANYON AND LOWER COLORADO RIVER REGIONS
IN THE UNITED STATES AND MEXICO

VOLUME 1, PART B : BIBLIOGRAPHY

CATALOGERS NOTE

canon : *a standard or essential list of works*

The Grand Canon
not **The Grand Canyon**

RAVEN'S PERCH MEDIA

BIBLIOGRAPHICAL AND HISTORICAL RESOURCES ON THE GRAND CANYON AND LOWER COLORADO RIVER REGIONS

https://ravensperch.org

PREFACE

CITATIONS IN THE SPECIALIZED BIBLIOGRAPHY SERIES have been extracted from Volume 1/ Part B of THE GRAND CANON, a far more expansive bibliography of the Grand Canyon and Lower Colorado River regions of southwestern North America. THE GRAND CANON is a series of publications accessible online at https://ravensperch.org.

These listed publications are specifically about entomological and related taxa or topics that address them. Items that are not organismally focused studies, or that do not specially mention entomological and related topics—for example, more broadly focused ecological investigations or studies of environmental concerns—do not appear in this special bibliography. For citations that relate to broader ecological and environmental matters, which otherwise are about the environments of this region, consult the much more comprehensive listings in Part 19 of THE GRAND CANON, Volume 1).

Each citation here includes an Item number (for example, 19.4217; the prefix "19." indicates that it is from Part 19 of the much larger bibliography, THE GRAND CANON, Volume 1/Part B (Bibliography); other prefixes indicate that they are sourced from other enumerated parts of the main bibliography. These Item numbers serve as serial numbers only, which uniquely identify citations throughout THE GRAND CANON. Numbers are assigned as citations are acquired for the bibliography, thus they do not follow in order.

See https://ravensperch.org for everything pertaining to the complete Grand Canyon–Lower Colorado River bibliography.

ALSO CONSULT THE FOLLOWING SEPARATE BIBLIOGRAPHICAL PRODUCTIONS FROM RAVEN'S PERCH MEDIA

Bibliography and Annotated Checklist of Living Organisms First Named from the Grand Canyon and Vicinity (Northwestern Arizona) [2nd Edition: 2024]

DIRECT DOWNLOAD (PDF, 2.4 MB; 205 pp.):
https://ravensperch.org/wp-content/uploads/2024/10/Species-Checklist__2nd-edition.pdf
or
https://www.academia.edu/124748559/

Kaibab Plateau Ecology

An Inclusive Research Bibliography with Annotations (1893–2024) : Grand Canyon National Park (North Rim) and Kaibab National Forest (North Kaibab Ranger District), Arizona : plus A Chronological–Historical Bibliography of Bioecology and Conservation of Kaibab Deer [2024]

DIRECT DOWNLOAD (PDF, 2.8 MB; 184 pp.):
https://ravensperch.org/wp-content/uploads/2024/11/Kaibab-Plateau-Ecology.pdf
or
https://www.academia.edu/125696447/

BIBLIOGRAPHY OF ENTOMOLOGY OF THE GRAND CANYON REGION

(INSECTS, ARACHNIDS, AND OTHER ARTHROPODS)

ANONYMOUS

1892 19.3272 Personal notes. *Psyche*, 6 (July) (195): 292-293. [Includes notice of embarkation of C. H. Tyler Townsend "on a field trip by wagon from [Las Cruces] to the Grand Cañon of the Colorado *via* Flagstaff" where they will also meet another party under Prof. Toumey.]

1892 19.3225 Calendar of Societies [SECTION]. *Science*, 20 (November 11) (510): 278. [Includes notice for presentations to New Mexico Society for the Advancement of Science, Las Cruces, New Mexico: ". . . C. H. Tyler Townsend, A Partial Comparison of the Insect Fauna of the Grand Cañon with that of the San Francisco Mountain, in Arizona . . ." (ENTIRE NOTE)]

1893 19.3691 Proceedings of the New Mexico Society for the Advancement of Science. *In:* Proceedings of Scientific Societies [SECTION]. *American Naturalist*, 27 (March): 310-312. [See "Meeting of November 2, 1892, at La Cruçes.—(No. 1.)", pp. 310-311, summary of a paper by [C. H. Tyler] Townsend, "A partial comparison of the insect fauna of the Grand Cañon with that of the San Francisco Mountain in Arizona"; and which also notes (p. 311), "Specimens of insects were exhibited . . . and many photographs and views of the cañon region were shown." And see repeated under "(No. 3)" (p. 311): "Quite a number of specimens of the insect fauna of Grand Cañon and the San Francisco Mountains of Arizona were exhibited by Professor Townsend, besides some photographs taken during the trip."]

1905 19.3280 [W. M. Wheeler field work on the Formicidae of the Southwest, including Grand Canyon.] *In:* Museum News Notes [SECTION]. *American Museum Journal* (American Museum of Natural History), 5(2) (April): 91.

1913 19.5136 [Note.] *In:* [Meeting of] February 2nd, 1911; entomological program. *Hawaiian Entomological Society, Proceedings*, 2 [for 1911-1912] (5) (July): 191. ["Mr. Swezey exhibited a collection of insects taken at the Grand Canyon, Arizona, while on a visit to that place." (ENTIRE NOTE)]

Anonymous *(continued)*

1916	19.4052	Potato crop brings goodly wealth to Michigan growers. *Pere Marquette Service* (Pere Marquette Railroad, Detroit), 2(7) (December): 6-7. [See p. 7, "Origin of the Potato Bug": "The late C. C. James, of Canada, who was as highly regarded in scientific agriculture in Canada as Uncle James Wilson in the United States, held to a novel theory as to the origin of the potato bug. [¶] This pest, according to Prof. James, was none other than the Colorado beetle, which is indigenous to the Grand Canon of the Colorado. It first reached the Detroit river in 1877, and his belief was that it had traced the footsteps of the Forty-Niners eastward. It is a known fact that potatoes can be reproduced from the peel providing that there is an eye in it. Now, Mr. James, held that the Forty-Niners in their march across the continent had left a trace of these, which the Colorado beetle followed. It took them from 1849 to 1877 to reach Michigan." (ENTIRE NOTE) Surely a confused rendition.]
1917	19.6125	Proceedings of the Brooklyn Entomological Society. *Brooklyn Entomological Society, Bulletin*, 12(2) (April): 45-47. [See "Meeting of November 16" (p. 46), which notes: "The scientific programme was Mr. G. P. Englehardt's account of his visit to the Grand Canyon of Arizona, between June 6 and 10. After an illuminating description of the natural features he noted as interesting captures in the canyon of *Cicindela arizonæ*, rather common along a small stream on the Bright Angel trail; *Zopherus gracilis, Hetærina vulnerata*, abundant in Indian Garden, as well as *Notonecta mexicana*; *Memythrus cupressi* was found on willow, in the same place, and the larvæ of *Megathymus* sp. was found boring in agave. *Sphinx coloradus* came to light at the top of the Canyon." (ENTIRE NOTE)]
1922	19.3734	Barkbeetles menace to Grand Canyon forests. *Lumber* (Chicago), 70 (October 20): 44. [Grand Canyon National Park and Kaibab National Forest.] [Bark beetles.]
1994	19.88	Observations. *In:* Lamb, Susan (ed.), *The best of Grand Canyon Nature Notes.* Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 45. [Reprinted from *Grand Canyon Nature Notes*, September, 1921 [*sic*], October, 1932, November, 1926; mule deer, tarantulas.]
1995	19.109	Butterfly poachers brought to justice. *Endangered Species Bulletin*, 20(2): 4-6.
2006	19.5027	Descoberto novo gênero de grilo. *SBE Noticias* (Sociedade Brasileira de Espeleologia, Boletim Electrônico), 1(22) (August 2): 2. ("Fonte: O Estado de São Paulo 26/07/2006".) [Regarding the discovery of a new genus of cave cricket by Kyle D. Voyles and J. Judson Wynne in Grand Canyon-Parashant National Monument.] [In Portuguese.]
2006	19.2936	Utah researchers discover new type of cave cricket. *In:* Cave Biology [SECTION]. *TSA Activities Newsletter* (Texas Speleological Association), 10(10) (October): 4-5. [Grand Canyon-Parashant National Monument caves. Excerpted from online posting from *Washington Post*, 25 July 2006.]

A

Adams, James K., AND Lafontaine, J. Donald

2009 19.4280 A new species of *Plagiomimicus* Grote (Noctuidae: Stiriinae) from northern Arizona and southeastern Utah. *Lepidopterists' Society, Journal*, 63(3): 173-176. [*P. kathyae*, type material from Cameron Trading Post, Cameron, Arizona, and Moab, Utah.]

Addicott, John F., AND Bao, Tan

1999 19.2295 Limiting the costs of mutualism: multiple modes of interaction between yuccas and yucca moths. *Royal Society of London, Proceedings, Series B, Biological Sciences*, 266(1415): 197-202.

Alexander, Caroline

1996 19.151 Crimes of passion; a glimpse into the covert world of rare butterfly collecting. *Outside*, (January): 29-32.

Alexander, Charles P.

1946 19.5283 Records and descriptions of North American crane-flies (Diptera). Part VI. Tipuloidea of Arizona, New Mexico and Trans-Pecos Texas, 1. *American Midland Naturalist*, 35(2) (March): 484-531. [See pp. 506-508, *Tipula (Lunatipula) kaibabensis*, new species; holotype male from "Kaibab Plateau, north rim of the Grand Canyon, Arizona". Also includes various species records from Grand Canyon.]

1948 19.2078 Records and descriptions of North American crane-flies (Diptera). Part VII. The Tipuloidea of Utah, 1. *American Midland Naturalist*, 39(1): 1-82.

Allred, Dorald M., AND Cole, Arthur C.

1979 19.157 Ants from northern Arizona and southern Utah. *Great Basin Naturalist*, 39(1): 97-102. [*NOTE*: See Allred and Tanner (1979, pp. 89-90, ITEM NO. 19.158) for study-site descriptions.]

Allred, Dorald M., AND Gertsch, Willis J.

1976 19.4039 Spiders and scorpions from northern Arizona and southern Utah. *Journal of Arachnology*, 3: 87-99. [Northern Arizona locales include Paria River area, U.S. Highway 89 south of Page, and vicinity of Navajo Generating Station.]

Allred, Dorald M., AND Tanner, Vasco M.

1979 19.158 Beetles from the environs of Lake Powell in southern Utah and northern Arizona. *Great Basin Naturalist*, 39(1): 89-96. [Study-site descriptions (pp. 89-90) also pertain to Allred and Cole (1979, ITEM NO. 19.157).]

Anderson, Wyatt W.; Arnold, Jonathan; Baldwin, David G.; Beckenbach, Andrew T.; Brown, Celeste J.; Bryant, Stephen H.; Coyne, Jerry A.; Harshman, Lawrence G.; Heed, William B.; Jeffery, Duane E.; Klaczko, Louis B.; Moore, Betty C.; Porter, Jean M.; Powell, Jeffrey R.; Prout, Timothy; Schaeffer, Stephen W.; Stephens, J. Claiborne; Taylor, Charles E.; Turner, Monte E.; Williams, Gabriel O.; AND Moore, John A.

1991 19.3036 Four decades of inversion polymorphism in *Drosophila pseudoobscura*. *U.S. National Academy of Sciences, Proceedings*, 88 (November): 10367-10371. [Includes Grand Canyon data.]

Arnett, Ross H., Jr.

1951 19.2081 A revision of the Nearctic Oedemeridae (Coleoptera). *American Midland Naturalist*, 45(2) (March): 257-391.

Augustson, G. F.

1943 19.4333 A new subspecies of *Orchopeas sexdentatus* (Baker) (Siphonaptera: Dolichopsyllidae). *Southern California Academy of Sciences, Bulletin*, 42(1): 49-51, Plate 5 (p. 51). [*Orchopeas sexdentatus neotomae*; from "South Entrance, Grand Canyon National Park". Type host *Neotoma lepida devia* Goldman.]

Avramenko, N. O., AND Zatsaritsina, Yu. V. [Авраменко, Н. О.; Зацарицина, Ю. В.]

2015 19.6610 Нові види тварин, які були відкриті в 2014 році [Novi vydy tvaryn, yaki buly vidkryti v 2014 rotsi] [New species of animals that were discovered in 2014] [ABSTRACT]. *In: Матеріали науково-практичної конференції викладачів, аспірантів та студентів Сумського НАУ (20-24 квітня 2015 р.). Том II.* [Materialy naukovo-praktychnoyi konferentsiyi vykladachiv, aspirantiv ta studentiv Sums'koho NAU (20-24 kvitnya 2015 r.). Tom II.] [Proceedings of the scientific-practical conference of teachers, graduate students and students of Sumy NAU (April 20-24, 2015). Volume II.] Суми: Національного Аграрного Університету [Sumy: Natsional'noho Ahrarnoho Universytetu] [Sumy, Ukraine: National Agrarian University], p. 54. [Includes: "Hesperochernes bradybaughi або лжескорпіони . . . виявили в одній з печер в штаті Арізона, на території, що охороняється Parashant, на північному краю Великого Каньйону." (*Translated here*: *Hesperochernes bradybaughi* or false scorpions [pseudoscorpions] . . . found in one of the caves in Arizona, in the Parashant protected area, on the northern edge of the Grand Canyon.) This refers to Harvey and Wynne (2014, ITEM NO. 19.4593), but omits *Tuberochernes cohni* that is also described therein as new; that work was performed on the Grand Canyon-Parashant National Monument, Arizona.] [In Ukrainian.]

Ayers, Andrew D.

1999 19.192 *Gammarus lacustris* Sars (Crustacea: Amphipoda) in the tailwater of a regulated river. *Arizona-Nevada Academy of Science, Journal*, 31(2): 83-96. [Date "1998 [Distributed March 1999]" (square brackets thus).]

B

B., E. D.

_____	19.194	African honey bees found on Grand? *In:* Hot Line [SECTION]. *Paddler*, _____: 14.

B., R. A.; B., J. P.; D., K.; F., C. D.; H., Y.; L., R. H.; R., R.; S., W. L.; AND T., P. M.

1990	19.4926	(CONTRIBUTORS) Arizona. *News of the Lepidopterists' Society*, (2) (March/April): 15-16.

Baker, Carl F.

1895	19.3191	Preliminary studies in Siphonaptera.—III. Genus *Pulex* (continued.) *Canadian Entomologist*, 27(4) (April): 108-112. [See p. 111.]
1895	19.3192	Preliminary studies in Siphonaptera.—V. Genus *Pulex* (Division III.) *Canadian Entomologist*, 27(6) (June): 162-164. [See p. 164.]
1904	19.3102	A revision of American Siphonaptera, or fleas, together with a complete list and bibliography of the group. *U.S. National Museum, Proceedings*, 27: 365-469. [See pp. 382-383, 385.]

Ball, E. D.

1933	19.6063	The genus *Myndus* Stal in North America (Homoptera Fulgoridae). *Washington Academy of Sciences, Journal* (Washington, D.C.), 23(10) (October 15): 478-484. [*Myndus* Stål.] [See p. 482, *Myndus yuccandus*, new species, from a yucca at "Grand Canyon Bridge, Ariz." (Navajo Bridge).] [*NOTE*: Kramer (1979, ITEM NO. 19.6062) examined the type material from "Grand Canyon, Arizona", noting that "The information published with the original description is slightly different from that on the labels of the holotype; this is probably due to a lapsus by Ball. The previously published locality was given as 'Grand Canyon Bridge' and the date of collection '30 August 1930'. One paratype male with same data. Both are in the collection of the USNM." It is feasible that Ball's published information is correct. Not resolved here.]
1935	19.4452	Some new Issidae, with notes on others—(Homoptera–Fulgoridae). *Brooklyn Entomological Society, Bulletin*, 30(2) (April): 37-41. [See p. 38, "*Hysteropterum cornutum* var. *utahnum* Ball n. var. [new variety]", from "near the Grand Canyon" (likely North Rim).]
1937	19.6118	Some new Fulgoridae from the western United States. *Brooklyn Entomological Society, Bulletin*, 32(5) (December): 171-183. [See *Yucanda miniata*, new species (p. 175); holotype, allotype, and four paratypes "from a small shrub that looks like a dwarf mesquite, at the Grand Canyon Bridge, Arizona". See also *Arida nodosa*, new species (pp. 176-177; types from Tucson Mountains but distribution noted "from Yuma to Tucson and north to the Grand Canyon Bridge".] [Navajo Bridge.]

Ball, E. D., AND Beamer, R. H.

1939 19.5233 A revision of the genus *Athysanella* and some related genera (Homoptera-Cicadellidae). *University of Kansas, Science Bulletin*, 26(1) (October 1): 5-82 (including Plates 1-12). [See: *Athysanella fredonia*, new species (pp. 12-13), holotype from Fredonia, Arizona; paratypes from localities including "Grand Canyon, Ariz." *Athysanella globosa*, new species (pp. 18-19), holotype from "Grand Canyon, Ariz." *Athysanella* (*Gladionura*) *casa*, new species (p. 48), paratypes from localities including "Grand Canyon, Ariz." Refer also to Plates 1, 2, 7, 9, 11.]

Ball, E. D.; Tinkham, E. R.; Flock, Robert; AND Vorhies, C. T.

1942 19.211 The grasshoppers and other Orthoptera of Arizona. *University of Arizona, College of Agriculture, Agricultural Experiment Station, Technical Bulletin 93*, pp. 257-373.

Banks, Nathan

1902 19.3659 A list of spiders collected in Arizona by Messrs. Schwarz and Barber during the summer of 1901. *U.S. National Museum, Proceedings*, 25: 211-221, Plate 7. [Reports various species from "Bright Angel" and "Colorado Cañon". None of the new species described are from Grand Canyon. A large number of specimens in this paper are from Williams, Arizona.]

1903 19.3600 A revision of the Nearctic Chrysopidae. *American Entomological Society, Transactions*, 29(2): 137-162. [See *Chrysopa chlorophana* Burm., pp. 147-148; including Grand Canyon.]

1906 19.3596 A revision of the Nearctic Hemerobiidae. *American Entomological Society, Transactions*, 32(1): 21-51, Plates 3-5. [See *Hemerobius moestus* Banks, pp. 31-32, and *H. pacificus* Banks, p. 33; both including Grand Canyon.]

Barber, H. G. [Barber, Harry Gardner]

1910 19.3572 Some Mexican Hemiptera-Heteroptera new to the fauna of the United States. *New York Entomological Society, Journal*, 18(1) (March): 34-39. [See p. 39: "*Milyas spinicollis* Champ. This was collected by Professor E. B. Wilson, of Columbia University, in the Grand Cañon of the Colorado along Bright Angel Trail." (ENTIRE NOTE)]

1938 19.5491 A new genus and species of the subfamily Triatominae (Reduviidae: Hempitera). *Entomological Society of Washington, Proceedings* (Washington, D.C.), 40(4) (April): 104-105. [*Paratriatoma hirsuta*, new genus, new species; paratypes from Phanton [*sic*] Ranch, Grand Canyon. (Phantom Ranch is consistently misspelled in this paper.)]

Barnes, William, AND Benjamin, F. H.

1926 19.5123 Notes on diurnal Lepidoptera, with additions and corrections to the recent "List of Diurnal Lepidoptera". *Southern California Academy of Sciences, Bulletin*, 25(3) (September/December): 88-98. [Includes *Coenomympha fureae*, new species, type locality "Grand Canyon, Ariz." (p. 90); and *Cercyonis damei*, new species, type locality "Grand Canyon, Ariz." (p. 90).]

Barr, William F.

1972 19.4322 New species of North American *Acmaeodera* (Coleoptera: Buprestidae). *Museu Boçage, Archivos* (Lisboa), Series 2, 2(7): 145-201. [See *Acmaeodera pletura*, new species, pp. 164-166, Figure 12 (p. 199); "Additional paratypes" from North and South Rims of Grand Canyon (among other locales).]

Bauer, David L.

1955 19.4938 Notes on the *Papilio machaon* complex in Arizona. *The Lepdopterists' News*, 9(1): 7-10.

1955 19.5049 A new race of *Papilio indra* from the Grand Canyon region. *The Lepdopterists' News*, 9(2/3): 49-54. [*Papilio indra kaibabensis*, new subspecies; types from Bright Angel Point, Grand Canyon.]

Baxter, Colden V.

2020 19.6581 [Remarks.] *In:* 追悼～中野繁氏を偲ぶ：バハカリフォルニア沖海難事故から20年 [Tsuitō ～ Nakano Shige-shi o shinobu: Bahakariforunia oki kainan jiko kara 20-nen] [Mourning—In memory of Mr. Shigeru Nakano: 20 years after the marine accident off the coast of Baja California]. 一般社団法人日本生態学会ニュースレター [Nihon seitai gakkai Nyūsuretā] [Ecological Society of Japan, Newsletter], 2020(5) (51) (May): 6-7. [Includes remark (p. 7, *translated here*), "In the last few months, I have been able to publish several treatises that follow Mr. Nakano's footsteps . . . [including a] study that revealed the fact that aquatic insects, fish, and their interactions determine the circulation and fate of mercury between the Colorado River in the Grand Canyon and its banks."] [Author's name is given in Japanese orthography: コールデン・V・バクスター.] [In Japanese.]

Baxter, Colden V.; Rosi-Marshall, Emma J.; Cross, Wyatt F.; Kennedy, Theodore A.; Wellard, Holly A.; Hall, Robert O.; AND Yard, Michael D.

2008 19.2762 A quantitative food web and ecosystem production budget for Glen Canyon, Colorado River [ABSTRACT]. *In: Colorado River Basin Science and Resource Management Symposium 2008. Coming together: Coordination of science and restoration activities for the Colorado River ecosystem : abstracts : November 18-20, 2008, Doubletree Resort Hotel, Scottsdale, Arizona.* [No imprint], p. 36. [Glen Canyon Dam tailwater.]

Beamer, L. D., AND Beamer, R. H.

1930 19.4512 Biological notes on some western cicadas. *New York Entomological Society, Journal*, 38(3) (September): 291-305. [Grand Canyon, see *Diceroprocta apache*, p. 296.]

Beamer, R. H.

1948 19.4363 Some new species of *Delphacodes* (Homoptera, Fulgoridae, Delphacinae); Part IV. *Kansas Entomological Society, Journal*, 21(3) (July): 96-110. [See pp. 100-101, *D. apicata*, new species. Under "Macropterous Form", includes holomorphotype from "Grand Canyon, Ariz., Aug. 11, 1927, R. H. Beamer".]

Beck, D. Elden

1929 19.5122 Bees of the sub-family Osminae in the collection of the Brigham Young University. *Brooklyn Entomological Society, Bulletin*, 24 (December): 303-306. [See p. 304, "*Osmia coloradensis* Cresson. Arizona: 1 ♀ Rim Grand Canyon, Kaibab Forest ([identified by Vasco M.] Tanner)."]

Bedford, Ashton; Sankey, Temuulen T.; Sankey, Joel B.; Durning, Laura E.; AND Ralston, Barbara E.

2017 19.5835 Remote sensing of tamarisk beetle (*Diorhabda carinulata*) impacts along 400 km of the Colorado River in the Grand Canyon, Arizona, USA [ABSTRACT]. *In: 14th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region, September 11-14, 2017, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona.* [No imprint], pp. 11-12.

2018 19.5812 Remote sensing of tamarisk beetle (*Diorhabda carinulata*) impacts along 412 km of the Colorado River in the Grand Canyon, Arizona, USA. *Ecological Indicators*, 89 (June): 365-375.

Bedford, Ashton; Sankey, Temuulen T.; Sankey, Joel B.; Durning, Laura E.; Ralston, Barbara E.; AND Bransky, Nathaniel D.

2019 19.6269 Remote sensing of tamarisk beetle (*Diorhabda carinulata*) impacts along 412 km of the Colorado River in the Grand Canyon, Arizona, USA [ABSTRACT]. *In: 15th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region : theme: "Science and Solutions for Conserving the Southwest's Land, Water, Biodiversity and Cultures" : September 9-12, 2019, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona*, p. 11.

Behan, Jeff

1995 19.222 The bug that changed history. *Boatman's Quarterly Review*, 8(2): 17.

Belk, Denton

1974 19.229 *Zoogeography of the Arizona Anostraca, with a key to the North American species.* Doctoral dissertation, Arizona State University.

1977 19.230 Zoogeography of the Arizona fairy shrimps (Crustacea: Anostraca). *Arizona-Nevada Academy of Science, Journal*, 12(2): 70-78.

1992 19.231 Observations on the clam shrimps of Arizona. *Arizona-Nevada Academy of Science, Journal*, 26(2): 132-138.

Belk, Denton, AND Fugate, Michael

2000 19.1980 Two new *Branchinecta* (Crustacea: Anostraca) from the southwestern United States. *Southwestern Naturalist*, 45(2) (June): 111-117. [Includes *Branchinecta kaibabensis*, new species (pp. 115-117, figures 2b (p. 114), 3a-e (p. 116); type locality in "A natural pool 0.6 km east of Arizona Highway 67 just northeast of Forest Road 213 in the Kaibab National Forest".]

Benesh, Bernard

1946 19.6358 A systematic revision of the Holarctic genus *Platycerus* Geoffroy (Coleoptera: Lucanidae). *American Entomological Society, Transactions*, 72(3) (September): 139-202. [See *Platycerus marginalis* Casey, pp. 172-175, Plates 4, 6 (key on p. 200); distributional notes include "Kaibab Forest, VII, (V. M. Tanner)" (ENTIRE NOTE).] [*NOTE*: Although the ranger district on the Kaibab forest is not indicated, Vasco M. Tanner worked principally in Utah with explorations also on the Kaibab Plateau.]

Bennett, Dayle D.

1982 19.2874 A pilot control project to evaluate acephate for control of pandora moth, *Coloradia pandora* Blake (Lepidoptera: Saturniidae), Jacob Lake, Arizona, 1981; North Kaibab Ranger District, Kaibab National Forest, Arizona. *U.S. Forest Service, Forest Pest Management Report R-3 82-10*, 36 pp.

1984 19.2875 Pandora moth suppression project using acephate, Jacob Lake, Arizona, 1983; Kaibab National Forest, Arizona. *U.S. Forest Service, Forest Pest Management Report R-3 84-10*, 18 pp.

Bennett, Dayle D.; Schmid, J. M.; Mata, S. A.; AND Edminster, C. B.

1987 19.244 Growth impact of the North Kaibab pandora moth outbreak. *U.S. Forest Service, Rocky Mountain Forest and Range Experiment Station, Research Note RM-474*, 4 pp.

Bequaert, Joseph C.

1929 19.4502 A new *Pseudomasaris* from California, with some considerations on the masarid wasps (Hymenoptera). *Psyche*, 36(2) (June): 61-88. [Under "Additional Records of Pseudomasaris", see p. 71, "*P. vespoides* (Cresson).—Arizona: Grand Canyon. 1 ♂ (G. P. Engelhardt)." (ENTIRE NOTE)]

1932 19.6106 The Nearctic social wasps of the subfamily Polybiinae (Hymenoptera; Vespidae). *Entomologica Americana*, 13(3) (December): 87-149 (pagination includes Plates 27-29). [See pp. 124, 125, and *Mischocyttarus flavitarsis* var. *kaibabensis*, new variety (p. 133), female holotype and paratype from Bright Angel Trail, Grand Canyon, collected by R. C. Shannon, August 4, 1917.]

1940 19.6112 Notes on the distribution of *Pseudomasaris* and on the foodplants of the Masaridinae and Gayellinae (Hymenoptera, Vespidae). *Brooklyn Entomological Society, Bulletin*, 35(2) (April): 37-45. [Under distribution *P. vespoides* Cresson (p. 37), only new localities are listed, including: "southern rim of Grand Canyon, 1 ♂ (Margaret L. Cook)".]

Bertholf, Judy Kay

1979 19.3410 *Tiger beetles of the genus Cicindela in Arizona (Coleoptera: Cicindelidae).* Master's thesis, Texas Tech University, 94 pp.

Bestard, Margeaux

2020 19.6506 [Photo without legend. Very large moth on person's hand along Colorado River.] *Boatman's Quarterly Review*, 33(3) (Fall): 43.

Beutenmüller, William

1907 19.4065 Notes on a few North American Cynipidae, with descriptions of new species. *American Museum of Natural History, Bulletin*, 23: 463-466, Plate 37. [See *Andricus wheeleri*, new species, p. 464, Plate 37, figures 7-9; from "Coconino Forest, rim of the Grand Cañon, Arizona; altitude 7,000 feet. (William M. Wheeler)."]

Binford, Greta J.; Callahan, Melissa S.; Bodner, Melissa R.; Rynerson, Melody R.; Berea Núñez, Pablo; Ellison, Christopher E.; AND Duncan, Rebecca P.

2008 19.5144 Phylogenetic relationships of *Loxosceles* and *Sicarius* spiders are consistent with Western Gondwanan vicariance. *Molecular Phylogenetics and Evolution*, 49: 538-553. [Taxon inclusion of individual genes (Table 1, p. 541) lists *Loxosceles kaiba*, from "USA: Grand Canyon NP, AZ". (No further text note.)]

Blackman, M. W. [Blackman, Maulsby Willett]

1928 19.6421 The genus *Pityophthorus* Eichh. in North America: A revisional study of the Pityophthori, with descriptions of two new genera and seventy-one new species. *New York State College of Forestry at Syracuse University, Technical Publication 25 / New York State College of Forestry at Syracuse University, Bulletin 3-b*, 212 pp. [Includes *Pityophthorus grandis*, new species; holotype from Kaibab National Forest, Arizona.]

1934 19.4374 A revisional study of the genus *Scolytus* Geoffroy (*Eccoptogaster* Herbst) in North America. *U.S. Department of Agriculture, Technical Bulletin 431*, 30 pp. [See p. 19, *Scolytus robustus*, new species; paratype material "collected in Kaibab National Forest, Ariz."]

Blinn, Dean W., AND Cole, Gerald A.

1991 19.273 Algal and invertebrate biota in the Colorado River: comparison of pre- and post-dam conditions. *In:* [National Research Council], Commission on Geosciences, Environment, and Resources, Water Science and Technology Board, Committee to Review the Glen Canyon Environmental Studies, *Colorado River ecology and dam management : proceedings of a symposium, May 24-25, 1990, Santa Fe, New Mexico.* Washington, D.C.: National Academy Press, pp. 102-123.

Blinn, Dean W., AND Ruiter, David E.

2006 19.2873 Tolerance values of stream caddisflies (Trichoptera) in the lower Colorado River basin, USA. *Southwestern Naturalist*, 51(3) (September): 326-337.

2009 19.6432 Caddisfly (Trichoptera) assemblages along major river drainages in Arizona. *Western North American Naturalist*, 69(3) (September): 299-308. [Includes Colorado River localities in Grand Canyon, and Little Colorado River at Cameron and Colorado River confluence.]

Blocker, H. Derrick, AND Johnson, James W.

1988 19.5232 Classification of the subgenus *Athysanella*, genus *Athysanella* Baker (Homoptera, Cicadellidae, Deltocephalinae). *In:* Research in the Auchenorrhyncha, Homoptera: A Tribute to Paul W. Oman. *Great Basin Naturalist Memoirs*, (12): 18-42. [Grand Canyon noted: *Athysanella globosa* Ball and Beamer (p. 23), *A. fredonia* Ball and Beamer (pp. 29-30).]

Bloodworth, Benjamin R.

2019 19.6271 Current distribution and potential impacts of tamarisk beetle (*Diorhabda* spp.) across the Colorado River Basin [ABSTRACT]. *In: 15th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region : theme: "Science and Solutions for Conserving the Southwest's Land, Water, Biodiversity and Cultures" : September 9-12, 2019, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona*, p. 16.

2020 19.6403 Current distribution and potential impacts of tamarisk beetle (*Diorhabda* spp.) across the Colorado River Basin [ABSTRACT]. *In: Colorado River Terrestrial and Riparian (CRTR) Meeting, 2020 Annual Meeting, Aquarius Casino Resort, Laughlin, NV, January 28-30, 2020*.

Bloodworth, Benjamin R.; Shafroth, Patrick B.; Sher, Anna A.; Mannes, Rebecca B.; Dean, Daniel W.; Johnson, Matthew J.; AND Hinojosa Huerta, Osvel

2016 19.4976 Tamarisk beetle (*Diorhabda* spp.) in the Colorado River basin: synthesis of an expert panel forum. *Colorado Mesa University, Ruth Powell Hutchins Water Center, Scientific and Technical Report 1*, 20 pp. [including wraps].

Bohart, George E., AND Knowlton, George F.

1952 19.5251 Yearly population fluctuation of *Bombus morrisoni* at Fredonia, Arizona. *Journal of Economic Entomology*, 45(5): 890-891.

Bohart, R. M.

1958 19.6121 A new *Prionony*x and a key to the North American species (Hymenoptera: Sphecidae). *Brooklyn Entomological Society, Bulletin*, 53(4) (October): 90-93. [*Prionony*x *subatrata*, new species; localities of paratype specimens include "Grand Canyon South Rim (M. A. Evans), Kaibab Forest (M. Wasbauer)".]

