PALEONTOLOGY

of the

GRAND CANYON REGION

AND IN THE STRATIGRAPHIC CONTINUITY
OF GRAND CANYON FORMATIONS

FOURTH EDITION

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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



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

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AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

INTRODUCTION

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.

In this paleontology bibliography, and in THE GRAND CANON overall, earth-science citations embrace studies and remarks about Grand Canyon rock units *and* their stratigraphic continuity beyond the canyon-proper, as well as Mesozoic strata in the areas nearest to the Grand Canyon. The extralimital references are important for their focus on correlative stratigraphic and paleoecological analyses that, in turn, reflect upon studies in the Grand Canyon. Studies embrace the time-stratigraphic range from Neoproterozoic to Pleistocene, and sub-fossil occurrences in the Holocene.

Culling these paleontology citations from THE GRAND CANON was an opportunistic effort, not originally a part of the main bibliography. (A paleontological bibliography for material that limits itself only to, or includes data from, Grand Canyon National Park alone would be a labor-intensive effort requiring page-by-page examinations of many of the citations here, and more.) The publications listed here are those that have obvious reference to paleontology. There are many more citations that might have been added, particularly those that relate to broad stratigraphic, sedimentological, and paleogeological studies, which by implication should also contain references to fossils; and similarly, texts that embrace the general geology of the Grand Canyon that should include detailed or superficial commentaries on fossils. However, without a wholesale revisit to all of these publications it is not clear which among such titles do contain paleontological data. Part 21 of THE GRAND CANON does contain all citations that relate to the earth sciences for the greater Grand Canyon region.

Each citation here includes an Item number (for example, 21.6265; the prefix "21." indicates that it is from Part 21 of the much larger bibliography, THE GRAND CANON, Volume 1). They 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 within the bibliography. Citations that may be deleted do not reuse the Item numbers. See https://ravensperch.org for everything pertaining to the complete Grand Canyon–Lower Colorado River bibliography.

BIBLIOGRAPHY OF PALEONTOLOGY OF THE GRAND CANYON REGION AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

NOTE: Publications that relate to creationist and young-earth perspectives of Grand Canyon geology are included here with the understanding that this is an ongoing, sometmes tempetuous, field of study that contrasts ideas of faith with the tenets and methodologies of empirical and falsifiable science. Accordingly, some users of this bibliography may object to including creationist research with the science-based works of geology. However, these are topically identical so they are not segregated. To assist researchers looking for contrasting perspectives, both for and against creationist-held views pertaining to the Grand Canyon, these citations are denoted in the bibliography with Item Numbers in *italics*. Many more creationism-focused publications might have been listed but it is not clear, without revisiting all of them, which among them add discussions specifically about fossils (as opposed to, for example, non-fossiliferous stratigraphic analyses). Again, refer to Part 21 of THE GRAND CANON Volume 1/Part B.

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

ANONYMOUS

1884	21.3802	["Two miners report finding a series of footprints in Grand Cañon, Arizona."] Harper's Weekly, 28(1414) (January 26): 63. ["In form they are such as would be made by a bare human foot, but each one, the miners say, is twenty-six inches long and twelve inches wide, and the depth of the imprint at the ball of the foot is six inches. Say that a twelve-inch foot goes to a six-foot man, which is the droughtsman's rule, the man who made these imprints must have been thirteen feet in height. The imprints are evenly eighteen feet apart, which would indicate that he was fairly bounding along."] [Cryptopaleontology. See also Anonymous (1884, ITEM NO. 21.5047).]
1884	21.5047	Ancienne race humaine. <i>In:</i> Nouvelles de Tous les Points du Globe [SECTION]. <i>L'Exploration</i> (Paris), 17: 728. [Reported from the <i>Champion</i> (Peach Springs, Arizona), "MM. Spencer et Ridenour" (Charles Spencer and William "Bill" B. Ridenour, miners) reported finding large footprints attributed by local Indians to an ancestral race.] [Cryptopaleontology. See also Anonymous (1884, ITEM NO. 21.3802).] [In French.]
1901	21.5596	Early American giants. <i>The Christian Work</i> , 71 (August 15): 239. [Cryptopaleontology. Fossilized human "giant" in Grand Canyon; story related to the author by "Mr. Hull" when the author visited Hance Trail. Hull had been directed to the "giant" by Indians.]
1918	21.6265	List of accessions to the collections during the fiscal year 1916-1917. <i>In:</i> Report on the progress and condition of the United States National Museum for the year ending June 30, 1917. Washington, D.C.: U.S. Government Printing Office, pp. 99-142. [See p. 119: " a collection of vertebrate fossils obtained by Mr. L. F. Noble in the Grand Canyon of Arizona, consisting of amphibian or reptile tracks from the Coconino sandstone and Devonian fish remains from the Temple Butte limestone (60064) "]
1926	21.21	Fossil fish. <i>Grand Canyon Nature Notes</i> , 1(7) (November 11): 4. [Ribs and backbone of a fish from the Kaibab limestone near Bright Angel Ranger Station, North Rim.]
1926	21.22	Prehistoric footprints from the Grand Canyon. Scientific American, 134: 330.
1926	21.7377	Prehistoric footprints from the Grand Canyon. <i>Science</i> , New Series, 63(1638) (May 21): xvi.

Anonymous	(continued)	
1926	21.7378	Prehistoric footprints from the Grand Canyon. <i>Canadian Medical Association Journal</i> , 16(7) (July): 857. [Credited to <i>Science</i> , May 21, 1926 (Anonymous, 1926, ITEM NO. 21.7377).]
1926	21.7378	Prehistoric footprints from the Grand Canyon. <i>Canadian Medical Association Journal</i> , 16(7) (July): 857. [Credited to <i>Science</i> , May 21, 1926 (Anonymous, 1926, ITEM NO. 21.7377).]
1926	21.8623	Nyolclábu ősállat. <i>A Munka</i> (Salgótarján, Hungary), 4(28) (July 10): 4. [Reporting (in translation here) on the footprints of an "eight-legged primitive animal" described by Charles W. Gilmore from the Grand Canyon. Also notes a "sixteen-toed animal".] [In Hungarian.]
1926	21.8303	Fossilized footprints millions of years old. <i>The Monthly Evening Sky Map</i> (Brooklyn, New York), 20(326) (August): [4]-[5]. [Reports Charles Gilmore's discoveries at Grand Canyon.]
1926	21.5297	Fossil footprints ages old found in Grand Canyon. Popular Mechanics Magazine, 46(3) (September): 433.
1927	21.5124	Footprints millenniums old. Popular Science Monthly, 111(4) (October): 36.
1928	21.29	Lessons from a graveyard. Grand Canyon Nature Notes, 3(5) (October 31): 1.
1929	21.7204	Scientific work. <i>Grand Canyon Nature Notes</i> , 3(10) (June 30): 1-2. [Includes note of David White studying fossil flora and Precambrian sedimentary strata.]
1929	21.7206	Facts—not fancies. <i>Grand Canyon Nature Notes</i> , 3(11) (July 31): 6. [Includes note: "Some very interesting material has recently been collected from the Hacatai [<i>sic</i>] Shale (Algonquin Age) which contains rather definite traces of organic matter." (ENTIRE NOTE)] [Hakatai Shale, Algonkian age (Proterozoic).]
1929	21.30	Hither and yon. <i>Grand Canyon Nature Notes</i> , 4(2) (October 31): 13-14. [Includes brief note of fossil footprints in the Coconino Sandstone in Bass Canyon (p. 13).]
1930	21.31	Disclosures of ancient life in the Grand Canyon. Carnegie Institution of Washington, News Service Bulletin, 2: 63-70.
1930	21.34	Briefs. <i>Grand Canyon Nature Notes</i> , 4(6) (April 30): 37. [Brief note of fossils in Bright Angel Shale along Tonto Trail.]
1930	21.35	Odds and ends. <i>Grand Canyon Nature Notes</i> , 4(8) (June 30): 56. [Trilobite fossils in Muav Limestone, which "probably represent new species".]
1930	21.7209	Briefs. <i>Grand Canyon Nature Notes</i> , 5(1) (November 30): 11. [Range extension of Coconino Sandstone trackway. Edwin D. McKee sighted "large footprints" west of Seligman, Arizona, "65 miles beyond the nearest track locality in the Grand Canyon."]
1934	21.8397	U.S. National Academy of Sciences awards. <i>Nature</i> , (May 26): 788. [Includes: "The first award of the Charles Doolittle Walcott Medal and honorarium of 1,350 dollars of the Academy has been made to Dr. David White, of the U.S. Geological Survey, in recognition of his work on the pre-Cambrian algæ of the Grand Canyon of Arizona, which are among the very oldest of plant fossils." (ENTIRE NOTE)]
1936	21.37	Find well preserved sloths in cave resembling stable. <i>Science News Letter</i> , (September 5): 157. [Rampart Cave.]

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Anonymous (continued)

1936	21.6639	Ground sloth cave. <i>In:</i> The Supplement [SECTION]. <i>Southwestern Monuments Monthly Report</i> (U.S. National Park Service), (December): 437. [Rampart Cave.] [One paragraph quoted with credit, "Extracted from Museum News, December 1, 1936."; with the interesting note added: "Plans for showing the cave to the public have not been completed but it is hoped that an exhibit in situ can be made. Tentative plans include running a trench through the cave and lining the walls of the trench with glass so that bones or any possible human artifacts may be seen."]
1937	21.5138	Carnegie expedition tracks prehistoric giant sloth to its lair. <i>Life</i> , 3(12) (September 20): 48-50. [Rampart Cave.] [See also Charles Amsden, "Sloth Hunting", letter to editor, 3(15) (October 11): 128 (ITEM NO. 21.5139).]
1937	21.4852	Most ancient animal life. <i>Science News Letter</i> , (December 18): 391. [Precambrian jellyfish from Grand Canyon (later named <i>Brooksella canyonensis</i>).]
1977	21.6237	Fossil fire. National Park Service Newsletter, 12(4) (April): 3. [Rampart Cave fire.]
1981	21.49	Update on pollen in Grand Canyon. Bible-Science Newsletter, 19(6): 5-6.
1989	21.3809	Fossil pollen in Grand Canyon overturns plant evolution. <i>Creation Ex Nihilo</i> , 12(1): 38-39.
1995	21.53	Bag of tricks. <i>Grand Canyon Field Notes</i> (Center for Resource Interpretation, Grand Canyon National Park), (7) (December 11): [2]. [Packrat middens.]
1998	21.4811	Disney World displays Grand Canyon fossils. <i>Park Paleontology</i> (U.S. National Park Service), 4(1) (Winter): 4.
1998	21.4648	Fossil vertebrate tracks in National Park Service areas. <i>Park Paleontology</i> (U.S. National Park Service), 4(4) (Fall): 2.
1999	21.6072	Late Pleistocene vertebrate communities of the lower Grand Canyon: Rampart and Muav Caves. <i>Park Paleontology</i> (U.S. National Park Service), 5(4) (Fall): 2. [Item signed "staff writer". Note on research conducted by Mary Carpenter and Jim Mead.]
2001	21.3896	In search of nautiloids. <i>Acts and Facts</i> (Institute for Creation Research), 30(8) (August): 3-4.
2002	21.4649	Did you know? <i>Park Paleontology</i> (U.S. National Park Service), 6(2) (Summer): 8. [Fossil dung of <i>Nothrotheriops shastensis</i> , from Grand Canyon.]
2003	21.8432	ICR geologist presents discovery at geologic society meeting. <i>Acts and Facts</i> (Institute for Creation Research), 32(1) (January): 1. [Steven Austin presents finding pertaining to orthocone nautiloid layer in the Redwall Limestone in Marble Canyon.]
2003	21.5263	Footprints in stone. <i>Creation Resources Trust, Fact Sheet 28</i> , 2 pp. (Creation Resources Trust, Yeovil, United Kingdom.)
2004	21.3968	Tracks in time; explorers find 265-million-year-old animal trails. <i>In:</i> Behind the Scenes [SECTION]. <i>National Geographic</i> , (June): [xlii].
2005	21.6280	Coconino Sandstone. <i>Creation News Update</i> (Crying Rocks Ministry, Sedona, Arizona), 2(6) (December): 1-2. [Creationist perspective.]

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Anonymou	s (continued)	
2009	21.4494	50 years ago from the Mohave County Miner. <i>Mohave Memories</i> (Mohave Museum of History and Arts, Kingman, Arizona), 1 (February): 3. [Passing note of Shasta ground sloth in Rampart Cave.]
2015	21.6779	Other things. <i>Smoke Signals</i> (Kaibab Band of Paiute Indians), (August): [unpaginated]. [Photograph of fossil collected in Grand Canyon by Susannah Porter. Notes Tribal Council approval of her request to name the fossil <i>Kaibabia</i> after the Kaibab Band of Paiute Indians. No further details. A <i>nomen nudum</i> here. See Porter and Riedman, 2016, ITEM NO. 21.7114, for formal erection of the genus.)]
2018	21.8082	Grand Canyon fossils. <i>Stoney Statements</i> (Clear Lake Gem and Mineral Society, Houston, Texas), 44(3) (March): 7-9.
2019	21.8046	Tiny footprints, big discovery: Reptile tracks oldest ever found in Grand Canyon; UNLV geologist investigating 310 million-year-old fossil trackway from ancient reptilian creature. <i>UNLV College of Sciences</i> (University of Nevada at Las Vegas, College of Sciences), (Spring): 3. [Steve Rowland discovered a sideways-motion reptile trackway in float boulder along Bright Angel Trail.]
2021	21.8619	Tiny time bombs. [Untitled tract] (Berean Baptist Church, London, Ontario), (January 24). [Article comprises full-panel remarks introduced thusly: "The discovery of tiny pollen grains in rock shows just how inflated the billions of years claimed by evolutionists really are." Refers to Burdick (1981, ITEM NO. 21.8618).] [Apparently reprinted in various venues over time. Compare Anonymous (2024, ITEM NO. 21.8620).]
2024	21.8620	Tiny time bombs. <i>Friday Church News Notes</i> (Way of Life Literature, Fundamental Baptist Information Service, Port Huron, Michigan), 25(13) (March 29): 4. [Credited to "CreationMoments.com, Jan. 26, 2024". Remarks introduced thusly: "The discovery of tiny pollen grains in rock shows just how inflated the billions of years claimed by evolutionists really are." Refers to Burdick (1981, ITEM NO. 21.8618).] [Apparently reprinted in various venues over time. Compare Anonymous (2021, ITEM NO. 21.8619).]



Aasoumi, H.; Broutin, J.; Gand, G.; AND El Wartiti, M.

2009	21.7035	La paléontologie de l'époque Permien. Paleoflores "mixtes" et traces vertébrés tétrapodes du Permien inférieur du Maroc Central: Paléo-environnement et
		paléoclimat [ABSTRACT]. From: Présentations Orales: Paléozöique. In: 1er Congrès International sur la Paléontologie des Vertébrés du Nord de l'Afrique: programme et résumé. Marrakech, Morocco: [no imprint], p. 6. [Includes note of Hermit Formation of Grand Canyon.] [In French.]

Abel, Othenio

1935 21.4243 *Vorzeitliche Lebensspuren*. Jena: Gustav Fischer, 644 pp. [See pp. 262-266.] [In German.]

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Affaton, Pa	ecal	
Allatoli, Pa	iscai	
1990	21.8376	Le Bassin des Volta (Afrique de l'Ouest): une marge passive, d'âge Protérozoïque Supérieur, tectonisée au panafricain (600 ± 50 Ma). Paris: Editions de l'ORSTOM [Office de la recherche scientifique et technique outre-mer], Institut Français de Recherche Scientifique pour le Développement en Coopération, Collection Études et Thèses, 2 volumes (pp. 1-310, 311-500). [Doctoral thesis, Université d'Aix-Marseille III.] [See p. 74, brief note of <i>Chuaria</i> in Grand Canyon, in context of discussions, passim, of <i>C. circularis</i> Walcott in the region under study.] [In French.]
Agenbroad	, Larry D.	
1997	21.7758	Quaternary resources: Interdisciplinary research in the Grand Staircase-Escalante National Monument. <i>In:</i> Hill, Linda M. (ed.) and Koselak, Janine J. (producer), <i>Learning from the Land: Graind Staircase-Escalante National Monument Science Symposium proceedings, November 4-5, 1997, Southern Utah University.</i> [No place U.S. Bureau of Land Management, Grand Staircase-Escalante National Monument, pp. 423-434. (Volume: BLM/UT/GI-98/006+1120.) [Includes data from Grand Canyon region.]
Agenbroad	, Larry D., A	ND Mead, Jim I.
1987	21.59	Late Pleistocene alluvium and megafauna dung deposits of the central Colorado Plateau. <i>In:</i> Davis, George H., and VandenDolder, Evelyn M. (eds.), Geologic diversi of Arizona and its margins: Excursions to choice areas. Field-trip guidebook, Geological Society of America 100th Annual Meeting, Phoenix, Arizona, October 26-2 1987. <i>Arizona Bureau of Geology and Mineral Technology, Geological Survey Branch Special Paper 5</i> , pp. 68-84.
1995	21.5965	Documented Quaternary climate change on the Colorado Plateau: 40,000 yr B.Ppresent. <i>In:</i> Waugh, W. J. (ed.), <i>Proceedings of the workshop: Climate Change in the Four Corners and Adjacent Regions: Implications for Environmental Restoration and Land-Use Planning, September 12-14, 1994, Campbell College Center, Mesa State College, Grand Junction, Colorado. Grand Junction, Colorado: U.S. Department of Energy, Grand Junction Projects Office, pp. 3-8.</i>
Agenbroad	, Larry D.; M	lead, Jim I.; AND Brunelle, Andrea J.
2004	21.4611	Quaternary paleontology of megamammals from national park units of the Colorado Plateau and Channel Islands of California [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 36(5): 53.
Agić, Heda;	; Cohen, Pho	pebe; Porter, Susannah; AND Junium, Christopher
2020	21.8367	Carbon istotope measurements of single organic-walled microfossils from the Tonian Chuar Group, USA reveal taxon-specific water column habitats [ABSTRACT]. <i>In:</i> The Palaeontological Association, 64th Annual Meeting, virtual meeting, 16th-18th December, Oxford University Museum of Natural History: programme, abstracts, AG pagers. [No imprint] p. 25. [Meeting held virtually (online) due to the COVID-19.

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papers. [No imprint], p. 25. [Meeting held virtually (online) due to the COVID-19

Alf, R. M. [Alf, Raymon	d Manfred]
1959	21.72	Possible fossils from the early Proterozoic Bass Formation, Grand Canyon, Arizona. <i>Plateau</i> , 31: 60-63.
1968	21.73	A spider trackway from the Coconino Formation, Seligman, Arizona. <i>Southern California Academy of Sciences, Bulletin</i> , 67(2): 125-128.
Allmon, Wa	arren D., AND	Kissel, Richard A.
2016	21.7273	Fossils of the southwestern US. <i>In:</i> Swaby, Andrielle N., Lucas, Mark D., and Ross, Robert M. (eds.), <i>The Teacher-Friendly Guide to the earth science of the southwestern US.</i> Ithaca, New York: Paleontological Research Institution, pp. 89-157.
Alpert, Ste	phen P.	
1974	21.7786	Systematic review of the genus <i>Skolithos</i> . <i>Journal of Paleontology</i> , 48(4) (July): 661-669. [See <i>Skolithos annulatus</i> (Howell, 1957) (pp. 664-665); holotype from Grand Canyon. Also notes (p. 665) <i>Scolithus arizonicus</i> (nomen nudum), traces observed by Newberry (1861) that were provided with a suggested name (without description) by James (1892).]
Amsden, Cl	harles	
1937	21.5139	Sloth hunting. <i>In:</i> Pictures to the Editors [SECTION]. <i>Life</i> , 3(15) (October 11): 128. [Letter and photo in response to <i>Life</i> article, "Carnegie Expedition Tracks Prehistoric Giant Sloth to Its Lair", 3(12) (September 20): 48-50, which related to Rampart Cave (see Anonymous, 1937, ITEM NO. 21.5138). Amsden relates to work in Gypsum Cave, Nevada.]
Anderson,	R. Scott	
1993	21.88	A 35,000 year vegetation and climate history from Potato Lake, Mogollon Rim, Arizona. <i>Quaternary Research</i> , 40: 351-359.
Anderson,	R. Scott; He	vly, Richard H.; Adam, David P.; Betancourt, Julio L.; AND Mead, Jim I.
2000	21.3604	Middle- and late-Wisconsin paleobotanic and paleoclimatic records from the southern Colorado Plateau, USA. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 155(1/2): 31-57.
Andrews, F	lenry N.	
1980	21.89	The fossil hunters: in search of ancient plants. Ithaca, New York: Cornell University Press, 421 pp. [See p. 217.]
Antevs, Err	ıst	
1962	21.93	Late Quaternary climates in Arizona. American Antiquity, 28: 193-198.

Asama, Kaz	zuo [浅間一:	男]
1959	21.110	Systematic study of so-called <i>Gigantopteris</i> . <i>Tohoku University, Science Reports</i> (Sendai, Japan), Series 2 (Geology), 31(1): 1-72 [entire number].
1975	21.111	古生代末植物 区の成立 について [Koseidai-sue shokubutsu-ku no seiritsu ni tsuite]. The rise of paleobotanical provinces in the latest Paleozoic Era. 地学雑誌 <i>Journal of Geography</i> (Tokyo Geographical Society), 84(2): 55-70. [Includes <i>Supaia</i> of Grand Canyon.] [In Japanese, with bilingual titles and abstract.]
Ash, Sidney	/ R.	
1977	21.6401	An unusual bennettitalean leaf from the Upper Triassic of the south-western United States. <i>Palaeontology</i> , 20(3): 641-659, Plates 77-79. [Localities include Cameron, Arizona.]
2006	21.7123	Chilbinia gen. nov., an archaic seed fern in the Late Triassic Chinle formation of Arizona, USA. Palaeontology, 49(2): 237-245. [Chilbinia lichii, new genus, new species, from the Shinarump Member of the Chinle Formation "across the canyon of the Little Colorado River from the village of Cameron, Arizona, on the Navajo National Reservation".]
Augusta, N	ěmejc-Jos.	
1937	21.124	Deux nouvelles découvertes de plantes dan le Permien de la Moravie (Tchécoslovaquie). <i>Přírodovědeckou Fakultou Karlovy University, Spisy / Faculté des Sciences de l'Université Charles, Publications</i> (Praha), (151), 10 pp. [See description of <i>Supaia moravica</i> J. Augusta (pp. 7-9), which includes remarks (p. 8) and illustration (p. 9) of <i>Supaia linearifolia</i> D. White from the Permian of Grand Canyon.] [In French, with serial title in Czech and French.]
Austin, Ste	ven A.	
2003	21.4444	Nautiloid mass kill and burial event, Redwall Limestone (Lower Mississippian), Grand Canyon region, Arizona and Nevada. <i>In:</i> Ivey, Robert L. (ed.), <i>Proceedings of the Fifth International Conference on Creationism: held August 4-9, 2003, Pittsburgh, Pennsylvania, USA: technical symposium sessions.</i> Pittsburgh: Creation Science Fellowship.
2003	21.7471	[Remarks on nautiloids.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> Vail, Tom, <i>Grand Canyon : a different view.</i> Green Forest, Arkansas: Master Books, pp. 52-53.
2018	21.7472	[Remarks on nautiloids.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> 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, pp. 52-53. [In the translation of Vail's (2003) <i>Grand Canyon: a different view</i> .] [In Chinese.]

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Austin, Steven A., AND Wise, Kurt P.

1995	21.119	Nautiloid mass-kill event at a hydrothermal mound within the Redwall Limestone (Mississippian), Grand Canyon, Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 27(6): A-369.
Axelrod, Da	niel I.	
1986	21.122	Cenozoic history of some western American pines. Missouri Botanical Garden, Annals,

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Baird	. Dor	hald
Danu	, ,	ıaıu

Dania, Dona.		
1952	21.151	Revision of the Pennsylvanian and Permian footprints <i>Limnopus</i> , <i>Allopus</i> and <i>Baropus</i> . <i>Journal of Paleontology</i> , 26: 832-840.
1965	21.152	Footprints from the Cutler Formation. <i>In:</i> Lewis, G. E., and Vaughn, P. P., Early Permian vertebrates from the Cutler Formation of the Placerville area, Colorado. <i>U.S. Geological Survey, Professional Paper 503-C</i> , pp. C47-C50. [Includes Grand Canyon ichnofauna.]
Baird, M. R.		
1975	21.153	Conodont biostratigraphy of the Kaibab Formation, eastern Nevada and west-central

Baird, M. R., AND Collinson, J. W.

1975	21.154	Conodont biostratigraphy of the Kaibab and Plympton Formations [ABSTRACT].
		Geological Society of America, Abstracts with Programs, 7: 716.

Utah. Master's thesis, Ohio State University, 71 pp.

Baldwin, Christopher T.; Strother, P. K.; Beck, J. H.; AND Rose, Eben

73(3): 565-641.

21.4049	Palaeoecology of the Bright Angel Shale in the eastern Grand Canyon, Arizona, USA,
	incorporating sedimentological, ichnological and palynological data. <i>In:</i> McIlroy, D.
	(ed.), The application of ichnology to palaeoenvironmental and stratigraphic analysis.
	Geological Society, Special Publications (London), (228): 213-236.

Baldwin, Gordon C.

2004

1946	21.163	Notes on Rampart Cave.	<i>Masterkey</i> , 20: 94-96.
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Baldwin, Jo	ohn T.		
2007	21.7405	Grand Canyon reveals nautiloid mass kill event. <i>In:</i> Faith and Science Update [SECTION]. <i>Perspective Digest</i> (Adventist Theological Society, Barrien Springs, Michigan), 12(3): 50-52. [Creationist perspective.]	
Bartlett, Ri	ckey, and El	liott, David K.	
2011	21.5576	The paleoecology of the Coconino Sandstone depositional environment: The case for available surface water [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 43(5): 30.	
2015	21.6836	Pit-trapping predation strategy: The first record of ant-lion pits in the fossil record [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 47(7): 346. [Coconino Sandstone. Northern Arizona; specific locale(s) not indicated.]	
Bartos, Fra	nces Maribel		
1972	21.6018	Pollen in fecal pellets as an environmental indicator. Master's thesis, University of Arizona, 94 pp. [Grand Canyon collections include Stanton's Cave (fossil pellets), Buck Farm Canyon, and rim of Fossil Bay.]	
Bassler, R.	S. [Bassler,	Ray Smith]	
1941	21.179	A supposed jellyfish from the pre-Cambrian of the Grand Canyon. <i>U.S. National Museum, Proceedings</i> , 89: 519-522. [<i>Brooksella canyonensis</i> , new species.]	
1950	21.180	Faunal lists and descriptions of Paleozoic corals. <i>Geological Society of America, Memoir 44</i> , 315 pp. [See pp. 219-220, 233-234.]	
Beatty, W.	В.		
1962	21.189	Geology and mining operations in U.S. Guano cave, Mohave County, Arizona [ABSTRACT]. <i>Cave Notes</i> , 4: 40-41.	
Becker, Hel	lmar G.		
2010	21.7159	Entzauberte Kugeln und phycodische Strukturen in Gesteinen. Münster: Verlagshaus Monsenstein und Vannerdat OHG, 243 pp. [See under "Merkwürdige Objekte": "Gigasphären, Kugelschalen im Kilometerbereicht". A peculiar exposé in fossil phycology, on "spherical rock shells" of up to 1 km in diameter, often in limestones, which briefly takes note (p. 169) of the example of the Kaibab Plateau, which exhibits multiple ball-shaped shells in areas of "scant vegetation".] [In German.]	
Behrensme	eyer, Anna K.	; Cifelli, Richard L.; Stevens, Larry [Stevens, Lawrence E.]; AND Downs, William R.	
1986	21.200	Overview of Quaternary deposits in the Grand Canyon [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 18(5): 341.	

Berta, Anna	alisa		
1981	21.216	The Plio-Pleistocene hyaena <i>Chasmaporthetes ossifragus</i> from Florida. <i>Journal of Vertebrate Paleontology</i> , 1: 341-356. [Includes Anita, Arizona.]	
Besom, Kin	n		
2010	21.4705	Grand Canyon National Park: Fossil <i>what? In:</i> Bacharach, Joan, Collecting America. <i>Sojourns</i> (Peaks, Plateaus and Canyons Association), 5(1) (Winter/Spring): 9-10. [Rampart Cave fossils; specifically, dung.]	
2010	21.4706	Rampart's treasure <i>In:</i> Around the Plateau on public lands: From the collections [FEATURE]. <i>Sojourns</i> (Peaks, Plateaus and Canyons Association), 5(1) (Winter/Spring): 46-47. [Rampart Cave.]	
Betancourt	, Julio L.		
1990	21.229	Late Quaternary biogeography of the Colorado Plateau. <i>In:</i> Betancourt, Julio L., Van Devender, Thomas R., and Martin, Paul S. (eds.), <i>Packrat middens: the last 40,000 years of biotic change.</i> Tucson: University of Arizona Press, pp. 259-292.	
Betancourt	, Julio L.; Va	n Devender, Thomas R.; AND Martin, Paul S.	
1990	21.230	Introduction. <i>In:</i> Betancourt, Julio L., Van Devender, Thomas R., and Martin, Paul S. (eds.), <i>Packrat middens: the last 40,000 years of biotic change.</i> Tucson: University of Arizona Press, pp. 2-11.	
1990	21.231	Synthesis and prospectus. <i>In:</i> Betancourt, Julio L., Van Devender, Thomas R., and Martin, Paul S. (eds.), <i>Packrat middens: the last 40,000 years of biotic change.</i> Tucson: University of Arizona Press, pp. 435-447.	
Beus, Stan	ley S.		
1964	21.233	Fossils from the Kaibab Formation at Bee Spring, Arizona. <i>In:</i> Sutherland, Diony H. (ed.), Contributions to the geology of northern Arizona; Memorial to Major Brady. <i>Museum of Northern Arizona, Bulletin 40</i> , pp. 59-64.	
1965	21.234	Permian fossils from the Kaibab Formation at Flagstaff, Arizona. <i>Plateau</i> , 38: 1-5.	
1986	21.244	Biostratigraphy of the Surprise Canyon Formation (latest Mississippian and earliest Pennsylvanian) in western Grand Canyon, Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 18(5): 341.	
1990	21.247	Distribution and orientation of Permian brachiopods on a bedding plane, Kaibab Formation, northern Arizona, United States of America [ABSTRACT]. <i>2nd International Brachiopod Congress, Abstracts</i> , 5-9 February 1990, University of Otago, Dunedin, New Zealand, p. 12.	
1990	21.250	The distribution and orientation of shells from a brachiopod population, Permian Kaibab Formation, northern Arizona, USA. <i>In:</i> MacKinnon, D. I., Lee, D. E., and	

		Campbell, J. D. (eds.), <i>Brachiopods through time : proceedings of the 2nd International Brachiopod Congress.</i> Rotterdam: A. A. Balkema, pp. 233-239.	
1991	21.251	Reconstructing ancient life communities from fossil beds — a field investigation for secondary science students [ABSTRACT]. <i>Arizona-Nevada Academy of Science, Journal</i> , 26(Proceedings Supplement): 36.	
1995	21.253	Paleontology of the Surprise Canyon Formation (Mississippian) in Grand Canyon, Arizona. <i>In: Fossils of Arizona, Volume 3, Proceedings 1995.</i> Mesa, Arizona: Southwest Paleontological Society and Mesa Southwest Museum, pp. 25-36.	
1999	21.254	Chapter E. Megafossil paleontology of the Surprise Canyon Formation. <i>In:</i> Billingsley, George H., and Beus, Stanley S. (eds.), Geology of the Surprise Canyon Formation of the Grand Canyon, Arizona. <i>Museum of Northern Arizona, Bulletin 61</i> , pp. 69-96. [References combined for volume, pp. 245-250.]	
Beus, Stanl	ey S., AND B	Breed, William J.	
1968	21.258	A new nautiloid species from the Toroweap Formation in Arizona. <i>Plateau</i> , 40(1) (Spring): 128-135.	
Beus, Stanl	ey S., AND T	hompson, Kelcy	
1994	21.266	Late Early Permian microfossils from the Fossil Mountain Member of the Kaibab Formation in northwestern Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 26(6): 4.	
Beus, Stanl	ey S.; Cullo	m, C. R.; AND Turner, J. D.	
1989	21.267	Macrofaunal paleocommunities in the Kaibab Formation (Permian), eastern Grand Canyon region, Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 21(5): 57.	
Beus, Stanl	ey S.; Johns	son, Heidi; Nicholson, H. Tim; Winthrow, Brian; AND Dyer, Elizabeth	
1989	21.268	Circular orientation of invertebrate fossil shells in Permian Kaibab Formation, northwestern Arizona [ABSTRACT]. <i>In:</i> Twenty-third Annual Meeting, April 15, 1989, University of Nevada, Las Vegas. <i>Arizona-Nevada Academy of Science, Journal</i> , 24(1989 Proceedings Supplement): 46.	
Bigsby, Joh	n J.		
1878	21.6134	Flora and fauna of the Devonian and Carboniferous Periods. The genera and species arranged in tabular form, showing their horizons, recurrences, localities, and other facts. With large addenda (from recent acquisitions). London: John Van Voorst, 447 [448] pp. (Thesaurus Devonico-Carboniferus.) [Refer to abbreviations, p. 137. Colorado River (and Diamond Creek) noted, pp. 222, 360, 392; data from Newberry (1861).]	

Billingsley,	George H.,	AND Beus, Stanley S.	
1985	21.286	The Surprise Canyon Formation—an Upper Mississippian and Lower Pennsylvanian(?) rock unit in the Grand Canyon, Arizona. <i>U.S. Geological Survey, Bulletin 1605-A</i> , pp. A27-A33.	
1999	21.287	(EDS.) Geology of the Surprise Canyon Formation of the Grand Canyon, Arizona. <i>Museum of Northern Arizona, Bulletin 61</i> , 254 pp., Plates A1-A9 (Plate A1 is map in pocket). [Also an "Errata sheet" distributed by Billingsley in July 1999, [5] pp.]	
Billingsley,	George H., <i>i</i>	AND Breed, William J.	
1976	21.290	Mississippian nautiloids of the Grand Canyon. <i>Plateau</i> , 48: 67-70.	
Blair, Gerry	,		
1980	21.311	Fire at fossil cave. Lapidary Journal, 34: 690-695. [Rampart Cave.]	
Blair, J. Luk	«e		
2003	21.3880	The western Grand Canyon region, northwestern Arizona, portrayed in color-coded, hill-shaded 10-m-resolution digital elevation data. <i>Geology</i> , 31(7): cover, inside front cover.	
Blakey, Ron	nald C.		
1995	21.330	Tracks of time. Cañon Journal, 1(1): 48-53.	
Blazey, Edw	vard Brice		
1971	21.336	Fossil flora of the Mogollon Rim. Doctoral dissertation, Arizona State University, 169 pp. [Includes stratigraphic correlations with Grand Canyon.]	
1974	21.337	Fossil flora of the Mogollon Rim, central Arizona. <i>Palaeontographica</i> , 146(B): 1-20.	
Bloeser, Bo	nnie		
1979	21.341	Melamocyrillium [sic]; new acritarch genus from Kwagunt Formation (late Precambrian), Chuar Group, Grand Canyon Supergroup, Arizona [ABSTRACT]. American Association of Petroleum Geologists, Bulletin, 63: 420-421. [NOTE: "Melamocyrillium", nomen nudum; genus named formally with species descriptions as Melanocyrillium by Bloeser (1985, ITEM NO. 21.343).]	
1980	21.342	Structurally complex microfossils from shales of the late Precambrian Kwagunt Formation (Walcott Member, Chuar Group) of the eastern Grand Canyon, Arizona. Master's thesis, University of California at Los Angeles, 188 pp.	
1985	21.343	Melanocyrillium, a new genus of structurally complex late Proterozoic microfossils from the Kwagunt Formation (Chuar Group), Grand Canyon, Arizona. <i>Journal of Paleontology</i> , 59: 741-765.	

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Bloeser,	Bonnie;	Schopf, J. William;	Horody	/ski, Robert J	.; AND	Breed,	William J.
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1977 21.345 Chitinozoans from the late Precambrian Chuar Group of the Grand Canyon, Arizona. *Science*, 195: 676-679.

Bober, Katherine M. M.; Cace, Courtney R.; Matel, Theodore P.; Huegele, Indah B.; Boucher, Lisa D.; Hermsen, Elizabeth J.; Manchester, Steve R.; McCoy, Victoria E.; Santucci, Vincent L.; AND Tweet, Justin S.

2024 21.8531 An overview of Paleozoic paleobotanic resources documented in National Park Service areas [ABSTRACT]. *In:* Wilson, Jeffrey A. Mantilla, and Friedman, Matt (eds.), 12th North American Paleontological Convention, University of Michigan, 17-21 June 2024; Program with abstracts. *University of Michigan, Papers on Paleontology*, (39): 124-125.

Bohacs, Kevin M., AND Junium, Christopher K.

21.6211 Microbial mat sedimentary structures and their relation to organic-carbon burial in the Middle Neoproterozoic Chuar Group, Grand Canyon, Arizona, USA. *In:* Scheiber, Juergen, Bose, Pradip, Eriksson, P. G., Sarkar, Subir, Altermann, Wladyslaw, and Catuneanu, Octavian (eds.), *Atlas of microbial mat features preserved within the clastic rock record.* Amsterdam and New York: Elsevier, pp. 208-213. (Volume: Atlases in Geoscience, no. 2.)

Bottjer, D., AND Hagadorn, J. W.

2007 21.6352 Mat growth features. *In:* Scheiber, Juergen, Bose, Pradip, Eriksson, P. G., Sarkar, Subir, Altermann, Wladyslaw, and Catuneanu, Octavian (eds.), *Atlas of microbial mat features preserved within the clastic rock record.* Amsterdam and New York: Elsevier, pp. 53-71. (Volume: Atlases in Geoscience, no. 2.) [See Figure 4(a)-4, wrinkle structures and "*Kinneyia*" in fine-grained sandstones of the Chuar Group and Nankoweap Formation, Grand Canyon.]

Boudreau, Diana M.

2019 21.7966 Grand Canyon National Park : 2019 Paleontology Project After Action Report. [Grand Canyon, Arizona]: U.S. National Park Service, iii, 55 pp. [Page iii should be page 1.]

Boudreau, Diana M.; Colvin, Ronnie; AND Spamer, Earle

21.7834 The grand history of interpreting paleontological resources at Grand Canyon National Park [ABSTRACT]. Geological Society of America, Abstracts with Programs, 51(5):
Paper No. 96-13
(https://gsa.confex.com/gsa/2019AM/meetingapp.cqi/Paper/340594).

Boudreau, Diana M.; Santucci, Vincent L.; Widrig, Klara; Nebel, Mark; Miller, Anne; Colvin, Ronnie; Besom, Kim; AND Hyde, Colleen

2020 21.8039 Chapter 12. Grand Canyon National Park paleontological resources management and protection. *In:* Santucci, Vincent L., and Tweet, Justin S. (eds.), *Grand Canyon National Park : centennial paleontological resource inventory (non-sensitive version).*Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and

		Science, pp. 465-503. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103</i> .)	
2021	21.8263	Grand Canyon National Park paleontological resources management and protection. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. [unpaginated page facing 241], 241-266, A1-A2, B1 (pagination is contiguous). [Reset reprinting of Boudreau <i>et al.</i> (2020, ITEM NO. 21.8039).]	
Boureau, É	douard		
1964	21.355	Quatrième embranchement; Sphenophyta. <i>In:</i> Boureau, Édouard (ed.), <i>Traité de Paléobotanique</i> (publié sous la direction de Édouard Boureau). Tome III, Sphenophyta, Noeggerathiophyta. Paris: Masson et Cie., 544 pp. [See p. 64.] [In French.]	
1979	21.7228	Sur l'origine et la signification du "point noir" dans les organismes Précambriens des Richât de Mauritanie. <i>In: Comptes rendus du 104e Congrès National des Sociétés Savants : Bordeaux 1979 : Section des Sciences : Fascicule I, Paléobotanique.</i> Paris: Bibliothèque Nationale, pp. 7-28. (Volume includes masthead, "Ministère des Universités, Comité des Travaux Historiques et Scientifiques".) [See p. 10, reference to Grand Canyon occurrences, citing Schopf (1978, ITEM NO. 21.7227).] [In French.]	
Boureau, É	douard, AND	Doubinger, Jeanne	
1975	21.356	Pteridophylla (première partie). <i>In:</i> Boureau, Édouard (ed.), <i>Traité de Paléobotanique</i> (publié sous la direction de Édouard Boureau). Tome IV, Fascicule 2. Paris: Masson et Cie., 768 pp. [See pp. 200-201, 368, 419-426.] [In French.]	
Bowsher, A	. L.		
1954	21.367	The stratigraphic significance of a crinoid from the Redwall limestone of Arizona. <i>Journal of Paleontology</i> , 28: 113-116.	
Bowyer, F.;	Wood, R. A	.; AND Poulton, S. W.	
2017	21.7363	Controls on the evolution of Ediacaran metazoan ecosystems: A redox perspective. <i>Geobiology</i> , 15(4) (July): 516-551 + Supporting Information (Excel file) accessible online at onlinelibrary.wiley.com/doi/10.1111/gbi.12232/abstract . [Includes notes of Chuar Group of Grand Canyon.]	
Boyd, D. W	., AND Newe	II, N. D.	
1978	21.369	Unusual pelecypods from the Permian of Arizona and New Mexico [ABSTRACT]. Geological Society of America, Abstracts with Programs, 10: 97.	
Bubnoff, Se	erge von		
1956	21.8216	Einführung in die Erdegeschichte. Berlin: Akademie-Verlag, 808 pp. [See brief notes of Precambrian fossils and rocks in Grand Canyon, pp. 75, 77, 93.] [In German.]	

Bradbury, 3	Bradbury, J. Platt, AND Blair, Will N.				
1979	21.371	Paleoecology of the upper Miocene Hualapai Limestone Member of the Muddy Creek Formation, northwestern Arizona. <i>In:</i> Newman, Gary W., and Goode, Harry D. (eds.), <i>Basin and Range Symposium and Great Basin Field Conference.</i> Denver: Rocky Mountain Association of Geologists, pp. 293-303.			
Braddy, Sir	mon J.				
1995	21.6914	The ichnotaxonomy of the invertebrate trackways of the Coconino Sandstone (Lower Permian), northern Arizona. <i>In:</i> Lucas, Spencer G., and Heckert, Andrew B. (eds.), Early Permian footprints and facies. <i>New Mexico Museum of Natural History and Science, Bulletin 6</i> , pp. 219-224.			
Brady, L. F.	. [Brady, Lio	nel F.]			
1939	21.376	Tracks in the Coconino sandstone compared with those of small living arthropods. <i>Plateau</i> , 12: 32-34.			
1947	21.377	Invertebrate tracks from the Coconino sandstone of northern Arizona. <i>Journal of Paleontology</i> , 21: 466-472.			
1949	21.378	Oniscoidichnus, new name for Isopodichnus Brady 1947 not Bornemann 1889. Journal of Paleontology, 23: 573. [See also adjoining article (but which does not pertain to Grand Canyon strata): Hans, Otto, 1949, Possibility of synonymous homonyms, Journal of Paleontology, 23: 573-574.]			
1955	21.379	Possible nautiloid mandibles from the Permian of Arizona. <i>Journal of Paleontology</i> , 29: 102-104, plate 21.			
1959	21.381	A new area of the Kaibab limestone with silicified fossils. <i>Plateau</i> , 31: 88-89.			
1961	21.382	A new species of <i>Palaeohelcura</i> Gilmore from the Permian of northern Arizona. <i>Journal of Paleontology</i> , 35: 201-202.			
Brakenridg	e, G. R.				
1978	21.384	Evidence for a cold, dry full-glacial climate in the American Southwest. <i>Quaternary Research</i> , 9: 22-40.			
Brand, Leo	nard R.				
1977	21.385	Coconino Sandstone (Permian) fossil vertebrate footprints; paleoecological implications [ABSTRACT]. <i>American Association of Petroleum Geologists, Bulletin</i> , 61: 771.			
1978	21.386	Footprints in the Grand Canyon. <i>Origins</i> , 5(2): 64-82.			

1979	21.387	Field and laboratory studies on the Coconino Sandstone (Permian) vertebrate footprints and their paleoecological implications. <i>In:</i> Sarjeant, W. A. S. (ed.), <i>et al.</i> , Trace fossils. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 28(1/2): 25-38.	
1989	21.388	Coconino Sandstone (Permian) fossil footprints: The influence of the depositing medium on print characteristics [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 21(6): A111.	
1992	21.389	Reply [to comments by Martin G. Lockley (1992) and David B. Loope (1992) on "Fossil vertebrate footprints in the Coconino Sandstone (Permian) of northern Arizona: Evidence for underwater origin" by Brand and Tang (1991).] <i>Geology</i> , 20: 668-669, with combined references cited, pp. 669-670.	
1996	21.390	Variations in salamander trackways resulting from substrate differences. <i>Journal of Paleontology</i> , 70(6): 1004-1010.	
Brand, Leor	nard R., AND	Florence, James	
1982	21.3914	Stratigraphic distribution of vertebrate fossil footprints compared with body fossils. <i>Origins</i> , 9(2): front cover, 67-74, back cover.	
Brand, Leor	nard R., AND	Kramer, J.	
1996	21.4456	Underprints of vertebrate and invertebrate trackways in the Permian Coconino Sandstone in Arizona. <i>Ichnos</i> , 4(3): 225-230.	
Brand, Leor	nard R., AND	Tang, Thu	
1991	21.391	Fossil vertebrate footprints in the Coconino Sandstone (Permian) of northern Arizona: Evidence for underwater origin. <i>Geology</i> , 19: 1201-1204 + Appendix 1 as "Supplementary Data 9135" [Data Repository item]. [See also comments by Martin G. Lockley (1992) and David B. Loope (1992), and reply by Brand (1992).]	
Brassell, S.	C.		
1989	21.393	Proterozoic biomarkers: Potential and significance [ABSTRACT]. 28th International Geological Congress, Abstracts, 1: 196.	
Braver, Gra	ice		
2024	21.8573	High-precision handheld phtogrammetry integration for non-invasive paleontological and geological studies [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 56(5), abstract 213-4 (https://doi.org/10.1130/abs/2024AM-401587). [[A]pplilcations include studies conducted at Grand Canyon-Parashant National Monument where a trace-fossil covered rock was located" (specific locale not indicated).]	
Breed, Willi	iam J.		
1967	21.401	Arizona's oldest amphibian. <i>Plateau</i> , 40(2) (Fall): 68-71.	

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1969 21.404 The discovery of orthocone nautiloids in the Redwall Limestone—Marble Canyon,

1303	21.101	Arizona. <i>In:</i> Baars, Donald L. (ed.), Geology and natural history of the Grand Canyon region. <i>Four Corners Geological Society, 5th Field Conference, Guidebook</i> , p. 134.
Breed, Will	iam J., AND I	Foster, B. T.
1974	21.412	(WITH DRAWINGS BY Pamela Lungé) Paleozoic fossils of the Grand Canyon. <i>In:</i> Breed, William J., and Roat, Evelyn C. (eds.), <i>Geology of the Grand Canyon.</i> Flagstaff, Arizona: Museum of Northern Arizona, and Grand Canyon Natural History Association, pp. 65-75.
Breithaupt,	Brent H., A	ND Matthews, Neffra A.
2010	21.7696	An Early Jurassic desert ichnofauna: Paleontological resources in the Vermilion Cliffs National Monument and Paria Canyon-Vermilion Cliffs Wilderness [ABSTRACT]. <i>In:</i> Program and abstracts: 70th Anniversary Meeting, Society of Vertebrate Paleontology: David L. Lawrence Convention Center, East Lobby and Westin Convention Center Pittsburgh, Pittsburgh, Pennsylvania USA, October 10-13, 2010, p. 64A.
2011	21.6026	Paleontological resources in the Vermilion Cliffs National Monument and Paria Canyon-Vermilion Cliffs Wilderness: The use of photogrammetric ichnology in the 21st century [ABSTRACT]. <i>In:</i> Olstad, Tyra, and Aase, Arivd K. (eds.), Proceedings of the Ninth Conference on Fossil Resources. <i>Brigham Young University, Geology Studies</i> , 49(A): 5.
Brezinski, I	David K.	
1991	21.421	Permian trilobites from the San Andres Formation, New Mexico, and their relationship to species from the Kaibab Formation of Arizona. <i>Journal of Paleontology</i> , 65(3): 480-484.
Briggs, Der	ek E. G., AND	Rolfe, W. D. Ian
1983	21.423	A giant arthropod trackway from the Lower Mississippian of Pennsylvania. <i>Journal of Paleontology</i> , 57: 377-390.
Brinkerhoff	f, Riley	
2021	21.8252	Utah Geologic Association President's message. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , p. viii.
Brocks, Joc	hen J., AND	Summons, Roger E.
2004	21.6340	Sedimentary hydrocarbons, biomarkers for early life. <i>In:</i> Schlesinger, W. H. (ed.), <i>Treatise on geochemistry, Volume 8 : Biogeochemistry.</i> Amsterdam: Elsevier, pp. 63-115. [See "Biomarkers in the proterozoic (0.54-2.5 Ga)", pp. 101-102), which includes Chuar Group, Grand Canyon.]

Brocks, Joch	nen J.; Buic	k, Roger; Summons, Roger E.; AND Logan, Graham A.					
2003	21.7090	A reconstruction of Archean biological diversity based on molecular fossils from the 2.78 to 2.45 billion-year-old Mount Bruce supergroup, Hamersley Basin, Western Australia. <i>Geochimica et Cosmochimica Acta</i> , 67(22): 4321-4335. [Chuar Group of Grand Canyon noticed twice, p. 4324.]					
Brocks, Joch	nen J.; Jarro	ett, Amber J. M.; Sirantoine, Eva; Hallmann, Christian; Hoshino, Yosuke; AND Liyanage, Tharika					
2017	21.7574	The rise of algae in Cryogenian oceans and the emergence of animals. <i>Nature</i> (London), 548 (August 31): 578-581 + Supplementary Discussion online (doi:10.1038/nature23457), 30 pp. [Includes Chuar Group of Grand Canyon.]					
Brocks, Joch	nen J.; Jarro	ett, Amber J. M.; Sirantoine, Eva; Kenig, Fabien; Moczydłowska, Małgorzata; AND Porter, Susannah M.					
2015	21.6807	Early sponges and toxic protists? Cryostane, a new biomarker antedating Sturtian Snowball Earth [ABSTRACT]. <i>In:</i> 2015 Goldschmidt Conference, Prague, CZ, August 16-21, 2015: abstracts, p. 395. [Includes Chuar Group of Grand Canyon.]					
2016	21.8098	Early sponges and toxic protists: Cryostane, a new biomarker antedating Sturtian Snowball Earth [ABSTRACT]. <i>In:</i> 35th International Geological Congress, Abstracts, Paper No. 3132. [Includes Chuar Group of Grand Canyon.]					
Brocks, Joch	nen J.; Jarro	ett, Amber J. M.; Sirantoine, Eva; Kenig, Fabien; Moczydłowska, Małgorzata; Porter, Susannah M.; AND Hope, J.					
2016	21.8099	Early sponges and toxic protists: possible sources of crystane, an age diagnostic biomarker antedating Sturtian Snowball Earth. <i>Geobiology</i> , 14(2) (March): 129-149. [Includes Chuar Group of Grand Canyon.]					
Brower, J. C	: .						
1969	21.432	Crinoids. <i>In:</i> McKee, E. D., and Gutschick, R. C., History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , pp. 475-543.					
Bruns, R. H.							
1973	21.453	Conodonts from the Permian Kaibab and Toroweap Formations in northern Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 5: 303-304.					
Buick, Roge	r, and Knol	l, Andrew H.					
1999	21.4713	Acritarchs and microfossils from the Mesoproterozoic Bangemall Group, northwestern Australia. <i>Journal of Paleontology</i> , 73(5): 744-764. [See notice of Chuar Group of Grand Canyon, p. 749.]					

