

boatman's quarterly review

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SHARON HESTER

Prez Blurb • Guide Profiles • Gilbert Hansen • Citizen Science
Back of the Boat • GCRG News • Financial Fitness • Not For Sale
Native Fish • Skunks • Bats • Bears • Mountain Lions

boatman's quarterly review

...is published more or less quarterly
by and for GRAND CANYON RIVER GUIDES.

GRAND CANYON RIVER GUIDES
is a nonprofit organization dedicated to

Protecting Grand Canyon
Setting the highest standards for the river profession
Celebrating the unique spirit of the river community
Providing the best possible river experience

General Meetings are held each Spring and Fall. Our Board of Directors Meetings are generally held the first Wednesday of each month. All innocent bystanders are urged to attend. Call for details.

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Our editorial policy, such as it is: provide an open forum. We need articles, poetry, stories, drawings, photos, opinions, suggestions, gripes, comics, etc. Opinions expressed are not necessarily those of Grand Canyon River Guides, Inc.

Written submissions should be less than 1500 words and, if possible, be sent on a CD or emailed to GCRG. Microsoft Word files are best but we can translate most programs. Include postpaid return envelope if you want your disk or submission returned.

Deadlines for submissions are the 1ST of February, May, August and November. Thanks!
Our office location: 515 West Birch, Flagstaff, AZ 86001
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Keeping the BQR Fresh: How You Can Help

POOF! JUST LIKE MAGIC, the *Boatman's Quarterly Review* appears in your mailbox, but as you can imagine, putting together a 48-page newsletter is not quite as simple as that. As our keynote publication, the quarterly journal celebrates (and educates about) the place we love and our river running heritage, but at the same time, it's absolutely essential that we keep things fresh, modern, and forward-looking. That's where you come in. Yes, you!!

It is abundantly clear that our vibrant river community is our biggest asset and a huge resource to tap. We therefore strongly encourage you to submit something for the BQR, whether it is a story, an opinion piece, photography, poetry, artwork... whatever floats your boat, so to speak. The really wonderful thing about the BQR is that it continues to be an open forum where river guides and river lovers can express themselves, and share their opinions, concerns, experiences, or their expertise with others.

It's super easy to do. Just send us a Word file by email. The maximum word count is 1500 words. And please don't embed photos in the text—send them as separate JPGS, 300 to 350 DPI for a 5x7 size. The submission deadlines are the 1ST of November, February, May and August, but you can send us a submission anytime since the process is essentially ongoing.

The bottom line is, we want to keep things fresh and instill the BQR with the unique voices and talent of our river running community. You can help out. Speak up! Share! It's as simple as that. We urge you to keep the BQR on your radar—not just as a passive reader, but also as an active participant in keeping its content relevant as our river experience and river community evolves. We look forward to hearing from you. Many thanks!

Cover: Sharon Hester rows Crystal Rapid at 45,000 CFS, 1985.
Photo: Dugald Bremner

Prez Blurp

DAY NINE OF MY LAST RIVER TRIP began at Thunder River. It was a balmy, sunny day in Grand Canyon. We parked in the mouth of Tapeats and most of the group hiked up to the top of the Diabase Sill onto the Bass Limestone, onward and upward toward the Muav until they reached Thunder River. I returned early to check on the boats and saw big black clouds rolling in. The wind began to blow and rain fell slowly at first, and then faster and heavier. Lightening and thunder filled the sky and big black clouds sat above us. The group returned to the boats at 2:30 P.M. soaking wet, just as the creek began to flash. They said the trail was running like a streambed and were glad to be heading out. We loaded up and got out of the mouth as quickly as we could. The storm quickly rolled downstream and met with another storm coming from Kanab, around the Deer Creek area. As we floated Tapeats Rapid, past Helicopter Eddy and into the Narrows, sunshine and blue sky surrounded us. Just past the Narrows, about a mile away, we could see red spray billowing out of the mouth of Deer Creek. The spray crossed the river and almost reached the camp across from the creek. Floating closer we could hear the rumble of a flash flood. No one could take their eyes off of the giant dark, red waterfall that poured out of the mouth of Deer Creek. Plants lay flat as red mud poured down the mouth of the canyon and into the river. You could smell and taste the big muddy water. I was so caught up in the flash that I ended up taking a pretty exciting line through Deer Creek rapid. For all of us it was the biggest flash flood we had ever seen at Deer Creek.

Today, back home as I write my last pres blurp, I sit back and think about this wildly beautiful day. The constant change of everything down there reminds us what an incredible place Grand Canyon is, and how very lucky we are to work and play there. The need to protect and advocate for Grand Canyon is more real than ever before. As river guides, our opinions are wildly different and diverse, but the one thing we do agree on is that we must protect the place we love. Thank you all for sharing your deep love of the river with everyone you take down the canyon and teaching them how to fight for and protect Grand Canyon. And please share your poems, stories, and science by contributing to the BQR. Sharing your love of the Canyon is one of the best ways to advocate for its continued protection. Let's all be the best stewards and defenders that we can be.

Thank you for letting me represent you this year as President of GCRG. I have loved every minute of it. Steve "Doc" Nicholson will be taking over in September as President and three new directors will come on board. As we did successfully last fall, GCRG hopes to meet again with the Superintendent and her key staff (including rangers), to discuss current issues, get on the same page, and build our positive relationship so we can move forward together.

Have fun out there, and I hope you all get to enjoy the big muddy monsoon river this season.

Amity Collins



Photo courtesy: Steve Mace.

Guide Profiles

Ethan Dyer, Age 26

WHERE WERE YOU BORN & WHERE DID YOU GROW UP? I was born in Atlanta, GA but my parents moved to Flagstaff a month later and I've been here ever since.

WHO DO YOU WORK FOR CURRENTLY (AND IN THE PAST)? I've just worked for Canyoneers.

HOW LONG HAVE YOU BEEN GUIDING? Eight years.

WHAT KIND OF BOAT(S) DO YOU RUN? I primarily drive big, fat, sluggish C-crafts. I also row a couple trips a year and like to pack raft.

WHAT OTHER RIVERS HAVE YOU WORKED ON? None...I did run the Rio De Flag last year but it was an unpaid position.

WHAT ARE YOUR HOBBIES/PASSIONS/DREAMS? I do a lot of climbing, backpacking, and wandering. Sometimes I'm a wannabe woodworker.

MARRIED/FAMILY/PETS? I somehow managed to marry an absolutely wonderful woman, her name is Alex. I also live with two of the worst rez dogs in town.

SCHOOL/AREA OF STUDY/DEGREES? I have a degree in Mechanical Engineering.

WHAT MADE YOU START GUIDING? I grew up backpacking in the canyon and bumming drinks off of river trips; I figured the river was the way to go!

WHAT BROUGHT YOU HERE? My teacher in high school asked me if I wanted to work in Canyoneers' shop.

WHAT DO YOU DO IN THE WINTER? For a while I worked for an electric motor company. Last year I remodeled houses. This year, who knows?

IS THIS YOUR PRIMARY WAY OF EARNING A LIVING OR DO YOU COMBINE IT WITH SOMETHING ELSE? This, whatever I do in the winter, and not spending money.



WHAT'S THE MOST MEMORABLE MOMENT IN YOUR GUIDING CAREER? My first baggage boat me and the other baggage boatmangot separated from the trip for 36 hours. We had a great time camped at Lava Chuar with our very own kitchen, dinner, and toilet. The group somehow managed to forgive us in the end.

WHAT'S THE CRAZIEST QUESTION YOU'VE EVER BEEN ASKED ABOUT THE CANYON/RIVER? If I could "go to the top and get some wine" while camped at Matkat Hotel.

WHAT DO YOU THINK YOUR FUTURE HOLDS? Hopefully more adventures around the Southwest, and possibly a baby, yikes.

WHAT KEEPS YOU HERE? Aside from the Canyon itself, I really think the people do. People I work with and the passengers. Passengers may be awful or they may be great, but they always keep things interesting.

Orea Roussis, Age 49

WHERE WERE YOU BORN & WHERE DID YOU GROW UP? Born in Nyack, New York and raised in West Hartford, CT.

WHO DO YOU WORK FOR CURRENTLY (AND IN THE PAST)? I work for Canyon Explorations and Outdoors Unlimited.

HOW LONG HAVE YOU BEEN GUIDING? I started guiding in 1990 on the Ocoee River in TN.

WHAT KIND OF BOAT(S) DO YOU RUN? Oar and paddle boats for the most part. I have kayak guided and recently started ducky guiding. If I could ducky the canyon for the rest of my career I would die happy.



WHAT OTHER RIVERS HAVE YOU WORKED ON? I have worked over forty different stretches of river all over the country and in Nepal and Chile. I now spend most of my time in the Canyon, Idaho, and Oregon.

WHAT ARE YOUR HOBBIES/PASSIONS/DREAMS? I love to bake and cook.

MARRIED/FAMILY/PETS? Nope.

SCHOOL/AREA OF STUDY/DEGREES? BA in Molecular Biology and an Associates in Culinary Arts.

WHAT MADE YOU START GUIDING? I wanted to become a better kayaker.

WHAT BROUGHT YOU HERE? My friend Randy Holton worked down here for Outdoors Unlimited and he thought I would like rowing a baggage boat. I had never rowed before but I sort of figured it out and managed to not flip.

WHO HAVE BEEN YOUR MENTORS AND/OR ROLE MODELS? For learning to be a good boater, my friend Snuffy. Working down here, my role model would be Bert Jones.

WHAT DO YOU DO IN THE WINTER? As little as possible. Travel, mostly to Chile, hang out with my Dad, read books and cook.

IS THIS YOUR PRIMARY WAY OF EARNING A LIVING OR DO YOU COMBINE IT WITH SOMETHING ELSE? I took a vow of poverty and decided to earn my living being a raft guide.

WHAT'S THE MOST MEMORABLE MOMENT IN YOUR GUIDING CAREER? It's hard to say, things seem memorable when my heart rate spikes. Guiding all kinds of Class v in California? Dropping into a big hole on the Kali Gandaki in Nepal and nearly drowning? Having a flash flood come through camp in the Canyon? Havasu flashing when we were almost to Beaver?

WHAT DO YOU THINK YOUR FUTURE HOLDS? My 50th birthday...maybe a trip to Africa to play with baby elephants.

WHAT KEEPS YOU HERE? Working with people I like, meeting new people I enjoy, and sleeping under the stars.

Gilbert Hansen, Ghost of Glen Canyon

The sad truths I've been taught by the families of the dead are these: seeing is believing; knowing is better than not knowing; to name the hurt returns a kind of comfort; the grief ignored will never go away.

—THOMAS LYNCH¹

AMONG THE MEMORIAL PLAQUES at Navajo Bridge is one for Gilbert Hansen, mounted on the west side of the original bridge, east of the visitor

center. The bronze marker is relatively small, measuring twelve by eighteen inches. Otis “Dock” Marston photographed the plaque in 1958 under the old bridge,² but it was moved to its present location in 1995 after the new bridge was completed and the visitor area redesigned. While the notes on the Marston photo give the general location, an undated photo by Woody Reiff provides a visual clue to the original location,³ in a spot now obliterated by the redesign. For those interested, a YouTube video taken in 1968 gives a partial view of the previous visitor area and the public access it once provided to the area under the old bridge.⁴

Hansen disappeared while rafting upstream in Glen Canyon in a party of twelve under the direction of Elmer Purtymun, a well-known guide from Sedona.⁵

Hansen often piloted one of the rafts for Purtymun and was known to seek out holes and rough water. Because the body was not recovered, the cause of death was given as accidental drowning only after a coroner’s inquest met in Flagstaff on September 14, almost three months after Hansen’s disappearance.⁶ Purtymun signed the death certificate as the “informant.” The location of the drowning was reported as “near Utah State Line,” an area now under the waters of Lake Powell. The plaque gives the location as “near Powell’s Music Temple,” dozens of miles upstream in Utah. John

Wesley Powell named Music Temple in 1869, during his first expedition down the Colorado River. No one from the Purtymun/Hansen party signed the Rainbow Bridge Register in 1957, but Hansen did sign on an earlier trip with the “Purtymun River Rats” May 11, 1954.

Marston believed he had photographed the probable location of Hansen’s drowning at a large boulder below Music Temple which created a hole during high water.⁷ Marston also suggested this was the same location

where two others drowned June 14, 1961. Twenty-seven year-old, Neil D. Hardman, was from Murray, a suburb of Salt Lake City, and 32 year-old, Roger Morrison Felt, was from the rural town of Heber, Utah. Hardman’s body was recovered at the base of Glen Canyon Dam,⁵ although Felt, like Hansen, was never seen again.

Another well-documented drowning in Glen Canyon was that of fifteen year-old David Quigley on June 26, 1951.⁸ His body was found and buried many miles downstream in the Grand Canyon near President Harding Rapid, river mile 44. As the historian Gregory Crampton once commented, “Although the Colorado in Glen Canyon was a placid stream many lives have been lost to its waters.”⁹ This was especially true when including the river crossing at Lees Ferry, five miles

upstream from the bridge, where Glen Canyon turns into the Grand Canyon.

Forty-five year-old Gilbert Harold Hansen (May 5, 1912–May 17, 1957) lived in Batavia, Illinois, a suburb west of Chicago. He worked as executive vice president for the Furnas Electric Company in Batavia and was known to give talks in the local Illinois area to show off photographs of his Glen Canyon trips.¹⁰ A talented mechanic and inventor, he designed a pressure switch for water pumps which gave the company a big boost in 1938. He also married the boss’s daughter, Helen Furnas,



Hansen Plaque at Navajo Bridge, March 21, 2018.
Photo courtesy: David Bailey.

Still Missing in Arizona



Gil H. Hansen (right), Furnas Electric Co. vice-president, and Elmer Purtyman, Colorado river guide, were photographed last year when Purtyman was visiting the Batavia plant.

Search Continues For Batavia Man

Newspaper clipping dated May 20, 1957, from the files of the Batavia Historical Society showing Gilbert Hansen (right) and Elmer Purtyman in Batavia, circa 1956.

and they had three sons. The *Batavia Historian*¹¹ chronicles the suburb's history, including the formation and growth of the Furnas Company and the part played by Hansen in the organization. It was the Furnas Foundation that paid for the plaque at Navajo Bridge, not long before most of Glen Canyon, too, disappeared.

River guide Gaylord Staveley gave the Hansen story an odd twist in his book *The Rapids and the Roar*.¹² In August of 1958, more than a year after Hansen's disappearance, Staveley described being interviewed by an agent of the Pinkerton Detective Agency. According to the agent, Hansen had supposedly been carrying \$400,000 on the river trip and his wife wanted him found. When the raft dumped, Hansen by some accounts was wearing a leather jacket and high-top leather boots, unusual gear for Glen

Canyon rafting, and this was taken as evidence that Hansen may have been planning his disappearance. In addition to intentionally overturning his raft, of course, this would have required him to swim in boots to the bank unseen, hike upstream to an exit like Llewellyn Gulch or Hole-in-the-Rock, and be picked up by an unknown party, presumably by prior arrangement. It certainly makes for an attention-grabbing tale to entertain the dudes while sitting around the campfire.

Gilbert's wife Helen outlived her husband's accident by only a few years, although she did remarry. Her grave can be seen in the River Hills Memorial Park in Batavia under the name "Helen Hansen Kidd" (1913–1962).¹³ On one side is the twin marker for her parents, Carl and Leto Furnas, and on the other is a marker for her first husband, a duplicate bronze plaque identical to the one at Navajo Bridge.

