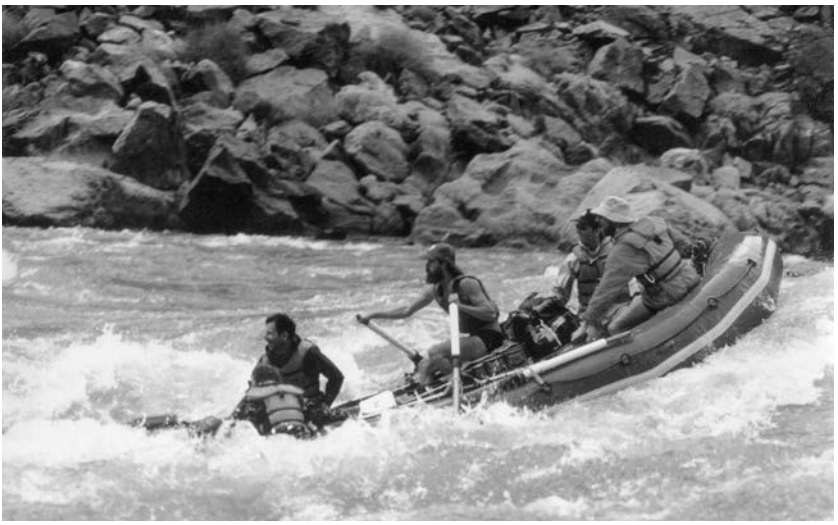
An Interview with the Great Unconformity: Howie Usher, Scientist and River Guide

By Howie Usher, Amy Ilona Stein,
and Byron E. Pearson

Introduction

The Grand Canyon river-guide community is a unique group of individuals who live both above and below the rim. Their culture and history are built upon layers of fact, fiction, and epic tales that transcend the canyon walls. Their ranks have included men and women, scientists, businesspeople, park service employees, people of all political persuasions, and non-conformists all seeking knowledge, excitement, enlightenment, and, to a degree, immortality in a region forever on the move. Like those who came before and the many who will undoubtedly follow, Howell (Howie) Davis Usher arrived in Grand Canyon to work a season as a field biologist in the summer of 1977 and never really left. During more than four decades of hiking, studying, and rowing through Grand Canyon, Howie Usher watched the canyon and community meander through numerous changes. What follows is an interview by Professor Amy Stein in which Usher relates memories and reflections unique to his forty-plus years in Grand Canyon.

HOWELL D. USHER worked as a field ecologist and river guide in Grand Canyon from 1977 to 2019. During the off-season, he taught aquatic ecology and biology at Mingus Union High School in Cottonwood, Arizona, from 1987 to 2013. AMY ILONA STEIN is a professor of art history, history, and humanities at Yavapai College. BYRON E. PEARSON is a professor of history at West Texas A&M University.



Howie Usher navigating the fourth wave in Hermit Rapid, 1982. Courtesy of Howie Usher.

USHER: You gotta understand, my first trip into the Grand Canyon wasn't on a boat, it was on foot. I hiked into Grand Canyon for the first time in April of 1973. I'll get to that story in a minute. But one of the first times I realized I would, hopefully, spend the rest of my life in the canyon was early on in my river career. I don't remember the passenger's name anymore. And I couldn't tell you what year we went down river together, but I do know I was still with "Wi-Wo," aka Wilderness World, a commercial river company run by Vladimir Kovalik and I can tell you, the old guy—who now that I am sixty-six I realize was only about fifty or so—was taking his daughter downriver on some sort of adventure or holiday. So near the end of the trip, the old guy sits down next to me on the beach. We're eating dinner and the guy looks at me all earnest and emotional and says, "Howie, don't spend your whole life here on the river. It's a dead end. You are so much more than this." And I'm thinking to myself, "Why wouldn't I want to spend the rest of my life down here; what could be better than this?"

Beginnings: Field Research and Science Education with the Museum of Northern Arizona

STEIN: Stephen W. Carothers was the director of biology at the Museum of Northern Arizona (MNA) when you were hired on as a field biologist. The park service contracted MNA to inventory and study the biological resources in Grand Canyon and to evaluate the impact of commercial tourism, including the river-running industry. He left the museum in 1981 to start his own consulting firm. From 1977 to 1984, you worked on his studies of the burro population in the canyon and the Bureau of Reclamation's studies of the fish population below Glen Canyon Dam.

During this time, while you were participating in field research and learning to row an oar-powered raft through Grand Canyon, you worked with a number of scientists who continued on with field research. While working on these studies and as a river guide for Wilderness World, you completed a master's degree through Northern Arizona University in aquatic ecology and completed a secondary education credential. Tell us about this remarkable period of time. How did you climb on board with the museum's biology department and why did you decide to go into education rather than continue on with field research?

USHER: I learned to row in Grand Canyon but I grew up in southern California, hiking, running, and surfing Black's Beach, La Jolla, and a few other spots in San Diego County. I did a lot of backpacking in the Sierras and San Jacinto Mountains back then too. I lived in Solano Beach while attending the University of California at San Diego (UCSD). I spent time watching the coastal birds in their natural habitat outside my back door. I was studying biology but it was spending time along the coast and in the estuaries that got me fascinated and into environmental science and ecology.

At any rate, Roderick Nash [professor of environmental studies at the University of California at Santa Barbara (UCSB)] gave a guest lecture at UCSD and I spoke to him after that lecture. I realized that UCSB, where Rod was teaching, had the exact environmental studies program I was interested in. Rod invited me up to UCSB and gave me a job as