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Burdick, Cli	fford L.						
1966	21.468	Microflora of the Grand Canyon. <i>Creation Research Society Annual</i> , 3(1) (May): 38-50.					
1972	21.469	Progress report on Grand Canyon palynology. <i>Creation Research Society Quarterly</i> , 9(1): 25-30.					
1981	21.8618	Pine pollen in the Grand Canyon. Bible-Science Newsletter, (June): 1.					
1982	21.3911	Re: Chadwick: Precambrian Pollen in the Grand Canyon—A Reexamination (Origins 8: 7-12). <i>In:</i> Reactions [SECTION]. <i>Origins</i> , 9(1): 7-9. [Comment on Chadwick (1981, ITEM NO. 21.528).]					
Burrillo, R.	E.						
2018	21.7666	A very old horn; the Grand Canyon and greater Bears Ears as a continuous cultural landscape. <i>Colorado Plateau Advocate</i> , (Fall/Winter): 16-20. [Harrington's mountain goat.]					
Burtsev, G.I	M.; Zhegallo	, E. A.; Ragozin, A. L.; Luchinina, V. A.; Makulbekov, N.M.; Durante, M. B.; Luvsantseden, U.; Dobruskin, I. A.; Soda, J.; AND Ichinnorov, N. [Братцева, Г. М.; Жегалло, Е. А.; Рагозина, А. Л.; Лучинина, В. А.; Макулбеков, Н. М.; Дуранте, М. В.; Лувсанцэдэн, У.; Добрускина, И. А.; Содов, Ж.; Ичинноров, Н.]					
2005	21.5823	Палеонтология Монголии. Флора Фанерозоя. [Paleontologiya Mongolii. Flora Fanerozoya.] [Paleontology of Mongolia. Phanerozoic flora.] Moskva: ГЕОС [GEOS], 355 рр. (Палеонтология Монголии [SERIES].) [See "Chuaria Walcott, 1899 (Ch. circularis Walcott, 1899 emend. Vidal et Ford, 1985; верхний докемвриы, Большой каньон, США)" [Chuaria Walcott, 1899 (Ch. circularis Walcott, 1899 emend. Vidal et Ford, 1985; verchniy dokemvriy, Bolshoi kanion, SShA)] [Chuaria Walcott, 1899 (Ch. circularis Walcott, 1899 emend. Vidal et Ford, 1985; Upper Precambrian, Grand Canyon, USA)].] [In Russian.]					
Butterfield,	Nicholas J.;	Knoll, Andrew H.; AND Swett, Kenne					
1994	21.480	Paleobiology of the Neoproterozoic Svanbergfjellet Formation, Spitsbergen. <i>Fossils and Strata</i> , (34): 1-84. [Includes notes of Grand Canyon.]					

Calhoun, Jeanne A.

2021 21.8251 Forward [sic]; paleontology of Grand Canyon National Park. *In:* Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological

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resource inventory; a century of fossil discovery and research. *Utah Geological Association, Special Publication 1*, p. vi.

Campos, Pa	auia r., Wille	ersley, Eske; Mead, Jim I.; Hofreiter, Michael; AND Gilbert, M. Thomas				
2010	21.5308	Molecular identification of the extinct mountain goat, <i>Oreamnos harringtoni</i> (Bovidae) <i>Boreas</i> , 39(1): 18-23.				
Canright, J	. E.					
1970	21.506	Spores and associated macrofossils from the Devonian of Arizona. <i>In: Geoscience and man.</i> Baton Rouge, Louisiana: Louisiana State University, School of Geoscience, pp. 83-88.				
1978	21.507	Palynomorph assemblages from the Supai Formation of Arizona as indicators of ag [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 10: 98.				
Cao, Fang;	Duan, Chen	gua; AND Zhang, Luyi [曹 劳; 段承华; 张录易]				
1995	21.8222	陕西宁强梅树村阶瓶状徽化石的发现及其意义 [Shǎnxī níng qiáng méi shù cūn jiē píng zhuàng wēi huàshí de fǎ xiàn jí qí yìyì]. Discovery of Meishucunian vase-shaped microfossils in Ningqiang, Shaanxi and its significances. 地质论评 [dìzhí lùn píng] / Geological Review (Beijing), 41(4) (July): 355-362, 2 plates. [See in section 5, "古生物学意义" [gǔshēngwù xué yìyì] [Paleontological Significance] (p. 359), notes on microfossils of the Chuar Group, Grand Canyon.] [In Chinese, with bilingual titles and abstract.]				
Carnegie I	nstitution of	Washington				
1938	21.512	Extremely old fossil. Pan-American Geologist, 70: 151-152.				
1938	21.513	Rarity of pre-Cambric fossils. Pan-American Geologist, 70: 228-229.				
Carnegie I	nstitution of	Washington, Exhibition Committee				
1937	21.514	The annual exhibition representing research activities of Carnegie Institution of Washington. <i>Scientific Monthly</i> , 44 (June): 509-518. [See "Recent Cave Explorations in the Southwest", pp. 514-515; includes mention of Rampart Cave and Muav Cave.]				
Carpenter,	Frank M.					
1927	21.516	A fossil insect from the Lower Permian of the Grand Canyon. <i>U.S. National Museum, Proceedings</i> , 71(article 23), 4 pp.				
1928	21.517	A new protodonatan from the Grand Canyon. <i>Psyche</i> , 35: 186-190, Plate 5. [<i>Typus whitei</i> , new species; holotype from the Hermit Shale, Bright Angel Trail.]				

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	Mary C.				
1999	21.3587	Late Pleistocene vertebrate communities of the lower Grand Canyon: Rampart and Muav Caves [ABSTRACT]. <i>In:</i> Abstracts of papers; Fifty-ninth Annual Meeting, Society of Vertebrate Paleontology, Adams Mark Hotel, Denver, Colorado, October 20-23, 1999. <i>Journal of Vertebrate Paleontology</i> , 19(3, Supplement): 36A.			
2002	21.3805	Vulpes vulpes (red fox) remains from Stanton's Cave, Arizona: first known record from the Grand Canyon [ABSTRACT]. Journal of Vertebrate Paleontology, 22(3, Supplement): 41A.			
2003	21.4440	Late Pleistocene Aves, Chiroptera, Perissodactyla, and Artiodactyla from Rampart Cave, Grand Canyon, Arizona. Master's thesis, Northern Arizona University, 333 pp.			
rpenter,	Mary C., AND	Mead, Jim I.			
2000	21.3664	A mummified canid from a cave in the Grand Canyon, Arizona [ABSTRACT]. <i>In:</i> Abstracts of papers; Sixtieth Annual Meeting, Society of Vertebrate Paleontology, Fiesta Americana Reforma Hotel, Mexico City, Mexico, October 25-28, 2000. <i>Journal of Vertebrate Paleontology</i> , 20(3, Supplement): 33A.			
rter, Joh	n L.; Brezins	ski, David K.; Kollar, Albert D.; AND Dutro, J. Thomas, Jr.			
2014	21.7252	Brachiopoda taxonomy and biostratigraphy of the Redwall Limestone (Lower			

1898	21.5748	The development and geological relations of the vertebrates. <i>Journal of Geology</i> , 6(4) (May/June): 393-416. [See p. 394: "The earliest remains of fishes known are from the Lower Ordivician [<i>sic</i>] rocks of the Grand Canyon region of the United States. These are the very imperfectly preserved remains of what seem to be scales and bones of fishes whose affinities cannot be made out from the material." (no further note of Grand Canyon)]
1915	21.523	The Permo-Carboniferous red beds of North America and their vertebrate fauna. Carnegie Institution of Washington, Publication 207, 176 pp. [See pp. 74, 75.]
1919	21.524	The environment of vertebrate life in the late Paleozoic in North America; a paleogeographic study. <i>Carnegie Institution of Washington, Publication 283</i> , 273 pp. [See pp. 146-153.]

Case, E. C. [Case, Ermine Cowles]

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Case, Zach	ery T., AND N	lielson, R. LaRell
2020	21.8051	Stratigraphic, depositional environmental and paleontologic analysis of the Harrisburg Member of the Kaibab Formation in north central Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 52(1): doi:10.1130/abs/2020SC-343754. [NOTE: The 2020 GSA section meetings, scheduled for the earlier part of the year, all were cancelled due to the COVID-19 pandemic, although the abstracts volumes were published.]
Cavalier-Sr	nith, T.	
2002	21.8213	The neomuran origin of archaebacteria, the negibacterial root of the universal tree and bacterial megaclassification. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 52: 7-76. [See p. 37, brief discussion of eukaryotic fossils (from Grand Canyon) and "plausibly eukaryotic fossils" in the Kwagunt Formation, Grand Canyon.]
Chadwick,	Arthur V.	
1981	21.528	Precambrian pollen in the Grand Canyon—a reexamination. <i>Origins</i> , 8(1): cover, 7-12. [See also comments by Clifford L. Burdick and by W. H. Rusch, Sr., <i>Origins</i> , 9(1): 7-9 (1982, ITEM NOS. 21.3911, 21.3912, respectively).]
Chadwick,	Arthur V.; D	eBord, P.; AND Fisk, L. H.
1973	21.529	Grand Canyon palynology—a reply. Creation Research Society Quarterly, 9(4): 238.
Chaloner, V	W. G., AND La	acey, W. S.
1973	21.533	The distribution of late Paleozoic floras. <i>In:</i> Hughes, N. F. (ed.), Organisms and continents through time; methods of assessing relationships between past and present biologic distributions and the positions of continents; a symposium volume of 23 papers. <i>Special Papers in Palaeontology</i> (Palaeontological Association), no. 12, pp. 271-289.
Chamberla	in, C. Kent	
1972	21.534	Evolution of the Permian trilobite Anisopyge. Journal of Paleontology, 46: 503-508.
Chambers,	Carol L.; Do	ucett, Richard; AND Mikesic, David G.
2005	21.4108	Long-term cave roosting and diet of spotted bats (<i>Euderma maculatum</i>) in northern Arizona as indicated by stable isotopes from mummified remains and live bats [ABSTRACT]. <i>In:</i> 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. 34.

Chambers,	Carol L.; The	omas, Shawn; Santucci, Vincent L.; Oswarld, Hattie; AND Ballensky, Jason			
2024	21.8475	Ancient bat remains illustrate the role of caves as habitat anchors in the temporarlly dynamic landscape of the Grand Canyon. <i>Parks Stewardship Forum</i> , 40(1): 39-52. [Features Double Bopper Cave and Leandras Cave.]			
Chambers	Consultants a	and Planners			
1980	21.7656	Paleontological resource inventory of the Lower Colorado River region: final report. Stanton, California: Chambers Consultants and Planners, for U.S. Bureau of Reclamation, 98 pp. + appendices. (Sponsored in part by Water and Power Resources Service, Boulder City, Nevada.) [Coverage divided into regions: Grand Canyon; Lake Mead; Davis Dam to International Boundary; and Salton Sea.]			
Chameroy,	Eric; Rowla	nd, Stephen; AND Caputo, Marlo			
2022 21.8416 Hidden in plain sight: Revisiting some known tetrapod trackways of the Formation (Late Pennsylvanian) of Grand Canyon National Park, Arizon [ABSTRACT]. Geological Society of America, Abstracts with Programs, 5-22-4, https://doi.org/10.1130/abs/2022CD-374002.					
2023	21.8511	Photogrammetric documentation of some known, yet undescribed, late Pennsylvania (Wescogame Formation) tetrapod trackways of Grand Canyon National Park, Arizona USA [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 55(4): abstract 36-14 (https://doi.org/10.1130/abs/2023CD-387397). ["All three trackway appear to belong to the ichnogenus cf. <i>Amphisauropus</i> isp. with likely seymouriamorph anamniote trackmakers. All three trackways are preserved in eolia sandstone, which is the dominant lithology of the Wescogame."]			
Chiu, Chun	Heng; Igleh	neart, Ian; AND Lofgren, Donald			
2020	21.8042	Circular structures from the Precambrian Bass Formation in Grand Canyon National Park—biogenic or non-biogenic? <i>In:</i> Miller, David M. (ed.), <i>Changing facies : the 2020 Desert Symposium field guide and proceedings.</i> [No place]: Desert Symposium, Inc., pp. 171-178.			
Chronic, Ha	alka				
1952	21.569	Molluscan fauna from the Permian Kaibab formation, Walnut Canyon, Arizona. Geological Society of America, Bulletin, 63: 95-165.			
1953	21.570	Molluscan fauna from the Permian Kaibab formation, Walnut Canyon, Arizona. Doctoral dissertation, Columbia University.			
Chure, Dan					
2002	21.6236	Hindsight makes better foresight: Paleontology as a new tool for conservation. <i>Park Science</i> (U.S. National Park Service), 21(2) (Spring): 43-46. [See Figure 2, p. 45, photo of fossil condor skull from Grand Canyon.]			

Ciampaglio	, Charles N.;	Babcock, Loren E.; Wellman, Crrie L.; York, Angela R.; AND Brunswick, Holly K.				
2006	21.7789	Phylogenetic affinities and taphonomy of <i>Brooksella</i> from the Cambrian of Georgia and Alabama, USA. <i>Palaeoworld</i> , 15: 256-265. [See p. 263, remarks on <i>Brooksella canyonensis</i> Bassler, from the Neoproterozoic of Grand Canyon. The authors "provisionally agree" with Glaessner's (1969) interpretation as a trace fossil, <i>Asterosoma? canyonensis</i> .]				
Cinnamon,	Steven K.					
1987	21.573	Prehistoric vegetation changes at Wupatki National Monument, Coconino County, Arizona [ABSTRACT]. <i>Arizona-Nevada Academy of Science, Journal</i> , 22 (1987 Proceedings Supplement): 17. [Of Quaternary regional interest.]				
Cinnamon,	Steven K., A	ND Hevly, Richard H.				
1988	21.574	Late Wisconsin macroscopic remains of pinyon pine on the southern Colorado Plateau, Arizona. <i>Current Research in the Pleistocene</i> , 5: 47-48.				
Cisne, J. L.						
1971	21.575	Paleoecology of trilobites of the Kaibab limestone (Permian) in Arizona, Utah, and Nevada. <i>Journal of Paleontology</i> , 45: 525-533.				
Clark, David	d L.					
1979	21.578	Permian-Triassic boundary: Great Basin conodont perspective. <i>Brigham Young University, Geology Studies</i> , 26(1): 85-90.				
Clark, David	d L., and Beh	nken, F. H.				
1971	21.579	Conodonts and biostratigraphy of the Permian. <i>In:</i> Sweet, W. C., and Bergstrom, S. M. (eds.), Symposium on conodont biostratigraphy. <i>Geological Society of America, Memoir 127</i> , pp. 403-407.				
Clark, F. E.;	O'Deen, W.	A.; AND Belau, D. E.				
1974	21.580	Carbon, nitrogen, and ¹⁵ N content of fossil and modern dung from the lower Grand Canyon. <i>Arizona Academy of Science, Journal</i> , 9: 95-96.				
Clark, Richa	ard Collins					
1977	21.588	Plant taxa in late Pleistocene artiodactyl fecal pellets, Rampart Cave, Arizona. Master's thesis, Colorado State University, 78 pp.				
Clendenon,	Cedric, AND	Brand, Leonard				
2024	21.8538	On the synonymization of <i>Paleohelcura tridactyla</i> with <i>Stiaria intermedia</i> : Reanalysis of ichnotaxobases [ABSTRACT]. <i>In: ICHNIA 2024—The 5th International Congress on</i>				

		Ichnology: celebrating one ichnology!: Florianópolis, Brazil, April 14-19th, 2024: abstract book, p. 66. [Paleohelcura tridactyla Gilmore, 1926 (type material from Grand Canyon), is proposed to be a junior synonym of Stiaria intermedia Smith, 1909.]			
2024	21.8539	Is a neotype needed for <i>Diplodichnus biformis</i> Brady, 1947? [ABSTRACT]. <i>In: ICHNIA</i> 2024—The 5th International Congress on Ichnology: celebrating one ichnology!: Florianópolis, Brazil, April 14-19th, 2024: abstract book, pp. 67-68. [Type material from the Coconino Sandstone of Arizona.]			
2024	21.8540	Trackways of scorpions, tarantulas, and crayfish produced experimentally in subaeria and subaqueous conditions compared with <i>Paleohelcura</i> and <i>Octopodichnus</i> [ABSTRACT]. <i>In: ICHNIA 2024—The 5th International Congress on Ichnology: celebrating one ichnology! : Florianópolis, Brazil, April 14-19th, 2024 : abstract book pp. 69-71. [Relates to ichnofossils of the Coconino Sandstone. Creationist perspective; see also publications by Brand.]</i>			
Clevenger,	Joe, AND Del	hler, Carol			
2023	21.8507	Newly identified microbialite reefs of the Grand Canyon Tonto Group [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 55(6): abstract 112-13 (https://doi.org/10.1130/abs/2023AM-392192). [Microbial patch reefs in the socalled "rusty-brown dolostones" of intermittent exposure throughout the Colorado River corridor.]			
Cloud, Pres	ton E., Jr. [C	Cloud, Preston]			
1960	21.6677	Gas as a sedimentary and diagenetic agent. <i>American Journal of Science</i> , 258-A (Bradley Volume): 35-45, Plates 1-3. [See pp. 43-44, remarks on supposed jellyfish fossils from the Grand Canyon Precambrian.]			
1968	21.594	Pre-metazoan evolution and the origins of the Metazoa. <i>In:</i> Drake, E. T. (ed.), <i>Evolution and environment.</i> New Haven, Connecticut: Yale University Press, pp. 1-72.			
1973	21.4652	Pseudofossils: A plea for caution. <i>Geology</i> , 1(3): 123-127.			
1983	21.596	Early biogeologic history: the emergence of a paradigm. <i>In:</i> Schopf, J. William (ed.), <i>Earth's earliest biosphere : its origin and evolution.</i> Princeton, New Jersey: Princeton University Press, pp. 14-31.			
Coats, Larry	1				
1996	21.600	Mid-Wisconsinan glacial plant communities of the eastern Grand Canyon, Arizona. AMQUA 1996; program and abstracts of the 14th biennial meeting; Global warming, interglacials, interstadials, climatic optima, and other events. <i>American Quaternary Association, National Conference, Program and Abstracts</i> , 14: 71.			
1996	21.4538	The paleoecological record of the eastern Grand Canyon prior to the last glacial maximum [ABSTRACT]. <i>In:</i> Selected abstracts from the 1996 National Speleological Society National Convention in Salida, Colorado. <i>Journal of Cave and Karst Studies</i> , (December): 213.			

1997	21.3852	Middle to late Wisconsinan vegetation change at Little Nankoweap, Grand Canyon National Park, Arizona. Master's thesis, Northern Arizona University, 139 pp.					
2003	21.8103	Middle to late Wisconsinan vegetation change at Little Nankoweap, Grand Canyon National Park, Arizona. <i>From:</i> Cave Research Foundation Activities 1998 [SECTION]. <i>In:</i> Winkler, Elizabeth, and Kambesis, Patricia, <i>Cave Research Foundation: annual reports 1998-2000.</i> Dayton, Ohio: Cave Books, pp. 37-38.					
Coats, Larr	y L.; Cole, K	enneth L.; AND Mead, Jim I.					
2008	2008 21.5016 50,000 years of vegetation and climate history on the Colorado Plateau, Utah and Arizona, USA. <i>Quaternary Research</i> , 70(2) (September): 322-338.						
Coats, Larr	y L.; Cole, K	enneth L.; Mead, Jim I.; Cannella, John A.; AND Fisher, Jessa					
2003	21.3916 Middle Wisconsinan vegetation on the Colorado Plateau, Utah and Arizona, USE Evidence for glacial-age monsoons? [ABSTRACT]. In: 16th INQUA Congress: pwith abstracts, July 23-30, 2003, Reno Hilton Hotel and Conference Center, R. Nevada, USA. Reno, Nevada: Desert Research Institute, p. 164. [Internation for Quaternary Research.]						
Coats, Larr	y L.; Mead, 3	lim I.; AND Anderson, R. Scott					
2003	21.3917	Late Pleistocene life on the Colorado Plateau: Faunal and floral evidence from the national parks, Arizona and Utah [ABSTRACT]. <i>In:</i> 16th INQUA Congress: programs with abstracts, July 23-30, 2003, Reno Hilton Hotel and Conference Center, Reno, Nevada, USA. Reno, Nevada: Desert Research Institute, p. 190. [International Union for Quaternary Research.]					
Cockerell, 1	Г. D. A. [Сос	kerell, Theodore Dru Alison]					
1927	21.602	A large form of <i>Oreohelix yavapai</i> in the Grand Canyon. <i>The Nautilus</i> (Philadelphia), 40(3): 101. [Subfossils.]					
Codrington	, Stephen						
2005	21.5379	Planet geography. Sydney, Australia: Solid Star Press, 3rd ed., 279 pp. [Grand Canyon, pp. 161, 254, 618.]					
Coffin, Har	old						
1975	21.8129	The fossil record attests Creation; the sudden appearance in the fossil record of complex animals disproves the theory of progressive evolution. <i>Advent Review and Sabbath Herald</i> (Seventh-day Adventists, Washington, D.C.), 152(16) (April 17): 8-10. [Text begins with remarks on Grand Canyon.]					
Colbert, Ed	win H.						
1954	21.605	Paleontology of the Museum of Northern Arizona. <i>Plateau</i> , 26: 89-94.					

Cole, Kennet	:h Lee	
1978	21.610	A late Pleistocene gradient analysis in the Grand Canyon, Arizona [ABSTRACT]. American Quaternary Association, National Conference, Abstracts, no. 5, p. 194.
1981	21.611	Late Quaternary environments in the eastern Grand Canyon: Vegetational gradients over the last 25,000 years. Doctoral dissertation, University of Arizona, 206 pp.
1982	21.613	Cliff profile development in the eastern Grand Canyon and rates of cliff retreat as inferred by fossil <i>Neotoma</i> middens [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 14(4): 156.
1982	21.614	Late Quaternary zonation of vegetation in the eastern Grand Canyon <i>Pinus</i> , <i>Juniperus</i> , <i>Pseudotsuga</i> , <i>Zea mays</i> . <i>Science</i> , 217(4565) (September 17): cover, contents, 1142-1145.
1985	21.615	Past rates of change, species richness, and a model of vegetational inertia in the Grand Canyon, Arizona. <i>American Naturalist</i> , 125(2): 289-303.
1990	21.616	Reconstruction of past desert vegetation along the Colorado River using packrat middens. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 76: 349-366.
1990	21.617	Late Quaternary vegetation gradients through the Grand Canyon. <i>In:</i> Betancourt, Julio L., Van Devender, Thomas R., and Martin, Paul S. (eds.), <i>Packrat middens: the last 40,000 years of biotic change.</i> Tucson: University of Arizona Press, pp. 240-258.
1992	21.618	Late Quaternary vegetation of the Grand Canyon reconstructed from fossil packrat middens. <i>In:</i> Santucci, Vincent L. (ed.), <i>National Park Service paleontological research abstract volume : presented at the 3rd Fossil Resources Conference, Fossil Butte National Monument, Wyoming, September 1992</i> , p. 41.
1993	21.6320	Late Quaternary vegetation of the Grand Canyon reconstructed from fossil packrat middens [ABSTRACT]. <i>In:</i> Santucci, Vincent L. (ed.), National Park Service paleontological research, Volume 1. <i>U.S. National Park Service, Technical Report NPS/NRPEFO/NRTR-93/11</i> , p. 37.
2005	21.4110	Integrating data on historic vegetation change between the San Francisco Peaks and Grand Canyon [ABSTRACT]. <i>In:</i> 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. 37.
2008	21.4539	Prehistoric packrats piled up clues to climate change. <i>U.S. Geological Survey, Fact Sheet 2008-3053</i> , 2 pp.
2010	21.5301	Vegetation response to early Holocene warming as an analog for current and future changes. <i>Conservation Biology</i> , 24(1) (February): 29-37.
Cole, Kennet	h L., AND A	nderson, R. Scott
2015	21.6860	The last 30,000 years of climate and vegetation change across northern Arizona reconstructed from high elevation fossil records in the Grand Canyon [ABSTRACT]. <i>In:</i> 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. 19.

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Cole, Ker	neth L.,	AND	Arundel	, Samantha	т.
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2004	21.4582	Carbon 13 isotopic records of fossil packrat pellets and elevational movements of Utah agave reveal Younger Dryas cold period in Grand Canyon, Arizona [ABSTRACT]. Geological Society of America, Abstracts with Programs, 36(5): 514.
2005	21.4158	Carbon isotopes from fossil packrat pellets and elevational movements of Utah agave plants reveal the Younger Dryas cold period in Grand Canyon, Arizona. <i>Geology</i> , 33(9): 713-716.

Cole, Kenneth L., AND Davis, Owen K.

2005	21.4109	Fossil plant remains in Colorado Plateau caves [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. 36.

Cole, Kenneth L., AND Mayer, Larry

1982	21.619	Use of packrat middens to determine rates of cliff retreat in the eastern Grand
		Canyon, Arizona. Geology, 10: 597-599. [See also comments by Louise D. Hose
		(1983, ITEM NO. 11: 314), Jon F. Haman (1983, ITEM NO. 11: 315), and Bernard J.
		Smith (1983, ITEM NO. 11: 494), each accompanied by reply by Cole and Mayer (pp.
		314-315, 316, 494-495 (ITEM NO. 21.6854).]

Cole, Kenneth L., AND Mayer, Larry

1982	21.6854	[Replies to comments by Louise D. Hose, Jon F. Haman, and Bernard J. Smith,
		regarding "Use of packrat middens to determine rates of cliff retreat in the eastern
		Grand Canyon, Arizona."] <i>Geology</i> , 10: 314-316, 494-495.

Cole, Kenneth L., AND Mead, Jim I.

1981	21.620	Late Quaternary animal remains from packrat middens in the eastern Grand Canyon,
		Arizona. Arizona-Nevada Academy of Science, Journal, 16: 24-25.

Cole, Kenneth L.; Arundel, Samantha T.; Cannella, J.; Fisher, J.; AND Spaulding, W. G.

2002	21.6583	Holocene migrations of Creosote bush and pinyon pines in the western United States:
		Implications for the next century [ABSTRACT]. Eos (American Geophysical Union,
		Transactions), 83(47, Fall Meeting Supplement), Abstract PP61A-0299.

Cole, Kenneth L.; Cannella, John; Spaulding, W. Geoffrey; Arundel, Samantha; Coats, Larry; AND Fisher, Jessa

2003	21.3918	Holocene vegetational disequilibrium suggested by slow dispersal of late-successional
		trees and shrubs of western North America [ABSTRACT]. <i>In:</i> 16th INQUA Congress:
		programs with abstracts, July 23-30, 2003, Reno Hilton Hotel and Conference Center,
		Reno, Nevada, USA. Reno, Nevada: Desert Research Institute, p. 164. [International
		Union for Quaternary Research.1

Cole, Kenneth L.; Ironside, K. E.; Cole, E. A.; AND Fisher, J.

2011	21.6540	Late Quaternary precipitation seasonality of SW North America reconstructed from
		stable isotopes in fossil packrat pellets [ABSTRACT]. American Geophysical Union, 2011

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Fall Meeting,	San Francisco,	California,	5-9 December,	Abstract PP21A-1788.
[Includes Gra	and Canyon.]			

2000	21.3732	Faunal remains in California condor nest caves. <i>The Condor</i> , 102(1) (February): 222-227. [Principally modern fauna of California; includes discussions of fossil remains in Grand Canyon.]
ndra, G.	E., AND Elias	s, M. K.
1944	21.5613	Carboniferous and Permian ctenostomatous Bryozoa. <i>Geological Society of America, Bulletin</i> , 55: 517-568, 13 Plates. [See <i>Bascomella subsphaerica</i> , new species, pp. 541-542, Plate 1, figure 1; from Kaibab Limestone "near Bright Angle [<i>sic</i>] Trail just west of Grand Canyon [village]"; holotype Nebraska Geological Survey 449. (<i>NOTE</i> : Not included in Spamer's accountings of Grand Canyon type fossils.)] [Bright Angel Trail.]
1945	21.632	Bicorbula, a new Permian bryozoan, probably a bryozoan-algal consortium. Journal of Paleontology, 19: 116-125.
1945	21.633	Bicorbis arizonica Condra and Elias, new name for B. arizonica. Journal of Paleontology, 19: 411.
nnors, Ti	imothy B.; T	weet, Justin S.; AND Santucci, Vincent L.
2020	21.8030	Chapter 3. Stratigraphy of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., an Tweet, Justin S. (eds.), <i>Grand Canyon National Park: centennial paleontological resource inventory (non-sensitive version).</i> Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 45-74. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103.</i>)
2021	21.8255	Stratigraphy of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 33-54. [Reset reprinting of Connors <i>et al.</i> (2020, ITEM NO. 21.8030).]
nservatio	on Legacy	
2016	21.7665	Stewards Individual Placement Program. <i>In:</i> Conservation Legacy annual report: 2016. Durango, Colorado: Conservation Legacy, pp. 9-10. [Includes brief notes and illustration of Robyn Henderek and her archaeological and paleontological work in Grand Canyon caves and assistance in monitoring hydrologic system of the Kaibab Plateau.]
peland, I	Peter; Watso	on, E. Bruce; Thomas, J. B.; AND Cox, Katrina
2008	21.4299	Fossils as alpha thermochronometers [ABSTRACT]. <i>Geological Society of America</i> ,

Abstracts with Programs, 40(6): abstract no. 222-13.

Cornet, Y.;	François, C.	; Compère, P.; Callec, Y.; Roberty, S.; Plumier, J. C.; AND Javaux, E. J.
2019	21.7994	New insights on the paleobiology, biostratigraphy and paleogeography of the pre- Sturtian microfossil index taxon <i>Cerebrosphaera</i> . <i>Precambrian Research</i> , 332(105410), 22 pp. + Supplemental Data online, https://doi.org/10.1016/j.precamres.2019.105410 . [Chuar Group noted pp. 2, 3.]
Corsetti, Fr	ank A.	
2009	21.4714	Extinction before the snowball. Nature Geoscience, 2: 386-387.
Corsetti, Fr	ank A.; Awr	amik, Stanley M.; AND Pierce, David
2003	21.3947	A complex microbiota from snowball Earth times: Microfossils from the Neoproterozoic Kingston Peak Formation, Death Valley, USA. <i>U.S. National Academy of Sciences, Proceedings</i> , 100(8) (April 15): 4399-4404. [Includes general correlation with Grand Canyon, p. 4400.]
Covey, Jon		
2014	21.6371	Stratigraphic ranges of fossils continue to expand with new discoveries. (Anita Millen, ed.) <i>Creation in the Crossfire</i> (South Bay Creation Science Association, Torrance, California), (March): 1-5.
Cowie, Joh	n Watson	
1967	21.676	Life in Pre-Cambrian and Cambrian times. <i>In:</i> Harland, W. H., <i>et al.</i> (eds.), <i>The fossil record : a symposium with documentation.</i> London: Geological Society of London, pp. 17-35. [See p. 25.]
Crampton,	Henry Edwar	rd
1911	21.5617	The doctrine of evolution: its basis and its scope. New York: Columbia University Press, 311 pp. + advertisements. (Columbia University Lectures. The Hewitt Lectures, 1906-1907.) [See in "The Evidence of Fossil Remains" (pp. 73-105); specifically, pp. 85, 90—Grand Canyon, in passing.]
Csotony, Ju	ılius	
2021	21.8250	A Pleistocene open woodland scene from Rampart Cave in the western portion of the Grand Canyon [which] features American cheetahs (<i>Miracinonyx trumani</i>), Harrington's mountain goat (<i>Oreamnos harringtoni</i>), shasta ground sloth (<i>Nothrotheriops shastensis</i>), Stocks' vampire bats (<i>Desmodus stocki</i>), California condor (<i>Gymnogyps californianus</i>), and a woodrat (<i>Neotoma</i>). <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , cover, [ii]. [Painting is a view from the mouth of Rampart Cave, with an approaching monsoon.]

Cui, Xingqi	Cui, Xingqian; Liu, Xiao-Lei; Shen, Gaozhong; Ma, Jian; Husain, Fatima; Rocher, Donald; Zumberge, John E.; Bryant, Donald A.; AND Summons, Roger E.		
2020	21.8097	Niche expansion for phototrophic sulfur bacteria at the Proterozoic-Phanerozoic transition. <i>U.S. National Academy of Sciences, Proceedings</i> , 117(30) (July 28): 17599-17606 + Supplementary Information online, 31 pp. [Analyses in the Supplementary Information include Chuar Group.]	
Cummings,	, Linda Scott	see also Scott, Linda	
1988	21.5908	Pollen and macrofloral analysis. <i>In:</i> Schroedl, Alan R. (principal investigator, compiler), <i>Cultural resource investigations on the Kaibab Plateau, northern Arizona: The Highway 67 data recovery project.</i> Salt Lake City: P-III Associates, Inc., <i>for</i> U.S. National Park Service, Western Region, Interagency Archeological Services Branch, pp. 321-332.	
1994	21.5909	Pollen and phytolith analysis of sediments from agricultural terraces, site MU 125A, Kaibab National Forest, Arizona. Paleo Research Labs, for University of Cincinnati, Department of Anthropology, 13 pp. (Paleo Research Labs, Technical Report 94-06.)	
Cummings,	, Linda Scott,	AND Puseman, Kathryn	
1995	21.5912	Pollen and macrofaunal analysis at Sites MU 123, MU 125, and MU 235 in Kaibab National Forest, north-central Arizona. Denver: Paleo Research Laboratories, for U.S. Forest Service, Kaibab National Forest, Williams, Arizona, 47 pp. (Paleo Research Labs, Technical Report 95-10.)	
Cummings,	, Linda Scott,	AND Moutoux, Thomas E.	
1996	21.5911	Pollen analysis at the Lefevre Site (AR-03-07-03-1034), Arizona Strip, Arizona. Denver: Paleo Research Laboratories, for U.S. Forest Service, Kaibab National Forest, Williams, Arizona, 12 pp. (Paleo Research Labs, Technical Report 95-81.)	
Cummings,	, Linda Scott;	Puseman, Kathryn; AND Moutoux, Thomas E.	
1996	21.5910	Pollen and macrofaunal analysis at Clover Ruin (AR-03-07-01-1036), Arizona. Denver: Paleo Research Laboratories, for U.S. Forest Service, Kaibab National Forest, Williams, Arizona, 22 pp. (Paleo Research Labs, Technical Report 95-80.)	

David, L. R.		
Davis, Owe	n K.	
1990	21.798	Caves as sources of biotic remains in arid western North America. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 76: 331-348.
Davis, Owe	n K.; Agenb	road, Larry; Martin, Paul S.; AND Mead, Jim I.
1984	21.799	The Pleistocene dung blanket of Bechan Cave, Utah. <i>In:</i> Genoways, Hugh H., and Dawson, Mary R. (eds.), Contributions in Quaternary vertebrate paleontology: A volume in memorial to John E. Guilday. <i>Carnegie Museum of Natural History, Special Publication, 8</i> , pp. 267-282. [See p. 273, <i>Nothrotheriops</i> dung from Rampart Cave illustrated.]
Dawson, J.	William	
1896	21.832	Pre-Cambrian fossils especially in Canada. <i>Canadian Record of Science</i> , 7: 157-162. [See p. 158.] [An abstract of a paper read to the Geological Section, British Association for the Advancement of Science, 66th meeting, Liverpool, September 1896.]
1896	21.833	Note on Cryptozoon and other ancient fossils. <i>Canadian Record of Science</i> , 7(4): 203-219.
1897	21.5177	Note on Cryptozoon and other ancient fossils. <i>In: McGill University: papers from the Department of Geology.</i> Montreal: McGill University. [No. 6 in volume. Reprinted from <i>Canadian Record of Science</i> with original pagination.]
1897	21.3799	Relics of primeval life: beginning of life in the dawn of geological time. New York, Chicago, and Toronto: Fleming H. Revell Co., 336 pp. [See pp. 53, 56-57.]
DeCourten,	Frank L.	
1976	21.838	Trace fossils of the Kaibab Formation (Permian) of northern Arizona. Master's thesis, University of California at Riverside, 72 pp.
1980	21.839	The relationship between lithofacies and ichnofauna in shallow marine deposits of the Kaibab Formation, northern Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 12(7): 410.

Dehler, Carol Merritt			
201	14 21.6865	Advances in Neoproterozoic biostratigraphy spark new correlations and insight in evolution of life. <i>Geology</i> , 42(8) (August): 731-732. [Includes Chuar Group, Grand Canyon.]	
Dehler	, Carol M., AND	Elrick, Maya	
199	98 21.840	Implications for paleoenvironmental and areal extent of the Chuar basin from facies analyses of the middle Chuar Group (Neoproterozoic), Grand Canyon [ABSTRACT]. Geological Society of America, Abstracts with Programs, 30(6): 7.	
Delaine	e, Maxence		
201	16 21.7961	Composition des thèques d'amibes xénosomiques : utilisatiobn potentielle comme bio- indicateur des dépôts de particules d'origine atmosphérique. Doctoral dissertation, Université de Bourgogne—Franche Comté, 256 pp. [See section 3.1.2.1, "Enregistrement fossile des thèques d'amibes" (pp. 256-257), which relates to the Chuar Group of Grand Canyon.] [In French.]	
Delsuc	, Frédéric; Kuc	ch, Melanie; Gibb, Gillian C.; Karpinski, Emil; Hackenberger, Dirk; Szpak, Paul; Martínez, Jorge G.; Mead, Jim I.; McDonald, H. Gregory; MacPhee, Ross D. E.; Billet, Guillaume; Hautier, Lionel; AND Poinar, Henrik N.	
201	19 21.7807	Ancient mitogenomes reveal the evolutionary history and biogeography of sloths. <i>Current Biology</i> , 29, doi:10.1016/j.cub.2019.05.043, 12 pp. + Supplementary Information online, 14 pp. [Data include Rampart Cave <i>Nothrotheriops shastense</i> .] ["Annotated mitogenomes have been deposited in GenBank: MK903494-MK903503 and the corresponding raw Illumina reads in the European Nucleotide Archives: PRJEB32380. Additional data, including capture bait sequences, alignments, and trees can be retrieved from zenodo.org (https://doi.org/10.5281/zenodo.2658746)."]	
Deniso	n, R. H.		
195	51 21.850	Late Devonian fresh-water fishes from the western United States. <i>Fieldiana—Geology</i> , 11: 221-261.	
Depére	et, Charles		
190	06 21.5043	L'apparition de la vie sur le globe. <i>La Revue du Mois</i> (Paris), 2(7) (July 10): 37-51. [See pp. 45-46, regarding the Precambrian of Grand Canyon (after Walcott).] [Cover for this number specifies "1re Année, No 7" and also indicates, "Tome II—Première Livraison". Cataloger's note in copy seen indicates "Annee 1, v. 2".] [In French.]	
190	07 21.4978	Les transformations du monde animal. Paris: Ernest Flammarion, 360 pp. (Bibliothèque de Philosophie scientifique.) [See pp. 341-343.] [In French.] [Numerous reprintings and imprints, also in translation.]	
190	09 21.6218	The transformations of the animal world. London: Kegan Paul, Trench, Trübner and Co., Ltd., 360 pp. (International Scientific Series [F. Legge, ed.], Volume 94.) [See pp. 330-332.]	

1909	21.6219	The transformations of the animal world. New York: D. Appleton and Co., 360 pp. (The International Scientific Series.) [See pp. 330-332.]
1909	21.6222	Die Umbildung der Tierwelt. Eine Einführung in die Entwicklungsgeschichte auf palaeontologischer Grundlage. (Richard N. Wegner, translator.) Stuttgart: E. Schweizerbart, 330 pp. [Translation of The Transformations of the Animal World.] [See pp. 307-309.] [In German.]
1912	21.6220	Превращения животнаго мира [Prevrashcheniya zhivotnago mira]. (A. A. Borsiak, translator.) Petrograd: Тип. М. Стасюлевича [Tip. M. Stasiyulevicha], 269 pp. [Translation of <i>The Transformations of the Animal World.</i>] [In Russian.]
1980	21.6221	The transformations of the animal world. New York: Arno Press, 360 pp. [Facsimile reprint of 1909 London ed. (ITEM NO. 21.6218).]
deSaussure	e, Raymond E	E.
1956	21.853	Remains of the California condor in Arizona caves. <i>Plateau</i> , 29: 44-45.
Dewar, Dou	ıglas	
1957	21.4980	The transformist illusion. Murfreesboro, Tennessee: Dehoff Publications, 306 pp. [See p. 24, notice of <i>Brooksella canyonensis</i> from the Precambrian of Grand Canyon.]
Diamond, C	Charles W.; [Dehler, Carol M.; Karlstrom, Karl E.; AND Lyons, Timothy W.
2015	21.6809	The Neoproterozoic Chuar Group: A unique window into the coevolution of life and environment in a restricted marine setting [ABSTRACT]. <i>In: Astrobiology Science Conference 2015: Habitability, Habitable Worlds, and Life: June 15-19, 2015, Chicago, Illinois.</i> Houston, Texas: Lunar and Planetary Institute, abstract 7512. [Cover for program volume: <i>Astrobiology Science Conference 2015: Habitability, Habitable Worlds, and Life: AbSciCon2015: Program of Technical Sessions: June 15-19, 2015, Chicago, Illinois</i> , with imprints for Universities Space Research Association, and Lunar and Planetary Institute.] [Program volume: LPI Contribution No. 1842.]
2015	21.6808	Restricted marine deposition in the Neoproterozoic Chuar Group [ABSTRACT]. <i>In:</i> 2015 Goldschmidt Conference, Prague, CZ, August 16-21, 2015: abstracts, p. 728.
Dice, Lee R		
1932	21.858	Notes on <i>Hypolagus browni</i> and <i>Lepus benjamini</i> , fossil hares from the Pleistocene of Arizona. <i>Michigan Academy of Science, Papers</i> , 16: 379-382.
Dijkstra, S.	J., AND Ame	erom, H. W. J. van
1988	21.865	Fossilium catalogus. II: Plantae (S. J. Dijkstra, ed.), Pars 93. Filicales, Pteridospermae, Cycadales, incertae sedis. 2. Supplement. 48. Sph. nystroemii-Z. Amsterdam: Kulger Publications, pp. 753-926. [See pp. 800-801, 908-909.] [Strictly taxonomic, with notations in German.]

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DiMichele, William A., AND Aronson, Richard B.			
1992	21.3724	The Pennsylvanian-Permian vegetational transition: A terrestrial analogue to the onshore-offshore hypothesis. <i>Evolution</i> , 46(3): 807-824. [Includes Hermit Shale.]	
DiMichele	, William A.; Ch	naney, Dan S.; Nelson, W. John; Lucas, Spencer G.; Looy, Cindy V.; Quick, Karen; AND Wang, Jun	
2006	21.7092	A low diversity, seasonal tropical landscape dominated by conifers and peltasperms: Early Permian Abo Formation, New Mexico. <i>Review of Palaeobotany and Palynology</i> , 145: 249-273. [Includes comparative <i>Supaia</i> material from the Hermit Shale of Grand Canyon (reproduced from White, 1929), pp. 259, 262, and see 266, 271.]	
Donovan,	Christine; Tho	mpson, Kelcy; AND West, William	
1992	21.876	Trace fossils. <i>In:</i> Colorado River Investigations XI: July/August, 1992 (supervised by Stanley S. Beus, James N. David, Frank B. Lojko, and Lawrence E. Stevens). Flagstaff, Arizona: Northern Arizona University, for U.S. National Park Service, Grand Canyon National Park, pp. 156-167.	
Doubinge	r, Jeanne, AND	Heyler, Daniel	
1975	21.878	Nouveaux fossiles dans le Permien français. <i>Société Géologique de France, Bulletin</i> , Series 7, 17(6): 1176-1180. [Includes note of <i>Supaia</i> from the Hermit Shale.] [In French.]	
Downie, C).		
1969	21.879	Appendix. Palynology of the Chuaria shales of the Grand Canyon. <i>From:</i> Ford, T. D., <i>et al.</i> , Preliminary report of the Chuar Group, Grand Canyon, Arizona. <i>In:</i> Baars, Donald L. (ed.), Geology and natural history of the Grand Canyon region. <i>Four Corners Geological Society, 5th Field Conference, Guidebook</i> , pp. 121-122.	
Doyle, Jai	mes A.		
1978	21.5768	Origin of angiosperms. <i>Annual Review of Ecology and Systematics</i> , 9: 365-392. [See p. 382, brief note of Permian callipterids, based in part on the paper by S. Mamay (1971, ITEM NO. 21.2024).]	
Dryer, Jai	nes D.		
1994	21.4467	Late Pleistocene vegetation change at Stanton's Cave, Colorado River, Grand Canyon National Park, Arizona. Master's thesis, Northern Arizona University, 102 pp.	
Du, Rulin,	AND Tian, Lifu	[杜汝霖; 田立富]	
1985	21.7391	燕山青自口系娶親藻義意鳳山藻厲的; 友現和初步研究 [Yànshān qīng zì kǒu xì qǔqīn zǎo yì yì fèng shān zǎo lì de; yǒu xiàn hé chūbù yánjiū]. Discovery and preliminary study of mega-alga <i>Longfengshania</i> from the Quinbaikou System of the	

Yanshan Mountain area. 地质学报 [Dìzhí xuébào] Acta Geologica Sinica, 1985(3):

183-190, 2 plates.	[Includes references to <i>Chuaria</i> in the U.S., with Grand Canyon
citations.] [In Chir	ese, with bilingual title and abstract.]

Duan, Chen	ghua		
1985	21.886	The earliest Cambrian vase-shaped microfossils of Fangxian County, Hubei Province. <i>Tianjin Institute of Geology and Mineral Resources, Chinese Academy of Geological Sciences, Bulletin</i> , no. 13, pp. 87-107, 3 plates. [Includes references to <i>Chuaria</i> in Grand Canyon.] [In Chinese, with bilingual title and abstract.]	
Duff, R. Joe	el [Duff, Joe	נו	
2016	21.6984	Tiny plants—big impact; pollen, spores, and plant fossils. <i>In:</i> Hill, Carol A., Davidson, Gregg, Helble, Tim, and Ranney, Wayne (eds.), <i>The Grand Canyon: monument to an ancient earth: can Noah's Flood explain the Grand Canyon?</i> Grand Rapids, Michigan: Kregel Publications; and Tulsa, Oklahoma: Solid Rock Lectures, pp. 144-151.	
2016	21.6988	Life in the canyon; packrats, pollen, and giant sloths. <i>In:</i> Hill, Carol A., Davidson, Gregg, Helble, Tim, and Ranney, Wayne (eds.), <i>The Grand Canyon: monument to an ancient earth: can Noah's Flood explain the Grand Canyon?</i> Grand Rapids, Michigan: Kregel Publications; and Tulsa, Oklahoma: Solid Rock Lectures, pp. 178-183.	
Duncan, He	elen		
1969	21.899	Bryozoans. <i>In:</i> McKee, E. D., and Gutschick, R. C., History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , pp. 345-433.	
Dutro, J. Th	nomas, Jr.;(Gordon, Mackenzie, Jr.; AND Huddle, J. W.	
1979	21.911	Paleontological zonation of the Mississippian System. <i>In:</i> Craig, L. C., Connor, C. W., <i>et al.</i> , Paleotectonic investigations of the Mississippian System in the United States, Part 2, Interpretive summary and special features of the Mississippian System. <i>U.S. Geological Survey, Professional Paper 1010-S</i> , pp. 407-429.	
Dutta, Sury	endu; Stein	er, Michael; Banerjee, Santanu; Erdtmann, Bernd-Dietrich; Jeevankumar, Silambuchelvan; AND Mann, Ulrich	
2006	21.4717	Chuaria circularis from the early Mesoproterozoic Suket Shale, Vindhyan Supergroup, India: Insights from light and electron microscopy and pyrolysis-gas chromatography. Journal of Earth Systems Science (Indian Academy of Sciences, Bangalore), 115(1) (February): 99-112. [See pp. 99, 101; type locality in Grand Canyon noted p. 101.]	

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Easton, W. H.			
1952	21.928	Corals from the Redwall limestone (Mississippian) of Arizona [ABSTRACT]. <i>Geological Society of America, Bulletin,</i> 63: 1246.	
Easton, W.	H., AND Guts	schick, Raymond C.	
1953	21.929	Corals from the Redwall limestone (Mississippian) of Arizona. <i>Southern California Academy of Sciences, Bulletin</i> , 52(1): 1-27.	
Edwards, D	ave, AND Be	us, Stanley S.	
1983	21.935	Paleoecology of two Permian fossil communities in the Kaibab Formation, northern Arizona [ABSTRACT]. <i>Arizona-Nevada Academy of Science, Journal</i> , 18 (1983 Proceedings Supplement): 58-59.	
Eginoire, St	tephen		
2024	21.8564	Ancient bats: Inside the Grand Canyon's longest known cave. <i>Colorado Plateau Advocate</i> , (Fall/Winter): cover, 2, 4-13. [Not noted by name but pertains to the Double Bopper cave system. Includes preserved <i>in situ</i> remains of Townsend's bigeared bats, some aged beyond the ability of carbon dating.]	
Eisenack, A	lfred		
1966	21.939	Über <i>Chuaria wimani</i> Brotzen. <i>Neues Jahrbuch für Geologie und Palaeontologie</i> , 1: 52-56. [Includes <i>Chuaria circularis</i> , Grand Canyon.] [In German.]	
Elias, Maxir	n K.		
1946	21.3735	Fossil symbiotic algae in comparison with other fossil and living algae. <i>American Midland Naturalist</i> , 36(2) (September): 282-290. [See p. 288.]	
1947	21.6744	Algae in Recent and ancient reefs. <i>In:</i> U.S. National Research Council, Division of Geology and Geography, <i>Report of the Committee on a Treatise on Marine Ecology and Paleoecology, 1946-1947: presented in preliminary form as Appendix H at the Annual Meeting of the Division, May 2, 1947).</i> Washington, D.C.: U.S. National Research Council, Division of Geology and Geography, pp. 73-76. (Report of the Committee on a Treatise on Marine Ecology and Paleoecology, No. 7.) [See pp. 74-75, regarding Permian <i>Bicobula</i> from Grand Canyon: "The phytomorph in this consortium is apparently related to the living red algae <i>Marchessetti</i> and <i>Liagora</i> from the Southern Pacific."]	