Kern Nuttall

FOOTNOTES:

1. THOMAS LYNCH, *Bodies in Motion and at Rest: On Metaphor and Mortality*, Norton, 2001.
2. The Otis Marston Colorado River Collection, Huntington Digital Library website: Plaque "Gilbert Hansen" under bridge at Marble Canyon.
3. Woodrow Reiff, Gilbert H. Hansen memorial plaque, Cline Library Special Collections Digital Archives, call number NAU.PH.99.5.146.
4. YouTube video: 1968 *Grand Canyon Lees Ferry*, posted June 8, 2018.
5. *Arizona Republic* 1957 Jun, p 4: Colorado River Search for Hansen Body Suspended.
6. Arizona death certificates, Arizona Department of Health Services website (genealogy.az.gov).
7. The Otis Marston Colorado River Collection, Huntington Digital Library website: Rock in Glen Canyon below Music Temple....
8. *Ogden (Utah) Standard-Examiner* 1951 July 13, p 3A: River Party Finds Body; Believed Utah Boy Scout.
9. SHARLOT M. HALL, *Sharlot Hall on the Arizona Strip*, C. Gregory Crampton editor, Sharlot Hall Museum Press, Prescott, 1999, p 50.
10. *Rockford Morning Star* 1957 Feb 17, p 10: Gilbert Hansen to Show Slides of Colorado Trip.
11. *The Batavia Historian* (www.bataviainhistory.org) 42 (4), October 2001: Carl Furnas...And the Company He Built.
12. GAYLORD STAVELEY, *The Rapids and the Roar*, Fretwater Press, Flagstaff, 2015, pp 198–200.
13. "Find A Grave" website (www.findagrave.com): listed on the website under "Helen Furnas Kidd." The name inscribed on the headstone is actually "Helen Hansen Kidd."

Citizen Science Along the River— Dragonfly Mercury Project

IT IS NEARLY IMPOSSIBLE to float down the river without seeing these bright, vibrant creatures flying through the air—dragonflies. Their presence brings an aura of beauty, mystique, and curiosity to river trips. Dragonfly larvae, or juveniles, are less conspicuous than their adult counterparts, but have just as much to offer. Dragonfly larvae can reveal important details about the health of an ecosystem. Glen Canyon National Recreation Area (GLCA) is one of many parks participating in a nation-wide study known as the Dragonfly Mercury Project (DMP)— www.nps.gov/articles/dragonfly-mercury-project.htm The DMP engages citizen scientists in the collection of dragonfly larvae for mercury analysis in national parks. Since 2011, over ninety parks and 3,000 citizen scientists have participated in the project (Flanagan Pritz and Nelson 2017). The goal of this study is to obtain a better understanding of mercury contamination in our parks while educating and engaging local communities in scientific research.

Mercury enters the environment via atmospheric deposition, such as rain, snow, and dust. It is also a product of human pollution, which includes mining and coal-burning power plants. The mercury in the environment is constantly being converted by natural processes to methylmercury, which is extremely toxic. Methylmercury negatively impacts the nervous system and can cause issues with vision, motor skills, and memory (Hong et al. 2012). The toxin bioaccumulates in the tissues of animals and biomagnifies up the food chain. Dragonfly larvae are an excellent specimen to sample because of their prevalence in the food web. They can live up to seven years as predatory larvae, eating smaller insects and accumulating mercury as they grow. The dragonfly larvae are prey for many fish, which are then eaten by animals like birds, bears,

and humans. By collecting dragonfly larvae for mercury analysis, we can achieve a better understanding of the toxins in our environment and how to manage them.

In the summer of 2018, GLCA and citizen scientists sampled five sites throughout the park for the DMP. These sites included Slickhorn Canyon (adjacent to the San Juan River), The Slough (adjacent to the Colorado River), Bowns Canyon, Ribbon Canyon, and Lone Rock Beach. In the southwest, dragonfly larvae are often found in pools of warm, algae-covered water anywhere from the river's edge to deep within the canyons. Since the juveniles burrow into the clay and sand underwater, sampling involves digging into the substrate with D-nets and sifting through the mud. Each dragonfly larvae is placed in a small plastic bag, measured to the nearest millimeter, and identified down to family. In North America, there are six main families of dragonflies: Aeshnidae, Gomphidae, Corduliidae, Libellulidae, Macromiidae, and Cordulegastridae. The size and family, as well as park name, site name, and date, are recorded on a tag. Then, each individual and their tag are placed into a larger plastic bag and frozen until shipment. Laboratories at USGS, University

of Maine, and Dartmouth College receive coolers of dragonfly larvae from all over the country and analyze them for mercury. The final results are published for anyone from landowners to the National Park Service to inform future management strategies.

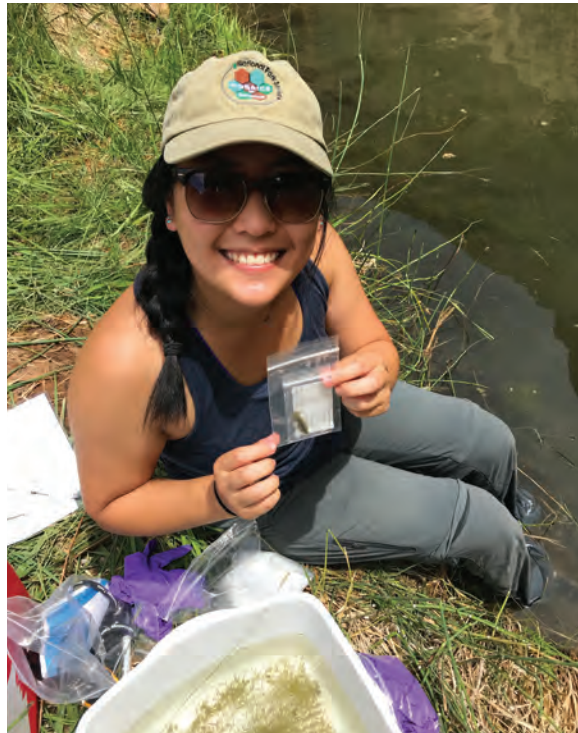
The sampling effort at Slickhorn Canyon was completed in partnership with Grand Canyon Youth (GCY). Between May and July, GLCA biologists participated in several GCY trips along the San Juan River to engage youth in dragonfly sampling and acoustic bat monitoring. The sampling at Slickhorn Canyon took place at the end of June with participants from GCY's Middle School Adventure. During the five-day trip from Mexican



Members of the SCC-AL Native Conservation Corps sampling dragonfly larvae at The Slough. Photo credit: Katherine Ko.

Hat to Clay Hills Crossing, twenty youth assisted with larvae collection for the DMP. The youth enjoyed hiking the canyon, discovering fossils along the way, and sampling dragonfly larvae in a pool that doubled as a swimming hole. At this site, the larvae were easily visible in the water and so plentiful that one youth caught six individuals in one sweep. Rounding out the ecosystem were lizards, frogs, and adult dragonflies all around. Citizen science efforts like the DMP give youth a unique perspective on their surroundings and new reasons to explore their public lands.

In mid-July, another sampling effort took place along the Colorado River at a site known as The Slough. Seven Hopi tribal youth from the Southwest Conservation Corps Ancestral Lands (SCC-AL) Native Conservation Corps program assisted in this effort. After boating about half an hour upriver from Lees Ferry, these high schoolers spent just over two hours at this site. Their natural curiosity took over as they collected fourteen individuals, ranging from 6mm to 40mm in length. Larvae belonging to the Aeshnidae and Libellulidae families were found at both Slickhorn



A successful sampling outing! GLCA Mosaics in Science Intern and DMP Lead Katherine Ko with an Aeshnidae larva. Photo credit: Katherine Ko.

Canyon and The Slough. Observing the adult dragonflies at each site can also help identify the less distinctive larvae down to the correct family. The Common Green Darner (*Anax junius*), which belongs to the Aeshnidae family, and Flame Skimmer (*Libellula saturata*), which belongs to the Libellulidae family, were often observed at sampling sites. Other adult dragonflies observed in GLCA include Desert Whitetail (*Plathemis subornata*), Western Pondhawk (*Erythemis collocata*), and Black Saddlebags (*Tramea lacerata*).

Citizen science projects like the DMP are more than a means to collect large amounts of data in a short amount of time. They are

a vehicle for outreach, education, and inspiration. DMP volunteers were quick to embrace the heat of the desert and dive into murky waters to look for dragonfly larvae. They asked how this study will benefit the community. They insisted on looking through mud until they found one more larvae. They inquired about jobs that would bring them outside to the rivers and the canyons. Projects like the DMP provide participants with unique experiences in their local environment. As these

volunteers gain a new perspective on the world around them, they are inspired to return to these magical places and bring new admirers along.

This is the first year GLCA has participated in the DMP, and it is extremely important to keep the project active in the Southwest. This study achieves many objectives on multiple levels. The ultimate scientific goal is to obtain a large-scale view of mercury contamination in our national parks. These results can be used as a vehicle to discuss larger pollution and biodiversity issues. The DMP is also rooted in citizen science and emphasizes connecting people to parks. This project depends upon and thrives on the enthusiasm



Citizen scientists observe the aquatic macroinvertebrates of the Southwest. Photo credit: Krista Allen.

and dedication of everyone from river guides to boy scouts. It gives citizen scientists a unique opportunity to explore national parks and participate in conservation efforts. It is these experiences that continue to draw people outdoors and make them fall in love with the environment. The more time we spend outside, the more informed we are about the world in which we live, the better we can protect it for generations to come.

For additional information about this project, please feel free to contact any of the authors.

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Page Girl Scouts dig through their findings at Lees Ferry.
Photo credit: Krista Allen.

REFERENCES:

1. FLANAGAN PRITZ, COLLEEN, AND SARAH J. NELSON, "Collecting Data on Charismatic Mini-Fauna: Public Participation and the Dragonfly Mercury Project." *Maine Policy Review* 26.2 (2017) : 50–54, <http://digitalcommons.library.umaine.edu/mpr/vol27/iss7/9>.
2. HONG, YOUNG-SEOUB, YU-MI KIM, AND KYUNG-EUN LEE, "Methylmercury Exposure and Health Effects." *Journal of Preventive Medicine and Public Health* 45.6 (2012): 353–363. PMC. Web. 19 July 2018.

Back of the Boat— The Whale Foundation News Bulletin

I NEEDED A WIDE-BRIMMED SUNHAT, a sheet and a coffee mug. "Damn it," I thought, once in the truck and realizing the holes in my pre-trip pack. "It's June! These are essential items. Trip's over."

I was quick turning from a motor trip to a row trip, in two different warehouses, and hadn't gotten it all from one derig to the next load out. That old adage, "what you don't have, you don't need" was bullshit mental gymnastics to feel okay about going without, and not something I was ever good at. I don't do well with coming up short.

This is a river guide's life, though. Going without or living right on the edge of it, anyway. Despite the outside appearance of having life by the tail and all of it figured out, we're usually one mechanical breakdown or dental visit away from being financially underwater. We can skip rent for the season, maybe, or do without wheels for a long time. We sacrifice this or that to make the lifestyle work. We often even sacrifice larger plans, as it's difficult to get "career building" work in between river seasons, and most of those part-time wages are used for the *other* part of the time.

Hard to get ahead under these circumstances.

Tim Whitney understood this. As a full time guide and a community leader in the '80s and '90s, he toiled to establish some workable means to get guides' health insurance coverage for when life hit the fan. It wasn't to be, but when he passed away from cancer in 2012, a fund was set up in his name to care for the physical well-being of our community. Each spring, the Tim Whitney Wellness Initiative covers the cost of the Health Fair at the Guide Training Seminar and the subsequent lab work for individuals seeking further screenings. Participating is one of the best exercises in adult thinking a guide can do.

Additionally, applications are also accepted between February and May to receive a generous stipend to offset some of the cost of a health insurance plan. The Health Insurance Assistance Plan (HIAP) was designed to incentivize even more responsible thinking. If you're getting insurance for the first time, you can receive up to \$750!

This summer, the Whale Foundation awarded 24 guides \$11,200 towards their health insurance

premiums. We know the difficulty of reconciling a full-time life with part-time wages. If you're paying for your own health insurance, we want to help, and if you don't have insurance yet, we'd like to encourage you to get it. We applaud everyone who's doing all they can to make it work. Learn more at www.whalefoundation.org/health-insurance. We also have resources to help you navigate the process of applying for an insurance plan. Just call the office at 928.774.9440.

I'm also very proud to announce the *expansion* of the Kenton Grua Memorial Scholarship (KGMS). This year, we were able to award \$8,000 to five former and current guides pursuing further education and skills. Whether enrolled in a degree or a course, all nine of our applicants embody the curious, determined and resourceful nature of our community. Learn more about these five by *liking* the Whale page on Facebook and/or *following* us on Instagram. Better yet, subscribe

to www.whalefoundation.org and check out the KGMS page. Again, congratulations to these scholarship winners and good luck with your endeavors!

Speaking of resourcefulness, things turned out on my row trip, too. That evening, I crossed the beach at Lees Ferry and casually mentioned my plight to a friendly motor guide. "No problem," he says. He has a spare sheet and an extra Hydroflask. "Hellz yeah," I say. And the hat? Crazy how the universe conspires to help; my trip leader's sweetheart showed up for the night with a stack of hats for sale! I love this community—one need only ask and you can come out on top.

It's this spirit of support the Whale Foundation strives to emulate, as our namesake, Curtis Hansen did for so many years in Grand Canyon.

John Napier
EXECUTIVE DIRECTOR,
WHALE FOUNDATION

2018 Kenton Grua Memorial Scholarship Winners



Owen Ludwig, AZRA—
Welding Course at
Coconino Community
College



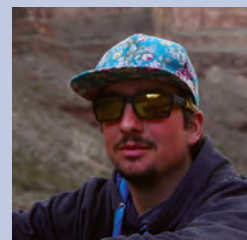
Chelsea Taylor, ARR—
MA in Psychology
Sciences at Northern
Arizona University



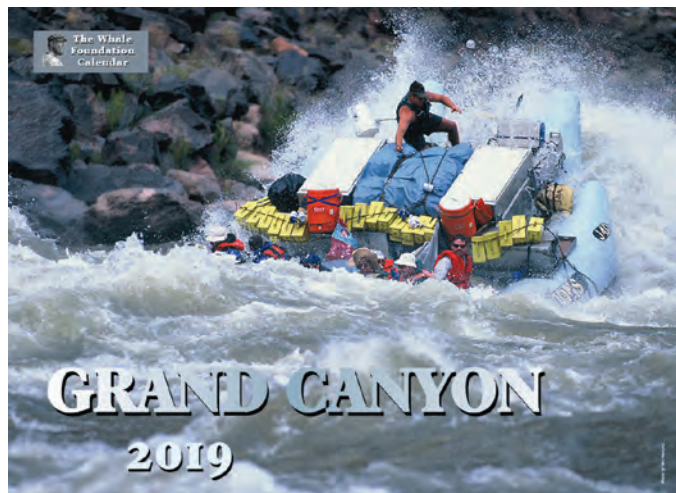
Riley Weathers, ARR—
Business Degree,
Northern Arizona
University



Meredith Dahle, Outdoors
Unlimited—Physician
Assistant Master's, Pacific
University



Weston McCue, Tour
West—Medical School,
University of Hawai'i



It's Calendar Time!

THE WHALE FOUNDATION'S 2019 Grand Canyon Calendar will be available for order October 1st. Featuring guides in the throes of whitewater, it's sure to be a hit! Go to our merchandise page at www.whalefoundation.org to purchase.

Heads up!—New Email Address for GCRG and Other Related Changes

GCRG HAS HAD THE SAME EMAIL ADDRESS for about the last twenty years or so, but it is finally time for us to modernize and host our email through our domain. We're in that transition now, so please make note that Grand Canyon River Guides' new email address will be: info@gcrg.org.

GCRG will also be changing the way we reach out to our guide, general member and outfitter email lists for group emails. We can no longer simply "bcc" everyone with our mass emails because they tend to get marked as spam, and that in turn, adversely affects the reputation of our ISP. Consequently, GCRG will be moving to an established email newsletter platform whenever we need to distribute group emails because it is the only way we can reach large numbers of people at one time.