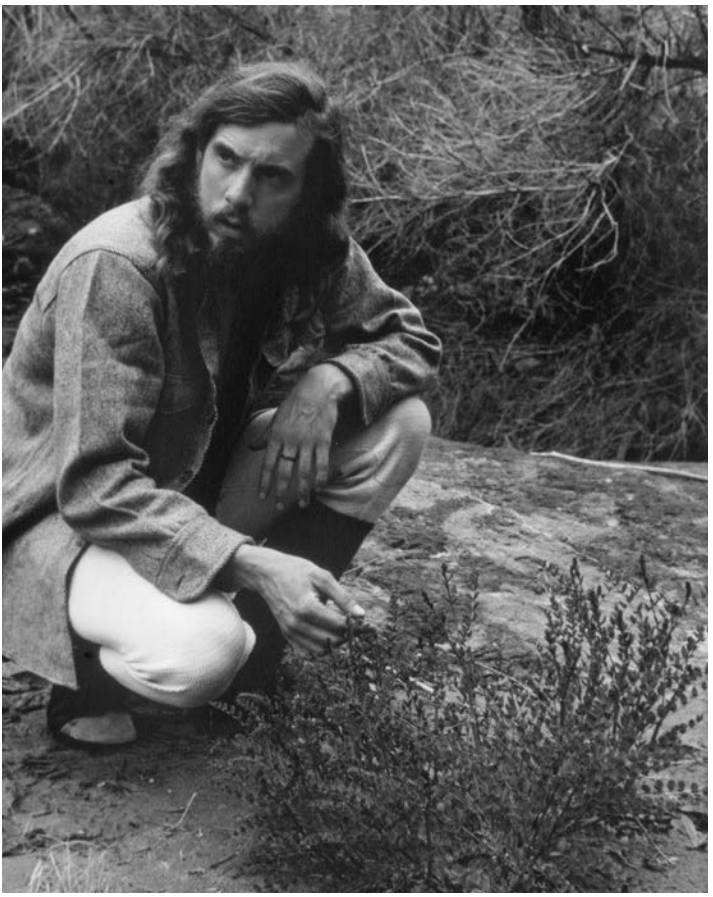
his teaching assistant. I wrote my senior thesis on the public use, human history, and ecology of the Channel Islands and worked in the natural history museum in Santa Barbara. I finished my bachelor's degree there.

The "Feral Ass Gang": The Grand Canyon Burro Project

USHER: While I was still in college, I went on two epic hiking trips through Grand Canyon. On one twenty-eight-day hike during the winter of 1976–1977, I hiked from Matkatamiba to the Little Colorado. On this trip, I met a group of field biologists doing research for MNA on one of those first hiking trips. The summer before I finished my BS in environmental science, I worked for the U.S. Forest Service in Alaska. I wrote letters to everyone I could think of to get a job. Steve Carothers at MNA was the only guy to respond. I came out to work in Grand Canyon; I was given food and a place to sleep while in the field, and then the museum put me up in an old converted chicken coop they called "[the] cabins." It was pretty much four walls and a bed. I couldn't have been happier.

So in 1977, my father was a Methodist minister and my mom, the minister's wife. My older brother was an attorney defending the poor in California, my younger brother was a business student at Southern Methodist University, and I was a proud member of the "Feral Ass Gang." My first job as field research ecologist in Grand Canyon was in summer of 1977 when I worked for Stephen W. Carothers and MNA on the Feral Burro Project. Five of us were flown in by helicopter to six different sites. Actually, it was three pairs of matched sites. The study compared areas that either had or did not have burros—your basic experimental and control site setup.

We would count the number of various types of plants along the transect and calculate abundance and cover. And as for the small mammal population, we were looking at species abundance, age distributions, and indigenous and exotic populations. When we did the mammal collection, we used mouse and rat-snap traps. Nick Czaplewski, Christopher Carothers, L. T. Green, and I would radiate out from a single point in four different directions while Jill Mazoni cooked dinner in camp.



Howie Usher, Shinumo Creek, January 1978. Courtesy of Howie Usher.

We carried newspaper bags full of traps and a mustard bottle full of bait. Then we would loop back around to camp. I always wondered what someone would think if they could look down on us from above watching these hopelessly lost newspaper delivery boys in Grand Canyon.

The Feral Ass Gang worked through the summer on data collection. The effect of wild burros in the canyon was profound. Burros don't follow existing or consistent trails.

You could look up at the canyon walls in several places and it looked like the landscape had been plowed into a regular diamond pattern, like stretched metal.

STEIN: The conclusion of that project was rather controversial, wasn't it?

USHER: I have mixed emotions about what happened to the burros in Grand Canyon. If I remember correctly, the final report on the environmental impact of burros in Grand Canyon suggested a number of options for their removal. Shooting them in place was just one and probably the last of the recommendations as it would be the most efficient use of time and resources. An animal rescue group stepped in and helped finance their removal and transportation to Texas, I think. The burros needed to be removed as it was appropriate and necessary. I was conflicted. I was concerned that they were just transported to another location, adopted out, and then left to reproduce and thus have a negative impact on another environment.[1]

STEIN: There are apocryphal stories about research biologists eating wild burro while down in the canyon. Did you ever eat burro burritos while on assignment?

USHER: We always carried our own provisions down into the canyon with us. We never ate burro meat, Jackalope, or any other local wildlife.

STEIN: And after the burro study?

USHER: When that study concluded Steve offered me and Nick Czaplewski jobs on a study that took us on 18–21 day river trips. I worked projects for MNA that were contracted through the U.S. Department of the Interior. I worked on a fish study with a team that set trammel and gill nets and carried electroshocking equipment. The setup was pretty primitive. We collected, tagged, measured, and studied scales and opercula (gill covers) for age and growth. When I look back on those boats and those setups, it is amazing we all survived. These aquatic studies were the catalyst for my graduate research in aquatic ecology. I knew if I wanted to continue doing ecological research I needed a graduate degree. I was really

[1] The National Park Service had been shooting burros in Grand Canyon for many years, so this would have been a continuation of existing policy.

interested in aquatic insects but my research project focused on cladophora (algae).

Becoming a Boatman

Usher: My transition from field research to commercial boatman bridged an amazing time in the canyon's contemporary history. I worked on a few important and remarkable research projects. I spent long periods of time down in Grand Canyon with other interesting characters. I was lucky to meet up with Roderick Nash and I was lucky to be hired by Stephen Carothers. I was particularly lucky that during this time the museum's head boatman, Tom Olson, taught me how to row a boat. I mean, the boatmen who worked for Wilderness World and the museum were really great about teaching me how to row, how to read the water, and of course how to learn from my mistakes. I was hedging my bets when I completed a high school teaching certificate during my graduate program. Had a full-time teaching position not fallen in my lap, I was prepared to do field research for the rest of my life.

