

BOOKS AND WEB RESOURCES ABOUT THE GRAND CANYON

BOOKS

Here is a list of books I own and have read over the past four decades. Most of these can be found for sale new or used on the internet. Many are in public libraries. Here they are sorted into nine groups:

FOR THE GENERAL READER:

Collier, Michael. 1980 *Grand Canyon Geology*. A 42-page paperback that gives a brief overview of Grand Canyon geology. Written for the average person. Good photos, informative.

Shelton, John S. 1966. *Geology Illustrated*. This old classic probably has the clearest introduction to the geology of the Grand Canyon (pp. 248-290). The black and white photos throughout the text are some of the most informative geology photos ever taken. The book also contains a superb introduction to many other areas of geology as understood before the theory of Plate Tectonics.

Redfern, Ron, 1980. *Corridors of Time: 1,700,000 Years of Earth at Grand Canyon*. Panoramic color photos of the Grand Canyon, some of which are spectacular. The text gives an excellent discussion of geologic history written for the average person.

Hill, Carol; Davidson, Gregg; Helble, Teim; and Ranney, Wayne; eds. 2016. *The Grand Canyon—Monument to an Ancient Earth*. While written primarily to combat books by creationists once sold in the science section of the Visitor Center bookstore, this is an outstanding, easy-to-read, and beautifully illustrated introduction to the geology of the Grand Canyon and its history. The final chapter is a slam dunk regarding science vs creationist geology!

Price, L. Greer. 1999. *An Introduction to Grand Canyon Geology*. Very brief introduction to basic geology of the Canyon with many color illustrations—including some paleogeographic maps, paintings of depositional environments of some of the strata, and ancient life. Very quick, easy, and informative read.

Beal, Merrill D. 1978. *Grand Canyon. The Story Behind the Scenery*. A thin souvenir pamphlet or magazine of the kind you find in all National Park bookstores. Has some wonderful photos, including several from remote locations of surpassing geological interest.

Dutton, Clarence. *Tertiary History of the Grand Canyon District with ATLAS*. 1881. Original printing by Government Printing Office now priceless. Stunning reprint by Peregrine Smith in 1977. The accompanying Atlas has the famous 3-page fold-out drawings by W.H. Holms of the vista from Point Sublime plus other magnificent illustrations. The illustrations are online at the Library of Congress website and are a glory to behold. Dutton's text (also online) is written in the style of 19th century travel dialogs. The text illustrations are also magnificent. One of the most engaging books ever written about the geology of the Grand Canyon.

FOR THE SCIENCE-INFORMED GENERAL READER:

Ranney, Wayne. 2012. *Carving Grand Canyon, second edition*. This is an excellent introduction to problems associated with the origin of the Grand Canyon by someone who has read the salient literature and attended conferences of those researching the topic. The author gives fair treatment to all the different explanations proposed and resists siding with any particular theory.

Powell, James Lawrence, 2005, *Grand Canyon: Solving Earth's Grandest Puzzle*. Jim Powell is a geologist and former executive administrator at several universities. He has reviewed most of the theories for the origin of the Grand Canyon and presents here a summary of what people have thought and are thinking about how the Canyon formed. He not only read most of the literature but also interviewed some of the major players around today. After reviewing various scenarios for how things evolved, he takes a stab at what sounds most reasonable to him.

Stephens, Hal G. and E.M. Shoemaker. 1987. *In the Footsteps of John Wesley Powell*. Photos made in 1872 compared with photos made in 1968. How much does the river change in 100 years? Take a look.

Webb, Robert H. 1996. *Grand Canyon, a Century of Change*. Photos made in 1889-1890 on the Stanton Expedition compared with photos made a century later.

Another contribution assessing how things change along the river in 100 years. Much emphasis is given to vegetation changes, but several of the geologic discussions are excellent.

FOR GEOLOGISTS

Beus, Stanley S. and M. M. Morales, eds. 2003. *Grand Canyon Geology, Second Edition*. Systematic discussion of the rocks, structural geology and origin of the Grand Canyon written by a bevy of experts. This is a go-to book for those with extensive geological training. The authors of the individual chapters present their viewpoints with clarity and document published results they draw on for their opinions.