So, onwards and upwards! Here is what you can do to help with this transition:

- Most email clients provide a safe (or trusted) sender or whitelist option for trusted contacts in your email address book. Please add our new "From" email address to your email address book to help our messages bypass filters and reach your inbox.
- If you have been getting our email blasts in the past, we will automatically include you in our Subscribed list going forward since we assume that you would want to continue to receive them.
- If you get either regular emails (or the email

newsletter) from GCRG, and do not wish to receive them, please *do not* mark them as spam. Again, that can really harm our ability to send future emails (not just to you, but to others as well) if our ISP's reputation is harmed. If you do not wish to receive email from us, please just let us know, or in the case of the email newsletters, there will always be an Unsubscribe option for you to use if you wish to no longer be on our list.

- If you are not already on one of our group email lists and would like to subscribe, just go to the right-hand side of our website homepage, www.gcrg.org and click on the link that says "Join the GCRG Email List." It's a great way to stay informed about a myriad of things such as dam flows, updates on pertinent issues that pertain to Grand Canyon and the Colorado River, info on our Guides Training Seminar or other river-related events, action alerts, etc...If you want to get dialed in to what's happening on the Colorado River and with GCRG, this is the way to do it!

We will keep our old email address for a while until we feel comfortable in shutting it down, but please take note of our new email address, info@gcrg.org, put it in your email address book as a Trusted Sender, and start using it. Thanks for supporting and welcoming GCRG's outreach efforts, and we will "see you in cyberspace!"

Fall Rendezvous 2018

GOTTA FESS UP. We have no plan, yet. But we're working on it! As you can imagine, planning anything is pretty tough in the summer months when everyone is on the river. Go figure...

Will we do a Verde float? Will we do a "behind the scenes" tour of the Museum of Northern Arizona collections with Dr. Larry Stevens (who happens to be the Curator of Ecology at MNA, as well as the Director of Springs Stewardship Institute). Guess you'll have to wait a while longer to find out while we nail things down.

Guides will get a Fall Rendezvous postcard in the mail, but the event will be open to anyone who is interested. We will post details on the Fall Rendezvous page of our website, www.gcrg.org when available. Look under Guide Resources on the left-hand side bar.

Whatever we do, it will be fun and interesting, and you should join us!

Financial Fitness for 2018

RIVER SEASON IS WINDING DOWN. You're nursing your battered body and relationships back to health. How about applying that same energy to your finances? Here's two things you can do this month to bolster your financial health:

CHECK YOUR FEDERAL INCOME TAX WITHHOLDINGS

File this under boring but important. With the advent of federal tax "reform" and lower rates for 2018 (passed by your Congress and President last December), withholding formulas used by employers were revised. Many of you have noticed a steep decline in your federal income tax withholdings, which translated into higher paychecks. That's nice. But what might not be nice is getting a nasty surprise when you file your 2018 tax return next spring and end up owing a chunk. And possibly an underpayment penalty on top of it. Ouch!

The IRS and financial advisors are very concerned that this will be the case for many taxpayers this year, especially those on the lower end of the earnings scale. It's an even bigger risk for taxpayers that work multiple part-time jobs (like lots of river guides do) and those who have self-employment or subcontractor income (like lots of river guides do).

So do a withholding check-up now. That will give you time to ask your employers to withhold more for the rest of the year, or for you to set aside some savings, should you need it next April 15TH. The IRS has developed an online calculator (free, of course) at www.irs.gov/individuals/irs-withholding-calculator. You can also look at your latest paycheck stubs and compare the cumulative federal income tax withheld (not Social Security or Medicare taxes) as a percentage of your gross wages to date. Compare that to the actual percentage of federal income tax liability calculated on your 2017 tax return, as compared to your gross 2017 earnings. Or ask your tax advisor to assist you. It can get a little messy.

Still confused? After all, this is all just estimates based on estimates. Congress hasn't even finished diddling around with the tax law. Do yourself a favor and start setting aside some additional savings now (hello tip money), just in case you get a nasty surprise at tax return time. If you don't need to send it to Uncle Sam, you can do something really productive with it, like...

CONTRIBUTE TO YOUR IRA

If you haven't already contributed to or maxed out your IRA (Individual Retirement Account) for 2018, it's time. Contribution limits for 2018 are \$5,500 per individual (\$6,500 for those fifty and older).

There are two basic types of IRA's—a traditional and a Roth. Here's a simplified explanation: A traditional IRA allows most taxpayers to deduct this year's contributions from your taxable income on your tax return, but everything in your account once you start taking retirement distributions will be subject to income tax. A Roth IRA (which we usually prefer) doesn't allow current year deductions, but once you start taking retirement distributions, everything in the account will be tax-free. Nice! There are other benefits as well—ask your tax advisor.

You are likely eligible to make IRA contributions, even if you participate in an employer plan like a 401k or 403b, however it does depend on your household's "adjusted gross income". If you have self-employment income, you may be eligible to contribute significantly higher amounts through a solo 401k plan.

There's a host of other rules and complications—you can ask your tax advisor or visit www.irs.gov/retirement-plans. If you haven't started an IRA yet, it just takes a few minutes—either at your bank or online at investment firms such as Vanguard, Schwab, Fidelity, etc. You fill out a form, you pick a few funds to invest in and you write a check.

Ready to make a full commitment? Sign-up to have automatic monthly contributions transferred from your checking account, so you don't have to think about it. Smart! Not quite ready for that? You have until April 15, 2019 to finish making your 2018 contributions. Just get started. Even contributing \$500 or \$1000 for this year gets you on your way and will feel great.





The mouth of Kanab Creek from the top of the Redwall. © Kristen Caldon

The Grand Canyon Is Not For Sale

IF EVER THERE WAS A QUESTION about whether uranium mining poses a risk to the environment and human health, the people of the Colorado Plateau can set the record straight. Hidden amongst the beauty of this region—from the Grand Canyon, across the Navajo Nation, and the bluffs of southeastern Utah—is a toxic legacy; a legacy from a time when uranium mining boomed and then busted and in some cases tried to come crawling back again.

While hundreds of uranium mine sites remain in need of cleanup, endangering public health and water supplies to this day, clarity is still lacking on whether or not new uranium mining can be done more safely. This is especially true near the Grand Canyon, where substantial groundwater, soil and vegetation research is needed to better understand the pathways by which freshly exposed uranium could find its way into the ecosystem, our waterways, and the human body.

Except for the occasional blip, uranium prices have been depressed for decades; a result of a flooded global uranium market that has tamped the need for newly mined uranium.

But in 2007, a sudden, but brief spike in uranium prices brought a wave of thousands of new mining claims to public lands adjacent to Grand Canyon National Park. It was then that a broad coalition of tribes, organizations, elected officials, businesses and individuals came together to urge the Department of Interior to protect the region from the risks of new uranium mines. The federal government heard those voices loud and clear.

In 2012, after a multi-year public process, then Secretary of the Interior, Ken Salazar instituted a twenty-year ban on new uranium mines on one million acres of public lands on the north and south rims of the Grand Canyon. The purpose of the ban was to allow more time for necessary research to be conducted so that more informed decisions could be made about uranium mining in the future. The ban prevents new mining claims while allowing any existing claims that meet specific standards to move

ahead. Only one mine has so far been determined by the U.S. Forest Service to meet those standards, and that's Energy Fuels' Canyon Mine, located on Forest Service land just six miles as the crow flies from the south rim. The Havasupai Tribe, the Grand Canyon Trust, and partner organizations have sued the Forest Service to challenge that determination. Meanwhile, the mining industry sued the Department of Interior in an attempt to overturn the mining ban. The Grand Canyon Trust and others intervened in that case on behalf of the Interior Department and the mining industry has lost the case twice so far; once before the Arizona District Court in 2014 and again before the Ninth Circuit Court of Appeals in 2017. Today, industry hopes the U.S. Supreme Court will agree to hear its appeal and we expect to know more about whether or not it will, early this fall.



THE ERA OF TRUMP

The industry-sympathetic actions of the Trump administration during the first half of Trump's presidency have sewn a lot of uncertainty and alarm for the communities and organizations that want to see the Grand Canyon protected. They wonder if Interior Secretary Zinke or President Trump himself will try to lift the twenty-year ban before its expiration in 2032.

One indication that an attack on the ban could be on the table came in December of 2017 when President Trump signed Executive Order 13817. That order is aimed at creating a new list of critical minerals and then forming a strategy around streamlining developers'

Photo Credit: Arizona Wildlife Federation.

access to those minerals. The resulting updated list was finalized by Secretary Zinke in May of 2018 and includes uranium. This is despite the fact that a critical mineral is defined as a “non-fuel mineral or mineral material” and uranium has historically and predominantly been considered a fuel mineral. It’s now up to the Department of Commerce to determine a strategy for streamlining access to uranium and other minerals on the list and it’s possible that prematurely lifting the Grand Canyon mining ban could be part of that strategy.

In June, Arizona sportsmen’s groups put up billboards along Interstate 17 near Phoenix asking the public to urge Secretary Zinke, who takes pride in his identity as an avid sportsman, to protect the Grand Canyon from uranium mining. The Interior Department caught wind of the billboards and responded with a chastising tweet expressing “disappointment” that the groups would “waste” valuable conservation dollars on such a thing. The tweet added: “The Secretary has no intention to revisit uranium mining in and around the canyon and has made exactly zero moves to suggest otherwise.” The groups, as well as the Coconino County Board of Supervisors and members of Arizona’s democratic congressional delegation immediately sent follow up letters to Secretary Zinke. The letters expressed thanks for the tweet and asked for a formal confirmation that the Grand Canyon mining ban would remain. Neither Secretary Zinke nor the Interior Department has yet responded.

But the Interior Department is not the only agency with sway over the mining ban. Another red flag was raised in mid July when—in response to a petition filed in January by two internationally controlled, U.S. subsidiaries of uranium mining companies (Energy Fuels Resources and Ur-Energy)—the Department of Commerce announced it was opening an investigation into whether or not the U.S. should impose quotas on uranium in the interest of national security. Such a move, as requested by the mining companies, would require U.S. nuclear power reactors to purchase at least 25 percent of their supply from U.S. mines. It would additionally require federal agencies to purchase 100 percent of their uranium supply from U.S. mines.

WHY DOES A QUOTA MATTER?

Remember that flooded global uranium market I mentioned? Imposing quotas would circumvent the global market and drive up the price of domestic uranium, effectively subsidizing private mining companies’ ability to mine from our public lands. The mining companies’ petition states: “Under the

25 percent quota, prices increase \$21 per pound in 2018 and \$32 per pound in 2022... which translate to a 69 and 104 percent increase in domestic prices respectively.” And earlier this year, Energy Fuels’ president told an audience at an investor conference that if the companies’ requests were granted, “that could change our business overnight.”

Those higher prices combined with the blessing of a label like “in the name of national security” could add pressure to lift the Grand Canyon mining ban, especially since the Grand Canyon region is home to some of the highest grade uranium in the country (though it’s much lower than other uranium deposits globally).

This private profit would be made in the name of stabilizing the electrical grid and ensuring uranium supplies for our defense needs. But guess what, the nuclear power industry and defense experts say a uranium quota is unnecessary and even harmful to those sectors. The day the Commerce Department announced its investigation, the nuclear industry released a report explaining that quotas would drive up the industry’s costs by \$500–800 million dollars and force the closure of even more reactors. At present, more nuclear reactors are closing domestically than are being built. In 2016, the U.S. had 104 reactors and in 2017, that number had declined to 99. Additionally, defense experts, including at the Department of Energy, have said that uranium supplies are sufficient to sate our defense demands through 2060. So it seems the only security that quotas would actually protect is the financial security of uranium mining companies and their executives.

The public has until September 10TH to submit comments to the Commerce Department regarding its quota investigation. Comments can be submitted online at <https://www.federalregister.gov/documents/2018/07/25/2018-15891/notice-of-request-for-public-comments-on-section-232-national-security-investigation-of-imports-of>.

The fight is long from over, but with your help, we can continue to spread the word that the Grand Canyon is not worth anyone’s monetary profit, neither is it worth sacrificing under the façade of national security. We are Americans and we’re proud of it, which is exactly why we won’t stand for private, often internationally controlled companies taking advantage of an energy-focused administration to make a quick dollar on one of America’s crown jewels. The Grand Canyon isn’t for sale.

Amber Reimondo
GRAND CANYON TRUST

Book Review

The Grand Canyon: Between River and Rim, PETE MCBRIDE, Rizzoli New York, 2018, 236 pages, ISBN: 978-0-8478-6304-4, \$50.

AMONG US THERE ARE PEOPLE who paint and there are true artists; there are ones who write and true writers; there are those who take pictures and there are true photographers.

This couldn't be more evident in attempting to capture the essence of a landscape, especially on film. The masters in this craft are easily separated from the amateurs. Yet even for a master of photography, attempting to reinvent the Grand Canyon picture book using exclusively his own photos is, at the bare minimum, incredibly audacious. Perhaps even more outlandish is getting a publisher to jump on board. *Why?* Millions and millions, even billions of photos, have been taken of this place. This optical cornucopia

has given birth to a smorgasbord of Canyon picture books over the years, scattered on coffee tables across the globe. Plus, here in the 21st century, digital cameras, iPhone cameras, and Photoshop have made better "picture takers" of us all. So, how do a single photographer and his publisher both come to believe his stuff is worthy of yet another Grand Canyon picture book? That photographer must be *really* damn good and have something *really* original to deliver.

Pete McBride is that damn good and his stuff is that original.

To put it simply, his new book *The Grand Canyon: Between River and Rim*, is the masterpiece of its genre. Years in the making, it chronicles the fourteen-month, nearly 800-mile epic journey through the Canyon that McBride made along with writer and buddy, Kevin Fedarko. The odyssey started innocently enough as a simple assignment for *National Geographic*, one



with a laudable goal: walk the entirety of Grand Canyon below the rims, record the journey with film and words, and use the collective imagery to deepen awareness of serious threats to the Canyon looming ahead. At the time, only a couple of dozen people had walked the entire length of Grand Canyon. Of those, none had photographed the journey in earnest, and none were professional photographers. Massive in scope and unprecedented, it was a potential magnum opus for a Grand Canyon photographer. Even better, it was one with redeeming purpose. Despite having no Grand Canyon backpacking experience, McBride and Fedarko jumped at the opportunity.

In the fall of 2015, with backpacks bulging and a heap of naivety, they headed downstream from Lees Ferry. Five days later they staggered out, completely trashed in spirit and body. Fedarko's feet were hamburger; McBride was sick from low-blood sodium. A vicious Canyon spanking left them soul-searching. Daunted but determined, they returned three weeks later.

Award-winning and internationally recognized from outdoor film work in 75 countries, even McBride was overwhelmed by the task at hand. The pressure was on, physically and professionally. As he notes in one of his essays in the book, "Considering this park is the most photographed canyon in the world, fighting redundancy, cliché imagery plagues my mind as much as our hunt for water." Hunt he did, for precious water and photo-ops. 60,000 pictures, 150 days and countless potholes later, his thirst was quenched.