Bongberg, Jack

1952 19.6422 Jack Bongberg (Albuquerque Laboratory). *In: Proceedings of the Fourth Annual Western Forest Insect Work Conference, Victoria, B. C., December 8-10, 1952*, p. 8. [Includes brief remarks on budworm infestation on the North Rim of Grand Canyon National Park.]

Boudreau, Diane

2004 19.2961 Terrible tigers of the desert. *Chain Reaction* (Arizona State University), 1(2): 18-19. [Tiger beetles. North Rim of Grand Canyon, *in passing*.]

Bousquet, Yves

2012 19.4049 *Catalogue of* Geadephaga *(Coleoptera, Adephaga) of America, north of Mexico. Trachypachidae-Trechini.* Sofia, Bulgaria; and Moscow, Russia: Pensoft Publishers, 1722 pp. (*ZooKeys*, 245(1): 1-1722 (Special Issue).) [See p. 168, *Nebria georgei* Kavanaugh, 2008", from Grand Canyon; p. 313, *Cicindela hemorragica arizonae* Wickham, 1899, from Grand Canyon.]

Boyle, Robert H.

1959 19.6884 An absence of wood nymphs; Vladimir Nabokov, famed author of "Lolita," and a renowned lepidopterist, seeks his favorite butterfly in Arizona. *Sports Illustrated*, (September 14):. [Nabokov is interviewed when he and his wife are staying in a cabin at Forest Houses in Oak Creek Canyon, Arizona. Quoting Nabokov, he mentions, *in passing*, his Grand Canyon butterfly discovery, which he hopes to find at Oak Creek.]

Bradley, J. Chester

1919 19.2013 An entomological cross-section of the United States. *Scientific Monthly*, 8(4): 356-377, (5): 403-420, (6): 514-526. [Grand Canyon, see pp. 357, 359, 519-520.]

1977 19.2003 (WITH AN INTRODUCTION BY Frank L. Lambrecht) Bug men and botanists in Arizona. *Journal of Arizona History*, 18(4): 469-484. [Lambrecht introduction, pp. 469-472; remainder reprinted from Bradley (1919).]

Bromley, Stanley W.

1940 19.6113 New U.S.A. robber flies (Diptera: Asilidae). *Brooklyn Entomological Society, Bulletin*, 35(1) (February): 13-21. [See *Erax benedicti*, new species; paratype material includes "2 females, Grand Canyon, Ariz., June 12, 1937 (W. Benedict)" (pp. 15-16, Figure 1 (p. 20)).]

Brown, F. Martin

1967 19.3974 Dr. Edward Palmer's collecting localities in southern Utah and northwestern Arizona. *Lepidopterists' Society, Journal*, 21(2): 129-134.

Brown, Larry N.

1984 19.363 Population outbreak of pandora moths (*Coloradia pandora* Blake) on the Kaibab Plateau, Arizona (Saturniidae). *Lepidopterists' Society, Journal*, 38(1): 65.

Brown, Nikolle L.

2001 19.2143 "D"-flies: Which is a dragon? Which is a damsel? *The Waiting List* (Grand Canyon Private Boaters Association), 5(3) (Fall): 9.

2004 19.2494 Critters in the canyon; Tarantulas and tarantula hawks. *The Waiting List* (Grand Canyon Private Boaters Association Quarterly), 7(1) (Fall): 43.

Bruner, Lawrence

1904 19.372 The Acridiidae. *In: Biologia Centrali-Americana. Insecta. Orthoptera. Volume II. The Acridiidae by Prof. Lawrence Bruner, B.Sc. [the Tettiginae by Albert P. Morse], and the Phasmidae by Robert Shelford, M.A., F.L.S., C.M.Z.S.* [No imprint], 412 pp., 8 plates. [Volume II, 1900-1909.] [*Series imprint*: London: R. H. Porter, *for* the editors.] [See p. 46, *Syrbula modesta*.] [Issued in parts with dated signatures; signature Gg (pp. 41-48) dated January, 1904.] [Square brackets in title are part of title.] [See also Rehn and Hebard (1912, ITEM NO. 19.1386) for lectotypifications of selected species.]

Bryner, Jeanna

2007 19.2934 New albino millipedes discovered; "living fossils" will help researchers understand how life evolution [*sic*]. *C.O.G.nizance* (National Speleological Society, Central Oklahoma Grotto), (March/April): 5. ("Reprinted from Livescience.com".) [J. Judson Wynne research in Grand Canyon caves.]

Bunn, Ralph W.

1930 19.4310 Notes on the genus *Aphelonema* Uhler with descriptions of new species (Homoptera, Fulgoridae). *Kansas Entomological Society, Journal*, 3(3) (July): 73-77. [See p. 76, *Aphelonema convergens* var. *canyonensia*, new variety; holotype from "vicinity of Grand Canyon", and some paratypes from "Grand Canyon".]

Burke, H. E.

1907 19.3653 A new buprestid enemy of *Pinus edulis*. (*Melanophila pini-edulis*, n. sp.) *Entomological Society of Washington, Proceedings* (Washington, D.C.), 9(1/4) (March/December): 117-118. [New species, based in part on "One female taken by Mr. E. A. Schwarz from pinyon (*Pinus edulis*) at Bright Angel Hotel (Grand Canyon P.O.), Arizona, on July 11, 1902." (p. 118)] [*Melanophila piniedulis*.]

Byars, Betty

1982 19.399 Insect density and diversity on Colorado River beaches. Part I. Sweep net trapping. *In: Colorado River Investigations I : July/August 1982.* Flagstaff, Arizona: Northern Arizona University, and Museum of Northern Arizona, pp. 44-55.

1984 19.400 Insect diversity and density on Colorado River beaches, 1983. *In:* Beus, Stanley S., and Carothers, Steven W. (eds.), *Colorado River Investigations II : July/August 1983.* Flagstaff, Arizona: Northern Arizona University, *for* U.S. National Park Service, Grand Canyon National Park, pp. 126-132.

1984 19.401 Further investigations on *Pogonomyrmex* ants on Colorado River beaches in Grand Canyon. *In:* Beus, Stanley S., and Carothers, Steven W. (eds.), *Colorado River Investigations II : July/August 1983.* Flagstaff, Arizona: Northern Arizona University, *for* U.S. National Park Service, Grand Canyon National Park, pp. 133-142.

C

Cain, D. L.; Croteau, M.-N.; Fuller, C. C.; Barasch, D.; Beisner, K.; AND Schenk, E.

2017 19.5836 Uranium exposure in spring outflows within Grand Canyon National Park [ABSTRACT]. *In: 14th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region, September 11-14, 2017, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona.* [No imprint], p. 28. [Data based on studies of insect taxa.]

Carlisle, Daren M.; Wolock, David M.; Konrad, Christopher P.; McCabe, Gregory J.; Eng, Ken; Grantham, Theodore E.; AND Mahler, Barbara

2019 19.6368 Flow modification in the nation's streams and rivers. *U.S. Geological Survey, Circular 1461*, 75 pp. (The Quality of Our Nation's Waters.) [See p. 63, "Dam Operations Adjusted to Mitigate the Ecological Consequences of Streamflow Fluctution", which relates to the management of Glen Canyon Dam and to acquatic insects in the Colorado River downstream.]

Carothers, Steven W.; Johnson, R. Roy; AND Kingsley, Kenneth J.

2020 19.6502 A naturalized riparian ecosystem: Consequences of tamarisk leaf beetle (*Diorhabda* spp.) biocontrol. *In:* Johnson, R. Roy, Carothers, Steven W., Finch, Deborah M.; Kingsley, Kenneth J., and Stanley, John T. (technical eds.), Riparian research and management: Past, present, future: Volume 2. *U.S. Forest Service, Rocky Mountain Research Station, General Technical Report RMRS-GTR-411*, pp. 18-46.

Carothers, Tanner

2017 19.5784 Mites in Grand Canyon. *Boatman's Quarterly Review*, 30(2) (Summer): 4-6.

Carter, E. E.

1922 19.4079 Statement of Mr. E. E. Carter, Forest Service. *In:* U.S. House of Representatives, House Committee on Appropriations, Subcommittee, *Second Deficiency Appropriation Bill, 1923. Hearing before Subcommittee of House Committee on Appropriations : consisting of Messrs. Martin B. Madden (Chairman), Joseph G. Cannon, Daniel R. Anthony, Jr., Patrick H. Kelley, William R. Wood, Joseph W. Byrns, Thomas U. Sisson, and James A. Gallivan, in charge of deficiency appropriations : Sixty-seventh Congress, Fourth Session.* Washington, D.C.: U.S. Government Printing Office, pp. 53-63. [See "Insect Infestation in Grand Canyon National Park", p. 56. North Rim and Kaibab National Forest.]

Casey, Thomas L.

1895 19.4537 Coleopterological notices. VI. *New York Academy of Sciences, Annals*, 8 (July): 435-838. [See pp. 489-490, *Trichochrous incipiens*, new species, based on a single female specimen from "Arizona (near the Grand Cañon of the Colorado). Dr. T. Mitchell Prudden." And see pp. 527-528, *T. reversus*, new species, based on a single female specimen from "Arizona (near the Grand Cañon of the Colorado)", from Dr. T. Mitchell Prudden.]

1900 19.3610 Review of the American Corylophidae, Cryptophagidae, Tritomidae and Dermestidae, with other studies. *New York Entomological Society, Journal*, 8(2) (June): 51-172. [Grand Canyon collections noted for: *Cryptorhopalum pruddeni*, new species, p. 156; *Orphilus aequalis*, new species, p. 164.]

1907 19.4409 Notes on *Chalcolepidius* and the Zopherini. *Canadian Entomologist*, 39(2) (February): 29-46. [See p. 41, *Zopherodes lugubris*, new species, and *Z. pruddeni*, new species, described from "Arizona (Grand Canyon of the Colorado)"; *Zopherodes* also a new genus in this publication (p. 38).]

1908 19.6207 A revision of the tenebrionid subfamily Coniontinæ. *Washington Academy of Sciences, Proceedings* (Washington, D.C.), 10 (April 25): 51-166. [See *Discodemus brevipennis*, new species (p. 61); "Arizona (Grand Canyon of the Colorado),— T. Mitchell Prudden".]

1909 19.6208 Studies in the American Buprestidæ. *Washington Academy of Sciences, Proceedings* (Washington, D.C.), 11(2) (April 28): 47-178. [See *Buprestis subornata* Leconte (p. 98); localities include "Arizona (Grand Canyon of the Colorado)".]

1912 19.3608 Studies in the Longicornia of North America. *In:* Casey, Thomas L., *Memoirs on the Coleoptera. III.* Lancaster, Pennsylvania: New Era Printing Co., pp. 215-386. [Grand Canyon collections noted for: *Prionus spiculosus*, new species, p. 240; *P. angustulus*, new species, p. 241; *P. fissifrons*, new species, p. 243; *P. terminalis*, new species, pp. 243-244; *Stenosphenus pruddeni*, new species, pp. 346-347.]

1918 19.3787 A review of the North American Bembidiinæ. *In:* Casey, Thomas L., *Memoirs on the Coleoptera. VIII. 1918.* Lancaster, Pennsylvania: New Era Printing Co., pp. 1-223. [See *Bembidion (Cyclolopha) occultum*, new subgenus, new species (p. 144), type specimen from "Grand Cañon of the Colorado", collected by T. Mitchell Prudden.] [A review of the North American Bembidiinae.]

Causey, N. B.

1975 19.428 Desert millipedes (Spirostreptidae, Spirostreptida) of the southwestern United States and adjacent Mexico. *Texas Tech University Museum, Occasional Papers*, (35), 12 pp. [See *Orthoporus ornatus* (Girard) (pp. 5-7), which includes (p. 7) new record, "Coconino Co., floor of the Grand Canyon"; with credit (p. 11), "Fred Wagner made the collection from the floor of the Grand Canyon of the Colorado, which established a new northwestern record". (No further notes pertaining to the Grand Canyon material.)]

Center for Biological Diversity

2015 19.4834 *Before the Secretary of the Interior: Emergency petition to list the Arizona wetsalts tiger beetle (*Cicindela haemorrhagica arizonae*) and the MacDougal's yellowtops (*Flaveria macdougalii*) as Endangered or Threatened under the Endangered Species Act.* [No place]: Center for Biological Diversity, [4], 20 pp. [Grand Canyon region. Includes riparian concerns relating to groundwater discharge.]

Chamberlin, Ralph V.

1940 19.4341 New American tarantulas of the family Avicylariidae. *University of Utah, Bulletin*, 30(13) (May 6), 39 pp. [See *Aphonopelma behlei*, new species, from Grand Canyon Village (pp. 26-27), and *A. phasmus*, new species, from Phantom Ranch, Grand Canyon (p. 28).]

1948 19.4376 On some American spiders of the family Erigonidae. *Entomological Society of America, Annals*, 41(4): 483-562. [Includes *Tapinocyba kesimba*, new species, from V.T. Ranch (VT Ranch), Kaibab Plateau.]

Chamberlin, Ralph V., AND Ivie, Wilton

1942 19.4378 A hundred new species of American spiders. *University of Utah, Bulletin*, 32(13) (June 30) [Biological Series, 7(1)], 117 pp. [See *Oecobius parvus*, new species, from Virgin River narrows (p. 13); *Neoantistea coconino*, new species, from "Kaibab Forest, Arizona" [coordinates indicate area of South Rim of Grand Canyon] (pp. 28-29, Plate 6, figures 59, 60); *Linyphantes ephedrus*, new species, localities include Virgin River narrows (pp. 46-47, Plate 10, figures 104-107); *Metepeira arizonica*, new species, localities include Virgin River narrows (p. 69, Plate 14, figures 182-184; Plate 15, figures 185-187).]

Chandler, Peter

1993 19.5494 The Holarctic species of the *Mycetophila fungorum* (De Geer) group (Diptera: Mycetophilidae). *British Journal of Entomology and Natural History*, 6: 5-11. [See *Mycetophila neofungorum*, new species; "Holotype male USA, Arizona, Grand Canyon National Park (north rim), 15.vii.1954 (W. L. Downes, Natural History Museum, London)." (Brief taxonomic description only. Apparently a unique specimen.)]

Chavez, J. L., AND Stevens, Lawrence E.

2015 19.4845 Assassin bug (Hemiptera: Reduviidae) diversity and biogeography in the Colorado River Basin, with an emphasis on the Colorado Plateau ecoregion, southwest USA [ABSTRACT]. *In: 13th Biennial Conference of Science and Management on the Colorado Plateau and Southwest Region, October 5-8, 2015, Northern Arizona University, High Country Conference Center : oral and poster abstracts*, p. 18.

Chen, Chang

1999 19.5248 *Genetical and molecular systematic study on the genus* Montagnea *Fr., a desert adapted Gasteromycete.* Master's thesis, Virginia Polytechnic Institute and State University, 74 pp. [Specimens examined for the study include *Montagnea arenaria*

(DC) Zeller, with included material from "Coconino County, Jacob Lake, House Rock Valley, July 26, 1955, Coll. H. E. Ahles. HEA9515 (MICH)" (p. 14).]

Chen, Zhong; Clancy, Karen M.; AND Kolb, Thomas E.

2003 19.2855 Variation in budburst phenology of Douglas-fir related to western spruce budworm (Lepidoptera: Tortricidae) fitness. *Journal of Economic Entomology*, 96(2): 377-387.

Chen, Zhong; Kolb, Thomas E.; Clancy, Karen M.; Hipkins, Valerie D.; AND DeWald, Laura E.

2001 19.2905 Allozyme variation in interior Douglas-fir: association with growth and resistance to western spruce budworm herbivory. *Canadian Journal of Forest Research*, 31(1): 1691-1700. [Includes trees from near Jacob Lake, Arizona.]

Clarke, J. F. Gates

1947 19.2185 Notes on Oecophoridae, with descriptions of new species. *Washington Academy of Sciences, Journal* (Washington, D.C.), 37(1): 2-18. [Moths.] [Includes *Depressaria schellbachi*, new species from Shoshone Point.]

Cleland, Sophia; Hocutt, Gregory D.; Breitmeyer, Christopher M.; Markow, Therese A.; AND Pfeiler, Edward

1996 19.446 Alcohol dehydrogenase polymorphism in barrel cactus populations of *Drosophila mojavensis. Genetica*, 98(1) (July): 115-117. [Entomology; host plant barrel cactus, *Ferocactus acanthodes*. Populations studied from Agua Caliente, California, and the Grand Canyon, Arizona.]

Cleveland, Danielle; Hinck, Jo Ellen; AND Lankton, Julia S.

2019 19.5983 Assessment of chronic low-dose elemental and radiological exposures of biota at the Kanab North uranium mine site in the Grand Canyon watershed. *Integrated Environmental Assessment and Management*, 15(1) (January): 112-125 + Supporting Information online, https://seta.onlinelibrary.wiley.com/doi/abs/10.1002/ieam.4095, 21 pp.

2021 19.6559 Elemental and radionuclide exposures and uptakes by small rodents, invertebrates, and vegetation at active and post-production uranium mines in the Grand Canyon watershed. *Chemosphere*, 263 (January): (127908) (https://doi.org/10.1016/j.chemosphere.2020.127908) + research data online (Chemical analyses and histopathology of organisms and plants collected from breccia pipe uranium mine sites in the Grand Canyon wateshed, 2015-2020, U.S. Geological Survey data release (https://doi.org/10.5066/P94OVQO9 [also as https://www.sciencebase.gov/catalog/item/5f40097182ce8df5b6cb4221]).

Cockerell, T. D. A. [Cockerell, Theodore Dru Alison]

1895 19.449 Additions to the list of U.S. Hymenoptera. *Canadian Entomologist*, 27 (April): 134. [Includes *Smicra divisa* Walker, collected at "Grand Canon, Arizona" by C. H. T. Townsend, July 8, 1892.]

1905 19.4540 New American bees. *Biological Society of Washington, Proceedings* (Washington, D.C.), 18: 177-184. [See p. 184, *Triepeolus hopkinsi*, new species; "Grand Canyon of the Colorado, Arizona, August 3, 1904. (Webb). Received from Mr. Viereck, to whom it has been returned. It is named after professor Hopkins, who sent it to Mr. Viereck, and who has done good work in the region of the Grand Canyon."] [A. D. Hopkins?]

1905 19.3564 *Diadasia* Patton: A genus of bees. *American Naturalist*, 39 (October): 741-745. [See distribution list, p. 745; includes *D. diminuta* Cresson from Grand Canyon.]

1912 19.3309 Some Coccidæ from the Grand Cañon, Arizona. *Canadian Entomologist*, 44(10) (October): 301. [Described from collection made during a visit by "Mr. E. Bethel"; presumably South Rim.]

Coelho, Joseph R.; Holliday, Charles W.; AND Hastings, Jon M.

2011 19.4268 The geographic distributions of cicada killers (*Sphecius*; Hymenoptera, Crabronidae) in the Americas. *Open Entomology Journal*, 5: 31-38. [In Grand Canyon and lower Colorado River regions includes *S. grandis* Say and *S. convallis* Patton.)

Cole, A. C., Jr.

1932 19.5199 The relation of the ant, *Pogonomyrmex occidentalis* Cr., to its habitat. *Ohio Journal of Science*, 32(2) (March): 133-146. ["I have observed it at the following specific localities: * * * *Arizona.*—Grand Canyon, Williams, Cameron and Lee's Ferry." (pp. 133, 134) (ENTIRE NOTE)]

1936 19.4415 Descriptions of seven new western ants. (Hymenop.: Formicidae.) *Entomological News* (Academy of Natural Sciences of Philadelphia, Entomological Section), 47 (May): 118-121. [See p. 120, *Myrmecocystus melliger* subsp. *semirufus* Emery var. *romainei*, new variety; "Described from a series of 54 workers taken by Miss Marjorie Romaine, at Cameron, Arizona."]

1937 19.6541 An annotated list of the ants of Arizona (Hymen.: Formicidae). *Entomological News*, 48 (April): 97-101, (May): 134-140.

1938 19.4419 Descriptions of new ants from the western United States. *American Midland Naturalist*, 20 (September): 368-373. [See *Myrmecocystus melliger* subsp. *semirufus* Emery, pp. 371-372; describing specimens collected 10 miles south of Cameron, Arizona.]

1956 19.4384 Observations of some members of the genus *Pheidole* in the southwestern United States with synonymy (Hymenoptera: Formicidae). *Tennessee Academy of Science, Journal*, 31(2) (April): 112-118. [See p. 113, *Pheidole pilifera artemisia* Cole, specimens collections include those from The Gap north of Cameron, "Kaibab National Forest, 25 mi. N. of Marble Canyon"; pp. 114-116, *Pheidole sitarches* complex, collections include those from "20 mi. S. of Marble Canyon", "27 mi. N. of Cameron".]

Cole, Gerald A.

1961 19.2144 Some calanoid copepods from Arizona with notes on congeneric occurrences of *Diaptomus* species. *Limnology and Oceanography*, 6(4) (October): 432-442. [See *Diaptomus nudus* Marsh 1904 (pp. 433-434): "[In Arizona] I have found it in 7 locations. These include two ponds on the North Rim of the Grand Canyon National

Park, and three ponds in the Kaibab National Forest north of the Grand Canyon". See also *Diaptomus shoshone* Forbes 1893 (p. 434): "This high-altitude species of the western states has not been reported previously from Arizona. It was collected in a pool at an altitude of about 9,000 ft in the Kaibab National Forest north of Grand Canyon National Park".]

Colton, Harold S.

1944 19.468 The anatomy of the female American lac insect, *Tachardiella larrea. Museum of Northern Arizona, Bulletin 21*, 24 pp.

Coquillett, D. W.

1902 19.3592 New acalyptrate Diptera from North America. *New York Entomological Society, Journal*, 10(4) (December): 177-191. [See *Trypeta varipennis*, new species, p. 180; "Bright Angel Hotel, brink of Grand Canyon".]

Count, E. W. [Count, Earl W.]

1929 19.482 Cricket notes. *Grand Canyon Nature Notes*, 3(12) (August 31): 4-5.

1994 19.499 Cricket notes. *In:* Lamb, Susan (ed.), *The best of Grand Canyon Nature Notes.* Grand Canyon, Arizona: Grand Canyon Natural History Association, pp. 79-80. [Reprinted from *Grand Canyon Nature Notes*, August, 1929.]

Crawford, C. S.; Bercovitz, K.; AND Warburg, M. R.

1987 19.509 Regional environments, life-history patterns and habitat use of spirostreptid millipedes in arid regions. *Linnean Society, Zoological Journal*, 89: 63-88.

Creighton, William S.

1930 19.3582 The New World species of the genus *Solenopsis* (Hymenop. Formicidae). *American Academy of Arts and Sciences, Proceedings*, 66(2) (December): 39-152. [See *S. (Solenopsis) xyloni* subsp. *aurea* (Wheeler), pp. 103-104, plate 3, figure 2. Includes note of activity observed near bottom of Bright Angel Trail.] [Ants.]

Cresson, Ezra T., Jr.

1919 19.4541 Dipterological notes and descriptions. *Academy of Natural Sciences of Philadelphia, Proceedings*, 71: 171-194. [See *Bombylius facialis*, new species, pp. 187-188, type male from "Rim of Grand Canyon, 7000 feet, alt., [*sic*] May 23, 1918, (F. M. Jones), [A.N.S.P. No. 6213]"; and see p. 190, *Callicera montensis* Snow, 1892, "One specimen, Grand Canyon, 7000 feet alt., May, (F. M. Jones)."] [Square brackets on catalogue number are part of quotation.]

Crews, Sarah C., AND Gillespie, Rosemary G.

2010 19.5172 Molecular systematics of *Selenops* spiders (Araneae: Selenopidae) from North and Central America: implications for Caribbean biogeography. *Linnean Society, Biological Journal*, 101: 288-322 + Supporting Information online. [See "Appendix. Collecting localities and voucher numbers of all animals used in this study. Locality numbers refer to numbers in the Supporting Information (Figs[.] S1 and S2)." See p. 319, locality 165, "*Selenops debils* gp. species 1. USA: Arizona, Coconino Co., Monument Trail, flat near archaeological site, 36°25.309'N, 112°27.483'W" [North Rim, off of Bill Hall Trail]. No separate text mention. The map referred to in the Supporting Information, Figure 2-HI, only displays the generalized location of localities 159-169 on a low-resolution satellite-photo map of southwestern North America (http://onlinelibrary.wiley.com/store/10.1111/j.1095-8312.2010.01494.x/asset/supinfo/BIJ_1494_sm_Fig_2_HI.tif); it is not useful in locating individual localities.]

Currie, Rolla P.

1903 19.3196 The Odonata collected by Messrs. Schwarz and Barber in Arizona and New Mexico. *Entomological Society of Washington, Proceedings* (Washington, D.C.), 5(4): 298-304. [Includes collections by [H. S.] Barber made at Bright Angel Hotel and Indian Garden.] [E. A. Schwarz.]

Curtis, William M., AND Stock, Michael J.

1991 19.530 Invertebrate species associated with various vegetation and habitat types in the Colorado River corridor, Grand Canyon National Park. *In: Colorado River Investigations #9 : July/August, 1990* (supervised by Stanley S. Beus, Lawrence E. Stevens, and Frank B. Lojko). Flagstaff, Arizona: Northern Arizona University, *for* U.S. National Park Service, Grand Canyon National Park, pp. 141-149. [Insects.]

D

Dajoz, Roger

1985 19.5279 Répartition géographique et abondance des espèces du genre *Triplax* Herbst (Coléoptères, *Erotylidae*). *L'Entomologiste* (Revue d'amateurs) (Paris), 41(3) (June): 133-141. [Kaibab Plateau, see p. 140 and data plotted in Figure 1 (p. 137, legend p. 136).] [In French.]

Danforth, Bryan N.

1996 19.6613 Phylogenetic analysis and taxonomic revision of the *Perdita* subgenera *Macrotera*, *Macroteropsis*, *Macroterella* and *Cockerellula* (Hymenopera: Andrenidae). *University of Kansas, Science Bulletin*, 55(16) (November 1): 635-692. [See throughout, but particularly *Perdita* (*Macroterella*) *opacella* Timberlake (pp. 668-669, figures 27c [p. 664], 34 [p. 669], 35 [distribution map, p. 670]; the holotype, a single female from Marble Canyon near Lee's Ferry, is noted.]

Davis, William T.

1917	19.3593	Sonoran cicadas collected by Harry H. Knight, Dr. Joseph Bequaert and others, with descriptions of new species. *New York Entomological Society, Journal*, 25(4) (December): 203-215. [See *Tibicen cinctifera* Uhler, p. 210; including Grand Canyon and Kaibab Plateau.]
1919	19.2944	Cicadas of the genus *Cacama*, with descriptions of several new species. *New York Entomological Society, Journal*, 27 (March): 68-79, Plate 13. [See *Cacama valvata* (Uhler), pp. 70-72, which notes examined species: "Grand Canyon, Ariz., sage bush [*sic*] country half way level in Canyon, June 5, 1915, male (B. B. Fulton), D's Coll. Grand Canyon, Ariz., Indian Garden, June 9, 1916, male (Geo. P. Engelhardt), D's Coll. The two males from the Grand Canyon are smaller than the others in my collection."] [*NOTE*: The running head for the article reads "Cicadas of the Genus Cicada."]
1920	19.3321	North American cicadas belonging to the genera *Platypedia* and *Melampsalta*. *New York Entomological Society, Journal*, 28(2) (June): 95-135, Plate 5. [See *Platypedia putnami* var. *lutea*, new variety, pp. 106-108, Plate 5, figure 4. Non-type material (not illustrated) includes specimens: "Moran's Point, Grand Canyon, June, 1901, two females, collection Am. Museum of Natural History. Grand Canyon, June 16, 1907, 7,000 ft., male (H. A. Kaeber), collection Academy [of] Natural Sciences of Philadelphia."]
1921	19.3595	Records of cicadas from North America with descriptions of new species. *New York Entomological Society, Journal*, 29(1) (March): 1-16. [See *Tibicen apache*, new species, pp. 3-5, Plate 1, figures 4-6; including Grand Canyon. Only type material from Florence, Arizona, is illustrated.]
1921	19.3322	Cicadas of the genus *Cacama*, with descriptions of several new species. *In:* Davis, William T., *North American cicadas : a collection of papers published in the Journal of the New York Entomological Society from 1915 to 1921.* [Facsimile reprint of Davis (1919, ITEM NO. 19.2944), *New York Entomological Society, Journal*, 27 (March): 68-79, Plate 13; retains original pagination. See p. 71.]
1921	19.3323	North American cicadas belonging to the genera *Platypedia* and *Melampsalta*. *In:* Davis, William T., *North American cicadas : a collection of papers published in the Journal of the New York Entomological Society from 1915 to 1921.* [Facsimile reprint of Davis (1920, ITEM NO. 19.3321), *New York Entomological Society, Journal*, 28(2) (June): 95-135, Plate 5; retains original pagination. See p. 108.]
1939	19.5125	New cicadas from North America and the West Indies. *New York Entomological Society, Journal*, (December): 287-302. [Volume is enumerated "XLXII" (*sic*).] [See new record for Arizona, *Okanagana fumipennis* Davis (pp. 297-298), based on "a single colony of *fumipennis* 35 miles north of Williams, Coconino County, Arizona, on the Grand Canyon road", collected by Mr. and Mrs. John L. Sperry, June 21, 1937.]
1942	19.4513	Notes on cicadas with descriptions of new species. *New York Entomological Society, Journal*, 50 (June): 169-187. [Grand Canyon, see under "*Diceroprocta apache* and its varieties", pp. 172-174.]

DeLong, Dwight M.

1964 19.5497 A monographic study of the North American species of the genus *Ballana* (Homoptera: Cicadellidae). *Ohio Journal of Science*, 64(5) (September): 305-370. [See *Ballana balsa*, new species (pp. 319, 327, 339, 356); paratypes include 11 from "Grand Canyon, Arizona, July 28, 1936, R. H. Beamer".]

Dennison, Philip E.; Coates, Austin; Hultine, Kevin; Nagler, Pamela; AND Glenn, Ed

2011 19.3903 Remote monitoring of tamarisk defoliation by the saltcedar leaf beetle [ABSTRACT]. *2011 Tamarisk Research Conference, February 16 and 17, Tucson, Arizona, Marriott University Park*.

Deuser, Curtis E.

2011 19.4957 The Colorado River: A narrow ribbon of green—some are weeds and the beetles are coming! [ABSTRACT]. *In: Rethinking Protected Areas in a Changing World : The George Wright Society Conference on Parks, Protected Areas and Cultural Sites, March 14-18, 2011, New Orleans, Louisiana : abstracts.* [No place]: George Wright Society, p. 120.

Dobzhansky, Th. [Dobzhansky, Theodosius]

1930 19.6261 The North American beetles of the genus *Coccinella*. *U.S. National Museum, proceedings*, 80(Article 4)(2904), 32 pp. [See *Coccinella novemnotata* Herbst subspecies *degener* Casey. Localities noted in geographic distribution include "Grand Canyon, Bright Angel".]

1937 19.3986 Further data on the variation of the Y chromosome in *Drosophila pseudoobscura*. *Genetics*, 22 (May): 340-346. [Data include those from specimens collected in lower Colorado River region and Grand Canyon, "Type V (Race A)".]

1958 19.2093 Genetics of natural populations. XXVII. The genetic changes in populations of *Drosphila pseudoobscura* in the American Southwest. *Evolution*, 12(3) (September): 385-401.

Doering, Kathleen C.

1939 19.5234 A contribution to the taxonomy of the subfamily Isiinae in America North of Mexico (Fulgoridae, Homoptera). *University of Kansas, Science Bulletin*, 26(2) (October 1): 83-167 (including Plates 13-22). [See *Bruchomorpha bunni*, new species pp. 119-121, Plate 20, figure 3, Plate 21, figure 15, Plate 22, figures 4, 4a, holotype from "Grand Canyon, Arizona"; *Novellina bicolorata* var. *inflata* Lindsay (p. 178), with paratypes noted from "Grand Canyon, Ariz."]

Drost, Charles A.

2005 19.2589 Biology of stream caves in Grand Canyon National Park [ABSTRACT]. *In: Eighth Biennial Conference of Research on the Colorado Plateau, du Bois Center, Northern Arizona University, 7-10 November 2005 : program and abstracts of presented papers and posters (version 2.0)*, p. 41.

Drost, Charles A., AND Blinn, Dean W.

1995 19.2878 *Invertebrate survey of Roaring Springs Cave, Grand Canyon National Park, September 1994.* [Flagstaff, Arizona: Northern Arizona University], *for* U.S. National Park Service, Denver Service Center, 13 pp. (Work Order 1443PX200094183.)

1997 19.572 Invertebrate community of Roaring Springs Cave, Grand Canyon National Park, Arizona. *Southwestern Naturalist*, 42(4): 497-500.