Timmons, J.M. and K.E. Karlstrom. 2012, eds. *Grand Canyon Geology*. Geological Society of America Special Paper 489. A monograph summarizing results of a campaign led by Karl Karlstrom and Laura Crossley along with their students and colleagues mainly from the University of New Mexico following years of field research along the river corridor. New data with expansive, evolving interpretations are referenced and presented. Significant new details are added to a huge fold-out geologic map that builds on the classic maps published in 1967 and 1986 by the Grand Canyon Natural History Association. As is usually the case, not all geologists will agree with many of the interpretations presented. It nevertheless represents a heroic effort worthy of careful consideration. Let multiple hypotheses thrive!

Hamblin, Kenneth. 1994. *Late Cenozoic Lava Dams in the Western Grand Canyon*. Geological Society of America Memoir 183. Monumental study of the lava flows that poured into the Grand Canyon toward its western end. Wonderful images, sketches, diagrams and a fold-out map accompany this detailed study. A classic for the ages.

POWELL EXPEDITION

Powell, John Wesley. 1874. *The Exploration of the Colorado River and its Canyons*. This is THE classic account of Powell's exploration of the Colorado River upon which all subsequent books have been based. Powell has been accused of moral turpitude for conflating adventures of his 1869 and 1872 voyages into a single

narrative. The outrage! It is a fabulous account with great illustrations and descriptive rhapsodies. Required reading.

Darrah, William Culp. 1951. *Powell of the Colorado*. The first biography of J.W. Powell. Thorough and highly interesting. Written somewhat in the style of Francis Parkman in which the author attempts to get into the minds of the subjects and even recreate scenes. These plus inaccuracies have left the author open to savage criticism nowadays from others who claim to have done better research. Darrah does not conceal his deep admiration of Powell while the critics nowadays have not concealed their skepticism-if not outright contempt—for both Darrah and Powell himself. Like all history, we were not there to observe things--so we will never know.

Ghiglieri, M.P. 2003, *First through Grand Canyon: The secret journals and letters of the 1869 crew who explored the Green and Colorado Rivers*. Newly transcribed and corrected day-by-day notes for the 1st Powell expedition. The section in front gives new biographical information on the crew and the section in back gives rarely publicized records of what happened to them afterwards. John Wesley Powell and all who characterized him in positive terms are repeatedly and passionately disparaged. The author states that his own work is the “definitive history” of the controversial first voyage through the canyon. It may be, but not all historians will likely agree. A shocking suggestion of the fate of the three men who deserted the voyage drew much attention to this book. Whatever, Ghiglieri is a wonderful writer.

Cooley, John. 1988. *The Great Unknown*. Northland Publishing. The side-by-side journals of participants on the historic and controversial first expedition down the Colorado River. Riveting, with many interesting passages not normally quoted by historians and popularizers. For history buffs, this book probably gives the best insight into what the first voyage was like, especially if you try to re-live the daily entries and read between the lines (realizing that all of the participants had been soldiers in the Civil War). Excellent introduction by the author.

Worster, Donald. 2001. *A River Running West: The Life of John Wesley Powell*. A new and favorable look at Powell’s life and impact. Most of the information regarding the river expedition and the times before is not new. This one gets in

high gear regarding the events after Powell's famous expedition. Very readable and useful.

Stegner, Wallace, *Beyond the Hundredth Meridian: John Wesley Powell and the Second Opening of the West*. This is a much celebrated work that frames Powell and his work in terms of the bigger picture regarding settlement of the American West. Lots of analysis of 19th century politics.

Dolnick, Edward. 2001. *Down the Great Unknown: John Wesley Powell's 1869 journey of discovery and tragedy through the Grand Canyon*. This one re-tells the story from standard sources and apparently references it to the author's experiences in rapids mostly upstream of the Grand Canyon. The book was heavily promoted, and it does contain some new information and insights not available in previous accounts. It is well-written and can be read rapidly.

Powell, John Wesley. 1974 *An Overland Trip to the Grand Canyon: Northern Arizona as Powell Saw It in 1870* (Wild and Woolly West Ser. No.280). Reprint of 1875 article published in Scribners Monthly by Powell describing his visits to the region north of the Colorado River after his famous first voyage through the Grand Canyon. Classic illustrations and photographs of the area including many with Indians wearing costumes Powell took along for the purpose.

Maurer, Richard. 1999. *The Wild Colorado*. Based mainly on a diary kept by Fred Dellenbaugh, the author describes and illustrates the second voyage put together by J.W. Powell in 1872. Contains many early photographs and drawings of the area. It provides an alternative to Dellenbaugh's own book on the second voyage.