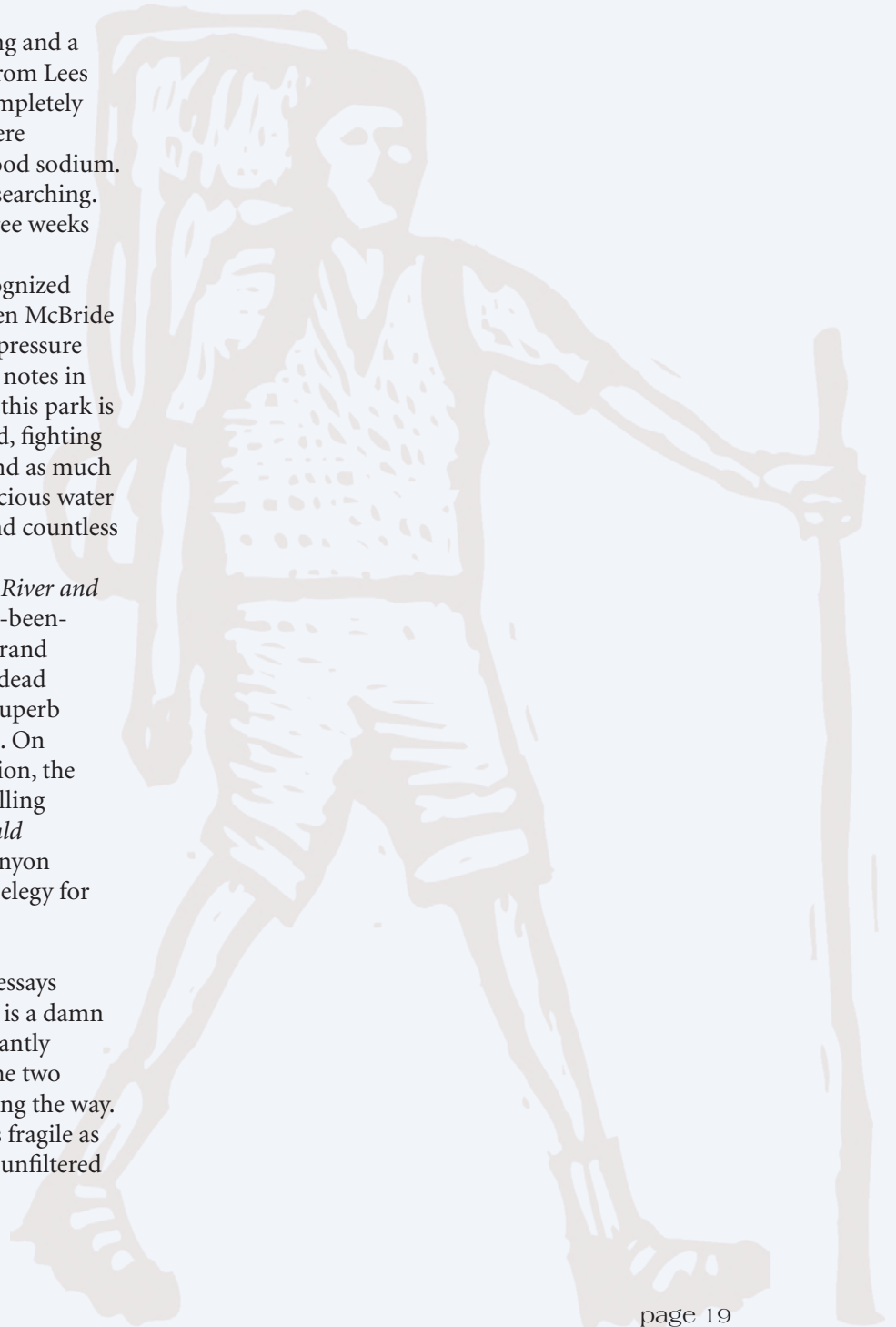
As a result, *The Grand Canyon: Between River and Rim* is the mother lode of marvelous, never-been-seen-before shots from no-man's-land in Grand Canyon. The book jumpstarts with a drop-dead gorgeous cover. Momentum builds with a superb foreword by *Outside* editor, Hampton Sides. On his heels is Fedarko. In a timeless introduction, the gifted author of the *New York Times* best-selling book and Grand Canyon classic, *The Emerald Mile*, Fedarko delivers a stirring plea for Canyon conservation, summing the book up as "an elegy for an incomparable landscape."

What follows is McBride's mind-blowing photography and his humble, self-effacing essays describing the journey. Turns out, McBride is a damn good writer as well. Indeed, McBride poignantly portrays "profound silence" as the first of the two greatest Canyon treasures he discovered along the way. "The second treasure," he says, "that feels as fragile as the umbrella of emptiness around us is the unfiltered and undiluted night sky."

In the end, the content leaves no doubt that Grand Canyon is worthy of an unyielding, unceasing fight for salvation, and McBride's book, like the overwhelming silence and the nocturnal skies he so eloquently depicts, is one more Grand Canyon treasure.

Tom Myers

NOTE: Proceeds of the book benefit the nonprofit Grand Canyon Association.



Important Conservation Milestones Reached for Native Fish Conservation in Grand Canyon

ON MAY 14, 2018, NATIONAL PARK SERVICE fisheries biologists, in cooperation with the Bureau of Reclamation and U.S. Fish and Wildlife Service, released 120 endangered humpback chub into Bright Angel Creek following six years of successful suppression of nonnative brown trout and rainbow trout throughout the stream. This effort follows successful translocations to Havasu Creek, where a reproducing population has been established. These are important milestones in the long-term recovery of the species through the establishment of additional

spawning populations outside of the Little Colorado River, and reduction of threats due to predation by, and competition with, nonnative trout within Grand Canyon. Such conservation actions offer a template for nonnative species control and endangered fish recovery throughout the Southwest.

The humpback chub, an endangered fish species endemic to the Colorado River Basin, evolved in the pre-dam Colorado River subject to frequent disturbances due to drought and flooding, high turbidity, and seasonally variable temperatures



NPS fisheries biologists releasing the first humpback chub in Bright Angel Creek. Photo credit: Elizabeth Byrley/NPS photo.



NPS fisheries biologists releasing the first humpback chub in Bright Angel Creek. Photo credit: Elizabeth Byrley/NPS photo.



Snorkeling with adult Havasu Creek humpback chub in Grand Canyon. Photo credit: Robert Schelly/NPS photo.



NPS fisheries biologists releasing the first humpback chub in Bright Angel Creek. Photo credit: Elizabeth Byrley/NPS photo.

ranging from near freezing to more than 80 degrees F. Extensive dam construction and flow regulation has accelerated the establishment and proliferation of many species of introduced nonnative fishes, most of which evolved in more stable and predictable systems than the pre-dam Colorado. These human-induced changes to the Colorado River ecosystem, and other arid river systems across the Southwest, have led to a high degree of imperilment for our native desert fishes. Nevertheless, the largest remaining humpback chub population in the world is found in the Grand Canyon.

Following years of monitoring and research quantifying the impacts of nonnative trout on the native fish community in Grand Canyon and elsewhere, intensive nonnative fish control efforts were directed at Bright Angel Creek, the primary source of brown trout production in Grand Canyon. Brown trout are known to reach large size and prey on native fishes where they are introduced, and impacts are documented across the globe. In Bright Angel Creek, the reduction of brown trout and rainbow trout populations by approximately greater than eighty percent has resulted in rebounds in native fish populations, increasing the likelihood of survival of translocated humpback chub. This marked reduction in trout abundance extends into Colorado River reaches above and below Bright Angel Creek, reducing nonnative predation pressure and benefitting humpback chub and other native fishes in the main channel as well.

Through May of 2018, monitoring by NPS biologists in Havasu Creek confirms annual reproduction and recruitment of the translocated population, indicated by the growing number of juvenile humpback chub

found. This population has been subjected to a natural regime of annual and intense monsoonal flooding, but their abundance has been sustained. Fisheries biologists will continue to monitor the Havasu Creek population, as well as those released into Bright Angel Creek, twice per year. Nonnative trout will continue to be removed from Bright Angel Creek during the fall and winter months, but at a reduced level that maintains the low numbers. To assess growth and survival of translocated fish, each humpback chub was tagged with a small micro-chip, similar to those used in household pets. Upon first capture, any newly found fish spawned in the creeks also receive tags. An antenna system was also installed downstream of the Bright Angel Campground to detect movements of tagged humpback chub and other fishes in and out of Bright Angel Creek.

There are no fishing restrictions at Bright Angel or Havasu creeks related to translocation activities. Anglers should be familiar with the identifying characteristics of humpback chub and other native fishes to avoid any accidental harvest of these endangered or protected fishes. If any native species are incidentally caught, they must be immediately released unharmed.

Additional information on humpback chub translocations and Grand Canyon National Park's fisheries program is available online at <http://www.nps.gov/grca/naturescience/fish.htm>.

*Brian Healy, Robert Schelly,
Emily Omana Smith, & Rebecca Koller*



What's that Stench??

IN 2012, A BOATER ON A PRIVATE river trip sent me a photo from 220-Mile camp of a black-and-white animal with the question ‘What exactly is that?’ It was pretty obvious that it was a hog-nosed skunk (*Conepatus leuconotus*), but verified with NAU’s mammologist Tad Theimer that this was indeed what we were looking at (Figure 1.) What was significant about this particular photograph was that hog-nosed skunks had never been documented in Grand Canyon before. The least studied of the American skunks, hog-nosed skunks are black with a completely white back and tail, with a hairless snout and long claws used for rooting. Hog-nosed skunks look similar to badgers, and are sometimes referred as badger skunks.

The distribution of hog-nosed skunks have ranged as far north as Colorado down throughout the southwestern u.s. including southern Arizona, New Mexico, and Texas, and as far south as Costa Rica (Dragoo and Sheffield 2009). Evidence, however, suggests that hog-nosed skunks have declined in recent decades, with the northern most extent of its range shrinking due to habitat loss. The species has likely disappeared from Colorado and northern New Mexico, and have dramatically declined in Texas (Cuaron et al. 2008). The current extent of hog-nosed skunks in Arizona is concentrated in the southeast region of the state, with more limited observations in the central and western part of the state. Across their geographic range, hog-nosed skunks can occupy a variety of habitats from low-lying desert-scrub to mixed conifer forests up to 2700 meters (e.g. the Pinaleno Mountains of southeastern Arizona), occurring in canyons, stream sides, and rocky terrain. Given their adaptiveness, it is not too surprising that hog-nosed skunks would eventually drop into the Grand Canyon.

Building from citizen-science reporting of a hog-nosed skunk at 220-Mile (Figure 1), and then another photo-documentation in 2013 at Pumpkin Springs (Figure 2), we developed a camera-trap study to further document this newly revealed meso-predator along the Colorado River through Grand Canyon. With

funding provided by the Grand Canyon Association, we deployed 21 passive infrared cameras along a sixty river mile stretch of the Colorado River to determine baseline abundance of hog-nosed skunks and refine the population status of this regionally declining species. Cameras were set to record animal presence 24 hours a day and were deployed for fifteen months (June 2015–September 2016) to capture seasonal movements or variations in distribution. We deployed one remote camera approximately every two to three river miles beginning near river mile 178 and ending near river mile 238, along both river sides. Camera locations were informed by suspected hog-nosed skunk habitat in rocky outcroppings, burrowing activity in dense tamarisk thickets, and animal sign such as tracks, pelt remains, or scat.

After over a year in the field, cameras captured hog-nosed skunks at 17 of 21 (81 percent) camera traps across a 55-mile stretch between river miles 181 and 236, with most detections occurring on river left. Hog-nosed skunks were active year round, with no discernible seasonal period/s of inactivity. Detections were highest during summer/monsoonal periods, although not significantly, indicating that an adequate prey base is available along the river corridor on a year round basis. Although skunks in general are primarily nocturnal, hog-nosed skunks are known to forage during the day. In Grand Canyon, hog-nosed skunks appear to be most active during the night, with about 96 percent of camera detections of hog-nosed skunks occurring at night, or during crepuscular hours of dusk and dawn. Less than five percent of detections occurred during daylight, which may explain why hog-nosed skunks were not reported in Grand Canyon until five years ago. Because of their cryptic nature of burrowing during the heat of the day, and divergence between hog-nosed skunk and human activity patterns, these skunks may have plausibly been long undetected by humans in the Grand Canyon’s remote and rugged environment.

So, how many are there in Grand Canyon? This is generally the number one question any wildlife



Figure 1



Figure 2

Figure 1. The first documentation of an adult hog-nosed skunk in Grand Canyon photographed at 220 Mile Canyon in summer 2012. Photo credit: Jen Hiebert.

Figure 2. Photo-documentation of a juvenile COLE at Pumpkin Springs on river left in summer 2013. Photo credit: Ariel Leonard.

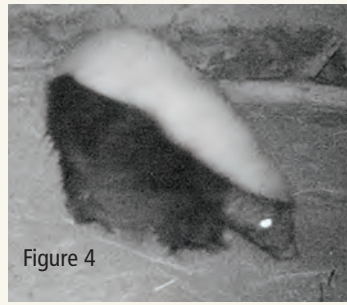


Figure 3. A hog-nosed skunk camera-trapped in September 2015 near river mile 198 along the Colorado River through Grand Canyon. Photo credit: NPS, Brandon Holton.

Figure 4. A hog-nosed skunk camera trapped near river mile 181 along the Colorado River through Grand Canyon. Note: This animal is the farthest upriver documented hog-nosed skunk. Photo credit: NPS, Brandon Holton.

biologist gets regardless of what species they are studying; and of course, the number one answer is usually “we don’t know.” Most of the hog-nosed skunks camera-trapped were adults, but individual skunks could not be reliably identified. In addition, home range size and movements of hog-nosed skunks are not well documented in other canyon systems. Nonetheless, based on distances between camera-traps in this study and the limited home range size reported from other hog-nosed skunk ranges, most of the adult skunks detected at different camera-traps are likely different individuals. Even though an accurate population estimate of hog-nosed skunks is currently elusive, the distribution along the canyon bottom is surprisingly wide, and perhaps expanding upriver. Hog-nosed skunk observations have not been reported above Lava Falls, so please keep your eyes open and report any sightings. Our next steps might be to use genetics garnered from feces to develop a population estimate, similar to the on-going effort to determine the Canyon’s bighorn sheep population size.

Genetics can also help identify relatedness to other hog-nosed skunk populations, and determine where these skunks dispersed into the canyon from. Prior to the discovery of hog-nosed skunks in Grand Canyon, the northwestern-most record of hog-nosed skunk was reported in the Hualapai Mountains north of Kingman, AZ and about 35 km to the southwest of Grand Canyon. Hoffmeister (1986) suggested that hog-nosed skunks in Arizona may be expanding their range and increasing in abundance in the northwestern part of the state, but were absent from his 1971 account “Mammals of Grand Canyon.” Conceivably, hog-nosed skunks have expanded their range gradually to the northwest, and have inhabited the Grand Canyon long enough to establish a seemingly healthy breeding population, with adults, juveniles and kits (skunk babies) documented on both sides of the river. Considering the reported range contractions of hog-nosed skunks in the southwestern U.S., protected ecosystems like Grand Canyon serving as relatively new refugia highlights the importance of maintaining functional connectivity across large southwestern landscapes.

Regardless of exactly how and when hog-nosed skunks started inhabiting the Grand Canyon, they join a diverse cadre of other terrestrial predators that prowl the canyon bottom. Hog-nosed skunks are known to overlap with other skunk species, including striped and spotted skunks. Spotted skunks, the more common skunk species found in the Canyon, and hog-nosed skunks routinely overlapped at camera-traps, but likely focus on different prey resources. Although spotted skunks to some degree incorporate insects into their diets, hog-nosed skunks primarily feed on insects, but may also be opportunistic feeders that prey on small vertebrates as well (Dragoo and Honeycutt 1999). The dense vegetation routinely found along the river’s edge likely harbors some of the highest abundance of ground dwelling insects, potentially providing a rich food base for a rooting carnivore such as hog-nosed skunks. Hog-nosed skunks are also sharing their newly occupied habitat with ringtails, raccoons, gray fox, coyotes, bobcats, and mountain lions, all of which were camera-trapped at locations occupied by hog-nosed skunks.

Before 2012, hog-nosed skunks were an unknown in Grand Canyon. Since, we have been able to not only determine that hog-nosed skunks are dispersed along fifty-plus miles of canyon bottom through the Grand Canyon, but have documented these mysterious skunks for the first time to the north and west of the Colorado River. Prospectively, hog-nosed skunks have inhabited Grand Canyon for considerably longer than reported. The remoteness of the Grand Canyon, the relatively low human visitation, and the cryptic life history of hog-nosed skunks have likely concealed this carnivore. Skunks typically are not considered charismatic wildlife, and therefore hog-nosed skunks may not have been reported with particular zest, or perhaps misidentified or overlooked as just another skunk. I like to think however that hog-nosed skunks have been living among the canyon creatures, wildlife and humans alike, for a long time, lurking in the shadows and competing with pallid bats for scorpions.