Dunford, James Christopher

2007 19.4351 *The genus* Speyeria *and the* Speyeria atlantis/Speyeria hesperis *complex: Species and subspecies accounts, systematics, and biogeography (Lepidoptera: Nymphalidae).* Doctoral dissertation, University of Florida, 245 pp. [See p. 93, account for *Speyeria hesperis schellbachi* Garth, 1949, holotype from Neal Spring, North Rim of Grand Canyon. (For original subspecies description, *S. atlantis schellbachi*, see Garth (1949, ITEM NO. 19.626).]

Durst, Scott L.; Theimer, Tad C.; Paxton, Eben H.; Sogge, Mark K.; AND Waskeiwicz, Marlyse C.

2005 19.2591 Consequences of the invasion of exotic saltcedar: An arthropod perspective [ABSTRACT]. *In: Eighth Biennial Conference of Research on the Colorado Plateau, du Bois Center, Northern Arizona University, 7-10 November 2005 : program and abstracts of presented papers and posters (version 2.0)*, p. 42.

Dyar, Harrison G.

1925 19.6655 Some new American moths (Lepidoptera). *Insecutor Inscitiae Menstruus* (Washington, D.C.), 13(1/3) (January/March): 1-19. [See *Olyca subumbrella*, new species (p. 14), which notes for non-type material: ". . . I have taken larvae on the rim of the Grand Canyon, 7,000 feet, Arizona." (ENTIRE NOTE) (Type material from New Mexico and Texas.)]

E

Ehrhorn, Edw. M.

1899 19.3983 Five new Coccidæ. *Canadian Entomologist*, 31(1) (January): 5-7. [Includes *Ripersia arizonensis*, new species, and *Dactylopius formicarii*, new species, both from "Thurber's Camp, Grand Canyon" (*i.e.*, Bright Angel Camp).] [Five new Coccidae.]

El-Haj, Suzanne, AND Ruvalcaba, Antonio

2021 19.6695 River connections—flowing rivers and monarch migration. *Boatman's Quarterly Review*, 34(4) (Winter 2021-2022): 14-17. [Monarch butterflies, *Danaus plexippus*.]

Elias, Scott A.; Mead, Jim I.; AND Agenbroad, Larry D.

1992 19.585 Late Quaternary arthropods from the Colorado Plateau, Arizona and Utah. *Great Basin Naturalist*, 52(1): 59-67. [Insecta; see p. 63 and following.]

Ellingson, Aaron R., AND Andersen, Douglas C.

2002 19.2272 Spatial correlations of *Diceroprocta apache* and its host plants: Evidence for a negative impact from *Tamarix* invasion. *Ecological Entomology*, 27(1) (February): 16-24.

Emmel, Thomas C.

1969 19.4719 Taxonomy, distribution and biology of the genus *Cercyonis* (Styridae). I. Characteristics of the genus. *Lepidopterists' Society, Journal*, 23(3): 165-175. [Grand Canyon, see map, p. 167; *C. pegala damei*, pp. 169, 173.]

1987 19.4008 The John Adams Comstock Award, 1987; the man we honor, John S. Garth. *News of the Lepidopterists' Society*, (6) (November/December): 77-78, 80. [See p. 78, notice of Garth's work at Grand Canyon National Park, beginning 1946.]

Emmel, Thomas C., AND Emmel, John F.

1967 19.588 The biology of *Papilio indra kaibabensis* in the Grand Canyon. *Lepidopterists' Society, Journal*, 21(1) (February 21): 41-48.

Engelhard, Michael, AND Kaspar, Thomas

2008 19.2745 Butterflies. *In:* 3 poached treasures. *Backpacker*, 37(6) (August): 50. [Includes note of *Papilio indra kaibabensis* swallowtail butterfly, rare species from Grand Canyon sought by poachers. Text and photo credits noted in binding margin of page.]

F

Fairweather, Mary Louise [Fairweather, Mary Lou]

1990 19.597 Biological evaluation of pest conditions and potential hazard trees in two campgrounds on the Kaibab National Forest, Arizona. Albuquerque: *U.S. Forest Service, Southwestern Region, State and Private Forestry, Forest Pest Management, Forest Pest Management Report R-3 90-3*, 8 pp.

Fairweather, Mary Lou; McMillin, Joel; Rogers, Terry; Conklin, Dave; AND Fitzgibbon, Bobbe

2006 19.5174 Field guide to insects and diseases of Arizona and New Mexico forests. *U.S. Forest Service, Southwestern Region, Management Report MR-R3-16-3*, 271 pp.

Fall, H. C.

1905	19.3601	Revision of the Ptinidae of boreal America. *American Entomological Society, Transactions*, 31(2/3): 97-296, Plate 7. [See p. 217, *P. bistriatum* var. *arizonense*, new variety; p. 236, *C. grande*, new species; p. 244, *C. longulum*, new species; p. 250, *C. pingue*, new species; all including Grand Canyon.]
1909	19.3603	Revision of the species of *Diplotaxis* of the United States. *American Entomological Society, Transactions*, 35(1) (January): 1-97. [See p. 34, *D. conformis*, new species; including Grand Canyon.]
1910	19.3602	Miscellaneous notes and descriptions of North American Coleoptera. *American Entomological Society, Transactions*, 36(2): 89-197. [See p. 177, *Bruchus perplexus*, new species; including Grand Canyon.]
1912	19.3599	A review of the North American species of *Collops* (Col.). *New York Entomological Society, Journal*, 20(4) (December): 249-274. [See pp. 263-264, *C. bipunctatus* Say.]
1915	19.3391	A revision of the North American species of *Pachybrachys*. *American Entomological Society, Transactions*, 41(3) (September): 291-486. [See pp. 344-345, *P. arizonensis* Bowdich; pp. 447-449, *P. bivittatus* Say.]

Ferris, G. F.

1931	19.6139	The sucking lice. *Pacific Coast Entomological Society, Memoir 1*, 320 pp. [See p. 109, *Enderleinellus longiceps* Kellogg and Ferris; host and distribution notes include "from *Sciurus kaibabensis* from the Kaibab National Forest, Arizona" (ENTIRE NOTE)]

Fisher, W. S.

1942	19.3332	A revision of the North American species of buprestid beetles belonging to the tribe Chrysobothrini. *U.S. Department of Agriculture, Miscellaneous Publication 470*, 275 pp. [See pp. 37, 87, 91, 95, 111, 152, 172, 190.]

Foote, Richard H.; Blanc, F. L.; AND Norrbom, Allen L.

1993	19.608	*Handbook of the fruit flies (Diptera: Tephritidae) of America north of Mexico.* Ithaca (New York) and London: Comstock Publishing Associates, 571 pp.

Fox, William Henry

1917	19.3111	*Museums of the Brooklyn Institute of Arts and Sciences : report upon the conditions and progress of the museums for the year ending December 31, 1916.* Brooklyn, New York, New York: Brooklyn Institute of Arts and Sciences. [See "Department of Natural Science", under "Gifts", "Dr. R. Ottolengui. Insects from Grand Canyon, Arizona . . ."; and under "Collection and Exchange", "G. P. Engelhardt. Bat from Grand Canyon . . . Spermophile from Grand Canyon." (p. 50) No further elaboration.]

Fox, William J.

1893 19.4538 New species of fossorial Hymenoptera. *Canadian Entomologist*, 25(5) (May): 113-117. [See pp. 116-117, *Gorytes dentatus*, from "Grand Canyon, Arizona, '70 miles North of Flagstaff.' *(C. H. Tyler Townsend)."*]

Francœur, A. [Francœur, André] [Francoeur, André]

1973 19.6448 Révision taxonomique des espèces Néarctiques du groupe *Fusca*, genre *Formica* (Formicidæ, Hymenoptera). *Société Entomologique du Québec, Mémoires / Entomological Society of Québec, Memoirs*, (3), 316 pp. [Ants.] [See *Formica altipetens* (pp. 52-60), distribution of published and material examined includes "Kaibab Nat. Forest" and "North Rim, Grand Canyon" (p. 58), distribution map (p. 59); *Formica neoclara* (pp. 84-94), "North Rim, Grand Canyon" (p. 91, but apparently not shown on distribution map, p. 93); *Formica argentea* (pp. 141-152), "Bright Angel Trail et Coconino Forest dans la région du Grand Canyon" (p. 149) and text note of specimens examined from Grand Canyon (p. 148), distribution map (p. 151); *Formica neorufibarbis* (pp. 215-228), "North Rim, Grand Canyon" (p. 225), distribution map (p. 227); *Formica gnava* (pp. 238-245), "Indian Gardens . . . et Bright Angel Trail dans le Grand Canyon" (p. 244), distribution map (p. 207); *Formica occidua* (pp. 254-259), "Bright Angel Trail dans le Grand Canyon" (p. 257), distribution map (p. 160). (Some distribution maps combine multiple species, thus maps may be separate from the species descriptions.)] [In French.]

Freeman, H. A.

1963 19.4416 Type localities of the Megathymidae. *Journal of Research on the Lepidoptera*, 2(2): 137-141. [See p. 140, under *Agathymus* Freeman: "[*A.*] *alliae* (Stallings and Turner), 15 mi. W. Cameron, Arizona, along canyon of Little Colorado R., elev. 5000 ft." (ENTIRE NOTE)] [See also Stallings and Turner (1957, ITEM NO. 19.4417).]

Freytag, Paul H.

1962 19.4137 A new species of *Idiocerus* from the Southwest and a review of the related species (Homoptera: Cicadellidae). *Ohio Journal of Science*, 62(5) (September): 244-252. [See *I. dolosus* Ball, pp. 245-246, Plate 1, which includes listing of Grand Canyon specimens.]

Friedlander, Tim

1987 19.6153 Taxonomy, phylogeny and biogeography of *Asterocampa* Röber 1916 (Lepidoptera, Nymphalidae, Apaturinae). *Journal of Research on the Lepidoptera*, 25(4) (Winter 1986 [1987]: 215-338 (pagination includes Plates 1-22) [date of publication 31 December 1987]. [See *Asterocampa celtis antonia* (W. H. Edwards, 1878) (pp. 243-254), specifically p. 252, "Garth's (1950) record of *A. leilia* from the Grand Canyon (Arizona) is also this subspecies of *A. celtis.*"; and see *Asterocampa leilia* (W. H. Edwards, 1874) (pp. 254-260), specifically p. 260, "The species reported as *A. leilia* from the Grand Canyon (Garth, 1950) are actually *A. celtis antonia* ('montis') (Reinthal, unpublished obs.)." (ENTIRE NOTES) See also distribution map, Plate 1 (p. 315). The references are to Garth (1950, ITEM NO. 19.627).]

Fritzinger, Carol (Fritz), AND Kennedy, Ted

2014 19.4239 FLY-CO news. *Boatman's Quarterly Review*, 27(1) (Spring): 8-9. [Insect survey along Colorado River in Grand Canyon. Item also includes derivation of FLY-CO name for Grand Canyon Monitoring and Research Center foodbase lab.]

Fulton, B. B.

1925 19.4313 Physiological variation in the snowy tree-cricket, *Oecanthus niveus* De Greer. *Entomological Society of America, Annals*, 18: 363-383. [Grand Canyon, see pp. 377 (physiological observations relating to humidity), 378 (geographic distribution).]

Furniss, Malcolm M.

2007 19.5911 A history of forest entomology in the Intermountain and Rocky Mountain areas, 1901 to 1982. *U.S. Forest Service, Rocky Mountain Research Station, General Technical Report RMRS-GTR-195*, 40 pp. [Includes Kaibab Plateau.]

Furniss, R. L., AND Carolin, V. M.

1977 19.3761 Western forest insects. *U.S. Forest Service, Miscellaneous Publication 1339*, 654 pp. [See p. 120, piñon needle scale, *Matsucoccus acalyptus* Herbert (McCambridge 1974); a "serious outbreak" noted at Grand Canyon National Park, *in passing*.]

G

Gadgil, P. D., AND Flint, T. N.

1983 19.5187 Assessment of the risk of introduction of exotic forest insects and diseases with imported tents. *New Zealand Journal of Forestry*, 28(1): 58-67. [Study performed by examining "45 tents accompanying incoming passengers at the Auckland International Airport from 3 to 9 December, 1981" (p. 58). See data in Appendix 1 (p. 66), which includes tent from "USA/Grand Canyon". Another tent from "USA/Arizona".]

Gardner, Joel, AND Gibbs, Jason

2020 19.6989 The "red-tailed" *Lasioglossum* (*Dialictus*) (Hymenoptera: Halictidae) of the western Nearctic. *European Journal of Taxonomy*, 725:1-242 [entire number]. (Monograph urn:lsid:zoobank.org:pub:89FA8DDF-F4B9-417-A-A5AF-B2BC9660E024.) (https://doi.org/10.5852/ejt.2020.725.1167) [See *Lasioglossum* (*Dialictus*) *cactorum*, new species (pp. 32-39, figs. 16-18, 93C, 114A); holotype from Nevada; paratypes include (square brackets are part of quotation): "2 ♀♀ Grand Canyon Mile 1792 [*sic*]; [36°N, 112° W]; 11 Jun. 1953; G.D. Butler leg.; UAIC · 1♀ Grand Canyon Mile 32; [36°N, 112° W]; 6 Jun. 1953; G.D. Butler leg.; UAIC". See *Lasioglossum* (*Dialictus*) *miltolepoides*, new species (pp. 142-147, figs. 61-63, 90I, 97B, 103B, 113A); holotype from Utah; paratypes include (square brackets are part of quotation): "1 ♀ Grand Canyon Mile 0; [36°N, 112° W]; 6 Jun. 1953; G.D. Butler leg.; UAIC · 2♀♀

Grand Canyon Mile 20.4; [36°N, 112° W]; 6 Jun. 1953; G.D. Butler leg.; UAIC". (Localities as cited are here interpreted as being along the Colorado River.)]

Garrigues, Roy M. [Garrigues, Roy McEndree, III]

1965 19.625 A *Cuterebra* (Diptera: Cuterebridae) infestation in the Grand Canyon rattlesnake, *Crotalus viridis abyssus*, with a list of those recorded from other hosts. *Kansas Academy of Science, Transactions*, 67(4) (Winter 1964): 689-692. [Issue no. 4 published 17 February 1965.]

Garth, John S.

1949 19.626 Studies in Arizona Lepidoptera. I. A new subspecies of *Speyeria atlantis* (Edwards) from the Kaibab Plateau, Grand Canyon National Park. *Southern California Academy of Sciences, Bulletin*, 48(Part 1): 1-4. [*Speyeria atlantis schellbachi* Garth, male holotype and female allotype from Neal Spring, North Rim of Grand Canyon; 20 paratypes from various Kaibab localities.]

1950 19.627 Butterflies of Grand Canyon National Park. *Grand Canyon Natural History Association, Bulletin 11*, 52 pp.

Gelhaus, Jon K.

2005 19.6147 Systematics and biogeography of the desert crane fly subgenus *Tipula* (*Eremotipula*) Alexander (Diptera: Tipulidae). *American Entomological Society, Memoir 46*, 235 pp.

Gertsch, Willis J.

1933 19.6334 New genera and species of North American spiders. *American Museum Novitates*, (636), 28 pp. [See *Misumenops coloradensis*, new species (p. 17, figures 15 [p. 12], 46 [p. 24]); "Female paratypes from Grand Canyon (North Rim), Arizona, and Kanab, Utah."]

1933 19.6335 Diagnoses of new American spiders. *American Museum Novitates*, (637), 14 pp. [See Figure 11 (p. 8), "*Allocosa noctuabunda* Montgomery, Palpus", which is not otherwise mentioned in this text. However, Gertsch (1934, ITEM NO. 19.6336), erects the new species *A. mokiensis* based on this figure, the holotype of which is there noted as from Indian Gardens, Grand Canyon.]

1934 19.6336 Notes on American Lycosidae. *American Museum Novitates*, (693), 25 pp. [See *Arctosa mokiensis*, new species (p. 8); "Male holotype from Indian Gardens, Grand Canyon, Arizona, May 26, 1905."] [In synonymy is *A. noctuabanda* as figured by Gertsch (1933, ITEM NO. 19.6335), p. 8, figure 11, which there is a species not otherwise mentioned.]

1934 19.6140 Further notes on American spiders. *American Museum Novitates*, (726), 26 pp. [See *Phidippus kaibabensis*, new species; "Male holotype from the Kaibab forest, near the north rim of the Grand Canyon, Arizona, July 8, 1931 (Gertsch)." (pp. 14-15, Figure 18 [p. 17]).]

1935 19.2190 Spiders from the southwestern United States, with descriptions of new species. *American Museum Novitates*, (792), 31 pp. [Collections include taxa from the Grand

Canyon and Kaibab Plateau. None of the species described as new are from the area covered by this bibliography.]

1939 19.6337 A revision of the typical crab-spiders (Misumeninae) of America North of Mexico. *American Museum of Natural History, Bulletin*, 76(Article 7): 277-442. ("This paper is part of a dissertation presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy at the University of Minnesota.") [See *Misumenops oblongus* (Keyserling) (pp. 319-321), records include "Indian Gardens, Grand Canyon, July 24, 1934, female (Lutz)"; *M. dubius* (Keyserling) (pp. 325-326), records include "Phantom Ranch, Grand Canyon, July 26, 1934, female (F. E. Lutz)"; *M. coloradensis* Gertsch, records include "Kaibab forest, July 11, 1931, two females (Gertsch); *Xysticus apachecus* Gertsch (pp. 356-357), records include "north rim of the Grand Canyon, July 7, 1932, male and four females (Gertsch); *X. locuples* Keyserling (pp. 357-358), records include "Bright Angel Point, Grand Canyon, July 19 (Banks, 1902)".]

1946 19.6338 Notes on American spiders of the family Dictynidae. *American Museum Novitates*, (1319), 21 pp. [See *Mallos eutypus* Chamberlin and Gertsch (p. 8), records include "Phantom Ranch, Grand Canyon, July 26, 1934, females (F. E. Lutz)".]

1958 19.4742 The spider family Diguetidae. *American Museum Novitates*, (1904), 24 pp. [Includes female of *Diguetia canities* McCook, from Indian Garden, Grand Canyon.]

1960 19.4848 The *fulva* group of the spider genus *Steatoda* (Araneae, Theridiidae). *American Museum Novitates*, (1982), 48 pp. [See in particular *Steatoda variata*, new species (pp. 24-29 and figures 2 [p. 7, distribution map], 22-25 [p. 13], 34-44 [p. 17]), holotype male from The Gap, Arizona. Non-type records include "Twenty-five males north of The Gap . . . male, many females."]

Gertsch, Willis J., AND Ennik, Franklin

1983 19.5009 The spider genus *Loxosceles* in North America, Central America, and the West Indies (Araneae, Loxoscelidae). *American Museum of Natural History, Bulletin*, 175 (Article 3): 264-360. [See *Loxosceles kaiba*, new species, p. 303, Map 4 (p. 295), Figures 110-113 (p. 299), Figure 133 (p. 300). [The specific epithet, *kaiba* [*sic*], is named "for Kaibab Plateau on north face of Grand Canyon" (p. 303). Holotype male, and female and immature specimens "from Thunder Cave" (Thunder River Cave). Also referred material from Cameron Cave, Grand Canyon National Park.]

Giauque, Courtney; Yard, Michael D.; AND Coggins, Lewis G.

2005 19.2551 Inter- and intra-annual differences in the availability of drifting invertebrates near the Little Colorado River, Grand Canyon, AZ [ABSTRACT]. *In: Colorado River Ecosystem Science Symposium 2005. Abstracts. October 25-27, 2005, Fiesta Inn Resort, 2100 South Priest Drive, Tempe, AZ.* [Flagstaff, Arizona]: [U.S. Geological Survey, Grand Canyon Monitoring and Research Center], p. 42.

Gitt, Werner

2003 19.5790 [Dragonflies.] *From:* Grand Canyon; the plants and animals [SECTION]. *In:* Vail, Tom, *Grand Canyon : a different view.* Green Forest, Arkansas: Master Books, p. 81. [Creationist perspective.]

2018 19.5791 [Dragonflies.] *From:* Grand Canyon; the plants and animals [SECTION]. *In:* 湯姆 韦尔 [Vail, Tom], 大峡谷 ： 一个非凡的视野 [Dà xiágǔ : yīgè fēifán de shìyě] [Grand

Canyon : an extraordinary vision]. Green Forest, Arkansas: Master Books, p. 81. [In the translation of Vail's (2003) *Grand Canyon : a different view*.] [Creationist perspective.] [In Chinese.]

Glassbers, Jeffrey

2001 19.2040 *Butterflies through binoculars : the West : a field guide to the butterflies of western North America.* Oxford and New York: Oxford University Press, 374 pp.

Gould, Rowan W.

2011 19.3468 Endangered and Threatened wildlife and plants; petition to list Grand Canyon Cave Pseudoscorpion. *Federal Register*, 76(138) (July 19): 42654-42658. [*Archeolarca cavicola* Muchmore, 1981 (see ITEM NO. 19.5001)]

Graauw, Kristen de

2012 19.4623 *Tree-ring analysis of outbreak dynamics across an insect's entire range: The Pandora moth system.* Master's thesis, Indiana State University, Terre Haute, 92 pp. [Study site locations include Jacob Lake, Ten X Campground, and Forest Service Road 22, all in Kaibab National Forest units.]

Graham, Timothy B. [Graham, Tim B.]

1986 19.651 *Plant-herbivore interactions: Grasses and grasshoppers in Grand Canyon National Park.* Doctoral dissertation, Utah State University, 155 pp.

Graham, Timothy B., AND Norton, Roy A.

1998 19.3469 Uncharismatic microfauna of the Colorado Plateau: Notes on distribution and ecology of an undescribed, pothole-dwelling Ameronothrooid (Acari: Ameronthridae) mite. *In:* Hill, L. M., and Koselak, J. J., *Learning from the land: Grand Staircase-Escalante National Monument Science Symposium proceedings, Southern Utah University, Cedar City, UT, November 4-5, 1997*. Salt Lake City: U.S. Bureau of Land Management, pp. 477-483. [Includes localities near Desert View, Grand Canyon.]

Grissell, E. E.

1983 19.4649 *Boharticus*, n. gen., with a review of *Rhopalicus* Foerster and *Dinotiscus* Ghesquiere (Hymenoptera: Pteromalidae). *Pan-Pacific Entomologist*, 59(1/4): 78-102. [New genus. See *Boharticus margaretae*, new species (pp. 86-87, Figures 2 (p. 81), 13 (p. 85), 17 (p. 85)); specifically, p. 87, citing paratype specimen (USNM) from "8 miles SW Peach Springs, 4500', 7 September 1964, C. W. O'Brien, ex *Juniperus*."]

Gross, Peter

1974 19.6987 Scientist Syd spends successful sabbatical studying Big Bend bugs. *Faculty Exchange* (Millersville State College, Millersville, Pennsylvania), 7(9) (March 6): [unpaginagted, 2 pp.] [Entomologist Sydney Radinovsky, Biology Department. Includes a paragraph

noting that a stop at Grand Canyon National Park found him in a freak snowstorm at the bottom. No details.]

H

Halbritter, Dale A.; Storer, Caroline G.; Kawahara, Akito Y.; AND Daniels, Jaret C.

2019 19.6486 Phylogeography and population genetics of pine butterflies: Sky islands increase genetic divergence. *Ecology and Evolution*, 9: 13889-13401 + Suplementary Information online, https://onlinelibrary.wiley.com/doi/full/10.1002/ece3.5793, (2, 7 pp.) + genetic data, code, alignments, and other output files: Dryad https://doi.org/10.5061/dryad.4mw6m906h. [Sampling sites include two on the Kaibab Plateau (pine white butterfly, *Neophasia menapia*).]

Hall, Jack C., AND Evenhuis, Neal L.

2003 19.5224 Review of the subgenus *Geron (Geron)* Meigen in the Nearctic region (Diptera: Bombyliidae: Toxophorinae). *Zootaxa*, (181): 1-72. [See *Geron prosopidis*, new species; paratypes include 11 taken at "S Rim Grand Canyon, 21-22.vii.1932 (R.H. Painter)".]

Hamilton, Chris A.; Hendrixson, Brent E.; AND Bond, Jason E.

2016 19.5488 Taxonomic revision of the tarantula genus *Aphonopelma* Pocock, 1901 (Araneae, Mygalomorphae, Theraphosidae) within the United States. *ZooKeys*, 560: 1-340 [entire number].

Hansman, Heather

2019 19.6055 Re-engineering the Colorado River. Can dam releases that mimic natural flows restore the Grand Canyon ecosystem? *Scientific American*, 320(2) (February): 64-69. [Principal focus of article is on aquatic insect fauna along the Colorado River through Grand Canyon.]

Haradon, Richard M.

1985 19.5230 New groups and species belonging to the nominate subgenus *Pauroctonus* (Scorpiones, Vaejovidae). *Journal of Arachnology*, 13: 19-42. [See *Pauroctonus boreus* (Girard) (pp. 24-27); specifically, note of the holotype of *Vejovis aquilonalis* Stahnke from a locality south of Grand Canyon.]

Hart, Robert J.; Vaughan, R. Greg; McDougall, Kristin; Wojtowicz, Todd; AND Thenkenbail, Prasad

2017 19.5679 The U.S. Geological Survey Flagstaff Science Campus; providing expertise on planetary science, ecology, water resources, geologic processes, and human interactions with the earth. *U.S. Geological Survey, Fact Sheet 2017-3051*, [2] pp.

[See "Southwest Biological Science Center", p. [1], which includes photo, "capturing aquatic insects on the Colorado River".]

Harvey, Mark S., AND Wynne, J. Judson

2014 19.4593 Troglomorphic pseudoscorpions (Arachnida: Pseudoscorpiones) of northern Arizona, with the description of two new short-range endemic species. *Journal of Arachnology*, 42(3): 205-219. [Includes new species, *Hesperochernes bradybaughi* and *Tuberochernes cohni*, both from "PARA-1001 Cave", Grand Canyon-Parashant National Monument. Other taxonomic acts in this paper: "the genus *Archeolarca* Hoff and Clawson is newly synonymized with *Larca* Chamberlin, and the following species are transferred from *Archeolarca* to *Larca*, forming the new combinations *L. aalbui* (Muchmore 1984), *L. cavicola* (Muchmore 1981), *L. guadalupensis* (Muchmore 1981) and *L. welbourni* (Muchmore 1981)" (from the abstract).]

Hastriter, Michael W., AND Haas, Glenn E.

2005 19.5209 Bionomics and distribution of species of *Hystrichopsylla* in Arizona and New Mexico, with a description of *Hystrichopsylla dippiei obliqua*, n. ssp., (Siphonaptera: Hystrichopsyllidae). *Journal of Vector Ecology*, 30(2) (December): 251-262. [See *Hystrichopsylla dippiei truncata* Holland, 1957 (pp. 257-260), which includes examined material from various localities on Kaibab Plateau (p. 257, figure 3L [p. 258]).]

Hatten, James R.

2016 19.5147 A satellite model of southwestern willow flycatcher (*Empidonax traillii extimus*) breeding habitat and a simulation of potential effects of tamarisk leaf beetles (*Diorhabda* spp.), southwestern United States. *U.S. Geological Survey, Open-File Report 2016-1120*, 88 pp.

Haury, Loren R.

1981 19.4146 *Cladophora drift and planktonic crustaceans in the Colorado River: Lee's Ferry to Diamond Creek.* La Jolla, California: Scripps Institution of Oceanography, [1], 13, [11] pp.

1987 19.734 *Zooplankton of the Colorado River, Glen Canyon Dam to Diamond Creek.* La Jolla, California: Scripps Institute of Oceanography, *for* U.S. Bureau of Reclamation, Upper Colorado Region, Glen Canyon Environmental Studies, Salt Lake City, 59 pp.

1988 19.735 Zooplankton of the Colorado River, Glen Canyon Dam to Diamond Creek. *In:* U.S. Bureau of Reclamation, Glen Canyon Environmental Studies, *Glen Canyon Environmental Studies : executive summaries of technical reports : November 1988.* [No place]: Glen Canyon Environmental Studies, pp. 205-215.

Hauser, Martin, AND Irwin, Michael E.

2003 19.5498 The Nearctic genus *Ammonaios* Irwin and Lyneborg 1981 (Diptera: Therevidae). *Entomological Society of America, Annals*, 96(6): 738-765. [Includes *Ammonaios*

confusus, new species; non-type material examined includes specimens from "11.3-14.5 km W Page", "32.2 km W Marble Canyon", and "Cameron".]

Haverty, Michael I., AND Nelson, Lori J.

2007 19.3075 *Reticlitermes* (Isoptera: Rhinotermitidae) in Arizona: Multiple cuticular hydrocarbon phenotypes indicate additional taxa. *Entomological Society of America, Annals*, 100(2): 206-221. [Samples analyzed include material from "Fredonia, [and] North Rim of the Grand Canyon", without further details.]

Haverty, Michael I.; Nelson, Lori J.; AND Forschler, Brian T.

1999 19.3837 New cuticular hydrocarbon phenotypes of *Reticulitermes* (Isoptera: Rhinotermitidae) from the United States. *Sociobiology*, 34(1): 1-21. [Includes collection localities: "North Rim, Grand Canyon" and "Hwy 89, 16km east of Jacob Lake".]

Hayward, C. Lynn

1932 19.6107 The paper wasps of Utah; including a description of a new variety of *Polistes canadensis* Linn. *Utah Academy of Sciences, Proceedings*, 9: 85–101 (pagination includes Plate 9). [Based on the author's Master's thesis, Brigham Young University, 1931.] [Includes *Polistes canadensis* var. *kaibabensis*, new variety; known certainly only from the type locality, Point Sublime, North Rim of Grand Canyon, with note also of "a very typical specimen" from El Tovar, South Rim of Grand Canyon.] [See also Snelling (1974, ITEM NO. 19.6108).]

Headlee, Thomas J.

1906 19.3399 Blood gills of *Simulium pictipes*. *American Naturalist*, 40 (December): 875-885. [See p. 876, reference to Townsend's observation of *Simulium* in Grand Canyon, *in passing*.]

Hebard, Morgan

1920 19.3757 A revision of the North American species of the genus *Myrmecophila* (Orthoptera; Gryllidae; Myrmecophilinae). *American Entomological Society, Transactions*, 46: 91-111. [See map, p. 97; *Myrmecophila manni* Schimmer, pp. 104-108; *M. nebrascensis* Lugger, pp. 108-111. South Rim localities noted.]

Helfer, R. G.

1939 19.4923 Dominance modifiers of scute in *Drosophila pseudoobscura*. *Genetics*, 24 (March): 278-301. [Strains include "Grand Canyon-3".]

Hellenthal, Ronald A., AND Price, Roger D.

1989 19.4383 *Geomydoecus thomomyus* complex (Mallophaga: Trichodectidae) from pocket gophers of the *Thomomys talpoides* complex (Rodentia: Geomyidae) of the United States and Canada. *Entomological Society of America, Annals*, 82(3) (May): 286-297. [See

Geomydoecus craigi, new species; non-type material noted from "N rim Grand Canyon" and "Jacobs Lake, Kaibab Plateau", from *T. t. kaibabensis* Goldman.]

Henry, Brianna L.; Croteau, Marie-Noele; Walters, David M.; AND Cain, Daniel J.

2017 19.5844 Bioaccumulation dynamics and transfer of uranium across metamorphosis in the mayfly *Neocloeon triangulifer* [ABSTRACT]. *In: 14th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region, September 11-14, 2017, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona.* [No imprint], p. 71. [Studies of material gathered along the Colorado River (locations not identified), as a model for understanding uranium mining impacts in the Grand Canyon region.]

Henry, Brianna L.; Croteau, Marie-Noele; Walters, David M.; Miller, Janet L.; Cain, Daniel J.; AND Fuller, Christopher C.

2020 19.6560 Uranium bioaccumulation dynamics in the mayfly *Neocloeon triangulifer* and application to site-specific prediction. *Environmental Science and Technology*, 54(18): 11313-11321 + Supplemental Information online (https://pubs.acs.org/doi/10.1021/asc.est.0c03372), 7 pp. ["... mayfly U concentrations were predicted using the water chemistry and U measured in periphyton from springs in Grand Canyon ..." (from the abstract).]

Henry, Thomas J.

2015 19.5496 Revision of the ceratocapsine *Renodaeus* group: *Marinonicoris*, *Pilophoropsis*, *Renodaeus*, and *Zanchisme*, with descriptions of four new genera (Heteroptera, Miridae, Orthotylinae). *ZooKeys*, 490: 1-156 [entire number]. [See *Ceratocapsidea fusiformis* (Van Duzee), new combination (pp. 32-39, 43, 129) (*Ceratocapsidea*, new genus). *Ceratocapsus clavicornis* Knight is placed in synonymy; type material examined, from Grand Canyon (see Knight, 1925, ITEM NO. 19.5495).]

Hermann, Frederick J., AND Leese, B. M.