I got really lucky again because I landed a secure teaching job with benefits, a retirement plan, and summers off. I wasn't doing research, but I was still able to be down in the canyon running a boat every summer. I taught high school science for twenty-five years in Cottonwood, Arizona. In the latter portion of that career, I created a river ecology lab science class that taught kids how to collect and analyze data. With Mike Westcott at the high school, we created the Verde Watershed Watch Network, which brought together science teachers and students from the area high schools to collect and analyze data for a larger project through Northern Arizona University. I brought my field experience into the classroom and was able to get a few other teachers and a lot of kids out into the field.

Guiding for "Wi-Wo," 1979–1985

STEIN: For the first five or six years that you were working as a commercial guide and doing field research for the Museum

Wilderness World crew, c. 1980, from left to right: Sue Bassett, Gary Casey, Michael Marstellar, Jimmy Hendrick, Howie Usher, and Geno Foushee. Courtesy of Howie Usher.

of Northern Arizona you worked for Wilderness World ("Wi-Wo"). Vladimir Kovalik, one of the original partners who founded this commercial river company that ran through Grand Canyon for seventeen years, had a particular philosophy about river trips. He started his company during a very fertile moment for environmental awareness in the United States.

What we know about Vladimir Kovalik is rather remarkable. He survived the Second World War and life behind the iron curtain in the Slovak Republic (Czechoslovakia after 1945). He came to the United States with his wife, an American relief worker, and went on to graduate from Stanford. He worked for the U.S. State Department in Southeast Asia. He designed rafts and started a river company that took commercial passengers on trips to introduce them to the natural beauty of the American West. The company policy was to instill the philosophy and carry the message

of David Brower and Martin Litton: preserve the wilderness and the wild rivers. He spoke of a fantastic power in the canyon that brings people together.

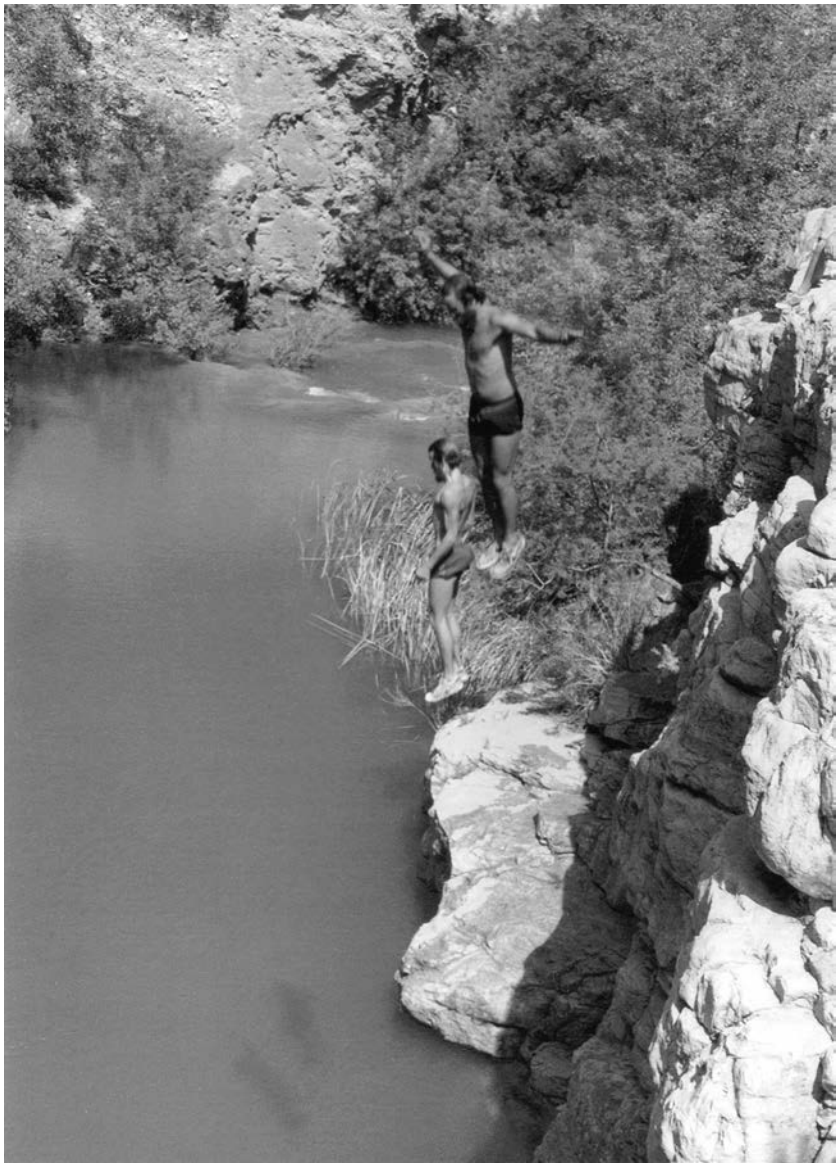
Although commercial and private river trips through Grand Canyon had taken place before the rise of popular environmental awareness in the early 1970s, you began rowing in a decade when the current for such a journey was picking up speed. You also had the opportunity to work with Roderick Nash, a leading historian of wilderness, and then Kovalik, a commercial outfitter who promoted the necessity of experiencing wilderness in order to appreciate it. The idea that a wilderness adventure or a Grand Canyon river trip could be a transformative experience was and continues to be present in the literature of environmental history and philosophy along with travel writing. After forty years on the river, do you still see this thirst for the experience and growth?

USHER: When I started commercial boating in 1977, the philosophy was pretty much no holds barred. Wilderness World was about experiencing the wilderness. If you read Roderick Nash's book *Wilderness and the American Mind* you are familiar with his deconstruction of the idea of wilderness.[2] Once you leave the confines of the city walls, or civilization, you become free to run wild and drop the restrictions of social norms. We were wild down on the river and in the canyon. Today trips are still an adventure, but they are affected by our litigious society and insurance companies. There are all kinds of new regulations intended to protect the commercial clients from the park itself and in some cases protect the park from clients. There are some regulations that impinge on the nature of adventure.