Brandon Holton
WILDLIFE BIOLOGIST AT GCNP

Bats, White Nose Syndrome, and Caves

GRAND CANYON HAS ONE OF THE highest diversities of bat species of all National Parks, including at least 22 of Arizona's 28 species, from the smallest Canyon bat to the largest Mastiff bat. This diversity of bats is largely attributed to the Canyon's distinct biological life zones situated along 5000 feet of vertical relief from the canyon rims to the Colorado River below. However, white nose syndrome has killed millions of cave-dwelling bats across the continental U.S., and could threaten this great diversity of bats if it arrives here. Grand Canyon wildlife biologists are using acoustic detectors, capture techniques, and surveying for hibernating bats throughout Grand Canyon to better understand the bat life histories, behaviors, distributions, and health conditions, in order to better understand the threats and implications of white nose syndrome to this superlative array of bat species.

White nose syndrome is caused by an invasive fungus called Pd (*Pseudogymnoascus destructans*) that thrives in some cave environments. The hardy fungal spores will attach to hibernating bats, reproduce, and irritate bats. This irritation causes bats to arouse, disrupting hibernation and causing bats to burn through critical energy stores, and perish. Approximately one quarter of bat species in the United States and Canada are believed to hibernate almost exclusively in caves (Tuttle and Taylor 1994). With at least eleven species of bats in Grand Canyon hypothesized to be cavern-dwelling bats, half of our bats may be susceptible to Pd invasion and developing WNS. Primarily spread from bat to bat, human activities have also been implicated to contribute to the introduction and spread of Pd (Leopardi et al. 2015). Pd spores can be transferred between caves

by hitching rides on clothing and backpacks. If not decontaminated <https://www.whitenosesyndrome.org/mmedia-education/united-states-national-white-nose-syndrome-decontamination-protocol-april-2016-2>, Pd can be transferred to clean caves and infect roosting bats, and cause white nose syndrome. National Parks can particularly susceptible, as visitors come from all over the country and routinely travel from park to park, including many of the eastern and mid-western Parks where white nose syndrome has already established.

Even in the current absence of white nose syndrome in Grand Canyon, cave roosting bats are still exceptionally vulnerable to human disturbance in their nursery and hibernation caves. These cavern-dwelling bats can die a result of inadvertent disturbance by recreational cave explorers who do not realize the consequences of their actions. Human activity at cave roosts may lead to abandonment of the roost or unnecessary expenditure of crucial energy reserves. In Grand Canyon, Townsend's big-eared bats (*Corynorhinus townsendii*) are extremely sensitive to disturbance at roosts sites, particularly during the reproductive season and during hibernation. When hibernating, bats must conserve energy until insects are once again abundant. A single disturbance during hibernation can cost a bat over sixty days of stored fat reserves (Thomas, et. al., 1990).

All caves accessible along the river corridor through Grand Canyon are closed to protect sensitive cave resources including bats. Bats need our help. Please spread the word about how the river community can protect Grand Canyon's invaluable bat diversity.

Brandon Holton & Sarah Ciaracchi

Bat Encounters Along the River

BAT ENCOUNTERS, defined as any physical contact between a bat and a person, are rare but do occur. Although echolocation is a finely tuned evolutionary trait, bats have occasionally flown into people. If you are a little brown bat, capable of catching more than 1,200 mosquito-sized insects in an hour, mistakes can be made. However, waking up with a bat on your chest or face in the middle of the night can be a bit frightening. Reports of this happening in Grand Canyon again are rare, but have occurred a couple of times over the past few years. In 2014, near

Granite camp, a private river runner awoke to a bat on his face. The bat was collected and tested positive for rabies. Earlier this year at Parashant camp, a river guide and two passengers on a commercial trip awoke with a bat crawling on them. The bat was not collected so rabies could not be confirmed, but is highly suspect. In both cases, everyone with confirmed or possible contact with the bat received post-exposure rabies prophylaxis.

Although bats serve as one of the primary reservoir species for rabies (in addition to raccoons, skunks, and

foxes), surveys of natural populations of bats suggests that rabies prevalence is around or below one percent across all bat species. Typically rabid bats exhibit abnormal behavior such as crawling on the ground or appear to be weak and docile. However, we rarely see this, and instead observe the other 99 percent of healthy bats flying throughout the Canyon providing valuable ecosystem services such as pest control and pollination. Still we wonder about that one percent, and rightfully so given the fatalistic repercussions of contracting rabies. But with only one to three cases reported annually in the U.S., the odds of contracting rabies are extremely low. This however doesn't mean that precautions cannot be made. The first thing that bats do after roosting all day is to get a drink of water, and may continue to drink in between insect foraging bouts. Meaning, river camps are in the hotspot of bat activity typically all night long. If this makes you uneasy, sleep in a tent. If your buddy gives you grief for not sleeping outside, be sure to black-light the scorpions around his sleeping pad. Fear not though, the scorpion-eating pallid bats will probably have his back.

Wildlife biologists want everyone to love their species of interest as much as they do. Bats can sometimes be a hard sell though. I have talked with a handful of folks from both the river community and disease specialists about the recent encounters at Parashant. Although I sense this was a rare and isolated occurrence, and Parashant and all river camps are safely inhabited by healthy bats, I cannot be certain. This fall, I'm hoping to head down to Parashant to capture and sample bats as part of a bat encounter risk assessment. I want everyone to feel safe on the river, especially the stewards that help protect this place. If you observe any suspicious bat behavior or have any concerns about bats or specific locations along the river, please give me a call.

Currently we are developing information sheets concerning bat encounters that will be provided to both commercial outfitters and private boaters. If you do have an bat encounter, please contact a Park Official and a Public Health Officer.

- Brandon Holton, Wildlife Biologist, Grand Canyon National Park, 928-638-7752;
- Don Hoeschele, NPS Office of Public Health, 928-638-7355;
- Dr. Maria Said, NPS Office of Public Health, 202-513-7151;
- Dr. Danielle Buttke, NPS Office of Public Health, 970-267-2118.

Brandon Holton

What Should I Do If I Come Into Contact With A Bat?

- Less than one percent of bats have rabies, but bats that act strangely or contact humans are ten times more likely to have rabies.
- Humans can get rabies by exposure to bat saliva through a bite or scratch.
- Rabies is 100 percent preventable in humans with medical care, but it's almost always fatal if untreated.
- If you had direct contact with a bat, you may have been exposed to rabies.

Remember the 4C's

1. COLLECT the bat for testing if you have been properly trained
2. CONTACT a park official and Public Health Officer.
3. CLEAN the area of skin with soap and water.
4. CONSULT your physician for medical care

The following resources can assist you (and your physician) in making decisions about the need for further follow-up: www.nps.gov/orgs/1103/rabies.htm

NPS Office of Public Health
Don Hoeschele
(928)638-7355, don_hoeschele@nps.gov

Dr. Maria Said
(202)513-7151,
maria_said@nps.gov

Dr. Danielle Buttke
(970)267-2118, danielle_buttke@nps.gov

Coconino County Public Health Office
Matthew Maurer
(928)679-7332 mmaurer@coconino.az.gov

Park official, Grand Canyon National Park
Brandon Holton
(928)638-7752, brandon_holton@nps.gov

That's Not a Bighorn...

WE ALL KNEW WE'D SEE a few more sheep down by the river this summer. After a winter of bad skiing, we always see more sheep down by the river (one of those weird, inexplicable correlations).

The high country was dry, and the animals were thirsty. Without any late winter storm to give them a little help, the creeks and tanks up on the plateaus dried up quickly this spring. I saw Will at Redwall at the beginning of May, and he said they were *already* hauling water out to the tanks at the Flying M. So, it was no surprise that during the first few months of the season, hundreds of sheep were down by the river already, conceding to have their picture taken in exchange for some precious water ("there must be a clause included for them in the Colorado River Compact..."). What *was* surprising, on that hot morning in early June, was the huge, odd-looking Bighorn crawling through the boulders above Badger Rapids that we saw.

I remember driving past the rustling in the trees, thinking "maybe no one noticed so I won't have to swing around for *another* bighorn picture." But as I looked over my shoulder on the way by, I saw that the assumed ram was actually a bear. The Cinnamon Black Bear isn't commonly seen in Arizona, let alone down at the river in Grand Canyon. In fact, the only other time I've even heard of someone seeing a bear down there was in March, 2005, down there above Parashant. The surprise wore off throughout the day, as everyone discussed the effects of the drought. In fact, we were all fully expecting a parched mountain lion to come waltzing through camp on its way to the river later that evening.

Upon arriving home, we encountered a few others with similar stories of the bear encounter by Badger. It seems it was enjoying some beach time for more than just a few days. And as I related the story to one friend of mine, he volleyed a question I apparently wasn't ready for. "Why didn't you wrestle it?!" And just like Captain John T. Hance, when asked what he did with all the dirt when he dug the Grand Canyon, I was speechless.

Dave Sherman



Photo credit: Thea Sherman

Photo credit: Ben Murphy



Photo credit: Ben Murphy

And That's Not a Bobcat...

IT WAS JULY 27, 2018—the second day of our trip. We left Lees Ferry on Thursday the 26th with a one boat chartered eight-day motor trip with GCE. My wife, Sandy, was swamping for me. That morning we hiked North Canyon, then cruised on down to Shinimo Wash to have lunch in the shade. After lunch we headed downstream, floating and talking about all the great interp in that stretch of the canyon.



Photo credit: Sandy Thevenin

We left the eddy at Stanton's Cave and pulled into the eddy at Vasey's to look at an almost-dry spring. While we were hovering in the eddy I asked Sandy to get her phone out and take a picture of Vasey's, because I had never seen it that low. As she got her phone out, I yelled, "Oh my God! There is a bobcat." It was walking down towards the river, right through the dead plant life where the water from Vasey's is normally flowing. It headed upstream and disappeared behind some rocks and plants. The next clear sighting of the animal was heading up the shoreline for that slickrock of Redwall Limestone, towards Stanton's Cave. At that point, we noticed that even though it was the size of a bobcat it had a long tail and its color was a light brown that I had seen in pictures. Then I realized, that is not a bobcat, it's a mountain lion! It paused to tease some raven's on the shore and then continued upstream and disappeared. I believe it was a juvenile mountain lion because of its size and it had dark brown tips on its ears. It had a really neat saunter as it walked, never taking the time to acknowledge our presence or even look at us. What a great place to see a mountain lion for the first time. So next time you are at Vasey's, keep your eyes open!

Art Thevenin





Isis Temple. © Kristen Caldon



The mouth of Bright Angel Creek. © Kristen Caldon



Blue Moon Bench. © Kristen Caldon

SHARON HESTER

I WAS BORN IN 1957 IN HEIDELBERG, GERMANY. My father was a military officer, and I moved fourteen times before I was twenty. My parents were originally from Texas. Everyone has nicknames in Texas—mine was Shay-Shay, so I shortened it to Shay. At least in the river world, I mostly use the name Shay. Other places, I tend to introduce myself as Sharon. I was naturally inclined to be outdoor-oriented. One of my biggest mentors in my childhood was my sixth-grade teacher, Mr. Paul Beard. He was huge in as far as teaching me about natural history. I'm a great lover of natural history, birds, and being outdoors. I rode horses from a young age, which I think boosted my athletic abilities and confidence. My parents got me a horse as a bribe for getting on the honor roll in eighth grade. It was pretty much all over from there on. I rode horses a lot, usually by myself, out in the woods, out in the mountains around north of Los Angeles. I would even ditch high school classes to go out riding by myself.

When I graduated from high school in 1975, I mentioned to my dad that I'd seen in *National Geographic* some river-running trips in the Grand Canyon, and suggested that maybe it could be something we'd do together. For my graduation present, he took my sister and me on a river trip through the Grand Canyon. I was eighteen. I'm not sure why my sister got to go, too. (laughter) The three of us went off on a twelve-day ARTA snout trip to Lake Mead. Looking back on it now, I realize it was pretty high water. Later on in 1990, when I moved to Flagstaff, I discovered living across the street from me, a couple that had been on the river trip with me—Capy and Blair Davis. It had been their honeymoon, and they had video of our trip, together from 1975. There wasn't *that* much footage of myself and my family, but there was enough. One of the things that I noticed early in the video I was rowing the snout right from the start at Lees Ferry.

QUARTAROLI: This is your trip as a passenger?

HESTER: I was a passenger. I had no recollection of rowing from Lees Ferry. I knew I rowed a lot on the trip. Apparently I could row pretty well—I was a strong girl. In the video, there I was rowing the snout and the head guide was standing behind me giving his spiel. I found that interesting as I had not remembered that at all.

QUARTAROLI: Who were your boatmen right from the get-go?

HESTER: Phil Town was the head guide, and Rob Elliott was on the trip; Bob McGavern, David Winn,

Boyce McClung. As I remember, McGavern got flown out at Phantom Ranch because he had been exposed to hepatitis, and Allen [Alvin] Joe Halliday got flown in. It was his [Halliday's] first trip rowing his own boat.

McGavern came back in to join our trip at Diamond, with a dog. It turned out he'd been *fired* before this trip, because he had allowed his assistant to kayak along on his previous trip, against orders. On our trip none of the passengers knew he'd been fired, but he still had to row the trip because ARTA didn't have anyone else. He was having so much fun that he rejoined the trip at Diamond, once he was released from the hospital. He paddled down and caught up to our trip in a kayak with a cocker spaniel sitting in the cockpit with him.

I was greatly interested in rowing, and apparently had the confidence and some ability to do it, because they let me row Unkar and some other rapids. I remember the guides trying to get me to row Lava (Q laughs), and them saying, "Really, you can row Lava. We'll get you right to the edge. Once you're in it, it's all luck." Of course I didn't believe them, but now I know that actually is pretty much true! (laughter) But at the time, as a guest on the trip, Lava had been really built up to a great height, and there was no way I was going to row it. Now, knowing what I know as a guide, I realize I probably *could* have rowed it just fine, especially in a snout.

QUARTAROLI: What fun!

HESTER: Yes! I was hooked, and decided by the end of the trip—raft guide was not on the high school career counselor's list—that's what I wanted to do. Our guides suggested going to California and learning how to row there. It turned out that the next summer, was the first great California drought in recent history, and the river companies that I applied at were shutting down and not hiring. So I decided then that I would try to start a career as a firefighter, a fireman, in San Diego County. That's where I was living with my father. I started going through the process, first aid, fire classes, for that next year. I'd done all the weight-lifting and the training I needed to do, several courses when, in 1978, I got a phone call from one of the companies in California asking if I wanted to come up and work. At first I said no, because I was already in the middle of this big new plan, but the more I thought about it—which was just basically overnight—I decided that if I didn't do it then, I'd probably never do it. I felt pretty comfortable that with my strength training and size that I would probably get the fire department job. But then



Snapshots from the first trip in 1975. Top: the kayaking cocker spaniel. Bottom: Sister Trina Hester, catching a ride from Bob McGavern below Diamond Creek.

I thought, “I’ll never be a river guide if I don’t do this now. I can always come back to firefighting.” Ha ha ha! I called the river company and asked if I could come on up and train as a guide in Northern California. My Dad drove me up, because I didn’t own a car, he left me there at the guide’s house. I went to that first day of April training in the freezing cold sleet and rain. It was pretty brutal. I had no wet suit or any sort of rafting gear. If I’d had a car, I probably would have gone home. (laughter) But I was pretty much stuck.