1956 19.2097 A grass (*Munroa squarrosa*) apparently cultivated by ants. *American Midland Naturalist*, 56(2) (October): 506-507. [Locality noted as "about 18 miles east of Jacob Lake".]

Hespenheide, Henry A.

2003 19.2856 New *Lechriops* species for the United States (Coleoptera: Curculionidae: Conoderinae). *The Coleopterists Bulletin*, 57(3): 345-352. [*NOTE*: The new taxa described are extralimital to this bibliography; biogeographical discussions are pertinent.]

Hewes, Laurence Ilsley

1933 19.753 Butterflies—try and get them. *Sierra Club Bulletin*, 18: 47-55. [See p. 55.]

Hofknecht, Greg William

1981 19.776 *Seasonal community dynamics of aquatic invertebrates in the Colorado River and its tributaries within Grand Canyon, Arizona.* Master's thesis, Northern Arizona University, 105 pp.

Holigay, Tanya

2003 19.2363 Why are the trees orange? *Nature Notes* (Grand Canyon National Park), 19(1) (Winter 2002-2003): 1-2. [Bark beetle infestation.]

Hopkins, A. D.

1909 19.3654 Practical information on the scolytid beetles of North American forests. I. Barkbeetles of the genus *Dendroctonus*. *U.S. Bureau of Entomology, Bulletin 83, Part I*, 169 pp. [Bark beetles. Distribution maps include Grand Canyon region and Kaibab Plateau.]

Hopkins, Heidi

2014 19.5742 *Phylogenetic revision of the genus* Arenivaga *(Rehn) (Blattodea: Corydiidae), with descriptions of new species, a key to the males, and an investigation of its ecological niche.* Doctoral dissertation, University of New Mexico, 467 pp. [*NOTE*: Acts of taxonomic nomenclature in this unpublished dissertation are not valid under the *International Code of Zoological Nomenclature*. See Hopkins (2014, ITEM NO. 19.4944) for nomenclatural acts in a validly published venue.]

2014 19.4944 *A review of the genus* Arenivaga *(Rehn) (Blattodea, Corydiidae), with descriptions of new species and key to the males of the genus.* Sofia, Bulgaria; and Moscow, Russia: Pensoft Publishers, 256 pp. (*ZooKeys*, 384: 1-256 (Special Issue).) [Includes new species from Grand Canyon: *Arenivago grandiscanyonensis* (pp. 108-111), holotype from Colorado River Mile 211.5 Right; *A. impensa* (pp. 138-141), paratypes from Grand Canyon localities; *A. pagana* (pp. 177, 180-182), holotype from Colorado River Mile 202.5 Left.]

Hopping, G. R.

1963 19.5573 North American species in Group IX of *Ips* De Geer (Coleoptera : Scolytidae). *Canadian Entomologist*, 97 (April): 422-434. [See *Ips conjusus* (Leconte), pp. 425-429, which includes specimens examined from "Grand Canyon" (p. 428); *Ips lecontei* Swaine, pp. 433-434, which includes specimens examined from "Grand Canyon N. P." (p. 434).]

Horn, George H.

1893 19.3589 The Galerucini of boreal America. *American Entomological Society, Transactions*, 20(2) (April/June): 57-136. [See *Luperus wickhami*, new species, pp. 114-115; from Peach Springs, Arizona.]

Hottes, F. C.

1956 19.2196 Two new species of *Cinara* from northern Arizona with illustrations of hitherto unfigured species and notes on *Schizolachnus flocculosa* (Williams) (Aphidae). *Biological Society of Washington, Proceedings* (Washington, D.C.), 69: 219-224.

Howard, L. O. [Howard, Leland O.]

1922 19.5905 Report of the Entomologist. *In: U.S. Department of Agriculture, Annual Report.* Washington, D.C.: U.S. Government Printing Office. [Seen as a separate. See under "Insects Affecting Forest Resources and Shade Trees"; specifically, "Grand Canyon-Kaibab Control Project", p. 24.]

1924 19.5906 Report of the Entomologist. *In: U.S. Department of Agriculture, Annual Report.* Washington, D.C.: U.S. Government Printing Office. [Seen as a separate. See under "Insects Affecting Forest Resources and Shade Trees"; specifically, "The Kaibab Control Project", p. 25.]

1925 19.5907 Report of the Entomologist. *In: U.S. Department of Agriculture, Annual Report.* Washington, D.C.: U.S. Government Printing Office. [Seen as a separate. See under "Investigation and Control of Western Bark Beetles"; specifically, "The Kaibab control project", p. 30.]

1926 19.5908 Report of the Entomologist. *In: U.S. Department of Agriculture, Annual Report.* Washington, D.C.: U.S. Government Printing Office. [Seen as a separate. See under "Investigations of Insects Affecting Forest and Shade Trees"; specifically, "The Kaibab National Forest and Grand Canyon National Park", p. 25.]

1927 19.5909 Report of the Entomologist. *In: U.S. Department of Agriculture, Annual Report.* Washington, D.C.: U.S. Government Printing Office. [Seen as a separate. See under "Investigations of Insects Affecting Forest and Shade Trees"; specifically, "Western Bark Beetles" (p. 25), with brief note of Kaibab National Forest.]

Howard, Leland O.; Dyar, Harrison G.; AND Knab, Frederick

1915 19.3254 The mosquitoes of North and Central America and the West Indies. Volume Three; Systematic description (in two parts); Part I. *Carnegie Institution of Washington, Publication 159, Volume 3*, 523 pp. [See under *Culiseta incidens* (pp. 478-483), Grand Canyon specimens cited, p. 482.]

Hubbard, Clarence Andreson

1943 19.3395 The fleas of California; with checklists of the fleas of Oregon–Washington–British Columbia–Alaska–Idaho–Nevada–Arizona. *Pacific University Bulletin*, 39(8) (June): 1-12.

1947 19.791 *Fleas of western North America : their relation to the public health.* Copyright Iowa State College Press. [Facsimile reprinting 1968, New York and London, Hafner Publishing Co., 533 pp.]

J

Jacobi, W. R.; Goodrich, B. A.; AND Cleaver, C. M.

2011 19.5226 Firewood transport by national and state park campers: A risk for native or exotic tree pest movement. *Arboriculture and Urban Forestry*, 37(3): 126-138. [Source area localities studied include Grand Canyon National Park and Lake Mead National Recreation Area.]

Jamison, Levi R., AND Riper, Charles van, III

2012 19.3907 Population dynamics of the tamarisk leaf beetle (*Diorhabda carinulata*) within the Colorado River basin [ABSTRACT]. *2012 Tamarisk Coalition Symposium, February 15-17, Grand Junction, CO, Two Rivers Convention Center*.

2018 19.5819 Population dynamics of the northern tamarisk beetle (*Diorhabda carinulata*) in the Colorado River basin. *U.S. Geological Survey, Open-File Report 2018-1070*, 68 pp.

Jamison, Levi R.; Ament, Nate; AND Tate, Clark

2010 19.3901 Distribution and expansion of *Diorhabda carinulata* across the Colorado Plateau [ABSTRACT]. *2010 Tamarisk Symposium, January 12 and 13, Two Rivers Convention Center, Grand Junction, Colorado*.

Jamison, Levi R.; Riper, Charles van, III; AND Bean, Dan W.

2015 19.5114 The influence of *Tamarix ramosissima* defoliation on population movements of the northern tamarisk beetle (*Diorhabda carinulata*) within the Colorado Plateau. *In:* Huenneke, Laura F., Riper, Charles van, III, and Hays-Gilpin, Kelley A. (eds.), *The Colorado Plateau VI : science and management at the landscape scale.* Tucson: University of Arizona Press. (11th Biennial Conference of Research on the Colorado Plateau.)

Johannsen, Oskar Augustus

1903 19.3253 Aquatic nematocerous Diptera. *In:* Needham, James G., MacGillivray, Alex. D., Johannsen, O. A., and Davis, K. C., Aquatic insects in New York State. *New York State Museum, Bulletin 68* (Entomology, 18) [and concurrently, *University of the State of New York, Bulletin 295*], pp. 328-441. [See p. 387, *Simulium* sp. found on Hance Trail.]

Johnson, Elizabeth Joy

2001 19.4932 *The molecular evolution of the sex-ratio gene complex in* Drosophila persimilis*.* Master's thesis, University of Georgia, 37 pp. [Includes *D. pseudoobscura* strains from "Grand Canyon, AZ" and "North Rim, AZ" (pp. 29, 31, 32).]

Johnson, Matthew J.; Jamison, Levi; Ralston, Barbara E.; Makarick, Lori; AND Holmes, Jennifer

2012 19.4509 *2011 monitoring tamarisk foliage removal by the introduced tamarisk leaf beetle (*Diorhabda carinulata*), and its effects on avian habitat parameters along the Colorado River in Grand Canyon National Park, Arizona.* [No place]: U.S. National Park Service; *in cooperation with* Northern Arizona University, 71 pp. [Date given on p. iv.]

Johnson, Matthew J.; Ralston, Barbara; Holmes, Jennifer A.; AND Calvo, Christopher

NO DATE 19.5992 *Task 4.5 final sampling/monitoring report : Arizona Water Protection Fund Grand; inventory of tamarisk leaf beetle and effects on riparian habitat in the Colorado, Verde, Salt and Tonto Rivers, 2011, 2012 and 2013.* Flagstaff, Arizona: Northern Arizona University, Colorado Plateau Research Station; and U.S. Geological Survey, Southwest Biological Science Center, *for* Arizona Water Protection Fund, 102 pp. [Study area on Colorado River is between Glen Canyon Dam and Lees Ferry.]

Johnson, Matthew J.; Ralston, Barbara; Makarick, Lori; AND Holmes, Jennifer

2011 19.3905 Status and implications of tamarisk beetle (*Diorhabda carinulata*) along the Colorado River in Glen and Grand Canyons [ABSTRACT]. *2011 Tamarisk Research Conference, February 16 and 17, Tucson, Arizona, Marriott University Park*.

Johnson, Walter N.

1990 19.5290 A new subspecies of *Cicindela pusilla* Say from northern Arizona. *Cicindela*, 22(1) (March): 1-12. [*Cicindela pusilla kaibabensis*, from "8 miles north of Kaibab Lodge".]

Johnston, M. Andrew

2019 19.6338 Phylogenetic revision of the psammophilic *Trogloderus* Leconte (Coleoptera: Tenebrionidae), with biogeographic implications for the Intermountain Region. *PeerJ*, 7: e8039, doi:10.7717/peerj.8039, 45 pp. + Supplemental Information online. [See *Trogloderus skillmani*, new species (pp. 24-26), holotype from "USA: AZ: Mohave Co./6m [miles] E Colorado City/Rosy Canyon Road/1.5 m S UT state line"; 920 paratypes listed in Supplemental Information. See *Trogloderus warneri*, new species (pp. 30-31), 237 paratypes listed in Supplemental Information, including specimens from localities within the region covered by this bibliography. No specimens in this study are from the Grand Canyon.]

Johnston, M. Andrew; Fleming, David; Franz, Nico M.; AND Smith, Aaron D.

2015 19.5231 Amphidorini LeConte (Coleoptera: Tenebrionidae) of Arizona: Keys and species accounts. *In:* Thomas, Donald B., Smith, Aaron D., and Aalbu, Rolf L. (eds.), A tribute to Honorary Member Dr. Charles A. Triplehorn. *Coleopterists Society, Monograph 14*, pp. 27-54. [See *Eleodes* (*Caverneleodes*) *leptoscelis* Triplehorn (p. 48, figure 9B [p. 38]), from Cave of the Domes, Grand Canyon; and *Embaphion glabrum* Blaisdell (p. 52, figure 2A [p. 30]), with note of favorable localities on the Arizona Strip.]

Jones, Susan C.

1985 19.839 New termite records for the Grand Canyon. *Southwestern Entomologist*, 10(2) (June): 137-138.

2004 19.6024 New inland records of *Incisitermes minor* (Isoptera: Kalotermitidae) along the Colorado River. *Sociobiology*, 43(3): 565-572. [In Colorado and Utah, but also notes earlier such collections in northern Arizona.]

K

Kavanaugh, David H.

2008 19.2842 A new species of *Nebria* Latreille (Coleoptera: Carabidae: Nebriini) from the Grand Canyon, Arizona. *Carnegie Museum of Natural History, Annals*, 77(1) (July): 1-5.

Keen, F. P.

1952 19.4574 Insect enemies of western forests. *U.S. Department of Agriculture, Miscellaneous Publication 273*, revised, 280 pp. [See Figure 62 (p. 14) and Figure 106 (p. 232), illustrating Black Hills beetle damage and control in Kaibab National Forest, Arizona. No text notes of Kaibab forest.]

Kennedy, Theodore A. [Kennedy, Ted]

NO DATE 19.4406 *Citizen science—Quantifying food for the fishes of the Grand Canyon.* [AND] *Bugs, bugs, and more bugs! Common terrestrial insects caught in light traps.* U.S. Geological Survey, [2] pp. [2013?] [Fact sheet.]

Kennedy, Theodore A., AND Gloss, Steven P.

2005 19.2543 Aquatic ecology: the role of organic matter and invertebrates. *In:* Gloss, Steven P., Lovich, Jeffrey E., and Melis, Theodore S. (eds.), The state of the Colorado River ecosystem in Grand Canyon; a report of the Grand Canyon Monitoring and Research Center, 1991-2004. *U.S. Geological Survey, Circular 1282*, pp. 87-102.

2005 19.2559 Aquatic ecology: the role of organic matter and invertebrates (chapter 5). *In: Colorado River Ecosystem Science Symposium 2005. Abstracts. October 25-27, 2005, Fiesta Inn Resort, 2100 South Priest Drive, Tempe, AZ.* [Flagstaff, Arizona]: [U.S. Geological Survey, Grand Canyon Monitoring and Research Center], p. 21. [Chapter 5 refers to ITEM NO. 19.2543.]

2005 19.2596 Aquatic ecology: the role of organic matter and invertebrates [ABSTRACT]. *In: Eighth Biennial Conference of Research on the Colorado Plateau, du Bois Center, Northern Arizona University, 7-10 November 2005 : program and abstracts of presented papers and posters (version 2.0)*, p. 55.

Kennedy, Theodore A.; Cross, Wyatt F.; Baxter, Colden V.; Donner, Kevin C.; Rosi-Marshall, Emma J.; Hall, Robert O., Jr.; Behn, Kathrine; Kincaid, Dustin; AND Copp, A.

2010 19.4607 The use of invertebrate drift in combination with flow food webs to evaluate the effects of a controlled flood on a tailwater trout population [ABSTRACT]. *In: Aquatic Sciences: Global Changes from the Center to the Edge : abstract book, 2010 Summer Meeting, Joint Meeting with ASLO and NABS, 6-11 June 2010, Santa Fe, NM, USA*, p.

124. [Colorado River below Glen Canyon Dam.] [Association for the Sciences of Limnology and Oceanography. North American Benthological Society.]

Kennedy, Theodore A.; Metcalfe, Anya; Deemer, Bridget R.; Ford, Morgan; Szydlo, Cheyenne; Yackulic, Charles; AND Muehlbauer, Jeffrey

2022 19.6725 Little bugs, bid data, and Colorado River adaptive management: Preliminary findings from the ongoing bug flow experiment at Glen Canyon Dam. *Boatman's Quarterly Review*, 35(3) (Fall): 26-31.

Kennedy, Theodore A.; Muehlbauer, Jeffrey D.; Deemer, Bridget R.; Yackulic, Charles B.; Ford, M. A.; Szydlo, C.; AND Metcalfe, Anya N.

2022 19.6834 Experimental "Bug Flows" increased algae production and insect diversity in the Colorado River, Grand Canyon [ABSTRACT]. *In: 16th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region, September 12-15, 2022, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona*, pp. 94-95. [Controlled steady-flows from Glen Canyon Dam.]

Kennedy, Theodore A.; Muehlbauer, Jeffrey D.; AND Rogowski, David L.

2019 19.6285 Colorado River ecosystem responses to the 2018 Bug Flow experiment from Glen Canyon Dam [ABSTRACT]. *In: 15th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region : theme: "Science and Solutions for Conserving the Southwest's Land, Water, Biodiversity and Cultures" : September 9-12, 2019, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona*, p. 63.

Kennedy, Theodore A.; Muehlbauer, Jeffrey D.; Yackulic, Charles B.; Lytle, David A.; Kortenhoeven, Eric W.; AND Metcalfe, Anya N.

2015 19.4862 Little bugs, big data, and Grand Canyon: light trapping by river rafters yields insights into Colorado River aquatic insect dynamics [ABSTRACT]. *In: 13th Biennial Conference of Science and Management on the Colorado Plateau and Southwest Region, October 5-8, 2015, Northern Arizona University, High Country Conference Center : oral and poster abstracts*, p. 51.

Kennedy, Theodore A.; Muehlbauer, Jeffrey D.; Yackulic, Charles B.; Lytle, David A.; Miller, Scott W.; Dibble, Kimberly L.; Kortenhoeven, Eric W.; Metcalfe, Anya N.; AND Baxter, Colden V.

2016 19.4975 Flow management for hydropower extirpates aquatic insects, undermining river food webs. *BioScience*, 66(7): 561-575 + Supplemental Material online, 6 pp. [Includes Colorado River in Glen Canyon below Glen Canyon Dam.]

Kennedy, Theodore A.; Yackulic, Charles B.; Cross, Wyatt F.; Grams, Paul E.; Yard, Michael D.; AND Copp, Adam J.

2014 19.4444 The relation between invertebrate drift and two primary controls, discharge and benthic densities, in a large regulated river. *Freshwater Biology*, 59(3) (March): 557-572 + supporting data online (Figures S1, S2), doi:10.1111/fwb.12285/suppinfo, 2 pp. [Colorado River below Glen Canyon Dam.]

Kennedy, Theodore A.; Yackulic, Charles B.; Muehlbauer, Jeffrey D.; Kortenhoeven, Eric; AND Copp, Adam J.

2013 19.5435 High resolution sampling of insect emergence by citizen scientists leads to fundamental insights about the life history of aquatic insects in the Colorado River, Grand Canyon [ABSTRACT]. *In: 12th Biennial Conference of Science and Management on the Colorado Plateau, September 16-19, 2013, Northern Arizona University, Flagstaff, Arizona : program and abstracts of presented papers and posters.* [Flagstaff, Arizona: Northern Arizona University], pp. 79-80.

Kim, Ke Chung

1966 19.5289 The species of *Enderleinellus* (Anoplura, Hoplopleuridae) parisitic on the Sciurini and Tamiasciurini. *Journal of Parasitology*, 52(5) (October): 988-1024. [See *Enderleinellus kaibabensis*, new species (pp. 1000-1002, 1022; figures 12 (p. 999, legend p. 998), 29 (p. 1001), 54-59 (p. 1005, legend p. 1004); types from "Kaibab National Forest, Arizona", specific locales not indicated but parasitic on *Sciurus kaibabensis* Merriam, thus Kaibab Plateau.]

King, Robert L.

1924 19.4361 Heteromorphic homologous chromosomes in three species of *Pseudotrimerotropis* (Orthoptera: Acrididae). *Journal of Morphology*, 38(1) (September): 19-63. [Includes Grand Canyon.]

Kloeppel, Heidi M., AND Stevens, Larry [Stevens, Lawrence E.]

2003 19.2433 Invertebrate pests in the Grand Canyon. *The Wild Thing* (Grand Canyon Wildlands Council Newsletter), (Fall): 12.

Kment, Petr; Carapezza, Attilio; AND Jindra, Zdeněk

2020 19.6488 Taxonomic catalogue of the family Ochteridae with description of *Ochterus papaceki* sp. nov. from Socotra Island and Tanzania (Hempitera: Heteroptera). *Acta Entomologica* (Musei Nationalis Pragae), 60(1): 23-64. [See *Ochterus barberi* Schell (p. 35), with rectification of holotype as lectotype; the species was erected in Schell's (1943, ITEM NO. 19.6155) January installment, with types (from Grand Canyon) designated in the April installment, for which Schell's holotype from Grand Canyon is redesignated a lectotype. See also *O. rotudus* J. T. Polhemus & M. S. Polhemus (p. 46), which reidentifies Schell's (1943) *O. viridifrons* (specimens from Grand Canyon).] [The newly described species of Kment *et al.*'s paper is not pertinent to this bibliography.]

Knight, Harry H.

1921 19.4091 Monograph of the North American species of Deraeocoris (Heteroptera, Miridae). *Minnesota State Entomologist, 18th Report to the Governor*, pp. 77-210, Plate 8. [Published June 18, 1921.] [Grand Canyon specimens cited; see: *Deraeocoris (Camptobrochis) brevis* (Uhler), pp. 103-105; *D. fulvus*, new species (including paratypes from Grand Canyon), pp. 144-145; *D. bullatus*, new species (including holotype, allotype, and paratypes from Grand Canyon), pp. 147-148; *D. navajo*, new

species (holotype from Grand Canyon), pp. 155-156); *D. fulvescens* (Reuter), pp. 167-169.]

1921 19.4092 Monograph of the North American species of Deraeocoris—Heteroptera Miridae. *University of Minnesota, Agricultural Experiment Station, Technical Bulletin 1*, pp. 77-210, Plate 8. [Published June 19, 1921. "This article appeared originally in the Eighteenth Report of the Minnesota State Entomologist, published June 18, 1921. In order to avoid confusion in citation, the original pagination is retained in this bulletin."]

1925 19.5495 Descriptions of thirty new species and two new genera of North American Miridae (Hemiptera). *Brooklyn Entomological Society, Bulletin*, 20(1) (February): 33-58. [See *Ceratocapsus clavicornis*, new species (pp. 47-48); holotype and allotype, "August 3, 1917, Grand View [Grandview], Grand Canyon, Arizona (H. H. Knight); author's collection"; also 30 paratypes "taken with the types on *Cowania mexicana*"; and a paratype from Williams, Arizona. Also see *Phytocoris mellarius*, new species (pp. 56-57); holotype and allotype, "August 3, 1917, Grand View [Grandview], Grand Canyon, Arizona (H. H. Knight); author's collection"; also nine paratypes "taken with the types. This species was probably collected on some conifer although I do not find the remarks in my notes."]

1926 19.6124 Descriptions of seven new species of *Pilophorus* (Hemiptera, Miridae). *Brooklyn Entomological Society, Bulletin*, 21(1/2) (February/April): 18-26. [See *Pilophorus strobicola*, new species (p. 19); localities of non-type study specimens include "Grand Canyon, Arizona". See also *P. fuscipennis*, new species (pp. 23-24); paratype material includes "♂ ♀, Aug. 3, 1917, Grand View [Grandview], Grand Canyon, Arizona (H. H. Knight)".]

1928 19.6120 New species of *Phytocoris* from North America (Hemiptera, Miridae). *Brooklyn Entomological Society, Bulletin*, 23(1) (February): 28-46. [See *Phytocoris hesperius*, new species; paratype specimens include "2♂ 1♀ Aug. 2, 1917, at top of Bright Angel trail, Grand Canyon (H. H. Knight)".]

1929 19.6068 Descriptions of five new species of *Plagiognathus* from North America (Hemip.: Miridae). *Entomological News* (Academy of Natural Sciences of Philadelphia, Entomological Section), 40 (March): 69-74. [See p. 73, *Plagiognathus tenellus*, new species; holotype, allotype, and 12 paratypes from "top of Bright Angel trail, Grand Canyon, Arizona (H. H. Knight); author's collection."]

1934 19.6123 *Phytocoris* Fallen—twelve new species from the western United States (Hemiptera, Miridae). *Brooklyn Entomological Society, Bulletin*, 29(1) (February): 1-16. [See *Phytocoris varius*, new species (pp. 9-11); "*Holotype*: ♂ September 6, 1931, Grand Canyon (H. H. Knight); author's collection. *Allotype*: ♀, taken with the type. *Paratypes*: ♂, 3♀, taken with the types by beating on large cedar trees (*Juniperus* sp.) which were found growing behind the cabin camp located at the entrance gate of the Grand Canyon National Park." Also paratypes from Durango, Colorado and Chiricahua Mountains, Arizona.]

1968 19.5134 Taxonomic review: Miridae of the Nevada Test Site and the western United States. *Brigham Young University, Science Bulletin* (Biological Series), 9(3), 282 pp. [See: *Lepidopsallus ovatus* Knight, 1926 (p. 51), with the cursory note, "This species was described from Tucson, Arizona, and I have other specimens from Grand View [Grandview], Grand Canyon, and Williams." *Deraeocoris bullatus* Knight, 1921 (p.82), with the cursory note, "The species *bullatus* was described from specimens taken on cliff rose, *Cowania mexicana*, at Grand View, Grand Canyon, Arizona, in 1917." *Largidea rubida* (Uhler, 1904) (p. 84), with the cursory note, "I have collected it on

pines, *Pinus*, in Colorado and at Grand View, Grand Canyon, Arizona." *Parthenicus cowaniae*, new species (pp. 148-149, Figure 211 (p. 147); types from Grand View [Grandview], Grand Canyon, and Hermit Rim Road, Grand Canyon. *Pilophorus exiguus* Poppius, 1914 (p. 168), with the cursory note, "Described from Bright Angel Trail, Grand Canyon, Arizona" (see Poppius, 1914, ITEM NO. 19.5135), with a "[l]ater record" from "Grand Canyon", 1925. *Bolteria juniperi*, new species (pp. 202-203, Figure 253), paratype "near Grand Canyon, Arizona". *Phytocoris flaviatus*, new species (p. 241, Figure 297 (p. 242), holotype "above Bright Angel Trail, Grand Canyon, Arizona".]

Knowlton, George F.

1946 19.6119 Chermidae notes. *Brooklyn Entomological Society, Bulletin*, 41(2) (April): 61. [Includes *Chermes cooleyi* Gillette on Douglas fir, *Pineus coloradensis* (Gillette) on western yellow pine, and *Pineus similis* (Gillette) on *Pinus flexilis*; all noted from "Kaibab Forest, Arizona", which based on other localities listed in this brief item, in Utah to the north, pertains to Kaibab Plateau.]

1954 19.6114 Aphid records from United States and Canada. *Brooklyn Entomological Society, Bulletin*, 49(2) (April): 47-48. [See p. 48, "*Aphis armoraceae* Cowen. Alate on *Sphaeralcea*, Marble Canyon, Arizona, June 16, 1949."]

1958 19.6122 Tingidae are biters. *Brooklyn Entomological Society, Bulletin*, 53(3) (June): 73. [Regarding "irritating bites" when "*Corythucha morrilli* Osb. & D. tingid bugs were swept from rabbit brush, *Chrysothamnus nauseosus*". Localites noted include several in southern Utah and at Fredonia, Arizona.]

Knull, Josef N.

1947 19.5222 New Buprestidae with notes (Coleoptera). *Ohio Journal of Science*, 47(4) (July): 174-176. [See p. 176, *Buprestia prospera* Csy., regarded as a "valid species", which notes, "Specimens are at hand from Arizona: Williams and south rim of Grand Canyon . . . ." (ENTIRE NOTE)]

1957 19.4418 Three new species of *Aphricus* with a note on *Ctenicera* (Coleoptera: Elateridae). *Ohio Journal of Science*, 57(4) (July): 200-202. [See *Aphricus knowltoni*, new species, pp. 200-201; includes type material from Cameron, Arizona.]

Ko, Katherine, AND Pilkington, Lonnie

2018 19.5964 Citizen science along the river—dragonfly mercury project. *Boatman's Quarterly Review*, 31(3) (Fall): 8-10.

Kortenhoeven, Eric; Muehlbauer, Jeff; AND Kennedy, Ted

2016 19.5189 Hydropower waves, insect eggs and citizen science: What's up with the aquatic food base in Grand Canyon? *Boatman's Quarterly Review*, 29(3) (Fall): 19-22.

Kramer, James P.

1979 19.6062 Taxonomic study of the planthopper genus *Myndus* in the Americas (Homoptera: Fulgoroidea: Cixiidae). *American Entomological Society, Transactions*, 105 (September): 301-389. [See *Myndus yuccandus* Ball (p. 328, Figures 54-56 [p. 327, legend (p. 326) indicates illustrations from paratype]), type material examined from "Grand Canyon, Arizona." Kramer notes: "Holotype male, Grand Canyon, Arizona, 4 August 1930, E.D. Ball. The information published with the original description is slightly different from that on the labels of the holotype; this is probably due to a lapsus by Ball. The previously published locality was given as 'Grand Canyon Bridge' and the date of collection '30 August 1930'. One paratype male with same data. Both are in the collection of the USNM." (no further specifics) Refers to Ball (1933, ITEM NO. 19.6063).] [*NOTE*: "Grand Canyon Bridge" is certainly Navajo Bridge, and it is feasible that this is the correct locality and date. Not resolved here.]

Kucera, James R.; Durden, Lance A.; AND Kim, Ke Chung

2007 19.2861 New records of sucking lice (Phthiraptera: Anoplura) from the western United States. *Journal of Vector Ecology*, 32(2) (December): 366-370. [Includes records from Kaibab Plateau and other locales on the Arizona Strip.]

Kuhnt, P., AND Reineck, G.

1908 19.6189 Aus den Sitzungen. I. *Deutsche Entomologische Zeitschrift*, 1908(2) (March 1): 282-293. [See p. 28: "Horn zeigt eine *Amblychila*-Larve (wahrscheinlich *A. Schwarzi*: Peach Spring, Arizona: Ch. Fuchs) von 28 mm Länge, die sich von den G. Hornschen Angaben (Tr. Am. Ent. Soc. 1876) vor allem durch das Vorhandensein von jederseits 2 Augen unterscheidet." It is not clear to which paper by George H. Horn in the 1876 *Transactions of the American Entomological Society* is referred; Peach Spring (Peach Springs) is not noted in any of them. However, "The Sexual Characters of North American Cicindelidæ with Notes on Some Groups of *Cicindela*" (pp. 232-240, Plate I) includes *Amblychila* Say (pp. 233-234). Plate I in this volume is not called out in any paper therein; it does, however, include "Fig. 18.—Hind trochanter and last ventral ♂ and ♀ of *Amblychila*." Thus it is to this paper that Kuhnt and Reineck seem to have referred, although the absence of specific information as noted by them is a matter not resolved here. The specific epithet, *schwarzi*, pertains to *A. schwarzi* Walther Hermann Horn, 1903. The genus is correctly *Amblycheila* Say, 1830; *Amblychila* is an unjustified emendation by Agassiz, 1846.] [In German.]

L

LaBerge, Wallace E.

1967 19.6173 A revision of the bees of the genus *Andrena* of the western hemisphere. Part I. *Callandrena*. (Hymenoptera: Andrenidae). *University of Nebraska State Museum, Bulletin*, 7 (October): 1-318. [See: *Andrena* (*Callandrena*) *helianthi* Robertson, 1891 (pp. 94-101), locality records (within the boundaries of this bibliography) include only "Fredonia", in Arizona (p. 100, no further details); *A.* (*C.*) *pecosana* Cockerell, 1913 (pp. 112-117), locality records include "UTAH: Kaibab Forest" (p. 116, no further

details; the distribution map [p. 116] plots a dot perhaps at the area of Kanab, Utah, thus perhaps a misregistration for the Kaibab Plateau), *A.* (*C.*) *utahensis*, new species (pp. 258-260, Figures 292-296 [p. 314]), paratypes include 5 females and 1 male from "Grand Canyon", collected by G. E. Bohart, June 5, 1940.]

Lauman, G. W. "Pat"; Schulz, James G.; Thomas, James A.; AND Willis, Daryl H.

1991 19.905 Macroinvertebrate studies in side canyon tributaries of the Grand Canyon. *In: Colorado River Investigations #10 : July/August, 1991* (supervised by Stanley S. Beus, Lawrence E. Stevens, and Frank B. Lojko). Northern Arizona University, *for* U.S. National Park Service, Grand Canyon National Park, pp. 73-90.

Lavoie, Kathleen H.; Helf, Kurt L.; AND Poulson, Thomas L.

2007 19.3864 The biology and ecology of North American cave crickets. *Journal of Cave and Karst Studies*, 69(1) (April): 114-134. [See p. 114, reference, *in passing* and noting a web-based press release, about a new genus of rhaphidiphorid cave cricket from Grand Canyon-Parashant National Monument.]

Le Conte, John L.[1]

1876 19.6017 (WITH George H. Horn) The Rhynchophora of America, North of Mexico. *American Philosophical Society, Proceedings*, 15(96) (December): i-xvi, 1-442 [entire number]. [*NOTE*: Cited here with question. Le Conte (p. 364) named the new species *Tomicus confusus* based on three specimens from "Southern California and Arizona"; no further information relating to the type localities is known. Swain (1924, ITEM NO. 19.6018) selected Le Conte's "California" specimen, in the Agassiz Museum, Harvard University, as the type for *Ips confusus* (Le Conte); he selected the "Arizona specimen" as the holotype of *Ips lecontei*, new species. Inasmuch as the genus represents forest beetles, it is not likely that the California specimen came from a locality pertaining to the lower Colorado River region as defined in this bibliography (thus neither Le Conte nor Swain are cited in Part 11, Section 1). However, the genus is widely distributed, including the Grand Canyon region and higher elevations of Arizona, and although it is less likely that Le Conte's specimen is from the immediate Grand Canyon region, both Le Conte's and Swain's papers are cited here conditionally.]