Back in the day, we would set up camp right above or right below rapids like Hermit or Dubendorf. Then we would put on our life jackets, walk to the head of the rapid, and with any intrepid client who chose to join in, we would jump in for an invigorating swim through the rapid.[3] At one point

[2] Roderick Frazier Nash, *Wilderness and the American Mind* (New Haven, Conn., 1967).

[3] This also served as an opportunity to teach people what to do if they found themselves thrown out of a boat unexpectedly.



Howie Usher and Michael Marstellar cliff jumping at Havasu near the tumbler below Beaver Falls, c. 1979. Courtesy of Howie Usher.

the park service decided that swimming rapids was an unnecessary danger so there was an attempt to ban it.

In 1983, during the high water, a passenger did drown in Crystal Rapid so it is a reasonable concern.[4] You don't want your passengers getting thrown out of your boat while you are running a rapid. However, it is important for a passenger to know how to respond or react if they were to get bounced out of your boat. We now have semi-controlled training exercises at less challenging rapids like Chuar. Interested clients have the option now to swim a rapid and prepare.

For a bit more excitement and a bigger wilderness adventure, we also jumped off cliffs and rock outcrops into the river. There are a number of places in the canyon where you can jump into the river or deep pools in the side streams. Havasu Creek and the Little Colorado were great places. Clients sometimes went home with bruises or kinks from a bad landing. And the culture of the passengers started to change. Guides encouraging clients to jump if there was hesitation, once viewed as friendly peer pressure, eventually became perceived as bullying. For a while there was a company ban on jumping in the canyon. Now clients are allowed to jump at some of those same locations if they want. However, more often than not, trips avoid stopping at those choice locations to avoid the potential conflict altogether.

Jumping and swimming on a river trip were among the wildest activities on the river, but even the nature of hiking has changed. The company I work for, Arizona Raft Adventures (AzRA), books a great deal of its river trips with what we call an "exchange." Halfway through a river trip, some clients hike out the Bright Angel trail and some clients hike in. Whether you are hiking up and out of the canyon or down and in, it's a demanding hike. Until quite recently, passengers were responsible for the hike. A member of the river company prepared those hiking on the south rim. We river guides prepared those hiking out the night before in camp. Now groups of passengers hiking in or hiking out

[4] Crystal Rapid is universally recognized by the guiding community as one of the most dangerous rapids in Grand Canyon. It is not a place where guides or passengers would swim, at least voluntarily.

must be accompanied by a hiking guide with the river company. I suppose this is the result of too many unprepared or underprepared passengers getting into trouble on the trail. I think this is a reflection of the change in the culture of folks coming down river.

I remember a client from the early days who actually collected pocket change in five-gallon water cooler bottles for years to save up for her trip. It seems like the passengers lately are older, more affluent, and less adventuresome. They can afford a Grand Canyon river trip but they expect more comfort, more support, and more hand-holding. Not everyone, mind you, but it's like a river trip is just one item on the bucket list. Hey, I'm older; hell, I'm on Medicare and collecting Social Security, so I am not disrespecting senior citizens or anything. It just feels like most passengers aren't there to push the envelope or put themselves out there for a real adventure anymore.

Back in the day, passengers savored the idea of "working" for the adventure. Not just training or preparing for the hikes in Grand Canyon but being a part of the river "team." Bailing the boats, helping in the kitchen, sleeping under the stars, that was a huge part of the experience. Now many clients just want to be on the most comfortable river trip with the most accommodating menus and creature comforts from home. The folks that become participants in the trip, rather than passengers, can gain more from their experience.

The change in our culture and the nature of our passengers is certainly reflected in the new regulations developed by the park service. The lack of familiarity with the Grand Canyon environment or just an overall wilderness environment is the catalyst for a number of necessary regulations to protect the canyon. Insisting that river guides lead hiking trips in the canyon has diminished the negative impact multiple trailing has had on specific "attraction sites." Additionally, not all guides begin or limit their river careers to running the Colorado through Grand Canyon. It's important for guides to understand the natural and human history of the canyon not just so they can act as park service interpreters, but also to protect its complicated, fragile

ecology. Many of our younger guides understand and are up for this challenge.

Evacuations

STEIN: When you first started rowing as a commercial river guide, the means to a job with a river company would be described now-a-days as an apprenticeship or on-the-job training. Recently the park service has initiated greater control and regulation of boatmen including required trainings and credentials you need to hold to be employed as a guide. Boatmen need to pass a park service commercial operating regulations exam, hold a food handler's card, and also complete Wilderness First Responders emergency medical training. At the bottom of Grand Canyon, they need to be able to come together and respond to natural disasters and medical emergencies. There are frightening stories about near drownings at Havasu Creek during flash floods and tragic stories of fatal falls in Stone Creek. Have you been involved in any serious evacuations?

USHER: Evacuation stories in Grand Canyon take on epic proportions. I participated in many evacuations but there are two that were pretty serious. The stories are great illustrations of the changes that have taken place with river trips over the years. When I was just starting as a river guide I helped with the evacuation of a fellow guide back when I worked for Wilderness World. It was in 1983, we were camped at Ledges at mile 152.[5] Jimmy Hendrick was leading the trip when Jeff Behan fell climbing. This resulted in an open dislocation of his ankle. Jimmy tells a great story of teamwork, a quick and bold response to the accident. He referred to it in an interview as a "classic Wilderness World team effort."

The guides on the trip took the lead and called the shots. We did not have sat phones or radios in those days. One of the guides, John Markey, rowed his boat downstream, hiked up to Havasupai Village, and called the park service for a helicopter. The majority of the crew climbed up a side canyon

[5] River miles are measured both up and down stream of Lee's Ferry, which is designated as mile zero.

Howie Usher at Crystal Rapid, 1983, at 77,000 cfs. Courtesy of Howie Usher.

just downstream of Ledges camp, found Jeff, administered emergency medical care, transported him on a backboard—and belayed him down a steep canyon wall—and returned him to camp. The crew cared for him throughout the night until a helicopter could evacuate him to a Flagstaff hospital. Although it was an open dislocation, exposed to potential serious infection, with the exception of a bit of a limp, Jeff made a full recovery. He was actually on the river a couple of summers ago and helped out when someone on one of my trips got injured.