Elias, Scott A.			
1994	21.943	Quaternary insects and their environments. Washington, D.C., and London: Smithsonian Institution Press, 284 pp.	
1995	21.944	Packrat middens, archives of desert biotic history. <i>In:</i> Nierenberg, William A. (edin-chief), <i>Encyclopedia of environmental biology. Volume 3, O-Z, Index.</i> San Diego, California: Academic Press, pp. 19-35.	
1997	21.945	The ice-age history of Southwestern national parks. Washington, D.C., and London: Smithsonian Institution Press, 200 pp.	
2007	21.6863	Rodent middens. <i>In:</i> Elias, Scott A. (edin-chief), <i>Encyclopedia of Quaternary science. Volume 4, Pol-Z.</i> Amsterdam, Boston, Heidelberg [etc.]: Elsevier, pp. 2356-2367. [Includes (p. 2357) Figure 2, "Packrat (<i>Neotoma</i>) midden sample from a rock shelter at Emery Falls, Grand Canyon, Arizona" (in-situ photo by Thomas Van Devender). Also includes discussions pertaining to middens of the Grand Canyon and lower Colorado River regions.]	
2013	21.6864	Rodent middens. <i>In:</i> Elias, Scott A. (edin-chief) and Mock, Cary J. (associate ed.), <i>Encyclopedia of Quaternary science. Volume 4, Pol-Z.</i> Amsterdam, Boston, Heidelberg, London, New York, Oxford, Paris, San Diego, San Francisco, Singapore, Sydney, and Tokyo: Elsevier, 2nd ed., pp. 674-683. [Includes (p. 675) Figure 2, "Packrat (<i>Neotoma</i>) midden sample from a rock shelter at Emery Falls, Grand Canyon, Arizona" (in-situ photo by Thomas Van Devender). Also includes discussions pertaining to middens of the Grand Canyon and lower Colorado River regions.]	
Elias, Scott	A.; Mead, Ji	m I.; AND Agenbroad, Larry D.	
1992	21.946	Late Quaternary arthropods from the Colorado Plateau, Arizona and Utah. Great Basin	
		Naturalist, 52(1): 59-67.	
Elliott, Davi	d K.	Naturalist, 52(1): 59-67.	
Elliott, Davi	d K. 21.948	Naturalist, 52(1): 59-67. Devonian placoderms from Flagstaff[,] Arizona [ABSTRACT]. Arizona-Nevada Academy of Science, Journal, 24(1989 Proceedings Supplement): 46.	
		Devonian placoderms from Flagstaff[,] Arizona [ABSTRACT]. Arizona-Nevada Academy	
1989	21.948	Devonian placoderms from Flagstaff[,] Arizona [ABSTRACT]. <i>Arizona-Nevada Academy of Science, Journal</i> , 24(1989 Proceedings Supplement): 46. [Brief information on current research.] <i>Ichnology Newsletter</i> , no. 19, p. 19. [Bright	
1989 1990 2016	21.948 21.949 21.6985	Devonian placoderms from Flagstaff[,] Arizona [ABSTRACT]. Arizona-Nevada Academy of Science, Journal, 24(1989 Proceedings Supplement): 46. [Brief information on current research.] Ichnology Newsletter, no. 19, p. 19. [Bright Angel Shale, Coconino Sandstone.] Trace fossils; footprints and imprints of past life. In: Hill, Carol A., Davidson, Gregg, Helble, Tim, and Ranney, Wayne (eds.), The Grand Canyon: monument to an ancient earth: can Noah's Flood explain the Grand Canyon? Grand Rapids, Michigan: Kregel	

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Elliott, David K.,	AND	Blakey,	Ronald	C.
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2005	21.6889	The pre-Permian vertebrate record in Arizona. <i>In:</i> Heckert, Andrew B., and Lucas, Spencer G. (eds.), Vertebrate paleontology in Arizona. <i>New Mexico Museum of Natural History and Science, Bulletin 29</i> , pp. 1-9.
Elliott. Davi	d K., AND Ho	odnett. John-Paul M.

2013	21.6372	A new species of <i>Bransonella</i> (Chondrichthyes, Xenacanthimorpha, Bransonelliformes)
		from the Middle Permian Kaibab Formation of northern Arizona. Journal of
		Paleontology, 87(6): 1136-1142. [Bransonella tribula, new species; type locality
		southwest of Flagstaff, Arizona.]

Elliott, David K., AND Martin, Daryl L.

1987	21.950	A new trace fossil from the Cambrian Bright Angel Shale, Grand Canyon, Arizona. <i>Journal of Paleontology</i> , 61: 641-648.
1987	21.951	Chancelloria, an enigmatic fossil from the Bright Angel Shale (Cambrian) of Grand Canyon, Arizona. Arizona-Nevada Academy of Science, Journal, 21: 67-72.

Elliott, David K.; Hodnett, John-Paul; AND Olsen, Tom

2010 21.7695		Ctenacanthiform sharks from the Permian Kaibab Formation, northern Arizona
		[ABSTRACT]. In: Program and abstracts: 70th Anniversary Meeting, Society of
		Vertebrate Paleontology: David L. Lawrence Convention Center, East Lobby and
		Westin Convention Center Pittsburgh, Pittsburgh, Pennsylvania USA, October 10-13,
		<i>2010</i> , p. 85A.

Ellsworth, Lincoln

1935	21.953	Exploring today. New York: Dodd, Mead and Co., 194 pp. [See "Fossils in the Grand
		Canyon", pp. 97-101.]

Elston, Donald P.; Young, Richard A.; McKee, Edwin H.; AND Dennis, Michael L.

1989	21.987	Paleontology, clast ages, and paleomagnetism of Upper Paleocene and Eocene gravel and limestone deposits, Colorado Plateau and Transition Zone, northern and central Arizona. <i>In:</i> Elston, Donald P., Billingsley, George H., and Young, Richard A. (eds.), Geology of Grand Canyon, northern Arizona (with Colorado River guides). <i>28th International Geological Congress, Field Trip Guidebook T115/315.</i> Washington, D.C.:
		American Geophysical Union, pp. 155-165.

Emslie, Steven Douglas

1985	21.1000	Fossil condors (<i>Gymnogyps californianus</i>) and their extinction in Grand Canyon, Arizona. <i>Abstracts, 103rd Stated Meeting of the American Ornithologists' Union,</i> 7-10 October 1985, Arizona State University, Tempe, Arizona; Paper Session Abstracts, no. 14.	
1986	21.1001	Canyon echoes of the condor. Natural History, 95(4) (April): 10, 12-14.	

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

1987	21.1002	The origin, evolution and extinction of condors in the New World. Doctoral dissertation, University of Florida, 183 pp.	
1987	21.1004	Age and diet of fossil California condors in Grand Canyon, Arizona. <i>Science</i> , 237(4816) (August 14): 768-770.	
1988	21.1005	Vertebrate paleontology and taphonomy of caves in Grand Canyon, Arizona. <i>National Geographic Research</i> , 4(1): 128-142.	
Emtage, Ma	arilyn A.		
1977	21.4455	Modern invertebrate footprints compared with fossil footprints from the Coconino Sandstone (Permian). Master's thesis, Loma Linda University, 49 pp.	
Euler, Robe	ert C.		
1978	21.1010	Archaeological and paleobiological studies at Stanton's Cave, Grand Canyon National Park, Arizona—a report of progress. <i>National Geographic Society, Research Reports,</i> 1969 Projects, pp. 141-162.	
1984	21.1011	(ED.) The archaeology, geology, and paleobiology of Stanton's Cave, Grand Canyon National Park, Arizona. <i>Grand Canyon Natural History Association, Monograph</i> 6, 141 pp.	
Eyster, Ath	ena E.; Weis	ss, Benjamin P.; Karlstrom, Karl E.; AND Macdonald, Francis A.	
2017	21.7577	Linking Laurentia's latitude to Neoproterozoic diversification of eukaryotes [ABSTRACT]. <i>In:</i> Northeastern Geobiology Symposium 2017. [No place]: University of Connecticut, Center for Integrative Geosciences, p. 49.	

F

Fairchild, Thomas R.; Barbour, Aledir P.; AND Haralyi, Nicolau L. E.

1978	21.8448	Microfossils in the "Eopaleozoic" Jacadigo Group at Urucum, Mato Grosso, southwest Brazil. <i>Boletim IG</i> (Universidade de São Paulo, Instituto de Geosciências), 9: 74-79. [Includes brief notes of Grand Canyon Precambrian microfossils, pp. 76, 78.]			
Farmer, Ma	Farmer, Malcolm F.				
1956	21.1023	Tracks and trackways of northern Arizona—a record of the past. <i>Plateau</i> , 28: 54-66.			

Faul, Henry, AND Roberts, Wayne A.			
1951	21.1027	New fossil footprints from the Navajo(?) sandstone of Colorado. <i>Journal of Paleontology</i> , 25: 266-274. [Includes notes on Grand Canyon.]	
Fedonkin, I	Mikhail A., A	ND Yochelson, Ellis L.	
2002	21.4712	Middle Proterozoic (1.5 Ga) <i>Horodyskia moniliformis</i> Yochelson and Fedonkin, the oldest known tissue-grade colonial eucaryote. <i>Smithsonian Contributions to Paleobiology</i> , (94), 29 pp. [See pp. 25-26.]	
Fenton, Ca	rroll Lane, Al	ND Fenton, Mildred Adams	
1958	21.1040	The fossil book : a record of prehistoric life. Garden City, New York: Doubleday and Co., Inc., 482 pp. [See pp. 11, 72, 74.]	
1989	21.1041	The fossil book: a record of prehistoric life. (Revised and expanded by Patricia Vickers Rich, Thomas Hewitt Rich, and Mildred Adams Fenton.) New York, London, Toronto, Sydney, and Auckland: Doubleday, 740 pp. [See pp. 9, 122, 124, 390.] [For a corrected republication of this ed. see Rich et al. (1996, ITEM NO. 21.2767).]	
Ferguson, (C. W.		
1971	21.1042	Tree-ring dating of Colorado River driftwood in the Grand Canyon. <i>Hydrology and Water Resources in Arizona and the Southwest</i> , 1: 351-366.	
1984	21.1043	Dendrochronology of driftwood from Stanton's Cave. <i>In:</i> Euler, Robert C. (ed.), The archaeology, geology, and paleobiology of Stanton's Cave, Grand Canyon National Park, Arizona. <i>Grand Canyon Natural History Association, Monograph 6</i> , pp. 93-98.	
Ferrell, Var	ıce		
1996	21.4505	The evolution handbook. Altamont, Tennessee: Harvestime Books, [144] pp. (The Evolution Disproved Series—Book 23.) [Grand Canyon, pp. [77], [93]-[94].]	
Fichter, Jui	rgen		
1990	21.1052	[Brief information on current research.] <i>Ichnology Newsletter</i> , no. 19, p. 19. [Coconino Sandstone.]	
Figueirido,	Borja; Pére	z Ramos, Alejandro; Hotchner, Anthony; Lovelace, David M.; Pastor, Francisco J.; AND Palmqvist, Paul	
2022	21.8451	The brain of the North American cheetah-like cat <i>Miracinonyx trumani</i> . <i>iScience</i> , 25: 105671 (https://doi.org/10.1016/j.isci.2022.105671), 21 pp. [Includes comments (p. 11) on occurrences of this species in Grand Canyon, citing Hodnutt <i>et al.</i> (2022, ITEM NO. 21.8450).]	

Finks, Robert M.			
1960	21.1062	Late Paleozoic sponge faunas of the Texas region. The siliceous sponges. <i>American Museum of Natural History, Bulletin</i> , 120 (article 1): 1-160, plates 1-50. [See pp. 70-72; plates 16, 17, 19.]	
Fisher, W. L			
1964	21.1067	Lithologic and faunal zonation of massive limestones, Kaibab Formation, northwestern Arizona. <i>Plateau</i> , 36: 110-114.	
Fleming, R.	Farley		
1993	21.3925	Pliocene climate of the Colorado Plateau and the age of the Grand Canyon: Evidence from Anza-Borrego, California. <i>In:</i> Wrenn, John H., Suc, Jean-Pierre, and Leroy, Suzanne A. G. (eds.), <i>The Pliocene: time of change: including papers from the symposium entitled "The Palynology, Climate, and Sequence Stratigraphy of the Pliocene" (held during the 26th Annual Meeting of the American Association of Stratigraphic Palynologists, Inc., Baton Rouge, Louisiana, 1993). Dallas, Texas: American Association of Stratigraphic Palynologists Foundation, pp. 217-226.</i>	
1994	21.1077	Cretaceous pollen in Pliocene rocks: Implications for Pliocene climate in the southwestern United States. <i>Geology</i> , 22(9): 787-790.	
Fleming, R.	Farley, AND	Remeika, Paul	
1997	21.1078	Pliocene climate of the Colorado Plateau and age of the Grand Canyon: Evidence from Anza-Borrego Desert State Park, California [ABSTRACT]. <i>In:</i> Johnston, Margaret, and McChristal, James (compilers, eds.), Partners in Paleontology; Proceedings of the Fourth Conference on Fossil Resources, October 31-November 4, 1994, Colorado Springs, Colorado. <i>U.S. National Park Service, Natural Resources Report NPS/NRFLFO/NRR-97/01</i> , p. 73.	
Florin, Rudo	olf		
1938	21.1079	Die Koniferen Oberkarbons und des Unteren Perms. <i>Palaeontographica</i> , Abteilung B, Paläophytologie, 85(1): 1-62. [In German.]	
1939	21.1080	Die Koniferen Oberkarbons und des Unteren Perms. <i>Palaeontographica</i> , Abteilung B, Paläophytologie, 85(2): 63-122. [See pp. 64, 76.] [In German.]	
1939	21.1081	Die Koniferen Oberkarbons und des Unteren Perms. <i>Palaeontographica</i> , Abteilung B, Paläophytologie, 85(4): 175-241. [See pp. 178, 199, 219, 220, 225-228.] [In German.]	
1940	21.1082	Die Koniferen Oberkarbons und des Unteren Perms. <i>Palaeontographica</i> , Abteilung B, Paläophytologie, 85(5): 243-363. [See pp. 250, 260, 305-307, 350.] [In German.]	
1945	21.1083	Die Koniferen Oberkarbons und des Unteren Perms. <i>Palaeontographica</i> , Abteilung B, Paläophytologie, 85(8): 655-721. [See Tables 1, 2.] [In German.]	
1950	21.1084	Upper Carboniferous and Lower Permian conifers. <i>Botanical Review</i> , 16(5): 258-282. [See pp. 267-268.]	

Force, Chris	s P.		
1989	21.1086	Late Pleistocene biogeography of <i>Neotoma</i> of the Grand Canyon of the Colorado Plateau [ABSTRACT]. <i>In:</i> Kraus, David W., and Rose, Kenneth D. (eds.), Society of Vertebrate Paleontology, 49th Annual Meeting, Abstracts of Papers. <i>Journal of Vertebrate Paleontology</i> , 9(3, Supplement): 21A.	
1990	21.1087	Late Pleistocene <i>Neotoma</i> biogeography of the Grand Canyon of the Colorado Plateau [ABSTRACT]. <i>In:</i> Reynolds, Jennifer (compiler), Abstracts of papers presented at the Mojave Desert Quaternary Research Center fourth annual symposium. <i>San Bernardino County Museum Association Quarterly</i> , 37(2): 27.	
Ford, Trevo	r David		
1962	21.6801	The oldest fossils. <i>New Scientist</i> , 15(297) (July 26): 191-194. [See p. 193: "A jellyfish impression has also been found in the Grand Canyon." (ENTIRE NOTE)]	
Ford, Trevo	r D., AND Br	eed, William J.	
1972	21.1100	The problematical Precambrian fossil Chuaria. 24th International Geological Congress, Montreal, Proceedings, Section 1, Precambrian geology, pp. 11-18.	
1973	21.1101	The problematical Precambrian fossil <i>Chuaria</i> . <i>Palaeontology</i> , 16(3): 535-550.	
1974	21.1104	The younger Precambrian fossils of the Grand Canyon. <i>In:</i> Breed, William J., and Roat, Evelyn C. (eds.), <i>Geology of the Grand Canyon.</i> Flagstaff, Arizona: Museum of Northern Arizona, and Grand Canyon Natural History Association, pp. 34-40.	
1977	21.1106	The nature and distribution of the late Precambrian fossil <i>Chuaria</i> . <i>In:</i> Sidarenko, A. V. (ed.), <i>Correlation of the Precambrian</i> . I.G.C.P. Symposium, Moscow, 1975, pp. 279-286.	
1977	21.1107	Chuaria circularis Walcott and other Precambrian fossils from Grand Canyon. Palaeontological Society of India, Journal, 20: 170-177 (in Jurij Alexandrovich Orlov Memorial volume).	
Foster, John	n R.		
2009	21.6955	Taphonomic characteristics of a quarry in the Bright Angel Shale (Middle Cambrian), Grand Canyon National Park, Arizona: A preliminary look [ABSTRACT]. <i>In: Rocky Mountains and the Colorado Plateau : Canyons, Resources and Hazards : October 3-7, 2009, Grand Junction, Colorado : program</i> , pp. 22-23. [Examination of rock slabs quarried by Edwin D. McKee in 1930.]	
2009	21.7186	Taphonomic characteristics of a quarry in the Bright Angel Shale (Middle Cambrian), Grand Canyon National Park, Arizona: A preliminary look. <i>In:</i> Baltzer, Edward, (ed., with Cathy Duran), Proceedings: AIPG Rocky Mountains and the Colorado Plateau: Canyons, Resources and Hazards: Grand Junction, Colorado, October 3-7, 2009. Westminster, Colorado: American Institute of Professional Geologists, pp. 77-80. [Examination of rock slabs quarried by Edwin D. McKee in 1930.]	

2009	21.7187	Taphonomic characteristics of a quarry in the Bright Angel Shale (Middle Cambrian), Grand Canyon National Park, Arizona: A preliminary look [ABSTRACT]. <i>In:</i> Baltzer, Edward, (ed., with Cathy Duran), Proceedings: AIPG Rocky Mountains and the Colorado Plateau: Canyons, Resources and Hazards: Grand Junction, Colorado, October 3-7, 2009. Westminster, Colorado: American Institute of Professional Geologists, p. 157. [Examination of rock slabs quarried by Edwin D. McKee in 1930.]		
2011	21.6363	Trilobites and other fauna from two quarries in the Bright Angel Shale (Middle Cambrian, Series 3; Delamaran), Grand Canyon National Park, Arizona. <i>In:</i> Hollingsworth, J. Stewart, Sundberg, Frederick A., and Foster, John R. (eds.), Cambrian stratigraphy and paleontology of northern Arizona and southern Nevada; the 16th Field Conference of the Cambrian Stage Subdivision Working Group, International Subcommission on Cambrian Stratigraphy, Flagstaff, Arizona, and southern Nevada, United States. <i>Museum of Northern Arizona, Bulletin 67</i> , pp. 99-120.		
2014	21.7937	Cambrian ocean world: ancient sea life of North America. Bloomington and Indianapolis, Indiana: Indiana University Press, 416 pp., 28 plates in color. [Grand Canyon, see particularly pp. 43-70, 89-91, 183-185; Plates 1-3 (following p. 224); also elsewhere, passim.]		
Foster, Joh	n R.; Sundbe	erg, Fred A.; Karlstrom, Karl E.; Schmitz, Mark D.; Mohr, Michael T.; AND Hagadorn, James W.		
2019	21.7929	Long-distance lateral variability in biotas and lithologies of the Cambrian Bright Angel Formation (Tonto Group), Grand Canyon, USA [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 51(5): Paper No. 160-2 (https://gsa.confex.com/gsa/2019AM/meetingapp.cqi/Paper/336319).		
Fox-Dobbs,	Kena; Tidha	am, Thomas A.; Bowen, Gabriel J.; AND Emslie, Steven D.		
2006	21.7291	Dietary controls on extinction versus survival among avian megafauna in the late Pleistocene. <i>Geology</i> , 34(8) (August): 685-688 + Data Repository item 2006138, 5 pp. [Study sites includes Shrine Cave and Sandblast Cave, Grand Canyon.]		
Francischin	i, Heitor; Lu	cas, Spencer G.; Voigt, Sebastian; Marchetti, Lorenzo; Santucci, Vincent L.; Knight, Cassandra L.; Wood, John R.; Dentzien-Dias, Paula; AND Schultz, Cesar L.		
2019	21.7792	On the presence of <i>Ichniotherium</i> in the Coconino Sandstone (Cisuralian) of the Grand Canyon and remarks on the occuption of deserts by non-amniote tetrapods: <i>PalZ</i> (<i>Paläontologische Gesellschaft</i>), https://doi.org/10.1007/s12542-019-00450-5 , 19 pp. + Supplementary Material online (9 pp., https://static-content.springer.com/esm/art%3A10.1007%2Fs12542-019-00450-5/MediaObjects/12542 2019 450 MOESM1 ESM.pdf).		
Fritts, Haro	ld C.			
1965	21.1121	Tree-ring evidence for climatic changes in western North America. <i>Monthly Weather Review</i> , 93(7): 421-443.		

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Froede, Carl R., Jr.

Galiano, Henry, AND Frailey, David

21.1133

21.4976

1977

Garde, G.

1899

	, -				
1999	21.4223	Precambrian metazoans within a young-earth Flood framework. <i>CEN Technical Journal</i> (Creation Ex Nihilo Technical Journal), 13(2): 90-95. [See also Comment by Steven A. Austin, and rejoinder by Froede (2000).]			
1999	21.3869	Precambrian plant fossils and the Hakatai Shale controversy. <i>Creation Research Society Quarterly</i> , 36(3) (December): 106-113.			
Frost, Kayla	, AND Foster	-, Jon			
2015	21.6697	Of prehistoric proportions. <i>Arizona Highways</i> , 91(5) (May): 46-49. [Rampart Cave and Shasta ground sloth.]			
Fürsich, Fra	Fürsich, Franz Theodor, AND Bromley, Richard Granville				
1985	21.1128	Behavioural interpretation of a rosetted spreite trace fossil: <i>Dactyloidites ottoi</i> (Geinitz). <i>Lethaia</i> , 18: 199-207. [See <i>D. canyonensis</i> , p. 207 (<i>i.e.</i> , <i>Brooksella canyonensis</i> Bassler).]			
G					
Gabnebin, E	lie				
1934	21.8554	La durée des temps géologiques. Société Vaudoise des Sciences Naturelles, Bulletin (Lausanne), 58(234): 125-146. ("Leçon inaugurale du cours de géologie stratigraphique, prononcée le 16 mai 1933 à l'Université de Lausanne. Communiquée à la Société vaudoise des Sciences naturelles dans la séance du 8 novembre 1933.") [See under section 6, "Durée de l'évolution des êtres vivants", p. 138, brief remarks on fossils reported from the Precambrian strata of Grand Canyon.] [In French.]			

- 4	

32. [See p. 32.] [In French.]

Chasmaporthetes kani, new species from China, with remarks on phylogenetic relationships within the Hyaenidae (Mammalia, Carnivora). American Museum Novitates, (2632), 16 pp. [Includes references to the Anita, Arizona, fauna.]

La faune anté-primordiale. Le Naturaliste (Paris), Series 2, (310) (February 1): 31-

Garton, Michael		
1996	21.5868	The pattern of fossil tracks in the geological record. <i>CEN Technical Journal</i> (Creation Ex Nihilo Technical Journal), 10(1): 82-100. [Grand Canyon, see pp. 91-92, 93, 94, 96.]
Gass, H. L.		
1964	21.1143	A review of the Paleozoic fish of Arizona. Master's thesis, University of Arizona, 97 pp.
Gilmore, Ch	arles W.	
1926	21.1184	Fossil footprints from the Grand Canyon [ABSTRACT]. <i>Geological Society of America, Bulletin,</i> 37: 240-241.
1926	21.1185	Fossil footprints. Grand Canyon Nature Notes, 1(4) (June 26): 1-3.
1926	21.1186	Fossil footprints from the Grand Canyon. <i>Smithsonian Miscellaneous Collections</i> , 77(9): 1-41.
1926	21.1187	Collecting fossil footprints in Arizona. <i>In:</i> Explorations and field-work of the Smithsonian Institution in 1926. <i>Smithsonian Miscellaneous Collections</i> , 78(1): 20-23.
1927	21.1188	Footprints of unknown vertebrate animals in the Carboniferous and Permian of the Grand Canyon [ABSTRACT]. <i>Science</i> , New Series, 65: 479-480.
1927	21.1189	Fossil footprints in the Grand Canyon [ABSTRACT]. Washington Academy of Sciences, Journal (Washington, D.C.), 7: 272.
1927	21.1190	Collecting fossil footprints in the Grand Canyon, Arizona. <i>In:</i> Exploration and field work of the Smithsonian Institution in 1926. <i>Smithsonian Miscellaneous Collections</i> , 78(7): 45-48.
1927	21.1191	Fossil footprints from the Grand Canyon: Second contribution. <i>Smithsonian Miscellaneous Collections</i> , 80(3): 1-78.
1928	21.1192	Fossil footprints from the Grand Canyon: Third contribution. <i>Smithsonian Miscellaneous Collections</i> , 80(8): 1-16.
1928	21.1193	Fossil footprints in the Grand Canyon of the Colorado, Arizona. <i>In:</i> Smithsonian Institution, Exploration and field work in 1927. <i>Smithsonian Institution Publication</i> 2957, pp. 7-10.
1928	21.6508	Charles W. Gilmore (introduced by John C. Merriam): Footprints of unknown vertebrate animals in the Carboniferous and Permian of the Grand Canyon, Ariz. (illustrated)." [TITLE ONLY]. <i>In: Report of the National Academy of Sciences: fiscal year 1926-1927.</i> Washington, D.C.: U.S. Government Printing Office, p. 26. [Presentation made April 26, 1927.]

Gilmore, Charles W., AND Cochran, Doris M.		
1930	21.1194	Reptiles. <i>In:</i> Cold-blooded vertebrates. <i>Smithsonian Scientific Series</i> (Abbot, Charles Greeley, edin-chief), Volume 8, Part 3, pp. 209-355. [See pp. 275-277, plates 61, 62.]
Gilmore, Cha	arles W., ANI	Sturdevant, Glen E.
1928	21.1195	Discovery of fossil tracks on the North Rim of the Grand Canyon. <i>Science</i> , New Series, 67: 216. [Coconino Sandstone and Supai Group.]
Gilmore, D.	P.; Da Costa	, C. P.; AND Duarte, D. P. F.
2001	21.4524	Sloth biology: an update on their physical ecology, behavior and role as vectors of arthropods and arboviruses. <i>Brazilian Journal of Medical and Biological Research</i> , 34: 9-25. [See p. 23, Rampart Cave.]
Gilmour, E.	H., AND Voge	el, I. D.
1978	21.1196	Bryozoans of the Toroweap Formation, southern Nevada [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 10: 107.
Gish, Duane	т.	
2003	21.7469	[Remarks on fossils.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> Vail, Tom, <i>Grand Canyon: a different view.</i> Green Forest, Arkansas: Master Books, pp. 50-51.
2018	21.7470	[Remarks on fossils.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> 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, pp. 50-51. [In the translation of Vail's (2003) <i>Grand Canyon: a different view</i> .] [In Chinese.]
Glaessner, N	lartin F.	
1962	21.1198	Pre-Cambrian fossils. <i>Biological Reviews</i> , 37: 467-494.
1966	21.1199	Precambrian palaeontology. Earth-Science Reviews, 1: 29-50.
1969	21.1200	Trace fossils from the Precambrian and basal Cambrian. Lethaia, 2: 369-393.
1972	21.1201	Precambrian paleozoology [ABSTRACT]. 24th International Geological Congress, Montreal, Abstracts, p. 10.
1972	21.1202	Precambrian paleozoology. 24th International Geological Congress, Montreal, Section 1, p. 19.

Gordon, Ma	Gordon, Mackenzie, Jr.		
1982	21.1215	Biostratigraphy of the Watahomigi Formation. <i>In:</i> McKee, Edwin D., The Supai Group of Grand Canyon. <i>U.S. Geological Survey, Professional Paper 1173</i> , Chapter F, pp. 113-135.	
Gordon, Ma	ackenzie, Jr.,	AND McKee, Edwin D.	
1978	21.1216	Significance of the invertebrate fauna of the Watahomigi Formation (Supai Group) [ABSTRACT]. Geological Society of America, Abstracts with Programs, 10: 107.	
Graham, Jo	ohn P.		
2020	21.8156	Grand Canyon National Park Geologic Resources Inventory report. Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, 180 pp. (Natural Resource Report NPS/NRSS/GRD/NRR-2020/2195.)	
Grater, Rus	ssell K.		
1958	21.1231	Last stand of the ground sloth. <i>Arizona Highways</i> , 34(7) (July): 30-33. [Rampart Cave.]	
Graversen,	Ole; Milàn,	Jesper; AND Loope, David B.	
2007	21.4792	Dinosaur tectonics: A structural analysis of theropod undertracks with a reconstruction of theropod walking dynamics. <i>Journal of Geology</i> , 115: 641-654. [See p. 652, reptile footprints in Coconino Sandstone on Hermit Trail.]	
Grayson, D	onald K.		
1993	21.1239	The desert's past: a natural prehistory of the Great Basin. Washington, D.C., and London: Smithsonian Insitution Press, 356 pp. [See pp. 72, 126, 200.]	
2006	21.6085	The Late Quaternary biogeographic histories of some Great Basin mammals (western USA). <i>Quaternary Science Reviews</i> , 25: 2964-2991. [Includes Rampart Cave.]	
2007	21.5747	Deciphering North American Pleistocene extinctions. <i>Journal of Anthropological Research</i> , 63(2) (Summer): 185-213.	
Gregory, W	/.K.; Merrill,	E. D.; Vaughan, T. W.; White, David; AND Howell, W. H.	
1933	21.4899	Marsh Fund. <i>In:</i> Report of the National Academy of Sciences: Fiscal Year 1931-1932. Washington, D.C.: U.S. Government Printing Office, pp. 17-18. [Includes item of payment of \$100 to Edwin D. McKee "for a study of palaeozoic and precambrian faunas in the Grand Canyon", completing payment of a \$150 grant to Glen E. Sturdevant in 1926; and note that McKee "proposes to make a systematic study of the Devonian rocks of northern Arizona and the sedimentation and fossil features of Kaibab limestone." (p. 17)] [U.S. National Academy of Sciences, Report.]	

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Griffin, L. R.

1966 21.1259 Actinocoelia meandrina Finks, from the Kaibab Limestone of northern Arizona.

Brigham Young University, Geology Studies, 13: 105-108.

Gussow, William Carruthers

1973 21.1271 *Chuaria* sp. cf. *C. circularis* Walcott from the Precambrian Hector Formation, Banff National Park, Alberta, Canada. *Journal of Paleontology*, 47: 1108-1112. [Includes notes of Chuar Group, Grand Canyon.]

Gutschick, Raymond C., AND Easton, W. H.

1942 21.1278 Corals from the Redwall Limestone (Mississippian) of Arizona [ABSTRACT]. *Geological Society of America, Bulletin,* 53: 1830.

Gutschick, Raymond C., AND Rodriguez, Joaquin

21.1279 Comment on: "Medusoid" salt pseudomorphs. *Journal of Paleontology*, 65: 331. [Comment on Seilacher, A., 1991, "Medusoid" salt pseudomorphs, *Journal of Paleontology*, 65: 330; no mention of Grand Canyon in Seilacher's paper.]



Haley, B. J.

1991

2001 21.6587 Using δ^{13} C to reconstruct paleocological [sic] environments and paleoclimatic conditions of the Middle Cambrian Bright Angel Shale in the eastern Grand Canyon of northern Arizona [ABSTRACT]. American Geophysical Union, 2001 Spring Meeting, Abstract B32A-04.

Hall, James

1856

Descriptions and notices of the fossils collected upon the route. Chapter 9 of: Blake, William P., General report upon the geological collections. From: Whipple, A. W., with Ives, J. C., [1853-1854], Report of explorations for a railway route, near the thirty-fifth parallel of north latitude, from the Mississippi River to the Pacific Ocean. In: Reports of explorations and surveys to ascertain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean. Made under the direction of the Secretary of War, in 1853-4 Volume 3. Washington, D.C.: A. O. P. Nicholson, Printer. (Volume: U.S. 33rd Congress, 2nd Session, House Executive Document 91.) [See Part 4 ("Report upon the geology of the route") [1856], No. 1, pp. 99-105, Geology plates 1, 2.]

Halpern, Yv	Halpern, Yvonne		
1988	21.1290	The effect of lithology, diagenesis, and low-grade metamorphism of the ultrastructure and surface sculpture of acritarchs from the late Proterozoic Chuar Group, Grand Canyon, Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 20(7): A226.	
1988	21.1291	The effect of lithology, diagenesis and low-grade metamorphism on the ultrastructure and surface sculpture of acritarchs from the late Proterozoic Chuar Group, Grand Canyon, Arizona. Master's thesis, Tulane University, 133 pp.	
Ham, Ken			
2003	21.7471	[Remarks on nautiloids.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> Vail, Tom, <i>Grand Canyon: a different view.</i> Green Forest, Arkansas: Master Books, pp. 52-53.	
2003	21.7475	[Remarks on fossils.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> Vail, Tom, <i>Grand Canyon: a different view.</i> Green Forest, Arkansas: Master Books, p. 55.	
2018	21.7472	[Remarks on nautiloids.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> 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, pp. 52-53. [In the translation of Vail's (2003) <i>Grand Canyon: a different view.</i>] [In Chinese.]	
2018	21.7476	[Remarks on fossils.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> 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. 55. [In the translation of Vail's (2003) <i>Grand Canyon: a different view</i> .] [In Chinese.]	
Haman, Joi	n F.		
1983	21.1292	Comment [on "Use of packrat middens to determine rates of cliff retreat in the eastern Grand Canyon, Arizona" by Kenneth L. Cole and Larry Mayer (1982, ITEM NO. 21.619).] <i>Geology</i> , 11: 315. [Reply by Cole and Mayer, 316.]	
Hamilton, A	Andrew		
1958	21.1318	Bat Cave bonanza. Westways, 50 (January): 4-5.	
Hansen, Mi	chael C.		
1978	21.1328	A presumed lower dentition and spine of a Permian petalodontiform chondrichthyan, Megactenopetalus kaibabanus. Journal of Paleontology, 52: 55-60.	
Hansen, Ric	chard M.		
1978	21.1329	Shasta ground sloth food habits, Rampart Cave, Arizona. <i>Paleobiology</i> , 4: 302-319.	

Hansen, Ri	Hansen, Richard M., AND Martin, Paul S.	
1973	21.1330	Ungulate diets in the lower Grand Canyon. <i>Journal of Range Management</i> , 26: 380-381.
Häntzschel	, W. [Häntzs	schel, Walter]
1962	21.1331	Trace fossils and problematica. <i>In:</i> Moore, R. C. (ed.), <i>Treatise on invertebrate paleontology, Part W, Miscellanea.</i> Boulder, Colorado: Geological Society of America, and Lawrence, Kansas: University of Kansas Press, pp. W177-W245.
1975	21.1332	Trace fossils and problematica. <i>In:</i> Teichert, C. (ed.), <i>Treatise on invertebrate paleontology, Part W, Miscellanea, Supplement 1.</i> Boulder, Colorado: Geological Society and America, and Lawrence, Kansas: University of Kansas Press, 2nd ed., revised, enlarged, pp. W1-W269 [entire volume].
Harington,	C. R. [Harin	gton, Charles Richard]
1972	21.1335	Extinct animals of Rampart Cave. Canadian Geographical Journal, 85: 178-183.
1984	21.1336	Ungulate remains from Stanton's Cave: An identification list. <i>In:</i> Euler, Robert C. (ed.), The archaeology, geology, and paleobiology of Stanton's Cave, Grand Canyon National Park, Arizona. <i>Grand Canyon Natural History Association, Monograph 6</i> , pp. 67-75.
Harrington	, M. R. [Harı	ington, Mark Raymond]
1936	21.1341	A new ground-sloth den. <i>Masterkey</i> , 10: 225-227. [Rampart Cave.]
Harris, Arth	nur H.	
1990	21.6061	Fossil evidence bearing on southwestern mammalian biogeography. <i>Journal of Mammalogy</i> , 71(2): 219-229. [Study sites include in Grand Canyon: Rampart Cave, Cylinder Cave, Tse'an Kaetan Cave, Tse'an Olje Cave; and elsewhere in region: Tule Springs and Gypsum Cave.]
Hartman, J	oseph H.; AN	D Young, Richard A.
2010	21.5349	Paleontological constraints on early Eocene landscapes and paleoenvironment of northwestern Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 42(5): 76.
Hartman, J	oseph H.; G	unnell, Gregg F.; AND Young, Richard A.
2013	21.6199	Determining the geologic age of the Duff Brown Tank continental mollusk local fauna (Coconino County, Arizona): An improving science (or, why does it have to be so hard [ABSTRACT]?). Geological Society of America, Abstracts with Programs, 45(7): 401.

Haubold, Hartmut			
1971	21.1355	Handbuch der Paläoherpetologie (Oskar Kuhn, ed.), Teil 18, Ichnia amphibiorum et reptiliorum fossilium. Stuttgart and Portland (Oregon): Gustav Fischer. [See pp. 11-19, 26-29, 32-34, 38-40, 44-45, 92, 104-114, 121-124.] [Concurrent title of series, Handbook of Paleoherpetology.] [In German.]	
1984	21.1356	Saurierfährten. Wittenberg and Lutherstadt: A. Ziemsen Verlag, 231 pp. [In German.]	
1996	21.3708	Ichnotaxonomie und Klassifikation von Tetrapodenfährten aus dem Perm. <i>Hallesches Jahrbuch Geowissenschaften</i> , B18: 23-88. [In German.]	
2000	21.8229	Tetropodenfährten aus dem Perm—Kenntnisstand und progress 2000. The tetrapod tracks of the Permian—state of knowledge and progress 2000. <i>Hallesches Jahrbuch Geowissenschaften</i> , (B), 22: 1-16. [In German, with bilingual item title and abstract.]	
Haubold, Ha	artmut, AND	Lucas, Spencer G.	
2001	21.8539	Early Permian tetrapod tracks—preservation, taxonomy, and Euramerican distribution. <i>In:</i> Cassinis, Giuseppe (ed.), Permian continental deposits of Europe and other areas. Regional reports and and correlations. <i>Monografie di «Natura Bresciana»</i> (Museo Civico di Scienze Naturali di Brescia, Italia), (25): 347-354.	
Haubold, Ha	artmut; Hun	t, Adrian P.; Lucas, Spencer G.; AND Lockley, Martin G.	
1995	21.6913	Wolfcampian (Early Permian) vertebrate tracks from Arizona and New Mexico. <i>In:</i> Lucas, Spencer G., and Heckert, Andrew B. (eds.), Early Permian footprints and facies. <i>New Mexico Museum of Natural History and Science, Bulletin 6</i> , pp. 135-165.	
Haug, Émile	.		
1903	21.4979	Walcott, Charles D.—"Sur les formations pré-cambriennes fossilifères." Congr. Géol. Intern., C. R. de la VIII ^e Session, pp. 299-312, 1901." [ABSTRACT]. <i>Geologisches Centralblatt</i> , 3(13) (July 1): 682-683. [Refers to Walcott (1901, ITEM NO. 21.3970).] [In French.]	
Hay, Oliver	Р.		
1921	21.1372	Descriptions of species of Pleistocene Vertebrata, types or specimens of most of which are preserved in the United States National Museum. <i>U.S. National Museum, Proceedings</i> , 59: 599-642. [See pp. 617-638.]	
1927	21.1373	The Pleistocene of the western region of North America and its vertebrated animals. <i>Carnegie Institution of Washington, Publication 322B</i> , 346 pp. [See pp. 45, 56, 80, 129-137, 327, 330-331, 336-337.]	
Hayes, Daw	ın S.		
2009	21.4711	Sequence stratigraphic, microfossil, and geochemical analysis of the Neoproterozoic Red Pine Shale, Uinta Mountain Group, Utah: evidence of biotic change driven by eutrophication? <i>In:</i> Ward, Colin R., TSOP Spackman Awards, 2009. <i>Society for Organic Petrology Newsletter</i> , 26(4) (December): 14-17. [Includes Grand Canyon.]	

Hayes, Dav	vn S., AND D	ehler, Carol
2010	21.5348	Stratigraphic, microfossil, and geochemical analysis of the Neoproterozoic Uinta Mountain Group, Utah: Evidence of biotic change driving by eutrophication? <i>Geological Society of America, Abstracts with Programs</i> , 42(5): 297. [Includes Chuar Group of Grand Canyon.]
Heinrich, E	. William	
1957	21.4738	[Bat Cave guano deposit to be mined.] <i>Geochemical News</i> (University of Michigan), (8) (October): 7-8. [Bat Cave.]
Henderek,	Robyn L.; Er	nslie, Steven D.; Tobin, Benjamin W.; AND Schenk, Edward R.
2015	21.6817	Grand Canyon split twig figurine complex and the role of fossil remains at archaeological sites [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 47(7), Session 233, Paper 233-14.
Henderek,	Robyn L.; To	bbin, Benjamin W.; Wood, John R.; AND Schenk, Edward R.
2015	21.6823	Using photogrammetry to document and monitor cave paleontological and archaeological sites in Grand Canyon National Park [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 47(7): 516.
Hester, Jim	ı J.	
1960	21.1407	Late Pleistocene extinction and radiocarbon dating. American Antiquity, 26: 58-77.
1967	21.1408	The agency of man in animal extinctions. <i>In:</i> Martin, P. S., and Wright, H. E., Jr. (eds.), Prehistoric extinctions: The search for a cause. <i>In:</i> International Association of Quaternary Research (INQUA), 8th Congress, Proceedings, Volume 6. New Haven, Connecticut: Yale University Press, pp. 162-192. [See p. 184.]
Hevly, Rich	nard H.	
1984	21.1409	Macroscopic plant materials from Stanton's Cave, Arizona. <i>In:</i> Euler, Robert C. (ed.), The archaeology, geology, and paleobiology of Stanton's Cave, Grand Canyon National Park, Arizona. <i>Grand Canyon Natural History Association, Monograph 6</i> , pp. 33-46.
Hibbard, Cl	laude W.	
1958	21.6083	Summary of North American Pleistocene mammalian local faunas. <i>Michigan Academy of Science, Arts, and Letters, Papers</i> , 43: 1-32. [Rampart Cave noted.]
Hinds, Nor	man E. A.	
1938	21.1438	An Algonkian jellyfish from the Grand Canyon of the Colorado. <i>Science</i> , New Series, 88: 186-187.

2009	21.7036	Tetrapod footprints from Ikakern formation (Argana basin, western High Atlas, Morocco) [ABSTRACT]. <i>From:</i> Présentations Affichées: Paléozöique. <i>In: 1er Congrès International sur la Paléontologie des Vertébrés du Nord de l'Afrique: programme et résumé.</i> Marrakech: [no imprint], pp. 53-54. [Includes note of Hermit Formation of Grand Canyon.]
oare, R. D).; Plas, Leo	P., Jr.; AND Yancey, T. E.
2002	21.4462	Permian Polyplacophora (Mollusca) from Nevada, Utah, and Arizona. <i>Journal of Paleontology</i> , 76(2): 256-264.
odgins, G	reg; Brook,	George A.; AND Marais, Eugene
2007	21.6309	Bomb-spike dating of a mummified baboon in Ludwig Cave, Namibia. <i>International Journal of Speleology</i> , 36(1): 31-38. [Begins with note of giant ground sloth, <i>Glossotherium harlani</i> , from Grand Canyon Caverns, Arizona.]
odnett, Jo	ohn-Paul M.,	AND Elliott, David K.
2018	21.7520	Chondrichthyan assemblages from the Surprise Canyon (Late Mississippian, Serpukhovian) and Watahomigi (latest Mississipian/Early Pennsylvanian, Serpukhovian/Bashkirian) Formations of the western Grand Canyon, northern Arizon [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 50(5): Final Paper 22-1, doi:10.1130/abs/2018RM-313812.
2018	21.7732	Carboniferous chondrichthyan assemblages from the Surprise Canyon and Watahom formations (latest Mississippian-Early Pennsylvanian) of the western Grand Canyon, northern Arizona. <i>Journal of Paleontology</i> , 92 (Memoir 77), 33 pp. [A separate publication. Includes new species.]
2020	21.8033	Chapter 6. Paleozoic vertebrate paleontology of Grand Canyon National Park: Research history, resources, and potential. <i>In:</i> Santucci, Vincent L., and Tweet, Jus S. (eds.), <i>Grand Canyon National Park: centennial paleontological resource inventor (non-sensitive version).</i> Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 237-256. (Volume: <i>Natural Resource Repor NPS/GRCA/NRR</i> —2020/2103.)
2021	21.8258	Paleozoic vertebrate paleontology of Grand Canyon National Park: Research history, resources, and potential. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Gran Canyon National Park centennial paleontological resource inventory; a century of fos discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. [unnumbered page facing 105], 105-118. [Reset reprinting of Hodnett and Elliott (2020, ITEM NO. 21.8033).]
odnett, Jo	ohn-Paul M.;	Elliott, David K.; AND Olsen, Tom J.
2011	21.6737	The Petalodontiformes (Chondricthyes; Euchondrocephali) from the marine Permian (Leonardian/Guadeloupian) Kaibab Formation, northern Arizona [ABSTRACT]. <i>In:</i> Society of Vertebrate Paleontology, Abstracts of Papers, Seventy-first Annual Meeting

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Paris Las Vegas Hotel, Las Vegas, NV, USA, November 2-5, 2011, p. 126. [Volume, "Supplement to the online Journal of Vertebrate Paleontology".]

Hodnett, John-Paul M.; Elliott, David K.; Olsen, Tom J.; AND Wittke, James H.

2012 21.7082 Ctenacanthiform sharks from the Permian Kaibab Formation, northern Arizona. Historical Biology, 24(4): 1-15. [Vicinity of Flagstaff, Arizona.]

Hodnett, John-Paul M.; Elliott, David K.; AND Santucci, Vincent L.

21.8350 The holocephalans (Chondrichthyes) of the Mississippian (Visean) Redwall Limestone, Grand Canyon National Park, Arizona. *In:* Lucas, Spencer G., Hunt, Adrian P., and Lichtig, Asher J. (eds.), Fossil Record 7. *New Mexico Museum of Natural History and Science, Bulletin 82*, pp. 141-144. [Helodus sp., Psephodus sp.]

Hodnett, John-Paul M.; Mead, Jim; White, Richard; AND Carpenter, Mary

21.7697 *Miracinonyx trumani* (Carnivora: Felidae) from the Rancholabrean of Grand Canyon,
Arizona and its implications for the ecology of the "American cheetah" [ABSTRACT]. *In:*Program and abstracts: 70th Anniversary Meeting, Society of Vertebrate
Paleontology: David L. Lawrence Convention Center, East Lobby and Westin
Convention Center Pittsburgh, Pittsburgh, Pennsylvania USA, October 10-13, 2010, p.
106A. [Remains noted from Rampart Cave, Next Door Cave, and Stanton's Cave.]

Hodnett, John-Paul M.; White, Richard S.; Carpenter, Mary; Mead, Jim I.; AND Santucci, Vincent L.

2022 21.8450 *Miracinonyx trumani* (Carnivora; Felidae) from the Rancholabrean of the Grand Canyon, Arizona and its implications for the ecology of the "American cheetah". *In:*Morgan, Gary S., Baskin, Jon A., Czaplewski, Nicholas J., Lucas, Spencer G.,
McDonald, H. Gregory, Mead, Jim I., White, Richard S., Jr., and Lichtig, Asher J.
(eds.), Late Cenozoic vertebrates from the American Southwest: A tribute to Arthur H.
Harris. *New Mexico Museum of Natural History and Science, Bulletin 88*, pp. 157-186.
[Remains described from Rampart Cave, Next Door Cave, and Stanton's Cave.]

Hoffmeister, Donald F.

1986 21.1463 *Mammals of Arizona*. University of Arizona Press, and Arizona Game and Fish Department, xx + 602 pp. [See "Fossil Mammals in Arizona", pp. xiv, xvi-xviii.]

Hofmann, Hans J.

1992

21.7593

	,	reconstruction become and peropetation reconstruction, realist sty
		Bengtson, Stefan, Hayes, J. M., Lipps, Jere H., Schopf, J. William, Strauss, Harald,
		Summons, Roger E., and Walter, Malcolm R., Biostratigraphy and paleobiogeography
		of the Proterozoic. <i>In:</i> Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic</i>
		biosphere: a multidisciplinary study. Cambridge (United Kingdom), New York, and
		Melbourne: Cambridge University Press, pp. 491-496. [Includes Chuar Group.]
1992	21.7597	Proterozoic and selected Cambrian megascopic carbonaceous films. <i>From:</i> Towe,
		IZ IL M. D

Kenneth M., Bengtson, Stefan, Fedonkin, Mikhail A., Hofmann, Hans J., Mankiewicz, Carol, and Runnegar, Bruce N., Described taxa of Proterozoic and selected earliest Cambrian carbonaceous remains, trace and body fossils. *In:* Schopf, J. William, and Kline, Cornelis (eds.), *The Proterozoic biosphere : a multidisciplinary study.*

Proterozoic biostratigraphy: Problems and perspectives. From: Hofmann, Hans J.,

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 957-980. [Includes Chuar Group.]