Leibfried, William C., AND Blinn, Dean W.

1986 19.916 *The effects of steady versus fluctuating flows on aquatic macroinvertebrates in the Colorado River below Glen Canyon Dam, Arizona.* [No place]: Glen Canyon Environmental Studies, *for* Arizona Game and Fish Department, Phoenix, 58 pp. (Contract no. 6400042 Extension.) (Glen Canyon Environmental Studies Report B-8.)

1988 19.5507 The effects of steady versus fluctuating flows on aquatic macroinvertebrates in the Colorado River below Glen Canyon Dam, Arizona. *In:* U.S. Bureau of Reclamation, Glen Canyon Environmental Studies, *Glen Canyon Environmental Studies : executive summaries of technical reports : November 1988.* [No place]: Glen Canyon Environmental Studies, pp. 173-186.

---

[1] Often published as "LeConte" or "Leconte" but the author's own usage is "Le Conte".

Leibfried, William C.; Usher, Howell D.; AND Blinn, Dean W.

1986 19.6476 Invertebrate drift in the Colorado River below Glen Canyon Dam: The effects of steady versus fluctuating discharges [ABSTRACT]. *Arizona-Nevada Academy of Science, Journal*, 21(1986 Proceedings Supplement) (April): 19.

Leng, Charles W.

1902 19.3409 Revision to the Cicindelidae of Boreal America. *American Entomological Society, Transactions*, 28(2): 93-194. [See *C. rufiventris* Dej. var. *arizonae* Wickham, p. 178: "Canon of the Colorado River, in Arizona. July. Collected by Prof. Townsend on sandy places or along paths by a stream going down a side canon from Hance's Stone Cabin (2500 feet above the river and 2500 feet below the rim) to the level of the Colorado River." See Wickham (1899, ITEM NO. 19.3226).]

Linder, Folke

1952 19.4807 Contributions to the morphology and taxonomy of the Branchiopoda Notostraca, with special reference to the North American species. *U.S. National Museum, Proceedings*, 102(3291), 69 pp., 7 plates. [See *Apus longicaudatus* LeConte (p. 53 and following); cited localities, with USNM specimen lot numbers, include (p. 65) "Red Horse Tank, Grand Canyon"; "natural tank, south rim of the Grand Canyon"; and "Haulpai [*sic*] Indian Reservation".]

Lindsay, Dale R.

1938 19.5235 New species of *Norvellina* (Homoptera, Cicadellidae). *Kansas Entomological Society, Journal*, 11(4) (October): 113-123. [See *Norvellina bicolorata* var. *inflata*, new variety (pp. 113-114), "numerous paratypes" from localities including "Grand Canyon, Ariz."]

Liu, Tong-Xian, AND Kosztarab, Michael

1987 19.5214 Two new species of *Chionaspis* (Homoptera: Coccoidea: Diaspididae) from North America. *Florida Entomologist*, 70(4) (December): 512-520. [See *Chionaspis gilli*, new species (pp. 516-519); paratype specimens include "On *Tamarix chinensis*, 5 on 4 slides, Grand Canyon National Park, Colorado River, Coconino Co., Arizona (AZ), VII-23-1984 collected by L. E. Stevens, deposited in USNM."]

Loomis, Richard B., AND Welbourn, W. C., Jr.

1969 19.6776 A new species of *Hannemania* (Acarina, Trombiculidae) from *Bufo punctatus* of western North America, with comments on *Hannemania hylae* (Ewing). *Southern California Academy of Sciences, Bulletin*, 68(3): 161-169. [See *Hannemania bufonis*, new species (pp. 161-164, fig. 1); types from Whitewater Canyon, Riverside County, California, but specimens examined include "Arizona, Mohave Co.: Grand Canyon National Mon., Toroweap Valley, 25 April 1943 (17)."]

Lutz, Frank E.

1934 19.938 From low to high. *Grand Canyon Nature Notes*, 9(7) (October): 327-329. [Insect collecting at mouth of Bright Angel Creek, Indian Garden, and Supai. A general article without specifics.]

Lynch, Ann M.; Anhold, John A.; McMillin, Joel D.; Dudley, Steve M.; Fitzgibbon, Roberta A.; AND Fairweather, Mary Lou

2008 19.4897 *Forest insect and disease activity on the Kaibab National Forest and Grand Canyon National Park, 1918-2006 : report for the Kaibab N.F./Regional Analysis Team.* Tucson, U.S. Forest Service, Rocky Mountain Research Station; and Flagstaff: U.S. Forest Service, Arizona Zone Office, *for* U.S. National Forest Service, Kaibab National Forest, 41 pp.

M

Mader, Detlef

2011 19.5572 Lunarzyklische Populationsdynamik des Mosel-Apollo (*Parnassius apollo vinningensis*) und anderer Insekten im Moseltal zwischen Koblenz und Trier (Deutschland). Selenocyclical population dynamics of the Moselle Apollo (*Parnassius apollo vinningensis*) and other insects in the Moselle Valley between Koblenz and Trier (Germany). *Galathea* (Kreises Nürnberger Entomologen, Berichte), (Supplement 21), 279 pp., 4 plates. [See in section 10, "Bedeutung von Apollo faltern in meiner entomologischen Forschung und in meiner akademischen Laufbahn" (p. 193 and following); specifically, section 10.4, "Östlicher Tiger-Schwalbenschwanz (*Papilio glaucus*)", pp. 197-199, which discusses occurrences of *P. glaucus* Linnaeus at Grand Canyon.] [In German, with bilingual title.]

Makarick, Lori J.; Dow, Talise; AND Kolegas, Stacy

2010 19.3122 Tamarisk beetle found within Grand Canyon National Park. *Canyon Views* (Grand Canyon Association), 16(1) (Spring): 3-4. [First author's name misspelled Mackarick.]

Makarick, Lori J.; Moran, Mary; AND Naumann, Tamara

2010 19.3902 Planning for and living with the tamarisk beetle on the Colorado Plateau—a National Park Service perspective [ABSTRACT]. *2010 Tamarisk Symposium, January 12 and 13, Two Rivers Convention Center, Grand Junction, Colorado*.

Malloch, J. R.

1918 19.3390 Diptera from the south-western United States. Paper IV. Anthomyiidae. *American Entomological Society, Transactions*, 44(3) (September): 263-319, Plate 17. [See p. 316, *Hylemyia* sp. from "Bright Angel, Arizona, rim of Grand Cañon".]

Mangum, Fred A.

1990 19.950 *Aquatic ecosystem inventory, macroinvertebrate analysis, North Canyon Creek, Kaibab National Forest, 1990.* Provo, Utah: U.S. Forest Service, Intermountain Region, Aquatic Ecosystem Analysis Laboratory, Brigham Young University, 8 pp.

Mann, John

1969 19.6364 Cactus-feeding insects and mites. *U.S. National Museum, Bulletin 256*, 158 pp. [See *Chelindea vittiger* Uhler (pp. 131-133), "general occurrences" (p. 132) include Lees Ferry, Arizona; *Cactylopius confusus* Cockerell (pp. 147-148), "Material found on the low-growing *O[puntia]. basilaris* at Lees Ferry and the Grand Canyon in northern Arizona probably represents this species." (p. 147) (ENTIRE NOTES)]

Massey, Calvin L.

1974 19.5566 Biology and taxonomy of nematode parasites and associates of bark beetles in the United States. *U.S. Forest Service, Agriculture Handbook 446*, 233 pp. [See *Parasitorhabditis gracilis*, new species, type locality "Grand Canyon", "[a]ssociated with *Pseudohylesinus grandis* Sw. in white fir", pp. 69, 70. See also in Table 1, which lists *Pseudohylesinus grandis* at Grand Canyon (p. 13).]

Matzkin, Luciano M.

2008 19.4326 The molecular basis of host adaptation in cactophilic drosophila: Molecular evolution of a glutathione *S*-transferase gene (*GstD1*) in *Drosophila majoavensis*. *Genetics*, 178 (February): 1073-1083. [Materials include 15 lines from the "Mojave population (7 from Grand Canyon and 8 from Anza-Borrego)".]

Mawdsley, Jonathan R.

2001 19.3982 Taxonomy, phylogeny, and biogeography of the genus *Asydates* Casey (Insecta: Coleoptera: Melyridae). *Insecta Mundi* (Center for Systemtic Entomology, Gainesville, Florida), 15(2) (June): 123-128.

McAtee, W. L.

1919 19.6126 Notes on Nearctic Heteroptera. *Brooklyn Entomological Society, Bulletin*, 14(1) (February): 8-15. [See *Chelinidea vittiger* var. *artuflava*, new variety (pp. 11-12); localities for non-type specimens examined include "Grand Cañon, Ariz., July 10 (U. S. N. M.)".]

1919 19.3594 Key to the Nearctic genera and species of Berytidae (Heteroptera). *New York Entomological Society, Journal*, 27(1) (March): 79-92. [See *Pronotacantha annulata* Uhler, p. 89; including Grand Canyon.]

McCleary, James A.

1955 19.2206 A gall midge infesting *Opuntia phaeacantha*. *Saguaroland Bulletin* (Desert Botanical Garden of Arizona, Phoenix), (June/July): 69-72.

McCullough, D. G., AND Wagner, M. R.

1987 19.2286 Influence of watering and trenching ponderosa pine on a pine sawfly. *Oecologia*, 71(3): 382-387.

McHugh, Charles W.; Kolb, Thomas E.; AND Wilson, Jill L.

2003 19.2860 Bark beetle attacks on ponderosa pine following fire in northern Arizona. *Environmental Entomology*, 32(3): 510-522. [Study sites include Bridger Knoll Study Area on the Kaibab National Forest, North Kaibab Ranger District.]

McKee, Barbara H. *see also* Hastings, Barbara

1932 19.1021 Scorpion vs. tarantula. *Grand Canyon Nature Notes*, 7(1): 8-9.

1994 19.1028 Scorpion vs. tarantula. *In:* Lamb, Susan (ed.), *The best of Grand Canyon Nature Notes.* Grand Canyon, Arizona: Grand Canyon Natural History Association, pp. 83-84. [Reprinted from *Grand Canyon Nature Notes*, April, 1932.]

McKee, Edwin D.

1928 19.1034 The Polyphemus moth. *Grand Canyon Nature Notes*, 3(2) (July 31): cover, 4-5.

1929 19.1037 Odds and ends. *Grand Canyon Nature Notes*, 3(9) (May 31): 6. [Flammulated screech owl, eastern kingbird, spotted skunks, tent caterpillars, water ouzel nests.]

1929 19.1038 Heralds of summer. *Grand Canyon Nature Notes*, 3(10) (June 30): 6-7. [Birds, flowers, butterflies, insects.]

1929 19.1041 Hither and yon. *Grand Canyon Nature Notes*, 4(2) (October 31): 13-14. [Includes brief notes of American bald eagle in Hance Canyon, tarantulas on South Rim, and horned toad canibalism.]

1931 19.1053 Giant moths. *Grand Canyon Nature Notes*, 5(9) (July): 93-94. [See also errata, 6(1) (November): 14.]

1932 19.1067 Scorpion vs. centipede. *In:* Biological Briefs [SECTION]. *Grand Canyon Nature Notes*, 7(9) (December): 94.

1994 19.1096 The polyphemus moth. *In:* Lamb, Susan (ed.), *The best of Grand Canyon Nature Notes.* Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 82. [Reprinted from *Grand Canyon Nature Notes*, July, 1928.]

1994 19.1097 The Papilio tribe of butterflies. *In:* Lamb, Susan (ed.), *The best of Grand Canyon Nature Notes.* Grand Canyon, Arizona: Grand Canyon Natural History Association, pp. 82-83. [Reprinted from *Grand Canyon Nature Notes*, July, 1927.]

McKinney, Ted; Ayers, Andrew D.; AND Rogers, Roland S.

1999 19.1112 Macroinvertebrate drift in the tailwater of a regulated river below Glen Canyon Dam, Arizona. *Southwestern Naturalist*, 44(2) (June): 205-210.

McKinney, Ted; Rogers, Roland S.; AND Ayers, Andrew D.

1997 19.1113 Effects of experimental flooding on periphyton and macroinvertebrates in the Glen Canyon Dam tailwater. *Glen Canyon Dam beach/habitat-building flow : abstracts and executive summaries, April 1997* [symposium convened by the Grand Canyon Monitoring and Research Center, Department of the Interior, Flagstaff, Arizona, April 8-10, 1997, Flagstaff]. [No imprint, convenor from separate proceedings volume], p. 27.

McKinney, Ted; Rogers, Roland S.; AND Ayers, Andrew D.

1997 19.1113 Effects of experimental flooding on periphyton and macroinvertebrates in the Glen Canyon Dam tailwater. *Glen Canyon Dam beach/habitat-building flow : abstracts and executive summaries, April 1997* [symposium convened by the Grand Canyon Monitoring and Research Center, Department of the Interior, Flagstaff, Arizona, April 8-10, 1997, Flagstaff]. [No imprint, convenor from separate proceedings volume], p. 27.

1997 19.1115 Effects of experimental flooding on periphyton, diatom epiphytes and macroinvertebrates in the tailwater of a regulated river. *American Fisheries Society, 127th Annual Meeting, "Fisheries at Interfaces: Habitats, Disciplines, Cultures", 24-28 August 1997, Monterey, California, Abstracts: L-Z*, pp. 20-21.

McKinney, Ted; Rogers, Roland S.; Ayers, Andrew D.; AND Persons, William R.

1996 19.1116 Effects of experimental flooding on algae, macroinvertebrates, rainbow trout and flannelmouth suckers in the Glen Canyon Dam tailwater. *In:* Arizona Game and Fish Department, *The effects of an experimental flood on the aquatic biota and their habitats in the Colorado River, Grand Canyon, Arizona.* Phoenix: Arizona Game and Fish Department, pp. 10-1 to 10-30.

McLain, Lauren K., AND Stevens, Lawrence E.

2000 19.1990 On jeweled wings. *Nature Notes* (Grand Canyon National Park), 16(1) (Summer): 8-10. [Butterflies.]

McMaster, Melissa A., AND Makarick, Lori

2011 19.3544 Northern tamarisk beetle update. *Boatman's Quarterly Review*, 24(4) (Winter 2011-2012): 24-26.

McMillin, Joel D., AND DeGomez, Tom E.

2008 19.6019 Arizona fivespined ips, *Ips lecontei* Swaine, in the southwestern United States. *Forest and Insect Disease Leaflet* (U.S. Department of Agriculture), (116), revised, 8 pp.

Mead, Pauline [Mead, Polly] *see also* Pattraw, Pauline Mead

1930 19.1125 Butterflies near the Colorado River in November. *Grand Canyon Nature Notes*, 5(1) (November 30): 2-3.

Metcalfe, Anya N.

2018 19.5948 *Aquatic insect distribution in the Colorado River basin.* Master's thesis, Northern Arizona University, 85 pp. [Study area is Upper Colorado River Basin, Grand Canyon, and upper portion of Lake Mead during 2015-2016.]

2020 19.6546 Science story; aquatic insects. *In:* Scott, Annie, and Snow, Eleanor, The 150th anniversary of the 1869 Powell Expedition; USGS participation in the Sesquicentennial Colorado River Exploring Expedition and reflections from the ~1,000-mile journey down the Green and Colorado Rivers. *U.S. Geological Survey, Circular 1475*, p. 42.

Metcalfe, Anya N., AND Kennedy, Theodore A.

2015 19.4869 Phenology and life history plasticity of the bivoltine angel lichen moth (Erebidae: *Cisthene angelus*) in Grand Canyon, AZ, US [ABSTRACT]. *In: 13th Biennial Conference of Science and Management on the Colorado Plateau and Southwest Region, October 5-8, 2015, Northern Arizona University, High Country Conference Center : oral and poster abstracts*, p. 61.

Metcalfe, Anya N.; Fritzinger, Carol A.; Kennedy, Theodore A.; Dodrill, Michael J.; Muehlbauer, Jeffrey D.; Holton, Brandon; Durning, Laura E.; Sankey, Joel B.; AND Weller, T.

2022 19.6836 Bats, bugs, and boaters: insectivorous bat foraging along the Colorado River in Grand Canyon is determined by the availability of aquatic flies [ABSTRACT]. *In: 16th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region, September 12-15, 2022, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona*, p. 120.

Metcalfe, Anya N.; Fritzinger, Carol A.; Weller, Theodore J.; Dodrill, Michael J.; Muehlbauer, Jeffrey D.; Yackulic, Charles b.; Holton, P. Brandon; Szydlo, Cheyenne M.; Durning, Laura E.; Sankey, Joel B.; AND Kennedy, Theodore A.

2023 19.6853 Insectivorous bat foraging tracks the availability of aquatic flies (Diptera). *Journal of Wildlife Management*, 87(5): e22414 (https://doi.org/10.1002/jwmg.22414) + Supporting Information online (Fig. S1, Tables S1-S5, Methods SI and SII; 15 pp.). [Colorado River in Grand Canyon.]

Metcalfe, Anya N.; Kennedy, Ted [Kennedy, Theodore A.]**; AND Fritzinger, Carol "Fritz"**

2014 19.4620 Moth Mystery Hour. *Boatman's Quarterly Review*, 27(4) (Winter 2014-2015): 15-16. [Angel lichen moths, *Cisthene angelus*; light-trapping studies along Colorado River through Grand Canyon.]

Metcalfe, Anya N.; Kennedy, Theodore A.; Marks, Jane C.; AND Muehlbauer, Jeffrey D.

2019 19.6287 Gene flow among net-spinning caddisfly population in the Colorado River Basin [ABSTRACT]. *In: 15th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region : theme: "Science and Solutions for Conserving the Southwest's Land, Water, Biodiversity and Cultures" : September 9-12, 2019, High*

Country Conference Center, Northern Arizona University, Flagstaff, Arizona, pp. 78-79. [Upper Basin and Grand Canyon.]

Metcalfe, Anya N.; Kennedy, Theodore A.; AND Muehlbauer, Jeffrey D.

2016 19.5322 Phenology of the adult angel lichen moth (*Cisthene angelus*) in Grand Canyon, USA. *Southwestern Naturalist*, 61(3) (September): 233-240.

Metcalfe, Anya N.; Muehlbauer, Jeffrey D.; Kennedy, Ted [Kennedy Theodore A.]**; AND Ford, Morgan**

2019 19.6362 Bug flows: Don't count your midges until they hatch. *Boatman's Quarterly Review*, 32(4) (Winter 2019-2020): 8-11.

Michener, Charles D.

1939 19.2154 A revision of the genus *Ashmeadiella* (Hymen., Megachilidae). *American Midland Naturalist*, 22(1) (July): 1-84.

Miller, Douglass R., AND McKenzie, Howard L.

1973 19.3984 Seventh taxonomic study of North American mealybugs (Homoptera: Coccoidea: Pseudococcidae). *Hilgardia*, 41(17) (January): 489-542. [See *Cataenococcus formicarii* (Ehrhorn, n. comb., pp. 491-493; and *Cryptoripersia arizonensis* (Ehrhorn), pp. 499-500. Type material pertains to that described by Ehrhorn (1899, ITEM NO. 19.3983). The locality, "Thurber's Camp", Grand Canyon, as noted by Ehrhorn, is Bright Angel Camp.]

Miller, Russell B.

1981 19.2155 Hawkmoths and the geographic patterns of floral variation in *Aquilegia caerulea*. *Evolution*, 35(4) (July): 763-774. [Sampling sites include Kaibab Plateau.]

Millidge, A. F.

1981 19.4375 The erigonine spiders of North America. Part 4. The genus *Disembolus* Chamberlin and Ivie (Araneae: Linyphiidae). *Journal of Arachnology*, 9: 259-284. [See *Disembolus kesimbus* (Chamberlin), new combination, pp. 270-271, Figures 16, 17, 20 (p. 267), 55 (p. 273), 72 (p. 275), 94 (p. 278), Map 1D (p. 260).] [Chamberlin's type material from V.T. Ranch, Kaibab Plateau. Lectotype designated by Millidge.] [VT Ranch.]

Moldenke, Andrew R.

1970 19.5287 A revision of the Clytrinae of North America north of the Isthmus of Panama (Coleoptera: Chrysomelidae). Stanford, California: Stanford University, 310 pp. [Includes *Saxinis saucia kaibabiae*, new subspecies.]

Morris, Gail M.

2019 19.6288 Partnerships for monarch research in remote southwestern locations [ABSTRACT]. *In: 15th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region : theme: "Science and Solutions for Conserving the Southwest's Land, Water, Biodiversity and Cultures" : September 9-12, 2019, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona*, p. 81. [Includes note that the "Southwest Monarch Study is researching the breeding habitats and tagging monarchs at Grand Canyon National Park South Rim, North Rim and throughout the Colorado River corridor."]

Morris, Gail M.; Kline, Christopher; AND Morris, Scott M.

2015 19.5002 Status of *Danaus plexippus* population in Arizona. *Lepidopterists' Society, Journal*, 69(2): 91-107. [Monarch butterflies. Includes Colorado River in Grand Canyon and lower Colorado River.]

Muchmore, William B.

1981 19.5001 Cavernicolous species of *Larca*, *Archeolarca*, and *Pseudogarypus* with notes on the genera, (Pseudoscorpionida, Gaypidae and Pseudogarypidae). *Journal of Arachnology*, 9(1): 47-60. [See *Archeolarca cavicola*, new species (pp. 55-56, Figures 11, 12 [p. 53]), holotype female from Cave of the Domes, Grand Canyon.]

N

Nabokov, Vladimir

1942 19.2212 Some new or little known Nearctic *Neonympha* (Lepidoptera: Satyridae). *Psyche*, 49(3/4) (September/December): 61-80. [Includes *Neonympha dorothea*, new species, from Grand Canyon.]

2024 19.6983 *Bir günbatımının ayrıntıları : toplu hikâyer 1. The complete short stories of Vladimir Nabokov.* (Seniha Akar, Fatih Özgüven, Pınar Kür, and Dürrin Tunç, translators.) İstanbul: İletişim Yayınları, 351 pp. [Cited here only for the cover art: "Kelebek: Tiger Swallow Tail. Fotoğraf: Nabokov Stanford Üniversitesi'nden öğrencisi Dorothy Leuthold ile Grand Canyon'da, Haziran 1941" [Butterfly: Tiger Swallow Tail. Photo: Nabokov with Stanford University student Dorothy Leuthold in the Grand Canyon, June 1941" (after whom Nabokov named *Neonympha dorothea*).] [*NOTE:* None of the variously titled collections of Nabokov's stories that have been seen use either of these illustrations.] [In Turkish, with bilingual volume title.]

Nelson, C. Riley

1994 19.1245 Insects of the Great Basin and Colorado Plateau. *In:* Harper, Kimball T., St. Clair, Larry L., Thorne, Kaye H., and Hess, Wilford M. (eds.), *Natural history of the Colorado Plateau and Great Basin.* Niwot, Colorado: University Press of Colorado, pp. 211-237.

Nelson, G. H.

2000 19.3960 A revision of the subtribe Hippomelanina, part II: *Gyascutus* (*Gyascutus*) LeConte (Coleoptera: Buprestidae). *Journal of Natural History*, 34(12): 2251-2291.

Nelson, G. H., AND Westcott, R. L.

1995 19.4026 Three new species of *Acmaeodera* Eschscholtz (Coleoptera: Buprestidae) from the United States and Mexico. *The Coleopterists Bulletin*, 49(1): 77-87.

New Mexico College of Agriculture and Mechanic Arts, Agricultural Experiment Station, Board of Regents

1894 19.3503 Report of the Experiment Station. *New Mexico College of Agriculture and Mechanic Arts, Agricultural Experiment Station, 4th Annual Report of the Board of Regents, 1892-'93.* [See pp. 14-15: "From the middle of June, 1892, to the middle of August, the Entomologist [T. D. A. Cockerell] was away on a field-trip to the Grand Cañon of the Colorado. During this trip very many insects were collected and many observations recorded, but the results have only in part been worked up and published. * * * A new Garytes from the Grand Cañon has also been described by Mr. Fox." (ENTIRE NOTES). Regarding the new *Garytes*, refer to William J. Fox, (1893, ITEM NO. 19.4538).]

Nichols, Stacy, AND Shannon, Joe

1998 19.1247 Spiders. *Boatman's Quarterly Review*, 11(2) (Spring): 17.

Nielson, M. W.

1965 19.3334 A revision of the genus *Cuerna* (Homoptera, Cicadellidae). *U.S. Department of Agriculture, Agricultural Research Service, Technical Bulletin 1318*, 48 pp. [See *Cuerna kaloostiani*, new species (pp. 24-26), male holotype and female allotype from Flagstaff, Arizona; paratypes include "4 male paratypes, Grand Canyon, July 28, 1936, R. H. Beamer and D. R. Lindsay; 1 female paratype, Grand Canyon National Park, July 16, 1947, R. H. Beamer", "1 female, Bright Angel, July 14 (no year given), Barber and Swartz; in the U.S. Naitonal Museum; 4 females, Grand Canyon, August 19, 1939, E. P. Van Duzee . . . and 1 male, Bright Angel Camp, 6,900 feet, Wickham; in the California Academy of Sciences". Also, *Cuerna obtusa* Oman & Beamer 1944, specimens examined include "Grand Canyon, Kaibab" (no further data).]

Oberlin, Gaye E.; Shannon, Joseph P.; AND Blinn, Dean W.

1999 19.1252 Watershed influence on the macroinvertebrate fauna of ten major tributaries of the Colorado River through Grand Canyon, Arizona. *Southwestern Naturalist*, 44(1) (March): 17-30. [Paria River, Vasey's Paradise, Nankoweap Creek, Little Colorado

River, Bright Angel Creek, Tapeats Creek, Kanab Creek, Havasu Creek, Spring Canyon, and Diamond Creek.]

Osife, Maiya Laree

2013 19.6537 Microbiology and soundscape project. *Southern Paiute-Parashant Bulletin* (U.S. Bureau of Land Management and U.S. National Park Service, Grand Canyon-Parashant National Monument), 1 (July): 8. [*NOTE*: As noticed on p. 1, Osife is the author of the entirety of this inaugural issue. The microbiology project pertains to studies in cave environments of basalt flows in remote areas of the national monument, including Nampaweap. The soundscape project is not mentioned in the text.]

P

Pape, Robert B.

1998 19.2877 *Bat Cave, Grand Canyon National Park : baseline biological inventory : final report.* Tucson: [no imprint], *for* U.S. National Park Service, Grand Canyon National Park, 46 pp.

2014 19.4500 Biology and ecology of Bat Cave, Grand Canyon National Park, Arizona. *Journal of Cave and Karst Studies*, 76(1) (April): cover, inside front cover, 1-13.

2016 19.5142 The importance of ants in cave ecology, with new records and behavioral observations of ants in Arizona caves. *International Journal of Speleology* (Union Internationale de Spéléologie), 45(3) (September): 185-205 + Appendix A, "List of an records from caves, record source, and record author-assigned ecological group", [14] pp. [Includes cave localities in Grand Canyon-Parashant National Monument.]

Pape, Robert B.; Thomas, Donald B.; AND Aalbu, Rolf L.

2007 19.5477 A revision of the genus *Eschatomoxys* Blaisdell (Tenebrionidae: Pimeliinae: Edrotini) with notes on the biology. *The Coleopterists Bulletin*, 61(4): 519-540. [Includes *Eschatomoxys pholeter* Thomas and Pape, new species; holotype, allotype and paratypes from Bat Cave, Grand Canyon, and additional material from Rampart Cave ("on old sloth shit" [*sic*!]), Grand Canyon, and Eldel Cave, Mohave County. Includes remarks on other species from Marble Canyon.]

Parker, Douglas L.

1980 19.4738 *Integrated pest management guide : mountain beetle,* Dendroctonus ponderosae *Hopkins, in ponderosa pine, Kaibab Plateau, Arizona.* [No place]: U.S. Forest Service, Southwestern Region, 12 pp.

Parker, Douglas L., AND Stevens, Robert E.

1979 19.1266 Mountain pine beetle infestation characteristics in ponderosa pine, Kaibab Plateau, Arizona, 1975-1977. *U.S. Forest Service, Rocky Mountain Forest and Range Experiment Station, Research Note RM-367*, 4 pp.

Parker, Douglas L.; Graham, Donald P.; AND Schmeckpeper, Thomas C.

1979 19.6637 *Biological evaluation : western spruce budworm : Kaibab National Forest and Grand Canyon National Park.* Albququerque, New Mexico: U.S. forest Service, Southwestern Region, State and Private Forestry, Forest Insect and Disease Management, 17, 11 pp. (3430 R3 79-13") [Also "Errata Sheet" [1980], 1 p.]

Peck, Stewart Blaine

1973 19.1294 A systematic revision and the evolutionary biology of the *Ptomaphagus (Adelops)* beetles of North America (Coleoptera; Leiodidae; Catopinae), with emphasis on cave-inhabiting species. *Museum of Comparative Zoology, Bulletin*, 145(2): 29-162. [See p. 106, *P. cocytus*, new species, and related figures throughout; type from Roaring Springs Cave.]

1980 19.1295 Climatic change and the evolution of cave invertebrates in the Grand Canyon, Arizona. *NSS Bulletin* (National Speleological Society), 42(3): cover, contents page, 53-60.

Peck, Stewart B., AND Wynne, J. Judson

2013 19.4198 *Ptomaphagus parashant* Peck and Wynne, new species (Coleoptera: Leiodidae: Cholevinae: Ptomaphagini): the most troglomorphic cholevine beetle known from western North America. *The Coleopterists Bulletin*, 67(3): 309-317. [PARA-1001 cave, Parashant National Monument (*i.e.*, Grand Canyon-Parashant National Monument).]

Pelletier, Stephen

2008 19.3861 Crickets, comets, petroglyphs; the role of basic research at AASCU institutions. *Public Purpose*, (April/May): 2-6. [American Association of State Colleges and Universities.] [See pp. 2-3, note, *in passing*, of J. Judson Wynne's discovery of a new genus of cave cricket from Grand Canyon-Parashant National Monument. Also note grayed-out full-page background image of cricket, without legend, p. 2.]

Pellmyr, Olle; Balcázar Lara, Manuel; Althoff, David M.; Segraves, Kari A.; AND Leebens-Mack, James

2005 19.3963 Phylogeny and life history evolution of *Prodoxus* yucca moths (Lepidoptera: Prodoxidae). *Systematic Entomology*, doi:10.1111/j.1365-3113.2005.00301.x, 20 pp. [Includes *Prodoxus gypsicolor* Pellmyr, new species, pp. 5-8, Fig. 1R (type from California), with note (p. 7), "Specimens reared by OP from *A[gave]. utahensis* at Tuweep, Grand Canyon National Park . . . may belong to this species." (no further remarks) Article includes other regional occurrences of other species.]

Perrault, G. G.

1982 19.6897 Etudes sur la tribu des Bembidiini s. str. (Coleoptera, Carabidae). II. Révision du sous-genre Cyclolopha (Casey). *Entomologica Basiliensia*, 7: 89-126. [See *Bembidion sphaeroderum* Bates (pp. 100-102), wherein *B. (C.) occultum* Casey 1918 is synonymized with *B. sphaeroderum* Bates 1882; Casey's type material from Grand Canyon examined.] [In French.]

Peterson, Kathy

1982 19.1302 Interactions of harvester ants (*Pogonomymex*) and river recreationists. *In: Colorado River Investigations I : July/August 1982.* Flagstaff, Arizona: Northern Arizona University, and Museum of Northern Arizona, pp. 99-105.

Pfeiffer, Bryan

2007 19.2942 Size *doesn't* matter. *VES News* (Vermont Entomological Society Newsletter), (55) (Spring): 3. [Entomological notes from Grand Canyon hike; *Brephidium exile*, Western Pygmy-Blue butterfly, and caddisfly larvae.]

Pfeiler, E.; Reed, L. K.; AND Markow, T. A.

2005 19.2937 Inhibition of alcohol dehydrogenase after 2-propanol exposure in different geographic races of *Drosophila mojavensis*: lack of evidence for selection at the Adh-2 locus. *Journal of Experimental Zoology, B, Molecular and Developmental Evolution*, 304(2): 159-168.

Philip, Cornelius B.

1936 19.6116 Notes on certain males of North American horseflies (Tabanidae). *Brooklyn Entomological Society, Bulletin*, 31(5) (December): 189-197. [See p. 191: "*T. dorsifer* Wlk. [*Tabanus dorsifer* Walker, 1860] Allotype ♂ * * * Grand Canyon, Ariz., Phantom Ranch, about 2500'; July 26, 1934; F. E. Lutz." *NOTE* (from p. 189): "A number of apparently undescribed, or inadequately characterized males, have accumulated over a period of years and it appears opportune to make their descriptions available at this time. In order that initial descriptions of the opposite sex subsequent to the original specific establishment may be associated with a definite specimen, carefully preserved, for later reference and correction if need be, Mutkowsky's original conception when he proposed the term 'allotype,' is adhered to rather than the subsequent interpretation reflected in Banks and Caudell's 'Rules of Nomenclature' of an allotype as a 'paratype of the opposite sex.'"]