The Legendary 1983 High-Water Trip

In the summer of 1983, the snowpack in the mountains of the upper Colorado River basin melted with unprecedented speed. The massive amount of runoff caught the Bureau of Reclamation unprepared. The level of Lake Powell rose so rapidly that the Bureau of Reclamation built a temporary barrier of 4 x 8 sheets of plywood to hold back the water that threatened to flow uncontrolled

into Glen Canyon Dam's spillways. The bureau discharged record amounts of water into the Colorado River below the dam to create room for the sudden increase in runoff. The park service attempted to dissuade the river community from running the Colorado River in these treacherous conditions but a small number of guides, including Howie Usher, took passengers down the river during the summer of 1983 during the highest water releases in the history of Glen Canyon Dam.

STEIN: Nineteen eighty-three was a spectacular year for big water down in Grand Canyon. Do you have any interesting stories to tell from that season?

USHER: I was rowing for Wilderness World that year. Nineteen eighty-three was a record year for big water. I was on another trip with Jimmy Hendrick that summer. We missed the pull-in for Phantom Ranch and floated by as the park rangers were trying to stop us from going any farther. The river was flowing at 77,000 cubic feet per second (cfs). What you gotta understand is that these days the river runs under 20,000 cfs. So this was big, fast, treacherous water fraught with huge boils and whirlpools. Now there were six or seven of us guides on this trip and I am sure we each have a different recollection of the tale. For me, I was pissed at the one guide who missed the pull-in at Phantom because I had mail to send out. But I suppose it was lucky because we blew past the park rangers trying to get us to stop at Phantom Ranch. We camped between the silver bridge and Pipe Creek that night. The next morning we headed down to Crystal.

Unlike most North American whitewater, which is classified using the International Whitewater Scale of I–VI, Grand Canyon rapids are rated on a unique scale of 1–10, with ten being the most difficult. Within normal water fluctuations, Lava Falls, with a vertical drop of almost forty feet, and Crystal Rapid, with a drop of almost twenty feet, are the most dangerous. Each is rated at ten, with Crystal having the added hazard of becoming more dangerous at higher water. In 1983, however, the level of danger the record high water presented was uncharted. Much like explorer John Wesley Powell had written more than 100 years earlier, guides who chose to ride the river during June 1983 were literally entering "the great unknown."

On June 26, 1983, three guides in a dory, Kenton Grua, Rudi Petschek, and Steve Reynolds, blew past us at Hermit Rapid without even pausing to say hello. It was unusual with so few of us on the river—three guys in one boat and guides just not stopping to be social. We found out farther downstream these guys did not stop to scout Crystal. So it also wasn't surprising to learn they ran the hole, flipped the dory, and got pretty banged up. The incident didn't stop them; they continued down river. I can't remember when I learned that they were trying to set a speed record through Grand Canyon. This is why they didn't stop to chat, why they didn't scout the rapid. Their trip is written about in the book *The Emerald Mile*.[6]

We learned there was a fatality downstream at Crystal Rapid. And there were at least fifteen serious injuries. The park service was flying round-trip emergency evacuations to and from Crystal for a couple of days. The park service had rangers at both Crystal Rapid and Lava Falls. They required commercial and private boaters to hike passengers around Crystal. Guides had to go it alone in the rapids. After we ran the upper part of Crystal Rapid we pulled in at Ego Beach. We picked up our clients and went on downstream.

Once we got through the Gems and down into the Bass area of the canyon, I remember any number of boats tied to the shoreline looking like they'd been bombed out.[7] Side tubes spun in opposite directions, gear and equipment strewn along shores and ledges. As we came around the corner at mile 110 just below Shinumo, we saw Georgie White's boat, upside down, tied to the shore, with gear spread out all over the ledges. At about river mile 114, below Bass Canyon, we saw the frame of a motor rig sticking out of the water. It was an eerie experience.

At Matkatamiba Canyon the park service dropped one of their infamous notes. We were informed the river flow was

[6] Kevin Fedarko, *The Emerald Mile: The Epic Story of the Fastest Ride in History through the Heart of the Grand Canyon* (New York, 2013), 290.

[7] "Gems" references an area of numerous side canyons named for minerals and precious stones: Agate, Serpentine, Emerald, Ruby, Quartz, Jasper, Jade, Turquoise, Sapphire, and Topaz. "Bass" refers to an area of folded rock formations and a side canyon named after early Grand Canyon pioneer William Bass.

going to be raised from 77,000 to 92,000 cfs. We went on down and camped at the mouth of Havasu and sent a runner up to the village to call in to the office. Seizing the opportunity to experience the big water, the rest of the company office staff had grabbed a boat and were somewhere upstream. No one was working the phones that day. We camped for the night and ran Lava Falls Rapid the next day.

We scouted it with three other commercial company trips. One group was running three snouts. There was a motor trip and there was another trip similar to ours running all eighteen-foot oar-powered boats. We scouted from the bluff high above Lava on the left side. From the bluff, Lava and Lower Lava, which are normally two separate rapids, looked like one continuous rapid. It had a series of large lateral waves down the left side. The tongue led down the middle and the rapid basically started at what we know today as the end of the rapid, the big black rock. Both the ledge hole and the V wave were nonexistent. At the black rock, there began a series of Hermit Rapid–sized waves traveling all the way down to Lower Lava Rapids.

The motor rig ran first and pulled over on the right to "run safety."[8] The other oar trip ran left. We decided to run left as well but there were huge lateral waves we had to pull across to make our left run. I was the last boat from our trip to run Lava. On the right side lookout I could see the park ranger. I thought it might be Kurt Sauer of the Park Service River Unit so I waved. As I drifted up to the entry, the view was more like looking out to sea than looking down river. I started my pull left. But I didn't make it far enough left to avoid the big waves at the bottom. I ran some of the biggest waves sideways. At the crest of those waves it felt like we were more upside down than right side up. We were five-eighths of the way though a "barrel roll" when we crested the waves. We slapped back down on the back side of each wave only to repeat the process on the next wave. It was a huge scary ride but I had a great team of big guys tending to my high side.