Hofreiter, N	4ichael; Bet	ancourt, Julio L.; Pelliza Sbriller, Alicia; Markgraf, Vera; AND McDonald, H. Gregory
2002	21.5471	Phylogeny, diet and habit of an extinct ground sloth from Cuchillo Curá, Neuquén Province, southwest Argentina (en: Quaternary Research. Vol.59: 364-378). <i>Institute Nacional de Tecnología Agropecuraria [Argentina], Centro Regional Patagonia Norte, Estación Experimental Agropecuaria Bariloche, Comunicación Técnica 49</i> [ISSN 1667-4014]. [Preprint(?) of paper by Hofreiter <i>et al.</i> (2003) with title and cover sheet thus last author's name spelled "McDonal".] [Includes notes of Rampart Cave, Grand Canyon.]
2003	21.5472	Phylogeny, diet, and habitat of an extinct ground sloth from Cuchillo Curá, Neuquén Province, southwest Argentina. <i>Quaternary Research</i> , 59: 364-378. [Includes notes of Rampart Cave, Grand Canyon.]
Hofreiter, N	ichael; Mea	nd, Jim I.; Martin, Paul S.; AND Poinar, Henrik N.
2003	21.4520	Molecular caving. <i>In:</i> Correspondence [SECTION]. <i>Current Biology</i> , 13(18): R693-R695. [Features Rampart Cave.] [Also notes "Supplemental data are available at http://www.current-biology.com/supplemental"; however, the link was no longer valid when attempted 31 March 2009, and material not located on publisher's website. Supplemental material relocated 27 June 2023, associated with online posting of the paper, https://www.cell.com/current-biology/fulltext/S0960-9822(03)00642-0? returnURL=https%3A%2F%2Flinkinghub.elsevier.com%2Fretrieve%2Fpii%2FS0900982203006420%3Fshowall%3Dtrue (Supplemental material at https://www.cell.com/cms/10.1016/j.cub.2003.08.039/attachment/859ec2c6-ada0-43e9-a449-e0e88bd7831b/mmc1.pdf).]
Hofreiter, N	1ichael; Poii	nar, H. N.; Spaulding, W. G.; Bauer, K.; Martin, P. S.; Possnert, G.; AND Pääbo, S.
2000	21.4518	A molecular analysis of ground sloth diet through the last glaciation. <i>Molecular Ecology</i> , 9: 1975-1984. [See pp. 1977, 1982, notes on Rampart Cave.]
Holland, H.	D.	
2006	21.8217	The geologic history of seawater. <i>In:</i> Elderfield, H. (ed.), <i>The oceans and marine geochemistry</i> . Amsterdam, Boston, Heidelberg, London, New York, Oxford, Paris, Sar Diego, San Francisco, Singapore, Sydney, Tokyo: Elsevier, pp. 583-625. (Volume series: <i>Treatise on geochemistry, Volume 6</i> (H. D. Holland and K. K. Turekian, executive eds.).) [See p. 603, comments on microfossils of the Chuar Group, Grand

Hollingsworth, J. Stewart; Sundberg, Frederick A.; AND Foster, John R.

Canyon.]

2011 21.6362 (EDS.) Cambrian stratigraphy and paleontology of northern Arizona and southern Nevada; the 16th Field Conference of the Cambrian Stage Subdivision Working Group, International Subcommission on Cambrian Stratigraphy, Flagstaff, Arizona, and southern Nevada, United States. *Museum of Northern Arizona, Bulletin 67*, 321 pp., and "ISCS 16 Guidebook Errata Sheet", 7 pp. (ICSC Field Conference, Southwest

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

U.S., 2011. Southwest United States, 2011, The 16th Field Conference of the Cambrian Stage Subdivision Working Group, International Subcommission on Cambrian Stratigraphy, [International Commission on Stratigraphy], Flagstaff, Arizona, and southern Nevada, United States, 12-20 June 2011.)

Horodyski, l	Horodyski, Robert J.			
1986	21.1477	Paleontology of the late Precambrian Chuar Group, Grand Canyon, Arizona [ABSTRACT]. Geological Society of America, Abstracts with Programs, 18(5): 362.		
1988	21.1478	Late Proterozoic fossils from the western U.S.: Could they represent the oldest skeletal metaphytes and the oldest meiofunal traces? <i>Geological Society of America, Abstracts with Programs</i> , 20(7): A256.		
1989	21.1479	Paleontology of the Middle Proterozoic Belt Supergroup. <i>In:</i> Middle Proterozoic Belt Supergroup, western Montana (Don Winston, Robert J. Horodyski, and James W. Whipple, leaders). <i>28th International Geological Congress, Field Trip Guidebook T334</i> . Washington, D.C.: American Geophysical Union, pp. 7-26.		
1993	21.1480	Precambrian paleontology of the western conterminous United States and northern Mexico. <i>From:</i> Link, Paul Karl (ed.), Middle and Late Cenozoic stratified rocks of the western U.S. Cordillera, Colorado Plateau, and Basin and Range province. <i>In:</i> Reed, John C., Jr., Bickford, Marion E., Houston, R. S., Link, Paul Karl, Rankin, D. W., Sims, Paul K., and Van Schmus, W. Randall (eds.), Precambrian: Conterminous U.S. <i>Geological Society of America, Geology of North America, Volume C-2</i> , pp. 558-565 [references cited for chapter on pp. 575-594].		
1993	21.1481	Paleontology of Proterozoic shales and mudstones: examples from the Belt Supergroup, Chuar Group and Pahrump Group, western USA. <i>In:</i> Nagy, Bartholomew, Leventhal, Joel S., and Grauch, Richard I. (eds.), Metalliferous black shales and related ore deposits. <i>Precambrian Research</i> , 61(3/4) (March): 241-278.		
Horodyski, I	Robert J., AN	ND Bloeser, Bonnie		
1983	21.1482	Possible eukaryotic algal filaments from the late Proterozoic Chuar Group, Grand Canyon, Arizona. <i>Journal of Paleontology</i> , 57: 321-326.		
Horodyski, I	Robert J.; B	auld, John; Lipps, Jere H.; AND Mendelson, Carl V.		
1992	21.7591	Preservation of prokaryotes and organic-walled and calcareous and siliceous protists. <i>From:</i> Mendelson, Carl V., Bauld, John, Horodyski, Robert J., Lipps, Jere H., Moore, Toby B., and Schopf, J. William, Proterozoic and selected Early Cambrian microfossils: Prokaryotes and protists. <i>In:</i> Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere: a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 185-194. [Includes Chuar Group.]		
Hose, Louis	e D.			
1983	21.1483	Comment [on "Use of packrat middens to determine rates of cliff retreat in the eastern Grand Canyon, Arizona" by Kenneth L. Cole and Larry Mayer (1982, ITEM NO. 21.619).] <i>Geology</i> , 11: 314. [Reply by Cole and Mayer, 314-315.]		

Hoshino, \	osuke; Posh	ibaeva, Aleksandra; Meredith, William; Snape, Colin; Poshibaev, Vladimir; Versteegh, Gerard J. M.; Kuznetsov, Nikolay; Leider, Arne; Maldegem, Lennart van; Neumann, Mareike; Naeher, Sebastian; Moczydłowska, Małgorzata; Brocks, Jochen J.; Jarrett, Amber J. M.; Tang, Qing; Xiao, Shuhai; McKirdy, David; Das, Supriyo Kumar; Alvaro, José Javier; Sansjofre, Pierre; AND Hallmann, Christian
2017	21.7336	Cryogenian evolution of stigmasteroid biosynthesis. <i>Science Advances</i> (American Association for the Advancement of Science), 2: e1700887, 7 pp. + Supplementary Materials accessible at http://advances.sciencemag.org/content/suppl/2017/09/18/3.9.e1700887.DC1 , 28 pp. [Includes Chuar Group.]
Howe, Geo	orge F.	
1986	21.4235	Creation Research Society studies on Precambrian pollen: Part I—A review. <i>Creation Research Society Quarterly</i> , 23 (December): 99-104. [For Part II see Lammerts and Howe (1987, ITEM NO. 21.4236); Part III, Howe <i>et al.</i> (1988, ITEM NO. 21.4237).]
Howe, Ged	orge F.; Willia	ams, Emmett L.; Matzko, George T.; AND Lammerts, Walter E.
1986	21.3761	Pollen research update. Creation Research Society Quarterly, 22: 181-182.
1988	21.4237	Creation Research Society studies on Precambrian pollen, Part III: A pollen analysis of Hakatai Shale and other Grand Canyon rocks. <i>Creation Research Society Quarterly</i> , 24 (March): 173-182. [For Part I see Howe (1986, ITEM NO. 21.4235); Part II, Lammerts and Howe (1987, ITEM NO. 21.4236).]
Howell, Be	enjamin F.	
1956	21.1491	Evidence from fossils of the age of the Vindhyan system. <i>Palaeontological Society of India, Journal</i> , 1: 108-112.
1957	21.1492	Stipsellus annulatus, a Skolithos-like Cambrian fossil from Arizona. Wagner Free Institute of Science, Bulletin (Philadelphia), 32(2): 17-20. [New species, from the Tapeats Formation.]
Huene, F.	R. von [Huen	e, Friedrich R. von]
1926	21.1499	Notes on the age of the continental Triassic beds of North America, with remarks on some fossil vertebrates. <i>U.S. National Museum, Proceedings</i> , 69: 1-10.
Hunt, Adri	an P., and Lu	icas, Spencer G.
1998	21.3710	Implications of the cosmopolitanism of Permian tetrapod ichnofaunas. <i>New Mexico Museum of Natural History and Science, Bulletin</i> , 12: 55-57.
1998	21.4286	Ichnological evidence for tetrapod predation in the Paleozoic: Is there any? New Mexico Museum of Natural History and Science, Bulletin, 12: 59-65.

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Vertebrate tracks and the myth of the belly-dragging, tail-dragging tetrapods of the

1998

21.4287

1998	21.4287	late Paleozoic. <i>New Mexico Museum of Natural History and Science, Bulletin</i> , 12: 67-70.
2005	21.6905	The chondrichthyan <i>Megactenopetalus kaibabanus</i> from the Early-?Middle Permian of southern New Mexico and adjacent areas of Texas. <i>In:</i> Lucas, Spencer G., and Zeigler, Kate E. (eds.), The nonmarine Permian. <i>New Mexico Museum of Natural History and Science, Bulletin 30</i> , pp. 117-118. [Includes photo of TMM 41689, cast of holotype (MNA G 2.2280) of the species from the Kaibab Formation of Grand Canyon.]
2005	21.6906	The significance of Permian tracks to the development of a tetrapod ichnology [ABSTRACT]. <i>In:</i> Lucas, Spencer G., and Zeigler, Kate E. (eds.), The nonmarine Permian. <i>New Mexico Museum of Natural History and Science, Bulletin 30</i> , p. 127.
2005	21.6907	Nonmarine Permian track faunas from Arizona, USA: Ichnotaxonomy and ichnofacies. <i>In:</i> Lucas, Spencer G., and Zeigler, Kate E. (eds.), The nonmarine Permian. <i>New Mexico Museum of Natural History and Science, Bulletin 30</i> , pp. 128-131.
2005	21.6908	Stratigraphic distribution of ichnofossils in the Coconino Sandstone (Permian: Leonardian) of Grand Canyon National Park and the Seligman/Ash Fork area, northern Arizona, USA [ABSTRACT]. <i>In:</i> Lucas, Spencer G., and Zeigler, Kate E. (eds.), The nonmarine Permian. <i>New Mexico Museum of Natural History and Science, Bulletin 30</i> , p. 132.
2006	21.5353	Permian tetrapod ichnofacies. <i>In:</i> Lucas, Spencer G., Cassinis, Giuseppe, and Schneider, Joerg W. (eds.), Non-marine Permian biostratigraphy and biochronology. <i>Geological Society, Special Publications</i> (London), (265): 137-156.
2007	21.6934	Cenozoic vertebrate trace fossils of North America: Ichnofaunas, ichnofacies and biochronology. <i>In:</i> Lucas, Spencer G., Spielmann, Justin A., and Lockley, Martin G. (eds.), Cenozoic vertebrate tracks and traces. <i>New Mexico Museum of Natural History and Science, Bulletin 42</i> , pp. 17-41. [Summary review. In section, "Neogene Tracks", see "Northwestern Arizona" (p. 22) and "Lake Mead area" (p. 26). In section, "Bromalites", see remarks on Pleistocene animal coprolites from Grand Canyon (pp. 29, 30), packrat middens and ringtail refuse deposits in Grand Canyon (p. 31).]
2018	21.7794	The record of sloth coprolites in North and South America: implications for terminal Pleistocene extinctions. <i>New Mexico Museum of Natural History and Science, Bulletin</i> , 79: 277-298. [Includes Rampart and Muav Caves, and names <i>Castrocopros martini</i> , new ichnogenus, new ichnospecies, from Rampart Cave.]
Hunt, Adria	n P., AND Sa	ntucci, Vincent L.
1998	21.1506	Taxonomy and ichnofacies of Permian tetrapod tracks from Grand Canyon National Park, Arizona. <i>In:</i> Santucci, Vincent L., and McClelland, Lindsay (eds.), National Park Service paleontological research. <i>U.S. National Park Service, Geologic Resources Division Technical Report NPS/NRGRD/GRDTR-98/01</i> , pp. 94-96.
1998	21.1507	An identification key to Permian tetrapod tracks from Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and McClelland, Lindsay (eds.), National Park Service paleontological research. <i>U.S. National Park Service, Geologic Resources Division Technical Report NPS/NRGRD/GRDTR-98/01</i> , pp. 97-98.
2001	21.3711	An unusual tetrapod track morphology from the Permian Coconino Sandstone, Grand Canyon National Park, Arizona. <i>In:</i> Santucci, Vincent L., and McClelland, Lindsay

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(eds.), Proceedings of the 6th Fossil Resource Conference. *U.S. National Park Service, Geologic Resources Division, Technical Report NPS/NRGRD/GRDTR-01/01*, pp. 44-47.

2002 21.3806

Reassessment of late Paleozoic tetrapod tracks from Grand Canyon National Park, Arizona [ABSTRACT]. *Journal of Vertebrate Paleontology*, 22(3, Supplement): 68A. [First author given as "Hunt, Adrian L."]

Hunt, Adrian P.; Lockley, M. G.; Haubold, H.; AND Braddy, S.

1995 21.1508 Tetrapod ichnofacies in Early Permian red beds of the American Southwest. *New Mexico Museum of Natural History and Science, Bulletin,* 6: 295-301.

Hunt, Adrian P.; Lucas, Spencer G.; AND Lockley, M. G.

1995 21.4288 Paleozoic tracksites of the western United States. *In:* Lucas, Spencer G., and Heckert, A. B. (eds.), Early Permian footprints and facies. *New Mexico Museum of Natural History and Science, Bulletin*, 6: 213-218.

Hunt, Adrian P.; Lucas, Spencer G.; Lockley, M. G.; Haubold, H.; AND Braddy, S.

1995 21.3712 Tetrapod ichnofacies in Early Permian red beds of the American Southwest. *New Mexico Museum of Natural History and Science*, 6: 295-301.

Hunt, Adrian P.; Lucas, Spencer G.; Santucci, Vincent L.; AND Elliott, David K.

2005 21.6890 Permian vertebrates of Arizona. *In:* Heckert, Andrew B., and Lucas, Spencer G. (eds.), Vertebrate paleontology in Arizona. *New Mexico Museum of Natural History and Science, Bulletin 29*, pp. 10-15.

Hunt, Adrian P.; Lucas, Spencer G.; Santucci, Vincent L.; AND Kenworthy, Jason P.

20.9 21.4678 Significant vertebrate coprolite ichnoassemblages in National Park Service areas [ABSTRACT]. Geological Society of America, Abstracts with Programs, 41(7): 263.

Hunt, Adrian P.; Lucas, Spencer G.; AND Spielmann, Justin A.

21.6899 The bromalite collection at the National Museum of Natural History (Smithsonian Institution), with descriptions of new ichnotaxa and notes on other significant coprolite collections. *In:* Hunt, Adrian P., Milàn, Jesper, Lucas, Spencer G., and Spielmann, Justin A. (eds.), Vertebrate coprolites. *New Mexico Museum of Natural History and Science, Bulletin 57*, pp. 104-114. [Includes Rampart Cave, Grand Canyon National Park.]

Hunt, Adrian P.; Santucci, Vincent L.; AND Lucas, Spencer G.

2005 21.6891 Vertebrate trace fossils from Arizona with special reference to tracks preserved in National Park Service units and notes on the Phanerozoic distribution of fossil footprints. *In:* Heckert, Andrew B., and Lucas, Spencer G. (eds.), Vertebrate paleontology in Arizona. *New Mexico Museum of Natural History and Science, Bulletin* 29, pp. 158-166.

Hunt, Adrian P.; Santucci, Vincent L.; Tweet, Justin S.; AND Lucas, Spencer G.

2012 21.6897 Vertebrate coprolites and other bromalites in National Park Service units. *In:* Hunt, Adrian P., Milàn, Jesper, Lucas, Spencer G., and Spielmann, Justin A. (eds.), Vertebrate coprolites. *New Mexico Museum of Natural History and Science, Bulletin*

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

57, pp. 343-354. [Grand Canyon National Park, pp. 347-348, Figures 2H, I (p. 346), and unnumbered figures in volume (pp. 354, 378); Grand Canyon-Parashant National Monument, p. 349; Pipe Spring National Monument, p. 350.]

2006	21.6315	A preliminary inventory of fossil fish from National Park Service units. <i>In:</i> Lucas,
2000	21.0313	Spencer G., Spielmann, Justin A., Hester, Patricia M., Kenworthy, Jason P., and Santucci, Vinicent L. (eds.), America's antiquities: 100 years of managing fossil on federal lands. <i>New Mexico Museum of Natural History and Science, Bulletin 34</i> , pp. 63-69. ["Lake Mead National Recreation Area and Parashant National Monument [Grand Canyon-Parashant National Monument]", p. 64; "Grand Canyon National Park" p. 64.]
Huntoon, P	Peter W.	
1989	21.1547	Bat Cave guano mine, western Grand Canyon, Arizona. <i>In:</i> Elston, Donald P., Billingsley, George H., and Young, Richard A. (eds.), Geology of Grand Canyon, northern Arizona (with Colorado River guides). <i>28th International Geological Congress, Field Trip Guidebook T115/315.</i> Washington, D.C.: American Geophysical Union, p. 228.
Huntoon, P	eter W., AND	Billingsley, George H.
1978	21.4472	Stratigraphy of the post-Redwall, pre-Supai erosion channels, and pollen dating of Cenozoic travertine and fine-grained clastic deposits, Grand Canyon, Arizona: completion report. [Laramie, Wyoming: University of Wyoming?], for Grand Canyon Natural History Association, unpaginated.
Hussakof,	Louis	
1941	21.1557	Fishes from the Devonian of Arizona. American Museum Novitates, (1186), 9 pp.
1943	21.1558	Permian fishes from the Kaibab formation of Arizona [ABSTRACT]. <i>Geological Society of America, Bulletin,</i> 54: 1834.
Hutira, Joh	ına	
1986	21.5915	Analysis of plants, pollen, and coprolites. <i>In:</i> Jones, Anne Trinkle, A cross section of Grand Canyon archeology: Excavations at five sites along the Colorado River. <i>U.S. National Park Service, Western Archeological and Conservation Center, Publications in Anthropology</i> , (28): 269-322.
Hutton, F.	w.	
1898	21.6903	Presidential address. Early life on the earth. <i>In:</i> [Proceedings of] Section C.—Geolog and Mineralogy. <i>Australasian Association for the Advancement of Science, Report of the Seventh Meeting</i> (Sydney), pp. 340-356. [Grand Canyon, see p. 346.]

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I

Iberall, Eleanora Roberta see also Robbins, Eleanora I.

1972 21.1562 Paleoecological studies from fecal pellets: Stanton's Cave, Grand Canyon, Arizona.

Master's thesis, University of Arizona, 67 pp.

Irvine, Spencer, AND Strauss, Justin V.

21.6831

2014 21.6487 Taphonomy of vase shaped microfossils from the Late Tonian Callison Lake Dolostone, Yukon [ABSTRACT]. *Geological Society of America, Abstracts with Programs*, 46(6): 542. [Noted as "roughly coeval with diverse VSM assemblages from the Chuar Group of Grand Canyon, Arizona."]

Irvine, Spencer; Strauss, Justin V.; AND Cohen, Phoebe

Abundance and morphological variation of vase shaped microfossils from the Late Tonian Callison Lake Formation, Yukon [ABSTRACT]. *Geological Society of America, Abstracts with Programs*, 47(7), Session 123, Paper 123-2. [Notes comparable taxa of Chuar Group of Grand Canyon.]

Jackson, Robert Tracy

2015

1912 21.1588 Phylogeny of the Echini, with a revision of Palaeozoic species. *Boston Society of Natural History, Memoirs, Volume 7*, 491 pp., 75 plates. [See pp. 261, 267-268; plates 10, 13.]

James, Joseph F.

Studies in problematic organisms—the genus *Scolithus*. *In:* Proceedings of the summer meeting, held at Washington, August 24 and 25, 1891. *Geological Society of America, Bulletin*, 3: 32-44. [See p. 36, note of J. S. Newberry's (1861) observation of "casts of worm-holes", seen at Diamond Creek, interpreted here as *Scolithus*; and p. 46, ". . . a name should be given to forms collected from [different] horizons, say *S. arizonicus* to the form from the Grand cañon [*sic*] of Arizona." (ENTIRE NOTE)] [Nomen nudum; see also Alpert (1974, ITEM NO. 21.7786).]

Jass, Christopher N., AND Mead, Jim I.

2000 21.3667 *Oreamnos harringtoni* from southeastern New Mexico and a description of the post-cranial skeleton of the species [ABSTRACT]. *In:* Abstracts of papers; Sixtieth Annual

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Meeting, Society of Vertebrate Paleontology, Fiesta Americana Reforma Hotel, Mexico City, Mexico, October 25-28, 2000. *Journal of Vertebrate Paleontology*, 20(3, Supplement): 50A. [Includes comparison, *in passing*, with Grand Canyon specimens.]

Javaux, Emmanuelle J., AND Lepot, Kevin

21.7374 The Paleoproterozoic fossil record: Implications for the evolution of the biosphere during Earth's middle-age. *Earth-Science Reviews*, 176: 68-86.

Johnson, G. A. L.; Sutton, I. D.; Taylor, F. M.; AND Thomas, G.

Invertebrata. Chapter 10. Coelenterata. In: Harland, W. B., Holland, C. H., House, M. R., Hughes, N. F., Reynolds, A. B., Rudwick, M. J. S., Satterthwaite, G. E., Tarlo, L. B. H., and Willey, E. C. (eds.), The fossil record: a symposium with documentation jointly sponsored by the Geological Society of London and the Palaeontological

Association. London: Geological Society of London, Vol. 2, pp. 347-378. [Includes Precambrian pseudofossils of Grand Canyon.]

Johnson, Heidemarie G., AND Elliott, David K.

1995 21.1614 A redescription of *Eldenosteus arizonensis* (Placodermi: Arthrodira) from the Upper Devonian Martin Formation of northern Arizona. *Journal of Vertebrate Paleontology*,

15(2): 221-234.

(entire passage)]

Johnson, J. Harlan

1961 21.1618 Limestone-building algae and algal limestones. Colorado School of Mines, 297 pp.

Johnson, R. Roy, AND Kingsley, Kenneth J.

2013 21.5922 Amadeo M. Rea and ethnobiology in Arizona: Biography of influences and early contributions of a pioneering ethnobiologist. *In:* Quinlan, Marsha, and Lepofsky, Dana (eds.), *Explorations in ethnobiology: The legacy of Amadeo Rea.* Denton, Texas:

Society of Ethnobiology, pp. 11-43.

Jones, C. Irwin

The Navajo Indian and his ways. *The New Age Magazine* (Ancient and Accepted Scottish Rite of Freemasonry of the Southern Jurisdiction, U.S.A., Supreme Council, 33°), 18(2) (February): 146-152. [Misinformed. "The land where lives the Navajo is the most forlorn I ever saw. It seems to have been an inland sea at one time for I have found different kinds of shells and have seen on the desert petrified alligators which have every appearance of having lived in a land of moisture. There seems to have been an earthquake or an erosion of the earth which cracked the mountains where the Grand Canyon is located, the sea being carried away through this canyon."

Jongmans, \	W., AND Dijl	kstra, S. J.
1958	21.1628	Fossilium catalogus. II: Plantae. (W. Jongmans, ed.) Pars 33, Filicales, Pteridospermae, Cycadales 6. 's-Gravenhage: W. Junk, pp. 367-462. [See pp. 401, 430-431.] [Strictly taxonomic, with notations in German.]
1965	21.1629	Fossilium catalogus. II: Plantae. (S. J. Dijkstra, ed.) Pars 62, Filicales, Pteridospermae, Cycadales 35. 's-Gravenhage: W. Junk, pp. 3309-3420. [See pp. 3356-3358.] [Strictly taxonomic, with notations in German.]
1967	21.1630	Fossilium catalogus. II: Plantae. (S. J. Dijkstra, ed.) Pars 38, Filicales, Pteridospermae, Cycadales 38. 's-Gravenhage: W. Junk, pp. 3621-3702. [See p. 3627.] [Strictly taxonomic, with notations in German.]
1971	21.1631	Fossilium catalogus. II: Plantae. (S. J. Dijkstra, ed. Pars 80, Gymnospermae (Gingophyta [sic] et Coniferae) II. 's-Gravenhage: W. Junk, pp. 93-195. [See pp. 129, 144.] [Strictly taxonomic, with notations in German.]
1973	21.1632	Fossilium catalogus. II: Plantae. (S. J. Dijkstra, ed.) Pars 83, Gymnospermae (Ginkgopyta et Coniferae) V. 's-Gravenhage: W. Junk, pp. 423-558. [See p. 550.] [Strictly taxonomic, with notations in German.]
Judd, John \	N.	
1896	21.5608	(ED.) The student's Lyell: a manual of elementary geology. London: John Murray, 635 pp. [See p. 438: " fossils doubtfully referred by [Charles D.] Walcott to Lingula, Discina, Hyolithes, and Stromatopora, with traces of Trilobites, have been found in pre-Cambrian strata of the Grand Cañon of the Colorado." (ENTIRE NOTE) (No other mention of Grand Canyon in volume.)]
Junium, Chr	istopher K.,	AND Bohacs, Kevin M.
2005	21.7361	Sedimentary, petrographic, and geochemical evidence for benthic microbial mats and a refined mudstone stratigraphy for the Neoproterozoic Kwagunt Formation, Chuar Group, Grand Canyon [ABSTRACT]. <i>In:</i> [Pennsylvania State University], 37th Annual Graduate Student Colloquium: sponsored by the Department of Geosciences, April 25-29, 2005. [State College, Pennsylvania]: [Pennsylvania State University, Department of Geosciences], p. [42] [pagination includes cover sheet].
2005	21.4314	Sedimentary, petrographic, and geochemical evidence for benthic microbial mats and a refined mudstone stratigraphy for the Neoproterozoic Kwagunt Formation, Chuar Group, Grand Canyon [ABSTRACT]. <i>In:</i> Geological Society of America, <i>Earth System Processes 2 (8-11 August 2005, Calgary, Alberta, Canada)</i> . Paper no. 8-1.
Jux, Ulrich		
1977	21.1634	Über die wandstrukturen Sphaeromorpher Acritarchen: <i>Tasmanites</i> Newton, <i>Tapajonites</i> Sommer & Van Boekel, <i>Chuaria</i> Walcott. <i>Palaeontographica</i> , 160 (Abteilung B, Paläophytologie): 1-16. [In German.]

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Kauffman,	Frie G	AND	Fursich	Franz
Naullillali,	LIIC G.,	AITU	i ui sicii,	I I aliz

1983	21.1643	Brooksella canyonensis: a billion year old complex metazoan trace fossil from the
		Grand Canyon [ABSTRACT]. Geological Society of America, Abstracts with Programs,
		15(6): 608.

Kauffman, Erle G., AND Steidtmann, James R.

1981	21.1644	Are these the oldest metazoan trace fossils? <i>Journal of Paleontology</i> , 55: 923-947. [See pp. 924-925.]
1983	21.1645	Reply. No, they are still dubiofossils! <i>In:</i> Comment and reply on "Are these the oldest metazoan trace fossils?" <i>Geology</i> , 11: 619-621. [Reply to: "Comment. Are the Medicine Peak Quartzite 'dubiofossils' fluid-evasion tracks?", by Preston Cloud (pp. 618-619).] [NOTE: Cloud's comment does not mention anything pertaining to the Grand Canyon, so it is not separately cited in this bibliography; it was initially in response to Kauffman and Steidtmann (1981, ITEM NO. 21.1644).]

Keable, Ed [Keable, Edward T.]

2021	21.8270	[Field briefing.] <i>In:</i> Explorations with Ed [SECTION]. <i>Canyon Views</i> (Grand Canyon
		Conservancy), 28(1) (Spring/Summer): 5. [Superintendent's paleontology hike on
		Hermit Trail with Science and Resource Management staff.]

Kenworthy, Jason P.

2010	21.5322	Changing landscape, climate, and life during the Age of Mammals: Interpreting
		paleontology, evolving ecosystems, and climate change in the Cenozoic fossil parks.
		Master's thesis, Oregon State University, 224 pp. [See pp. 39, 46, 48, 181. Grand
		Canyon National Park is not a principal focus of this thesis.]

Kenworthy, Jason P.; Kellerlynn, Katie; Graham, John; Thornberry-Ehrlich, Trista L.; AND Reiker, Philip

2011	21.5567	National Park Service Geological Resources Inventory reports: Integrating geologic
		data, park landscapes, and effective resource management [ABSTRACT]. Geological
		Society of America, Abstracts with Programs, 43(5): 298.

Kenworthy, Jason P.; Santucci, Vincent L.; AND Cole, Kenneth L.

2004	21.3966	An inventory of paleontological resources associated with caves in Grand Canyon National Park. <i>In:</i> Riper, Charles van, III, and Cole, Kenneth L. (eds.), <i>The Colorado Plateau : cultural, biological, and physical research</i> . Tucson: University of Arizona Press, pp. 211-228. (Sixth Biennial Conference of Research on the Colorado Plateau.)
2015	21.6794	An inventory of paleontological resources associated with caves in Grand Canyon

		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. 74-75.
Keppel, D.		
1934	21.5465	A study of the (Permian) bryozoan collection from the museum of the National Park Service at Grand Canyon, Arizona. Master's thesis, Columbia University.
Keyes, C. R	. [Keyes, Ch	arles Rollin]
1923	21.1689	Biotic resolution of Red Wall Limestone of Grand Canyon. <i>Pan-American Geologist</i> , 39: 57-61.
Kim, Bong-	Kyun [강봉균	2 1
1992	21.8212	牛物多條件의 地史學的 變邊史. Diversity patterns in the fossil record. 자연보존 [Chayŏn pojon yŏn'gu pogosŏ] / Nature Conservation (Korean Association for Conservation of Nature, Seoul), (78) (June): 8-11. [See p. 8, brief note of microfossils of the Kwagunt Formation, Grand Canyon.] [In Korean, with bilingual item and serial titles (from English-language contents page).]
King, Rober	t Evans	
1930	21.1746	The geology of the Glass Mountains, Texas. Part II. Faunal summary and correlation of the Permian formations with description of Brachiopoda. <i>University of Texas, Bulletin 3042</i> , 245 pp. [Includes Grand Canyon.]
Knauth, L. I	Paul	
1982	21.1752	Isotopic analyses of upper Proterozoic cherts with possible implications for upper Precambrian climates and the Phanerozoic explosion of life [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 14: 532.
2005	21.4734	Temperature and salinity history of the Precambrian ocean: implications for the course of microbial evolution. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 219: 53-69.
Knauth, L. I	Paul, AND Ep	ostein, S.
1976	21.1753	Hydrogen and oxygen isotope ratios in nodular and bedded cherts. <i>Geochimica et Cosmochimica Acta</i> , 40: 1095-1108.
Knauth, L. I	Paul, AND Ho	prodyski, Robert J.
1993	21.1754	Evidence for and implications of life on land in the Proterozoic [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 25(6): A80-A81.

Knight, Cas	si	
2020	21.8034	Chapter 7. Paleozoic paleobotany of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), <i>Grand Canyon National Park: centennial paleontological resource inventory (non-sensitive version).</i> Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 257-275. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103.</i>)
2021	21.8259	Paleozoic paleobotany of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 119-130, a1, [a2] (pagination is contiguous). [Reset reprinting of Knight (2020, ITEM NO. 21.8034).]
Knoll, Andre	ew H.	
1983	21.1755	Biological interactions and Precambrian eukaryotes. <i>In:</i> Tevesz, Michael J. S., and McCall, Peter L. (eds.), <i>Biotic interactions in Recent and fossil benthic communities.</i> New York and London: Plenum Press, pp. 251-283. [See pp. 271-273.]
2003	21.4621	Life on a young planet: The first three billion years of evolution on earth. Princeton, New Jersey: Princeton University Press, 277 pp.
Knoll, Andr	ew H.; Java	ux, E. J.; Hewitt, D.; AND Cohen, P.
2006	21.4654	Eukaryotic organisms in Proterozoic oceans. <i>Philosophical Transactions</i> (Royal Society of London), B (Biological Sciences), 361: 1023-1038. [See pp. 1027, 1029-1031, 1034.]
Kornicker, I	Louis S., AND	Conover, John T.
1960	21.6409	Effect of high storm tide levels on beach burial of jellyfish (Scyphozoa) and other organisms. <i>Internationale Revue Gesamten Hydrobiologie</i> , 45(2): 203-214. [Introduction and cited work notes fossil jellyfish reported from Grand Canyon by Van Gundy (1951), but erreoneously notes as from Cambrian strata. No further discussion.]
Kramer, Joi	n M.; Erickso	on, Bruce R.; Lockley, Martin G.; Hunt, Adrian P.; AND Braddy, Simon J.
1995	21.6915	Pelycosaur predation in the Permian: Evidence from <i>Laoporus</i> trackways from the Coconino Sandstone with description of a new species of <i>Permichnium</i> . <i>In:</i> Lucas, Spencer G., and Heckert, Andrew B. (eds.), Early Permian footprints and facies. <i>New Mexico Museum of Natural History and Science, Bulletin 6</i> , pp. 245-249. [The new ichnospecies, <i>P. coconinensis</i> , is described from near Seligman, Arizona.]
Krapovicka	s, Verónica	
2010	21.6370	El rol de las trazas fósiles de tetrápodos en los modelos de icnofacies continentales en embientes de climas áridos-semiáridos. Doctoral dissertation, Universidad de Buenos Aires, 343 pp. [See pp. 36-37, regarding Grand Canyon fossil collections examined in the American Museum of Natural History; specifically, the Coconino Sandstone

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ichnotaxa Ammobatrachus turbatan,	Dilochopodus tetradactylus,	and Laoporus noblei.
Listed only; no discussion by taxon.]	[In Spanish.]	

Kropf, Man	Kropf, Manny; Mead, Jim I.; AND Anderson, R. Scott					
2007	21.7007	Dung, diet, and the paleoenvironment of the extinct shrub-ox (<i>Euceratherium collinum</i>) on the Colorado Plateau, USA. <i>Quaternary Research</i> , 67: 143-151. [Includes references to "eastern Grand Canyon Caves" noted by archaeological site numbers.]				
Krylov, I. N	., AND Vasu	na, R. A. [Крылов И.Н.; Васуна Р.А.]				
1975	21.4757	Ревнейший следы жизни на Земли [Drevneishiy sledy zhizni na Zemly] [The oldest traces of life on earth]. Стратиграфия Палеонтология [Stratigrafiya Paleontologiya] [Stratigraphic Paleontology], 6: 60-92. [In Russian.]				
Kull, Ulrich						
1977	21.6404	Die Fossilien des Präkambriums. <i>Naturwissenschaftliche Rundschau</i> , 30(6): 209-215. [Chuar Group, Grand Canyon, pp. 213-214.] [In German.]				
Kurtén, Bjö	rn, AND And	erson, Elaine				
1980	21.1791	Pleistocene mammals of North America. New York: Columbia University Press, 442 pp.				
Kurtén, Bjö	rn, AND Wer	delin, Lars				
1988	21.1792	A review of the genus <i>Chasmaporthetes</i> Hay, 1921 (Carnivora, Hyaenidae). <i>Journal of Vertebrate Paleontology</i> , 8(1): 46-66.				

I

Labrot, Philippe

2006	21.4708	Microscopie à force atomique de microfossiles précambriens. Doctoral dissertation,
		Université d'Orleans, 261 pp. [See p. 12.] [In French.]

Lahr, Daniel J. G.; Bosak, Tanja; Lara, Enrique; AND Mitchell, Edward A. D.

2015	21.6810	The Phanerozoic diversification of silica-cycling testate amoebae and its possible links	
		to changes in terrestrial ecosystems. PeerJ, 3: e1234, doi:10.7717/peerj.1234, 19	
		pp. [Includes notes of Chuar Group of Grand Canyon.]	

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Lammerts,	Walter E	AND Howe	. George F.
Laiiiiiei (5,	waitei E.,	AND HOWE	, decide r.

1987	21.4236	Creation Research Society studies on Precambrian pollen—Part II: Experiments on
		atmospheric pollen contamination of microscope slides. Creation Research Society
		Quarterly, 23 (March): 151-153. [For Part I see Howe (1986, ITEM NO. 21.4235); Part
		· · · · · · · · · · · · · · · · · ·

III, Howe et al. (1988, ITEM NO. 21.4237).]

Lane, A. A.; Braddy, S. J.; Briggs, D. E. G.; AND Elliott, D. K.

2003 21.3915 A new trace fossil from the Middle Cambrian of the Grand Canyon, Arizona, USA. Palaeontology, 46(Part 5): 987-997. [Bicavichnites martini, new ichnogenus, new ichnospecies; from the Bright Angel Shale.]

Lane, Abigail

2000 21.6339 1999; Burgess Shale arthropods—walking techniques and fossil trackways. *In:*

Sylvester-Bradley Awards. *The Palaeontology Newsletter* (The Palaeontological Association, United Kingdom), (43): 22-23. [Funding award to enable "examination of trackway specimens housed at the U.S. National Museum of Natural History and the Museum of Northern Arizona, and collection of new material from the Tapeats Sandstone and Bright Angel Shale Formations of the Grand Canyon, revealing a wide range of trackway morphologies preserved in these Cambrian deposits." (p. 22) Compares to Burgess Shale ichnofossils.]

Lang, Walter

1974 *21.4483* (ED.) *Lessons taught by minifossils in the Grand Canyon.* Minneapolis, Minnesota: Bible-Science Association, tract.

Lange, Arthur L.

2020

1956 21.1814 Woodchuck remains in northern Arizona caves. *Journal of Mammalogy*, 37: 289-291.

Larsen, Brendan B.; Cole, Kenneth L.; AND Worobey, Michael

2018 21.7583 Ancient DNA provides evidence of 27,000-year-old papillomavirus infection and long-

term codivergence with rodents. *Virus Evolution*, 4(1): vey014, 8 pp. + Supplementary Data online ("Supplementary Figure S1, Phylogenetic relationship of all papillomavirus genomes isolated from vertebrates" and Supplementary Table (Excel file), https://academic.oup.com/ve/article/4/1/vey014/5039640#supplementary-data). [*Neotoma*, cf. *N. cinerea*; *N. lepida*. "The packrat middens analyzed for this study were originally collected in 1979 from a cliff at 1770 m of elevation on the south arm of Poston Butte, just east of Chuar Valley in the Grand Canyon, Arizona (36° 10′ 27″ N.; 111° 54′ 5″ W)" (p. 4).]

Lassiter, Linda Sue; Tweet, Justin S.; Sundberg, Frederick A.; Foster, John R.; AND Bergman, P. J.

21.8032 Chapter 5. Paleozoic invertebrate paleontology of Grand Canyon National Park. *In:*Santucci, Vincent L., and Tweet, Justin S. (eds.), *Grand Canyon National Park:*centennial paleontological resource inventory (non-sensitive version). Fort Collins,

		Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 109-236. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103</i> .)
2021	21.8257	Paleozoic invertebrate paleontology of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. [unnumbered page facing 73], 73-104, A1-A42, B1-B22, C1-C4, D1 (pagination is contiguous). [Reset reprinting of Lassiter <i>et al.</i> (2020, ITEM NO. 21.8032).]
Laudermilk	, J. D. [Laud	lermilk, Jerry]
1942	21.1831	Cave of the giant sloths. (Photographs by Hulbert Burroughs.) Desert Magazine, 6(1) (November): 24-28. [Rampart Cave.]
1944	21.1834	Fossil weather. Desert Magazine, 7(11) (September): 19-23.
1948	21.1832	They left their prints in stone. <i>Desert Magazine</i> , 12(2) (December): 22-24. [Fossil plants in Hermit Shale, Grand Canyon.]
Laudermilk	, Jerry D., Ar	ND Munz, P. A.
1938	21.1833	Plants in the dung of <i>Nothrotherium</i> from Rampart and Muav Caves, Arizona. <i>Carnegie Institution of Washington, Publication 487</i> , pp. 271-281.
Lee, Willis	т.	
1927	21.6139	Correlation of geologic formations between east-central Colorado, central Wyoming and southern Montana. <i>U.S. Geological Survey, Professional Paper 149</i> , 80 pp. [See p. 12, "Lyons Sandstone (redefined)", including notes by C. W. Gilmore on fossil footprints of the Coconino Sandstone of Grand Canyon.]
Lenton, Tim	nothy M.; Bo	yle, Richard A.; Poulton, Simon W.; Schields-Zhou, Graham A.; AND Butterfield, Nicholas J.
2014	21.6805	Co-evolution of eukaryotes and ocean oxygenation in the Neoproterozoic era. <i>Nature Geoscience</i> , 7 (April): 257-265. [Includes Chuar Group of Grand Canyon.]
Lerner, Alla	ın J.; Voigt,	Sebastian; AND Lucas, Spencer G.
2012	21.5795	The first Mesozoic record of <i>Walpia hermitensis</i> , an invertebrate trace fossil previously known only from the Permian of the American Southwest [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 44(6): 89.
Lesniak, Bil	ıı	
2008	21.8433	Been there, dung that: NAU scientist gets the scoop on poop and climate change. Wayne County Gem and Mineral Club News (Wayne County, New York), 34(3) (March): 4; (4) (April): 4; (5) (May): 3-4. [Brief and superficial; peculiarly broken up over three issues. Regarding Northern Arizona University Jim Mead's research on fossil dung from the Colorado Plateau, including Grand Canyon.] [Note also Mead's

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plenary address to the Tennesee Academy of Science, Noember 21, 2014, "Ice Age Colorado Plteau: Been There Dung That" (Fulcher, Teresa L., "124th Meeting of the Tennessee Academy of Science, 21 November 2014, Walters State Community College, Morristown, Tennessee", *Tennessee Academy of Science, Journal*, 90(1/2) (May 2015): 11-12; Mead's address noted by title only).]

Lesser, Sa	ımantha; Sant	cucci, Vincent L.; AND Jorstad, Thomas
2012	21.7698	National Park Service vertebrate collections at the Smithsonian: Collaboration to support science and stewardship [ABSTRACT]. <i>In: Program and abstracts: 72nd Annual Meeting, Society of Vertebrate Paleontology: Raleigh Convention Center, Raleigh, NC, USA, October 17-20, 2012: Supplement to the online Journal of Vertebrate Paleontology, October 2012</i> , p. 127. [Pilot project to inventory and photograph three collections, including "Charles Gilmore's Paleozoic vertebrate ichnofossils from Grand Canyon National Park".
2013	21.6195	A Smithsonian Institution and National Park Service collaboration to manage paleontological resources [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 45(7): 429.
Lewin, Ro	ger	
1985	21.1865	Plant communities resist climatic change. <i>Science</i> , 228: 165-166. [Summarizing the paleoenvironmental work of Kenneth Cole.]
1986	21.1866	Mountain goat horn: A clue to extinction? Science, 232: 450.
Ley, Willy		
1953	21.8595	For Your Information [COLUMN]. <i>Galaxy Science Fiction</i> (New York), 7(2) (November): 35-43. [See the "Any Questions?" section, which includes (pp. 41-42) the inquiry from Rita Eleftheriades of New York City, "What are the oldest known fossils and how old are they?", with Ley's reply that includes the comments, "From the Proterozoic Era, a few doubtful fossils are known, one from Australia (<i>Protaledadia</i>) and one from the Grand Canyon (<i>Beltina danae</i>), both believed to be early arthropods." and "Spicules of sponges from the Proterozoic of Grand Canyon are less doubtful than the supposed arthropods" (no further details pertaining to the Grand Canyon occurrences).]
Li, Chao;	Peng, Ping'an;	Sheng, Guoying; AND Fu, Jiamo
2000	21.4810	Precambrian organic matter. <i>Chinese Science Bulletin</i> , 45(4) (February): 295-304. [Includes notice of Chuar Group.]
Linck, Ott	o	
1948	21.7964	Lebens-Spuren aus dem Schilfsandstein (Mittl. Keuper km 2) NW-Würtembergs und ihre Bedeutung für die Bildungsgeschichte der Stufe. <i>Vereins für Vaterländische Naturkunde in Württemberg, Jahreshefte</i> , 97/101: 1-100 (including Plates 1-8). [See p. 61, remarks pertaining to the ichnospecies <i>Octopodichnus didactylus</i> Gilmore and the paleoenvironment of the Coconino Sandstone.] [In German.]

Lindsay, Ev	Lindsay, Everett H., AND Tessman, Norman T.		
1974	21.1869	Cenozoic vertebrate localities and faunas in Arizona. <i>Arizona Academy of Science, Journal</i> , 9: 3-24.	
Linick, T. W	/.; Jull, A. J.	T.; Toolin, L. J.; AND Donahue, D. J.	
1986	21.7011	Operation of the NSF-Arizona accelerator facility for radioisotope analysis and results from selected collaborative research projects. <i>Radiocarbon</i> , 28(2A): 522-533. [See section, "Faunal Paleoextinctions" (pp. 528-531), which includes Rampart Cave and Stanton's Cave, Grand Canyon.] [National Science Foundation.]	
Linnell, Tor	·е		
1933	21.7963	Zur Morphologie und Systematik der Trias-Cycadophyten. II. Über Scytophyllum Bornem, eine wenig bekannte Cycadophytengattung als Keuper. Svensk Botanisk Tidskrift (Svenska Botaniska Föreningen, Stockholm), 27(3): 310-332, Plate 2. [See Scytophyllum apoldense (Compter) n. comb.; compares (p. 324) morphological elements to Supaia anomala White, from the Permian Hermit Shale of Grand Canyon.] [In German.]	
Lochman, 0	Christina		
1952	21.7987	Trilobites. <i>In:</i> Cooper, G. Arthur, Arellano, A. R. V., Johnson, J. Harlan, Okulitch, Vladimir J., Stoyanow, Alexander, and Lochman, Christina, Cambrian stratigraphy and paleontology near Caborca, northwestern Sonora, Mexico. <i>Smithsonian Miscellaneous Collections</i> , 119(1): 60-161, Plates 15-31. [Study area is extralimital to this bibliography, but Grand Canyon noted pp. 73, 75, 77, 79, 80, 122, 137; with specific remark (p. 76), "A careful revision of the Grand Canyon generic identifications should be made before the faunal lists [for the study area] can be used accurately for correlation purposes."]	
Lockley, Ma	artin G.		
1992	21.1887	Comment [on "Fossil vertebrate footprints in the Coconino Sandstone (Permian) of northern Arizona: Evidence for underwater origin" by Brand and Tang (1991).] <i>Geology</i> , 20: 666-667. [See also reply by Brand (1992), pp. 668-669; with combined references cited, pp. 669-670.]	
2011	21.6803	The ichnotaxonomic status of <i>Brasilichnium</i> with special reference to occurrences in the Navajo Sandstone (Lower Jurassic) in the western USA. <i>In:</i> Sullivan, Robert M., Lucas, Spencer G., and Spielmann, Justin A. (eds.), Fossil Record 3. <i>New Mexico Museum of Natural History and Science, Bulletin 53</i> , pp. 306-315. [Includes <i>Chelichnus</i> from Permian Coconino Sandstone.]	
Lockley, Ma	artin G.; Nov	okov, Valery; Dos Santos, Vanda Faria; Nessov, Lev A.; AND Forney, Gerald	
1994	21.7389	"Pegadas de Mula": an explanation for the occurrence of Mesozoic traces that resemble mule tracks. <i>Ichnos</i> , 3: 125-133. [Includes Paleozoic trace fossils from Grand Canyon.]	

Lofgren, Do	Lofgren, Donald L., AND Liu, Jennifer		
2019	21.8041	(WITH Eric B. Williams) <i>Moment in time: The life of Raymond Alf and the history of the Peccary Society.</i> Claremont, California: The Webb Schools, 340 pp. [Privately pubished.] [Includes Alf's paleontological work in Grand Canyon.]	
Lofgren, Do	nald L.; Gre	ening, Jay A.; Johnson, Cooper F.; Lewis, Sarah J.; AND Torres, Mark A.	
2006	21.4643	Footprints on the sands of time: Fossil tracks at the Raymond Alf Museum of Paleontology. <i>In:</i> Reynolds, Robert E. (ed.), <i>Making tracks across the Southwest.</i> [No place]: California State University, Desert Studies Consortium; and LSA Associates, Inc., pp. 52-62.	
2006	21.6316	Fossil tracks at the Raymond Alf Museum of Paleontology and management of tracks on public lands. <i>In:</i> Lucas, Spencer G., Spielmann, Justin A., Hester, Patricia M., Kenworthy, Jason P., and Santucci, Vinicent L. (eds.), America's antiquities: 100 years of managing fossil on federal lands. <i>New Mexico Museum of Natural History and Science, Bulletin 34</i> , pp. 109-118.	
Long, Austir	ı, and Marti	in, Paul S.	
1974	21.1892	Death of American ground sloths. Science, 186: 638-640.	
Long, Austir	n, Hansen, R	R. M.; AND Martin, Paul S.	
1974	21.1893	Extinction of the Shasta ground sloth. <i>Geological Society of America, Bulletin,</i> 85: 1843-1848.	
Loope, Davi	d B.		
1992	21.1919	Comment [on "Fossil vertebrate footprints in the Coconino Sandstone (Permian) of northern Arizona: Evidence for underwater origin" by Brand and Tang (1991).] <i>Geology</i> , 20: 667-668. [See also reply by Brand (1992), pp. 668-669; with combined references cited, pp. 669-670.]	
1992	21.1920	Fossil vertebrate footprints in the Coconino Sandstone (Permian) of northern Arizona: subaqueous or subaerial? [ABSTRACT]. <i>In:</i> Proceedings of the Nebraska Academy of Sciences, including the NATS and TERQUA divisions and affiliated societies. <i>Nebraska Academy of Sciences and Affiliated Societies, Proceedings</i> , 102: 70.	
Love, Gordo	n D.; Frosje	ean, Emmanuelle; Stalvies, Charlotte; Fike, David A.; Grotzinger, John P.; Bradley, Alexander S.; Kelly, Amy E.; Bhatia, Maya; Meredith, William; Snape, Colin E.; Bowring, Samuel A.; Condon, Daniel J.; AND Summons, Roger E.	
2009	21.4809	Fossil steroids record the apperance of Demospongiae during the Cryogenian period. <i>Nature</i> (London), 457 (February 5): 718-721, and Supplementary Information doi:10.1038/nature07673, www.nature.com/nature, 50 pp.	