Philip, Kenelm W.

1996 19.4424 [Comment on "The Butterfly Wars" by Ted Williams in *Audubon* magazine.] *News of the Lepidopterists' Society*, 38(2) (April): 54. [Williams (1996), see ITEM NO. 19.4423.] [Includes brief note on Kaibab swallowtail and Grand Canyon.]

Pike, Chris, AND Ward, Steve

1987 19.1321 Further investigations on *Pogonomyrmex sp.* ants on Colorado River beaches in Grand Canyon National Park. *In:* Weiss, Gayle C. (ed.), *Colorado River Investigations V : July/August, 1986* (supervised by Stanley S. Beus and Steven W. Carothers). Flagstaff, Arizona: Northern Arizona University, *for* U.S. National Park Service, Grand Canyon National Park, pp. 138-174.

Pike, Chris; LaChat, Robert; AND Taylor, Cathy O'Rourke

1989 19.1322 Continued studies on the red harvester ant: density and foraging activities on human impacted, Colorado River beaches in Grand Canyon National Park, Summer 1989. *In: Colorado River Investigations VIII : July/August, 1989* (supervised by Stanley S. Beus, Lawrence E. Stevens, and Frank B. Lojko). Flagstaff, Arizona: Northern Arizona University, *for* U.S. National Park Service, Grand Canyon National Park, pp. 104-115.

Pitnick, Scott; Miller, Gary T.; Schneider, Karin; AND Markow, Therese A.

2003 19.4364 Ejaculate-female coevolution in *Drosophila mojavensis*. *Royal Society of London, Proceedings*, B, 270: 1507-1512. [Includes collection from Whitmore Canyon, Grand Canyon, Arizona.]

Platnick, Norman I., AND Shadab, Mohammad U.

1975 19.5583 A revision of the spider genera *Haplodrassus* and *Orodrassus* (Araneae, Gnaphosidae) in North America. *American Museum Novitates*, (2583), 40 pp.

Pogue, Michael G.

2004 19.4311 A new species of *Schinia* Hübner from riparian habitats in the Grand Canyon (Lepidoptera: Noctuidae: Heliothinae). *Zootaxa*, (788): 1-4. [*Schinia immaculata*; holotype from Colorado River Mile 23.0 Left.]

Pogue, Michael G., AND Harp, Charles E.

2004 19.4665 A review of the *Schinia tertia* (Grote) species complex (Lepidoptera: Noctuidae: Heliothinae). *Zootaxa*, (473): 1-32. [*Schinia tertia* (Grote), pp. 3-11, Grand Canyon material noted, p. 5; *S. albafascia* Smith, revised status, pp. 11-15, Grand Canyon material noted, p. 12. See also distribution maps for these species, pp. 30, 31. Illustrated material does not include Grand Canyon specimens.]

Polhemus, John T., AND Polhemus, Martin S.

1976 19.1345 Aquatic and semiaquatic Heteroptera of the Grand Canyon (Insecta: Hemiptera). *Great Basin Naturalist*, 36(2) (June): 221-226.

Poppius, B. [Poppius, Bertil Robert]

1914 19.5135 Übersicht der *Pilophorus* Arten nebst beschreibung verwandter Gattungen (Hem. Het.). *Société Entomologique de Belgique, Annales*, 58: 237-254. [Includes: *Pilophorus americanus*, new species (p. 243), types from "Williams, Ar.!" and "Br't Angel, Ar!"; *Pilophorus exiguus*, new species (pp. 246-247), types from "Br't Angel, Ar!" The localities thus cited are Williams, Arizona, and Bright Angel Trail (Grand Canyon). Of parenthetical note are several more species recorded in this paper from Williams and Flagstaff, Arizona.] [In German.]

Prakash, Satya

1974 19.4300 Gene differences between the sex ratio and standard gene arrangements of the *X* chromosome and linkage disequilibrium between loci in the standard gene arrangement of the *X* chromosome in *Drosophila pesudoobscura*. *Genetics*, 77 (August): 795-804. [Materials sample sites include "Grand Canyon (Arizona)" (no further precision).]

Pratt, Harry Davis

1945 19.2158 Taxonomic studies of Nearctic Cryptini (Ichneumonidae, Hymenoptera). *American Midland Naturalist*, 34(3) (November): 549-661.

Pujade Villar, Juli, AND Paretas Martínez, Jordi

2012 19.4329 A new species of woody tuberous oak galls from Mexico (Hymenoptera: Cynipidae) and notes with related species. Una nueva especie de agalla leñosa tuberosa en encinos de México (Hymenoptera: Cynipidae) y anotaciones sobre las especies relacionadas. *Dugesiana* (Universidad de Guadalajara, Centro de Estudios de Zoología, Sección de Entomología), 19(2) (December 21): 79-85. [See *Andricus wheeleri* (Beutenmüller, 1907), pp. 82-84; lectotype designated by Pujade-Villar and Paretas-Martínez, American Museum of Natural History collections with label "Caconino [*sic*] Forest, Grand Canyon, Ariz., May 1905, N.W. Wheeler coll."; paralectotypes from Coconino Forest. For Beutenmüller publication, see ITEM NO. 19.4065.] [In English, with bilingual title and abstract.]

Pyle, Robert Michael

1999 19.4094 *Chasing monarchs : migrating with the butterflies of passage.* Boston and New York: Houghton Mifflin Co., 307 pp. [See in Chapter 11, "Apache Gold", which includes Lees Ferry-Marble Canyon area; and pp. 228-235, Cibola National Wildlife Refuge.]

R

Ragenovich, Iral

1980 19.6683 Southwestern Region (R-3). *In:* Forest insect and disease conditions in the United States, 1978. *U.S. Forest Service, General Technical Report GTR-WO-19*, pp. 20-24. [See p. 20, under "Mountain pine beetle": "The infestation on the Kaibab National Forest, Ariz., declined to a low level. Activity continued on the adjoining Grand Canyon national Park, but losses were minimal. Mountain pine beetle attacked and killed relatively thrifty trees growing on the best sites in Arizona. no suppression or salvage programs were undertaken." (ENTIRE NOTE)]

Rehn, James A. G. [Rehn, James Abram Garfield]

1907 19.16811 Notes on Orthoptera from southern Arizona, with descriptions of new species. *Academy of Natural Sciences of Philadelphia, Proceedings*, 59(1) (January/March): 24-81. [See *Trimerotropis vinculata* Scudder (p. 45), which includes the note, "Several specimens of this common and widely distributed species from Grand Canyon of the Colorado (Skinner, July 11) are also in hand." (ENTIRE NOTE)]

1919 19.3325 Descriptions of new and critical notes upon previously known forms of North American Oedipodinae (Orthoptera; Acrididae); first paper. *American Entomological Society, Transactions*, 45: 229-255, Plates 26-28. [See *Mestobregma terricolor*, new species, pp. 242-247; female specimen from Grand Canyon noted, pp. 245 *note* 18, 246.]

1921 19.3633 Descriptions of new and critical notes upon previously known forms of North American Oedipodinae (Orthoptera; Acrididae); second paper. *American Entomological Society, Transactions*, 47(3): 171-197, plates. [See *Circotettix coconino*, new species, pp. 187-191, Plate 12, figures 19-21. Referred specimens include two from "Bright Angel, Grand Canyon of the Colorado".]

1954 19.1384 Of grasshoppers and their kin; the long, long trail of the specialist on a Spring survey. *Frontiers* (Academy of Natural Sciences of Philadelphia), 19(1) (October): 7-9.

Rehn, James A. G., AND Grant, Harold J., Jr.

1958 19.5288 A revision of the genus *Morsea* (Orthoptera; Acridoidea; Eumastacidae). *American Entomological Society, Transactions*, 84(3/4) (September/December): 217-259. [See *Morsea californica piute*, new subspecies; includes typical (but non-type) material from northwestern Arizona, and notes on atypical material from Fredonia, Arizona (pp. 239-250); *Morsea californa kaibabensis*, new subspecies, type from "Northwest escarpment slope of Kaibab Plateau" (pp. 250-254); *Morsea californa dumicola* Rehn and Hebard, with remarks on Grand Canyon specimens (pp. 254-259).]

Rehn, James A. G., AND Hebard, Morgan

1908 19.1385 An orthopterological reconnoissance of the southwestern United States. Part I: Arizona. *Academy of Natural Sciences of Philadelphia, Proceedings*, 60: 365-402. [See locality descriptions, pp. 367-368. See: ***Litanutria skinneri* Rehn** (p. 370), "A male specimen from the Grand Canyon, altitude 7,000 feet, September 11, 1907." ***Paropomala perpallida* new species** (pp. 373-375, figures 5, 6); "Type: ♂; near Bright Angel Trail, elevation 3,750 feet, Grand Canyon of the Colorado, Coconino County, Arizona. September 12, 1907. Collected by M. Hebard." ***Syrbula modesta* Bruner** (pp. 375-376); "This rather diminutive species was taken at elevations ranging from 4,900 to 5,800 feet in the Grand Canyon, three males and two females being included in the series." ***Amphitornus nanus*, new species** (pp. 376-378, figure 7); "Type: ♂; Grand Canyon of the Colorado, Coconino County, Arizona, altitude 7,000 feet, in conifer forest. September 11, 1907. Collected by Morgan Hebard." ***Dissosteira carolina* (Linnæus)**; "Three males and two females of this widely distributed species were taken at Williams, September 13, while a single female was taken September 11 at Bright Angel, Grand Canyon, elevation of 6,850 feet." ***Trimerotropis modesta* Bruner** (p. 390); "A female of this form taken on the rim of the Grand Canyon, near Bright Angel, September 11, and a male taken at Williams, September 13, are in the collection. The specific validity of this form appears to be rather questionable, as its relationship to *T. citrina* is so close that it may be nothing more than a race of that species." ***Trimerotropis inconspicua* Bruner** (p. 390); "Three males of this species taken at Bright Angel, Grand Canyon, 6,880 feet to 7,000 feet, are before us. Two were taken July 29 to August 2, 1906, by Calvert, and one on

September 11, 1907, by Hebard." ***Trimerotropis vinculata* Scudder** (pp. 390-391); "This wide ranging species is represented by eighty-three specimens taken as follows: . . . Bright Angel Trail, Grand Canyon, elevation 3,000-7,000 feet, July 29-August 2 (Calvert), September 11 and 12 (Hebard), 3 ♂, 9 ♀." ***Trimerotropis cyaneipennis* Bruner** (p. 391); "A series of sixteen males and seven females of this species was taken at elevations ranging from 3,800 to 7,000 feet on and in the vicinity of the Bright Angel Trail, Grand Canyon, September 11 and 12. [. . .] It was not plentiful along the canyon edge, but lower on the Bright Angel Trail it was found almost everywhere, most plentiful, however, about bare places near precipices." ***Circotettix undulatus* (Thomas)** (pp. 391-392); "A series of seven males and nine females taken near the rim of the Grand Canyon at Bright Angel represents this species. Two males and three females were taken July 29 to August 2, 1906, by Calvert, and the remainder September 11, 1907, by Hebard." ***Melanoplus aridus* (Scudder)** (pp. 396-397); "A very interesting series of this species was taken at localities in northern Arizona, a region from which it was previously not reported. [. . .] a series of fourteen males and eleven females from the riin of the Grand Canyon at Bright Angel, September 11, are very decidedly smaller than Scudder's measurements, some specimens being hardly more than half the size given by him. [. . .] at Grand Canyon it was the most abundant species of Orthoptera and was found everywhere in the undergrowth of the heavier pine woods." ***Melanoplus femur-nigrum* Scudder** (p. 397); "This little known species is represented by a series of two males and three females taken September 11 at the rim of the Grand Canyon at Bright Angel." ***Melanoplus canonicus* Scudder** (pp. 397-398); "A series of two males and seven females. taken September 12 along or near the Bright Angel Trail, Grand Canyon, represent this species. These specimens were taken at altitudes ranging from 4,850 to 6,800 feet, one female alone being from above an elevation of 5,800 feet. [. . .] In size there is considerable variation in the series, all being smaller than Scudder's original measurements." ("***Œcanthus niveus* (DeGeer)"** (p. 402); "A single male of this species was taken near Bright Angel Trail, Grand Canyon, at an elevation of about 4,900 feet, September 12. ("***Œcanthus nigricornis* Walker**" (p. 402); "A single male from the rim of the Grand Canyon at Bright Angel, September 11, is referred tentatively to this species." [See also Rehn and Hebard (1912, ITEM NO. 19.1386) for lectotypifications of selected species.]

1909 19.6211 An orthopterological reconnoissance of the southwestern United States. Part III: California and Nevada. *Academy of Natural Sciences of Philadelphia, Proceedings*, 61(3) (October/December): 409-483. [See p. 409, *Trimerotropis inconspicua* Bruner, noting previous record at "Bright Angel, Grand Canyon".]

1912 19.1386 Fixation of single type (lectotypic) specimens of species of American Orthoptera. Section one. *Academy of Natural Sciences of Philadelphia, Proceedings*, 64: 60-128. [See: With reference to Scudder (1897, ITEM NO. 19.1446), *Melanoplus canonicus* (p. 85); with reference to Rehn and Hebard (1908, ITEM NO. 19.1385), *Parapomala perpallida* and *Amphitornus nanus* (p. 105); and with reference to Bruner (1904, ITEM NO. 19.372), *Syrbula modesta* (p. 110).]

1914 19.6212 Studies in American Tettigoniidae (Orthoptera) I and II. *American Entomological Society, Transactions*, 40(4) (December): 271-344, 9 plates. [See *Scudderia furcata furcifera* Scudder (pp. 304-307, Plate 10, figure 20); specimens examined include (p. 307) one female in the Hebard collection, collected July 11, 1892, "Grand Canyon of the Colorado, Arizona".]

Reinhard, H. J.

1953 19.5493 New muscoid Diptera from the western United States. *Pan-Pacific Entomologist*, 29(1) (January): 49-59. [See *Fabriciella evanida*, new species; includes male paratype from "S. Grand Canyon, Ariz., August 17, 1949 (P. R. Fitzgerald)".]

Reinick, William R.

1902 19.3806 [Feldman Collecting Social, November 20, 1901, Philadelphia.] *In:* Doings of Societies [SECTION]. *Entomological News* (Academy of Natural Sciences of Philadelphia, Entomological Section), 13(1) (January): 24-26. [*NOTE*: Running head in this issue gives date, "Jan. '92".] [See p. 25: "Mr. [E. A.] Schwarz spoke of the abundance of dragonflies in Arizona around the water which was obtained from artesian wells, and wherever there was a little pool of water it teemed with insect life. He stated that at the top of the Grand Canon the fauna was boreal and ended abruptly at the brink; at the bottom were large forests and a great deal of vegetation existed and the fauna was tropical. The dragonflies seemed to be the only insects flying from the bottom to the top of the canon, which is about forty miles wide and one mile deep." (ENTIRE NOTE, *sic*)] [*NOTE*: Collections were made by H. S. Barber on the South Rim by Bright Angel Hotel and at Indian Garden only; for details see Rolla P. Currie (1903, ITEM NO. 19.3196).]

Ribble, D. W.

1974 19.5282 A revision of the bees of the genus *Andrena* of the western hemisphere; subgenus *Scaphandrena*. *American Entomological Society, Transactions*, 100(2) (June): 101-189. [See pp. 160-161, *Andrena (Scaphandrena) kaibabensis*, new species; holotype female and three female paratypes (at UCD) "collected on the North Rim of Grand Canyon National Park, June 21, 1949, by W. H. Lang. One female paratype (AMNH) was collected 20 miles south of Jacob Lake, Arizona, June 19, 1958, by W. J. and J. W. Gertsch."]

Richmond, Al

2015 19.4829 Visit with Emma Williams, GCHS scholarship winner, at the University of Arizona Tree Ring Lab. *The Bulletin* (Grand Canyon Historical Society), 19(3) (May/June): 2. [Informational notice only, with two photos including, "Emma and Rich with a Grand Canyon Ponderosa core that shows the cause of the demise . . . bark beetles." (ellipsis is part of legend)]

Riddle, Brett R., AND Honeycutt, Rodney L.

1990 19.2119 Historical biogeography in North American arid regions: An approach using mitochondrial-DNA phylogeny in grasshopper mice (genus *Onychomys*). *Evolution*, 44(1) (February): 1-15.

Riesenberg, Mindy

2020 19.6515 Bringing monarch butterflies back from the brink. *Canyon Views* (Grand Canyon Conservancy), 27(2) (Fall/Winter): 18-21.

Robertson, Jacqueline L.; Gillette, Nancy L.; Lucas, Barbara A.; Russell, Robert M.; AND Savin, N. E.

1978 19.4732 Comparative toxicity of insecticides to *Choristoneura* species (Lepidoptera: Tortricidae). *Canadian Entomologist*, 110 (April): 399-406. [Materials include live diapausing *C. conflictana* from North Rim of Grand Canyon.]

Robinson, Harold

1967 19.5947 New species of Dolichopodidae from the United States and Mexico (Diptera). *Entomological Society of Washington, Proceedings* (Washington, D.C.), 69(2) (June): 114-127. [Includes *Chrysotimus arizonicus*, new species (p. 125, figure 29 [p. 118]); holotype, allotype, and paratype from "Grand Canyon National Park (north rim)".]

Rosi-Marshall, Emma J.; Cross, Wyatt F.; Kennedy, Theodore A.; Kincaid, Dustin W.; AND Hall, Robert O., Jr.

2008 19.2760 Effects of the 2008 beach/habitat-building flow test on invertebrates downstream of Glen Canyon Dam [ABSTRACT]. *In: Colorado River Basin Science and Resource Management Symposium 2008. Coming together: Coordination of science and restoration activities for the Colorado River ecosystem : abstracts : November 18-20, 2008, Doubletree Resort Hotel, Scottsdale, Arizona.* [No imprint], pp. 33-34.

Rosi-Marshall, Emma J.; Kennedy, Theodore A.; Kincaid, Dustin W.; Cross, Wyatt F.; Wellard Kelly, Holly A.; Behn, Kathrine A.; White, Tyler; Hall, Robert O., Jr.; AND Baxter, Colden V.

2010 19.3202 Short-term effects of the 2008 high-flow experiment on macroinvertebrates in Colorado River below Glen Canyon Dam, Arizona. *U.S. Geological Survey, Open-File Report 2010-1031*, 28 pp.

Ross, C. L., AND Markow, T. A.

2006 19.4915 Microsatellite variation among diverging populations of *Drosophila majavensis*. *Journal of Evolutionary Biology*, 19(5) (September): 1691-1700.

Ruiter, David E.

1999 19.1415 A new species and new synonym in the genus *Psychoronia* (Limnephilidae), with significant records for caddisflies (Trichoptera) from western North America. *Great Basin Naturalist*, 59(2): 160-168. [See p. 164: "*Micrasema onisca* Ross 1947. Arizona: Coconino County, front passage to Roaring Springs Cave, Grand Canyon National Park, D. Blinn, 28 September 1994, 1M 1F (DB)."; p. 166: "*Lepidostoma apornum* Denning 1949. Arizona: Coconino County, front passage to Roaring Springs Cave, Grand Canyon National Park, D. Blinn, 28 September 1994, 1M (DB)". (ENTIRE NOTES)]

Ryckman, Raymond E.

1986 19.5492 The vertebrate hosts of the Triatominae of North and Central America and the West Indies (Hemiptera: Reduviidae: Triatominae). *Society of Vector Ecologists, Bulletin*,

11(2) (December): 221-241. [See *Paratriatoma hirsuta hirsuta* Barber, pp. 233-234, which notes collections from "Arizona in *Neotoma* lodges from the Phantom Ranch in the Grand Canyon, Coconino Co." (ENTIRE NOTE)]

S

Safford, Matt

2015 19.5945 *Invertebrate biodiversity surveys in Grand Canyon National Park : 2015 annual report.* U.S. National Park Service, Grand Canyon National Park, 13 pp.

Sanderson, M.; Usher, H. D.; Leibfried, B.; AND Byars, B.

1982 19.1424 Insect density and diversity on Colorado River beaches. Part II. Black light trapping. *In: Colorado River Investigations I : July/August 1982.* Flagstaff, Arizona: Northern Arizona University, and Museum of Northern Arizona, pp. 56-76.

Scarborough, Aubrey G.; Stevens, Lawrence E.; AND Nelson, C. Riley

2012 19.3767 The *albibarbis*-complex of *Efferia* Coquillett, 1910 from the Grand Canyon region, southwestern U.S.A., with three new species and new distribution records (Diptera: Asilidae). *Pan-Pacific Entomologist*, 88(1) (January): 58-86. [Of the three new species, only one, *Efferia tapeats* (pp. 75-78), is based on type material from within the area embraced by this bibliography; the holotype was taken at Clear Creek, Grand Canyon. Other material for this species and others in this paper are recorded from the region covered by this bibliography.]

Schell, Dorothydean Viets

1943 19.6155 The Ochteridae (Hemiptera) of the western hemisphere. *Kansas Entomological Society, Journal*, 16(1) (January): 29-36, (2) (April): 37-47. [See *Ochterus viridifrons* (Champion, 1901) (pp. 27-38 [note straddling of two dates, January and April]), notes briefly (p. 38), "One female specimen from the United States National Museum, bearing a Grand Canyon, Arizona label, appears to be *viridifrons*, but an examination of the male genitalia would be necessary for accurate determination." See also *Ochterus barberi*, new species (pp. 41-42), holotype male in U.S. National Museum, from "Colorado Canyon, Arizona", two paratypes in American Museum of Natural History, "collected at Grand Canyon, Arizona" (allotype and 61 additional paratypes from Arizona localities extralimital to the region covered by this bibliography). No further collecting data published.] [See also Kment *et al.* (2020, ITEM NO. 19.6488) regarding the type of *O. barberi* and Schell's identification of *O. viridifrons*.]

Schellbach, Louis, III

1933 19.5068 [Tarantulas.] *In:* Miscellany. *Grand Canyon Nature Notes*, 8(8) (November):.

Schmid, John M.

2007 19.5911 Appendix B—John M. Schmid's recollections of forest insect research at the RM Station, 1963 to 1992. *In:* Furniss, Malcolm M., A history of forest entomology in the Intermountain and Rocky Mountain areas, 1901 to 1982. *U.S. Forest Service, Rocky Mountain Research Station, General Technical Report RMRS-GTR-195*, pp. 26-30. [Includes Kaibab Plateau.]

Schmid, J. M., AND Bennett, D. D.

1988 19.1431 The North Kaibab pandora moth outbreak, 1978-1984. *U.S. Forest Service, Rocky Mountain Forest and Range Experiment Station, General Technical Report RM-153*, 18 pp.

Schmid, J. M.; Bennett, D. D.; AND Andrews, M.

1983 19.1432 Distribution of pandora moth egg masses and first stage larvae. *U.S. Forest Service, Rocky Mountain Forest and Range Experiment Station, Research Note RM-432*, 4 pp.

Schmid, J. M.; Bennett, D. D.; Young, R. W.; Mata, S. A.; Andrews, M.; AND Mitchell, J. C.

1982 19.1433 Sampling larval populations of the pandora moth, *Coloradia pandora*, *Pinus ponderosa* infestation on the Kaibab Plateau near Jacob Lake, Arizona. *U.S. Forest Service, Rocky Mountain Forest Experiment Station, Research Note RM-421*, 5 pp.

Schmid, J. M.; Farrar, P. A.; AND Mitchell, J. C.

1982 19.1434 Distribution of pandora moth egg masses and pupae near Jacob Lake, Arizona. *Environmental Entomology*, 11(3) (June): 701-704.

Schmid, J. M.; Farrar, P. A.; AND Ragenovich, I.

1981 19.2288 Length of western tent caterpillar egg masses and diameter of their associated stems. *Great Basin Naturalist*, 41(4): 465-466.

Schmid, J. M.; Mitchell, J. C.; Carlin, K. D.; AND Wagner, M. R.

1984 19.2287 Insect damage, cone dimensions, and seed production in crown levels of ponderosa pine. *Great Basin Naturalist*, 44(4): 575-578.

Schmid, J. M.; Mitchell, J. C.; AND Mata, S. A.

1986 19.2302 Ponderosa pine conelet and cone mortality in central Arizona. *Great Basin Naturalist*, 46(3): 445-448. [Includes South Rim.]

Schmid, J. M.; Thomas, L.; AND Rogers, T. J.

1981 19.3447 Prescribed burning to increase mortality of pandora moth pupae. *U.S. Forest Service, Rocky Mountain Forest and Range Experiment Station, Research Note RM-405*, 3 pp.

Schmidt, John

2003 19.5582 Twenty five years of forest insect research and related events. The Founders' Award Address / La Presentación del premio Fundador. *In:* Steed, Brytten (compiler), *Proceedings of the 1st Joint Meeting of the 12th National Symposium on Forest*

Parasites and the 54th Western Forest Insect work Conference (WFIWC) / Memorias de la Primera Reunión Conjunta XII Simposio Nacional de Parasitología Forestal y 54ava Conferencia de Entomología Forestal de Oeste : Guadalajara, Mexico, November 3-6, 2003 : Enhancing our Partnerships : Fomentando Nuestra Colaboración. [No place]: Western Forest Insect Work Conference; and México, Secretaría Medio Ambiente y Recursos Naturales, Comisión Nacional Forestal, pp. 4-8. [See p. 6, remarks on work on the Kaibab Plateau in 1982 and 1983.]

Schmidt, Laurie J.

2010 19.3790 Chewed out. An invasive plant called tamarisk has been killing off cottonwoods and destroying river habitat for decades. Now park rangers are hoping a beetle can turn the tide. *National Parks*, 84(1) (Winter): 20-21.

Schuh, Randall T.

2001 19.6067 Revision of New World *Plagiognathus* Fieber, with comments on the Palearctic fauna and the description of a new genus (Heteroptera: Miridae: Phylinae). *American Museum of Natural History, Bulletin 226*, 267 pp. [See *Plagiognathus longipennis* (Uhler) (pp. 151-155), specimens examined include "N. Rim Grand Canyon, Pt. Imperial, August 1, 1967, D. C. Rentz, 2♂, 1♀ (UCB)."; *P. tenellus* Knight (p. 229), specimens examined include "Grand Canyon, top of Bright Angel Trail, August 2, 1917, H. H. Knight, paratypes: 2♂, 2♀ (USNM); holotype male (USNM).", Figure 13 (p. 105, legend on p. 264, "*tenellus* (paratype male: Arizona: Coconino Co.: Grand Canyon)").]

Scott, James A.

1981 19.5133 "Butterflies of the Rocky Mountain States"; Ferris, C. & F. M. Brown, eds., with 8 contributors (F. M. Brown, D. Eff, S. L. Ellis, C. D. Ferris, M. S. Fisher, L. D. Miller, J. A. Scott and R. E. Stanford). 1981. 442 p. Univ. Oklahoma Press. *In:* Book Reviews [SECTION]. *Journal of Research on the Lepidoptera*, 20(1): 58-64. [A review of the book edited by Ferris and Brown, but with pertinent added remarks on taxonomy. See p. 62, with reference to *Cercyonis* of the Kaibab Plateau.]

2006 19.5132 *Cercyonis sthenele/meadii*, stenchospecies. *In:* Scott, James A., Fisher, Michael S., Kondla, Norbert G., Kohler, Steve, Guppy, Crispin S., Spomer, Stephen M., and Schmidt, B. Chris, Taxonomic studies and new taxa of North American butterflies. *Papilio*, New Series, (12) (April 28): 28-30. [Includes North Rim of Grand Canyon.] ["Stenchospecies" = superspecies concept.]

Scudder, Samuel Hubbard

1878 19.1971 Notice of the butterflies collected by Dr. Edward Palmer in the arid regions of southern Utah and northern Arizona during the summer of 1877. *U.S. Geological and Geographical Survey of the Territories, Bulletin*, 4: 253-258. [Includes various species described from Mount Trumbull and Mokiak Pass, among which are the following new species: *Neominois dionysus* (p. 254), localities include Mount Trumbull; *Synchloe thoosa* (p. 257), holotype female from Mokiak Pass; and a new species of *Thanaos* (pp. 257-258) yet to be described on a single female from Mount Trumbull.]

1897 19.1446 Revision of the orthopteran group Melanopli (Acridiidae), with special reference to North American forms. *U.S. National Museum, Proceedings*, 20: 1-421, plates 1-26. [See *Melanoplus canonicus*, new species, pp. 300-301, plate 20, figure 1 (known only from Grand Canyon); *Poecilotettix sanguineus*, new species, pp. 387-389, plate 26, figure 2 (including Grand Canyon but Grand Canyon specimen not figured).] [See also Rehn and Hebard (1912, ITEM NO. 19.1386) for lectotypifications of selected species.]

1899 19.2803 The orthopteran genus *Schistocerca*. *American Academy of Arts and Sciences, Proceedings*, 34(17) (March): 441-476. [See p. 466: *Schistocerca albolineata*; "Specimens at hand come from . . . and Grand Cañon, Ariz., July 5 (Bruner)."]

Searl, Clyde C.

1931 19.1450 Beetles. *Grand Canyon Nature Notes*, 5(3) (January): 25-26. [Includes "list of beetles collected July 15, 1930, of a few hours' journey down the Kaibab Trail from the North Rim to Roaring Springs".]

1931 19.1452 Some beetles of Grand Canyon. *Grand Canyon Nature Notes*, 5(6) (April): cover, 54-55.

1931 19.1453 An interesting bug. *Grand Canyon Nature Notes*, 5(7) (May): 64-65. [Cicadas at Grand Canyon village.]

1931 19.5389 [Beetles.] *In:* Field Observations [SECTION]. *Grand Canyon Nature Notes*, 5(7) (May): 69. [Wood-boring bettle, *Dendroetonus valens*, emerging from logs in Yavapai Observation Station.]

1931 19.5394 [*Eremocoris obscurus*.] *In:* Field Observations [SECTION]. *Grand Canyon Nature Notes*, 5(7) (May): 70.

1931 19.1454 [Lantern-fly.] *Grand Canyon Nature Notes*, 5(8) (June): 77.

1931 19.1456 Dragon-flies at Grand Canyon. *Grand Canyon Nature Notes*, 6(2) (December): 16-18.

1932 19.1458 Vandals of the sand. *Grand Canyon Nature Notes*, 6(5) (March): cover, 41-42. [Ant lions and tiger beetles.]

1932 19.1460 An insect observation. *Grand Canyon Nature Notes*, 7(5) (August): 51-52. [Cicadas.]

1932 19.1461 Insect notes. *Grand Canyon Nature Notes*, 7(6) (September): 57.

1994 19.1464 Some beetles of Grand Canyon. *In:* Lamb, Susan (ed.), *The best of Grand Canyon Nature Notes.* Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 78. [Reprinted from *Grand Canyon Nature Notes*, April, 1931.]

1994 19.1465 An interesting bug. *In:* Lamb, Susan (ed.), *The best of Grand Canyon Nature Notes.* Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 79. [Reprinted from *Grand Canyon Nature Notes*, May, 1931; cicada.]

1994 19.1466 Dragonflies at Grand Canyon. *In:* Lamb, Susan (ed.), *The best of Grand Canyon Nature Notes.* Grand Canyon, Arizona: Grand Canyon Natural History Association, pp. 80-81. [Reprinted from *Grand Canyon Nature Notes*, December, 1931.]

1994 19.1467 Vandals of the sand. *In:* Lamb, Susan (ed.), *The best of Grand Canyon Nature Notes.* Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 81. [Reprinted from *Grand Canyon Nature Notes*, March, 1932; ant lions.]

Segraves, Kari A., AND Pellmyr, Olle

2001 19.4914 Phylogeography of the yucca moth *Tegeticula maculata*: the role of historical biogeography in reconciling high genetic structure with limited speciation. *Molecular Ecology*, 10: 1247-1253.

Selleck, S. Shane

2012 19.3738 The USGS Sonoran Desert Research Center. *In:* Muller, Seth (ed.), *Science Research 2012 : special supplement brought to you by* Arizona Daily Sun. [Flagstaff, Arizona]: Arizona Daily Sun, p. 24. [Includes focuses on tamarisk and northern tamarisk beetle across the Colorado Plateau.]

Shannon, Joseph P.; Blinn, Dean W.; Stevens, Lawrence E.; AND Macauley, Jeanette

1992 19.1477 The ecology and distribution of benthic algae and associated macroinvertebrates in the dam-controlled Colorado River through Grand Canyon, Arizona [ABSTRACT]. *North American Benthological Society, Bulletin*, 9(1): 70-71.

Shaw, F. R.