I finished the whitewater training with Zephyr [Whitewater Expeditions], Bob Ferguson, the owner, was awesome to work for, and I continued to work there the next four, maybe five summers. A couple of seasons into that—that would have been the winter of 1979–1980, I started working in Costa Rica, doing some

of the first guiding, exploratory trips and such down there.

QUARTAROLI: You mentioned Zephyr, so you weren’t working for ARTA then?

HESTER: I actually didn’t work for ARTA. I had a lot of friends that worked for ARTA—in particular a boyfriend whose family, Robin and Bill Center, were running a company out on the American. I was pretty involved with the ARTA guides and did some training trips with them, and spent a lot of time at the ARTA house. Bob Ferguson initially worked for ARTA, so they were kind of sister companies in a way.

QUARTAROLI: Was this in Angel’s Camp?

HESTER: It was in Columbia, California.

ARTA was across the river near Angel’s Camp.

It was a pretty tight community, on the

Stanislaus where I worked. Bob Ferguson was

wonderful to work for. Bob McGavern, who had been one of the ARTA guides on my first river trip, let me stay at his house later on. He and his wife hosted me. Becca Lawton also came to visit, and both of them, at different times, coached me on river in his raft. Sometimes Bob would go along in his kayak while I was in the raft. He would laugh heartily when I rowed into holes. Learning by experience! I did those trips in addition to the training that the river company was providing.

I was trying to get as much time in as I could rowing. Bob was very instrumental in helping me get on the river and train. I worked the Stanislaus, Kings, American, and the Merced mostly—a few other rivers in Northern California for Zephyr.

QUARTAROLI: You said ’78. Seventy-nine was when the New Melones Dam started filling, so that kind of ended the Stanislaus anyway.

HESTER: Right. That was a big fight, I helped with some of the Friends of the River campaign, trying to stop the New Melones Dam. As the Stanislaus started to flood, I began working more and more on the Kings River, because it was just too sad to see the Stanislaus flood. The Kings was a wonderful river to work on as well. In 1981, Laura McGavern, Bob McGavern’s wife, got a private permit to run the Grand Canyon, and invited me to go with her and some friends. Bob didn’t go on that trip. She needed some boatmen. I went down on that trip in a kayak, because by then I’d also learned to paddle.

When I was done with that trip I remembered why I had wanted to be a guide in the first place, the Grand Canyon. I went back to Zephyr and told Bob Ferguson I was quitting—it was midsummer—and that I was going to go out to Flagstaff and look for work. I’d been

down the canyon only two times: once in a kayak and my 1975 trip as a customer, and I had worked a couple years as a guide both in Costa Rica, and at Zephyr in California. The Grand Canyon outfitters I approached didn't seem to have any interest in giving me a baggage boat, but eventually in October at the very end of the season, Wilderness World (WiWo), [owner Vladimir] Kovalik, gave me a trip. I wouldn't say it was my best trip ever. (laughter) All the other guides, most of them, it was their eleventh, twelfth trip of the season. They were pretty burned out. I felt much like an outsider and didn't really connect with the WiWo guides, and I was also quite a bit younger than most of them. They were a tight team—let's put it that way. I wouldn't call myself a bouncy young girl (laughter), and I wasn't real outgoing myself. I was definitely naïve. I had only kayaked the canyon that summer and rowed a snout a bit on my first trip in 1975.

QUARTAROLI: But Wilderness World is not running snouts anyway, so it's a different watercraft.

HESTER: Yeah. My recollection is I rowed just fine through all the rapids. I do remember having some trouble at some of the bigger eddies, not really knowing how to get out of some of the trickier eddies at that point. But I don't remember having any real problems rowing the boat in the rapids. After that trip I went on back down to Costa Rica for my guiding winter work.

QUARTAROLI: Who were you working for down there?

HESTER: At the time, there was only one company, Costa Rica Expeditions.

QUARTAROLI: Were they Americans there, or were they Costa Ricans?

HESTER: Michael Kay, the owner, is American. He was the first person to start a raft company in Costa Rica, and at that time there weren't any Costa Rican raft guides. We had some local land guides for naturalist trips, but the raft guides all came down from the United States. Gary Genest, Nick Hershenow, and myself were the main guides those early years in Costa Rica. We were still learning about the rivers down there. I did an exploratory, I think, that year, on the Pacuare, which was epic trip in itself, but that's another story.

QUARTAROLI: What rivers did you generally run?

HESTER: Well now they run a lot more rivers, but back then we only ran three by the end of my career there. Initially it was the Reventazon, a day section, and the Rio General, which was sometimes called the Chirripó Pacifico. We ran a four- or five-day on the Rio General. Once we did the exploratory on the Pacuare River—myself and Nick and a couple of

other guides we picked up on the streets—we started running that river commercially.

QUARTAROLI: That was multi-day on the Pacuare?

HESTER: That was usually a three-day on the Pacuare at that point. I think they just do it one night now. After I returned that early spring to Arizona, I had a letter waiting for me that said I had three training trips with AZRA. That was how I started initially. I did seven trips that year.

QUARTAROLI: Snout trips?

HESTER: It was either snout or paddle. I ended up mostly rowing snouts for AZRA that year. I rowed six snout trips, although I was a trainee on my first one, and I had a paddle raft one trip. Back then AZRA was split into two companies, the Snout Division, that's who I worked for and the Havasu Division, named for the raft type they used on those cycles. I only worked one season, '82 at normal water levels, then the next year was high water, '83. I only got to see ten trips before the floods of '83 changed things on the river.

* * *

Known for her prowess in rowing rafts and big ol' snout rigs—no mean feat and among a small cadre of those who have— plus her expertise as a kayaker, Sharon “Shay” Hester has been on the list of potential boatmen (“Boat Hags”—ask her about the term some time) to interview for quite a while. It is the general consensus that in 1991 Shay was the first woman to solo kayak the Grand Canyon. Back then, ARTA/AZRA gave their crew a form (see page 32) for them to keep track of trip dates, trip types, days, mileages, etc. Shay still has hers and it's a great way to keep track. She says: “They quit doing this form a long time ago, though I modified it and continued it on until, looks like until '98 I went to a notebook.” She was able to refer to it (I wish I had something similar) during the interview, which occurred at Shay's home in Flagstaff, Arizona, December 2017 and May 2018.

* * *

HESTER: April 1ST, 1983, we had an AZRA guide training trip that I kayaked on, and the water was starting to come up. We thought it was around 30,000. The trip after on June 12, I rowed a 22 foot snout. The Grand Canyon was shut down in late June. My 3rd trip in late June I was scheduled to be a guide on a snout. We were up at Lees Ferry were we were rigging up, it was maybe 70,000 or something, maybe 75,000? My recollection is a ranger came down to tell our head guide—I think it was Suzanne Jordan—that he'd gotten a call from AZRA, that the bus was on the way up



Sharon rowing a snout with some wind-assist.

with the customers, but that the owners of AZRA had decided to shut the trip down. He instructed her that when the passengers showed up, we were to feed them lunch, put them back on the bus, and send them back to Flagstaff. Fortunately, I didn't have the miserable job of telling those passengers, some of which had come from Germany, that their trip was over before it even started. They were *very* unhappy. I helped serve them lunch and then skedaddled, while Suzanne had to coax them to board the bus and go back to Flag.

The boats were rigged, so we unloaded the bags and boxes and then hauled the rubber and frames, still together, all the way up to the bathrooms, which was fairly close to the shore by then. We tied the boats to some rocks near the bathrooms. There were rumors already that the dam might be failing. Where these rumors came from, I don't remember, but I can tell you we learned a lot more about it as the day continued. If it flooded, the boats would still be there, we hoped. We figured that the water would have to go down at some point, and the boats would be there waiting for the next trip.

We hopped back into the truck, "What do we do

now," we asked?" Then someone had the bright idea, "Well, let's go check out the dam." We drove up to Page and parked in the lot next to the dam—it was back when you could do the self-tour of the dam. When we stepped out of the truck, the ground was shaking under our feet, like a minor earthquake. We walked to the canyon edge, and the spillways were furiously *pumping* out enormous jets of water. The amazing sight that everyone's seen in photos.

QUARTAROLI: Were they clear at that point?

HESTER: The spillways were clear water at that point. We walked into the visitor's center and they were still letting people take that one-way elevator down to the bottom, "Wow!" The whole visitors center was shaking, the glass window looking out over the observatory area were rattling lightly. We thought, "Well, it *must* be safe? I mean, they're letting people go down into the dam." We hopped into the tour elevator, went to the bottom, walked around in big open area, looked at all the different displays and engineering. Before too long though, we decided it was time to leave. We noticed this big work elevator that said, "Authorized Personnel Only." Of course, we

NAME: Sharon Hester

GRAND CANYON RIVER EXPERIENCE

TRIP *	DATES			RIVER DAYS	RIVER	ROLE	EMPLOYER					CRAFT								
	YEAR	IN	OUT				0	89	225	260	ARTA/AzRA				OTHER	M	S	SO	P	K
											P	G	A	B						
75	75	8/6	8/18	12	---	✓														
81	81	6/3	6/24	21	---	BB														
	81	8/15	8/26	12	---	BB														
82	82	5/11	5/23	12	---	✓														
	82	5/30	5/12	14	---	BB														
	82	6/18	7/2	14	---	✓														
	82	7/10	7/23	14	---	BB														
	82	7/31	8/13	14	---	BB														
	82	9/4	9/16	12	---	✓														
	82	10/3	10/17	15	---	BB														
83	83	4/1	4/16	16	---	K														
	83	6/12	6/25	14	---	✓														
100,000 cfs	83	7/2	7/5	4	---	K														
at lower	83	7/18	7/30	13	---	✓														
trip in	83	8/13	8/25	13	---	✓														
of	83	8/28	9/10	14	---	K														
travels	83	9/18	10/1	14	---	BB														
	84	6-11	6-23	13	---	✓														
	84	7-2	7-14	13	---	BB														
	84	7-16	7-28	13	---	✓														
	84	8-1	8-9	9	---	✓														
	84	8-13	8-25	13	---	✓														
	84	8-27	9-8	13	---	✓														
	84	9-24	9-28	5	---	✓														
	84	10-13	10-25	14	---	✓														
185	85	6-3	6-15	13	---	✓														
	85	6-24	7-6	13	---	✓														
	85	7-14	7-26	13	---	✓														
	85	8-12	8-24	13	---	✓														
	85	9-2	9-14	13	---	✓														
	85	10-6	10-20	14	---	✓														
86	86	5-19	5-31	13	---	✓														
	86	6-9	6-21	13	---	✓														
	86	6-23	7-5	13	---	✓														
	86	7-14	7-26	13	---	✓														
	86	8-4	8-16	13	---	✓														
	86	8-19	8-31	13	---	✓														
	86	9-9	9-21	13	---	✓														
87	87	4-19	5-2	14	---	✓														
	87	5-11	5-23	13	---	✓														
	87	6-6	6-18	13	---	✓														
	87	6-22	7-4	13	---	✓														
	87	7-20	8-1	13	---	✓														
	87	8-18	8-30	13	---	✓														
	87	9-15	9-27	13	---	✓														
88	88	4-30	5-13	14	---	✓														
	88	5-16	5-28	13	---	✓														

shipped in at Tanager
 Training note 1 day extra due to missing Digman?
 Trip in Cuy
 Diamond please

100,000 cfs
 at lower trip in of travels

Trip Log, page 1.

decided that's where we should go! We all hopped into this giant elevator designed to carry heavy loads, it wasn't the one we came down in at all—but the doors happened to be open. There's only two buttons on the tourist elevator, top and bottom. But this elevator had tons of floor buttons, so we decided to each pick a button. It was a *very* slow elevator. We got to the first lit-up floor button, the doors slowly opened, there was nobody in sight, so we snuck out like little delinquents and creeping out onto the floor to look around. Then quickly we jumped back in and got the doors to close before anyone caught us. We managed to do this at about two or three different floors as the elevator continued its slow journey upwards.

QUARTAROLI: What did you see? Just corridors?

HESTER: Corridors. I know one place we stepped out, we walked and there was a bay window overlooking a vast open space, with huge spinning rods going from floor to ceiling a few stories high, whirring in the open space. I was kind of overwhelmed, "Wow, that's amazing, how does all that work?" Those big pillars spinning in the air, went through the floor into another level and must have been connected to the turbines somehow? So far no one had managed to find us. We didn't venture too far from the elevator, because we didn't want it to close on us, and perhaps be stuck down there. Someone would hold the door, all the rest of us would kind of spread out and look and see if there was anything interesting, and run back.

We're on the elevator, figuring we will stop at the next lit up floor light, when a new floor light pops on, "bing!" and we realize someone not in the elevator has pressed a button. The doors open on a floor we didn't select, and there's these two guys in hard hats with metal lunch pails. "What are you guys doing here?!" "Oh, we're lost! We got on the wrong elevator! We're just trying to get out." "Sure you are. We're going to lunch. We'll take you back up to the top. You just stick with us." Now we're all in the elevator together, and there is not really a whole lot to say to each other. Of course, we stop at another floor or two where the door opens, so it's clear to the workmen that we had been fooling around, but they didn't say anything. We were stuck there with this very awkward silence. So I decided I'd try to engage these guys in conversation. "How long have you guys worked here?" The older one said, "Sixteen years," the younger said, "Six years." I said, "What's it like working here?" "Oh, we'd rather not be here." This was getting interesting, "Why? Why would you rather not be here?" "This dam has got really big problems. All the bigwigs are coming out from Salt Lake City tomorrow." We had seen the

plywood on top of the spillways when we first got there, because that was another thing we had heard about and wanted to see. "What's going to happen? Is the dam going to break?" They said, "No! The dam's not going to break, but it's eating away the spillways, and it's going to eat away the sides of the cliffs through the spillways, it's more likely the power plant's going to go before the dam, but the dam's going to stay, it's built to last." (laughter)

QUARTAROLI: Confidence!

HESTER: Yes. But the dam was potentially going to have the canyon erode away around it. Having heard that bit of inside scoop from those two guys in private on the elevator—and they weren't real happy about being there, they had said, "We'd rather be home." They seemed to be uncomfortable and nervous, so we had that little bit of insight that the dam *was* at risk, we heard the bigwigs were coming out, and that they weren't really quite sure what to do. Fortunately, we were not arrested or anything, and we had kind of a nice conversation by the time we got to the top, about their careers there at the dam. We got back in the truck and went back to Flagstaff. That was our little jaunt for the day, instead of rafting down the river at 75,000 or whatever high flow it was. The previous trip on June 12TH to June 25TH, we had some problems, serious problems, rowing the snouts and catching eddies and camps. I think the river was about 70,000, and rowing a snout at 70,000, I can tell you right now, is pretty darned challenging and exciting.

QUARTAROLI: All you need is one boat out of the trip not to get to camp.

HESTER: Yeah, on that trip we had missed multiple pull-ins. But the water was so high, you started trying to catch camp at two in the afternoon. You could miss multiple camps and eventually all the rafts would make a pull-in. We ended up using the small [Avon] Red Shank we had along, and we would throw it out before a desired camp, because the paddlers in that small boat could catch eddies easier than our big snouts.

QUARTAROLI: What was the Red Shank for, was that a paddle boat?

HESTER: It was a little paddle boat we'd bring along for fun. We put the best passengers and one of the assistant guides in it, and we would send them down ahead of time to catch a camp and they would set up with throw ropes— well that was the plan. But that plan didn't always work. We sometimes didn't get close enough to even have a throw rope catch us. It was pretty much a circus, but the river was going so fast we had lots of time for those shenanigans. We would miss hikes, or everyone catch a camp and the last boat

would miss it, but eventually you'd get in *somewhere*. I know there was one hike at Carbon-Lava where we let everyone off to hike around, do the loop, and none of us made the pull-in down below at Lava Chuar Canyon. That was very interesting! I pulled in at the bottom right, just *below* the rapid, and someone pulled in at the bottom left. The closest boat was pretty much mid-rapid, hanging onto the trees on the right-hand side in the camp area before the rapid, but there was still several feet of fast deep river between those trees and the passengers waiting on the shore.