Lago, Don. 2018. *The Powell Expedition*. This one focuses on the crew members and ongoing controversies about events before, during, and after the voyage. It starts by discussing the shortcomings of previous authors and then later presents new evidence against the suggestion that the three who left the voyage early were killed by Mormons instead of Indians. There is much new information about the crew members and how they may have felt and dealt with the rigors of the voyage.

Dellenbaugh, Frederick. 1908. *A Canyon Voyage: The Narrative of the Second Powell Expedition down the Green-Colorado River from Wyoming, and the*

Explorations on Land, in the Years 1871 and 1872. As the title describes, written by a young crew member on Powell's second voyage.

GUIDEBOOKS FOR RAFT TRIPS

Belknap's Waterproof Grand Canyon River Guide. New editions every several years. Mile by mile maps of rapids and campsites. Prefaced with an excellent summary of the geology and geologic history. Includes notes on flora, fauna, history of exploration, and sundry notes of interest. Handy flip top spiral bound for convenient carry on a raft or boat. Competitor with the Stevens Guide.

Stevens, Larry. 2013. *The Colorado River in the Grand Canyon: River Map and Guide.* Similar to Belknap's Guide. The back half is filled with excellent information about the geology, biology, ecology, human history, and anything apropos to a raft trip. Handy flip top spiral bound for convenient carry on a raft or boat. Competitor with the Belknap Guide.

Hamblin, W. Kenneth, Rigby, J. Keith. 1969. *Guidebook to the Colorado River Parts 1 and 2.* Mile by mile discussion of the geology –sometimes by tenths of mile! This two-volume set is a classic and still available second-hand online. The authors used to run raft trips through the canyon for students at Brigham Young University and wrote these as study guides. Most excellent.

Pewe, Troy. 1969. *Colorado River Guidebook-Lees Ferry to Phantom Ranch.* River maps with major geologic features noted and discussed. This guidebook was published privately by the author and is difficult to find now. It does turn up on used book sites from time to time. Get one if you can because it is excellent.

Martin, Tom and Duwain Whitis. 7th edition. 2018. *River Maps: Guide to the Colorado River in the Grand Canyon.* Large spiral bound mile by mile maps showing campsites and brief descriptions of individual rapids, features, and historical events. Tips for those rowing on how to handle various rapids and pull-ins at camps.

Elston, Donald P. 1989. *Geology of Grand Canyon (with Colorado River Guides).* \ Detailed geology guidebook for raft trips written by someone who studied the

geology on 25 raft trips. Also contains numerous articles on the geology written by outstanding geologists.

Lindemann, Linda L. 1996. *Colorado River Briefs for a Trip Through the Grand Canyon*. Mile by mile river log with humorous cartoons, topographic map segments, and sketch maps of major rapids. The accuracy of the rapids maps are questionable inasmuch as rapids change character significantly depending upon the river level.

RIVER RUNNING: Histories and narratives of those who have travelled through the Grand Canyon on the river.

Lavender, David. 1985. *River Runners*. Outstanding history of boat trips through the Grand Canyon. Examines in detail the early explorations and subsequent adventures of those who traversed the river before it became routine.

Ghiglieri, Michael P. 1992. *Canyon*. River running from the point of view of those who row in small boats and take precarious hikes into challenging side canyons. Interesting and well-written.

Beer, Bill. 1988. *We Swam the Grand Canyon*. Incredible story of 2 surfers who swam the length of the river through Marble Canyon and Grand Canyon. Crazy as they were, you may come to love or even envy these guys. There are moments of profundity (p. 113) and poignancy (p. 61) that you wouldn't expect in a book of this sort.

Kolb, Ellsworth. 1947. *Through the Grand Canyon from Wyoming to Mexico*. A widely distributed classic describing the Kolb Brothers' 1911 Canyon voyage. The brothers operated a photo studio at the South Rim for several decades and sold thousands of these books. Unlike many expeditions, this one went all the way to the Gulf of California.

Eddy, Clyde. 1929. *Down the World's Most Dangerous River*. Chronicle of a 1927 boat trip through the Canyon by Clyde Eddy, seven Ivy-Leagers, a bear cub, a dog, and a hobo that fell off a train near the launch point. Sounds bizarre, but you sometimes see stranger things on the river.