We couldn't pull over until mile 183. So three miles and

[8] To "run safety" means to put a boat into position to assist in case another boat flips and/or to rescue people who end up in the water.

maybe ten minutes downstream, we pulled over to check in with each other. The trip leader, Jimmy Hendricks, and I were discussing our runs and my heart rate was settling down. Then we saw orange flotsam floating down river followed by one of the snout boats, upside down, being chased by the motor rig. All of the passengers had been picked up by the motor rig. It took the motor rig another mile or so before the snout could be corralled to shore.

The AzRA Years, 1986–2019: Evacuations Redux

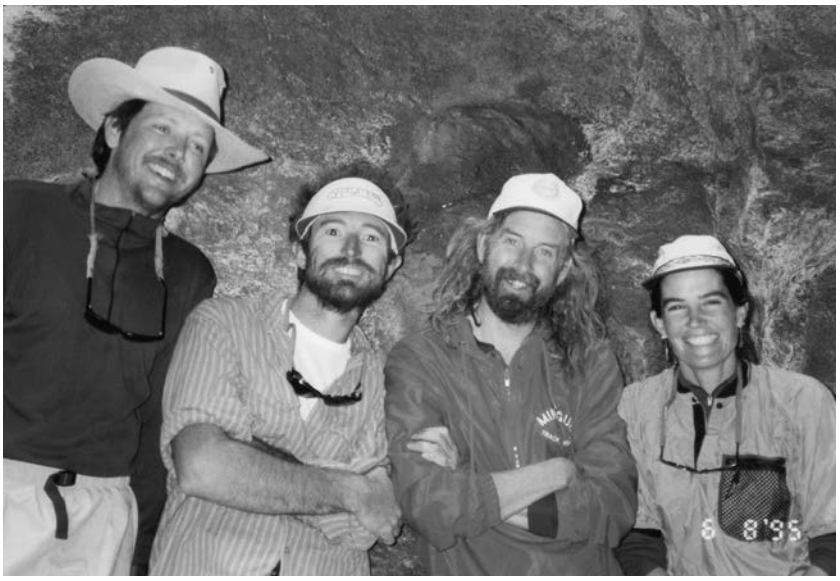
When Wilderness World, for whom Howie Usher guided from 1979 to 1985, was purchased by another rafting company, Usher joined Arizona Raft Adventures (AzRA), another outfit that specialized in trips consisting of small oar-driven boats. He guided for AzRA from 1986 to 2019.

STEIN: You have a rather dramatic evacuation story that includes an Air Force Black Hawk helicopter. Can you tell us that river tale?

USHER: Oh yeah, the Black Hawk story was a big favorite for a while. I was on an AzRA trip in July of 1994. Sharon (Shay) Hester, Anthea Elliott, John (John-O) O'Brien, and Brian (BriBo) Peterson. A group of cardiologists from California had chartered a professional development trip. There was a group of these doctors who would head out to hike every evening before dinner. Sometimes they would ask for a trail or route, others they'd just head out on their own. It was the night after we ran Lava and were camped at mile 190.

Some of the passengers had gone off on a hike. A group of female passengers went upstream to find a private place to bathe. The crew was busy with the end of the day activities in camp. John and BriBo were cooking dinner and making margaritas. Shay, Anthea, and I were sitting on our boats, writing in our journals, checking on equipment, and waiting on those margaritas.

So these doctors who went hiking every night hiked up and around this huge lava flow and they were way up high. The organizer of the trip brought along a relation. He was a younger man, I think his godson or nephew. Anyway, the



Arizona Raft Adventure crew, Black Tail Canyon, 1995. From left to right: Jerry Cox, Kevin Johnson, Howie Usher, and Ginger Birkland. Courtesy of Howie Usher.

female passengers were coming back from their bath and BriBo calls margaritas. I had one foot on the tube, one foot in mid-air and my empty San Francisco Giants insulated cup in hand. Suddenly, a couple of women returning from their bath started screaming. Shay, Anthea, and I were trying to figure out what the problem was when one of them finally told us that the young man had fallen off a cliff.

The three of us ran across the beach and up a scree slope.[9] We called the kid's name. We broke up and took three different paths up the scree slope to try to find him. Anthea screamed out that she had found him and so we three converged. The kid was sitting there, head in his hands and elbows on his knees. He was ashen grey and bleeding from a number of scrapes. Anthea did exactly what we as guides are trained to do in an emergency wilderness medical situation; she stabilized his neck.

[9] A scree slope consists of a steep angled slope covered with loose rocks.

While I asked him questions to ascertain what had happened and his condition, one of the passengers, a medical doctor, pushed me out of the way. I gave the guy some space but I tried to get a pulse and kept close enough to see what was going on. He pushed me away again. As we asked the kid a few questions, he mumbled and answered in fragmented sentences. Contrary to everything we are trained to do in our wilderness first responder training and exams, this doctor grabbed the kid's head and began to rotate it.

I guess this is a good place to talk about the changing attitudes and expectations on river trips and of river guides. Sometimes, on trips, guides are put in their place by the passengers. The patrons have the attitude that they paid for the trip and therefore the guides are there to serve and "snap-to." This is a difficult place to be in because the river company, our employer, expects us to take care of the passengers but also to defer to the patrons. You don't want passengers complaining about the "help," but you also don't want them to be permanently injured or die on your watch. This was a particularly difficult situation because it was a medical emergency and the doctors saw themselves as both the patrons and a higher authority. My concern was that these doctors were trained to respond in a sterile environment with all kinds of technologies or transportation immediately at hand.

At this point I turned to Anthea and instructed her to take copious notes. Based on the situation we, the crew, determined that an evacuation was appropriate. When we shared our decision with the group organizer, another medical doctor, we got some pushback. He didn't think it was a life-threatening situation, but we really didn't know what happened to the young man. He could have bounced down the lava flow, which was a field of sharp ugly rocks. He definitely rolled through barrel cactus. I decided we were moving forward with the evacuation.