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Lucas,	Spencer	G.
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1998	21.4289	Toward a tetrapod biochronology of the Permian. New Mexico Museum of Natural History and Science, Bulletin, 12: 71-92.
2019	21.8095	An ichnological perspective on some major events of Paleozoic tetrapod evolution. Società Paleontologica Italiana, Bollettino, 58(3): 223-266. [Includes Grand Canyon.] [In English, with abstract also in Italian.]

Lucas, Spencer G., AND Morgan, Gary S.

2005	21.4153	Pleistocene mammals of Arizona: An overview. In: Heckert, Andrew B., and Lucas,
		Spencer G. (eds.), Vertebrate paleontology in Arizona. New Mexico Museum of
		Natural History and Science, Bulletin 29, pp. 153-158.

Lucas, Spencer G.; Francischini, Heitor; Dentzien Dias, Paula; AND Ludlow, Bill

2018	21.7529	More than Chelichnus in the lower Permian Coconino Sandstone: New tetrapod
		footprint localities in Coconino County, Arizona [ABSTRACT]. Geological Society of
		America, Abstracts with Programs, 50(5): Final Paper 43-1, doi:10.1130/abs/2018RM-
		313462. [Apache-Sitgreaves National Forest.]

Lucas, Spencer G.; Heckert, Andrew B.; AND Tanner, Lawrence H.

2005	21.6373	Arizona's Jurassic fossil vertebrates and the age of the Glen Canyon Group. <i>In:</i>
		Heckert, Andrew B., and Lucas, Spencer G. (eds.), Vertebrate paleontology in Arizona.
		New Mexico Museum of Natural History and Science, Bulletin 29, pp. 95-104.
		[Includes outcrop areas on the Arizona Strip.]

Lucas, Spencer G.; Marchetti, Lorenzo; AND Francischini, Heitor

2019	21.7930	Rethinking the ichnology of the lower Permian Coconino Sandstone, Grand Canyon,
		Arizona [ABSTRACT]. Geological Society of America, Abstracts with Programs, 51(5):
		Paper No. 160-1
		(https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Paper/340926).

Lucas, Spencer G.; Olson, Thomas J.; Ludlow, Bill; AND Rogers, John B.

Lucas, Spen	icei G., Oiso	ii, Illollias J., Luulow, Bill, AND Rogers, John B.
2019 21.7900 Arizona's oldest extensive Permian tracksite and its stratigraphic significan		
		[ABSTRACT]. Geological Society of America, Abstracts with Programs, 51(5): Paper No.
		271-14 (https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Paper/336596). [Tonto
		Creek area, Mogollon Rim. Notes that "some previous correlations of Pennsylvanian
		strata (e.g., Wescogame Formation) of the Supai Group in the Grand Canyon to the
		lower Supai Formation along the Mogollon Rim are guestionable."

Lucas, Spencer G.; Tanner, Lawrence H.; AND Heckert, Andrew B.

2005	21.6892	Tetrapod biostratigraphy and biochronology across the Triassic-Jurassic boundary in
		northeastern Arizona. <i>In:</i> Heckert, Andrew B., and Lucas, Spencer G. (eds.),
		Vertebrate paleontology in Arizona. New Mexico Museum of Natural History and
		Science, Bulletin 29, pp. 83-93. [Includes outcrop areas on the Arizona Strip.]

Lull, Richard Swann

1904	21.5622	Nature's hi	eroglyphics.	Popular Scie	nce Monthly,	(December):	139-149. [Foss	il
		footprints.	See p. 149,	note of fossil	footprints in	Grand Canyor	n, in passing.]	

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1918	21.1984	Fossil footprints from the Grand Canyon of the Colorado. <i>American Journal of Science</i> , Series 4, 45: 337-346.
1918	21.1985	The pulse of life. <i>In:</i> The evolution of the earth and its inhabitants: a series of lectures delivered before the Yale Chapter of the Sigma Xi during the academic year 1916-1917. New Haven, Connecticut: Yale University Press, and London: Humphrey Milford, Oxford University Press, pp. 109-146. [See pp. 111, 118-119.]
Lundelius, I	Ernest L., Jr.	
2006	21.4522	Cave site contributions to vertebrate history. <i>Alcheringa</i> , 31: 195-210.
Lundelius, I	Ernest L., Jr.,	; Graham, Russell W.; Anderson, Elaine; Guilday, John; Holman, J. Alan; Steadman, David W.; AND Webb, S. David
1983	21.1988	Terrestrial vertebrate faunas. <i>In:</i> Wright, H. E., Jr. (ed.), <i>Late Quaternary environments of the United States. Volume 1. The Late Pleistocene.</i> Minneapolis, Minnesota: University of Minnesota Press, pp. 311-353.
Lundin, R. F	:.; Norby, R.	D.; Racey, J. S.; AND Walter, D. R.
1978	21.1989	Conodont biostratigraphy of Mississippian rocks of Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 10: 114.
Lyons, Paul	C., AND Mor	ey, Elsie Darrah
1995	21.1997	David White (1862-1935): American paleobotanist and geologist. <i>In:</i> Lyons, Paul C., Morey, Elsie Darrah, and Wagner, Robert H. (eds.), Historical perspective of early twentieth century Carboniferous paleobotany in North America; in memory of William Culp Darrah. <i>Geological Society of America, Memoir 185</i> , pp. 135-148.
2006	21.4303	David White (1862-1935): Pioneer in coal, petroleum, and paleobotanical studies. <i>GSA Today</i> (Geological Society of America), (June): 54-55. [Rock Stars feature.]



MacDonald, Jerry

1994	21.2001	Earth's first steps: tracking life before the dinosaurs. (Foreword by Martin Lockley,
		introduction by Nicholas Hotton, III.) Boulder, Colorado: Johnson Books, 290 pp.

Macurda, D	onald B., Jr.	
1969	21.2011	Blastoids. <i>In:</i> McKee, E. D., and Gutschick, R. C., History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , pp. 457-473.
Maithy, P. I	K., AND Babu	ı, Rupendra
1988	21.2014	Chitinozoa-like remains from Vindhyan Supergroup of Son Valley. <i>Palaeobotanist</i> , 37(1): 77-80. [Includes Chuar Group of Grand Canyon.] [With abstract also in Hindi.]
Malone, Bri	uce	
2006	21.6764	Grand Canyon mystery solved. <i>In:</i> Malone, Bruce, <i>Search for the truth : changing the world with the evidence for creation.</i> Midland, Michigan: Search for the Truth, revised, expanded 3rd ed., p. 48. [Nautiloid evidence for the Flood, in Redwall Limestone.]
Mamay, Se	rgius H.	
1976	21.2022	Paleozoic origin of the cycads. <i>U.S. Geological Survey, Professional Paper 934</i> , 48 pp. [See pp. 28-29.]
Mamay, Se	rgius H., AND	Breed, William J.
1970	21.2023	Early Permian plants from the Cutler Formation in Monument Valley, Utah. <i>U.S. Geological Survey, Professional Paper 700-B</i> , pp. B109-B117. [Includes notes of Grand Canyon.]
Mamay, Se	rgius H., AND	Watt, A. D.
1971	21.2024	An ovuliferous callipteroid plant from the Hermit Shale (Lower Permian) of the Grand Canyon, Arizona. <i>U.S. Geological Survey, Professional Paper 750-C</i> , pp. C48-C51.
Mamet, B. I	L., AND Skipp	o, Betty A.
1970	21.2025	Lower Carboniferous calcareous foramirifera [sic]: Preliminary zonation and stratigraphic implications for the Mississippian of North America. Sixième Congrès International de Stratigraphie et de Géologie du Carbonifère. Sheffield 11th to 16th September 1967. Compte Rendu, 3: 1129-1146.
1970	21.2026	Preliminary foraminiferal correlations of early Carboniferous strata in the North American Cordillera. <i>In:</i> Streel, M., and Wagner, R. H. (eds.), <i>Colloque sur la stratigraphie du Carbonifere.</i> Université de Liège, pp. 327-348. (Les Congres et Colloques de l'Universite de Liege, Volume 55.)

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Marché, Jo	rdan D., II	
1992	21.2034	Edward Hitchcock, <i>Fucoides,</i> and the ichnogenus <i>Scoyenia</i> . <i>Earth Sciences History</i> , 11(1): 13-20.
Marchetti,	Lorenzo; Fra	ancischini, Heitor; Lucas, Spencer G.; Voigt, Sebatian; Hunt, Adrian P.; AND Santucci, Vincent L.
2020	21.8036	Chapter 9. Paleozoic vertebrate ichnology of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), <i>Grand Canyon National Park:</i> centennial paleontological resource inventory (non-sensitive version). Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 333-379. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103</i> .)
2021	21.8261	Paleozoic vertebrate ichnology of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 171-204. [Reset reprinting of Marchetti <i>et al.</i> (2020, ITEM NO. 21.8036).]
Marchetti,	Lorenzo; Vo	igt, Sebastian; Lucas, Spencer G.; Francischini, Heitor; Dentzien-Dias, Paula; Sacchi, Roberto; Mangiacotti, Marco; Scali, Stefano; Gazzola, Andrea; Ronchi, Ausonio; AND Millhouse, Amanda
2019	21.7791	Tetrapod ichnotaxonomy in eolian paleoenvironments (Coconino and De Chelly formations, Arizona) and late Cisuralian (Permian) sauropsid radiation. <i>Earth-Science Reviews</i> , 190: 148-170.
Marchetti,	Lorenzo; Vo	igt, Sebastian; Mujal, Eudald; Lucas, Spencer G.; Francischini, Heitor; Fortuny, Josep; AND Santucci, Vincent L.
2020	21.8144	Extending the footprint record of Pareiasauromorpha to the Cisuralian: Earlier appearance and wider palaeobiogeography of the group. <i>Papers in Palaeontology</i> (Palaeontological Association), 2020: 1-23, doi:10.1002/spp2.1342. [Ichonospecies <i>Pachypes ollieri</i> (Ellenberger), new combination; includes material from "Hermit Formation, Hermit Basin, Cisuralian, Arizona, USA: GRCA 3172, trackway with three consecutive pes–manus couples, concave epirelief. GRCA 3173, counterpart of GRCA 3172, incomplete step cycle with two consecutive pes–manus couples, convex hyporelief." (p. 7) See also pp. 9 (with figures 5A-E, p. 11), 17, 18.]
Margulis, L	ynn	
1982	21.2046	Early life. Boston: Science Books International, Inc., 160 pp. [See p. 30.]
Marsh, Ada	m D.; Parke	r, William G.; AND Miller, Anne E.
2020	21.8037	Chapter 10. Mesozoic paleontology of Grand Canyon National Park: Trace fossils, stratigraphy, and regional correlations. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), <i>Grand Canyon National Park: centennial paleontological resource inventory (non-sensitive version).</i> Fort Collins, Colorado: U.S. National Park Service, Natural Passaurca Stowardship and Science, pp. 381-401. (Volume: Natural Passaurca Papart

NPS/GRCA/NRR-2020/2103.)

Resource Stewardship and Science, pp. 381-401. (Volume: *Natural Resource Report*

2021	21.8262	Mesozoic paleontology of Grand Canyon National Park—trace fossils, stratigraphy, and regional correlations. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 205-219. [Reset reprinting of Marsh <i>et al.</i> (2020, ITEM NO. 21.8037).]
Marshall, W	Villiam B.	
1929	21.2051	Three new land shells of the genus Oreohelix from Arizona. <i>U.S. National Museum, Proceedings</i> , 76 (article 5) (2802), 3 pp., 1 plate. [See pp. 1-2; plate 1, figures 1-3, 11.]
Martin, Dar	yl Lynn	
1985	21.2052	Depositional systems and ichnology of the Bright Angel Shale (Cambrian), eastern Grand Canyon, Arizona. Master's thesis, Northern Arizona University, 365 pp.
Martin, Dar	yl L., AND EI	liott, David K.
1984	21.2053	A regressive sequence and associated ichnofaunal assemblage, Bright Angel Shale (Cambrian), Grand Canyon, Arizona [ABSTRACT]. <i>Arizona-Nevada Academy of Science, Journal</i> , 19 (1984 Proceedings Supplement): 55-56.
Martin, Hai	rriet	
1992	21.2055	Conodont biostratigraphy and paleoenvironment of the Surprise Canyon Formation (Late Mississippian), Grand Canyon, Arizona. Master's thesis, Northern Arizona University, 298 pp.
Martin, Hai	rriet, AND Ba	rrick, James E.
1999	21.2056	Chapter F. Conodont biostratigraphy of the Surprise Canyon Formation. <i>In:</i> Billingsley, George H., and Beus, Stanley S. (eds.), Geology of the Surprise Canyon Formation of the Grand Canyon, Arizona. <i>Museum of Northern Arizona, Bulletin 61</i> , pp. 97-115. [References combined for volume, pp. 245-250.]
Martin, Hai	rriet, AND Be	us, Stanley S.
1989	21.2057	Conodont biostratigraphy of the Surprise Canyon Formation (Late Mississippian) in western Grand Canyon, Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 21(5): 111.
1992	21.2058	Conodont biostratigraphy and paleoenvironment of Late Mississippian strata in the Grand Canyon, Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 24(6): 50.
Martin, Jeff	f M.	
2014	21.6668	Late Pleistocene and Holocene Bison of Grand Canyon and Colorado Plateau: Implications from the use of paleobiology for natural resource management policy. Master's thesis, East Tennessee State University, 132 pp.

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Martin,	Jeff	М.,	AND	Mead	, Jim	I.
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2014	21.6379	Re-evaluation of Bison remains from the greater Grand Canyon region and Colorado
		Plateau: Native or non-native [ABSTRACT]. In: 10th North American Paleontological
		Convention, Florida Museum of Natural History, Hilton University of Florida Conference
		Center, 1714 SW 34th Street, Gainesville, Florida, February 15th-18th, 2014; Abstract
		Book. Paleontological Society, Special Publication 13, p. 59.

Martin, Jeff M.; Martin, Rachel A.; AND Mead, Jim I.

2017	21.7223	Late Pleistocene and Holocene Bison of the Colorado Plateau.	Southwestern
		Naturalist, 62(1) (March): 14-28.	

Martin, Jeff M.; Mead, Jim E.; AND Barboza, Perry S.

2018 21.7585 Bison body size and climate change. *Ecology and Evolution*, 8: 4564-4574. [Includes Grand Canyon bison.]

Martin, Jeff M.; Short, Rachel A.; AND Mead, Jim I.

2018 21.7613 Research: Are bison native to the Grand Canyon region? *myFOSSIL* (FOSSIL Project, sponsored by Florida Museum of Natural History, Gainiesville, Florida), 5(1) (Spring): 12-13.

Martin, Paul S.

1967	21.2059	Prehistoric overkill. <i>In:</i> Martin, P. S., and Wright, H. E., Jr. (eds.), <i>Prehistoric extinctions: The search for a cause.</i> New Haven, Connecticut: Yale University Press, pp. 75-180. (International Association Quaternary Research, 8th Congress, Proceedings, Volume 6.) [See pp. 92, 97.]
1975	21.2060	Sloth droppings. Natural History, 80(7) (August/September): 74-81.
1977	21.2061	Sloth droppings. <i>In:</i> Sloan, B. (ed.), <i>Cavers, caves, and caving.</i> New Brunswick, New Jersey: Rutgers University Press, pp. 255-263.
1978	21.2062	The equid niche in the Grand Canyon. CoEvolution Quarterly, (Fall): 136-137.
1984	21.2063	Stanton's Cave during and after the last ice age. <i>In:</i> Euler, Robert C. (ed.), The archaeology, geology, and paleobiology of Stanton's Cave, Grand Canyon National Park, Arizona. <i>Grand Canyon Natural History Association, Monograph</i> 6, pp. 131-137.
1985	21.2064	Introduction. <i>In:</i> Jacobs, Bonnie F.; Fall, Patricia L.; and Davis, Owen K. (eds.), Late Quaternary vegetation and climates of the American Southwest. <i>American Association of Stratigraphic Palynologists, Contributions Series</i> , no. 16, pp. 3-6.
1987	21.8125	The meaning of Ice Age extinction. <i>AnthroQuest</i> (L. S. B. Leakey Foundation, Pasadena, California), (37) (Spring): 10-13. [See p. 11, brief note of Grand Canyon.]
1990	21.4844	40,000 years of extinctions on the "planet of doom". <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 82: 187-201.
1994	21.2065	Who or what destroyed our megafauna? <i>In:</i> Boaz, Debra, Dornan, Michael, and Bolander, Susan (eds.), <i>Proceedings of the Fossils of Arizona Symposium, Volume II, November 19, 1994</i> , pp. 91-102.

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

1995	21.2066	Rediscovering the Desert Lab. <i>In:</i> Steadman, David W., and Mead, Jim I. (eds.), <i>Late Quaternary environments and deep history: A tribute to Paul S. Martin.</i> Hot Springs, South Dakota: The Mammoth Site of Hot Springs, South Dakota, Inc., Scientific Papers, Volume 3, pp. 1-24.
2002	21.4521	Sanctuary of the ground sloths. <i>Geosciences</i> (University of Arizona, Department of Geosciences), 7(2) (Spring): 9. [Rampart Cave.]
2005	21.4202	Twilight of the mammoths: ice age extinctions and the rewilding of America. Berkeley, California: University of California Press.
2005	21.4519	Ghostly grazers and sky islands. <i>In:</i> Gottfried, Gerald J., Gebow, Brooke S., Eskew, Lane G., and Edminster, Carleton B. (compilers), Connecting mountain islands and desert seas: Biodiversity and Management of the Madrean Archipelago II and 5th Conference on Research and Resource Management in the Southwestern Deserts, May 11-15, 2004, Tucson, Arizona. <i>U.S. Forest Service, Rocky Mountain Research Station, Proceedings RMRS-P-36</i> , pp. 26-34.

Martin, Paul S., AND Mehringer, Peter J., Jr.

1965	21.2067	Pleistocene pollen analysis and biogeography of the Southwest.	<i>In:</i> Wright, H. E., Jr.,
		and Frey, David G. (eds.), The Quaternary of the United States.	Princeton, New
		Jersey: Princeton University Press, pp. 433-451.	

Martin, Paul S., AND Shutler, D., Jr.

1959	21.2068	Paleoecology of the Rampart Cave ground sloth [ABSTRACT]. Geological Society of
		America, Bulletin, 70: 1734-1735.

Martin, Paul S.; Mead, James I.; AND Long, Austin

1984 21.2069 Extinction of Harrington's mountain goat in the Grand Canyon [ABSTRACT]. *Arizona-Nevada Academy of Science, Journal*, 19 (1984 Proceedings Supplement): 57-58.

Martin, Paul S.; Sabels, B. E.; AND Shutler, D., Jr.

1961	21.2070	Rampart Cave coprolite and ecology of the Shasta ground sloth. American Journal of
		Science, 259: 102-127. [See also an analytical review by Richard E. Graham (1961,
		ITEM NO. 30.112), Cave Notes, 3(1): 7-8.]

Maruyama, Kho [丸山 晃]

21.7756 原生生物の世界II:その成立と構造 [gensei seibutsu no sekai II: Sono seiritsu to kōzō]. The protist world II: its formation and structure. [No place]: オープンアクセスアーカイブ [ōpun'akusesuākaibu] Open-Access Archive, 642 pp. [See p. 117, "つぼ形 微化石、新原生代 Chuar 群、Grand Canyon: modern testate amoeba による分類ガイド" [tsu bo katachi bi kaseki, shingenseidai Chuar-gun, gurandokyanion: Modern testate amoeba ni yoru bunrui gaido] [Vase-shaped microfossil, Neoproterozoic Chuar group, Grand Canyon: classification guide by modern testate amoeba]. This is an abstract of the paper by Porter et al. (2006, ITEM NO. 21.3872).] [In Japanese, with bilingual title; and section title in mixed Japanese and Roman characters, thus.]

Mason, J. F.		
1938	21.2075	Cambrian faunal succession in Nevada and California. <i>Journal of Paleontology</i> , 12: 287-294.
Mather, Ter	ry James	
1970	21.2076	Stratigraphy and paleontology of the Permian Kaibab Formation, Mogollon Rim region, Arizona. Doctoral dissertation, University of Colorado, 187 pp.
McCall, G. J	. н.	
2006	21.7283	The Vendian (Ediacaran) in the geological record: Enigmas in geology's prelude to the Cambrian explosion. <i>Earth-Science Reviews</i> , 77: 1-229. [Grand Canyon, <i>in passing</i> , p. 174; <i>Chuaria</i> and <i>C. circularis</i> , <i>passim</i> .]
McCord, Ro	bert D., II	
1994	21.2113	Fossil tortoises of Arizona. <i>In:</i> Boaz, Debra, Dornan, Michael, and Bolander, Susan (eds.), <i>Proceedings of the Fossils of Arizona Symposium, Volume II, November 19, 1994</i> , pp. 83-89.
McCulloch,	Miriam E.	
1992	21.4457	Fenestrate bryozoans of the Toroweap Formation, Clark County, Nevada. Master's thesis, Eastern Washington University, 150 pp.
McDonald, I	H. Gregory	
1996	21.8044	Biogeography and paleoecology of ground sloths in California, Arizona and Nevada. <i>In:</i> Reynolds, Robert E., and Reynolds Jennifer (eds.), Punctuated chaos in the northeastern Mojave Desert. <i>San Bernardino County Museum Association Quarterly</i> , 43(1/2) (Winter/Spring): 61-65.
2003	21.3965	Sloth remains from North American caves and associated karst features. <i>In:</i> Schubert, Blaine W., Mead, Jim I., and Graham, Russell William (eds.), <i>Ice age cave faunas of North America.</i> Bloomington and Indianapolis, Indiana: Indiana University Press, and [Denver]: Denver Museum of Nature and Science, pp. 1-16.
McDonald, I	H. Gregory,	AND Chure, Daniel J.
2001	21.4791	The fossil record and contemporary problems in ecology: Contributions from semi-deep time. <i>In:</i> Santucci, Vincent L., and McClelland, Lindsay (eds.), Proceedings of the 6th Fossil Resource Conference. <i>U.S. National Park Service, Geologic Resources Division, Technical Report NPS/NRGRD/GRDTR-01/01</i> , pp. 167-172.

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McDonald, H. Gregory,	AND	Jefferson,	George T.
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1996	21.8045	Pleistocene distribution of the ground sloth <i>Nothrotheriops shastensis</i> (Xenarthra, Megalonychidae) [ABSTRACT]. <i>From:</i> Reynolds, Jennifer (compiler), Abstracts from the 1996 Desert Research Symposium, San Bernardino County Museum, April 26-29, 1996. <i>In:</i> Reynolds, Robert E., and Reynolds Jennifer (eds.), Punctuated chaos in the northeastern Mojave Desert. <i>San Bernardino County Museum Association Quarterly</i> , 43(1/2) (Winter/Spring): 151-152.
2008	21.6939	Distribution of Pleistocene <i>Nothrotheriops</i> (Xenarthra, Nothrotheridae) in North America. <i>In:</i> Wang, Xiaoming, and Barnes, Lawrence G. (eds.), Geology and veretebrate paleontology of western and southern North America, contributions in honor of David P. Whistler. <i>Natural History Museum of Los Angeles County, Science Series</i> , (41): 313-331. [Includes Muav Caves and Rampart Cave in Grand Canyon.]

McFarlane, D. A.; Lundberg, J.; AND Fincham, A. G.

2002	21.7091	A late Quaternary paleoecological record from caves of southern Jamaica, West Indies.
		Journal of Cave and Karst Studies, 64(2) (August): 117-125. [See p. 121: "We have
		found subfossil guano from a dry site in Bat Cave, Grand Canyon (Arizona, USA)
		radiocarbon dated at 12,400 ±90 yrs BP (DAM 96-03) that preserves 31.9% dry
		weight of chitin (unpublished data)." (ENTIRE NOTE)]

McGill College and University

1893	21.8314	Annual calendar of McGill College and University, Montreal. Session 1893-1894.
		Montreal: Printed for the University by John Lovell and Son. [In "Donations to Library
		and Museum from May, 1892, to April, 1893", see "To the Peter Redpath Museum", p.
		242 (exactly): "From Dr. Wolcott, Washington, D.C.—Stromatopora from the Lower
		Cambrian, Grand Canon, Colorado." (ENTIRE NOTE)]

McIntosh, Jennifer; Drake, Henrik; Osburn, Magdalena; Reiners, Peter; Fischer, Mark; Austin, Sarah; Martini, Anna; Kim, Ji-Hyun; Stevenson, Bradley; Roberts, Nick M. W.; Hiett, Coleman; Tikoff, Basil; AND Ferguson, Grant

2024	21.8578	Ancient to modern geologic and hydrologic forcings drive deep biosphere across Colorado Plateau [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 56(5), abstract 56-11 (https://doi.org/10.1130/abs/2024AM-403291). [Regarding "deep subsurface (>500 m) microbe, rock, and fluid systems". Includes note of the effect of "[r]apid denudation (<3-4 Ma), related to rapid incision of the Colorado River, decreased in-situ temperatures and dramatically increased hydraulic gradients, activating deep meteoric circulation, flushing of saline fluids, and possibly transport of micrographicm."
		microorganisms."]

McKee, Edwin D.

1929	21.2124	Laoporus goes walking. <i>Grand Canyon Nature Notes</i> , 3(12) (August 31): 3-4. [Laoporus noblei, ichnospecies of the Coconino Sandstone.]
1931	21.2135	Ancient landscapes of the Grand Canyon region: the geology of Grand Canyon, Zion, Bryce, Petrified Forest, and Painted Desert. [No imprint] (printed by Lockwood-Hazel Co., Atchison, Kansas], 50 pp. [1st ed.] [Title and subtitle from title-page. Cover

		title: Ancient landscapes of the Grand Canyon region : illustrated : the geological story of Zion, Bryce, Petrified Forest, Painted Desert, and Grand Canyon.] [Numerous eds., reprintings through 1985; refer to The Grand Canon for complete listings.]
1931	21.2167	Fossil footprints of the Coconino. <i>Grand Canyon Nature Notes</i> , 5(5) (March): 43-44.
1931	21.2169	Crinoidal limestone. Grand Canyon Nature Notes, 5(12) (October): 126-127.
1931	21.36	[Footprints of <i>Baropus</i> .] <i>In:</i> Miscellany [SECTION]. <i>Grand Canyon Nature Notes</i> , 6(1) (November): 14. [Item not signed but written in the first person and in context is Mckee.]
1932	21.2174	Some fucoides from the Grand Canyon. <i>Grand Canyon Nature Notes</i> , 7(8) (November): 77-81.
1933	21.2177	The Coconino sandstone—its history and origin. <i>In:</i> Papers concerning the palaeontology of California, Arizona, and Idaho. <i>Carnegie Institution of Washington, Publication 440</i> , pp. 77-115.
1934	21.2182	A probable influence on life in the Kaibab sea. <i>Grand Canyon Nature Notes</i> , 8(11) (February): 239-243.
1934	21.2184	Note on paleontology. <i>Grand Canyon Nature Notes</i> , 9(7 [<i>sic</i> , 6]) (September): 325-326. [Fossiliferous layer in Kaibab formation.]
1935	21.2185	A Conularia from the Permian of Arizona. <i>Journal of Paleontology</i> , 9: 427-429, Plate 48, figures 10, 11 (facing p. 422). [<i>Conularia kaibabensis</i> , new species.]
1937	21.3753	Triassic pebbles in northern Arizona containing Permian invertebrate fossils. <i>American Journal of Science</i> , Series 5, 33 (April): 260-263.
1938	21.2190	The environment and history of the Toroweap and Kaibab formations of northern Arizona and southern Utah. <i>Carnegie Institution of Washington, Publication 492</i> , 268 pp. [Hardbound and paperbound states.]
1939	21.2194	Paleozoic stratigraphy and palaeontology of Grand Canyon [delivered by J. C. Merriam]. <i>In:</i> Reports on investigations; palaeontology, early man, and historical geology. <i>Carnegie Institution of Washington, Year Book 38</i> , p. 303.
1941	21.2199	Derbya arizonensis, new name for <i>D. regularis</i> McKee. <i>Journal of Paleontology</i> , 15: 91. [NOTE: The genus name is correctly spelled <i>Derbyia</i> .]
1944	21.2203	Tracks that go uphill. <i>Plateau</i> , 16: 61-72.
1945	21.2204	Stratigraphy and ecology of the Grand Canyon Cambrian. <i>In:</i> McKee, E. D., and Resser, C. E., Cambrian history of the Grand Canyon region. <i>Carnegie Institution of Washington, Publication 563</i> , Part 1, pp. 3-168.
1947	21.2209	Experiments on the development of tracks in fine, cross-bedded sand. <i>Journal of Sedimentary Petrology</i> , 17: 23-28.
1947	21.2210	Original colors preserved in fossil seashells. <i>Plateau</i> , 19: 48-51.
1948	21.2212	Fossil life of the canyon country. <i>In:</i> Peattie, Roderick (ed.), <i>The inverted mountains—canyons of the West.</i> New York: Vanguard Press, pp. 67-82.

1960	21.2224	Spatial relations of fossils and bedded cherts in the Redwall Limestone, Arizona. <i>U.S. Geological Survey, Professional Paper 400-B</i> , pp. B461-B463.
1982	21.2248	The Supai Group of Grand Canyon. <i>U.S. Geological Survey, Professional Paper 1173</i> , 504 pp.
1982	21.2253	Distribution and age of fauna and flora. <i>In:</i> McKee, Edwin D., The Supai Group of Grand Canyon. <i>U.S. Geological Survey, Professional Paper 1173</i> , Chapter E, pp. 75-112.
1994	21.2269	Some fucoides from Grand Canyon. <i>In:</i> Lamb, Susan (ed.), <i>The best of Grand Canyon Nature Notes</i> . Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 23. [Reprinted from <i>Grand Canyon Nature Notes</i> , November, 1932.]
1994	21.2271	Crinoidal limestone. <i>In:</i> Lamb, Susan (ed.), <i>The best of Grand Canyon Nature Notes.</i> Grand Canyon, Arizona: Grand Canyon Natural History Association, pp. 24-26. [Reprinted from <i>Grand Canyon Nature Notes</i> , October, 1931.]
1994	21.2272	Laoporus goes walking. <i>In:</i> Lamb, Susan (ed.), <i>The best of Grand Canyon Nature Notes</i> . Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 27. [Reprinted from <i>Grand Canyon Nature Notes</i> , August, 1929.]
1994	21.2273	The probable influence of life in the Kaibab sea. <i>In:</i> Lamb, Susan (ed.), <i>The best of Grand Canyon Nature Notes.</i> Grand Canyon, Arizona: Grand Canyon Natural History Association, pp. 27-29. [Reprinted from <i>Grand Canyon Nature Notes</i> , February, 1934.]
McKee, Edv	vin D., AND G	Gutschick, Raymond C.
1969	21.2278	History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , 726 pp.
1969	21.2282	The Redwall faunas. <i>In:</i> McKee, E. D., and Gutschick, R. C., History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , pp. 125-172.
1969	21.2283	Brachiopods. <i>In:</i> McKee, E. D., and Gutschick, R. C., History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , pp. 435-437.
1969	21.2284	Miscellaneous fossil groups: Algae and stromatolites, holothurians, trilobites, ostracodes, and fish. <i>In:</i> McKee, E. D., and Gutschick, R. C., History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , pp. 545-552.
McKee, Edv	vin D., AND H	lussakof, Louis
1934	21.7020	[Shark tooth, <i>Deltodus mercurii</i> , from Kaibab formation below Desert View Point.] <i>In:</i> Field Observations [SECTION]. <i>Grand Canyon Nature Notes</i> , 9(2) (May):.
McKeever,	Patrick J., AN	ND Haubold, Hartmut
1996	21.2307	Reclassification of vertebrate trackways from the Permian of Scotland and related forms from Arizona and Germany. <i>Journal of Paleontology</i> , 70(6): 1011-1022.

McKinney, Frank K.				
1983	21.2308	Ectoprocta (Bryozoa) from the Permian Kaibab Formation, Grand Canyon National Park, Arizona. <i>Fieldiana—Geology</i> , New Series, no. 13, 17 pp.		
McLemore,	Devin M., AN	D Hargrave, Jennifer E.		
2014	21.6491	Fossil coral from the Missisippian Redwall Limestone in the Beaver Dam Mountains, Washington County, Utah [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 46(6): 514.		
Mead, Jim	I.			
1980	21.2312	In search of ancient pack rats. Natural History, 89 (September): 40-45.		
1981	21.2313	The last 30,000 years of faunal history within the Grand Canyon, Arizona. <i>Quaternary Research</i> , 15: 311-326.		
1983	21.2314	Harrington's extinct mountain goat (Oreamnos harringtoni) and its environment in the Grand Canyon, Arizona. Doctoral dissertation, University of Arizona, 232 pp.		
1986	21.2316	Diet and chronology of extinct mammals on the Colorado Plateau [ABSTRACT]. Geological Society of America, Abstracts with Programs, 18(5): 395.		
1998	21.2317	NAU participates in team effort to preserve cave fossils. <i>Northern Arizona University, EnviroNews</i> , (April): 6.		
2004	21.4009	Canyon dwellers during the Ice Age and since. <i>Boatman's Quarterly Review</i> , 17(2) (Summer): 36-38.		
2005	21.4111	Dry preservation of Ice Age organic remains and the unique record of vertebrate fauna of Colorado Plateau caves [ABSTRACT]. <i>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)</i> , p. 63.		
2005	21.6893	Late Pleistocene (Rancholabrean) amphibians and reptiles of Arizona. <i>In:</i> Heckert, Andrew B., and Lucas, Spencer G. (eds.), Vertebrate paleontology in Arizona. <i>New Mexico Museum of Natural History and Science, Bulletin 29</i> , pp. 136-151.		
Mead, Jim	I., AND Agen	broad, Larry D.		
1992	21.2318	Isotope dating of Pleistocene dung deposits from the Colorado Plateau, Arizona and Utah. <i>Radiocarbon</i> , 34(1): 1-19.		
Mead, Jim	I., AND Bell,	Christopher J.		
1994	21.2319	Late Pleistocene and Holocene herpetofaunas of the Great Basin and Colorado Plateau. <i>In:</i> Harper, Kimball T., St. Clair, Larry L., Thorne, Kaye H., and Hess, Wilford M. (eds.), <i>Natural history of the Colorado Plateau and Great Basin.</i> Niwot, Colorado: University Press of Colorado, pp. 255-275. [<i>NOTE</i> : Proofs not seen by authors; some errors appear.]		

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Mead	. Jim I	AND	Lawler.	, Mark C.
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1995	21.2320	Skull, mandible, and metapodials of the extinct Harrington's mountain goat
		(Oreamnos harringtoni). Journal of Vertebrate Paleontology, 14(4): 562-576. [Date
		on article head and spine is December 1994; cover date of number is 15 February
		1995.]

Mead, Jim I., AND Mead, Emilee M.

1985	21.2321	Ice Age plants and animals; secrets of the Colorado Plateau.	Explorations (University
		of Maine at Orono), 1(2): 6-13.	

Mead, Jim I., AND Mikesic, David G.

2001	21.3728	First fossil record of Euderma maculatum (Chiroptera: Vespertilionidae), eastern
		Grand Canvon, Arizona. Southwestern Naturalist, 46(3) (September): 380-383.

Mead, Jim I., AND Phillips, Arthur M., III

1978	21.2322	The late Pleistocene flora and fauna from Vulture Cave, Grand Canyon, Arizona
		[ABSTRACT]. American Quaternary Association, National Conference, Abstracts, (5):
		223.

1981 21.2323 The Late Pleistocene and Holocene fauna and flora of Vulture Cave, Grand Canyon, Arizona. *Southwestern Naturalist*, 26: 257-288.

Mead, Jim I., AND Swift, Sandra I.

2012	21.6896	Late Pleistocene (Rancholabrean) dung deposits of the Colorado Plateau, western
		North America. In: Hunt, Adrian P., Milàn, Jesper, Lucas, Spencer G., and Spielmann,
		Justin A. (eds.), Vertebrate coprolites. New Mexico Museum of Natural History and
		Science, Bulletin 57, pp. 336-342. [Includes Grand Canyon.]

Mead, Jim I., AND Van Devender, Thomas R.

1974	21.8557	Two late Pleistocene plant communities from the Grand Canyon [ABSTRACT]. <i>In:</i> Proceedings of the 18th Annual Meeting of the Arizona Academy of Science, April 19-20, 1974, Northern Arizona University, Flagstaff, Arizona. <i>Arizona Academy of Science, Journal</i> , 9 (April, Proceedings Supplement): 19. [Packrat middens at Shinumo Creek and Peach Springs Wash.]
1021	21 2324	Late Holocope diet of Rassariscus actutus in the Grand Canyon Arizona. Journal of

1981 21.2324 Late Holocene diet of *Bassariscus astutus* in the Grand Canyon, Arizona. *Journal of Mammalogy*, 62: 439-442.

Mead, Jim I.; Agenbroad, Larry D.; Phillips, Arthur M., III; AND Middleton, Larry T.

1987	21.2325	Extinction of the mountain goat (<i>Oreamnos harringtoni</i>) in southeastern Utah.
		Quaternary Research, 27: 323-331.

Mead, Jim I.; Coats, Larry L.; AND Schubert, Blaine W.

2003	21.3963	Late Pleistocene faunas from caves in the eastern Grand Canyon, Arizona. <i>In:</i>
		Schubert, Blaine W., Mead, Jim I., and Graham, Russell William (eds.), Ice age cave
		faunas of North America. Bloomington and Indianapolis, Indiana: Indiana University
		Press, and [Denver]: Denver Museum of Nature and Science, pp. 64-86. [See also
		volume dust jacket cover illustration.]

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Mead lim I	· Lawler M	ark C.; Meltzer, David J.; AND Vogel, John C.
1991	21.2326	Stable carbon and nitrogen isotope ratios of Late Pleistocene <i>Ovis</i> and <i>Oreamnos</i> from the Grand Canyon, Arizona [ABSTRACT]. <i>Arizona-Nevada Academy of Science, Journal</i> , 26(Proceedings Supplement): 48.
Mead, Jim I.	; Martin, Pa	aul S.; Euler, Robert C.; Long, Austin; Jull, A. J. T.; Toolin, Laurence J.; Donahue, Douglas J.; AND Linick, T. W.
1986	21.2327	Extinction of Harrington's mountain goat. <i>U.S. National Academy of Sciences, Proceedings</i> , 83: 836-839.
Mead, Jim I.	; O'Rourke	, Mary Kay; AND Foppe, Theresea M.
1986	21.8243	Dung and diet of the extinct Harrington's mountain goat (<i>Oreamnos harringtoni</i>). <i>Journal of Mammalogy</i> , 67(2) (May): 284-293. [Includes Grand Canyon.]
Mead, Jim I.	; Thompso	n, Robert S.; AND Long, Austin
1978	21.2328	Arizona radiocarbon dates IX: Carbon isotope dating of packrat middens. Radiocarbon, 20: 171-191.
Mead, Jim I.	; Tweet, Ju	stin S.; Santucci, Vincent L.; Tobin, Benjamin; Chambers, Carol L.; Thomas, Shawn C.; AND Carpenter, Mary C.
2020	21.8038	Chapter 11. Pleistocene/Holocene cave fossils from Grand Canyon National Park. Ice Age (Pleistocene) flora, fauna, environments, and climate of the Grand Canyon, Arizona. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), <i>Grand Canyon National Park:</i> centennial paleontological resource inventory (non-sensitive version). Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 403-463. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103</i> .)
2021	21.8262	Pleistocene/Holocene cave fossils from Grand Canyon National Park—Ice Age (Pleistocene) flora, fauna, environments, and climate of the Grand Canyon, Arizona. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 220-240, A1-A27 (pagination is contiguous). [Reset reprinting of Mead <i>et al.</i> (2020, ITEM NO. 21.8038).]
Mehringer, F	Peter J., Jr.	
1967	21.2330	The environment of extinction of the late-Pleistocene megafauna in the arid southwestern United States. <i>In:</i> Martin, P. S., and Wright, H. E., Jr. (eds.), <i>Prehistoric extinctions: The search for a cause.</i> New Haven, Connecticut: Yale University Press, pp. 247-266. (International Association of Quaternary Research, 8th Congress, Proceedings, Volume 6.)
Mendelson,	Carl V., AND	Schopf, J. William
1992	21.7592	Proterozoic and Early Cambrian acritarchs. <i>From:</i> Mendelson, Carl V., Bauld, John,

Horodyski, Robert J., Lipps, Jere H., Moore, Toby B., and Schopf, J. William, Proterozoic and selected Early Cambrian microfossils: Prokaryotes and protists. *In*:

1992	21.7596	Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere : a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 219-232. [Includes Chuar Group.] Proterozoic and selected Early Cambrian microfossils and microfossil-like objects. <i>In:</i>
		Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere : a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 865-952. [Includes Chuar Group.]
Merriam, Cl	harles W.	
1928	21.8563	Analogy of past and present life. <i>Grand Canyon Nature Notes</i> , 3(2) (July 31): 3-4. [Life zones in Grand Canyon compared to the stratigraphic record of fossils.]
Merriam, Jo	ohn Campbel	i e e e e e e e e e e e e e e e e e e e
1926	21.2338	Ancient footprints in the Grand Canyon. Scribner's Magazine, 79 (January): 77-82.
1927	21.2339	Exhibit of research results in the Grand Canyon [ABSTRACT]. <i>Science</i> , New Series, 65: 479-480.
1930	21.2340	The past as living. <i>Scientific Monthly</i> , 31(4) (October): 340-343. [Text of radio address presented under auspices of Science Service over Columbia Broadcasting System, New York, May 23, 1930.]
1930	21.2341	The past as living. <i>Carnegie Institution of Washington, News Service Bulletin</i> , 2(11) (October 26): 78-82. [Reprint of Merriam (1930, ITEM NO. 21.2340).]
1930	21.2342	The living past. New York: Charles Scribner's Sons. [See Chapter 5, "An abyss in time", pp. 73-92; and see Chapter 6, "Footprints on the path of history", pp. 95-110, which is a slightly revised, expanded reprint of Merriam's (1926, ITEM NO. 21.2338) "Ancient footprints in the Grand Canyon".]
1938	21.2343	The past as living. <i>In:</i> Published papers and addresses of John Campbell Merriam, Volume 3. <i>Carnegie Institution of Washington, Publication 500</i> , pp. 1941-1944. [Reprint of Merriam (1930, ITEM NO. 21.2340). The text of this reprinting is not applicable to the Grand Canyon, but three figures of interest are positioned between pp. 1944-1945.]
1938	21.2344	Ancient footprints in the Grand Canyon. <i>In:</i> Published papers of John Campbell Merriam, Volume 3. <i>Carnegie Institution of Washington, Publication 500</i> , pp. 1913-1919, 5 figures between pp. 1920-1921. [Reprint of Merriam (1926, ITEM NO. 21.2338).]
1939	21.2345	Paleozoic stratigraphy and palaeontology of Grand Canyon, Edwin D. McKee. <i>In:</i> Reports on investigations; palaeontology, early man, and historical geology. <i>Carnegie Institution of Washington, Year Book 38</i> , p. 303.
1941	21.2346	Recent research on major problems of the Grand Canyon area. <i>In:</i> Paleontology, early man, and historical geology. <i>Carnegie Institution of Washington, Year Book 40</i> , pp. 330-331.

1942	21.2347	Research on major problems of the Grand Canyon. <i>In:</i> Paleontology, early man, and historical geology. <i>Carnegie Institution of Washington, Year Book 41</i> , pp. 293-294.	
1943	21.2348	Investigation of major problems in geology and paleontology of the Grand Canyon. <i>In:</i> Paleontology, early man, and historical geology. <i>Carnegie Institution of Washington, Year Book 42</i> , pp. 196-197.	
Merriam, J	ohn Campbel	l, et al.	
1936	21.2349	Continuation of palaeontological researches. <i>Carnegie Institution of Washington, Yea Book 35</i> , pp. 316-319.	
1937	21.2350	Continuation of palaeontological researches. <i>Carnegie Institution of Washington, Year Book 36</i> , pp. 332-334.	
Mikesic, Da	ivid G., AND	Chambers, Carol	
2004	21.4615	Return of the bat mummy; a desert cave preserves a 10,000-year-old spotted bat. Bats, 22(4) (Winter): cover, inside front cover, 8-11. [Article includes information on modern bats of Grand Canyon. This cave location not identified, but apparently in Marble-Grand Canyon area.]	
Milàn, Jesp	er		
2006	21.7805	Fossile fodspor i Grand Canyon. <i>Varv</i> (Geologisk Centralinstitut, København), 2006(4) (February 15): 26-32. [Fossil trackways.] [In Danish.]	
Miller, A. K	., AND Furnis	sh, W. M.	
1957	21.2367	A second Permian specimen of the nautiloid <i>Aulametacoceras. Journal of Paleontology</i> , 31(4): 713-714, plate 84.	
1958	21.2368	Permian ammonoids from the Colorado Plateau. <i>Journal of Paleontology</i> , 32: 682-683.	
Miller, A. K	., AND Young	pquist, Walter	
1949	21.2369	American Permian nautiloids. <i>Geological Society of America, Memoir 41</i> , 218 pp. [See pp. 8-9, 25-28, 44, 57-61, 90-91, 93-94, 114-115, 137; plates 7, 13, 14, 21, 33, 34, 45, 59.]	
Miller, A. K	.; Downs, H.	R.; AND Youngquist, Walter	
1949	21.2370	Some Mississippian cephalopods from central and western United States. <i>Journal of Paleontology</i> , 23: 600-612.	
Miller, Ann	e Elizabeth		
2019	21.8048	Ichnology of the Bright Angel Shale Formation, Grand Canyon, Arizona: Indicators for Middle Cambrian paleoecology. Master's thesis, Northern Arizona University.	

2022	21.8408	Ichnology of the Bright Angel Formation, Grand Canyon, Arizona: Indicators for Middle Cambrian paleoecology [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 54(5): abstract 260-4, https://doi.org/10.1130/abs/2022AM-382268 .
Miller, Anno	e E.; Francis	chini, Heitor; Marchetti, Lorenzo; Pulsipher, Mikaela A.; AND Nebel, Mark L.
2024	21.8541	New tetrapod trackways in the Coconino Sandstone, Grand Canyon National Park, AZ. [ABSTRACT]. <i>In: ICHNIA 2024—The 5th International Congress on Ichnology: celebrating one ichnology! : Florianópolis, Brazil, April 14-19th, 2024 : abstract book,</i> pp. 69-71. [Relates to ichnofossils of the Coconino Sandstone.]
2024	21.8532	New tetrapod trackways in the Coconino Sandstone, Grand Canyon National Park, Arizona [ABSTRACT]. <i>In:</i> Wilson, Jeffrey A. Mantilla, and Friedman, Matt (eds.), 12th North American Paleontological Convention, University of Michigan, 17-21 June 2024; Program with abstracts. <i>University of Michigan, Papers on Paleontology</i> , (39): 312.
Miller, Ann	e E.; Marche	tti, Lorenzo; Francischini, Heitor; AND Lucas, Spencer G.
2020	21.8035	Chapter 8. Paleozoic invertebrate ichnology of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), <i>Grand Canyon National Park:</i> centennial paleontological resource inventory (non-sensitive version). Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 277-331. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103</i> .)
2021	21.8260	Paleozoic invertebrate ichnology of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 131-170. [Reset reprinting of Miller <i>et al.</i> (2020, ITEM NO. 21.8035).]
Miller, Ann	e E.; Steele,	Nicholas; AND Tobin, Benjamin W.
2018	21.8244	Vulnerability and fragility risk indices for non-renewable resources. <i>Environmental Monitoring and Assessment</i> , 190: paper 373, 11 pp. [Focus on cave paleontological resources in Grand Canyon National Park.]
Miller, Ann	e E.; Tobin, I	Benjamin W.; Schenk, Edward R.; AND Henderek, Robyn L.
2016	21.7044	Paleontological resource significance and vulnerability in the Grand Canyon and environmental impact of the Transcanyon Pipeline replacement [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 48(7): Paper 96-2, doi:10.1130/abs/2016AM-281669.
Miller, Dona	ald M.; Youn	ng, Robert A.; Gatlin, Thomas W.; AND Richardson, John A.
1982	21.2371	Amphibians and reptiles of the Grand Canyon National Park. <i>Grand Canyon Natural History Association, Monograph 4</i> , 144 pp. [See Part 2, "Prehistoric herpetofauna of the Grand Canyon region", pp. 5-15.]

Miller, Hals	sey W., Jr., A	ND Breed, William J.	
1964	21.2373	Metacoceras bowmani, a new species of nautiloid from the Toroweap formation (Permian) of Arizona. Journal of Paleontology, 38: 877-880.	
Miller, Loye	•		
1960	21.2374	Condor remains from Rampart Cave, Arizona. <i>The Condor</i> , 62(1): 70. [See also "Correction", 62(4): 298.]	
1960	21.4523	Correction [to "Condor remains from Rampart Cave, Arizona"]. <i>The Condor</i> , 62(4): 298.	
1960	21.8442	Condors of Lake Mead. <i>National Parks Magazine</i> , 34(156) (September): 8-9. [California condor remains from Rampart Cave, Grand Canyon.]	
Miller, Rich	ard F., AND	Tausch, Robin J.	
2001	21.8562	The role of fire in juniper and pinyon woodlands: A descriptive analysis. <i>In:</i> Galley, Krista E. M., and Wilson, Tyrone P. (eds.), Proceedings of the Invasive Species Workshop: The Role of Fire in the Control and Spread of Invasive Species. Fire Conference 2000: The First National Congress on Fire Ecology, Prevention, and Management. <i>Tall Timbers Research Station, Miscellaneous Publication 11</i> , pp. 15-30. (Tall Timbers Research Station, Tallahassee, Florida.) [Also includes discussion of early- to late-Holocene woodlands, including Grand Canyon.]	
Miller, Robe	ert Rush, AN	D Smith, Gerald R.	
1984	21.2375	Fish remains from Stanton's Cave, Grand Canyon of the Colorado, Arizona, with notes on the taxonomy of <i>Gila cypha</i> . <i>In:</i> Euler, Robert C. (ed.), The archaeology, geology, and paleobiology of Stanton's Cave, Grand Canyon National Park, Arizona. <i>Grand Canyon Natural History Association, Monograph 6</i> , pp. 59-65.	
Millhouse,	Amanda M.		
2009	21.4634	Analysis of trackways in the Permian Coconino Sandstone of Ash Fork and Grand Canyon, Arizona. Master's thesis, Northern Arizona University, 127 pp.	
Minard, An	ne		
1999	21.2381	Paleontologist Jim Mead. Flagstaff Live!, 5(14) (April 8-14): 9.	
Mizutani, H	liroshi; McFa	arlane, Donald A.; AND Kabaya, Yuko	
1992	21.7016	Carbon and nitrogen isotopic signatures of bat guanos as record of past environments. Mass Spectrometry Society of Japan, Journal, 40(1) (February): 67-82. [Incudes Bat Cave, Grand Canyon.]	