1951 19.6115 Some new Mycetophilidae from the western United States. *Brooklyn Entomological Society, Bulletin*, 46(3) (June): 65-70. [See *Mycetophila denningi*, new species (p. 67, Plate 3, Figure 4 (p.69)); "Described from one male [holotype] collected by D. G. Denning at Grand Canyon, Arizona on June 18, 1949."]

Shear, William A. [Shear, Bill]

2007 19.5718 Cave millipedes in the Rocky Mountains. *Utah Caver Annual 2006* (National Speleological Society, Utah Grottos) (August 2007): 11-12. [Includes Millepede Cave, Mohave County, Arizona Strip.]

Shear, William A.; Taylor, Steven J.; Wynne, J. Judson; AND Krejca, Jean K.

2009 19.4221 Cave millipeds of the United States. VIII. New genera and species of polydesmidan millipeds from caves in the southwestern United States (Diplopoda, Polydesmida, Macrosternodesmidae). *Zootaxa*, (2151): 47-65. [Includes *Pratherodesmus voylesi* Shear, new species, from October Gyp Cave and Millipede Cave, Mohave County, Arizona Strip.]

Shelley, Rowland M.

2001 19.6061 A synopsis of the milliped genus *Aniulus* Chamberlin (Julida: Parajulidae: Parajulinae: Aniulini). *In:* Reddell, James R., and Cokendolpher, James C. (eds.), Studies on the cave and endogean fauna of North America. III. *Texas Memorial Museum, Speleological Monographs*, (5): 73-95. [See *Aniulus paiutus* (Chamberlin) (pp. 79-

81); specimens examined include one male, three females from "outside North Rim Grand Canyon Nat. Pk.", collected 26 August 1993.]

Shelley, Rowland M., AND Richart, Casey H.

2014 19.5131 Tynommatidae, n. stat. a family of western North American millipeds: Hypotheses on origins and affinities; tribal elevations; rediagnoses of *Diactis* Loomis, 1937, and *florea* and *Caliactis*, both Shelley, 1996; and description of *D. hedini*, n. sp. (Callipodida: Schizopetalidae). *Insecta Mundi* (Center for Systemtic Entomology, Gainesville, Florida), (340): 1-19. [See under Tynommatidae: Colactidinae (p. 17), record of *Colactis utorum* (Chamberlin, 1925) from various localities in Grand Canyon, collected by Lawrence E. Stevens, 2000-2002.] [New status.]

Shelley, Rowland M., AND Stevens, Lawrence E.

2003 19.5129 Discovery of the milliped *Tylobolus utahensis* Chamberlin in Arizona (Spirobolida: Spirobolidae). *Western North American Naturalist*, 63(4): 541-542. [One male and one female specimen collected by Stevens on April 3, 2001, at Upper Deer Creek spring, Grand Canyon. Not illustrated.]

Shields, Oakley

1965 19.5584 *Callophrys* (*Mitoura*) *spinetorum* and *C.* (*M.*) *johnsoni*: Their known range, habits, variation, and history. *Journal of Research on the Lepidoptera*, 4(4): 233-250. [See locality data for *Callophrys* (*Mitoura*) *spinetorum* (Hewitson): "Grand Canyon, V-27-33, I9 (D. K. Duncan, AMNH). Hermit Basin, S. Rim Grand Canyon, 5250', VI-4-42, 3♂ 1♀ (J. S. Garth, in Garth, 1950). Mather Point, S. Rim Grand Ganyon, V-26-60, I♂ (K. Roever). Neal Spring, N. Rim Grand Canyon, VI-14-56, 1 (V. Nabokov, CU). [. . .] Pima Point, Grand Canyon, V-25-60, I♀ (K. Roever) [. . .] Swamp Ridge, N. Rim Grand Canyon, 7500-7750', VII-16-47, 1♂ (J. S. Garth, in Garth, 1950) [. . .] Yavapai Point, S. Rim Grand Canyon, 7000', VI-3-42, 1♂ (J. S. Garth); VII-12 to 18-44 (L. Schellbach, in Garth, 1950) . . . ."]

Sinclair, B. J.

2006 19.2960 A new species of *Wiedemannia* Zetterstedt from Grand Canyon National Park, with notes on additional Nearctic species (Diptera: Empididae). *Entomological Society of Ontario, Journal*, 137: 25-30. [*Wiedemannia digna*, new species; type locality Vasey's Paradise.]

Sissom, W. David, AND Francke, Oscar F.

1981 19.4173 Scorpions of the genus *Paruroctonus* from New Mexico and Texas (Scorpiones, Vaejovidae). *Journal of Arachnology*, 9: 93-108. [See *Parroctonus aquilonalis* (Stahnke, 1940), pp. 94-96, which notes discrepancy in location of the type locality for *Vijovis aquilonalis*, corrected to "30 miles south of the Grand Canyon, Arizona". (Refer to Stahnke, 1940, ITEM NO. 19.4170.)]

Skinner, Henry

1907 19.3354 (RECORDER) [Meeting of Entomological Section, Academy of Natural Sciences of Philadelphia, January 24, 1907.] *Entomological News* (Academy of Natural Sciences of

Philadelphia, Entomological Section), 18(6) (June): 266. [Includes note: "Dr. Calvert exhibited *Argia moesta* Hagen, found at Grand Canyon, Nuevo Laredo and Lake Chapala, Mexico, etc., and described the differences in both sexes in the specimens from these various localities. These differences were illustrated by averages. The question of the specific identity or difference in the forms was raised." (ENTIRE NOTE) See also paper by Philip P. Calvert, "An Entomological Journey in Mexico, with Special Reference to Odonata", 18(6) (June): 231-237 [ITEM NO. 2.14950], wherein his itinerary included "July 29-Aug. 3 [1906]. At Grand Canyon of the Colorado River, Arizona." without further remark on Grand Canyon in that paper.]

Smiley, Robert L., AND Moser, John C.

1974 19.6154 New tarsonemids associated with bark beetles (Acarina: Tarsonemidae). *Entomological Society of America, Annals*, 67(4) (July): 639-665. [See *Heterotarsonemus nakaharai*, new species (pp. 645-647); holotype, female "collected from *Ips knausi* Swaine in *Pinus ponderosa* Douglas at Grand Canyon, Arizona." Collector and collection date unknown; material in Canadian National Collection, 13177.]

Smith, Marion R.

1939 19.2962 Notes on *Formica (Neoformica) moki* Wheeler, with description of a new subspecies (Hymenoptera: Formicidae). *Entomological Society of America, Annals*, 32: 581-584. [Redescription of the species that was first named from Grand Canyon specimens by Wheeler (1906, ITEM NO. 19.1853). (The new subspecies, *Formica* (*Neoformica*) *moki* subsp. *xerophila*, is from Leavenworth, Washington, and thus extralimital to this bibliography.)]

1952 19.4940 North American *Leptothorax* of the *tricaninatus-texanus* complex (Hymenoptera: Formicidae). *New York Entomological Society, Journal*, 60 (June): 96-106. [See *Leptothorax (Myrafant) tricarinatus neomexicanus* Wheeler (pp. 100-102), including notes of occurrence in "Kohonino Forest on the rim of the Grand Canyon" (p. 101, credited to Wheeler) and note of Wheeler's observation of "a small colony beneath a stone in the Kohonino Forest on the rim of the Grand Canyon" (p. 102).]

Snelling, Gordon C., AND Snelling, Roy R.

2007 19.5221 New synonymy, new species, new keys to *Neivamyrmex* army ants of the United States. *In:* Snelling, Roy R., Fisher, Brian L., and Ward, Philip S. (eds.), Advances in ant systematics (Hymenoptera: Formicidae): Homage to E. O. Wilson—50 years of contributions. *American Entomological Institute, Memoirs*, 80: 459-550. [See *Neivamyrmex nyensis* Watkins (p. 486); localities of examined specimens include "Arizona, Coconino Co.: Havasu Canyon", with brief comment on the Havasu Canyon collection.]

Snelling, Roy R.

1974 19.6108 Changes in the status of some North American *Polistes* (Hymenoptera: Vespidae). *Entomological Society of Washington, Proceedings* (Washington, D.C.), 76(4) (December): 476-479. [See p. 477, *Polistes kaibabensis* Hayward, new status for *P. canadensis* var. *kaibabensis* Hayward, 1932 [see ITEM NO. 19.6107, type material from

North Rim and Point Sublime]. "This is a common form in the Grand Canyon area of Arizona."]

Snyder, T. E.

1923 19.4077 Forest insect investigations. *U.S. Department of Agriculture, Bureau of Entomology, Monthly Letter*, (109) (May): 2-3. [See p. 2: "W. D. Edmonston and George Hofer are at present on the Kaibab National Forest and Grand Canyon National Park, where control work is being conducted in cooperation with the Forest Service of this Department and the National Park Service of the Interior Department against the Black Hills beetle, *Dendroctonus ponderosae* Hopk." (ENTIRE NOTE)]

1923 19.4078 Forest insect investigations. *U.S. Department of Agriculture, Bureau of Entomology, Monthly Letter*, (112) (August): 2-3. [See p. 3: "Mr. Edmonston and Mr. Hofer are camped at Bright Angel, on the north rim of the Grand Canyon, engaged in an examination of the 17,000 acres treated last season. The purpose of this survey is to determine the results of last season's work and to formulate plans for next season." (ENTIRE NOTE)]

Sojourner, Mary

1997 19.6091 Fire ants. *Canyon Echo* (Sierra Club, Grand Canyon Chapter), 33(3) (April): 6. [Regarding an encounter at Lower National camp.]

1999 19.1516 Fire ants. *The Waiting List* (Grand Canyon Private Boaters Association), 3(2) (May): 19. [Regarding an encounter at Lower National camp.]

Sokoloff, Alexander

1959 19.4685 Studies of quantitative characters in *D. pseudoobscura*. *Drosophila Information Service* (University of Oregon, Department of Biology), (33) (November): 162-165. [Data derived from "material collected at the Grand Canyon"; live-collected.]

1965 19.4686 A possible maternal effect on quantitative characters of *D. pseudoobscura*. *Drosophila Information Service* (University of Oregon, Department of Biology), (40) (January): 90-92. [Data derived from specimens gathered at "Grand Canyon, Arizona".]

1965 19.2123 Geographic variation of quantitative characters in populations of *Drosophila pseudoobscura*. *Evolution*, 19(3) (September): 300-310.

Soleglad, Michael E.; Fet, Victor; AND Lowe, Graeme

2011 19.4172 Contributions to scorpion systematics. IV. Observations on the *Hadrurus* "*spadix*" subgroup with a description of a new species (Scorpiones: Caraboctonidae). *Euscorpius*, (112), 36 pp. [See p. 5. "*Hadrurus spadix* Stahnke, 1940 (66 specimens): General localities used in trichobothrial analysis (Soleglad, 1976; Fet, Soleglad & Barker, 2001): Arizona: Coconino County: Grand Canyon, 1 specimen . . . ."]

Soto, Limaris; Lambert, Paige; AND Bitting, Chelsea

2019 19.6487 *Geoscientists-in-the-Parks Internship Program : program report, Fiscal Year 2019.* Denver: U.S. National Park Service, Geoogic Resources Division, 40 pp. [including wraps]. [See photo: "Youth sampling dragonfly larvae at Elves Chasm in Grand Canyon National Park, Arizona during a Grand Canyon Youth Partners in Science river trip" (p. 34).]

Sourakov, Andrei

1995 19.4720 Systematics, evolutionary biology and population genetics of the *Cercyonis pegala* group (Lepidoptera: Nymphalidae: Satyrinae). *Holarctic Lepidoptera*, 2(1): 1-20. [Grand Canyon, see *Cercyonis pegala damei* (Barnes and Benjamin), "which occurs on the North Rim and northern slopes of the Grand Canyon", also synonymized as *C. sthenele damei*, pp. 6-8, 13.]

Sparavigna, Amelia Carolina

2016 19.6511 Patterned vegetation created by red harvester ants and evidenced in satellite images. *HAL archives-ouvertes*, ID: hal-02189240, https://hal.archives-ouvertes.fr/hal-012892040, [6] pp. [Includes Toroweap Valley, Grand Canyon.]

2016 19.6512 Patterned vegetation created by ants and observed in satellite images of rizona. *Philica (Elettronico)* (Politecnico di Torino, Repository Istituzionale), http://www.philica.com/printer_article.php?article_id=555, 3 pp. [Includes Toroweap Valley, Grand Canyon.]

Speas, David W.

2000 19.1974 Zooplankton density and community composition following an experimental flood in the Colorado River, Grand Canyon, Arizona. *Regulated Rivers: Research and Management*, 16(1): 73-81.

Speas, David W., AND Dresser, Thomas J., Jr.

1997 19.1529 Aquatic invertebrates of the Colorado River, Grand Canyon, AZ, following the 1996 experimental beach/habitat-building test flow. *American Fisheries Society, 127th Annual Meeting, "Fisheries at Interfaces: Habitats, Disciplines, Cultures", 24-28 August 1997, Monterey, California, Abstracts: L-Z*, pp. 74-75.

Stahnke, Herbert L.

1939 19.4174 *The scorpions of Arizona.* Doctoral dissertation, Iowa State College, 185 pp.

1940 19.4170 The scorpions of Arizona. *Iowa State College Journal of Science*, 15 (October): 101-103. [*NOTE*: Location of type locality for *Vijovis aquilonalis*, new species, corrected by Sissom and Francke (1981, ITEM NO. 19.4173).]

1945 19.4171 Scorpions of the genus *Hadrurus* Thorell. *American Museum Novitates*, (1298), 9 pp. [See *Hadrurus spadix* Stahnke, pp. 4-5; locality records include Grand Canyon.]

Stallings, Don B., AND Turner, J. R.

1957 19.4417 Four new species of *Megathymus* (Lepidoptera, Rhopalocera, Megathymidae). *Entomological News* (Academy of Natural Sciences of Philadelphia, Entomological Section), 68(1) (January): 1-16. [See *Megathymus alliae*, new species, pp. 1-5, Plate 1; "Described from 62 specimens (35 males and 27 females) collected 15 miles west of Cameron, Ariz., along the canyon of the Little Colorado River, elevation 5000 ft."]

Stehr, Frederick W., AND Cook, Edwin F.

1968 19.6423 A revision of the genus *Malacosoma* Hübner in North America (Lepidoptera: Lasiocampidae): Systematics, biology, immatures, and parasites. *U.S. National Museum, Bulletin 276*, 321 pp.

Stephens, S. Sky; Romero, Sheryl A.; AND Krist, Frank J.

2022 19.6786 (COMPILERS) Major forest insect and disease conditions in the United States 2020. *U.S. Forest Service, State and Private Forestry, FS-1202*, 26 pp. [See "Spruce Beetle *Dendroctonus rufipennis*" (pp. 7-8), "A small but notable increase in spruce mortality was also observed in Grand Canyon National Park, north of the rim on the Kaibab Plateau."; "Mountain Pine Beetle *Dendroctonus ponderosae*" (pp. 19-20), "Observed tree mortality was limited to a few scatteredf single trees in high elevation stands on south and southwestern facing slopes in northern Arizona on the Kaibab National Forest and Coconino National Forest."; "Western Spruce Budworm *Choristoneura freemani*" (pp. 23-24), "In Arizona, defoliation by the WSBW continued to be oserved on the Kaibab Plateau around Pleasant Valley and De Motte Park."]

Stevens, Lawrence Edward [Stevens, Larry]

1976 19.1546 An insect inventory of the Grand Canyon. *In:* Carothers, Steven W., and Aitchison, Stewart W. (eds.), *An ecological survey of the riparian zone of the Colorado River between Lees Ferry and the Grand Wash Cliffs, Arizona : final research report.* Grand Canyon National Park, Colorado River Technical Report 10, pp. 123-127. (Volume: Final research report for National Park Service (contract No. CX821500007), Colorado River Research Series, Contribution 38; Museum of Northern Arizona, Biology Department.)

1976 19.1547 Insect production on native and introduced dominant plant species. *In:* Carothers, S. W., and Aitchison, S. W. (eds.), *An ecological survey of the riparian zone of the Colorado River between Lees Ferry and the Grand Wash Cliffs : final research report.* Grand Canyon National Park, Colorado River Technical Report 10, pp. 129-135. (Volume: Final research report for National Park Service (contract No. CX821500007), Colorado River Research Series, Contribution 38; Museum of Northern Arizona, Biology Department.)

1985 19.1550 *Invertebrate herbivore community dynamics on* Tamarix chinensis *Loueiro and* Salix exigua *Nuttall in the Grand Canyon, Arizona.* Master's thesis, Northern Arizona University, 162 pp.

2010 19.3363 Dragonflies and damselflies of the Grand Canyon. *Grand Canyon River Runner*, (11) (Winter): 4-5.

2013 19.5444 Dragonflies of the Grand Canyon region: Diversity and biogeography [ABSTRACT]. *In: 12th Biennial Conference of Science and Management on the Colorado Plateau, September 16-19, 2013, Northern Arizona University, Flagstaff, Arizona : program and abstracts of presented papers and posters.* [Flagstaff, Arizona: Northern Arizona University], p. 116.

Stevens, Lawrence E., AND Bailowitz, Richard A.

2005 19.2708 Distribution of *Brechmorhoga* clubskimmers (Odonata: Libellulidae) in the Grand Canyon region, southwestern USA. *Western North American Naturalist*, 65(2) (April): 170-174.

2009 19.2947 Odonata biogeography in the Grand Canyon ecoregion, southwestern USA. *Entomological Society of America, Annals*, 102(2): 261-274.

Stevens, Larry [Stevens, Lawrence E.]**, AND Burke, Kelly**

2009 19.3032 Grand Canyon assault. *Boatman's Quarterly Review*, 22(4) (Winter 2009-2010): 14-15. [Tamarisk leaf beetle.]

Stevens, Lawrence E., AND Huber, R. L.

2004 19.2460 Biogeography of tiger beetles (Cicindelidae) in the Grand Canyon ecoregion, Arizona and Utah. *Cicindela*, 35: 41-64.

Stevens, Lawrence E., AND Ledbetter, Jeri D.

2012 19.4258 *Rare invertebrate species of Kaibab National Forest, northern Arizona: Final report.* Flagstaff, Arizona: Museum of Northern Arizona, *for* U.S. Forest Service, Kaibab National Forest, 33 pp. (FS Agreement No. 10-CS-11030420-038.) [All ranger districts. Regarding "3 invertebrate species that the Forest Service recognized as potentially warranting management attention." Persephone's Darner (*Aeshna persephone* Donnelly 1961), Kaibab Variable Tiger Beetle (*Cicindela terricola kaibabensis* Johnson 1990), Kaibab Indra Swallowtail (*Papilio indra kaibabensis* Bauer 1955).]

Stevens, Lawrence E., AND Menke, Arnold S.

2014 19.5995 Biogeography of *Ammophila* (Hymenoptea: Sphecidae) in the Grand Canyon ecoregion, southwestern USA. *Western North American Naturalist*, 74(2): 216-222. [With abstract also in Spanish.]

Stevens, Lawrence E., AND Petterson, Jim

1996 19.1570 Be(e) alert! Africanized honeybees in Grand Canyon. *Boatman's Quarterly Review*, 9(4): 16-17.

Stevens, Lawrence E., AND Polhemus, John T.

2008 19.2709 Biogeography of aquatic and semiaquatic Heteroptera in the Grand Canyon ecoregion, southwestern USA. *Monographs of the Western North American Naturalist*, 4: 38-76.

Stevens, Larry [Stevens, Lawrence E.]**, AND Steiner, Warren**

2013 19.4320 The Tenebrionidae of Arizona: An invitation to help develop a preliminary list [ABSTRACT]. *In: Third International Tenebrionoidea Symposium, Wednesday, August 7*

and Thursday, August 8, 2013, Arizona State University, Life Science Center, LSE 244, Tempe, AZ, p. [2].

Stevens, Lawrence E.; Bailowitz, Richard A.; AND Danforth, Douglas

2020 19.6583 *Dragonflies and damselflies of the Grand Canyon region.* Flagstaff, Arizona: Springs Stewardship Institute, 128 pp.

Stevens, Lawrence E.; Pitts, James P.; Wasbauer, Marius; AND Zimmerman, J.

2013 19.5445 Regional zoogeography of five aculeate wasp families (Hymenoptera: Vespoidea) in the Grand Canyon region, Arizona: Bradynobaenidae, Mutillidae, Tiphiidae, Scoliidae, and Pompilidae [ABSTRACT]. *In: 12th Biennial Conference of Science and Management on the Colorado Plateau, September 16-19, 2013, Northern Arizona University, Flagstaff, Arizona : program and abstracts of presented papers and posters.* [Flagstaff, Arizona: Northern Arizona University], p. 116.

Stevens, Lawrence E.; Ramberg, Frank B.; AND Darsie, Richard F., Jr.

2008 19.2872 Biogeography of Culicidae (Diptera) in the Grand Canyon region, southwestern U.S.A. *Pan-Pacific Entomologist*, 84(2): 92-109.

Stevens, Lawrence E.; Sublette, James E.; Shannon, Joseph P.

1998 19.1582 Chironomidae (Diptera) of the Colorado River, Grand Canyon, Arizona, USA, II: Factors influencing distribution. *Great Basin Naturalist*, 58(2): 147-155. [For part 1, see Sublette *et al.* (1998, ITEM NO. 19.1644).]

Stonedahl, Gary M., AND Schwartz, Michael D.

1996 19.1591 Two new genera for pine-inhabiting species of Phylini in North America (Heteroptera: Miridae: Phylinae). *American Museum Novitates*, (3166), 15 pp.

Stumpf, Stacy E.

2016 19.5597 *Aquatic macroinvertebrate and physical habitat monitoring for Hermit, Garden, and Bright Angel Creeks in Grand Canyon National Park : 2014 summary report.* Fort Collins, Colorado: U.S. National Park Service, Natural Resource Program Center, 20, 19 pp. (*U.S. National Park Service, Southern Colorado Plateau Network, Natural Resource Data Series, 2016/1060*.)

2017 19.5598 *Aquatic macroinvertebrate and physical habitat monitoring for Hermit, Garden, and Bright Angel Creeks in Grand Canyon National Park : 2015 summary report.* Fort Collins, Colorado: U.S. National Park Service, Natural Resource Program Center, 20, 22 pp. (*U.S. National Park Service, Southern Colorado Plateau Network, Natural Resource Data Series, 2017/1110*.)

Stumpf, Stacy E., AND Monroe, Stephen A.

2011 19.5599 *Aquatic macroinvertebrate and physical habitat monitoring for Hermit Creek in Grand Canyon National Park : 2009 summary report.* Fort Collins, Colorado: U.S. National Park Service, Natural Resource Program Center, 16 pp. (*U.S. National Park Service, Southern Colorado Plateau Network, Natural Resource Data Series, 2011/287*.)

2011 19.5600 *Aquatic macroinvertebrate and physical habitat monitoring for Hermit Creek, Garden Creek, and Bright Angel Creek in Grand Canyon National Park : 2010 summary report, revised March 2012.* Fort Collins, Colorado: U.S. National Park Service, Natural Resource Program Center, 35 pp. (*U.S. National Park Service, Southern Colorado Plateau Network, Natural Resource Data Series, 2012/265*.)

2012 19.5601 *Aquatic macroinvertebrate and physical habitat monitoring for Hermit Creek, Garden Creek, and Bright Angel Creek in Grand Canyon National Park : 2011 summary report.* Fort Collins, Colorado: U.S. National Park Service, Natural Resource Program Center, 35 pp. (*U.S. National Park Service, Southern Colorado Plateau Network, Natural Resource Data Series, 2012/418*.)

2014 19.5602 *Aquatic macroinvertebrate and physical habitat monitoring for Hermit Creek, Garden Creek, and Bright Angel Creek in Grand Canyon National Park : 2013 summary report.* Fort Collins, Colorado: U.S. National Park Service, Natural Resource Program Center, 41 pp. (*U.S. National Park Service, Southern Colorado Plateau Network, Natural Resource Data Series, 2014/737*.)

Sturdevant, Glen E.[2]

1926 19.1598 Dragon fly. *Grand Canyon Nature Notes*, 1(4): 3.

1926 19.1600 Daily battles. *Grand Canyon Nature Notes*, 1(4): 6. [Doodle bug.]

Sublette, James E.; Stevens, Lawrence E.; AND Shannon, Joseph P.

1998 19.1644 Chironomidae (Diptera) of the Colorado River, Grand Canyon, Arizona, USA, I: Systematics and ecology. *Great Basin Naturalist*, 58(2): 97-146. [For part 2, see Stevens, Sublette, and Shannon (1998, ITEM NO. 19.1582).]

Sugarman, Barbara

2014 19.4548 Has Pandora's Box been opened? A study on Pandora moths in northern Arizona [ABSTRACT]. *In: Northern Arizona University, 2014 Undergraduate Symposium Abstracts*. Flagstaff, Arizona: Northern Arizona University, p. 187.

Svinarenko, Igor [Свинаренко, Игорь]

1999 19.4069 Бабочка и смерть [Babochka i smert'] [Butterfly and death]. *Власть* [*Vlast'*] [Power] (Moskva), (16)(317) (April 27): [unpaginated]. [See illustrated sidebar, "Энтомология русской литературы; Набоков открыл 20 видов бабочек и дал им названия" [Entomologiya russkoy literatury; Nabokov otkryl 20 vidov babochek i dal im nazvaniya] [Entomology of Russian literature; Nabokov discovered 20 species of butterflies and gave them names], which includes note of a butterfly from Grand Canyon, *Cyllopsis pertepida dorothea* (see Nabokov, 1942, ITEM NO. 19.2212).] [In Russian.]

---

[2] Numerous items in early issues of *Grand Canyon Nature Notes* have been attributed without author (cited as "Anonymous" by convention in this bibliography). However, beginning with Vol. 1, no. 12 (May 31, 1927), the masthead on p. 1 lists G. E. Sturdevant as a by-line (not editor) for entire issues; thus citations herein have been emended where necessary. Issue by-lines ceased with Sturdevant's death; the final issue with it was Vol. 3, no. 7 (January 15, 1929).

Swain, J. M.

1924 19.6018 The allies of *Ips confusus* Lec. in western America; Family Ipidae, Coleoptera. *Canadian Entomologist*, 56(3) (March): 69-72. [*NOTE*: Cited here with question. Le Conte (1876, ITEM NO. 19.6017), p. 364, named the new species *Tomicus confusus* based on three specimens from "Southern California and Arizona"; no further information relating to the type localities is known. Swain (pp. 69-70) selected Le Conte's "California" specimen, in the Agassiz Museum, Harvard University, as the type for *Ips confusus* (Le Conte); he selected the "Arizona specimen" as the holotype of *Ips lecontei*, new species. Inasmuch as the genus represents forest beetles, it is not likely that the California specimen came from a locality pertaining to the lower Colorado River region as defined in this bibliography (thus neither Le Conte nor Swain are cited in Part 11, Section 1). However, the genus is widely distributed, including the Grand Canyon region and higher elevations of Arizona, and although it is less likely that Le Conte's specimen is from the immediate Grand Canyon region, both Le Conte's and Swain's papers are cited here conditionally.]

T

Tarnita, Corina E.; Bonachela, Juan A.; Sheffer, Efrat; Guyton, Jennifer A.; Coverdale, Tyler C.; Long, Ryan A.; AND Pringle, Robert M.

2017 19.6513 A theoretical foundation for multi-scale regular vegetation patterns. *Nature* (London), 541 (January 19): 398-401 + Supplementary Information with online version of the paper, 32 pp. [Data in paper include "Arizona", without specific localitiy. Supplementary Information, p. 16, includes notice of the research by Sparavigna (2016, ITEM NO. 19.6511), which included the identification of ant activity in satellite imagery of Toroweap Valley, Grand Canyon.]

Temple, Bill

2000 19.5355 Orchid and sightseeing tour of the West Coast of USA. *The Hardy Orchid Society Newsletter* (Stour Provost, Dorset, United Kingdom), (18) (October): 5-7. [See p. 6, brief remarks of having visited South Rim of Grand Canyon, and on North Rim "we saw *Goodyera oblongifolia* again and Weidemeyer's Admiral butterfly" (ENTIRE NOTE).

Terwilliger, Miranda

2023 19.6794 Wildlife projects on the North Rim. *Canyon Views* (Grand Canyon Conservancy), 30(2) (Spring/Summer): 6-9. [Includes butterflies.]

Thomas, Scott, AND Lindquist, Dave

1986 19.1671 Further investigations on *Pogonomyrmex* ants on Colorado River beaches in Grand Canyon. *In:* House, Dorothy A. (ed.), *Colorado River Investigations IV : July/August, 1985* (supervised by Stanley S. Beus and Steven W. Carothers). Flagstaff, Arizona:

Northern Arizona University, *for* U.S. National Park Service, Grand Canyon National Park, pp. 205-214.

Tilden, J. W.

1955 19.2216 A revision of *Tharsalea* Scud. (s. str.), with description of a new subspecies (Lepid., Lyc.). *Southern California Academy of Sciences, Bulletin*, 54(Part 2): 67-77. [s. str. = *sensu stricto* (identification in a narrow sense).] [Includes *Tharsalea arota schellbachi*, new subspecies, type locality "North Rim, Grand Canyon National Park" (pp. 72-76, Plate 24, figure 4 [p. 73]); other localities. The indication of the primary types collected on "Bright Angel Trail" pertains to the Old Bright Angel Trail in Bright Angel Canyon; further corroborated by the fact that all secondary types are from North Rim localities and thus the designation of the type locality.]

1957 19.2921 Taxonomic history and distribution of *Ochlodes yuma* (Hesperiidae). *Lepidopterists' News*, 11(4/5): 151-152. [Distributional data include: "COCONINO CO.: Indian Gardens, Grand Canyon National Park, 23-24.vii.24 (leg. E. L. BELL) in AMNH (RINDGE) and also 24.vii.34 and 18.vii.38 (both leg. E. L. BELL) in collections of the Naturalists' Workshop at Grand Canyon (SCHELLBACH)".]

Timberlake, P. H. [Timberlake, Philip H.]

1928 19.5569 Bees of the genus *Perdita* Smith in the American Museum of Natural History (Hymenoptera). *American Museum Novitates*, (321), 13 pp. [See *Perdita wheeleri*, new species; holotype male from "Indian Gardens in the Grand Cañon, Arizona (W. M. Wheeler)" (pp. 5-7).]

1956 19.6612 A revisional study of the bees of the genus *Perdita* F. Smith, with special reference to the fauna of the Pacific coast (Hymenoptera, Apoidea); Part II. *University of California, Publications in Entomology*, 11(5): 247-350. [Includes *Perdita opacella*, new species, a single female, holotype, from Marble Canyon, near Lee's Ferry, Arizona (collected by G. D. Butler, June 5, 1953, on *Stanleya*.]

1962 19.5570 A revisional study of the bees of the genus *Perdita* F. Smith, with special reference to the fauna of the Pacific coast (Hymenoptera, Apoidea); Part V. *University of California, Publications in Entomology*, 28(1), 123 pp. [including 13 plates]. [See *Perdita wheeleri* Timberlake (p. 32, figures 755, 756 [p. 112], 856 [p. 121]), from Grand Canyon [see Timberlake (1928, ITEM NO. 19.5569)]; *Perdita inornata*, new species (pp. 49-50, figures 787, 788 [p. 115], 872 [p. 122]), paratypes "4 females, 14 males, South Rim of the Grand Canyon, July 26, 1934 (H. E. and M. A. Evans); 1 male, Grand Canyon, July 28, 1949 (W. H. Lange)"; *Perdita dasylirii* Cockerell (pp. 55-57, figures 793, 794 [p. 116], 875 [p. 122], material examined includes "1 female, Grand Canyon, June 11, 1931 (F. E Lutz)"; *Perdita polytropica polytropica*, new species and new subspecies (pp. 57-59, figures 795, 796 [p. 116], 876 [p. 122]), type material from California, additional material examined includes "6 males, 52 miles below Lee's Ferry, Colorado River, Grand Canyon, on *Acacia*, June 6, 1953, and 18 females, 2 males, 179.2 miles below Lee's Ferry, on barrel cactus, June 11 (G. D. Butler)".]

1968 19.6611 A revisional study of the bees of the genus *Perdita* F. Smith, with special reference to the fauna of the Pacific coast (Hymenoptera, Apoidea); Part VII (including index to Parts I to VII). *University of California, Publications in Entomology*, (49), 196 pp. [See *Perdita opacella* Timberlake (pp. 8-9), which notes, "This has been known from one female from the Grand Canyon, rizona, but a small series of both sexes has been

collected at flowers of *Cleome* southwest of Moab, Utah." (p. 8); *P. depressa*, new species (pp. 48-50, plate figures 1217, 1218 [p. 167], 1312 [p. 175]), paratypes include "1 female, Supai, 3,500 feet, Havasu Canyon, Grand Canyon National Park, Coconino Co., Arizona, Aug. 2, 1934 (F. C. Lutz)." (p. 50); *P. subfasciata* Cockerell (p. 107), new records include "Mohave Co.: many of both sexes, 7 miles west of Peach Springs, on *Gutierrezia lucida*, Sept. 28, 1964 (Timberlake and Papp)."]