Luckily by this time, unlike the [Jeff] Behan evacuation of 1983, we carried emergency radios with us.[10] We didn't have satellite phones yet, but at least no one had to hike out of the canyon to call for help. We began the NPS protocol

[10] The Behan evacuation is discussed earlier on pages 537–38.

to request an evacuation. From where we sat we could see upriver toward Whitmore Canyon and also some scenic tourist flights, but no one would respond. We tried any number of frequencies, including the emergency frequency, but no one would respond. It was getting late and we were concerned about making a connection.

Suddenly we caught a communication between a commercial flight and LAX [Los Angeles International Airport]. I broke into the communication using the NPS protocols at the time. "Emergency, emergency, emergency, Grand Canyon River Trip Mile 190 head trauma requesting evacuation." Then I heard the pilot of the commercial flight tell LAX that he heard something coming from the Grand Canyon. He told me to "go ahead." I followed protocol again and repeated "emergency" three times, restated the river mile, the head trauma, and requested evacuation. The pilot repeated my message to LAX but it didn't sound correct to me. I tried to repeat and correct the information but we lost our connection. Although we never actually saw the plane, it must have passed out of our line of communication.

While I was making contact by emergency radio, BriBo rowed a boat upstream in order to transport the kid back to camp. The crew was ready with the backboard, but again the doctors insisted on moving him themselves and made the crew step aside. I don't know for sure but I fear they may have actually stood him up and walked him down the hill to the boat. We moved him back to camp and settled him in a tent. We were setting a schedule amongst the crew to sit up with him throughout the night, but again, the medical doctors insisted they had that covered.

Once that situation was settled, I went into camp to speak to the rest of the passengers. I was surprised by how calm everyone was and then I noticed the trough of margaritas was empty. I gathered everyone around and explained how the park service never flies at night so we should just settle in for the night, follow our regular routine, and prepare for the helicopter to arrive in the morning.

I crawled into bed on my boat. I had just finished the third transcription of Anthea's notes and my own notes on

what had transpired. It felt like midnight. And then I heard the sound of a helicopter upstream. My first thought was that it was a scenic helicopter shuttle on a late flight from the south rim to Las Vegas. Then I saw a spotlight flashing along the river, on the beaches and canyon walls. I knew then they were looking for us. I got back on the radio and contacted the helicopter on the emergency frequency. Our conversation was very calm, cool, and collected. I told the helicopter pilot the patient was stable and it would not be appropriate to land on this beach at night. The pilot acknowledged and turned to leave. It then it occurred to me I hadn't checked on the kid myself in a while. I left my boat and walked to his tent. The kid was alone, the doctors were not keeping the twenty-four hour watch as they had indicated, but said he was doing ok. He asked if I would empty his pee can for him.

The next thing I knew it was like a scene out of *Apocalypse Now*. The helicopter came blazing up the canyon at river level; the only thing missing was "The Ride of the Valkyries" and Robert Duvall screaming out the window. It was pure chaos. I pulled out the radio and kept telling him he didn't need to land. He wasn't interested. He got in so close I felt like I could reach out and grab his struts. I could see a human silhouette through an open door. I saw the figure snap an illumination stick and throw it out the door. Then I heard, "We've been up and down this river, this is the only place we can land, we are coming in, we can blow your boats right out of the water."

There was no stopping them. I screamed out to camp that there was a helicopter coming in. I was thinking if he could blow our boats over he could blow our kitchen from here to Lava Falls. So there I was stuffing my sleeping bag as fast as I could into my black waterproof bag and watching one of the passengers come down to the beach to squat and pee down by the boats. Oblivious. There was dead silence for a brief moment then the helicopter returned. I heard over the radio, "We have been in touch with the park service. We have clearance not to land. This is rescue 135 *your* United States Air Force at your service. Over and out." Then

the canyon went silent. Heart rates dropped as the sound of the helicopter disappeared down the canyon.

I was thinking to myself this Air Force crew was given clearance to swing through Grand Canyon. I hope they took the opportunity to land on an empty beach, dance naked in the moonlight for a minute or two, before heading back to base with a story no one else could ever tell.

The next morning, we prepared as usual and waited for a helicopter evacuation from the park service. When it finally arrived, an EMT who reminded me of Pancho Villa or perhaps Sylvester Stallone in *Rambo*—with packs and belts strapped diagonally across his chest—jumped out of the helicopter. It became apparent from the EMT's explanation that the information I communicated to the commercial pilot, which he communicated to LAX, and then was somehow transmitted to the park service, had been altered in translation. Nothing was as serious as these guys expected.

The pilot walked over to me and asked, "Are you the guy who waved off the Black Hawk last night." At the time, I admitted I didn't know what one was, but that I had waved off someone the night before." The pilot just chuckled and walked away. The injured kid was evacuated and there was no serious or permanent damage. When I finally saw a Black Hawk helicopter at an air show, I was pretty impressed.

River Culture and Community

STEIN: A good number of the river guides with whom you worked in the 1970s and 1980s were Vietnam veterans. We talked about the impact of the military and that conflict in particular on the culture and camaraderie of the guides. You've mentioned helicopter pilots who were former military pilots—any great stories about them?

USHER: Yeah, I can remember two really wild rides through Grand Canyon on helicopters. Once while I was working on the burro project, I was standing with L. T. Green waiting for our ride into the canyon. L. T. was a Vietnam veteran and frequently wore his fatigues with his insignias. One pilot recognized his uniform and invited L. T. into the front seat.

I made it a point to jump on that same flight. Let's just say that it was exciting. We dropped off the rim at what seemed like a ninety-degree angle. It was steep! During the ride to our destination the pilot banked heavily through a number of the passes and saddles. It was big!

Another time I was working a site in the Supai overlooking Shinumo Creek and the Bass Camp area.[11] The only place to land was on a ledge. When I jumped off the helicopter, I saw that the tail rudder was hanging over a drop of several hundred feet. I never felt in danger, but I did think, "Whoa," that was quite a landing!

STEIN: During the course of our conversations, you have mentioned a number of influential people from your life on the river such as Roderick Nash, Stephen W. Carothers, Tom Olsen, and Vladimir Kovalik. Larry Stevens, a well-known ecologist who has guided and studied in the canyon for years, once commented that the canyon is a refuge, not just for wildlife but for river guides as well. You rowed with the Wilderness World crew from 1979 until 1985 when you joined Arizona Raft Adventures for whom you guided for the rest of your career.