Moczydłow	Moczydłowska, Małgorzata		
2008	21.6375	The Ediacaran microbiota and the survival of Snowball Earth conditions. <i>Precambrian Research</i> , 167: 1-15. [Includes taxa from Chuar Group, Grand Canyon.]	
Moffitt, Ste	ve		
2002	21.3795	Digging in an elephant stable; Willis Evans, Rampart Cave, and the search for early man at Grand Canyon. <i>Nature Notes</i> (Grand Canyon National Park), (Summer): 1-3, 7, 12.	
Monasters	κy, Richard		
1992	21.2393	Wading newts may explain enigmatic tracks. <i>Science News</i> , 141 (January 4): 5. [Fossil footprints in Coconino Sandstone; reporting on research by L. R. Brand and T. Tang.]	
Montgomei	y, Kathy, AN	D Ward, Sam	
2024	21.8474	To the bat cave!!! The Grand Canyon is best known for its broad panoramas, billion-year-old geology and backcountry adventure. Caves aren't on that list, but one cave in particular is about to make headlines—it contains something so rare that nothing like it has ever been seen anywhere else in the world. <i>Arizona Highways</i> , 100(1) (January): 38-43. [Sam Ward's illustrations are paintings. The cave, "in a remote area of Grand Canyon National Park", was discovered by Jason Ballensky. It contains the well-preserved remains of bats that died between a century and more than 50,000 years ago.]	
Moore, Ray	mond C., AN	D Dudley, Ruth Mary	
1944	21.2410	Cheilotrypid bryozoans from Pennsylvanian and Permian rocks of the Midcontinent region. <i>In:</i> 1944 reports of studies. <i>Kansas Geological Survey, Bulletin 52</i> , Part 6, pp. 229-408. [See pp. 304, 384, 392, 396.]	
Morais, Lua	nna; Fairchil	d, Thomas Rich; Lahr, Daniel J. G.; Rudnitzki, Isaac D.; Schopf, J. William; Garcia, Amanda K.; Kudryavtsev, Anatoliy B.; AND Romero, Guilherme R.	
2017	21.7282	Carbonaceous and siliceous Neoproterozoic vase-shaped microfossils (Urucum Formation, Brazil) and the question of early protistan biomineralization. <i>Journal of Paleontology</i> , 91(3): 393-406. [Includes Chuar Group of Grand Canyon throughout.]	
Morais, Lua	ına; Lahr, Da	aniel J. G.; Rudnitzki, Isaac D.; Freitas, Bernardo T.; Romero, Guilherme R.; Porter, Susannah M.; Knoll, Andrew H.; AND Fairchild, Thomas R.	
2019	21.7793	Insights into vase-shaped microfossil diversity and Neoproterozoic biostratigraphy in light of recent Brazilian discoveries. <i>Journal of Paleontology</i> , 93(4) (July): 612-627. [Includes discussion of occurrences in Grand Canyon.]	

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Muir-Wood	, Helen, AND	Cooper, G. Arthur
1960	21.2427	Morphology, classification and life habits of the Productoidea (Brachiopoda). <i>Geological Society of America, Memoir 81</i> , 447 pp. [See pp. 278-281, 285-286, 287-288.]
Muleady-M	echam, Nanc	y Eileen
2004	21.3967	Paleourine analysis of packrat amberat. <i>In:</i> Riper, Charles van, III, and Cole, Kenneth L. (eds.), <i>The Colorado Plateau : cultural, biological, and physical research</i> . Tucson: University of Arizona Press, pp. 229-237. (Sixth Biennial Conference of Research on the Colorado Plateau.)
2015	21.6795	Paleourine analysis of packrat amberat [ABSTRACT]. <i>In:</i> 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. <i>U.S. Geological Survey, Open-File Report 2015-1115</i> , pp. 75-76.
Müller, A. F	1.	
1969	21.2430	Über ein neues Ichnogenus (<i>Tambia</i> n.g.) und andere Problematica aus dem Rotliegenden (Unterperm) von Thüringen. <i>Deutsche Akademie der Wissenschaften zu Berlin, Monatsberichte</i> , 11: 922-931. [New genus is not pertinent to Grand Canyon, but Grand Canyon material in discussion.] [In German.]
Muller, Set	h	
2005	21.4104	Christa Sadler; shell, bone and track; true loves of a fossil hunter. <i>In:</i> Talking with Flagstaff's geologists [FEATURE]. <i>Northern Arizona's Mountain Living Magazine</i> ,

N

Nagy, Robin Marie

2008 21.4439 Microfossils from the Neoproterozoic Chuar Group, Grand Canyon, Arizona: taxonomy, paleoecological analysis and implications for life during the onset of Neoproterozoic glaciation. Master's thesis, University of California at Santa Barbara, 74 pp.

Nagy, Robin M.; Porter, Susannah M.; Dehler, Carol M.; AND Shen, Yanan

(September): 20-21, 26-27.

2008 21.4296 Evidence for eutrophication in the >742+/-6 Ma Chuar Group, Grand Canyon, and possible implications for Neoproterozoic glaciation [ABSTRACT]. *Geological Society of America, Abstracts with Programs*, 40(6): abstract no. 125-3.

2009	21.4715	Biotic turnover driven by eutrophication before the Sturtian low-latitude glaciation. <i>Nature Geoscience</i> , 2: 415-418; and Supplementary Information available online www.nature.com/ngeo/journal/v2/n6/extref/ngeo525-s1.pdf , 10 pp. [Also a "Backstory" online, <i>Nature Geoscience</i> , 2: E10, doi:10.1038/ngeo535.]
Naples, Vir	ginia L.	
1990	21.2436	Morphological changes in the facial region and a model of dental growth and wear pattern development in <i>Nothrotheriops shastense</i> . <i>Journal of Vertebrate Paleontology</i> , 10(3): 372-389.
Nathorst, A	. G. [Natho	rst, Alfred Gabriel]
1885	21.5077	Några ord om slipsandstenen i Dalarne. <i>Geologiska Föreningens i Stockholm, Förhandlingar</i> , 7(9) (93): 537-560. [See pp. 554-555; note of <i>Chuaria</i> in Grand Canyon.] [In Swedish.]
1885	21.5078	Några ord om slipsandstenen i Dalarne. <i>Sveriges Geologiska Undersökning, Afhandlingar och Uppsatser</i> , Series C, no. 71, 26 pp. [See pp. 20-21; note of <i>Chuaria</i> in Grand Canyon.] [Reprinted from <i>Geologiska Föreningens i Stockholm, Förhandlingar.</i>] [In Swedish.]
1896	21.2438	Jordens historia: efter M. Neumayrs "Erdgeschichte" och andra källor utarbetad med särskild hänsyn till Nordens urvärld. Stockholm: F. & G. Beijers, Godtköpsupplaga, 2 volumes, pp. 1-584, 585-1128. [See Förra Delen [Volume 1], pp. 279, 380-384; note of Chuaria in Grand Canyon.] [In Swedish.] [NOTE: Godtköpsupplaga is in an older form of Swedish and has been translated for the compiler as meaning the "Good-buy edition" (i.e., the economical edition). In the 1990 ed. of this bibliography (GCNHA Monograph 8) it had been considered to be a part of the subtitle.]
Nations, J.	Dale, AND La	andye, J. Jerry
1974	21.2441	Cenozoic plant and animal fossils of Arizona. <i>In:</i> Smiley, Terah L., Nations, J. Dale, Péwé, Troy L., and Schafer, John P. (eds.), <i>Landscapes of Arizona : the geological story.</i> Landham, Maryland: University Press of America, pp. 7-35.
Neall, Rand	lolph E.	
1977	21.6792	C-14 dating may be wrong before 2000 B.C. <i>The Ministry</i> (Seventh-day Adventists, Ministerial Association, Washington, D.C.), 50(9) (September): 7-9. [Rampart Cave, see p. 9.] [Creationist perspective.]
Nelson, Clif	fford M., AND	Yochelson, Ellis L.
1980	21.2449	Organizing Federal paleontology in the United States, 1858-1907. Society for the Bibliography of Natural History, Journal, 9: 607-618.

Nelson, Lis	a		
1990	21.2450	Ice Age mammals of the Colorado Plateau. Flagstaff, Arizona: Northern Arizona University, 24 pp.	
Nelson, W.	John, AND L	ucas, Spencer G.	
2011	21.6804	Carboniferous geologic history of the Rocky Mountain region. <i>In:</i> Sullivan, Robert M., Lucas, Spencer G., and Spielmann, Justin A. (eds.), Fossil Record 3. <i>New Mexico Museum of Natural History and Science, Bulletin 53</i> , pp. 115-142.	
Newberry,	John Strong		
1861	21.2455	Geological report. <i>In:</i> Ives, J. C., Report upon the Colorado River of the West, explored in 1857 and 1858. <i>U.S. 36th Congress, 1st Session, Senate Executive Document [no number], Serial 1058</i> , Part 3, 154 pp. [separately paginated part in volume], with two maps in volume pocket. [See Ives (1861, ITEM NOS. 2.3584, 2.3585) for full information about the two states of the Ives volume. See Newberry (1861, ITEM NOS. 24.146, 24.378, for citations of the geologic maps.]	
1969	21.2459	Geological report. <i>In:</i> Ives, J. C., Report upon the Colorado River of the West, explored in 1857 and 1858. New York: Da Capo Press, 154 pp. [separately paginated part in volume], with two maps in volume pocket. [Volume is a facsimile reprint of Ives (1861), Senate Executive Document variant, including colored plates, but foldouts and maps are reduced in size.]	
Newell, No	rman D., AND	Ciriacks, Kenneth W.	
1962	21.2461	A new bivalve from the Permian of the western United States. <i>American Museum Novitates</i> , (2121), 4 pp. [<i>Scaphellina bradyi</i> , new species (Scaphellinidae, new family); from the Gamma member, Kaibab Limestone, south of Flagstaff, Arizona.]	
Nichols, R.	L.		
1930	21.2465	Fossils and what they tell. <i>Grand Canyon Nature Notes</i> , 4(9) (July 31): 59-60.	
Nicol, D.			
1944	21.2466	Paleoecology of three faunules in the Permian Kaibab formation at Flagstaff, Arizona. Journal of Paleontology, 18: 553-557.	
1945	21.2467	Paleoecology of three faunules in the Permian Kaibab formation at Flagstaff, Arizona. <i>Plateau</i> , 17: 46-53.	
1965	21.2468	An ecological analysis of four Permian faunas. <i>The Nautilus</i> (Philadelphia), 78: 86-95.	

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	Ni	mm	ons,	R.	т.
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1938	21.2483	In the lair of a prehistoric monster; exploring the Rampart caves for traces of the
		giant ground sloth Travel 71 (September): 20-23+

Nitecki, Matthew H.

1971	21.2484	Pseudo-organic structures from the Precambrian Bass Limestone in Arizona.
		Fieldiana—Geology, 23(1): 1-9.

Norr, Megan R.; Santucci, Vincent L.; AND Tweet, Justin S.

2016	21.7415	An inventory of trilobites from National Park Service areas. <i>In:</i> Sullivan, Robert M.,
		and Lucas, Spencer G. (eds.), Fossil Record 5. New Mexico Museum of Natural History
		and Science, Bulletin 74, pp. 179-203. [See "Lake Mead National Recreation Area and
		Grand Canyon-Parashant National Monument, Nevada-Arizona", pp. 184, 199; "Grand
		Canyon National Park, Arizona", pp. 185-186, 197-198.]

Norris, A. W.

1979	21.2497	Devonian in the western hemisphere. <i>In:</i> Robison, Richard A., and Teichert, Curt (eds.), <i>Treatise on invertebrate paleontology. Part A. Introduction: fossilization</i>
		(taphonomy), biogeography, and biostratigraphy. Boulder, Colorado: Geological Society of America, and Lawrence, Kansas: University of Kansas, pp. A218-A253.
		[See pp. A219-A222, A224-A225, A226, A228-A229, A233, A235-A238, A241, A244-A245.]



Olsen, John W., AND Olsen, Stanley J.

1984	21.2508	Zooarchaeological analysis of small vertebrates from Stanton's Cave, Arizona. <i>In</i> :
		Euler, Robert C. (ed.), The archaeology, geology, and paleobiology of Stanton's Cave,
		Grand Canyon National Park, Arizona. <i>Grand Canyon Natural History Association, Monograph</i> 6, pp. 47-57.

Olson, Edwin A., AND Broecker, Wallace S.

1961	21.2509	Lamont natural radiocarbon measurements VII. Radiocarbon, 3(1): 141-175.
		[Rampart Cave.]

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O'Rourke,	Mary Kay	
1985	21 8588	Pollen studies conducted in the Marble Canyon region, Grand Canyon, Arizon

from four caves.]

O'Rourke, Mary Kay, AND Mead, Jim I.

1985	21.2512	Late Pleistocene and Holocene pollen records from two caves in the Grand Canyon of
		Arizona, USA. <i>In:</i> Jacobs, Bonnie F.; Fall, Patricia L.; and Davis, Owen K. (eds.), Late
		Quaternary vegetation and climates of the American Southwest. American Association
		of Stratigraphic Palynologists, Contributions Series, no. 16, pp. 169-185.

report. Doctoral dissertation, University of Arizona. [Paleontological pollen studies

Osborn, Henry Fairfield

1921	21.5212	The Age of Mammals in Europe, Asia and North America. New York: Macmillan Co.,
		635 pp. [See p. 451, passing reference to Anita, near Grand Canyon.]

Osburn, Annie

1997	21.2514	Stories from deep time; fossils. To hike down the base of the Grand Canyon is to
		travel through time, layer by layer, a parade of fossils marking your progress.
		Lapidary Journal, 51(2): 310

Ossian, Clair Russell

1976 21.2515 Redescription of *Megactenopetalus kaibabanus* David 1944 (Chondrichthyes: Petalodontidae) with comments on its geographic and stratigraphic distribution. *Journal of Paleontology*, 50: 392-397.

P

Palmer, Allison R.

1979	21.2530	Cambrian. In: Robison, Richard A., and Teichert, Curt (eds.), Treatise on invertebrate
		paleontology. Part A. Introduction : fossilization (taphonomy), biogeography, and
		biostratigraphy. Boulder, Colorado: Geological Society of America, and Lawrence,
		Kansas: University of Kansas, pp. A119-A166. [See pp. A120-A124, A128-A132.]

Palmer, Allison R., AND Halley, Robert B.

1979	21.2531	Physical stratigraphy and trilobite biostratigraphy of the Carrara Formation (Lower and
		Middle Cambrian) in the southern Great Basin. U.S. Geological Survey, Professional
		Paper 1047, 131 pp. [Includes correlations with Grand Canyon.]

Parmalee,	Paul W.		
1969	21.2537	California condor and other birds from Stanton's Cave, Arizona. <i>Arizona Academy of Science, Journal</i> , 5: 204-206.	
Parmley, D	ennis, AND P	Peck, David L.	
2002	21.3754	Amphibians and reptiles of the late Hemphillian White Cone local fauna, Navajo County, Arizona. <i>Journal of Vertebrate Paleontology</i> , 22: 175-178.	
Patterson,	Bruce D.		
1984	21.2547	Mammalian extinction and biogeography in the southern Rocky Mountains. <i>In:</i> Nitecki, Matthew H. (ed.), <i>Exctinctions.</i> Chicago: University of Chicago Press, pp. 247-293.	
Pattison, H	alka		
1948	21.2548	Life in an ancient Arizona sea. <i>Plateau</i> , 21(1): 1-6.	
Peabody, F	rank E.		
1956	21.2555	Gilmore's split-toed footprint from the Grand Canyon Hermit shale formation. <i>Plateau</i> , 29 (October): 41-43.	
Peck, David	d L., and Par	mley, Dennis	
2000	21.3755	Paleoherpetofauna of the late Hemphillian (late Miocene) White Cone local fauna of Navajo County, Arizona [ABSTRACT]. <i>Georgia Journal of Science, Abstracts</i> , 58: 28-29.	
Peck, Stew	art B.		
1980	21.2560	Climatic change and the evolution of cave invertebrates in the Grand Canyon, Arizona. <i>NSS Bulletin</i> (National Speleological Society), 42(3): cover, inside front cover, 53-60.	
Peters, Sha	nan E., AND	Gaines, Robert R.	
2012	21.5906	Formation of the "Great Unconformity" as a trigger for the Cambrian explosion. <i>Nature</i> (London), 484(7394) (April 19): cover, 285, 363-366, and Supplementary Information (Figures S1-S8, Tables S1-S3, 17 pp., http://www.nature.com/nature/journal/v484/n7394/extref/nature10969-s1.pdf). [Cover title: "Life Force. Did the Formation of the Great Unconformity Trigger the Cambrian Explosion?"]	
Phillips, Ar	thur Morton,	ш	
1976	21.2598	Packrats, plants, and the Pleistocene in the lower Grand Canyon of Arizona [ABSTRACT]. American Quaternary Association, National Conference, Abstracts, no. 4, pp. 70-71.	

1977	21.2599	Packrats, plants and the Pleistocene in the lower Grand Canyon. Doctoral dissertation, University of Arizona, 137 pp.	
1977	21.2601	Chronology of late Pleistocene vegetation changes in the lower Grand Canyon, Arizona. <i>In:</i> Luteyn, James L., <i>et al.</i> (eds.), Abstracts of papers to be presented at the meetings of the Botanical Society of America and certain affiliated groups at Michigan State University. <i>Botanical Society of America, Miscellaneous Series Publication 154</i> , p. 41.	
1978	21.2602	Chronology of the late Pleistocene vegetation changes in the lower Grand Canyon, Arizona [ABSTRACT]. <i>American Quaternary Association, National Conference, Abstracts</i> , no. 5, p. 174.	
1984	21.2603	Shasta ground sloth extinction; fossil packrat midden evidence from the western Grand Canyon. <i>In:</i> Martin, Paul S., and Klein, Richard G. (eds.), <i>Quaternary extinctions:</i> a prehistoric revolution. Tucson: University of Arizona Press, pp. 148-158.	
Phillips, Art	thur M., III,	AND Van Devender, Thomas R.	
1974	21.8556	Late Pleistocene plant communities in the lower Grand Canyon of Arizona [ABSTRACT]. <i>In:</i> Proceedings of the 18th Annual Meeting of the Arizona Academy of Science, April 19-20, 1974, Northern Arizona University, Flagstaff, Arizona. <i>Arizona Academy of Science, Journal</i> , 9 (April, Proceedings Supplement): 18-19.	
1974	21.2604	Pleistocene packrat middens from the lower Grand Canyon of Arizona. <i>Arizona Academy of Science, Journal</i> , 9: 117-119.	
Pierce, Dav	id, AND Clou	id, Preston	
1979	21.4617	New microbial fossils from ~ 1.3 billion-year-old rocks of eastern California. Geomicrobiology Journal, 1(3): 295-309. [Includes notes of Chuar Group of Grand Canyon.]	
Pierce, Wal	ter H.		
1979	21.2608	Biostratigraphy of the Upper Carboniferous (Pennsylvanian) in the Virgin Mountains of southern Nevada and northwestern Arizona. <i>In:</i> Beus, Stanley S., and Rawson, Richard R. (eds.), Carboniferous stratigraphy in the Grand Canyon country, northern Arizona and southern Nevada. 9th International Congress of Carboniferous Stratigraphy and Geology, Field Trip no. 13. <i>American Geological Institute, AGI Selected Guidebook Series, no. 2</i> , pp. 127-131.	
Pivetta, Ma	rcos		
2019	21.8597	Um stranho no Grand Canyon; pegadas fósseis de 280 milhões de anos são o primeiro registro de vertebrados, em tese, não adaptados a ambientes secos em um antigo deserto. <i>Pesquisa FAPESP</i> (Fundação de Amparo à Pesquisa do Estado de São Paulo, São Paulo, Brasil), 20(280) (June): 58-60. [Vertebrate ichnofossils of the Coconino Sandstone.] [In Portuguese.]	

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Poole, Forrest G., AND S	Sandberg, Charles A.
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1991	21.2619	Mississippian paleogeography and conodont biostratigraphy of the western United States. <i>In:</i> Cooper, John D., and Stevens, Calvin H. (eds.), <i>Paleozoic paleogeography of the western United States—II. Volume 1.</i> Los Angeles: Society of Economic Paleontologists and Mineralogists, Pacific Section, pp. 107-136.
Porter, Sus	sannah M. [P	Porter, Susannah Malia McGuire]
2002	21.3844	Windows on early eukaryotic and early animal life. Doctoral dissertation, Harvard University, 293 pp.
2004	21.4308	Precambrian protozoa [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 36(5): 399.
2006	21.6443	The Proterozoic fossil record of heterotrophic eukaryotes. <i>In:</i> Xiao, Shuhai, and Kaufman, Alan J. (eds.), <i>Neoproterozoic geobiology and paleobiology.</i> Dordrecht, The Netherlands: Springer, pp. 1-21. (Volume: <i>Topics in Geobiology</i> , Volume 27.) [Grand Canyon, pp. 6-8.]
2011	21.5489	The rise of predators. <i>Geology</i> , 39(6) (June): 607-609. [References include earlier work in the Chuar Group.]
2012	21.5886	Diversity and ecological complexity in organic-walled microfossil assemblages from the mid-Neoproterozoic Chuar Group, Grand Canyon, Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 44(7): 400.
2015	21.6833	Tiny vampires in ancient seas: Evidence for predation via perforation in Neoproterozoic microfossils [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 47(7): 211. [Includes Chuar Group of Grand Canyon.]
2016	21.6947	Tiny vampires in ancient seas: Evidence for predation via perforation in microfossils from the 740-780 Ma Chuar Group, Grand Canyon, Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 48(4), doi:10.1130/abs/2016CD-274705.
2017	21.7310	A view of microbial ecosystems and oxygen from the mid-Neoproterozoic (780-730 Ma) Chuar Group, Grand Canyon Supergroup, Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 49(6), Session 11, doi:10.1130/abs/2017AM-301876.
Porter, Sus	sannah M., Ar	ND Knoll, Andrew H.
2000	21.3638	Testate amoebae in the Neoproterozoic Era: Evidence from vase-shaped microfossils of the Chuar Group, Grand Canyon. <i>Paleobiology</i> , 26(3): 360-385.
Porter, Sus	sannah M., Ar	ND Riedman, Leigh Anne
2016	21.7114	Systematics of organic-walled microfossils from the ca. 780-740 Ma Chuar Group, Grand Canyon, Arizona. <i>Journal of Paleontology</i> , 90(5): 815-853. [Includes new genera <i>Galerosphaera</i> , <i>Kaibabia</i> , <i>Lanulatisphaera</i> , <i>Microlepidopalla</i> , <i>Volleyballia</i> ; new species <i>Kaibabia gemmulella</i> , <i>Microlepidopalla mira</i> , <i>Volleyballia dehlerae</i> ; and new

(Vidal, 1976).]

combinations Galerosphaera walcottii (Vidal and Ford, 1985); Lanulatisphaera laufeldii

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2023	21.8465	Frameworks for interpreting the early fossil record of eukaryotes. <i>Annual Review of Microbiology</i> , 77: 173-191. [See p. 180, fig. 3 ("A selection of key fossils"): fig. 3e, <i>aleria lophostriata</i> , specimen from late Tonian Chuar Group; fig. 3n, <i>Caelatimurus foveolatus</i> , from late Tonian Chuar Group.]
Porter, Sus	annah M.; D	ehler, Carol M.; Moore, John L.; Riedman, Leigh Anne; AND Wang, Steve C.
2013	21.6176	Possible scale-bearing protists in the mid-Neoproterozoic Chuar Group, Grand Canyon, and Uinta Mountain Group, Utah [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 45(7): 693.
Porter, Sus	annah M.; M	leisterfeld, Ralf; AND Knoll, Andrew H.
2003	21.3872	Vase-shaped microfossils from the Neoproterozoic Chuar Group, Grand Canyon: A classification guided by modern testate amoebae. <i>Journal of Paleontology</i> , 77(3): 409-429. [Includes new species.]
Porter, Sus	annah M.; T	ydings, Aidan; Mantelzak, Dean; AND Tingle, Kelly E.
2023	21.8528	A new Tonian Konservat-Lagerstätte? Diverse, organically preserved vase-shaped microfossils from the <770-730 Ma Chuar Group, Grand Canyon, USA [ABSTRACT]. <i>In: The Palaeontological Association, 67th Annual Meeting, 11th-15th September 2023, University of Cambridge, UK: Programme and abstracts,</i> pp. 126-127. [Shales of the Awatubi and Walcott Members. "Eighteen species have been provisionally identified, ten of them new."]
Pothe de Ba	aldis, Elba D.	; Baldis, Bruno A.; AND Cuomo, Jorge
1983	21.4887	Los fósiles Precámbricos de la Formación Sierras Bayas (Olavarría) y su importancia intercontinental. <i>Asociación Geológica Argentina, Revista</i> , 38(1) (January/March): 73-83. [Includes Grand Canyon.] [In Spanish.]
Potter, Tym	nbri, AND Pro	othero, Donald
2024	21.8572	Possible sexual dimorphism in the Pleistocene Shasta ground sloth (<i>Nothrotheriops shastense</i>) [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 56(5), abstract 29-11 (https://doi.org/10.1130/abs/2024AM-401585). [Skulls examined include specimens from Rampart Cave.]
Pratt, Lisa	M.; Summon	ns, Roger E.; AND Hieshima, Glenn B.
1991	21.2652	Sterane and triterpane biomarkers in the Precambrian Nonesuch Formation, North American Midcontinent Rift. <i>Geochimica et Cosmochimica Acta</i> , 55: 911-916. [See p. 914.]
Pulsipher, I	Mikaela A.; N	Miller, Anne E.; Nebel, Mark L.; Looy, Cindy V.; Duijnstee, Ivo A. P.; AND Shiffbauer, James D.
2024	21.8533	Bringing the Hermit out of hiding: A reinvestigation of the Permian Hermit flora in Grand Canyon National Park after nearly a century in obscurity [ABSTRACT]. <i>In:</i> Wilson, Jeffrey A. Mantilla, and Friedman, Matt. (eds.), 12th North American

Wilson, Jeffrey A. Mantilla, and Friedman, Matt (eds.), 12th North American

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Paleontological Convention, University of Michigan, 17-21 June 2024; Program with abstracts. *University of Michigan, Papers on Paleontology*, (39): 351. [Hermit Shale.]

R

Racey, Jan Stewart				
1974	21.2677	Conodont biostratigraphy of the Redwall Limestone of east-central Arizona. Master's thesis, Arizona State University, 199 pp.		
Radwański	, Andrzej, AN	ID Roniewicz, Piotr		
1963	21.7817	Upper Cambrian trilobite ichnocoenosis from Wielka Wiśniówka (Holy Cross Mountains, Poland). <i>Acta Palaeontologica Polonica</i> (Warszawa), 8(2): 259-280, Plates 1-10. [Abstracts also in Polish and Russian.] [Quarry at Wielka Wiśniówka, near Kielce, western part of Góry Świętokrzyskie (Holy Cross Mountains).] [See <i>Bergaueria perata</i> Prantl, 1945 (pp. 271-273); specifically, p. 272, which notes occurrence in the Bright Angel Shale of Grand Canyon.]		
Ransom, Ja	y Ellis			
1949	21.6032	Uranium strike in petrified wood. <i>Desert Magazine</i> , 12(10) (August): 10-14. [Maggie and Riley Baker, Vermilion Cliffs carnotite. Includes postscript, p. 14, "Rich New Find at Baker Uranium Mine".] [Ellipsis is part of title.]		
Ratkevich,	Ron			
1979	21.2689	Field guide to Arizona fossils. Alamogordo, New Mexico: Dinograph Southwest, Inc., 114 pp.		
Raymond, I	Percy E.			
1935	21.2701	Pre-Cambrian life. <i>Geological Society of America, Bulletin,</i> 46: 375-392. (Address as retiring President of the Paleontological Society, December 28, 1934.)		
1939	21.3800	Prehistoric life. Cambridge, Massachusetts: Harvard University Press, 324 pp. [See pp. 30, 31, 33.]		
Rea, Amade	eo M.			
1980	21.2702	Late Pleistocene and Holocene turkeys in the Southwest. <i>In:</i> Campbell, Kenneth E., Jr. (ed.), Papers in avian paleontology honoring Hidegarde Howard. <i>Natural History Museum of Los Angeles County, Contributions in Science</i> , (330): 209-224.		

Rea, Amadeo M., AND Hargrave, Lyndon L.		
1984	21.2703	The bird bones from Stanton's Cave. <i>In:</i> Euler, Robert C. (ed.), The archaeology, geology, and paleobiology of Stanton's Cave, Grand Canyon National Park, Arizona. <i>Grand Canyon Natural History Association, Monograph 6</i> , pp. 77-91.
Read, Char	les B., and M	lamay, Sergius H.
1960	21.2704	Upper Paleozoic floral zones of the United States. <i>U.S. Geological Survey, Professional Paper 400-B</i> , pp. 381-382.
1964	21.2705	Upper Paleozoic floral zones and floral provinces of the United States. <i>U.S. Geological Survey, Professional Paper 454-K</i> , pp. K1-K32.
Reagan, Al	bert B.	
1904	21.2710	The fossils of the Lower Aubrey and Upper Red Wall limestones in the vicinity of Fort Apache, Arizona. <i>Indiana Academy of Science Proceedings for 1903</i> , pp. 237-246.
1904	21.2711	The fossils of the Red Wall compared with those of the Kansas Coal Measures. Indiana Academy of Science Proceedings for 1903, pp. 249-251.
1907	21.2712	The fossils of the Red Wall compared with those of the Kansas Coal measures. <i>Kansas Academy of Science, Transactions</i> , 20(2): 95-121.
Reitz, Erha	rd, and Höll,	Rudolf
1988	21.6403	Jungsproterozoische Mikrofossilien aus der Habachformation in den mittleren Hohen Tauern und em nordostbayerischen Grundgebirge. <i>Geologischen Bundesanstalt, Jahrbuch</i> (Wien), 131(2) (August): 329-340. [Chuar Group, Grand Canyon, pp. 334, 336.] [In German.]
Remeika, F	Paul, AND Fle	ming, R. Farley
1995	21.6322	Cretaceous palynoflora and Neogene angiosperm woods from Anza-Borrego Desert State Park, California: Implications for Pliocene climate of the Colorado Plateau and age of the Grand Canyon. <i>In:</i> Reimeika, Paul, and Sturtz, Anne (eds.), <i>Paleontology and geology of the western Salton Trough detachment, Anza-Borrega Desert State Park, California: field trip guidebook and volume for the 1995 San Diego Association of Geologist's</i> [sic] <i>field trip to Anza-Borrego Desert State Park: Volume 1.</i> [San Diego]: San Diego Association of Geologists, pp. 64-81. [Volume is two volumes in one.]
Repenning	, Charles A.	
1962	21.2740	The giant ground squirrel Paenemarmota. Journal of Paleontology, 36: 540-556.

Resser, Charles E.				
1928	21.2741	Cambrian fossils from the Mohave Desert. <i>Smithsonian Miscellaneous Collections</i> , 81(2): 1-14.		
1931	21.2743	The search for ancient life forms in the rocks of the western United States. <i>In:</i> Explorations and field-work of the Smithsonian Institution in 1930. <i>Smithsonian Institution Publication 3111</i> , pp. 21-32. [Smithsonian Miscellaneous Collections.]		
1935	21.2745	Nomenclature of some Cambrian trilobites. <i>Smithsonian Miscellaneous Collections</i> , 93(5): 1-46. [See p. 33.]		
1941	21.2748	Investigations of ancient Cambrian rocks in the United States. <i>In:</i> Explorations and field-work of the Smithsonian Institution in 1940. <i>Smithsonian Institution Publication</i> 3631, pp. 1-4.		
1945	21.2749	Cambrian fossils of the Grand Canyon. <i>In:</i> McKee, E. D., and Resser, C. E., Cambrian history of the Grand Canyon region. <i>Carnegie Institution of Washington, Publication</i> 563, Part 2, pp. 169-220.		
Retallack, G	iregory J.			
2024	21.8568	Form-classification for microbially induced sedimentary structures. <i>Alcheringa</i> , 2024, https://doi.org/10.1080/03115518.2024.2345641 , 15 pp. [See in the section on the systematic paleontology of <i>Rivularites</i> Fliche, 1906 (monospecific as <i>R. repertus</i> Fliche), see remark (p. 10), "The only other species of this genus, <i>Rivularities permiensis</i> White, 1929 [which is from the Permian Hermit Shale of Grand Canyon], is flexuous without cracking or distortion of <i>Rivularites</i> , and is regarded here as a junior synonym of <i>Neantia verrucoswa</i> (Lebesconte, 1887)." (ENTIRE NOTE)]		
Rhode, Dav	id			
2001	21.3794	Packrat middens as a tool for reconstructing historic ecosystems. <i>In:</i> Egan, Dave, and Howell, Evelyn A. (eds.), <i>The historical ecology handbook: a restorationist's guide to reference ecosystems.</i> Washington, D.C., Covelo, California, and London: Island Press, pp. 257-292.		
Rich, Patricia Vickers; Rich, Thomas Hewitt; Fenton, Mildred Adams; AND Fenton, Carroll Lane				
1996	21.2767	The fossil book: a record of prehistoric life. Mineola, New York: Dover Publications, Inc., 740 pp. (Unabridged and corrected republication of the 1989 revised and expanded ed. [see Fenton and Fenton, 1989, ITEM NO. 21.1041].)		
Reidman, Leigh Anne				
2016	21.7073	Vase-shaped microfossils of the Togari Group, Tasmania and implications for biostratigraphic subdivision of the Tonian Period [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 48(7): Paper 104-1, doi:10.1130/abs/2016AM-286079. [Includes Chuar Group of Grand Canyon.]		

Riedman,	Leigh Anne;	Porter, Susannah M.; AND Czaja, Andrew D.
2018	21.7636	Globally widespread apatitic scale microfossils of the mid-Tonian [ABSTRACT]. Geological Society of America, Abstracts with Programs, 50(6): doi:10.1130/abs/2018AM-324964. [Includes note of Chuar Group of Grand Canyon.]
2021	21.8366	Phosphatic scales in vase-shaped microfossil assemblages form Death Valley, Grand Canyon, Tasmania, and Svalbard. <i>Geobiology</i> , 19(4) (July): 364-375 + Supporting Information online (table and figures).
Riedman,	Leigh Anne;	Porter, Susannah M.; Lechte, Maxwell A.; Santos, Angelo dos; AND Halverson, Galen P.
2023	21.8559	Early eukaryotic microfossils of the late Palaeoproterozoic Limbunya Group, Birrindudu Basin, northern Australia. <i>Papers in Palaeontology</i> (Palaeontological Association), 2023, e1538 (doi:10.1002/spp2.1538), 52 pp. + Supplementary Information online. [Includes occurrences and comparisons to Chuar Group of Grand Canyon, throughout.]
Rigby, J. I	Keith	
1980	21.2773	Permian sponges from the Cordilleran region of western North America [ABSTRACT]. Geological Society of America, Abstracts with Programs, 12: 150.
1988	21.2774	The first reported occurrence of the demosponge <i>Haplistion</i> in the Permian Toroweap Formation. <i>Brigham Young University, Geology Studies</i> , 35: 9-13.
Ritter, Sc	ott M.	
1991	21.2777	Conodont-based revision of Upper Devonian-Lower Pennsylvanian stratigraphy in the Lake Mead region of northwestern Arizona and southeastern Nevada. <i>Brigham Young University, Geology Studies</i> , 37: 125-138. [Summary of Master's thesis, 1983.]
Robbins,	Eleanora I.;	Martin, Paul S.; AND Long, Austin
1984	21.2778	Paleoecology of Stanton's Cave, Grand Canyon, Arizona. <i>In:</i> Euler, Robert C. (ed.), The archaeology, geology, and paleobiology of Stanton's Cave, Grand Canyon National Park, Arizona. <i>Grand Canyon Natural History Association, Monograph 6</i> , pp. 115-130.
Robinson	, Steven J.	
1996	21.4498	Can Flood geology explain the fossil record? <i>Creation Ex Nihilo Technical Journal</i> , 10(1): 32-69. [Includes Grand Canyon.]
Romans,	Robert C.	
1973	21.2798	A history of paleobotany in Arizona. <i>Plateau</i> , 45: 93-101.

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Ross, Charles A.

1979 21.2805

Carboniferous. *In:* Robison, Richard A., and Teichert, Curt (eds.), *Treatise on invertebrate paleontology. Part A. Introduction : fossilization (taphonomy), biogeography, and biostratigraphy.* Boulder, Colorado: Geological Society of America, and Lawrence, Kansas: University of Kansas, pp. A254-A290.

Ross, Charles A., AND Ross, June R. P.

1976 21.2807

Permian. *In:* Robison, Richard A., and Teichert, Curt (eds.), *Treatise on invertebrate paleontology. Part A. Introduction: fossilization (taphonomy), biogeography, and biostratigraphy.* Boulder, Colorado: Geological Society of America, and Lawrence, Kansas: University of Kansas, pp. A291-A350. [See pp. A303-A304, A313-A314, A339-A340.]

Rothpletz, August

1915 21.7962

Über die systematische Deutung und die stratigraphische Stellung der ältesten Versteinerungen Europas und Nordamerikas mit besonderer Berücksichtigung der Cryptozoen und Oolithe. I. Teil: Die Fauna der Beltformation bei Helena in Montana.; Königlich Bayerischen Akademie der Wissenschaften (Mathematisch-physikalische Klasse) (München), 18(1), 46 pp., 2 plates. [See "Vorbemerkung zum I. Teil" (pp. 3-4), which relates to the author's participation in the 1913 International Geological Congress and his intent to do field studies that included mounting an expedition to study the paleontology of the Chuar Group of Grand Canyon, following the footsteps of Charles D. Walcott. He intended to use the Grandview Hotel as a base of operation, but he discovered that there was no boat to ferry him to the north side of the Colorado River. Instead he focused on the Unkar Group on the south side of Grand Canyon, realizing that any expedition to the Chuar would require bringing pack animals in from the north.] [In German.]

Rowland, Stephen M. [Rowland, Steve]

2017	21.7307	Trackway of sideways-walking pelycosaur in the Carboniferous Manakacha Formation in Grand Canyon National Park [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 49(6), Session 136, doi:10.1130/abs/2017AM-297334. [Bright Angel Trail. Ichnogenus <i>Chelichnus</i> (?).]
2019	21.7767	The oldest vertebrate trackway in Grand Canyon and the dawn of reptiles [ABSTRACT]. In: Karlstrom, Karl E., Crossey, Laura J., Semken, Steven, Stoeberl, Todd, and Calhoun, Jeanne (convenors), Grand Canyon Geology and Geoscience Education Public Symposium, April 18-20, 2019: in honor of Grand Canyon National Park's 2019 centennial celebration, Earth Day 2019, and the 150th anniversary of John Wesley Powell's 1869 pioneering Colorado River expedition. [No imprint], pp. 14-15.
2019	21.7931	Late Holocene eastward expansion of the Mojave Desert is recorded in packrat middens from northwestern Arizona [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 51(5): Paper No. 106-2 (https://gsa.confex.com/gsa/2019AM/meetingapp.cgi/Paper/338040).

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	Rowland,	Stephen M	., AND	Caputo,	Mario V.
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21.7693 Trackway of a sideways-walking basal tetrapod in the Pennsylvanian Manakacha Formation of Grand Canyon National Park [ABSTRACT]. *In:* Farke, Andy, MacKenzie, Amber, and Miller-Camp, Jess (eds.), *Meeting program and abstracts: October 17-20, 2018: Society of Vertebrate Paleontology: 78th Annual Meeting 2018: Albuquerque Convention Center, Albuquerque, NM.* [No place]: Society of Vertebrate Paleontology,

p. 206. [Chelichnus sp., from Bright Angel Trail.]

Rowland, Stephen M., AND Needham, Robert R.

2000 21.3718 *Ice Age ground sloths of southern Nevada*. (Illustrations by Thomas Dyer.)
Henderson, Nevada: Clark County Museum, 32 pp. (Clark County Museum Occasional Paper no. 2.) [Includes Rampart Cave, Grand Canyon, Arizona.]

Rowland, Stephen M., AND Olsen, Dana

2016 21.6949 Mid-to-late Holocene packrat midden data from the Shivwits Plateau record an eastward contraction of the North American monsoon [ABSTRACT]. *Geological Society of America, Abstracts with Programs*, 48(4), doi:10.1130/abs/2016CD-274553.

Rowland, Stephen M.; Caputo, Mario V.; AND Chameroy, Eric

21.8579 Silicified bones, invertebrate burrows, and eolian adhesion structures in the Pennsylvanian Wescogame Formation, Supai Group, Grand Canyon, Arizona [ABSTRACT]. Geological Society of America, Abstracts with Programs, 56(5), abstract 40-5 (https://doi.org/10.1130/abs/2024AM-404589).

Rowland, Stephen M.; Caputo, Mario V.; AND Jensen, Zachary A.

2020 21.8112 Early adaptation to eolian sand dunes by basal amniotes is documented in two Pennsylvanian Grand Canyon trackways. *PLoS One*, 15(8): e0237636, https://doi.org/10.1317/journal.pone,0237636, 28 pp. [*Chelichnus*-like trackway from Manakacha Formation, Bright Angel Trail.]

Rowland, Stephen M.; Rickerson, Cameron; Matz, Summer; Vosburgh, Stephanie; Cluff, Tom; AND Burkett, Michele

Sandstone of southern Nevada [ABSTRACT]. Geological Society of America, Abstracts with Programs, 48(7): Paper 75-10, doi:10.1130/abs/2016AM-285893. [Includes notes of correlation to Grand Canyon.]

2016 21.7694 First report of a large tetrapod trackway in the Lower Permian (Wolfcampian)
Queantoweap Sandstone of southern Nevada [ABSTRACT]. In: Farke, Andy, MacKenzie,
Amber, and Miller-Camp, Jess (eds.), Meeting program and abstracts; SVP 2016:
SVP 76th Annual Meeting: Society of Vertebrate Paleontology: October 26-29, 2016,
Grand America Hotel, Salt Lake City, Utah, USA. [No place]: Society of Vertebrate
Paleontology, p. 214. [Gold Butte area. Tentatively identified as Chelichnus gigas.
Includes notes of correlation to Grand Canyon.]

First report of Chelichnus gigas in the Lower Permian (Wolfcamp) Queantoweap

Roy, Sharat K.

2016

21.7059

1927 21.2818 *How old are fossils?* Field Museum of Natural History, Geology Leaflet 9, 12 pp., 4 plates.

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Rumery, Jo	yce V.	
1980	21.2824	Fossils of Arizona: A selected bibliography. <i>Arizona Bureau of Geology and Mineral Technology, Open-File Report 80-3</i> , 46 pp. [Preliminary.]
Rusch, W. I	H., Sr.	
1982	21.3912	Re: Chadwick: Precambrian Pollen in the Grand Canyon—A Reexamination (Origins 8: 7-12). <i>In:</i> Reactions [SECTION]. <i>Origins</i> , 9(1): 7-9. [Comment on Chadwick (1981, ITEM NO. 21.528).]
Ryland, Ker	nneth	
2006	21.6683	Seven preposterous claims of evolution. <i>The Sabbath Sentinel</i> (Bible Sabbath Association, Gillette, Wyoming), 58(4) (July/August): 7-8, 18-19. [See p. 18, comments on Grand Canyon stratigraphy and paleontology.] [Creationist perspective.]

S

Sadler, Christa J.

1993	21.2834	Arthropod trace fossils from the Permian De Chelly Sandstone, northeastern Arizona. Journal of Paleontology, 67(2): 240-249.
1993	21.2835	Life in stone; fossils of the Southwest. <i>Plateau</i> , 64(3), 32 pp. [entire number].
2005	21.4128	Life in stone : fossils of the Colorado Plateau. Grand Canyon, Arizona: Grand Canyon Association, 72 pp.
2006	21.4129	Life in stone: fossils of the Colorado Plateau. Grand Canyon, Arizona: Grand Canyon Association, revised ed., 72 pp.
2006	21.4168	Deep time; the long and extraordinary life of the Colorado Plateau. <i>Sojourns</i> (Peaks, Plateaus and Canyons Association), 1(1) (Winter/Spring): 38-45.

St. John, Orestes, AND Worthen, A. H.

1883	21.5125	Descriptions of fossil fishes. <i>From:</i> St. John, Orestes, and Worthen, A. H., Part II. Palaeontology of Illinois. Section I. Descriptions of fossil vertebrates. <i>In: Illinois</i>
		•
		Geological Survey, Volume VII. Geology and palaeontology. Published by authority of
		the Legislature of Illinois, pp. [55]-264. [See pp. 154-156, and Plate 10, figure 1;
		description of Deltodus powellii, from "Carboniferous limestone, probably at the age of
		the Coal Measures; Grand cañon of the Colorado, Utah territory." Presumably from
		Utah, but cited here in accordance with the terminology.]

ndo, Wil	liam J.	
1963	21.2841	New species of colonial rugose corals from the Mississippian of northern Arizona. Journal of Paleontology, 37: 1074-1079.
1964	21.2842	Stratigraphic importance of corals in the Redwall limestone, northern Arizona. <i>U.S. Geological Survey, Professional Paper 501-C</i> , pp. C39-C42.
1969	21.2843	Corals. <i>In:</i> McKee, E. D., and Gutschick, R. C., History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , pp. 257-343.
1972	21.2844	The identity and significance of <i>Menophyllum ulrichanum</i> Girty. <i>Journal of Paleontology</i> , 46: 58-61.
intucci, B	rianna; Mon	neymaker, Carol A.; Lisco, John F.; AND Santucci, Vincent L.
2021	21.8352	An overview of paleontological resources preserved within prehistoric and historic structures. <i>In:</i> Lucas, Spencer G., Hunt, Adrian P., and Lichtig, Asher J. (eds.), Fossil Record 7. <i>New Mexico Museum of Natural History and Science, Bulletin 82</i> , pp. 347-356. [See "Bright Angel Lodge—Grand Canyon National Park, Arizona" (pp. 350-351, 353-354) and "Park Headquarters Plaza—Grand Canyon National Park, Arizona" (p. 354).]
intucci, V	incent L.	
2005	21.7414	Historical perspectives on biodiversity and geodiversity. <i>George Wright Forum</i> , 22(3) 29-34. [See p. 32, brief remarks on the Abert and Kaibab squirrels in the context of mountain building and orogeny.]
2015	21.6834	National Park Service paleontological resources management, research and collections: Historical perspectives [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 47(7): 479.
2017	21.7413	Preserving fossils in the national parks: A history. <i>Earth Sciences History</i> , 36(2): 245 285. [Grand Canyon, see pp. 254-256, 259, 262, 265. Grand Canyon-Parashant National Monument, see p. 275.]
2020	21.8028	Chapter 1. Introduction and summary: The paleontological heritage of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), <i>Grand Canyon National Park:</i> centennial paleontological resource inventory (non-sensitive version). Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 1-10. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103</i> .)
2020	21.8131	Reflecting back in time to uncover the rich fossil record of Grand Canyon National Park. <i>Canyon Views</i> (Grand Canyon Conservancy), 27(2) (Fall/Winter): 4-17.
2021	21.8253	The paleontological heritage of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L. and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 1-10. [Reset reprinting of Santucci (2020, ITEN NO. 21.8028).]

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Santucci, Vincent L., AND Hunt, Adrian P.

1998 21.2846

Biostratigraphy and paleoecology of late Paleozoic tetrapod tracks from Grand Canyon National Park, Arizona [ABSTRACT]. *In:* Abstracts of papers; 58th Annual Meeting, Society of Vertebrate Paleontology, Snowbird, Utah, September 30-October 3, 1998. *Journal of Paleontology*, 18(3, Supplement): 75A.

Santucci, Vincent L., AND Knight, Cassi

21.6200 An inventory of paleobotanical resources from National Park Service areas [ABSTRACT].

Geological Society of America, Abstracts with Programs, 45(7): 65.

Santucci, Vincent L., AND Koch, Alison L.

2003 21.6234

Paleontological resource monitoring strategies for the National Park Service. *Park Science* (U.S. National Park Service), 22(1) (Fall): 22-25. [See in Figure 1 (p. 22), illustration of late Paleozoic reptilian or amphibian tracks in Grand Canyon National Park.]

Santucci, Vincent L., AND Tweet, Justin S.

2020 21.8027

(EDS.) Grand Canyon National Park: centennial paleontological resource inventory (non-sensitive version). Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, 603 pp. (Natural Resource Report NPS/GRCA/NRR—2020/2103.) [Individually authored chapters (cited separately herein), plus appendices to volume without authors noted: "Appendix A. Fossil Taxa Named From GRCA" (pp. 505-520), "Appendix B. Fossil Taxa Potentially Named From GRCA" (pp. 521-523), "Appendix C. Stratigraphic Tables of GRCA Paleozoic Taxa" (pp. 525-589), "Appendix D. Outside Repositories of GRCA Fossils" (pp. 591-594), "Appendix E. Paleontological Resource Law and Policy" (pp. 595-601), "Appendix F. Geologic Time Scale", "Modified from 1999 Geological Society of America Timescale" and "Dates and additional information from International Commission on Stratigraphy update 2019/05 . . . and USGS Fact Sheet 2007-3015" (p. 603).] [NOTE: The "sensitive version", not publicly available, is Natural Resource Report NPS/GRCA/NRR—2020/2095.]

2021 21.8249

(EDS.) Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. *Utah Geological Association, Special Publication 1*, 343 pp. + interleaved separately paginated appendices [466 pp. total]. (Published by the Utah Geological Association, Salt Lake City, *in cooperation with* U.S. National Park Service, Washington, D.C.) [Reset reprinting of Santucci and Tweet (2020, ITEM NO. 21.8027).] [Individually authored chapters and appendices (cited separately herein), with original cover art by Julius Csotonyi.] [This is *State 1*, available as an electronic-only (PDF) document at www.utahgeology.org. It also can be distinguished from *State 2* by uncorrected text in the foreword by Jeanne A. Calhoun (p. v), which is mistitled, "Forward", who mentions "Dr. Earl Spammer". The PDF version was officially released on Earth Day 2021 (April 22).]

2021 21.8275

(EDS.) Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. *Utah Geological Association, Special Publication 1*, 343 pp. + interleaved separately paginated appendices [466 pp. total]. (Published by the Utah Geological Association, Salt Lake City, *in cooperation with* U.S. National Park Service, Washington, D.C.) [Reset reprinting of Santucci and Tweet (2020, ITEM NO. 21.8027).] [Individually authored chapters and appendices (cited separately herein), with original cover art by Julius Csotonyi.] [This is *State 2*, in print format, which was produced as a one-off job by the U.S. Government Printing Office

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as arranged by the U.S. National Park Service (but not indicated anywhere in the
publication); 200 copies. It also can be distinguished from State 1 by corrected text
in the title of the "Foreword" by Jeanne A. Calhoun (p. v), who mentions "Dr. Earle
Spamer". The print version was first mailed on May 18, 2021.]