I ended up learning a technique on those high water snout trips. I learned to push into the eddy fence about mid to high on the fence—but not real high, because up high it was too sheer a fence—and to push forward. I would put all six or seven people out as far as I could on the snout tubes, so all the weight was up front, as I rammed the boat into the eddy fence. The snout would immediately do a quick spin, which I would assist in, and I'd then have everyone run as fast as they could to the very stern of the boat, just in front of where I was rowing. Now having no weight on the bow of the raft, and would row backwards. The boat would still want to spin again most often, because the eddy didn't have enough of the whole raft into the eddy. It would take time to break through those confused, but strong whirlpool eddy fences. As the boat spun again, and it was facing toward the shore, I'd have the passengers all run *back* to the front of the boat, and I'd push a few strokes, and then it'd spin again. Using people weight going back and forth, until I finally would slide into the bottom of the eddy. That ended up being a technique that I would use even at lower water flows.

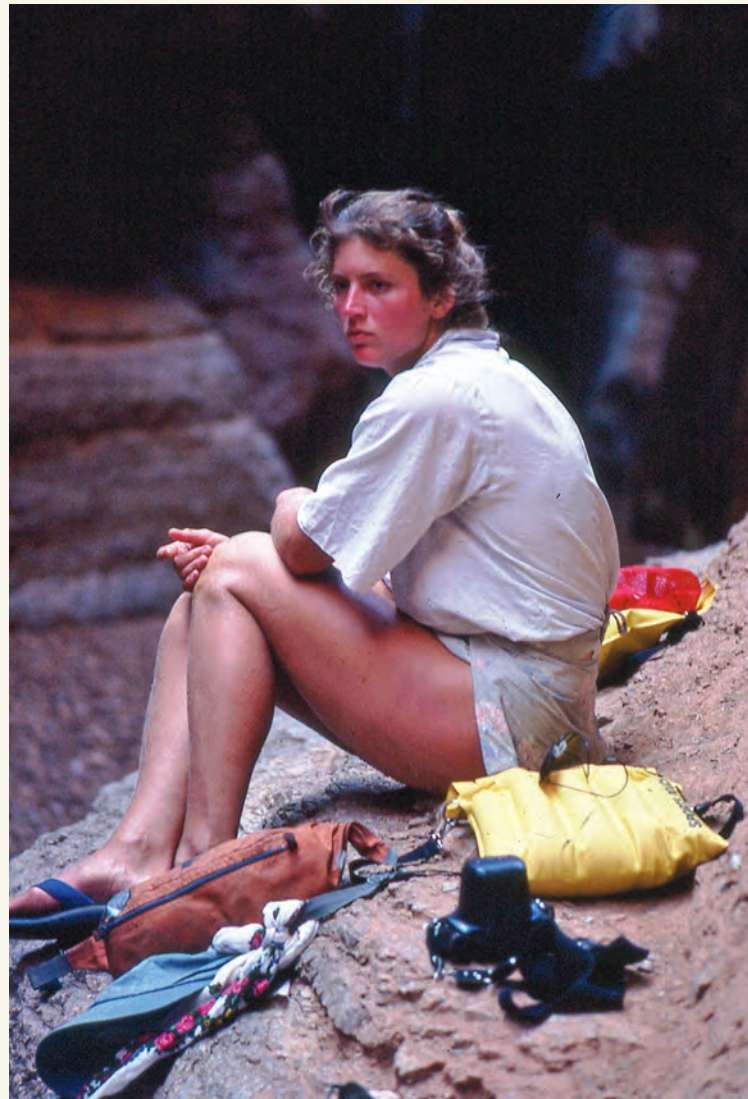
When we got back to town, after our dam escapade, George Marsik [Worldwide Explorations, Inc.], who was a local guide type, had pulled a private permit from someone who had cancelled last minute. He was looking for people to go down, and the put-in date was July second.

QUARTAROLI: You got invited?

HESTER: I got invited to go on that trip, as did Gary Kuchel, who'd been one of the boatmen on the trip where we snuck into the dam a few days before. Larry Stevens, Wayne Ranney, were also some of the folks on that trip.

QUARTAROLI: Wayne did a talk on that, "The Way Too Fast Trip." [See BQR, Vol. 21 No. 1, Spring 2008: <http://www.gcr.org/bqr/21-1/21-1.pdf>]

HESTER: Right. I decided to kayak, as did John Foss—rest in peace—and Joe Sharber. I don't remember everyone. I just remember John, Joe, and I. There were five of us, though.



Catching a break after rowing a snout all morning, 1982. Photo: Julie Galton

QUARTAROLI: Kayaking?

HESTER: Kayaking? I think four or five of us in kayaks? The river wasn't closed for very long. It closed right after AZRA canceled the trip at the ferry where we snuck into the dam and reopened sometime before we launched July 2ND on our private trip. I'm guessing the park decided to reopen it when they realized there were hundreds of people down in the canyon, and that was going to be a problem, too.

QUARTAROLI: At that point they started dropping the water. It was still eighty-some thousand.

HESTER: It was still super-high. I think it was probably closer to ninety thousand when we put-in. It was dropping as we went down, though. There were two rafts, a tiny Ouzel dory, which is a twelve-foot dory made by Randy Fabrese, and the four or five of us kayakers. The permit holder wanted to do one night on the river, but we put in late at four in the afternoon.

It became clear we weren't going to do a 48-hour trip. So at Phantom we made a phone call to have the trucks come pick us up on the morning of the 5TH.

QUARTAROLI: The kayakers left first, with the dory?

HESTER: We all launched together, the dory, the two rafts, and the kayakers. I remember at the beginning being very nervous and telling the others—they were all guides—“We have to have a plan. This is really high water,” and wanting to have a *real* specific plan about rescue, and how far we could be apart from each other. It actually became apparent pretty quickly that it was not that scary a water to kayak. As long as you didn't mind getting sucked down in whirlpools, spinning around, and things like that. The guys weren't really too amenable to rules, it turned out anyway. (laughs) It ended up just like your typical kayakers, just ad lib independent types, you know. We had an incident with John Foss at 24 ½-Mile, where he had a really long swim. We had camped there our first night. In the morning he ran the rapid by himself, with no one else in the water while we were scouting. His boat got completely launched, after being sucked down into a whirlpool and suddenly was shot out, like a watermelon seed. I remember seeing from shore the kayak almost

The trip was over the next day. The trip was three nights. Some of my more wild kayaking moments did happen on that trip. One was at Hance, where we kayakers decided to go right, down the biggest waves. They were mostly just huge smooth waves at that level, down the right middle side of the rapid. The rafts went left, where there were slightly smaller waves. Of course they didn't look that big from shore, but they were *humongous*. I was paddling a 12-foot Hollowform kayak back then, and I remember we all went into Hance one little duck right after one another. The second you entered those giant waves, it was like you were in the middle of the ocean—you never saw another kayak anywhere. I remember being at the bottom of one of those waves, looking up, and it was this towering wall of water—all smooth, almost to the top smooth—but it was *at least* twenty feet tall. I began losing momentum on the face of the wave and I was starting to claw my way up to the top with my paddle. At the very top of the wave there was a very small white bit of froth that was intermittently breaking. That little whitecap wave broke on the bow of my boat as I was about to crest the wave, and that was the end. I sailed backwards at a hundred miles an hour, straight back! There was nothing I could

do. I wasn't planning on surfing a twenty-foot wave backwards—*much* faster than I went up it, and I flipped at the trough. I managed to roll up soon after.

When we got to Crystal the big railroad car of a wave had maybe four feet of whitewater coming down at its crest. It was runnable, but we all decided to cheat it far right. The private we caught up to later that day, or the next day, had been there when the wave was smooth, not a bit of whitewater at the top they said. It had been more washed-out and a bit higher when they had gotten there a couple days before us and some of their kayakers ran that huge Crystal wave. That trip was one of my more

exciting times early in my career in Grand Canyon. I guess I was too inexperienced to realize it was a pretty wild thing to be doing. But I was having a ball, and it sure was fun. I was cautious, but I wouldn't say I was fearful of the river, although I was sleeping at night with my lifejacket close by in case the dam broke! (laughs) That was my biggest fear.

QUARTAROLI: I thought you were going to say you slept with it on!

HESTER: I think I had my arm through one opening,



Sharon, in her kayak, with the Ouzel dory on 1983 private trip, 91,000 cfs. Photo: Wayne Ranney

completely in the air, from stem to stern, and him upside down, falling through the air, out of the cockpit and into the river head first, because the boat was launched so violently and far out of the water. That was John Foss, who later died in Peru, kayaking [Rio Huallabamba Canyon, sometime after July 5, 1998].

The next night we spent at 94-Mile, on the right, up that side canyon. The 3RD night we spent *way* up National Canyon on the left. There was not bit of land left at National, we had to go far up canyon to camp.



Redwall Cavern, June, 1983. Photo: Wayne Ranney



Deer Creek, June, 1983. Photo: Wayne Ranney



Crystal Rapid, Sharon in kayak, June, 1983. Photo: Wayne Ranney



National Canyon, June, 1983. Photo: Wayne Ranney

because I figured I'd hear the flood coming if the dam broke. I thought that at least I could get it on, and they'd maybe find my body. Or perhaps I would be able swim up a side canyon and hang on as the current of the flood washed up the side canyons? For the next several years of high water, I was more nervous thinking the dam could fail than I was of the high water.

* * *

I'd done a solo trip on the Stanislaus River in California at 21. I like to be alone a lot, and enjoy observing nature, and I find it's a lot easier to do that when you're by yourself. I'd already done some solo backpacking as well, and always wanted to do a solo kayak trip in the Grand Canyon. I pulled a permit in 1991 and decided that was my chance to go by myself and do whatever I wanted. I didn't want to have a set time for takeout, so I had someone drop me off at Lees Ferry, and decided I would hitchhike out with whomever I could get a ride. This was probably a bad idea if something had happened, I realize now, but I wanted no set agenda.

QUARTAROLI: Was this to Diamond Creek?

HESTER: I had no one picking me up, so I could have gone to either takeout. I figured one kayak, I could get a ride out with anyone. I knew I couldn't carry enough food for 21 days, so I made a couple of food stashes the summer prior. I was looking to borrow a sea kayak, because I didn't want to go total backpacking style, I wanted some nice food and some beer.

QUARTAROLI: Had you been in a sea kayak before?

HESTER: I had been a sea kayak guide in Baja some.

QUARTAROLI: You were thinking that was going to work well enough?

HESTER: Well enough that I could make it work. I knew I could roll a sea kayak, though I'd never rolled one in whitewater. It's probably pretty good that I did not end up in a sea kayak by myself.

QUARTAROLI: What did you take? What kind of craft?

HESTER: I couldn't come up with a sea kayak, and AZRA guide Jon Hirsh had a T-Canyon. I think he might have gotten some of these boats maybe from [Dick] McCallum who had a bunch of Prijon boats. The T-Canyon is a really large, heavy whitewater kayak, and it holds a lot of gear. He was also planning on being down there ahead of me on a park archaeology trip, and he said, "I don't know if you're going to have enough food. I'm going to leave you a food stash." "I really don't think you need to leave me a food stash. I'll be fine. This is a big boat, I can carry a lot of stuff, and I've got some stashes down there already." "No, I'm going to leave you some food. I want

to help you out. I'm going to leave you a bucket, and I'll get the empty bucket later on my next trip." "Okay, thanks, whatever you want to do, Jon." He said, "You'll run into me later. You can thank me then."

I borrowed a drysuit from someone. It was a warm April—great weather. My intention was at any rapid I was nervous at, I would put the drysuit on in case I swam. I never once put the drysuit on! (laughter) The first big rapid was House Rock, and Brian Dierker was on a research trip. As I was getting ready to run House Rock, they came motoring downriver, "Great! I don't have to put my drysuit on. I'll just let them spot me." I do remember the boat was really heavy, I lost my grip on my one hand on the paddle in some big wave, but got it back. I went through the wave beautifully. The heavy boat was actually quite stable, and I realized it was going to perform great. I had to grip the paddle a lot tighter because it would sometimes submarine more through the waves than lightly flit over the top. I felt confident from that time on that everything was going to be fine. The first night I camped just below Boulder Narrows, on the left, on the cliffs, and a ringtail managed to steal my only luxury, which was dried mangoes. He stole the whole bag from me, and I had to put my food *in* my sleeping bag with me, because the ringtail was grabbing the stuff sack with my food and trying to haul it away. Even when I put the stuff sack in the bag with me, it would stomp on my sleeping bag and try to open the hood around my face to get in and get the food. I managed to keep flipping him off my bag so he couldn't get any more of my food.

I was enjoying being by myself quite a bit, but my original goal had been to do some hikes that I'd never hiked before. I thought, "Oh, that's great, I'll do all these hikes that I don't ever get to do on my commercial trips." The first hike or two, I headed off up a canyon I'd never been to. The minute I came to any place with a climb, even if it was only ten or twelve feet, I got scared off, because I realized that if I fell up these side canyons, no one was going to know I was there and I would be stuck. If I ended up swimming in the river and going to shore, separated from my boat, someone was going to come along eventually and rescue me, and there was water to drink. I discovered I was quite nervous about doing all this hiking I planned. It turned out I was going a lot faster pace than I thought I would. I got to the Little Colorado early. I went up behind the bushes where Jon had said he'd leave some food, and there it was, a whole five-gallon—not a *three*-gallon—bucket filled to the gills with food. Now, I'd only been on the river three days, so I still had a completely full boat, and pretty much very little room for anything else.

QUARTAROLI: Five gallons for one person!

HESTER: He went all out. There was a six-pack of beer, potatoes, big cans of sardines, cookies, crackers, candy, soup mix, and cans of salmon. It was loaded! "God, what am I going to do with this?!" I took everything out of the bucket and left it behind where he said to leave it, and I put a few things where I could in the boat, but it was kind of just cramming it in corners and different places. I had *no* room for the things that couldn't get wet, like the cookies. Once I got as much as I could in the boat, I climbed in the boat on the edge of the river. There's about three gallons of space between your legs, so I took about three gallons of food, and put everything between my legs, and then had to pull the spray skirt over the top. It was like a little hill between my legs. And I *still* had food that didn't fit. I took a salami and put it down the middle of my lifejacket, and took some cookies and put them down the sides of the lifejacket. I looked like the Michelin Man of food. I was thinking I'd run into Jon soon, I know he's down there, and I'll just give him back all this food. But it didn't take long around the corner a little ways at Lava Chuar camp, was a private trip. "Ah-ha! There's the solution!" I paddled up to the back of their rafts, and one guy was getting a beer in the drag bag, "Hey, do you guys need any food?" He kind of looked at me funny, and I said, "I've got *too* much food. You don't even want to know. Look." I grabbed onto the side of his boat and I opened my spray skirt, and there's just this mound of food. "Here, have some cookies, have these crackers. I'll never keep this dry." He was looking at me with his jaw open. He looked around, "Where's the rest of you?" I said, "I'm down here alone, but I have *way* too much food, so could you just take it off my hands?" I gave him all the food that couldn't get wet, cookies and crackers and things like that. Then I kept some canned foods, salami, potatoes and the six-pack of beer—I definitely wanted to keep that.

A bit later as I was passing Cardenas, there on the beach, was this backpacker, asleep, with his feet right by the river's edge. He was in the shade of that willow tree, he had his hat over his head, and his backpack was propped up against the tree, flies were buzzing over his head. I had this bright idea that here was another place I could get rid of some more food. "That'll be fun. I'll do something interesting." I paddled back up the big eddy, very quietly, and as I got to where his feet were, about a foot from the water's edge, I silently undid my sprayskirt, I took out one of the cans of beer and put it next to his feet, and then I paddled back into the river current.

QUARTAROLI: He was still asleep?