The Grand Canyon National Park centennial year of 2019 is also when you retired from commercial guiding on the river and in the canyon. Spending extended periods of time in the canyon while working together with these men and women on river trips must have fostered a strong sense of community. With more than forty years and over 150 river trips under your belt, can you share some of your observations or impressions of the river community with us?

USHER: First let me clarify that my forty years and 150 trips are fewer than some but more than others. That said, Grand Canyon river trips create community. After a couple of days into a fourteen- or eighteen-day trip you can see a "community" begin to develop amongst the passengers and crew on the river. The expectations and the innate character of people emerge when they experience the ominous nature in Grand Canyon. People take their place or position in the group. Some folks jump in and help load and unload the

[11] The Supai Group is one of the major geological layers in Grand Canyon located about halfway between the rim and the river.

boats. Passengers, strangers or not, help each other carry their personal gear and set up tents. They break bread and share wine. Some passengers work in the kitchen. Others do their part entertaining the crowd or just staying out of the way. People come together in the canyon. Sometimes the connection lasts well after the trip. Like a lot of guides, I got married on the south rim of Grand Canyon. My friends from the river company orchestrated the whole celebration. It was a community event. I was overwhelmed by the members of the river community, guides, and former passengers that came and made it happen.

It's been almost thirty years now and a fellow Giants fan, Steve Gibson, I met on a trip still sends a Christmas card and writes to me during the season from the Bay Area. Retired high school teachers from Berkeley, Helen and Bea, came down river and became fast friends and birding companions. They've welcomed me into their home wherever it may be. I spend holidays up in Old Station, California, with them. While doing research for her dissertation in Europe, my wife missed a connecting flight in London. The Fenichels, a London couple who had come down river a couple of times with me, took her in, took her out, and got her on her way. I've also lived and worked long enough to see kids I've taken down river, Loren Romley and Craig Ahrens, grow up and become colleagues at my river company.

Free Baseball: Extra Innings

USHER: Although there are established organizations out there developed exclusively for Grand Canyon river guides, my experience with the community is informal, more personal, and much stronger. In March of 2012, I suffered a devastating hemorrhagic stroke. I sustained some cognitive injury and total left-side paralysis. The doctors told my wife I would never walk again and that it was unlikely I would ever regain the use of my left side. When asked by a social worker what my goals and aspirations were for my recovery, my response was direct and simple: to get back down river and be back in the canyon I love.

Lava Falls Series: Howie Usher running the left side of Lava Falls Rapid, c. 2010. Courtesy of Howie Usher.

I was in Phoenix at the Barrows Neurological Institute for four months. Almost every day, someone from AzRA or the river community came to check on me or bring me some token of the river. My health insurance was through my public high school and the doctors and therapists, when they made rounds, always identified me as a fifty-nine-year-old "semi-active" high school teacher.

My high school and river colleagues along with my family were concerned that this misidentification was affecting the decisions being made for my occupational, physical, and cognitive therapy. My wife stapled large format photographs of me running the right side of Lava Falls on the wall of my hospital room. She also installed a poster of runner Steve Prefontaine with the quote "To Give Anything Less Than Your Best is to Sacrifice the Gift." She was instrumental in making sure the doctors, therapists, and the lot of them got it right so that I could get back down river.

The guides who came to see me regularly made sure my physical and occupational therapy was tailored to my return. Four months after I was airlifted to the Phoenix hospital from Cottonwood, I walked out of the skilled nursing facility with my buddy Duane Badger and caught my first Giants game of that season in Bank One Ballpark.[12]

When you are down in the canyon on a river trip and you flip a boat, it doesn't matter what company you work for or how much experience you have down there. All river guides pull together to help right the boat and get the trip moving back downstream. When I got home, a number of river colleagues came to help my wife and me during the early stages of my recovery. Sue Bassett, a Wilderness World guide, and Kim Fawcett from AzRA actually came down and stayed with us. Guides would make it a point to travel out of their way to check in with me at home before they would load up and rig a trip.

Any number of my buddies from AzRA would break down a trip at the warehouse in Flagstaff and then drive down to hang out and tell me their current stories. So many

[12] Home of Major League Baseball's Arizona Diamondbanks, Bank One Ballpark is now called Chase Field.

Amy Stein and Howie Usher, Chuar Butte, 1998. Courtesy of Howie Usher.

times members of the river community showed up around mealtime with a cooler full of provisions to prepare. Within a month of my return home, with the logistical support of AzRA, Kim Fawcett and Tom O'Hara had me back in the canyon on the water and behind the oars of an inflatable raft. They took Sue Bassett, Duane Badger, and me on a short trip from Glen Canyon Dam down to Lee's Ferry.

Although AzRA would have been justified to let me go, they stuck with me through it all. The owners, Alex and Fred Thevenin, the management team, and so many of the guides and staff were always present. The company had me back on the water full time as an assistant the summer of 2013, and I was given a full schedule rowing my own boat again the next year. I was able to work four more full seasons on the river through the end of 2017. It was an amazing gift to get those four years on the river after my stroke.

Anyone who knows me will tell you I am a huge San Francisco Giants fan. There is nothing I love more than when a game gets tied up and runs into extra innings. Nine innings is a complete game. Extra innings to me is like free baseball.

Howie Usher, c. 2000. Courtesy of Howie Usher.

You are getting more than you expected and certainly more than you paid for. These extra innings down in the canyon with my river family in my river home were the best years of my guiding career. They helped prepare me to walk away when the time finally came for me to do so. Grand Canyon, and the river that carved it, will always remain a part of me. I hope that during my forty years of ecological research, teaching, and guiding I have, in some way, contributed to the culture of environmental stewardship, education, and fun that should define every Grand Canyon river experience.

APPENDIX: SELECTED PUBLICATIONS

Howell D. Usher, C. O. Minkley, and Stephen W. Carothers, "Age and Growth Rate of the Flannelmouth Sucker, Catostomus Litipinnis, and the Bluehead Mountain Sucker, Pantosteus Discobolus," *Proceedings of the Second Conference on Scientific Research in the National Parks* 2 (1980): 163–75.

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