2021 21.8267

(COMPILERS) Grand Canyon National Park paleontological supplemental information: Part D. Paleontological resource law and policy. *In:* Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. *Utah Geological Association, Special Publication 1*, pp. 338-343.

Santucci, Vincent L., AND Wall, William P.

1995 21.2847

Climbing up sand dunes in the Permian: New tracksites from Grand Canyon National Park, Arizona. *In:* Santucci, Vincent L., and McClelland, Lindsay (eds.), National Park Service paleontological research. Denver: U.S. National Park Service, Natural Resources Publication Office, *U.S. National Park Service, Technical Report NPS/NRPO/NRTR-95/16*, pp. 64-65. [This is a variant of the same document cited as ITEM NO. 21.6319.]

1995 21.6319

Climbing up sand dunes in the Permian: New tracksites from Grand Canyon National Park, Arizona. *In:* Santucci, Vincent L., and McClelland, Lindsay (eds.), National Park Service paleontological research. Denver: U.S. National Park Service, Natural Resources Publication Office, *U.S. National Park Service, Technical Report NPS/NRPO/NRTR-95/16*, pp. 91-93. [This is a variant of the same document cited as ITEM NO. 21.2847.]

Santucci, Vincent L., AND Wood, John R. "Jack"

2015 21.7417

Application of new technologies supporting paleontological resource inventory and monitoring in Intermountain Region parks. *Crossroads in Science* (U.S. National Park Service, Intermountain Region), (3): 73-81. [Grand Canyon National Park, p. 77.]

Santucci, Vincent L.; Hunt, Adrian P.; AND Lockley, Martin G.

1998 21.6318

Fossil vertebrate tracks in National Park Service areas. *In:* Martin, James E., Hoganson, John W., and Benton, Rachel C. (eds.), Partners Preserving Our Past, Planning Our Future; Proceedings for the Fifth Conference on Fossil Resources. *Dakoterra* (South Dakota School of Mines and Technology, Museum of Geology), 5: 107-114. [Grand Canyon National Park, p. 107; Pipe Spring National Monument, p. 112.]

Santucci, Vincent L.; Hunt, Adrian P.; Nyborg, Torrey; AND Kenworthy, Jason P.

2006 21.6317

Additional fossil vertebrate tracks in National Park Service areas. *In:* Lucas, Spencer G., Spielmann, Justin A., Hester, Patricia M., Kenworthy, Jason P., and Santucci, Vinicent L. (eds.), America's antiquities: 100 years of managing fossil on federal lands. *New Mexico Museum of Natural History and Science, Bulletin 34*, pp. 152-158. [Grand Canyon National Park, p. 152.]

Santucci, Vincent L.; Kenworthy, Jason; AND Kerbo, Ron

2001 21.3731

An inventory of paleontological resources associated with National Park Service Caves. [Lakewood, Colorado?]: *U.S. National Park Service, Geologic Resources Division Technical Report NPS/NRGRD/GRDTR-01/02*, 50 pp. (NPS D-2231.) [See pp. 16-24, 28.]

Santucci, V	Santucci, Vincent L.; Tweet, Justin S.; AND Connors, Timothy B.				
2018	21.7972	The paleontology synthesis project and establishing a framework for managing National Park Service paleontological resource archives and data. <i>In:</i> Fossil Record 6. <i>New Mexico Museum of Natural History and Science, Bulletin</i> , 79: 589-601.			
Santucci, V	incent L.; Tv	veet, Justin S.; AND Kenworthy, Jason P.			
2012	21.6233	Paleoblitz: Uncovering the fossil record of the national parks. <i>Park Science</i> (U.S. National Park Service), 29(1) (Spring/Summer): 29-32.			
Santucci, V	incent L.; Tv	veet, Justin S.; Nebel, Mark; Miller, Anne; Boudreau, Diana; Widrig, Klara; AND Hodnett, John-Paul			
2019	21.7958	Celebrating the paleontological heritage of Grand Canyon National Park during the park's centennial [ABSTRACT]. <i>In:</i> 11th North American Paleontological Convention: NAPC: program with abstracts: June 23-27, 2019, Riverside, California. <i>PaleoBios</i> , 36 (Supplement 1): 311-312.			
Sarjeant, W	Villiam Anton	y S.			
1975	21.2848	Fossil tracks and impressions of vertebrates. <i>In:</i> Frey, Robert W. (ed.), <i>The study of trace fossils : a synthesis of principles, problems, and procedures in ichnology.</i> New York: Springer-Verlag, pp. 283-324. [See pp. 303, 311-312.]			
Savage, Do	nald E., AND	Russell, Donald E.			
1983	21.2850	Mammalian paleofaunas of the world. Reading, Massachusetts: Addison-Wesley Publishing Co., Advanced Book Program/World Science Division, 432 pp.			
Scharff, Ro	bert Francis				
1912	21.5129	Distribution and origin of life in America. New York: Macmillan Co., 497 pp.			
Schenk, Ed	ward T.				
1937	21.2857	Gravigrade endentates in lower Grand Canyon, Arizona [ABSTRACT]. <i>Geological Society of America, Proceedings for 1936</i> , p. 399.			
Schlegel, M	lartin, AND M	lesiterfeld, Ralf			
2003	21.6367	The species problem in protozoa revisited. <i>European Journal of Protistology</i> , 39: 349-355. [See p. 353, note of Chuar Group testate amoebae morphotypes.]			
Schmidt, G	erald D.; Du	szynski, Donald W.; AND Martin, Paul S.			
1992	21.3719	Parasites of the extinct Shasta ground sloth, <i>Nothrotheriops shastensis</i> , in Rampart Cave, Arizona. <i>Journal of Parasitology</i> , 78(5) (October): 811-816.			

Schmidt, H	ermann	
1959	21.2864	Die Cornberger Fährten im Rahmen der Vierfüssler-Entwicklung. <i>Hessische Landesamtes für Bodenforschung, Abhandlungen</i> , Heft 28, pp. 1-137. [Includes notes on Grand Canyon tracks.] [In German.]
Schmidt, Je	eremy	
1993	21.2865	Grand Canyon National Park: a natural history guide. Boston and New York: Houghton Mifflin Co., 246 pp.
Schopf, J. V	Villiam	
1973	21.2873	Evolutionary status of the late Precambrian biota; new evidence from South Australia and the Grand Canyon. <i>National Science Foundation, Symposium on Environmental Biogeochemistry, Utah State University, Logan, Utah, Abstracts with Programs</i> , pp. 2-3.
1975	21.2874	Precambrian paleobiology: Problems and perspectives. <i>In:</i> Donath, Fred A., Stehli, Francis G., and Wetherill, George W. (eds.), <i>Annual review of earth and planetary sciences. Volume 3.</i> 1975. Palo Alto, California: Annual Reviews, Inc., pp. 213-249.
1977	21.2875	Biostratigraphic usefulness of stromatolitic microbiotas: A preliminary analysis. <i>Precambrian Research</i> , 5: 143-173.
1978	21.2876	The evolution of the earliest cells. <i>Scientific American</i> , 239(3) (September): 110-112, 114, 116-120, 126, 128-134, 137-138.
1978	21.7227	L'évolution des premières cellules. <i>Pour la Science</i> (Paris), 13 (November): 64-82. [Translation of Schopf (1978, ITEM NO. 21.2876).] [In French.]
1992	21.7594	Evolution of the Proterozoic biosphere: Benchmarks, tempo, and mode. <i>In:</i> Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere: a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 583-602. [Includes Chuar Group.]
2000	21.3948	Solution to Darwin's dilemma: Discovery of the missing Precambrian record of life. <i>U.S. National Academy of Sciences, Proceedings</i> , 97(13) (June 20): 6947-6953. [See p. 6948.]
Schopf, J. V	Villiam, AND	Kline, Cornelis
1992	21.7589	The Proterozoic biosphere: a multidisciplinary study. Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, 1348 pp. [The cover misspells Kline's given name as "Cornelius".] [Pertinent chapters and sections are cited separately herein.]
Schopf, J. V	Villiam; Ford	d, Trevor D.; AND Breed, William J.
1973	21.2877	Microorganisms from the late Precambrian of the Grand Canyon, Arizona. <i>Science</i> , 179: 1319-1321.

1974	21.2878	Late Precambrian microfossils: Discovery of four new stromatolitic biotas [ABSTRACT]. American Journal of Botany, 61 (5, Supplement): 19.
Schult, Mai	rk Frederick	
1994	21.2887	Paleoecology and paleoenvironment of an Early Permian vertebrate trace fossil fauna, Las Cruces, New Mexico. Doctoral dissertation, Indiana University, 203 pp.
1995	21.6912	Comparisons between the Las Cruces ichnofauna and other Permian ichnofaunas, including inferred trackmakers. <i>In:</i> Lucas, Spencer G., and Heckert, Andrew B. (eds.) Early Permian footprints and facies. <i>New Mexico Museum of Natural History and Science, Bulletin 6</i> , pp. 127-133. [See "Colorado Plateau Region", p. 130, which includes note of Grand Canyon occurrences.]
Schumache	er, Dietmar	
1976	21.2889	Devonian conodonts from the Temple Butte Formation, Grand Canyon, Arizona [ABSTRACT]. <i>University of Arizona, Department of Geosciences, Research report 1975-1976</i> , Section 2, Part 1, p. 32.
Science Se	rvice	
1927	21.2893	Fossil footprints in the Grand Canyon. <i>In:</i> Science News [SECTION]. <i>Science</i> , New Series, 65 (March 11, Supplement): x.
1927	21.2894	Fossil-bearing rocks of the Grand Canyon. <i>In:</i> Science News [SECTION]. <i>Science</i> , New Series, 65 (April 29, Supplement): xii.
1930	21.2895	Fossil species of the Grand Canyon. <i>In:</i> Science News [SECTION]. <i>Science</i> , New Series, 71 (March 7, Supplement): x, xii.
Scott, Linda	a J. see also	Cummings, Linda Scott
1985	21.5913	Macrofaunal analysis of selected samples from AZ I:1:17 in the Kaibab National Forest, Arizona. Golden, Colorado: Palynological Analysts, for Arizona State Museum, Tucson, 15 pp.
Segerblom	, Gene, AND	Swain, Mark
1949	21.4662	Fortune hunt in a cave. <i>Popular Mechanics Magazine</i> , 91(6) (June): 160-163. [Bat Cave guano.]
Seilacher, <i>i</i>	Adolf	
1956	21.2909	Der Beginn des Kambriums als biologische Wende. <i>Neues Jahrbuch für Geologie und Palaeontologie, Abhandlungen</i> , 103: 155-180. [In German.]

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

1964	21.2910	Biogenic sedimentary structures. <i>In:</i> Imbrie, John, and Newell, Norman (eds.),
		Approaches to paleoecology. New York: John Wiley and Sons, Inc., pp. 296-316.

Seiler, Winston Marmion

2008 21.6078 Jurassic Navajo Sandstone of Coyote Buttes, Utah/Arizona: Coloration and diagenetic history, preservation of a dinosaur trample surface, and terrestrial analogs to Mars.

Master's thesis, University of Utah, 238 pp.

Serezhnikova, Ye. A. [Сережникова, E. A.]

2014 21.7032

Скелетные образования проблематичных низших многоклеточных вендского (эдиакарского) периода [Skeletnyye obrazovaniya problematichnykh nizshikh mnogokletochnykh vendskogo (ediakarskogo) perioda]. Skeletal structures of the problematical metazoa from the Vendian (Ediacaran). *In: Становление скелета у* различных групп организмов и биоминерализация в истории Земли : Геобиологические системы в прошлом: Программа Президиума РАН: «Проблемы происхождения жизни и становления биосферы» : Научно-образовательный центр ПИН РАН : Hayчнo-образовательный центр ИНМИ PAH [Stanovleniye skeleta u razlichnykh grupp organizmov i biomineralizatsiya v istorii Zemli : Geo-biologicheskiye sistemy v proshlom : Programma Prezidiuma RAN : «Problemy proiskhozhdeniya zhizni i stanovleniya biosfery» : Nauchno-obrazovatel'nyy tsentr PIN RAN : Nauchnoobrazovatel'nyy tsentr INMI RAN] [The formation of the skeleton in different groups of organisms and biomineralization in Earth's history: Geo-biological systems in the past: program of the Presidium of Russian Academy of Sciences: "The origin of life and the formation of the biosphere": Research and Education Center PIN RAS: Research and Education Center INMI RAS]. Mockba: ПИН PAH [Moskva: PIN RAN (Палеонтологический институт, России академия наук) (Paleontologicheskiy institut, Rossii akademiya nauk)] [Moscow: Paleontological Institute, Russian Academy of Sciences], pp. 14-43, Plate 1. [Brooksella canyonensis Bassler, from Grand Canyon, noted pp. 17-18.] [In Russian; article with bilingual title and abstract.]

Seward, Albert C.

1931	21.2914	Plant life through the ages : a geological and botanical retrospect. Cambridge, England: The University Press, 601 pp.
1931	21.2915	Plant life through the ages : a geological and botanical retrospect. New York: Macmillan Co., 601 pp.
1933	21.2916	Plant life through the ages : a geological and botanical retrospect. Cambridge, England: Cambridge University Press, 2nd ed.
1959	21.2917	Plant life through the ages : a geological and botanical retrospect. New York: Hafner Publishing Co., 603 pp. [See "The Grand Canyon of Arizona", pp. 14-17, and "A Permian flora in Arizona", pp. 249-251.]

Shields, Graham A.; Strachan, Robin A.; Porter, Susannah M.; Halverson, Galen P.; Macdonald,
Francis A.; Plumb, Kenneth A.; Alvarenga, Carlos J. de; Banerjee, Dhiraj M.;
Bekker, Andrey; Blecker, Wouter; Brasier, Alexander; Chakraborty, Partha
P.; Collins, Alan S.; Condie, Kent; Das, Kaushik; Evans, David A. D.; Ernst,
Richard; Fallick, Anthony E.; Frimmel, Hartwig; Fuck, Reinhardt; Hoffman,

		Paul F.; Kamber, Balz S.; Kuznetsov, Anton B.; Mitchell, Ross N.; Poiré, Daniel G.; Poulton, Simon W.; Riding, Robert; Sharma, Mukund; Storey, Craig; Stueeken, Eva; Tostevin, Rosalie; Turner, Elizabeth; Xiao, Shuhai; Zhang, Shuanhong; Zhou, Ying, Zhou; AND Zhu, Maoyan
2022	21.8621	A template for an improved rock-based subdivision of the pre-Cryogenian timescale. <i>Geological Society</i> (London), <i>Journal</i> , 179: https://doi.org/10.1144/jgs2020-222 , 22 pp. [See "Paleontological Constraints" (p. 8), which cites the Grand Canyon-based findings of Porter (2016, ITEM NO. 21.6833), Porter and Knoll (2000, ITEM NO. 21.3638), and Porter, Meisterfeld, and Knoll (2003, ITEM NO. 21.3872).]
Shumard, B	3. F.	
1868	21.5445	A catalogue of the Palaeozoic fossils of North America. St. Louis Academy of Science, Transactions, 2: 334-407. [See p. 355, listings of three species of Archaeocidaris as noticed from [J. C. Ives'] Report upon the Colorado River of the West; specimens from "Near Great Cañon of Colorado River".]
Sigler, Johr	ı W., AND Sig	gler, William F.
1994	21.2954	Fishes of the Great Basin and the Colorado Plateau: past and present forms. <i>In:</i> Harper, Kimball T., St. Clair, Larry L., Thorne, Kaye H., and Hess, Wilford M. (eds.), <i>Natural history of the Colorado Plateau and Great Basin.</i> Niwot, Colorado: University Press of Colorado, pp. 163-208.
Sirantoine,	Eva, AND Br	ocks, Jochen J.
2015	21.8100	Emerging picture of a pre-Cryogenian eukaryotic community based on immature molecular fossils [ABSTRACT]. <i>In: 2015 Goldschmidt Conference, Prague, CZ, August 16-21, 2015 : abstracts</i> , p. 2910. [Includes Chuar Group of Grand Canyon.]
Siveter, Da	vid J., AND V	Villiams, Mark
1997	21.3649	Cambrian bradoriid and phosphatocopid arthropods of North America. Palaeontological Association, Special Papers in Palaeontology, no. 57, 69 pp.
Skipp, Betty	y A. L.	
1963	21.2963	Zonation of calcareous Foraminifera in the Redwall limestone (Mississippian), Arizona [ABSTRACT]. <i>Geological Society of America, Special Paper 73</i> , pp. 245-246.
1969	21.2964	Foraminifera. <i>In:</i> McKee, E. D., and Gutschick, R. C., History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , pp. 173-255.
1979	21.2965	Great Basin region. <i>In:</i> Craig, L. C., and Connor, C. W. (coordinators), Paleotectonic investigations of the Mississippian System in the United States. Part 1. Introduction and regional analyses of the Mississippian System. <i>U.S. Geological Survey, Professional Paper 1010-P</i> , pp. 273-328.

Skipp, Betty,	AND McKee	e, Edwin D.
1978	21.2966	Transgressions and regressions of Redwall sea, northern Arizona, related to calcareous foraminiferal faunas [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 10: 147.
Skipp, Betty;	Halcomb,	L. D.; AND Gutschick, Raymond C.
1966	21.2967	Tournayellinae, calcareous foraminifera, in Mississippian rocks of North America; with translations from the original Russian of descriptions of several key genera and species by Ivan Mittin and Betty Skipp. <i>Cushman Foundation for Foraminiferal Research, Special Publication 9</i> , 38 pp.
Skwara, Ther	esa	
1992	21.2968	Old bones and serpent stones: a guide to interpreted fossil localities in Canada and the United States. Volume 2: Western states. Blacksburg, Virginia: McDonald and Woodward Publishing Co., 301 pp. [See cover, pp. 63, 102, 217-222.]
Smith, A. R.		
1969	21.2976	Precambrian fossils from the Bass Limestone of the Grand Canyon Series [ABSTRACT]. Geological Society of America, Abstracts for 1968, p. 639.
Smith, Berna	rd J.	
1983	21.2977	Comment [on "Use of packrat middens to determine rates of cliff retreat in the eastern Grand Canyon, Arizona" by Kenneth L. Cole and Larry Mayer (1982, ITEM NO. 21.619).] <i>Geology</i> , 11: 494. [With reply by Cole and Mayer, 494-495.]
Smith, Felisa	A., AND Be	tancourt, Julio L.
1998	21.2986	Response of the bushy-tailed woodrats (<i>Neotoma cinerea</i>) to late Quaternary climatic change in the Colorado Plateau. <i>Quaternary Research</i> , 50: 1-11.
Smith, Gerald	i R.	
1981	21.5738	Late Cenozoic freshwater fishes of North America. <i>Annual Review of Ecology and Systematics</i> , 12: 163-193. [See map, p. 174; and "The Colorado Plateau", p. 176.]
Snelling, And	rew A.	
2008	21.4445	High and dry sea creatures; flood evidence number one. <i>Answers</i> , 3(1) (January/March): 92-95.
2008	21.4446	The world's a graveyard; flood evidence number two. <i>Answers</i> , 3(2) (April/June): 76-79.

Snelling, Andrew A., AND Austin, Steven A.			
1992	21.3808	Grand Canyon: Startling evidence for Noah's Flood; footprints and sand "dunes" in a Grand Canyon sandstone! <i>Creation Ex Nihilo</i> , 15(1) (December): 46-50.	
Snow, Jose	ph I.		
1945	21.2996	Trilobites of the Middle Permian Kaibab formation of northern Arizona. <i>Plateau</i> , 18: 17-24.	
Spamer, Ea	ırle E.		
1979	21.3000	A jellyfish in the Canyon. <i>Grand Canyon Guide</i> , 3(1) (March 25): 1, 4. [General article about the Proterozoic pseudofossil " <i>Brooksella canyonensis</i> " Bassler.]	
1982	21.3001	Enigmatic fossils of the Grand Canyon Supergroup (Precambrian) of northern Arizona. Delaware Valley Paleontological Society, Newsletter, 4(8): 3-5.	
1982	21.3002	The fossil insects of the Grand Canyon. <i>Delaware Valley Paleontological Society, Newsletter</i> , 4(8): 5-6.	
1982	21.3003	The Devil and David White; or, The road to fame and misfortune through static morphology and lack of study. <i>Delaware Valley Paleontological Society, Newsletter</i> , 4(10): 4-6.	
1983	21.3004	Geology of the Grand Canyon: An annotated bibliography, 1857-1982, with an annotated catalogue of Grand Canyon type fossils. (Foreword by Edwin D. McKee.) <i>Geological Society of America, Microform Publication 13</i> , 543 [544] pp. on six 98-frame fiche.	
1984	21.3005	Geology of the Grand Canyon: An annotated bibliography, with an annotated catalogue of Grand Canyon type fossils. Volume 2. Supplement to the annotated bibliography (1857-1983), Supplement and revisions to the annotated catalogue. <i>Geological Society of America, Microform Publication 14</i> , 229 pp. on three 98-frame fiche.	
1984	21.3007	Paleontology in the Grand Canyon of Arizona: 125 years of lessons and enigmas from the late Precambrian to the present. <i>The Mosasaur</i> (Delaware Valley Paleontological Society, Journal), 2: 45-128.	
1988	21.3008	Geology of the Grand Canyon: An annotated bibliography, with an annotated catalogue of Grand Canyon type fossils. Volume 3. Second supplement (to 1987) with an annotated bibliography of the world literature on the Grand Canyon type fossil Chuaria circularis Walcott, 1899, an index fossil for the late Proterozoic. Geological Society of America, Microform Publication 17, 343 [355] pp. on four 98-frame fiche.	
1989	21.3009	The development of geological studies in the Grand Canyon; prepared for the 28th International Geological Congress Colorado River field trips through the Grand Canyon, Lees Ferry to Temple Bar, Lake Mead, Arizona, June/July 1989. <i>Tryonia</i> (Academy of Natural Sciences of Philadelphia, Department of Malacology, Miscellaneous Publications), no. 17, 87 pp. (Contribution of the Invertebrate Paleontology Section, no. 1.) [300 copies printed; first distributed gratis to members of the field trips. The trips, incidentally, ended at Pearce Ferry, not at Temple Bar as originally planned).]	

1989	21.3010	Late Proterozoic index fossil <i>Chuaria circularis</i> Walcott, 1899: Understanding an enigma [ABSTRACT]. <i>28th International Geological Congress, Abstracts</i> , 3: 159-160.
1990	21.3011	Geology of the Grand Canyon: An annotated bibliography, with an annotated catalogue of Grand Canyon type fossils. Volume 4. Third supplement (to 1989), with supplement to the annotated bibliography of the world literature on the Grand Canyon type fossil <i>Chuaria circularis</i> Walcott, 1899. <i>Geological Society of America, Microform Publication 20</i> , 178 pp. on two 98-frame fiche.
1992	21.3015	Geology of the Grand Canyon: An annotated bibliography, with an annotated catalogue of Grand Canyon type fossils. Volume 5. Fourth supplement (to 1991) with second supplement to the annotated bibliography of the world literature on the Grand Canyon type fossil <i>Chuaria circularis</i> Walcott, 1899. <i>Geological Society of America, Microform Publication 23</i> , 234 pp. on three 98-frame fiche.
1992	21.3016	The Grand Canyon fossil record; a source book on paleontology of the Grand Canyon and vicinity, northwestern Arizona and southeastern Nevada. Bibliography; indexes to taxa, stratigraphic records, localities, and repositories of type, figured, and cited specimens. <i>Geological Society of America, Microform Publication 24</i> , 1,008 pp. on eleven 98-frame fiche.
1992	21.3017	Computerized database on Grand Canyon paleontology [ABSTRACT]. National Park Service Paleontological Research Abstract Volume, 3rd Fossil Resources Conference, Fossil Butte National Monument, Wyoming, September 1992, p. 42.
1993	21.6321	Computerized database on Grand Canyon paleontology [ABSTRACT]. <i>In:</i> Santucci, Vincent L. (ed.), National Park Service paleontological research, Volume 1. <i>U.S. National Park Service, Technical Report NPS/NRPEFO/NRTR-93/11</i> , pp. 37-38.
1993	21.3018	GCPALEO: A computerized database on Grand Canyon paleontology. <i>In:</i> News and Notes [SECTION]. <i>Academy of Natural Sciences of Philadelphia, Proceedings</i> , 144: 342-343.
1993	21.3019	Late Pleistocene(?) land snails (Mollusca: Gastropoda) in "red earth" deposits of the Grand Canyon, Arizona. <i>The Mosasaur</i> (Delaware Valley Paleontological Society, Journal), 5: 47-58.
1995	21.3020	Sublime stone; Grand Canyon geology after Powell. <i>Canyon Legacy</i> (Dan O'Laurie Museum), (24): 16-26, back cover.
2020	21.8029	Chapter 2. History of paleontological work at Grand Canyon National Park. Up and down the long federal and NGO trails of paleontology in Grand Canyon National Park, 1858-2019. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), <i>Grand Canyon National Park: centennial paleontological resource inventory (non-sensitive version).</i> Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 11-44. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103.</i>) [NGO: Non-Government Organization.]
2021	21.8254	History of paleontological work at Grand Canyon National Park—up and down the long federal and NGO trails of paleontology in Grand Canyon National Park, 1858-2019. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 11-32. [Reset reprinting of Spamer (2020, ITEM NO. 21.8029).]

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Spamer, Ear	le E.,	AND	Bogan,	Arth	ur E.
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1993	21.3021	Mollusca of the Grand Canyon and vicinity, Arizona: New and revised data on diversity
		and distributions, with notes on Pleistocene-Holocene mollusks of the Grand Canyon.
		Academy of Natural Sciences of Philadelphia, Proceedings, 144: 21-68.

Spamer, Earle E.; Daeschler, Edward; AND Vostreys-Shapiro, L. Gay

1995	21.3023	A study of fossil vertebrate types in the Academy of Natural Sciences of Philadelphia;
		taxonomic, systematic, and historical perspectives. Academy of Natural Sciences of
		Philadelphia, Special Publication 16, 434 pp. [See Anthracopus ellangowensis Lorenz
		in Leidy, pp. 287-288. (A. ellangowensis does not pertain to Grand Canyon but Grand
		Canyon noted as part of discussion. Gilmore [1927, ITEM NO. 21.1191] had considered
		A. ellangowensis to be possibly a senior subjective synonym of Hylopus hermitanus
		Gilmore from the Hermit Shale of Grand Canyon.]

Spaulding, W. Geoffrey

1977	21.8317	Statement of W. Geoffrey Spaulding, Department of Geosciences, University of Arizona. <i>In:</i> Wild Free-Roaming Horses and Burros Act: hearing before the Subcommittee on Public Lands and Resources of the Committee on Energy and Natural Resources, United States Senate, Ninety-fifth Congress, First Session, on oversight of the Wild Free-Roaming Horses and Burros Act of 1971, May 23, 1977: Publication No. 95-60. Washington, D.C.: U.S. Government Printing Office, pp. 120-125. [Presentation of paleontological evidence from Rampart Cave, Grand Canyon, and Gypsum Cave, Nevada, with regard to the issue of the presence of Quaternary equids, in discussions of modern "feral" horses and burros.]
1983	21.3025	Late Wisconsin macrofossil records of desert vegetation in the American Southwest. Quaternary Research, 19: 256-264.
1990	21.3026	Comparison of pollen and macrofossil based reconstructions of Late Quaternary vegetation in North America. <i>Review of Palaeobotany and Palynology</i> , 64: 359-366.
1991	21.3027	A middle Holocene vegetation record from the Mojave Desert of North America and its paleoclimatic significance. <i>Quaternary Research</i> , 35: 427-437.

Spaulding, W. Geoffrey, AND Martin, Paul S.

1979	21.8569	Ground sloth dung of the Guadalupe Mountains. <i>In:</i> Genoways, Hugh H., and Baker, Robert J. (eds.), Biological investigations in the Guadalupe Mountains National Park, Texas; proceedings of a symposium held at Texas Tech University, Lubbock, Texas, April 4-5, 1975. <i>U.S. National Park Service, Proceedings and Transactions Series</i> , (4): 259-269. [Includes Rampart Cave and Muav Cave of Grand Canyon (pp. 260-263, 266. Also includes comparative analysis of cow dung from the vicinity of Rampart
		Cave.]

Spaulding, W. Geoffrey; Leopold, Estella B.; AND Van Devender, Thomas R.

1983	21.3028	Late Wisconsin paleoecology of the American Southwest. <i>In:</i> Wright, H. E., Jr. (ed.),
		Late Quaternary environments of the United States. Volume 1. The Late Pleistocene.
		Minneapolis, Minnesota: University of Minnesota Press, pp. 259-293.

Spaulding, \	W. Geoffrey;	Robinson; Stephen W.; AND Paillet, Frederick L.
1984	21.6074	Preliminary assessment of climatic change during Late Wisconsin time, southern Grea Basin and vicinity, Arizona, California, and Nevada. <i>U.S. Geological Survey, Water-Resources Investigations Report 84-4328</i> , 40 pp., 3 plates. [Includes Rampart Cave.
Sprinkle, Ja	imes	
1973	21.8278	Morphology and evolution of blastozoan echinoderms. Cambridge, Massachusetts: Harvard University, Museum of Comparative Zoology, Special Publication, 284 pp. [Eighth in the unnumbered Special Publication series.] [Systematics of Phylum Echinodermata, Subphylum Blastozoa, new subphylum. See Gogia longidactylus (Walcott) (pp. 83-85, plates 9, 10), including "[a] single specimen apparently belonging to this species (GCM 2641; Pl. 10, fig. 11) has also been found at a locality in the Bright Angel Shale, Tonto Trail, ½ mile northest of Indian Gardens"; and Gogia multibrachiatus (Kirk) (pp. 85-85, plate 11), type material USNM 108556a, b, "apparently collected by N. J. Cameron and Charles D. Walcott in 1915 from the Bright Angel Shale at a locality just north of Indian Gardens (Walcott locality 74e)".] [NOTE: Edwin Kirk's new species description for G. multibrachiatus appears on pp. 185-187 within the systematic paleontology text of McKee and Resser (1945, ITEM NO. 21.2293), not in a separate publication.]
1976	21.3040	Biostratigraphy and paleoecology of Cambrian echinoderms from the Rocky Mountains. <i>Brigham Young University, Geology Studies</i> , 23(2): 61-73.
2005	21.4517	 Hartin, Paul S.; MacPhee, Ross D. E.; Jull, A. J. T.; McDonald, H. Gregory; Woods, Charles A.; Itarralde-Vinent, Manuel; AND Hodgins, Gregory W. L. Asynchronous extinction of late Quaternary sloths on continents and islands. U.S. National Academy of Sciences, Proceedings, 102(33): 11763-11768.
Stearley, Ra	alph	
2012	21.6326	Rocks, fossils and geologic time. <i>In:</i> Haarsma, Deborah, and Hoezee, Scott (eds.), <i>Delight in creation: Scientists share their work with the church.</i> Grand Rapids, Michigan: Center for Excellence in Preaching, pp. 183-197.
2016	21.6983	Fossils of the Grand Canyon and Grand Staircase. <i>In:</i> Hill, Carol A., Davidson, Gregg, Helble, Tim, and Ranney, Wayne (eds.), <i>The Grand Canyon: monument to an ancient earth:</i> can Noah's Flood explain the Grand Canyon? Grand Rapids, Michigan: Kregel Publications; and Tulsa, Oklahoma: Solid Rock Lectures, pp. 130-143.
Steinhart, P	Peter	
1981	21.3048	The fossil horse. Audubon, 83 (March): 8, 10.
Strauss, Jus	stin V.; Knol	ll, Andrew H.; Cohen, Phoebe; AND Macdonald, Francis A.
2012	21.5889	Diverse vase-shaped microfossils in the Neoproterozoic Callison Lake Dolostone, Coal Creek inlier, Yukon Territory, Canada [ABSTRACT]. <i>Geological Society of America</i> ,

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Abstracts with Programs, 44(7): 603.	[Includes note of Chuar Group microfossils,
Grand Canyon.]	

Grana Ganyonij	
Strauss, Justin V.; Rooney, Alan D.; Macdonald, Francis	A.; Brandon, Alan D.; AND Knoll, Andrew H.

2014	21.8635	740 Ma vase-shaped microfossils from Yukon, Canada: Implications for Neoproterozoic chronology and biostratigraphy. <i>Geology</i> , 42(8) (August): 659-662 + Data Repository item 2014244 (doi:10.1130/G35736.1). [See Figure 4, correlative stratigraphic diagrams that include Grand Canyon, displaying distributions of vase-shaped microfossil horizons.]
		microfossil horizons.]

Strickland, Laura E.; Thompson, Robert S.; AND Anderson, Katherine H.

2001	21.3900	USGS/NOAA North American Packrat Midden Database data dictionary. U.S.
		Geological Survey, Open-File Report 01-022.

Strother, Paul K.

2000	21.3958	Cryptospores: The origin and early evolution of the terrestrial flora. <i>In:</i> Phanerozoic
		Terrestrial Ecosystems (convened by Robert A. Gastaldo and William A. DiMichele).
		Paleontological Society, Papers, 6 (November): 3-20.

21.7125 Systematics and evolutionary significance of some new cryptospores from the Cambrian of eastern Tennessee, USA. *Review of Palaeobotany and Palynology*, 227: 28-41. [See *Adinosporus bullatus*, new genus, new species (p. 33), type locality in Tennessee. Some non-type Grand Canyon samples used for plate illustrations in this paper (pp. 30, 33): *A. bullatus* from Bright Angel Shale, Red Canyon (Plate 2, figure 9) and Bright Angel Shale, Thunder Falls [Thunder River] (Plate 2, figure 12) (Plate 2 is on p. 34, with legend on p. 35).]

Strother, Paul K.; Baldwin, Christopher T.; Beck, John H.; AND Rose, Eben

2004	21.4433	An integrated sedimentological, ichnological and palynological study of the
		paleoecology of the Middle Cambrian, Bright Angel Shale, Grand Canyon, Arizona. <i>In:</i>
		Abstracts of the Proceedings of the Thirty-Sixth Annual Meeting of the American
		Association of Stratigraphic Palynologists; St. Catharines, Ontario—October 5-8, 2003.
		Palynology, 28: 265.

Strother, Paul K.; Wood, Gordon D.; Taylor, Wilson A.; AND Beck, John H.

2004	21.4050	Middle Cambrian cryptospores and the origin of land plants. <i>In:</i> Laurie, John R., and
		Foster, C. B. (eds.), Palynological and micropalaeontological studies in honour of
		Geoffrey Playford. Association of Australian Palaeontologists, Memoir 29, pp. 99-113.

Sturdevant, Glen E.

1926	21.3100	Ancient ferns. Grand Canyon Nature Notes, 1(3) (May 13): 3-4. [Hermit Shale.]
1926	21.3101	Dragon fly. Grand Canyon Nature Notes, 1(4) (June 26): 3. [Hermit Shale.]
1927	21.3104	Fossils. Grand Canyon Nature Notes, 1(9) (January 10): 1-4.

1927	21.23	When insects were the size of birds. <i>Grand Canyon Nature Notes</i> , 2(1) (June 30): 2. [Hermit Shale.]
1927	21.24	Grand Canyon animal tracks. <i>Grand Canyon Nature Notes</i> , 2(4) (September 30): 5. [Notice of C. W. Gilmore's "Fossil Footprints of the Grand Canyon" (Gilmore, 1927, ITEM NO. 21.1191).]
1928	21.25	Species of Productus of the Kaibab limestone at Grand Canyon. <i>Grand Canyon Nature Notes</i> , 2(8) (January 30): 3-5 + two unpaginated illustration pages. [<i>NOTE</i> : Although the by-line for this issue as noted in the masthead is G. E. Sturdevant, it is possible that the author of this item is Edwin D. McKee.]
1928	21.27	Third publication on Grand Canyon animal tracks. <i>Grand Canyon Nature Notes</i> , 2(10) (March 31): 4. [C. W. Gilmore publication of fossil tracks.]
1928	21.7202	[David White studying fossils of the "lower part of Grand Canyon".] <i>Grand Canyon Nature Notes</i> , 2(12) (May 31): 4.
1928	21.28	Fossils collected. <i>Grand Canyon Nature Notes</i> , 3(1) (June 30): 4.
Sumida,	Stuart S.	
1995	21.3116	Notes from the Third Biennial Conference of Research on the Colorado Plateau; first in a series. Correspondence of fossil vertebrate assemblages between the Colorado Plateau and continental Europe: Implications for Pangaean landforms during the Early Permian. <i>Grand Canyon Field Notes</i> (Center for Resource Interpretation, Grand Canyon National Park), (6) (November 20): [1-2] [entire number].
Summon	s, Roger E.	
Summon: 1992	s, Roger E. 21.7590	Abundance and composition of exractable organic matter. <i>From:</i> Hayes, J. M., Des Marais, David J., Lambert, Ian, Strauss, Harald, and Summons, Roger E., Proterozoic biogeochemistry. <i>In:</i> Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere: a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 101-116. [Includes Chuar Group.]
1992	21.7590	Marais, David J., Lambert, Ian, Strauss, Harald, and Summons, Roger E., Proterozoic biogeochemistry. <i>In:</i> Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere : a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and
1992	21.7590	Marais, David J., Lambert, Ian, Strauss, Harald, and Summons, Roger E., Proterozoic biogeochemistry. <i>In:</i> Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere : a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 101-116. [Includes Chuar Group.]
1992 Summon 1990	21.7590 s, Roger E., AND 21.3117	Marais, David J., Lambert, Ian, Strauss, Harald, and Summons, Roger E., Proterozoic biogeochemistry. <i>In:</i> Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere : a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 101-116. [Includes Chuar Group.] • Walter, Malcolm R. Molecular fossils and microfossils of prokaryotes and protists from Proterozoic
1992 Summon 1990	21.7590 s, Roger E., AND 21.3117	Marais, David J., Lambert, Ian, Strauss, Harald, and Summons, Roger E., Proterozoic biogeochemistry. <i>In:</i> Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere : a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 101-116. [Includes Chuar Group.] • Walter, Malcolm R. Molecular fossils and microfossils of prokaryotes and protists from Proterozoic sediments. <i>American Journal of Science</i> , 290-A: 212-244.
Summon:	21.7590 s, Roger E., AND 21.3117 s, Roger E.; Bra 21.3118	Marais, David J., Lambert, Ian, Strauss, Harald, and Summons, Roger E., Proterozoic biogeochemistry. <i>In:</i> Schopf, J. William, and Kline, Cornelis (eds.), <i>The Proterozoic biosphere : a multidisciplinary study.</i> Cambridge (United Kingdom), New York, and Melbourne: Cambridge University Press, pp. 101-116. [Includes Chuar Group.] Divide Walter, Malcolm R. Molecular fossils and microfossils of prokaryotes and protists from Proterozoic sediments. <i>American Journal of Science</i> , 290-A: 212-244. Distinctive hydrocarbon biomarkers from fossiliferous sediment of the Late Proterozoic Walcott Member, Chuar Group, Grand Canyon, Arizona. <i>Geochimica et Cosmochimica</i>

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Macroscopic Colonial Algae: *Chuaria* Walcott and *Tawuia* Hofmann", pp. 88-173, which includes Grand Canyon.]

Sundberg, Fred [Sundberg, Frederick A.] 1

2019	21.7959	Editorial: Into the canyon of time. The Trilobite Papers (An international newsletter
		for and by trilobite paleontologists) (Show Low, Arizona), (22): 2. [Remarks on a 14-
		day research trip on the Colorado River through Grand Canyon with Karl Karlstrom
		and others, to, among other tasks, "to re-investigate the Cambrian of the Grand
		Canyon, which included collecting fossil localities".]

2020 21.8119 [Note.] *In:* Research Reports [SECTION]. *The Trilobite Papers* (An international newsletter for and by trilobite paleontologists) (Show Low, Arizona), (23) (February): 3-4. [Briefly notes recent research, in press, that redefines the Tonto Group of Grand canyon.]

Sundberg, Frederick A.; Karlstrom, Karl E.; Geyer, G.; Foster, John R.; Hagadorn, James W.; Mohr, Michael T.; Schmitz, Mark D.; Dehler, Carol M.; and Crossey, Laura J.

Asynchronous trilobite extinctions at the early to middle Cambrian transition. *Geology*, 48: doi:10.1130/GG46913.1. [Includes brief note of detrital zircon dating of the Tapeats Sandstone in Grand Canyon, southern Nevada, and central Arizona.]

Sze, Xing Jian [Sze, H. C.] [斯 行 健]

21.8017

2020

1955 21.7085 山西上石盒子系一種 "種子蕨" Protoblechnum wongi Halle 的一塊新發現的 分叉的蕨葉

化石. On a forked frond of Protoblechnum wongii Halle. 古生物學報 *Acta Palaeontologica Sinica* (Beijing), 3(1) (February): 11-24, Plates 1-4. [Includes comparisons to paleoflora from the Hermit Shale of Grand Canyon, pp. 15-17, 20. Abstract notes in part (p. 23), ". . . the new generic name *Supaia* of White founded on specimens from the Hermit Shale in Grand Canyon, Arizona[,] is not valid."] [*NOTE*: The specific epithet *wongii* is spelled "wongi" in the Chinese title (in Roman characters, as shown), but is otherwise correctly spelled *wongii* in the English title and throughout the paper. *P. wongii* does not occur in Grand Canyon strata.] [In Chinese, with English title and abstract.]

Editor's note in *The Trilobite Papers*: "Please keep in mind that The Trilobite Papers is not a formal publication and should never be cited. If you wish to use information in this series for a formal publication, please contact the author of the information and then it oculd be cited only as 'personal communication'. This is particularly important for the sections on 'Field Notes' and 'Taxonomic Notes'." Items from this serial are cited in THE GRAND CANON as historical records of activities and contemporary research conducted in the Grand Canyon region.

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Τ

Talyzina, N	. м.	
2000	21.4480	Ultrastructure and morphology of <i>Chuaria circularis</i> (Walcott, 1899) Vidal and Ford (1985) from the Neoproterozoic Visingso Group, Sweden. <i>Precambrian Research</i> , 102(1) (July): 123-134.
Tasch, Paul	I	
1955	21.3740	The concept of psephonecrocoenosis applied to "dwarf" fossil faunas. <i>American Midland Naturalist</i> , 53(1): 205-212.
Taylor, Dwi	ight W.	
1970	21.3150	West American freshwater Mollusca, 1: Bibliography of Pleistocene and Recent species. San Diego Society of Natural History, Memoir 4, 73 pp.
1975	21.3151	Index and bibliography of late Cenozoic freshwater Mollusca of western North America. Claude W. Hibbard Memorial Volume 1. <i>University of Michigan, Papers on Paleontology, no. 10</i> , 384 pp.
Taylor, Wils	son A., AND	Strother, Paul K.
2008	21.4254	Ultrastructure of some Cambrian palynomorphs from the Bright Angel Shale, Arizona, USA. <i>Review of Palaeobotany and Palynology</i> , 151(1/2): 41-50.
2008	21.4318	Ultrastructure of Cambrian cryptospores support multilaminate walls as the primitive condition in the plant sporoderm [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs (Northeast Section, 43rd Annual Meeting)</i> , Paper no. 2-5.
Tedford, Ri	chard H.; W	ang, Xiaoming; AND Taylor, Beryl E.
2009	21.6377	Phylogenetic systematics of the North American fossil Caninae (Carnivora: Canidae). American Museum of Natural History, Bulletin 325, 218 pp. [Includes material from Anita, Arizona.]
Teyssèdre,	Bernard	
2006	21.4709	Les algues vertes (phylum Viridiplantae), sont-selles vieilles de deux milliards d'années? <i>Carnets de Géologie</i> (Brest), Livre 2006/01, 162 pp. [See pp. 7, 45, 52, 66, 86; Precambrian microfossils in Grand Canyon.] [In French.]

Thayer, Da	ve	
2009	21.4772	An introduction to Grand Canyon fossils. Grand Canyon, Arizona: Grand Canyon Association, 64 pp.
Thomas, B	rian	
2009	21.4774	Did plant growth require vast ages? <i>Acts and Facts</i> (Institute for Creation Research), (March): 14. [Creationist perspective. Includes mention of pollen in Hakatai Shale of Grand Canyon.]
Thompson,	, Robert S.,	AND Anderson, Katherine H.
2000	21.4616	Biomes of western North America at 18,000, 6000 and 0 14 C yr BP reconstructed from pollen and packrat midden data. <i>Journal of Biogeography</i> , 27: 555-584.
Thompson,	, Robert S.;	Hostetler, Steven W.; Bartlein, Patrick J.; AND Anderson, Katherine H.
1998	21.3167	A strategy for assessing potential future changes in climate, hydrology, and vegetation in the western United States. <i>U.S. Geological Survey, Circular 1153</i> , 20 pp.
Thompson,	, Robert S.;	Van Devender, Thomas R.; Martin, Paul S.; Foppe, Theresa; AND Long, Austin
1980	21.3168	Shasta ground sloth (<i>Nothrotheriops shastense</i> Hoffstetter) at Shelter Cave, New Mexico: Environment, diet, and extinctions. <i>Quaternary Research</i> , 14: 360-376.
Thompson,	, Robert S.;	Whitlock, Cathy; Bartlein, Patrick J.; Harrisoni, Sandy P.; AND Spaulding, W. Geoffrey
Thompson,	21.3169	
	21.3169	Geoffrey Climatic changes in the western United States since 18,000 yr B.P. <i>In:</i> Wright, H. E., Jr., Kutzbach, J. E., Webb, T., III, Ruddiman, W. F., Street-Perrott, F. A., and Bartlein, P. J. (eds.), <i>Global climates since the last glacial maximum.</i> Minneapolis, Minnesota,
1993	21.3169	Geoffrey Climatic changes in the western United States since 18,000 yr B.P. <i>In:</i> Wright, H. E., Jr., Kutzbach, J. E., Webb, T., III, Ruddiman, W. F., Street-Perrott, F. A., and Bartlein, P. J. (eds.), <i>Global climates since the last glacial maximum.</i> Minneapolis, Minnesota,
1993 Thomsen, I	21.3169 Dietrick E. 21.3170	Geoffrey Climatic changes in the western United States since 18,000 yr B.P. <i>In:</i> Wright, H. E., Jr., Kutzbach, J. E., Webb, T., III, Ruddiman, W. F., Street-Perrott, F. A., and Bartlein, P. J. (eds.), <i>Global climates since the last glacial maximum.</i> Minneapolis, Minnesota, and London: University of Minnesota Press, pp. 468-513. The great late Pleistocene extinction: a slothful tale. <i>Science News</i> , 112(24) (Dec.
1993 Thomsen, I	21.3169 Dietrick E. 21.3170	Geoffrey Climatic changes in the western United States since 18,000 yr B.P. <i>In:</i> Wright, H. E., Jr., Kutzbach, J. E., Webb, T., III, Ruddiman, W. F., Street-Perrott, F. A., and Bartlein, P. J. (eds.), <i>Global climates since the last glacial maximum.</i> Minneapolis, Minnesota, and London: University of Minnesota Press, pp. 468-513. The great late Pleistocene extinction: a slothful tale. <i>Science News</i> , 112(24) (Dec.
Thomsen, I	21.3169 Dietrick E. 21.3170 illiam D.	Climatic changes in the western United States since 18,000 yr B.P. <i>In:</i> Wright, H. E., Jr., Kutzbach, J. E., Webb, T., III, Ruddiman, W. F., Street-Perrott, F. A., and Bartlein, P. J. (eds.), <i>Global climates since the last glacial maximum.</i> Minneapolis, Minnesota, and London: University of Minnesota Press, pp. 468-513. The great late Pleistocene extinction: a slothful tale. <i>Science News</i> , 112(24) (Dec. 10): 396-398.
1993 Thomsen, I 1977 Tidwell, Wi 1975 1998	21.3169 Dietrick E. 21.3170 illiam D. 21.3173 21.3174	Climatic changes in the western United States since 18,000 yr B.P. <i>In:</i> Wright, H. E., Jr., Kutzbach, J. E., Webb, T., III, Ruddiman, W. F., Street-Perrott, F. A., and Bartlein, P. J. (eds.), <i>Global climates since the last glacial maximum.</i> Minneapolis, Minnesota, and London: University of Minnesota Press, pp. 468-513. The great late Pleistocene extinction: a slothful tale. <i>Science News</i> , 112(24) (Dec. 10): 396-398. Common fossil plants of western North America. Provo, Utah: Brigham Young University Press, 197 pp. [See pp. 23, 33, 84.] Common fossil plants of western North America. Washington, D.C.: Smithsonian

Tilton, Joh	n L.	
1931	21.3177	Permian vertebrate tracks in West Virginia. <i>Geological Society of America, Bulletin,</i> 42: 547-556. [Includes notes of Grand Canyon.]
Tingle, Kel	ly E.; Porter,	, Susannah M.; Raven, Morgan R.; Czaja, Andrew D.; Webb, Samuel M.; AND Bloeser, Bonnie
2023	21.8466	Organic preservation of vase-shaped microfossils from the late Tonian Chuar Group, Grand Canyon, Arizona, USA. <i>Geobiology</i> , 21: 290-309 + Supporting Information online (figs. S1-S13), accesible through web page https://doi.org/10.1111/gbi.12544 .
Tingle, Kel	ly E.; Porter,	Susannah M.; Teeter, Elizabeth C.; AND Darroch, Simon A. F.
2023	21.8529	Taphonomic variation in vase-shaped microfossils from carbonate nodules of the late Tonian Chuar Group, Grand Canyon, Arizona, USA [ABSTRACT]. <i>In: The Palaeontological Association, 67th Annual Meeting, 11th-15th September 2023, University of Cambridge, UK: Programme and abstracts</i> , p. 138.
Tinl, Teres	a J., AND Bei	ıs, Stanley S.
1985	21.3181	The occurrence of an opportunistic species in the upper Toroweap Formation, northwest Arizona [ABSTRACT]. <i>Arizona-Nevada Academy of Science, Journal</i> , 20 (198. Proceedings Supplement): 44-45.
Tweet, Jus	tin S.	
2020	21.8031	Chapter 4. Precambrian paleontology of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), <i>Grand Canyon National Park: centennial paleontological resource inventory (non-sensitive version).</i> Fort Collins, Colorado: U.S. National Park Service, Natural Resource Stewardship and Science, pp. 75-107. (Volume: <i>Natural Resource Report NPS/GRCA/NRR—2020/2103.</i>)
2021	21.8256	Precambrian paleontology of Grand Canyon National Park. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 55-72, A1-A7, B1-B2 (pagination is contiguous) [Reset reprinting of Tweet (2020, ITEM NO. 21.8031).]
2021	21.8264	(COMPILER) Grand Canyon National Park paleontological supplemental information: Par A. Fossil taxa named from GRCA. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. [unpaginated page facing 267], 267-281.
2021	21.8265	(COMPILER) Grand Canyon National Park paleontological supplemental information: Park B. Fossil taxa potentially named from GRCA. <i>In:</i> Santucci, Vincent L., and Tweet, Justin S. (eds.), Grand Canyon National Park centennial paleontological resource inventory; a century of fossil discovery and research. <i>Utah Geological Association, Special Publication 1</i> , pp. 282-283.