Tinkham, Ernest R.

1944 19.2127 Biological, taxonomic and faunistic studies in the shield-back katydids of the North American deserts. *American Midland Naturalist*, 31(2) (March): 257-328.

Torre Bueno, J. R. de la [Torre Bueno, José Rollin de la]

1905 19.3598 The genus *Notonecta* in North America north of Mexico. *New York Entomological Society, Journal*, 13(3) (September): 143-167, Plate 7. [See *Notonecta mexicana* Amyot and Serville, pp. 158-159; specifically, p. 159: "In the U. S. National Museum and Heidemann collections the specimens from Colorado Cañon, Hot Springs and Catalina Mts., Arizona, are var. *hades*, and above the average size and with more prominent eyes." (ENTIRE NOTE)]

1937 19.6117 Arizona insect localities. *Brooklyn Entomological Society, Bulletin*, 32(5) (December): 187-194. [Regarding unsatisfactory data on collection labels. Includes "Bright Angel Creek" (p. 189), "Kaibab National Forest" (p. 191).]

Townsend, C. H. Tyler [Townsend, Charles Henry Tyler]

1892 19.3219 [Southwest trip report.] *In:* Notes and News [SECTION]. *Entomological News* (Academy of Natural Sciences of Philadelphia, Entomological Section), 3(9) (November): 234. [Includes Hance Trail, Grand Canyon.]

1893 19.3095 A peculiar seed-like case-worm from the Grand Canyon. *American Naturalist*, 27 (February): 166-169. [See also an addendum, 27: 402 (ITEM NO. 19.3094).]

1893 19.1686 On a species of *Simulium* from the Grand Canon of the Colorado. *American Entomological Society, Transactions*, 20 (April): 45-48.

1893 19.3094 Further note on the tineid case-worm from the Grand Canyon. *American Naturalist*, 27 (April): 402. [Addendum to Townsend (1893, ITEM NO. 19.3095).]

1893 19.3344 *Schizura Ipomeæ* Doubl. *In:* Notes and News [SECTION]. *Entomological News* (Academy of Natural Sciences of Philadelphia, Entomological Section), 4(5) (May): 158. [Larva of *Schizura ipomeae* found on round-leafed leguminous tree, *Cercis occidentallis* Torr., on Hance Trail in Grand Canyon.]

1893 19.3217 A woolly leaf-gall on oak near Grand Canon. *American Naturalist*, 27 (October) (322): 905.

1893 19.3252 On the injurious and other locusts of New Mexico and Arizona. *Insect Life* (U.S. Department of Agriculture, Division of Entomology, Periodical Bulletin), 6(1) (November): 29-32.

1893	19.3661	Lycænid larva on Atriplex. *American Naturalist*, 27 (December): 1104-1105. [Specimens "from *Atriplex canescens*, 12 miles north of Cedar Ranch, Arizona, on the stage road from Flagstaff to the Grand Cañon."]
1893	19.3381	On the horse flies of New Mexico and Arizona. *Kansas Academy of Science, Transactions*, 13: 133-135. [Includes notice of specimens collected on Hance Trail.]
1893	19.1687	On a peculiar acalyptrate muscid found near Turkey Tanks, Arizona. *Kansas Academy of Science, Transactions*, 13 (October): 135-136.
1893	19.1688	Note on a scutellerid on native tobacco in Arizona. *Psyche*, 6 (November): 547-548. [*Corimelaena extensa* on *Nicotiana* at Cedar Ranch, between Flagstaff and the Grand Canyon.]
1894	19.1689	Notes on some South-Western Hemiptera. *Canadian Entomologist*, 26(11) (November): 312-316.
1895	19.1690	On the Coleoptera of New Mexico and Arizona, including biologic and other notes. *Canadian Entomologist*, 27: 39-51. [Cites numerous taxa from Grand Canyon.]
1895	19.3190	On the cabbage-shaped gall of *Cecidomyia salicisbrassicoides*, and its occupants. *Canadian Entomologist*, 27(8) (August): 205-207.
1896	19.1691	Notes on New Mexico and Arizona Hymenoptera. *Canadian Entomologist*, 28(4): 110-112(5) (March): 138-142. [Includes *Gorytes dentatus* Fox, new species (p. 139), and various previously recognized taxa, all from Hance Trail, Grand Canyon.]
1915	19.3569	New western and southwestern Muscoidea. *New York Entomological Society, Journal*, 23(4) (December): 216-234. [Item signed "Charles H. T. Townsend".] [See p. 234, *Microsciasma minuta*, new genus and new species, from Hance Trail, 1892.]

Triplehorn, Charles A.

1975	19.1697	A subgenus of *Eleodes* with three new cave-inhabiting species (Coleoptera: Tenebrionidae). *The Coleopterists Bulletin*, 29(1): 39-43. [New species from Grand Canyon.]
2002	19.4323	The role of serendipity in systematics. *American Entomologist*, 48(3) (Fall): 144-148. [Founders Memorial Lecture. See p. 147, remarks and photo pertaining to working at the Grand Canyon and review of the genus *Asidina* (see Triplehorn and Brown, 1971, ITEM NO. 19.4324).]

Triplehorn, Charles A., AND Brown, Kirby W.

1971	19.4324	A synopsis of the species of *Asidina* in the United States with description of a new species from Arizona (Coleoptera: Tenebrionidae). *The Coleopterists Bulletin*, 25(3): 73-86. [Includes *Asidina rugicollis*, new species, type material from South Rim of Grand Canyon [specific localities not published]. Also *A. parallela* (LeConte, 1851), specimens noted from Grand Canyon; *A. wickhami* (Horn, 1894), specmens noted from Hualapai Mountains, Peach Springs, and Valentine, Arizona.]

Troubridge, J. T., AND Crabo, L. G.

2002 19.5208 A review of the Nearctic species of *Hadena* Schrank, 1802 (Lepidoptera: Noctuidae) with descriptions of six new species. *Fabreries* (Association des Entomologistes Amateurs du Québec), 27(2) (December): 109-154 ("Section en français", pp. 135-145). [See *Hadena* (*Hadena*) *lafontainei*, new species (pp. 114-117, figures 3 [p. 146], 17 [p. 148], 33 [p. 153]); paratype material includes "2 ♀♀, Kaibab Plateau, nr. Jacob Lk., 8,300 ft [2,550 m], 18.VII.1980, D.C. Ferguson" (ENTIRE NOTE) (square brackets are part of quotation). Near Jacob Lake.] [Principally in English, with an abbreviated section in French.]

Tuthill, L. D.

1939 19.4317 New species of Psyllidae from the western United States. *Iowa State College, Journal of Science*, 13(2) (January): 181-186. [Insects. See pp. 185-186, *Trioza rubra*, new species; paratype material includes male specimen from "Grand Canyon".]

U

Uhey, Derek A.; Hofstetter, Richard W.; Remke, Michael; Vissa, Sneha; AND Haubensak, Karen A.

2020 19.6509 Climate and vegetation structure shape ant communities along elevational gradients on the Colorado Plateau. *Ecology and Evolution*, 10: 8313-8322 + Supporting Information online, https://doi.org/10.1002/ece3.6538, 14 pp. [Twelve study sites north and west of Flagstaff, Arizona, include three localities on the Kaibab National Forest north of Grand Canyon National Park.]

U.S. Department of Justice, U.S. Attorney, San Jose, California

1995 19.6424 Butterfly smuggling case. Press release from: U.S. Department of Jutice, U.S. Attorney, San Jose, California, December 14, 1994. *News of the Lepidopterists' Society*, 1995(1) (March): 22-23. [Regarding the cases against Richard J. Skalski, Mark L. Grinnell, and Thomas W. Kral, for "conspiring to poach federally protected butterflies between 1983 and 1992 on federally protected lands . . . and conspiring to trade and traffick in protected wildlife . . . ." Includes Kaibab swallowtail butterflies from Grand Canyon National Park.]

U.S. Forest Service

1979 19.1717 *Western spruce budworm management, Kaibab National Forest and Grand Canyon National Park.* Albuquerque, New Mexico: U.S. Forest Service, 182 pp.

1980 19.1718 *Western spruce budworm management, Kaibab National Forest and Grand Canyon National Park.* Albuquerque, New Mexico: U.S. Forest Service, 35 pp.

1980 19.1719 *Pandora moth management plan, Kaibab National Forest, Arizona.* Albuquerque: U.S. Forest Service, 60 pp.

U.S. Forest Service, AND U.S. National Park Service

1981 19.1720 *Western spruce budworm management, Kaibab National Forest, Grand Canyon National Park, Arizona.* Albuquerque, New Mexico: U.S. Forest Service, 127 pp.

U.S. Forest Service, Southwestern Region

1979 19.5729 *Draft : Environmental Statement : western spruce budworm management : Kaibab National Forest, Grand Canyon National Park.* Albuquerque, New Mexico: U.S. Forest Service, Southwestern Region, SEPARATELY PAGINATED SECTIONS [171 pp. total]. (03-07-79-1.)

1999 19.4635 *Forest insect and disease conditions in the Southwestern Region, 1998.* U.S. Forest Service, Southwestern Region, 20 pp. (R3-99-01.) [Regarding Grand Canyon National Park and Kaibab National Forest, see "Mountain Pine Beetle", pp. 4-5, and "Western Spruce Budworm", pp. 7-8.]

U.S. Forest Service, Southwestern Region, Forest Health

2015 19.5173 Forest insect and disease conditions in the Southwestern Region, 2014. *U.S. Forest Service, Southwestern Region, Forest Health PR-R3-16-13*, 43 pp. [Includes Kaibab National Forest.]

U.S. Forest Service, Southwestern Region, Forestry and Forest Health

2012 19.6302 Forest insect and disease conditions in the Southwestern Region, 2011. *U.S. Forest Service, Southwestern Region, Forestry and Forest Health, PR-R3-16-8*, 43 pp.

Usher, Howell D.; Leibfried, William C.; Blinn, Dean W.; AND Carothers, Steven W.

1986 19.6474 The aquatic insects of Roaring Springs, Bright Angel, Garden and Pipe Creeks, Grand Canyon National Park [ABSTRACT]. *Arizona-Nevada Academy of Science, Journal*, 21(1986 Proceedings Supplement) (April): 17.

Usinger, Robert L.

1931 19.2219 A new species of *Platylygus* (Miridae, Hemiptera). *Pan-Pacific Entomologist*, 7(3) (January): 129-130. [*Platylygus vanduzeei*, new species. Holotype is "male, No. 2997, Mus. Calif. Acad. Sciences, collected by C. D. Duncan, June 17, 1921, at the Grand Canyon, Arizona"; allotype collected by Usinger, "female, No. 2998, Mus. Calif. Acad. Sciences, collected by the author in Grand Canyon National Park, Arizona, South Rim, June 29, 1930."]

1944 19.3978 The Triatominae of North and Central America and the West Indies and their public health significance. *Public Health Bulletin*, (288), 83 pp. [See p. 48, *Paratriatoma hirsuta* Barber, 1938, Proc. Ent. Soc. Wash, 40: 104-105. Records include "Phantom Ranch, Grand Canyon, Ariz., May 1929 (Vernon Bailey)". Unlocalized specimen figured in pl. 7, fig. c.]

V

Van Duzee, E. P.

1935 19.1809 [Brief notice of E. C. Van Dyke's collecting trip to New Mexico via Grand Canyon.] *In:* Personals. *Pan-Pacific Entomologist*, 11(3): 134.

Van Duzee, M. C.

1927 19.5941 North American species of *Polymedon*. (Diptera Dolichopodidæ). *Entomological Society of America, Annals*, 20(1) (March): 123-126. [Includes *Polymedon dilaticosta* and *P. nitidus*, new species with type material from Bright Angel Trail, Grand Canyon.]

Vaurie, Patricia

1955 19.3980 A review of the North American genus *Amblycheila* (Coleoptera, Cicindelidae). *American Museum Novitates*, (1724), 26 pp. [See *Amblycheila schwarzi* W. Horn (pp. 19-22); specimens examined include "Grand Canyon, Spetember [*sic*], 1929 (C. C. Searl), one male."; "Other specimens reported in the literature include one female from the type locality, Peach Springs, Mohave County, 5000 feet, Arizona".]

Vernieu, William S.

2015 19.4832 Biological data for water in Lake Powell and from Glen Canyon Dam releases, Utah and Arizona, 1990-2009. *U.S. Geological Survey, Data Series 959*, 12 pp. [Principally Lake Powell, but includes two data stations below Glen Canyon Dam: "Glen Canyon Dam draft tubes" and "Colorado River at Lees Ferry". Summary of investigations of chlorophyll, phytoplankton, and zooplankton. With database description.]

W

Waltz, Amy E. M., AND Covington, W. Wallace

1999 19.3427 Butterfly richness and abundance increase in restored ponderosa pine ecosystem (Arizona). *Ecological Restoration*, 17(4): 244-246.

2001 19.3426 Butterfly response and successional change following ecosystem restoration. *In:* Vance, Regina K., Edminster, Carleton B., Covington, W. Wallace, and Blake, Julie A. (compilers), Ponderosa pine ecosystems restoration and conservation: steps toward stewardship; conference proceedings; Flagstaff, AZ, April 25-27, 2000. *U.S. Forest Service, Rocky Mountain Research Station, Proceedings RMRS-P-22*, pp. 88-94. [Study area between Mount Logan and Mount Trumbull, Arizona Strip.]

Wang, Daqing

2001 19.6588 *Systematics of the subterranean amphipod genus* Stygobromus *(Crangonyctidae) in western North America, with emphasis on species of the* hubbsi *group.* Doctoral dissertation, Old Dominion University (Norfolk, Virginia), 220 pp. [*NOTE*: New taxa described herein are not valid for the purposes of taxonomic nomenclature. Includes *Stygobromus blinni*, "new species" (pp. 20-24); see also distribution maps, pp. 198, 200. For formal publication of taxonomic acts, see Wang and Holsinger (2001, ITEM NO. 19.6589).]

Wang, Daqing, AND Holsinger, John R.

2001 19.6589 Systematics of the subterranean amphipod genus *Stygobromus* (Crangonyctidae) in western North America, with emphasis on species of the *hubbsi* group. *Amphipacifica* (Journal of Aquatic Systematic Biology), 3(2) (November 15): 39-147. [Includes *Stygobromus blinni*, new species (pp. 74-76, figure 21); female holotype and two female paratypes from "Roaring Springs Cave, on the north rim of the Grand Canyon near Bright Angel Trail and Bright Angel Creek" [*sic*] (p. 74), "about 1.6 km inside the cave" (p. 76); collected by Dean Blinn, 28 September 1994.]

Ward, J. V.; Zimmermann, H. J.; AND Cline, L. D.

1986 19.1819 Lotic zoobenthos of the Colorado system. *In:* Davies, Bryan R., and Walker, Keith F. (eds.), *The ecology of river systems.* Dordrecht, Boston, and Lancaster: Dr W. Junk Publishers, pp. 403-423. (*Monographiae Biologicae* [H. J. Dumont, series ed.], Volume 60.)

Ward, Stephen L., AND Lachat, Robert

1988 19.1820 Continued studies on the red harvester ant density and foraging activities on human impacted, Colorado River beaches in Grand Canyon National Park, 1987. *In: Colorado River Investigations VI : July/August, 1987* (supervised by Stanley S. Beus, Steven W. Carothers, and Frank B. Lojko). Flagstaff, Arizona: Northern Arizona University, *for* U.S. National Park Service, Grand Canyon National Park, pp. 44-59.

Waring, Gwendolyn L., AND Price, P. W.

1990 19.1825 Plant water stress and gall formation (Cecidomyiidae: *Asphondylia* spp.) on creosote bush. *Ecological Entomology*, 15(1): 87-95.

Washburn, Richard I., AND McGregor, Mark D.

1974 19.4498 White fir needle miner. *U.S. Forest Service, Forest Pest Leaflet 144*, 5 pp. [Notes Grand Canyon North Rim.]

Welbourn, W. Cal

1978 19.1840 Preliminary report on the cave fauna. *In: Cave resources of Horseshoe Mesa, Grand Canyon National Park.* Yellow Springs, Ohio: Cave Research Foundation, pp. 36-42. [Restricted distribution due to archaeological content.]

Welch, Craig

2010 19.3177 The butterfly sting; how a federal wildlife agent brought down one of the world's most notorious insect thieves. *High Country News*, 42(6) (April 12): 14-20. [*Papilio indra kaibabensis* and Grand Canyon, pp. 16, 18, 20. Regarding Hisayoshi Kojima.]

Weld, Lewis H.

1921 19.4539 American gallflies of the family Cynipidae producing subterranean galls on oak. *U.S. National Museum, Proceedings*, 59(2368): 187-246, Plates 28-37. [See *Disholcaspis lacuna*, new species (pp. 195-196, Plate 28, figure 2); non-type material noted from "Grand Canyon". See also unidentified collection "Weld No. 706" (pp. 190, 242), "old galls" collected from localities including "Grand Canyon".]

Wellard Kelly, Holly Ann

2010 19.4977 *Resource composition and macroinvertebrate resource consumption in the Colorado River below Glen Canyon Dam.* Master's thesis, Loyola University, 169 pp.

Wellard Kelly, Holly A.; Rosi-Marshall, Emma J.; Kennedy, Theodore A.; Hall, Robert O., Jr.; Cross, Wyatt F.; AND Baxter, Colden V.

2013 19.4675 Macroinvertebrate diets reflect tributary inputs and turbidity-driven changes in food availability in the Colorado River downstream of Glen Canyon Dam. *Freshwater Science*, 32(2): 397-410.

Wells, R. Spencer

1996 19.4373 Nucelotide variation at the *Gpdh* locus in the genus *Drosophila*. *Genetics*, 143: 375-384. [Fly stock material includes *D. pseudoobscura* obtained from genomic DNA "collected at Kaibab National Forest, Arizona."] [*Gpdh* locus, "encoding glycerol-3-phosphate dehydrogenase, E.C. 1.1.1.8".]

Wheeler, William Morton

1899 19.3763 New species of Dolichopodidæ from the United States. *California Academy of Sciences, Proceedings*, Series 3, Zoology, 2(1), 85 pp. [including 4 plates]. [See *Polymedon castus*, new species, pp. 6-8, Plate 1, figure 8. [New species based on a single female specimen "labeled 'Grand Cañon, Arizona,' from the collections of the University of Kansas." Collector not indicated.] [New species of Dolichopodidae from the United States.]

1905 19.3221 The North American ants of the genus *Liometopum*. *American Museum of Natural History, Bulletin*, 21: 321-333. [See pp. 325, 332.]

1906 19.1853 The ants of the Grand Cañon. *American Museum of Natural History, Bulletin*, 22: 329-345.

1908 19.4536 Honey ants, with a revision of the American Myrmecocysti. *American Museum of Natural History, Bulletin*, 24: 345-397. [See pp. 351-352, *Myrmecocystus melliger mendax*, new subspecies; non-type material noted from "Grand Cañon (Wheeler)".]

1908 19.1854 The ants of Texas, New Mexico and Arizona. (Part I.) *American Museum of Natural History, Bulletin*, 24: 399-485.

1913 19.4963 A revision of the ants of the genus *Formica* (Linné) Mayr. *Museum of Comparative Zoology, Bulletin*, 53(10): 379-565. [Grand Canyon, see: *F. fusca fusca* var. *argentea* Wheeler (pp. 501-503; examined material from "Coconino Forest, Grand Canyon, 7,000 ft.", p. 502); *F. fusca fusca* var. *gelida* Wheeler, new variety (pp. 505-507; non-type material from "Coconino Forest, Grand Canyon, 7,000 ft. (Wheeler)", p. 506); *F. rufibarbis* var. *gnava* Buckley (pp. 518-521; examined material from "Indian Garden, Grand Canyon", p. 519); *F. (Proformica) neogagates neogagates* Emery (pp. 536-538; examined material from "Coconino Forest at the Grand Canyon", p. 538); *F. (Neoformica* Wheeler, new subgenus*) moki* Wheeler, 1906 (pp. 558-560; type material for species noted from "Bright Angel Trail, Grand Canyon, 5,500-7,000 ft." (p. 560).]

1914 19.5591 New and little known harvesting ants of the genus *Pogonomyrmex*. *Psyche*, (October): 149-157. [See *Pogonomyrmex californicus* Buckley subsp. *maricopa*, new subspecies (pp. 155-156). Paratype material includes "Grand Canyon (Wheeler)".]

1915 19.3630 Some additions to the North American ant-fauna. *American Museum of Natural History, Bulletin*, 34: 389-421. [See *Aphaenogaster texana* Emery, pp. 412-413. "A very similar form, but slightly darker in the worker phase and tending towards the variety [*A. t. furvescens*, new variety, p. 413 and following], was collected in the Indian Garden on the Bright Angel Trail in the Grand Cañon, Arizona." (ENTIRE NOTE) *A. t.* var. *furvescens* is described from Huachuca Mountains and Ramsay Canyon, Arizona. Also see *Camponotus acutirostris* Wheeler *clarigaster*, new variety, p. 420; "A single specimen taken at an altitude of about 3000 ft. on the Bright Angel Trail in the Grand Cañon, Arizona."]

1917 19.2791 The mountain ants of western North America. *American Academy of Arts and Sciences, Proceedings*, 52(8) (January): 457-569. [See pp. 501, 504, 521, 523, 526, 558-561.]

White, M. J. D.

1949 19.4362 A cytological survey of wild populations of *Trimerotropis* and *Circotettix*. (Orthoptera, Acrididae). I. The chromosomes of twelve species. *Genetics*, 34 (September): 537-563. [Includes *Trimerotropis* sp. from Kingman, Arizona. Also reference to individuals of *T. cyaneipennis* from Grand Canyon as studied by King (1924 [ITEM NO. 19.4361]).]

Whiting, Daniel P.; Paukert, Craig P.; Healy, Brian D.; AND Spurgeon, Jonathan J.

2014 19.4692 Macroinvertebrate prey availability and food web dynamics of nonnative trout in a Colorado River tributary, Grand Canyon. *Freshwater Science*, 33(3): 872-884. [Bright Angel Creek.]

Wickham, Henry Frederick

1893 19.3176 Some interesting colour-varieties in the genus *Crossidius*. *Canadian Entomologist*, 25(8) (August): 189-194, plate.

1899 19.3226 The habits of American Cicindelidae. *Davenport Academy of Natural Sciences, Proceedings*, 7: 206-228. [Includes *Cicindela rufiventris* var. *arizonae*, new variety (pp. 226-227), based on specimens from "Grand Canyon" and from specimens collected in 1892 by "Professor [C. H. Tyler] Townsend" [on Hance Trail] between "Hance's stone cabin, 2500 feet below the rim . . . quite to the bottom of the cañon".]

Wilcox, J.

1965 19.6039 New *Heteropogon* Loew, with a key to the species and the description of a new genus (Diptera: Asilidae). *Southern California Academy of Sciences, Bulletin*, 64(4): 207-222. [See *Heteropogon stonei*, new species (pp. 220-222); specimens include one paratype female from "Grand Canyon, Arizona".]

Wilford, B. H.

1951 19.6425 *Forest insect conditions in the central and southern Rocky Mountains and the Great Plains, 1950.* Fort Collins, Colorado: Forest Insect Laboratory (U.S. Department of Agriculture, Agricultural Research Administration, Bureau of Entomology and Plant Quarantine, Division of Forest Insect Investigations), 8, 6, 2 pp. ["Not for publication; for administration use only"; but now accessible online at https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd522040.pdf.] [Includes Grand Canyon National Park.]

Williams, Emmett L.; Howe, George F.; AND White, Richard R.

1991 19.1867 A desert millipede: evolution or design?—An introduction. *Creation Research Society Quarterly*, 28(1): cover, 7-16. [Creationist perspective.]

Williams, Kelly K.; McMillin, Joel D.; DeGomez, Tom E.; Clancy, Karen M.; AND Miller, Andy

2008 19.2865 Influence of elevation on bark beetle (Coleoptera: Curculionidae, Scolytinae) community structure and flight periodicity in ponderosa pine forests of Arizona. *Environmental Entomology*, 37(1): 94-109.

Williams, Ted

1996 19.4423 The butterfly wars. *Audubon*, (March/April):.

Wilson, Edmund B.

1909 19.3104 The "accessory" chromosome in *Syromastes* and *Pyrrochoris* with a comparative review of the types of sexual differences of the chromosome groups. *Journal of Experimental Zoology*, 6(1) (January): 69-205, Plate 1. [Insects. Data include specimens from Grand Canyon, p. 203; Plate 1, figure 28 (legend, p. 205).]

1909 19.4930 Studies on chromosomes. V. The chromosomes of *Metapodius*. A contribution to the hypothesis of the genetic continuity of chromosomes. *Journal of Experimental Zoology*, 6(2) (February): 147-205, Plate 1. [Insects. *Metapodius granulosus* specimens from Grand Canyon; see pp. 156, Figure 2i (p. 157), 203; Plate 1, figure 21 (legend p. 205.]

Wilson, Jill L., AND Tkacz, Borys M.

1996 19.3182 Historical perspectives on forest insects and pathogens in the Southwest: Implications for restoration of ponderosa pine and mixed conifer forests. *In:* Covington, Wallace, and Wagner, Pamela K. (technical coordinators), Conference on adaptive ecosystem restoration and management: restoration of cordilleran conifer landscapes of North America, June 6-8, 1996, Flagstaff, Arizona. *U.S. Forest Service, Rocky Mountain Forest and Range Experiment Station, General Technical Report RM-GTR-278*, pp. 26-31. [*NOTE*: Cover title gives conference dates as June 6-8, 1995.] [See p. 27, note of Kaibab National Forest (Kaibab Plateau) and Grand Canyon National Park.]

Wind, Robert G.

1930 19.1875 Butterflies of the Grand Canyon. *Grand Canyon Nature Notes*, 4(12) (October 31): 81-84. [Includes "A Preliminary check List of the Dinural [*sic*] Lepidoptera of the Grand Canyon, With Data", pp. 82-84.]

Wolff, Theodore A., AND Nielsen, Lewis T.

1976 19.5020 The distribution of snowpool *Aedes* mosquitoes in the southwestern states of Arizona and New Mexico with notes on biology and past dispersal patterns. *Mosquito Systematics*, 8(4): 413-439. [Includes Kaibab Plateau.]

Wolff, Theodore A.; Nielsen, Lewis T.; AND Linam, Jay H.

1974 19.2908 Additional records of culicine and chaoborine mosquitoes from the mountains of Arizona and New Mexico. *In: California Mosquito Control Association, 42nd Annual Conference, and American Mosquito Control Association, 30th Annual Meeting, February 24-27, 1974*, pp. 41-42.

Wood, Sherwin F.

1950 19.3977 Dispersal flight of *Triatoma* in southern Arizona. *Journal of Parasitology*, 36(5) (October): 498-499. [Includes note, p. 499: "An occurrence of large numbers of *Triatoma rubida uhleri* in dispersal flight was noted by Usinger (1944, Public Health Bull., No. 288) in June of 1930 at Peach Springs, Arizona, when many bugs were collected in the daytime, presumably after a widespread night flight." (ENTIRE NOTE)]

Wood, Stephen L.

1982 19.6016 The bark and ambrosia beetles of North and Central America (Coleoptera: Scolytidae), a taxonomic monograph. *Great Basin Naturalist Memoirs*, (6), 1359 pp. [Grand Canyon regional localities cited throughout.]

Woods, John O.; Carr, Timothy G.; Price, Peter W.; Stevens, Lawrence E.; AND Cobb, Neil S.

1996 19.1898 Growth of coyote willow and the attack and survival of a mid-rib galling sawfly, *Euura* sp. *Oecologia*, 108: 714-722. [Stevens' given name misspelled "Laurence".]

Wynne, J. Judson

2010 19.5723 *Arthropod sampling at PARA-2204 Cave, Grand Wash Wilderness Area, Grand Canyon-Parashant National Monument, Arizona (preliminary results).* Flagstaff, Arizona: Northern Arizona University, Colorado Plateau Research Station, *for* U.S. National Park Service, Grand Canyon-Parashant National Monument, St. George, Utah; and U.S. Geological Survey, Astrogeology Science Center, Flagstaff, Arizona, 10 pp. [Includes plan of cave.]

Wynne, J. Judson, AND Drost, Charles A.

2009 19.2952 Southwest caves reveal new forms of life. *U.S. Geological Survey, Fact Sheet 2009-3024*, 2 pp.

Wynne, J. Judson, AND Voyles, Kyle D.

2014 19.4412 Cave-dwelling arthropods and vertebrates of North Rim Grand Canyon, with notes on ecology and management. *Western North American Naturalist*, 74(1): 1-17. [Grand Canyon-Parashant National Monument.]

Wynne, J. Judson; Drost, Charles A.; Cobb, Neil S.; AND Rihs, John R.

2008 19.2692 Cave-dwelling invertebrates of Grand Canyon National Park. *In:* Riper, Charles van, III, and Sogge, Mark K. (eds.), *The Colorado Plateau III : integrating research and resources management for effective conservation.* Tucson: University of Arizona Press, pp. 235-246.

2015 19.4786 Cave-dwelling invertebrates of Grand Canyon National Park [ABSTRACT]. *In:* Riper, Charles van, III, Drost, Charles A., and Selleck, S. Shane (compilers), A quarter century of research on the Colorado Plateau—A compilation of the Colorado Plateau Biennial Conference Proceedings for 1993-2015. *U.S. Geological Survey, Open-File Report 2015-1115*, pp. 131-132.

Wynne, J. Judson; Howarth, Francis G.; Sommer, Stefan; AND Dickson, Brett G.

2019 19.6180 Fifty years of cave arthropod sampling: techniques and best practices. *International Journal of Speleology* (Union Internationale de Spéléologie), 48(1) (January): 33-48. [See p. 34, reference to work in Grand Canyon-Parashant National Monument, although without noting that locale by name.]

Wynne, J. Judson; Sommer, Stefan; Howarth, Francis G.; Dickson, Brett G.; AND Voyles, Kyle D.

2018 19.6818 Capturing arthropod diversity in complex cave systems. *Diversity and Distributions*, 24: 1478-1491 + Supporting Information online through https://doi.org/10.1111/ddi.12772. [Study areas include caves on the Grand Canyon-Parashant National Monument with cave codes PARA-0901, -1001, -2202, -2204, -2602, -3501, -3502, -3503, -3504, -3507.]

Wynne, J. Judson; Voyles, Kyle; Drost, Charles A.; Solvesky, Benjamin G.; AND Herder, Michael J.

2005 19.2608 Cave ecology on the Arizona Strip [ABSTRACT]. *In: Eighth Biennial Conference of Research on the Colorado Plateau, du Bois Center, Northern Arizona University, 7-10 November 2005 : program and abstracts of presented papers and posters (version 2.0)*, p. 88.

Y

Yackulic, Charles B.

2019 19.6290 Using population models of interacting species to support decisions [ABSTRACT]. *In: 15th Biennial Conference of Science and Management for the Colorado Plateau and Southwest Region : theme: "Science and Solutions for Conserving the Southwest's Land, Water, Biodiversity and Cultures" : September 9-12, 2019, High Country Conference Center, Northern Arizona University, Flagstaff, Arizona*, p. 119. [Tamarisk beetle and southwestern willow flycatcher, Grand Canyon.]

Yard, Michael D.; Coggins, Lewis G.; Ralston, Barbara E.; Kennedy, Theodore A.; AND Persons, William R.

2005 19.2576 Response of drifting invertebrates and organic matter to disturbance from high experimental flows prescribed for the Colorado River, Grand Canyon, AZ [ABSTRACT]. *In: Colorado River Ecosystem Science Symposium 2005. Abstracts. October 25-27, 2005, Fiesta Inn Resort, 2100 South Priest Drive, Tempe, AZ.* [Flagstaff, Arizona]: [U.S. Geological Survey, Grand Canyon Monitoring and Research Center], p. 45.

Yeager, Mike

1999 19.1913 *Flies of the Southwest : for lakes (and streams).* Portland, Oregon: Frank Amato Publications, Inc., 64 pp. [Fishing lures.]

Z

Zhang, Z. Y., AND Wagner, M. R.

1991 19.2292 Cocoon and adult parameters predict fecundity of the pine sawfly *Neodiprion fulviceps*. *Southwestern Entomologist*, 16(3): 193-198.

Zimmer, Dieter E.

2003 19.4354 *A guide to Nabokov's butterflies and moths : 2001.* Hamburg: [D. E. Zimmer?], 389 pp. [See entry for *Cyllopsis pertepida dorothea* Nabokov, 1942, from Grand Canyon.]

Zouros, E.; Lofdahl, K.; AND Martin, P. A.

1988 19.2136 Male hybrid sterility in *Drosophila*: Interactions between autosomes and sex chromosomes in crosses of *D. mojavensis* and *D. arizonensis*. *Evolution*, 42(6) (November): 1321-1331.