Teal, Louise. 1994. *Breaking into the Current*. U. of Arizona Press. Profiles of a number of professional women river guides. Interesting stories of women as they broke into the previously macho world of river running.

Westwood, D., 1997. *Woman of the River: Georgie White Clark, White Water Pioneer*. The life story of one of the most colorful characters to run a commercial rafting operation in Grand Canyon. Georgie had enormous pontoon rigs populated with devotees addicted to her style of rough and tumble River-running. Stories about Georgie emerge in any extended discussion with professional boatmen. The likely true stories as summarized in this book are even more interesting.

Blaustein, John, Edward Abbey, & Martin Litton, 1999. *The Hidden Canyon: A River Journey*. Using Edward Abbey's incomparable prose, this book describes the riotous, raunchy fun a raft trip can be along with a hint of its possible spiritual nature.

Calvin, William H. 1986. *The River that Flows Uphill*. Details of an extended row trip interspersed with musings on the deepest nature of things from the perspective of a neurobiologist.

Stanton, Robert Brewster. 1982. *Colorado River Controversies*. One of the first detailed examinations of who was the first to explore the Colorado River in the Grand Canyon. Included is a direct interview with James White, who claimed he had inadvertently gone the whole length (from the junction with the Green River) several years before the first Powell expedition on logs tied together into a raft to escape an Indian attack. This is also one of the first of many attempts to get an "accurate" account of why three of Powell's crew left at Separation Canyon.

Fedarko, Kevin. 2013. *The Emerald Mile*. An account of the fastest boat ride through the Grand Canyon during one of the biggest modern floods. This was a legendary trip admired and celebrated by those who row the canyon. A fascinating read of an illegal adventure.

Fletcher, Colin, 1997. *River: One Man's Journey Down the Colorado*. Having hiked the length of the river in Grand Canyon National Park in 1965 and written a successful book about it, the author decided at age 67 to go from the source

springs in the Wind River Mountains in Wyoming down to the Colorado River and then through the Grand Canyon all the way to the Gulf of California. Once the spring fed stream became the Green River, he rowed a small inflatable raft all the way to the sea. This is his almost day by day account of this remarkable journey. His account of the traverse through the Grand Canyon is almost entirely about how he ran the rapids.

Dimock, Brad. 2001. *Sunk Without a Sound*. The story of Glen and Bessie Hyde who took a raft trip for their honeymoon on a sweep scow boat in 1928 that was found empty with provisions fully intact at Mile 237. After massive searches and decades of leads, stories, and rumors—no one knows what happened. It is a riveting account with a truly haunting photograph of the two taken at Hermit Camp less than three weeks before the empty scow was found. What was going on? The eyes.

LEES FERRY (*The historic launch place for all raft trips going through the Grand Canyon*)

Rusho, W.L. and Crampton, Gregory C. 1992. *Lee's Ferry, Desert River Crossing*. An excellent history of the area with a guide to remnants that can be visited today.

Reilly, P.T. edited by Robert H. Webb. 1999. *Lee's Ferry*. Detailed history of the people who lived and worked here.

HIKING

Martin, Tom. 2023 fifth edition *Day Hikes from the River*. This is a guide to 100 hikes in side canyons of the river. Each is shown on a topographic map with an accompanying discussion. Potential hikers should study carefully the author's characterization of how difficult each hike may be. Most of these require considerable time and effort. The hikes are the kind taken by adventurers on extended row trips.

Butchart, Harvey. *Grand Canyon Treks*. 1996. Combined version of three earlier printings (Treks I, II, and III). The author was a math professor at Northern Arizona University in Flagstaff who had a passion for exploring areas of the Grand Canyon few even knew about. These are descriptions of his perilous adventures

meant to hold information useful to others who are tempted to do the impossible. It is harrowing to read some of his accounts. Only those with extensive previous Canyon experience should use this as a guide. It does include some hikes mortals might undertake and is certainly interesting to read.

OTHER

Carothers, Steven W. and B.T. Brown. 1991. *The Colorado River Through Grand Canyon, Natural History and Human Change*. Environmental view of the aquatic and riparian ecosystems before and after Glen Canyon Dam altered the river. Good discussion of the politics and controversies regarding management of the river. Longueurs abound, but the topics are interesting.