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

2021	21.8266	(COMPILER) Grand Canyon National Park paleontological supplemental information: Part
		C. Stratigraphic tables of GRCA Paleozoic taxa. <i>In:</i> Santucci, Vincent L., and Tweet,
		Justin S. (eds.), Grand Canyon National Park centennial paleontological resource
		inventory; a century of fossil discovery and research. Utah Geological Association,
		Special Publication 1, pp. 284-337.

Tweet, Justin S., AND Santucci, Vincent L.

2021	21.8351	From microfossils to megafauna: An overview of the taxonomic diversity of National Park Service fossils. <i>In:</i> Lucas, Spencer G., Hunt, Adrian P., and Lichtig, Asher J. (eds.), Fossil Record 7. <i>New Mexico Museum of Natural History and Science, Bulletin</i> 82, pp. 437-452. [Includes Grand Canyon National Park.]
2024	21.8534	The collected paleontological heritage of the National Park Service [ABSTRACT]. <i>In:</i> Wilson, Jeffrey A. Mantilla, and Friedman, Matt (eds.), 12th North American Paleontological Convention, University of Michigan, 17-21 June 2024: Program with

Tweet, Justin S.; Kenworthy, Jason P.; AND Santucci, Vincent L.

2009	21.4679	An inventory of paleontological resources from National Park Service areas in the
		southern Colorado Plateau [ABSTRACT]. Geological Society of America, Abstracts with
		Programs, 41(7): 366.

abstracts. University of Michigan, Papers on Paleontology, (39): 419.

Tweet, Justin S.; Santucci, Vincent L.; AND Connors, Tim

2016	21.7075	An updated inventory of paleontological resources from the National Park Service's
		Mojave Desert Inventory and Monitoring Network [ABSTRACT]. Geological Society of
		America, Abstracts with Programs, 48(7): Paper 96-10, doi:10.1130/abs/2016AM-
		283270. [Mentions Grand Canyon-Parashant National Monument.]

Tweet, Justin S.; Santucci, Vincent L.; AND Hunt, Adrian P.

2012	21.6898	An inventory of packrat (Neotoma spp.) middens in National Park Service areas. In:
		Hunt, Adrian P., Milàn, Jesper, Lucas, Spencer G., and Spielmann, Justin A. (eds.),
		Vertebrate coprolites. New Mexico Museum of Natural History and Science, Bulletin
		57, pp. 355-368. [Grand Canyon National Park, p. 361; Pipe Spring National
		Monument, p. 363; Grand Canyon-Parashant National Monument, p. 364.]

Tweet, Justin S.; Santucci, Vincent L.; AND McDonald, H. Gregory

2016	21.7102	Name-bearing fossil type specimens and taxa named from National Park Service
		areas. <i>In:</i> Sullivan, Robert M., and Lucas, Spencer G. (eds.), Fossil record 5. <i>New</i>
		Mexico Museum of Natural History and Science, Bulletin 73, pp. 277-288. [Text and
		illustrations include Grand Canyon National Park.]
		illustrations include Grand Canyon National Park.]

Tydings, Aidan C., AND Porter, Susannah M.

2024	21.8535	A new highly diverse assemblage of organically preserved vase-shaped microfossils [ABSTRACT]. <i>In:</i> Wilson, Jeffrey A. Mantilla, and Friedman, Matt (eds.), 12th North
		American Paleontological Convention, University of Michigan, 17-21 June 2024;
		Program with abstracts. University of Michigan, Papers on Paleontology, (39): 419-
		420. [Lower Walcott Member of the <770-730 Ma Chuar Group, Grand Canyon.
		[Authors note they have "identified at least 19 species in this assemblage, nine of
		which are new."]

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

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Ulrich, Edward O., AND Bassler, Ray S.

1931	21.3207	Cambrian bivalved Crustacea of the order Conchostraca. <i>U.S. National Museum, Proceedings</i> , 78 (article 4), 130 pp.
1931	21.3208	Indianites, new name for the Cambrian crustacean Indiana Ulrich and Bassler. Washington Academy of Sciences, Journal (Washington, D.C.), 21: 364.

U.S. Bureau of Land Management, AND U.S. National Park Service

NO DATE	21.8606	Grand Canyon-Parashant National Monument, Arizona, Science Plan.	[No place]: U.S.
		Bureau of Land Management, and U.S. National Park Service, 68 pp.	[2023.]
		[Includes section on "Paleontology".]	

U.S. National Academy of Sciences

21.5817

1928	21.6510	Marsh Fund. <i>In:</i> Report of the National Academy of Sciences: fiscal year 1926-1927. Washington, D.C.: U.S. Government Printing Office, p. 21. [Grants awarded include: "November, 1926: A. A. Stoyanow, University of Arizona, Tucson, Ariz., \$150. Study of Paleozoic faunas of the Grand Canyon in Colorado [sic]."; "November, 1926: G. E. Sturdevant, Grand Canyon National Park, Ariz., \$150. Study of Paleozoic and pre-Cambrian faunas and formations of the Grand Canyon under direction of the
		committee of the section of geology and paleontology on research and educational use of outstanding features in earth history." (ENTIRE NOTE)]
		of outstanding reactives in earth history. (ENTIRE NOTE)]

U.S. National Museum

1905

Appendix II. List of accessions, 1902-3. From: Report of the U. S. Natiobnal
Museum, under the direction of the Smithsonian Institution, for the year ending June
30, 1903. In: Annual report of the Board of Regents of the Smithsonian Institution,
showing the operations, expenditures, and condition of the institution for the year
ending June 30, 1903. Report of the U. S. National Museum. Washington, D.C.: U.S.
Government Printing Office, pp. 95 [See p. 139: "Walcott, Hon. C. D specimen
of Middle Carboniferous sandstone slab with reptile tracks, collected on the Grand
View trail, Grand Cañon, Arizona, by Mr. Walcott (41094)."]

U.S. National Park Service, Cave and Karst Program

NO DATE	21.4694	Caves and karst in the U.S. National Park Service: nationwide. U.S. National Park
		Service, 1 sheet. [Poster. Includes Rampart Cave, with illustration.]

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

U.S. National Park Service, Grand Canyon National Park

Park Service, Grand Canyo
Canyon National Park, 9 nd Canyon fossils, with h smart phones to access commemorate National ards: 1) "Tetrapod Trackwastone); 2) "Shasta Ground; 3) "Dragonfly Wing" (Typotetopus productus, , Precambrian Grand Canyan Hermit Formation); 7) one); 8) "Burrows" d Columnal" (Crinoidea,
ira wit to [Ca nd s); cho mia mia est



Vail, Tom

,		
2003	21.4071	Grand Canyon: a different view. Green Forest, Arkansas: Master Books, 104 pp. ("Written and compiled by Tom Vail. Contributions by: Steve Austin, John Baumgardner, Ken Cumming, Duane Gish, Werner Gitt, Ken Ham, Bill Hoesch, Russ Humphreys, Alex Lalomov, John MacArthur, Henry Morris, John Morris, Terry Mortenson, Mike Oard, Gary Parker, Scott Rugg, Andrew Snelling, Keith Swenson, Larry Varidman, Tas Walker, John Whitcomb, Carl Weiland, Kurt Wise." [Principal photographer] Charly Heavenrich.) [Creationist perspective.]
2018	21.7430	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, 104 pp. [Translation of Grand Canyon: a different view (Vail, 2003, ITEM NO. 21.4071). Author's name in Chinese characters: 湯姆 韦尔.] [From the 2003 citation: "Written and compiled by Tom Vail. Contributions by: Steve Austin, John Baumgardner, Ken Cumming, Duane Gish, Werner Gitt, Ken Ham, Bill Hoesch, Russ Humphreys, Alex Lalomov, John MacArthur, Henry Morris, John Morris, Terry Mortenson, Mike Oard, Gary Parker, Scott Rugg, Andrew Snelling, Keith Swenson, Larry Varidman, Tas Walker, John Whitcomb, Carl Weiland, Kurt Wise. [Principal photographer] Charly Heavenrich."] [Creationist perspective.] [In Chinese.]

Van de Water, P. K.; Leavitt, S. W.; AND Betancourt, J. L.

1994	21.3793	Trends in stomatal density and ¹³ C/ ¹² C ratios of <i>Pinus flexilis</i> needles during last
		glacial-interglacial cycle. Science, 264: 239-243.

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Van Devender, Thomas R.

1977 21.3258 Holocene woodlands in the southewestern deserts. Science, 198: 189-192.

Van Devender, Thomas R., AND King, James E.

1971 21.3259 Late Pleistocene vegetational records in western Arizona. *Arizona-Nevada Academy of Science, Journal*, 6(4): 240-244.

Van Devender, Thomas R., AND Mead, Jim I.

1976 21.3260 Late Pleistocene and modern plant communities of Shinumo Creek and Peach Springs Wash, lower Grand Canyon, Arizona. *Arizona Academy of Science, Journal*, 11(1): 16-

Van Devender, Thomas R., AND Moodie, Kevin B.

1977 21.3261 The desert tortoise in the Late Pleistocene with comments about its earlier history.

In: Trotter, M. (ed.), Proceedings of the 1977 Symposium of the Desert Tortoise

Council, pp. 41-45.

Van Devender, Thomas R., AND Spaulding, W. Geoffrey

1979 21.3262 Development of vegetation and climate in the southwestern United States. *Science*, 204: 701-710. [Based on plant macrofossils in packrat middens.]

Van Devender, Thomas R., AND Tessman, Norman T.

21.8558 Late Pleistocene snapping turtles from southern Nevada [ABSTRACT]. *In:* Proceedings of the 18th Annual Meeting of the Arizona Academy of Science, April 19-20, 1974, Northern Arizona University, Flagstaff, Arizona. *Arizona Academy of Science, Journal*, 9 (April, Proceedings Supplement): 34-35. [Regarding the Glendale fossil fauna from Clark County, Nevada, and the turtle *Chelydra serpentina*. Remarks that the "nearest population" of this species is east of the continental divide. Hypothetical dispersal routes include an alternative, "from the Green River (Utah) southward into the Colorado River, thorugh the Grand Canyon (Arizona), and into the Virgin and Muddy Rivers (southern Nevada)".]

Van Devender, Thomas R.; Martin, Paul S.; Thompson, Robert S.; Cole, Kenneth L.; Jull, A. J. Timothy; Long, Austin; Toolin, Laurence J.; AND Donahue, Douglas J.

1985 21.3263 Fossil packrat middens and the tandem accelerator mass spectrometer. *Nature* (London), 317: 610-613.

Van Devender, Thomas R.; Mead, Jim I.; AND Rea, Amadeo M.

1991 21.3264 Late Quaternary plants and vertebrates from Picacho Peak, Arizona. *Southwestern Naturalist*, 36(3): 302-314. [See p. 310.]

Van Devender, Thomas R.; Phillips, Arthur M., III; AND Mead, Jim I.

1977 21.3265 Late Pleistocene reptiles and small mammals from the lower Grand Canyon of Arizona. Southwestern Naturalist, 22: 49-66.

Van Gundy, C. E. [Van Gundy, Clarence Edgar]		
1937	21.3273	Jellyfish from the Grand Canyon Algonkian. Science, New Series, 85: 314.
Vaughn, Pe	eter Paul	
1963	21.3289	A downslope trackway in the De Chelly sandstone, Permian of Monument Valley. <i>Plateau</i> , 36(1) (Summer): 25-28. [Notes comparison to Coconino Sandstone trackways.]
Venkatach	ala, B. S.; Sh	ukla, Manoj; Bansal, Rajendra; AND Acharyya, S. K.
1989	21.3290	Upper Proterozoic microfossils from the Infra Krol sediments, Nainital synform, Kumaon Himalaya, India. <i>In:</i> Jain, K. P., and Tiwari, R. S. (eds.), Proceedings on the symposium on Vistas in Indian Palaeobotany. <i>Palaeobotanist</i> , 38: 29-38. [See p. 35.]
Ventura, G	regory T.; K	enig, Fabien; Grosjean, Emmanuelle; AND Summons, Roger E.
2004	21.4605	Biomarker analysis of solvent extractable organic matter from the late Neoproterozoic Kwagunt Formation, Chuar Group (~800-742 Ma), Grand Canyon [ABSTRACT]. Geological Society of America, Abstracts with Programs, 36(5): 170.
Vidal, Gonz	zalo	
1974	21.3296	Late Precambrian microfossils from the basal sandstone unit of the Vissingsö beds, South Sweden. <i>Geologica et Palaeontologica</i> , 8: 1-13.
1983	21.3297	The oldest eukaryotic cells. <i>Scientific American</i> , 250(2): 48-57. [See p. 56.]
1986	21.3298	Acritarch-based biostratigraphic correlations and the upper Proterozoic in Scandinavia, Greenland, and North America [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 18(5): 420.
1990	21.3299	The late Proterozoic acritarch <i>Chuaria circularis</i> (Walcott) Vidal and Ford. <i>Journal of Paleontology</i> , 64(3): 488.
Vidal, Gonz	zalo, AND For	rd, Trevor D.
1985	21.3300	Microbiotas from the late Proterozoic Chuar Group (northern Arizona) and Uinta Mountain Group (Utah) and their chronostratigraphic implications. <i>Precambrian Research</i> , 28: 349-389.
Vidal, Gonz	zalo, AND Kno	oll, Andrew H.
1983	21.6410	Proterozoic plankton. <i>In:</i> Medaris, L. G., Jr., Byers, C. W., Mickelson, D. M., and Shanks, W. C. (eds.), Proterozoic geology: Selected papers from an international Proterozoic symposium. <i>Geological Society of America, Memoir 161</i> , pp. 265-278.

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Vidal, Gonzalo; Moczydlowska, Malgorzata; AND Rudavskaya, Valeria A.

1993 21.3301 Biostratigraphical implications of a *Chuaria-Tawuia* assemblage and associated

acritarchs from the Neoproterozoic of Yakutia. *Palaeontology*, 36(Part 2) (July): 387-402.

Visscher, H.; Kerp, J. H. F.; AND Clement-Westerhof, J. A.

1986 21.8600

Aspects of Permian palaeobotany and palynology. VI. Towards a flexible system of naming Palaeozoic conifers. *Acta Botanica Neerlandica*, 35(2) (May): 87-99. [See particularly "7. The Form-Genus Hermitia" (pp. 96-98), which includes Form-genus *Hermitia* Kerp et Clement-Westerhof, new genus; type-species *Hermitia dawsonii* (White 1929) Kerp et Clement-Westerhof, new combination (which was named by White from the Grand Canyon Hermit Shale); lectotype of *Hermitia dawsonii* designated.]

Vogel, Irene D.

1977 21.4458

Bryozoans of the Toroweap Formation, Dry Lake Range and North Muddy Mountains, Clark County, Nevada. Master's thesis, Eastern Washington University, 75 pp.

Vogel, Marilyn B.; Moldowan, J. Michael; AND Zinniker, David

2005 21.6840

Biomarkers from units in the Uinta Mountain and Chuar Groups. *In:* Dehler, Carol M., Pederson, Joel L., Sprinkel, Douglas A., and Kowallis, Bart J. (eds.), Uinta Mountain geology. *Utah Geological Association, Publication 33*, pp. 75-96.

Voigt, Sebastian

2005 21.6910

Die Tetrapodenichnofauna des kontinentalen Oberkarbon und Perm im Thüringer Wald—Ichnotaxonomie, Paläoökologie und Biostratigraphie. Göttingen: Cuvillier Verlag, 299 pp. (Doctoral dissertation, Martin-Luther-Universität Halle-Wittenberg, 2004.) [Under Batrachichnus Woodworth, 1900, includes remark on B. delicatulus (Lull) from the Hermit Shale of Grand Canyon (p. 68). Under Amphisauropus kablikae (Geinitz and Deichmüller, 1882, n. comb., includes remark on Gilmoreichnus (Hylopus) hermitanus (Gilmore) from the Hermit Shale of Grand Canyon (pp. 84, 86). Under Varanopus Moodie, 1929, includes remarks on Gilmoreichnus = Hylopus hermitanus (Gilmore) from the Hermit Shale of Grand Canyon (pp. 110, 112). Under Dromopus Marsh, 1894, includes remark on ichnofauna of the Coconino Sandstone of Grand Canyon (p. 118). Under "Ichnia tetrapodorum indet." includes remarks on Coconino Sandstone ichnofauna, p. 135. Also see note of Hermit Shale in Grand Canyon, p. 151.] [In German.]

Voigt, Sebastian; Lagnaoui, Abdelouahed; Hminna, Abdelkbir; Saber, Hafid; AND Schneider, Jörg W.

2011 21.7981

Revisional notes on the Permian tetrapod ichnofauna from the Tiddas Basin, central Morocco. *Paleogeography, Palaeoclimatology, Palaeoecology*, 302: 474-483. [See p. 481, correlation with Grand Canyon late Early Permian strata.]

AND IN THE STRATIGRAPHIC CONTINUITY OF GRAND CANYON FORMATIONS

Voigt, Sebastian; Small, Bryan J.; AND Sanders, Frank

from the Hermit Shale from the Grand Canyon, is probably a <i>Varanopus</i> trackway (cf Voigt, 2004 [ITEM NO. 21.6910])."]	2005		A diverse terrestrial ichnofauna from the Maroon Formation (Pennslvanian-Permian), Colorado: Biostratigraphic and paleoecological significance. <i>In:</i> Lucas, Spencer G., and Zeigler, Kate E. (eds.), The nonmarine Permian. <i>New Mexico Museum of Natural History and Science, Bulletin 30</i> , pp. 342-351. [A discussion of specimens of <i>Varanopus</i> sp. includes comparison to <i>Hyloidichnus</i> Gilmore from Grand Canyon, and the note, "The holotype of <i>Gilmoreichnus = Hylopus hermitanus</i> Gilmore, 1927, also from the Hermit Shale from the Grand Canyon, is probably a <i>Varanopus</i> trackway (cf. Voigt 2004 [ITEM NO. 21 69101]"]
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Wagner, Oscar Emil, Jr.

1932	21.3311	The paleontology and stratigraphy of the Kaibab limestone. Doctoral dissertation,
		University Illinois at Urbana-Champaign, 108 pp.

Walcott, Charles D.

alcott, Charles D.				
1884	21.5503	Note on Paleozoic rocks of central Texas. <i>American Journal of Science</i> , Series 3, 28(168) (December): 431-433. [See p. 432, <i>note</i> ‡: "Since the paper on the Pre-Carboniferous strata of the Grand Cañon was published (this Journal, vol. xxvi, p. 487) [<i>sic</i> ; see Walcott, 1883, ITEM NO. 21.3313], a fragment of a trilobite, probably of the genus Ptychoparia, has been detected in a bit of shale from the Chuar group." (ENTIRE ITEM)]		
1886	21.3317	Second contribution to the studies on the Cambrian faunas of North America. <i>U.S. Geological Survey, Bulletin 30</i> , 369 pp. [See pp. 41-44, 57-58, 63-64.]		
1890	21.3319	The fauna of the Lower Cambrian or <i>Olenellus</i> zone. <i>U.S. Geological Survey, 10th Annual Report</i> , Part 1, pp. 509-760. [See pp. 550-552, 557, 584; also errata, p. 763.]		
1897	21.3326	Cambrian Brachiopoda; genera <i>Iphidae</i> and <i>Yorkia</i> ; with descriptions of new species of each, and of the genus <i>Acrothele. U.S. National Museum, Proceedings</i> , 19: 707-718. [See pp. 711, 718.] [<i>Errata</i> : p. 718, add to figure 3: "3b. Posterior view of ventral valve. 6.", and "3c. Summit view of dorsal valve. 2 1/2."]		
1898	21.3327	Fossil medusæ. <i>U.S. Geological Survey, Monograph 30</i> , 201 pp. [See pp. 63, 180; plate 38.] [Fossil medusae.]		
1898	21.3328	Cambrian Brachiopoda: <i>Obolus</i> and <i>Lingulella</i> , with description of new species. <i>U.S. National Museum, Proceedings</i> , 21: 385-420. [See p. 399.]		
1899	21.3329	Pre-Cambrian fossiliferous formations. <i>Geological Society of America, Bulletin,</i> 10 (April): 199-244.		

1901	21.3330	Cambrian Brachiopoda; <i>Obolella</i> , subgenus <i>Glyptias</i> ; <i>Bicia</i> ; <i>Obolus</i> , subgenus <i>Westonia</i> ; with descriptions of new species. <i>U.S. National Museum, Proceedings</i> , 23: 669-695. [See p. 691.]
1901	21.3970	Sur les formations pré-Cambriennes fossilifères. <i>In:</i> Congrès Géologique International, Comptes Rendus de la VIII ^e Session, en France: premier fascicule. Paris: Bigot Frères, Lille, pp. 299-312. [8th International Geological Congress.] [See "Fossiles de la série du Grand-Cañon de l'Arizona", pp. 311-312.] [In French.]
1903	21.3331	Cambrian Brachiopoda: <i>Acrotreta</i> ; <i>Linnarssonella</i> ; <i>Obolus</i> ; with descriptions of new species. <i>U.S. National Museum, Proceedings</i> , 25: 577-612. [See p. 607.]
1905	21.3332	Cambrian Brachiopoda; with descriptions of new genera and species. <i>U.S. National Museum, Proceedings</i> , 28: 227-337. [See pp. 239, 336-337.]
1908	21.3333	Cambrian geology and paleontology I, No. 3; Cambrian Branchiopoda, Malacostraca, Trilobita, and Merostomata. <i>Smithsonian Miscellaneous Collections</i> , 53: 53-165. [See pp. 97-98.]
1910	21.3334	Cambrian geology and paleontology II; Abrupt appearance of the Cambrian fauna on the North American continent. <i>Smithsonian Miscellaneous Collections</i> , 57(1): 1-16.
1912	21.3335	Cambrian geology and paleontology II; Middle Cambrian Branchiopoda, Malacostraca, Trilobita, and Merostomata. <i>Smithsonian Miscellaneous Collections</i> , 57(6): 145-228. [See pp. 198-199, 208.]
1912	21.3336	Cambrian Brachiopoda. <i>U.S. Geological Survey, Monograph 51</i> , 2 volumes; Part 1, Text, 872 pp.; Part 2, Plates, 363 pp. [See Part 1, pp. 98-109, 187 [locality 17c], 213-214 [localities 73, 73a-b, 74, 74b-d, 75], 339, 345-346, 355-356, 361-364, 421-422, 454-455, 461-462, 466, 474-476, 515-516, 523-524, 540, 558-559, 732, 743-744, 758; Part 2, plates 2-4, 11, 19, 21, 25, 48, 86.]
1914	21.3337	Cambrian geology and paleontology, III; No. 2—Pre-Cambrian Algonkian algal flora. Smithsonian Miscellaneous Collections, 64(2): 77-156. [See pp. 80, 97, 98, 110-112, 140; plate 15.]
1915	21.3338	The Cambrian and its problems. <i>In:</i> Problems of American geology: a series of lectures dealing with some of the problems of the Canadian Shield and of the Cordilleras, delivered at Yale University on the Silliman Foundation in December, 1913. New Haven, Connecticut: Yale University Press, pp. 287-376. [See pp. 165, 172, 188, 199, 202, 203, 231.]
1916	21.3339	Cambrian geology and paleontology III; Cambrian trilobites. <i>Smithsonian Miscellaneous Collections</i> , 64(3): 157-258. [See pp. 184, 232.]
1916	21.3340	Cambrian geology and paleontology III; Relations between the Cambrian and pre- Cambrian formations in the vicinity of Helena, Montana. <i>Smithsonian Miscellaneous Collections</i> , 64(4): 259-301. [See pp. 282, 283; plates 40-43.]
1916	21.3341	Cambrian geology and paleontology III; Cambrian trilobites. <i>Smithsonian Miscellaneous Collections</i> , 64(5): 303-570. [See p. 369-371, 373-374, 424, 429.]
1918	21.3342	Cambrian geology and paleontology IV: Appendages of trilobites. <i>Smithsonian Miscellaneous Collections</i> , 67(4): 115-216. [See p. 174, 175, 209-210, 212, 213, 215.]

1924	21.3343	Cambrian geology and paleontology IV; No. 9; Cambrian and Ozarkian Brachiopoda; Ozarkian Cephalopoda and Notostraca. <i>Smithsonian Miscellaneous Collections</i> , 67(9): 477-554. [See pp. 514, 543.]
1924	21.3344	Cambrian geology and paleontology V, No. 2; Cambrian and Lower Ozarkian trilobites. Smithsonian Miscellaneous Collections, 75(2): 53-60. [See p. 54; plate 9.]
1925	21.3345	Cambrian geology and paleontology V, No. 3; Cambrian and Ozarkian trilobites. Smithsonian Miscellaneous Collections, 75(3): 59-146. [See p. 68.]
1926	21.5388	Report of the Secretary of the Smithsonian Institution; for the year ending June 30, 1926. Washington, D.C.: U.S. Government Printing Office. (Smithsonian Institution, Publication 2877.) [See pp. 9-10, "Collecting Fossil Footprints in Arizona", regarding the work in Grand Canyon by C. W. Gilmore.]
Walker, B. E	.	
1899	21.6717	Presidential address. <i>Canadian Institute, Proceedings</i> , New Series, 2(Part 1) (7) (February): 1-10. [See pp. 5-6, quoting C. D. Walcott, regarding Precambrian fossils in Grand Canyon.]
Walker, Tas	: [Валкер, Т	ac]
NO DATE	21.6742	Пласты Лольшого Каньона роказывают, что геологическое время вымышленное [Plasty Bol'shogo Kan'ona pokazyvayut, chto geologicheskoye vremya vymyshlennoy; svidetel'stva global'nogo potopa] [Fossils of the Grand Canyon show that the geological time scale is false]. Разумный Замысел [Razumnyy Zamysel] [Intelligent Design], (5): 6. [Creationist perspective.] [In Russian. Original English article not located.]
Walter, D. R	₹.	
1976	21.3347	Conodont biostratigraphy of the Mississippian rocks of northwestern Arizona. Master's thesis, Arizona State University, 185 pp.
Wang, Xin;	Yuan, XunL	ai; Zhou, ChuanMing; Du, KaiHe; AND Gong Miao
2011	21.7780	Anatomy and plant affinity of <i>Chuaria</i> . <i>Chinese Science Bulletin</i> , 56(12) (April): 1256-1261. [Pertains principally to studies of material collected from Neoproterozoic strata of Anhui Province, China, but begins with brief remarks on the taxon's discovery and first analyses in Grand Canyon.]
Ward, Leste	er F.	
1889	21.5618	The geographical distribution of fossil plants. <i>In:</i> U.S. Geological Survey, 8th Annual Report, pp. 663-931, plates, map. [See p. 917, brief references to Cruziana linnarssoni and C. rustica noted by C. A. White in Grand Canyon Cambrian strata; and also passing notice (pp. 917-918) of "C. D. Walcott, who also collected much silicified wood in the Grand Canon district".]

1905	21.3365	(WITH W. M. Fontaine, A. Bibbins, and G. R. Wieland) Status of the Mesozoic floras of the United States, second paper. <i>U.S. Geological Survey, Monograph 48</i> , 2 volumes; Part 1, Text, 616 pp. [see p. 16 and following]; Part 2, Plates, 129 plates.
Wardlaw, B	B. R., AND Co	llinson, J. W.
1977	21.3366	Biostratigraphic zonation of the Park City Group. <i>U.S. Geological Survey, Open-File Report 77-853</i> , 15 pp.
1978	21.3367	Stratigraphic relationships of the Park City Group (Permian) in eastern Nevada and western Utah. <i>American Association of Petroleum Geologists, Bulletin</i> , 62: 1171-1184.
1979	21.3368	Biostratigraphic zonation of the Park City Group. <i>In:</i> Studies of the Permian Phosphoria Formation and related rocks, Great Basin-Rocky Mountain region. <i>U.S. Geological Survey, Professional Paper 1163-D</i> , pp. 17-22.
Wardlaw, B	3. R.; Collins	on, J. W.; AND Maughan, E. K.
1979	21.3369	Stratigraphy of Park City Group equivalents (Permian) in southern Idaho, northeastern Nevada, and northwestern Utah. <i>In:</i> Studies of the Permian Phosphoria Formation and related rocks, Great Basin-Rocky Mountain region. <i>U.S. Geological Survey, Professional Paper 1163-C</i> , pp. 9-16.
Ware, John		
2019	21.7870	Stanton's Cave: Another important Grand Canyon anniversary. <i>Boatman's Quarterly Review</i> , 32(3) (Fall): 9-11. [50th anniversary of the Stanton's Cave archaeological and paleobiological expedition under Robert C. Euler and Bruce Harrill.]
Watt, Arthu	ır D.	
1970	21.3378	Catalog of the illustrated Paleozoic plant specimens in the National Museum of Natural History. <i>Smithsonian Contributions to Paleobiology</i> , (5), 53 pp.
Weaver, Ch	arles E.	
1955	21.3379	Invertebrate paleontology and historical geology from 1850 to 1950. <i>In:</i> Kessel, Edward L. (ed.), <i>A century of progress in the natural sciences, 1853-1953 : published in celebration of the centennial of the California Academy of Sciences.</i> San Francisco: California Academy of Sciences, pp. 689-745. [See p. 717.]
Webb, Rob	ert H.	
1986	21.7238	Spatial and temporal distribution of radiocarbon ages on rodent middens from the southwestern United States. <i>Radiocarbon</i> , 28(1): 1-8.
Webb, Rob	ert H., AND B	Setancourt, Julio L.
1990	21.3380	The spatial and temporal distribution of radiocarbon ages from packrat middens. <i>In:</i> Betancourt, Julio L., Van Devender, Thomas R., and Martin, Paul S. (eds.), <i>Packrat</i>

		middens: the last 40,000 years of biotic change. Tucson: University of Arizona Press, pp. 85-102.
Webster, G	i. D.	
1971	21.3382	The southwestern United States. <i>From:</i> Lane, H. R., Merrill, G. K., Straka, J. J., II, and Webster, G. D., North American Pennsylvanian conodont biostratigraphy. <i>In:</i> Sweet, W. C., and Bergstrom, S. M. (eds.), Symposium on conodont biostratigraphy. <i>Geological Society of America, Memoir 127</i> , pp. 403-407.
Wells, Phil	ip V.	
1976	21.3390	Macrofossil analysis of wood rat (<i>Neotoma</i>) middens as a key to the Quaternary history of arid America. <i>Quaternary Research</i> , 6: 223-248.
1983	21.5746	Paleobiogeography of montane islands in the Great Basin since the last glaciopluvial. <i>Ecological Monographs</i> , 53(4) (December): 341-382. [Data include western Grand Canyon and upper portion of lower Colorado River area.]
Wells, Phil	ip V., AND Be	erger, Rainer
1967	21.6075	Late Pleistocene history of coniferous woodland in the Mohave Desert; new evidence records pluvial expansion of the pinyon-juniper zone at the close of the Wisconsin glacial. <i>Science</i> , (March 31): 1640-1647. [Includes Rampart Cave.]
Welsh, Joh	n Elliott	
1959	21.3392	Biostratigraphy of the Pennsylvanian and Permian Systems of southern Nevada. Doctoral dissertation, University of Utah, 215 pp.
Weng, Che	ngyu	
1998	21.3398	Species differentiation of Picea in the Quaternary fossil record: Analysis and applications in the Pleistocene biogeography of the lower Mississippi Valley and the Holocene vegetation history of the southern Colorado Plateau. Doctoral dissertation, University of Wyoming, 224 pp.
Weng, Che	ngyu, AND Ja	ackson, Stephen T.
1997	21.8555	Late-glacial and Holocene vegetation history and paleoclimate of the Kaibab Plateau, northern Arizona [ABSTRACT]. <i>In:</i> Ecological Society of America, 1997 Annual Meeting jointly with The Nature Conservancy, 10-14 August 1997, Albuquerque, New Mexico; "Changing Ecosystems: Natural and Human Influences"; Abstracts. <i>Ecological Society of America Bulletin</i> , 78(4) (October, Supplement): 205. ["Pollen and plant macrofossil analysis from an AMS dated sediment core from Bear Lake (2768 m)". Also, without specifics, relies on "Records from Fracas Lake (2512 m)".]
1999	21.3939	Late glacial and Holocene vegetation history and paleoclimate of the Kaibab Plateau, Arizona. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 153(1/4): 179-201.

Wetmore, A	Alexander	
1925	21.5873	Appendix 1. Report on the United States National Museum. <i>In:</i> Walcott, Charles D., <i>Report of the Secretary of the Smithsonian Institution: for the year ending June 30, 1925.</i> Washington, D.C.: U.S. Government Printing Office, pp. 28-47. [See p. 42, regarding the ichnological work of C. W. Gilmore in Grand Canyon.]
1926	21.5389	Appendix 1. Report on the United States National Museum. <i>In:</i> Walcott, Charles D., <i>Report of the Secretary of the Smithsonian Institution : for the year ending June 30, 1926.</i> Washington, D.C.: U.S. Government Printing Office, pp. 34-49. [See pp. 39, 45, regarding the ichnological work of C. W. Gilmore in Grand Canyon.]
Wetzel, Ott	:0	
1940	21.3445	Mikropaläontologische Untersuchungen an eozoischen und paläozoischen Kieselgesteinen aus Nordamerika (USA. und Kanada). <i>Zentralblatt für Mineralogie, Geologie und Paläontologie</i> , Abteilung B (Geologie und Paläontologie), no. 3, pp. 60-86. [See pp. 61, 69-70.] [In German.]
Whidden, K	(atherine J.,	AND Bottjer, David J.
1989	21.3455	Petrographic analysis of preferentially silicified trace fossils in the Permian Kaibab Formation, southwestern Utah [ABSTRACT]. <i>Geological Society of America, Abstracts with Programs</i> , 21(5): 158.
1989	21.3456	A model for early diagenetic silicification of trace and body fossils [ABSTRACT]. Geological Society of America, Abstracts with Programs, 21(6): A19.
White, Cha	rles A.	
1874	21.3458	Preliminary report upon invertebrate fossils collected by the expeditions of 1871, 1872, and 1873, with descriptions of new species. <i>In:</i> U.S. Army Engineer Department, <i>Geographical and geological explorations and surveys west of the one hundredth meridian.</i> U.S. Government Printing Office, 27 pp.
1877	21.3459	Report upon the invertebrate fossils collected in portions of Nevada, Utah, Colorado, New Mexico, and Arizona, by parties of the expeditions of 1871, 1872, 1873, and 1874. <i>In:</i> U.S. Army Engineer Department, <i>Report upon United States geographical surveys west of the 100th meridian, in charge of 1st Lieut. Geo. M. Wheeler. Volume 4. Paleontology.</i> Washington, D.C.: U.S. Government Printing Office, Part 1, 219 pp. [See pp. 32-49, 109-113, 122-128, 141-143; plates 1, 8-10.]
1883	21.3461	Contributions to invertebrate paleontology no. 6: Certain Carboniferous fossils from the western States and Territories. <i>In:</i> Hayden, F. V., <i>U.S. Geological and Geographical Survey of the Territories, 12th Annual Report</i> , Part 1, Geology, paleontology, and zoology. U.S. Government Printing Office, pp. 119-141. [See pp. 119, 120, 124-125, 128, 136-141; plates 33-36.]

White, Davi	d	
1927	21.3462	Study of the fossil floras in the Grand Canyon, Arizona. <i>Carnegie Institution of Washington, Year Book 26</i> , pp. 366-369.
1927	21.3463	The flora of the Hermit shale in the Grand Canyon, Arizona. <i>U.S. National Academy of Sciences, Proceedings</i> , 13: 574-575.
1928	21.3464	Study of the fossil floras in the Grand Canyon, Arizona. <i>Carnegie Institution of Washington, Year Book 27</i> , pp. 389-390.
1928	21.3465	Algal deposits of Unkar Proterozoic age in the Grand Canyon, Arizona. <i>U.S. National Academy of Sciences, Proceedings</i> , 14: 597-600.
1928	21.6509	David White: The age of the Hermit shale in the Grand Canyon, Ariz. (illustrated)." [TITLE ONLY]. <i>In:</i> Report of the National Academy of Sciences: fiscal year 1926-1927. Washington, D.C.: U.S. Government Printing Office, p. 26. [Presentation made April 26, 1927.]
1929	21.3466	Flora of the Hermit shale, Grand Canyon, Arizona. <i>Carnegie Institution of Washington, Publication 405</i> , 221 pp.
1929	21.3467	Study of the fossil floras in the Grand Canyon, Arizona. <i>Carnegie Institution of Washington, Year Book 28</i> , pp. 392-393.
1929	21.3469	Interpreting the Grand Canyon. Science, New Series, 69: 671-672.
1929	21.6511	David White: Algal deposits of Unkar Proterozoic age in the Grand Canyon, Arizona (illustrated)." [TITLE ONLY]. <i>In: Report of the National Academy of Sciences: fiscal year 1927-1928.</i> Washington, D.C.: U.S. Government Printing Office, p. 42. [Presentation made April 23, 1928.]
1929	21.3468	The flora of the Hermit shale in Grand Canyon. <i>Grand Canyon Nature Notes</i> , 4(4) (December 31): 24-25.
1930	21.3470	Deposition and age of the Hermit shale [ABSTRACT]. <i>Geological Society of America, Bulletin,</i> 41: 47.
1934	21.3471	The seeds of <i>Supaia</i> , a Permian pteridosperm [ABSTRACT]. <i>Science</i> , New Series 79: 462.
1936	21.3472	Some features of the early Permian flora of America. 16th International Geological Congress, United States, 1933, Report, 1: 679-689.
1994	21.3473	The flora of the Hermit Shale in Grand Canyon. <i>In:</i> Lamb, Susan (ed.), <i>The best of Grand Canyon Nature Notes.</i> Grand Canyon, Arizona: Grand Canyon Natural History Association, p. 26. [Reprinted from <i>Grand Canyon Nature Notes</i> , December, 1929.]
Whitney, St	ephen R.	
1982	21.3476	A field guide to the Grand Canyon. New York: Quill, 320 pp. [Hardbound and paperbound states.]
1996	21.3477	A field guide to the Grand Canyon. Seattle, Washington: The Mountaineers, 2nd ed., 269 pp.

Whitney, S	mith, Elin	
2008	21.4516	The evolution of an ecosystem: Pleistocene extinctions. <i>In:</i> Minai, Ali A., and Bar-Yam, Yaneer (eds.), <i>Unifying themes in complex systems, Volume IV: proceedings of the fourth International Conference on Complex Systems</i> . Berlin and Heidelberg: Springer, pp. 239-246. (New England Complex Systems Institute Book Series.) [Includes Rampart Cave.]
Wilbur, Saı	nford R.	
1978	21.6084	The California condor, 1966-76: A look at its past and future. <i>U.S. Fish and Wildlife Service, North American Fauna, No. 72</i> , 136 pp. [Status up to the time of species-jrecovery plans. Includes notices of fossil occurrences at Stanton Cave and Rampart Cave.]
Williams, J	ohn W.; Grir	mm, Eric C.; Blois, Jessica L.; Charles, Donald F.; Davis, Edward B.; Goring, Simon J.; Graham, Russell W.; Smith, Alison J.; Anderson, Michael; Arroyo Cabrales, Joaquin; Ashworth, Allan C.; Betancourt, Julio L.; Bills, Brian W.; Booth, Robert K.; Buckland, Philip I.; Curry, B. Brandon; Giesecke, Thomas; Jackson, Stephen T.; Latorre, Claudio; Nichols, Jonathan; Purdum, Timshel; Roth, Robert E.; Stryker, Michael; AND Takahara, Hikaru
2018	21.7797	The Neotoma Paleoecology Database, a multiproxy, international, community-curated data resource. <i>Quaternary Research</i> , 89: 156-177. [This is an introduction to the Neotoma Paleoecology Database (https://www.neotomadb.org , named for the woodrats or packrats of the genus <i>Neotoma</i> and not restricted to that taxon). The database "is a community-curated data resource that supports interdisciplinary global change research by enabling broad-scale studies of taxon and community diversity, distributions, and dynamics during the large environmental changes of the past." On this site, at www.neotomadb.org/explorer , users may use metadata- or map-based query screens to search for specific information.]
Wilson, Ro	bert W.	
1941	21.3501	Preliminary study of fauna of Rampart Cave, Arizona [ABSTRACT]. <i>Geological Society of America, Bulletin,</i> 52: 1985.
1942	21.3502	Preliminary study of the fauna of Rampart Cave, Arizona. <i>In:</i> Contributions to paleontology. Studies of Cenozoic vertebrates of western North America and of fossil primates. <i>Carnegie Institution of Washington, Publication 530</i> , pp. 169-185.
Wise, Kurt	Р.	
2003	21.7473	[Remarks on fossils.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> Vail, Tom, <i>Grand Canyon: a different view.</i> Green Forest, Arkansas: Master Books, p. 54.
2018	21.7474	[Remarks on fossils.] <i>From:</i> Grand Canyon; the fossils [SECTION]. <i>In:</i> 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

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extraordinary vision.] Green Forest, Arkansas: Master Books, p. 54. [In the translation of Vail's (2003) *Grand Canyon: a different view.*] [In Chinese.]

Woltz, Christina R.;	Anderson, R	. P.:	Tosca.	N. J.:	and	Porter, S.	М.

2023 21.8527 The role of clay minerals in the preservation of Precambrian organic-walled microfossils. *Geobiology*, 21: 708-724 + Supplementary Material online, 30 pp. [See Table 1 (p. 711, and Supplementary Material Table S1), which lists for samples studied material from a Chuar Group outcrop in Grand Canyon.]

Woltz, Christina; Porter, Susannah M.; Dehler, Carol M.; AND Riedman, Leigh Anne

2023	21.8497	Evaluating the effects of preservation on eukaryotic diversity patterns of the Tonian
		Chuar and Uinta Mountain Groups of western Laurentia [ABSTRACT]. Geological Society
		of America, Abstracts with Programs, 55(6): abstract 107-7
		(https://doi.org/10.1130/abs/2023AM-394325).

Organic-walled microfossils from the c. 766-730 Ma Moosehorn Lake formation, Uinta Mountain Group, Utah [ABSTRACT]. In: The Palaeontological Association, 67th Annual Meeting, 11th-15th September 2023, University of Cambridge, UK: Programme and abstracts, p. 142. [Notes, "Fourteen of these species [of 22 species and four unnamed forms] also appear in the coeval Chuar Group of Arizona, including Kaibabia gemmullela, Microlepidopalla mira and Volleyballia dehlerae."]

Woltz, Cristina; Webb, Samuel M.; AND Sperling, Erik A.

2024	21.8644	Investigating the effects of local redox on the preservation of organic microfossil [sic]
		from the late Tonian Chuar and Uinta Mountain Groups of western Laurentia
		[ABSTRACT]. Geological Society of America, Abstracts with Programs, 56(4), abstract
		21-1 (https://doi.org/10.1130/abs/2024CD-399752).

Wood, John R.; Bozek, Michael A.; Milner, Andrew R. C.; Mims, Alison L.; Frost, Forest; AND Santucci, Vincent L.

2021	21.8349	Structure from motion photogrammetry enhances paleontological resource documentation, research, preservation and education efforts for National Park Service areas. <i>In:</i> Lucas, Spencer G., Hunt, Adrian P., and Lichtig, Asher J. (eds.), Fossil Record 7. <i>New Mexico Museum of Natural History and Science, Bulletin 82</i> , pp. 513-523. [See "Case Study #3—Use of 3D Data for Enhanced Visitor Engagement and Outreach" (pp. 520-521), which features "a virtual museum to showcase the palentological resources of Grand Canyon National Park (https://www.nps.gov/articles/series.htm?id=A9E62040-AC6F-A6D7-BE564A036F1D6146)" (accessed <i>here</i> , 7 November 2021).]

Woodbury, Angus M.

2023

1937	21.3522	An evolutionary time scale.	Evolution (Society for the Study of Evolution), 4(1)
		(June): cover, 7-8.	

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Wooddell, C	Charles Edwar	d
1927	21.3523	The Mississippian fauna of the Redwall limestone near Jerome, Arizona. Master's thesis, University of Arizona, 117 pp.
Wright, Mar	y Jane	
2009	21.4635	Micro and macro paleoethnobotany in the Grand Canyon river corridor: the Palisades site. Master's thesis, Northern Arizona University, 100 pp.
Wrona, Rys	zard	
1980	21.4710	Microarchitecture of the chitinozoan vesicles and its paleobiological significance. <i>Acta Palaeontologica Polonica</i> (Warszawa), 25(1): 123-163, plates 19-38. [See p. 149.]
Wurster, Ch	ıristopher M.;	MacFarlane, Donald A.; Bird, Michael I.; Ascough, Philippa; AND Athfield, Nancy Beavan
2010	21.5299	Stable isotopes of subfossil bat guano as a long-term environmental archive: Insights from a Grand Canyon cave deposit. <i>Journal of Cave and Karst Studies</i> , 72(2) (August): 111-121. [Bat Cave.]
Wurster, Ch	nristopher M.;	Patterson, William P.; McFarlane, Donald A.; Wassenaar, Leonard I.; Hobson, Keith A.; Athfield, Nancy Beavan; AND Bird, Michael I.
2008	21.4255	Stable carbon and hydrogen isotopes from bat guano in the Grand Canyon, USA, reveal Younger Dryas and 8.2 ka events. <i>Geology</i> , 36(9): 683-686 + Data Repository Item 2008175, 4 pp. [Data Repository Item comprises Table DR1, " δ^{13} C, δ D, and C:N ratios from guano core 96-04, Bat Cave, Grand Canyon, AZ, USA" (3 pp.), and Table DR2, "14C-AMS dates used for the chronology of guano core" (1 p.).]



Xiao, Shuhai, AND Dong, Lin

2006	21.8457	On the morphological and ecological history of Proterozoic macroalgae. <i>In:</i> Xiao,
		Shuhai, and Kaufman, Alan Jay (eds.), Neoproterozoic geobiology and paleobiology.
		Dordrecht, The Netherlands: Springer, pp. 57-90. [See p. 58, summary remarks
		including "Chuaria-like circular carbonaceous compressions" (Grand Canyon research
		cited but not noted by geographic name).]



Yabe, Hisak	Yabe, Hisakatsu, AND Imaizumi, Rikizô				
1946	21.7034	Plant-bed with the Cathaysian flora of Kaizan-tung, Kantô-syô, Manchuria, and its relation to the marine Permian deposits. <i>Japan Academy, Proceedings</i> (Tokyo), 22: 204-209, 218-224. [Two parts, published in separate numbers. See p. 224, brief comparisons to <i>Brongniartites? yakiensis</i> D. White and <i>B. aliena</i> D. White from the Hermit Shale of Grand Canyon.]			
Yang, Shipu	ı				
1985	21.3534	Advances in palaeoichnological research in China. <i>Geological Review</i> (Beijing), 31(3): 197-203, 2 plates. [Includes notes of Grand Canyon.] [In Chinese, with bilingual title and abstract.]			
Yochelson,	Ellis L.				
1955	21.3536	Permian Gastropoda of the southwestern United States. Doctoral dissertation, Columbia University.			
1962	21.3537	Gastropods from the Redwall limestone (Mississippian) in Arizona. <i>Journal of Paleontology</i> , 36: 74-80.			
1969	21.3538	Gastropods and pelecypods. <i>In:</i> McKee, E. D., and Gutschick, R. C., History of the Redwall Limestone of northern Arizona. <i>Geological Society of America, Memoir 114</i> , pp. 439-456.			
1979	21.3540	Charles D. Walcott—America's pioneer in Precambrian paleontology and stratigraphy. <i>In:</i> Kupsch, W. O., and Sarjeant, W. A. S. (eds.), History of concepts in Precambrian geology. <i>Geological Association of Canada, Special Paper 19</i> , pp. 261-292.			
1998	21.3544	Charles Doolittle Walcott, paleontologist. Kent, Ohio, and London: Kent State University Press, 510 pp.			
Yoshikawa,	. L. Keiko				
1986	21.5916	Faunal analysis of five Grand Canyon sites. <i>In:</i> Jones, Anne Trinkle, A cross section of Grand Canyon archeology: Excavations at five sites along the Colorado River. <i>U.S. National Park Service, Western Archeological and Conservation Center, Publications in Anthropology</i> , (28): 201-254.			

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Zeller, Edward J.

1957 21.3580 Mississippian endothyroid Foraminifera from the Cordilleran Geosyncline. Journal of Paleontology, 31(4): 679-704, plates 75-82.

Zheng, Wentao; Porter, Susannah M.; AND Tingle, Kelly E.

2024 21.8536 A late Tonian Lagerstätte: Pickled vase-shaped microfossils from the Chuar Group, Grand Canyon, U.S.A. [ABSTRACT]. In: Wilson, Jeffrey A. Mantilla, and Friedman, Matt (eds.), 12th North American Paleontological Convention, University of Michigan, 17-21 June 2024; Program with abstracts. University of Michigan, Papers on Paleontology, (39): 461. [Potential index fossils, ca. 789-729 Ma, including soft-part preservation, in the lower Walcott and upper Awatubi Members.]

Zumberge, John Alexander

2019 21.7956 A lipid biomarker investigation tracking the evolution of the Neoproterozoic marine biosphere and the rise of eukaryotes. Doctoral dissertation, University of California at Riverside, 250 pp. [Includes Chuar Group of Grand Canyon throughout.]

Zumberge, J. Alex [Zumberge, John Alexander], AND Love, Gordon D.

2015	21.8101	Tracking the emergence and expansion of eukaryotic phytoplankton and metazoa in Proterozoic oceans [ABSTRACT]. <i>In: Astrobiology Science Conference 2015</i> , no. 7466. [Includes Chuar Group of Grand Canyon.]
2016	21.8102	Tracking the expansion of eukaryotes on Proterozoic oceans using kerogen-bound lipid biomarkers [ABSTRACT]. <i>In:</i> 2016 Goldschmidt Conference, Yokohama, 26 June-1 July

: abstracts, p. 3776. [Includes Chuar Group of Grand Canyon.]

Zumberge, J. Alex [Zumberge, John Alexander]; Rocher, Don; and Love, Gordon D.

2020	21.8118	Free and kerogen-bound biomarkers from the late Tonian sedimentary rocks record
		abundant eukaryotes in mid-Neoproterozoic marine communities. Geobiology, 18(3)
		(May): 326-347. [Ca. 780-729 Ma Chuar Group (Grand Canyon) and Visingsö Group (Sweden).]