Zwinger, Ann H. 1995. *Down Canyon*. Thoughts and meditations of a naturalist who is just as fascinated by the tiny bugs and twigs as by the Canyon's overwhelming scenery. Wonderful nature writing.

Pyne, Stephen J. 1998. *How the Canyon Became Grand*. The author describes this book as "an extended interpretative essay that assumes rather than argues a variety of theses." It does this regarding how the Grand Canyon fits into the history of discovery, exploration, science, art, environmentalism, and the role of the Federal Government in the development and management of the American west.

Huisinga, Kristin; Makarick, Lori; Watters, Kate. 2006. *River and Desert Plants of the Grand Canyon*. Beautifully illustrated guidebook to the botany below the rim of the Grand Canyon. Want to identify the amazing plants that thrive along the river? This is a handbook to have. An important note regarding biologic "crusts" or cryptogamic soil as some call it is included. The significance of these crusts has only been recently appreciated.

Kinsey, Joni L. 2004 edition. *The Majesty of the Grand Canyon—150 years in art*. This book is a treasure of magnificent paintings and watercolors of the Grand Canyon. Many are by little-known artists. Can keep you and a looking glass spellbound for hours. Do not pass on a chance to get this one.

Babbitt, Bruce. 1978. *Grand Canyon—An Anthology*. A selection of outstanding writings on all aspects of the Grand Canyon. An incomparable collection assembled by a former (damn good) Governor of Arizona with a master's degree in geophysics. You can jump around from chapter to chapter to see the Canyon through the eyes of explorers, adventurers, tourists, scientists, and ultrasensitive souls. Contains a limited number of iconic black and white photographs wonderfully reproduced.

Fowler, D.D., Robert C. Euler, and Catherine S. Fowler. 1977. *John Wesley Powell and the Anthropology of the Canyon Country*. United States Geological Professional Paper 670-available online from the USGS website. A short summary of Powell's studies of Indian Country around the Grand Canyon.

Fletcher, Colin. 1967. *The Man Who Walked Through Time*. Description of a solo hike from west to east through the entire Grand Canyon National Park as it existed in 1965 (from Havasu Creek to Nankoweap Creek). It is a travel narrative describing the author's search for meaning in it all—particularly with respect to the concept of time. Much of the walk is along the Tonto Platform at the base of the flat-lying horizontal strata. Through-hikes of the National Park since it was greatly expanded along the river are now more frequently attempted.

Myers, Thomas M., Becker, C.B., and Stevens, L.E. 1999. *Fateful Journey*. Detailed discussion of past injuries and deaths encountered on river trips. Loaded with tabulations, statistics, photos, and descriptions relevant to the physical risks that river runners must take. Much is now known about how to avoid the troubles described in this book. The unstated take-home message seems to me to be that river runners should follow the safety protocols established for river running. Customers should heed the instructions of their guides.

Ghiglieri, Michael P. and Myers, Thomas M. 2001, and others in later editions (2013). *Over the Edge: Death in Grand Canyon*. Incredibly well-written accounts of known deaths in the Grand Canyon. Although the subject is morbid, it is difficult to put this book down no matter where you open and start reading.

WEB RESOURCES

(Cut and paste links into your browser)

1. Astounding panoramic photographs are at gcpano.org This is one of the most magnificent resources regarding the Grand Canyon on the internet. It is a privately funded effort to document the sights along the river and elsewhere in the region. The interactive index can send you to specific sites along the river as never photographed better. Perusal of these photos while reading about the pilgrim's journey through specific mileage zones will give you an impression that words cannot describe. It's free and HIGHLY RECOMMENDED.

2. ASU faculty friend of mine Steve Semken recommends the following sites that he has contributed to (one of which he stars in). The Trail of Time is an easy walk if you visit the South Rim and will give you a feeling of the vast amount of time on display there.

Grand Canyon Virtual Field Trip (it is free, but requires the user to sign up as a Guest with no further obligations):

<https://vft.asu.edu/migrated/iVFTLocations/GrandCanyon/GCOptions.html>

Trail of Time at Grand Canyon National Park web page:

www.nps.gov/grca/planyourvisit/the-trail-of-time.htm

Virtual Grand Canyon GeoFest 2020: recorded talks on geology and history a bunch of us gave during COVID

www.nps.gov/grca/planyourvisit/virtual-grand-canyon-geofest-2020.htm