HESTER: Yeah, he never saw me, and I figure he just woke up and discovered this beer had been left by his feet. I thought that was a fun little practical joke.

QUARTAROLI: His dream came true!

HESTER: Yeah! (laughs) But a few days later, after I finished the fifth and last beer, I really wished I'd left the potatoes. (laughs) I did run into Jon down at Hance, and spent the night with his group, and there I realized I didn't want to be around other people. That wasn't the goal. The rest of the trip I made a point not to—even if I was invited—not to camp with other groups. I did paddle over from Kanab Creek to an OARS trip and had dinner. Trips used to camp on the left side of that drainage just across from Kanab—I was camped at the mouth, and I had dinner and socialized a little with them. That was probably day seven or something? I wasn't doing the hiking I originally wanted to do, and by day eight, "You know, I'm kind of tired. I've had enough of being by myself. I think it's time to leave." A research trip had stalled out behind me. I knew what day they were going to take out, which would have been my ninth day, I think.

QUARTAROLI: This was Hirsh again?

HESTER: No, it was a motor trip that I knew was going to take out on my ninth day. I ended up waiting just above Diamond, for them to catch up, and I just hitchhiked out, back up to Flagstaff with that particular group. It was 4/16 to 4/26.

When I stopped at Lava Falls no one was around, so I pulled out the drysuit, and I had it halfway on—the closest I got to getting it on—because I was going to run Lava by myself. When an early-season commercial motor trip came around the corner. Once again, saved! I don't have to put on this stupid drysuit! I asked them if they would wait below while I ran Lava, and I quickly took it off and stuffed it in the boat and ran Lava with no problem.

QUARTAROLI: Was that down the right side of Lava?

HESTER: It was the right side. I can't come up with any epic stories about the trip. I think the most exciting part was the food stash dilemma. (laughter) But I'm glad I did it, and enjoyed being down there by myself for about a week, quite a bit. But after a week, I was ready to be around people a *little* more.

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I got to do some other privates, either as an instructor for Prescott College or privates with friends. But I never did another solo trip.

QUARTAROLI: What about Prescott College? You were there to do a river trip, or were you doing some other classes with them?

HESTER: I went back to school in their adult degree program in the early nineties, around that same time I did the solo trip. Because of my kayaking and Grand Canyon experience, they asked me to do some courses for them as an adjunct instructor; kayak instructing was one course I taught, and a wilderness perspectives/whitewater rafting. I co-instructed that course a couple of times, doing one in Utah and one in the Grand Canyon with Joel Barnes; and occasionally taught on wilderness leadership courses, assisting in kayak portions of their trips, mostly extra safety kayaker.

QUARTAROLI: What was the program you put together, the adult returning-whatever.

HESTER: Right. My coursework was in Outdoor Recreation and Wilderness Perspectives, but I ended up moving on to other things. I never completed the coursework. I ended up moving to California and leaving Prescott behind. I already had a radiography degree as I had gone back to school previous to that, and I ended up doing that as my second career in the off season.

QUARTAROLI: What is radiography?

HESTER: X-ray tech work. In the late eighties, probably '87 or so, I'd been on the river



1984. Photo: Dave Edwards

about five or six years, and I decided I wanted a career that could earn some decent money, but I didn't know what that was? I saw a few of older guides who didn't have that great a way to make money, and some seemed kind of lost. But I also didn't want to give up river running for very long. Sometimes the guests on these trips give you the best information. I had a conversation with a wonderful passenger, and when I told him I wanted a career in something that I could make better money at, but I didn't want to be gone from the river that long, he said, "You know, there's this Career Outlook Handbook and it predicts for the next ten years what the most hireable jobs will be." So when I got off that trip I headed to the library. The book predicted the number one job would be in computer technology, but I hated computers. Nursing was second. And then radiography, which is being an x-ray tech. A radiologist is a doctor, and a radiographer is the person that takes the pictures and assists in exams. One off season, after I quit working Costa Rica early but the California river season had not started, I had worked as an ambulance driver /EMT. And working that job I had experienced some of what x-ray techs did. I'd helped hold patients for pictures, and watch cat scans in the control rooms with the techs. I thought anatomy was fascinating, "That could be for me," I thought and I probably won't have to wipe anyone's butts.

QUARTAROLI: No bedpans.

HESTER: Little did I realize there's a *lot* of computer technology in radiology! (laughs) Or there became a lot of computer technology later, which as it turned out, was actually a godsend. The very first day at radiology school in Salt Lake City, the very first exam we were taught how to do was a barium enema exam. I realized right then (laughs) that maybe I had gotten it a little bit backwards! They broke us in right away.

QUARTAROLI: "We're going to weed some of these people out here right from the beginning."

HESTER: My idea of not wiping butts, which I figured nurses did a fair amount of, that was foiled, as was not being around computers. But it turned out to be a really good career. I didn't miss a river season while I was in a two-year program. The only full summer I was in school, I still worked one Grand Canyon raft trip. It did turn out to be a very hireable and interesting job to have, and I could come and go seasonally for work.

The last summer after I graduated, I immediately went back to run rafting trips. I did four trips, I think, that fall, because that was the whole goal for studying a hireable skill, to not be gone from the river for long. So I did not go to work in radiology immediately after

finishing school, instead I went back to work river running. That fall after river season, I started looking for work, in Flagstaff first. There wasn't anything, but I found work in Prescott, and that's how I got involved in Prescott College. I found work at Yavapai Hospital. So I was working there, and also working and studying at Prescott College at the same time. Eventually I went to full-time work in radiology. I came back to Flagstaff in April 1999, and in the year 2000 got hired at Flagstaff Medical Center FMC full time. So in 2000 I quit being a full-time river guide, because I became a full-time radiographer. When I quit working at the hospital after seven years, I did work one season full-time and realized it wasn't for me. Old pets and a house made it hard to be on the river full time. I think it was in 2007, that I realized working full-time on the river probably wasn't in the cards anymore.

QUARTAROLI: While you were working at the medical center, were you doing a couple of trips a summer then?

HESTER: Right. I would save all my vacation/sick time to be able to do two trips a year. I'd save every ounce of paid leave, and I could get in two river trips every year that way. Since 1981, I've never missed a raft trip in the Grand Canyon—doing at least one every year. In my early years, it was usually seven or eight trips. But since 2000, it's been between one and three, except for one year where I did five right after leaving FMC. I've been part-time for a long time now, and eventually started work in the office at AZRA, which has been a really nice, pleasant place to work. It's been great.

QUARTAROLI: Was that 2007–2008?

HESTER: No, I went to Rivers and Oceans (R&O) for a couple of years and worked as an adventure travel agent. I thought I might buy that business, because I had saved a lot of money by that point from working at FMC. I went to work for Pam and Tim [Whitney] in 2008, I think. But I decided that wasn't in the cards either, owning a business. It was really too much. I didn't feel like I had the acumen to run a business, take care of a household *and* do everything else all by myself.

An office job opened up at AZRA and it seemed like a no-brainer to go back there. AZRA has profit-sharing, which I was already a hundred percent vested in, and I could just step back right into work a place that had great benefits, and was a fun place to work—which was perfect. I enjoy getting people on the river, helping them learn about what they're going to experience, and fit them to the right trip for them. I use a lot of my knowledge and experience with running AZRA's social media and general reservations. I've had different



Kayaking through Lava Falls at 46,000 cfs, 1996. Photos: Dugald Bremner

job descriptions in the behind-the-scenes stuff with AZRA, but that's a lot of what I do now, besides charter reservations and meeting and greeting people before and after their raft trips.

* * *

I was there at the 1984 flash flood when almost all of our boats got washed out, at Havasu. There were two AZRA trips there, the Havasu Division and the Snout Division, and we all got hit by the flash flood, and had eight out of ten boats wash out of the confluence mouth. The river was really high, about 45,000 [cfs]. At that level, it's a big blue still lagoon in the mouth. Interestingly enough, it'd been a pretty wet, rainy trip, and all my previous trips there had been very little heavy monsoon action, and I'd *never* seen a flash flood. I remember the whole trip hoping to see a flash flood. Lorna Corson was working the trip too, and we were experiencing heavy rainstorms, "Oh! We'll get to see a flash flood!" She'd never seen a really big one, either.

While up hiking the creek, a hailstorm came in fast with heavy rain, the hail started hitting us, which nowadays would definitely be an alarm signal. So we returned to the mooring area in the mouth and took shelter under the overhang on the rafts in the mouth. There were two other boatmen there on the rafts in Havasu, Bill Wasley and Joel Schaler. Soon the heavy rain and hail stopped, and before long the drizzle had even stopped, and we started relaxing on the rafts, when I heard this shooshing noise, like a "shhhhhh." That noise hadn't been there earlier. We were all on the second boat to the end of the flotilla of rafts tied

together. If it's a triangle, we were at one apex, the eastern apex, in the narrowest section of the lagoon. I looked past the boat behind us, which was parked at the notch in the canyon, and that blue water that had been perfectly still in the lagoon was flowing slowly. I didn't have to think very long, I just yelled, "Flash flood!" I remember one of the guys going, "Naaahhhh," but I just knew *that* water should not be moving. I ran for *my* boat, which was at the northern, upstream river apex of the triangle of ten rafts. I wanted to get my lifejacket on first. I mean, I was very attached to my lifejacket since the high-water year. There were two boys, about fifteen or sixteen, and they both were getting on the boats. One was already on my boat, the other was almost there crossing the boats tied to shore. I started yelling at them, "Get to shore!" as I was running. I looked back to where I had just run from. The raft we had been sitting on, and the raft behind it, and the one tied in front of it, were all three mounting each other, the upstream boat's bow was on top of the rear stern of the next raft, and that raft's bow was bouncing on the stern of the 3RD raft tied more towards the disembarkation ledges. Only one guide was left on the boat—Bill Wasley—and he was on the second boat, the next farthest from the incoming flood, by one boat length. He was on the bucking bow, and I could see he was trying to time a leap to the *next* raft in front of him, to attempt to make a run to shore, which was what Lorna and Joel had done. Bill must have stayed on his raft a little longer than them, and the flood had hit the boats and was trying to flip those two boats, which at that time were still tied to the cliffs.

I realized then it was now dark muddy water, it just smelled of earth, a rich smell of dirt; I don't know if adrenaline has a smell but there was something almost



electric in the air. I realized those two boys may not make it back to shore before the flood trashed the boats. I started hearing rifle shots, it was the ropes starting to snap, “Bam! Bam! Bam! Bam!” They had become as tight as piano wires, until they could not hold. There used to be a chalkstone with some webbing around it that we tied up to, it was a little higher than the boats, it actually exploded with a crack. There was a spray of rocks that went across the boats, at the same time ropes to shore were snapping. We had tied all the boats to each other, just using our bowlines. We didn’t have any kind of quick release cam straps back then. When those first two bucking boats broke loose, they quit trying to flip, they then pivoted and started to shift outside and around all the other boats, torquing the lines tied to the other rafts tightly. I yelled at the boys, “No! Don’t go to shore! Get your lifejackets on, and get in a boat! You’re going to need to row a boat to shore!” I pulled out my knife, Dave Lowry says he remembers me saying, “What should I do?” He says he said, “Take your knife out and cut.” But I have no recollection of hearing him say anything, the noise of the flood was so loud. Either I subconsciously heard him, or because in my own mind I realized I would have to cut the boats loose, because now all the bowlines and ropes between all the rafts were tightening and torquing, as boats that broke loose from shore one by one and shifted in the flood. It looked like all of the boats were going to go as one giant flotilla out of the mouth and into the river. I started slashing every bowline and rope I could see. There wasn’t a whole lot of planning in this either, I sliced anything that looked like a bowline, as I ran from boat to boat. The ropes were so tight one touch

of the sharp knife and *snap*—they would separate. I think I managed to slice many of them apart, and told the boys to get in a boat and row to shore.

Bill Wasley had already leaped from his boat to the next boat by now, and we’re kind of hovering on the edge of the eddy fence. Perhaps a boat or two was still attached to shore? Some of the boats were in the current, some were still in the eddy, and some were in the flash flood, which was in the downstream portion of the harbor more than upriver. I heard Bill Wasley yell, “There’s a body!” I saw him run from the upstream of the flash flood side across a raft or two or three—it’s hard to say—to a raft that was already in the river current. He was looking, and staring, waiting for something, it’s clear he saw something go under the boats, and he’s trying to track it and see if it pops up on the other side, like when you lose your beer on one side and it pops up on the other. There are piles of reeds and debris hitting the up creek rafts and disappearing under them only to pop up in the rapid. But the raft’s pretty stable now. I see a woman pop up in the current of the river at 45,000, and all I see is this pale, round face, and two breasts—three things that pop up. Her eyes appear to be closed, she looks unconscious. She’s been stripped of her clothes, I think. But I’m farther away, so it is hard to tell. She popped up a good twenty feet away, already out in the river. This is where everything kind of gets blurry, because now my boat is actually entering the river. We are headed out in mass of rafts.

QUARTAROLI: It’s separate, it’s not tied to any other boat?

HESTER: Now I’m going to have to get on the oars and start rowing. I think my boat was all by itself.

There was some rafts boats still tied together. I start to row, but I'm looking around, because I'm trying to see what's going on, on shore, and row at the same time, and situate myself. I see a throw rope flash across into the river from shore. I never saw Dave Edwards jump in the river, but he was there when I saw the throw rope fly by, and it hits right in front of him. I see he's gripping the woman tightly and he's swinging into shore. I look back up to see a bunch of people on the ledges, where he has swung into shore, and people are rolling him and the woman up onto the rock ledges.

QUARTAROLI: This is that same woman that you had seen?

HESTER: Yeah. I didn't see him jump on her, but it was the same woman. He had her in a bear hug. I see Suzanne who was leaning over Dave, look up, she sees the rafts floating by, and I'm on one of them. She leaps for the rafts from shore. She ends up landing with her stomach on a tube, and she's kicking her legs up in the air, she just barely made that boat. I see Dave Lowry *run* down from higher up on the ledges and take a flying leap, and he doesn't make it to a raft, instead he hits the river and swims to a raft. He does get to a raft with a boy in it, and he pushes the boy out of the oars and he rows to shore to the left. I row to the shore to the left too. We both slam up against the motorboats moored downstream, which now have an immense amount of current against them because the flood's extra volume. Our rafts are trying to flip again. One of the boys rows to the first big rockfall downstream there on the right. He's all by himself and managed to pull over. He hangs out there all by himself looking forlornly back upstream. Suzanne is last seen going around the corner with three of the rafts. Bill Wasley, I think also rowed in to the same place we did with two rafts, so, there ended up being four boats on the left with the motor rafts.

QUARTAROLI: Up against the motor-rigs.

HESTER: Up against the motor-rigs, yeah. Dave said to me, "Stay here and look for bodies. Stay here with a throw rope at ready and wait." That's an order, his face was a pale greenish hue. He ran upstream to help manage the fiasco happening up there. The majority of our people were still up the creek though a few are on the ledges by the river. But that's a whole 'nother story, which I didn't witness, but I do know they made a Tyrolean Traverse to get people across the Havasu gorge. It was dark by the time we got everyone back together and headed downstream.

QUARTAROLI: But it was still only the one woman?

HESTER: Only one woman that washed down in the flash flood. She was on the other trip AZRA trip. Back then, we just left our lifejackets anywhere we wanted,

either on shore or tied to the rafts. Since that flood, the policy has been that everyone takes their lifejackets off and ties them up together on shore. That was not a policy before that, probably because before no one had experienced a big flood at Havasu. I had to do a bit of high-siding while I was waiting down on the rafts with the throw rope. There was no way you wanted to be on the low side of the boat, because the upstream tubes were inches from going under, there was such current they would have flipped.

QUARTAROLI: I can't believe that they *didn't* flip, at least one boat there, with that current up against the motor-rigs, because motor-rigs have almost flipped against each other—and not at 45,000 either.

HESTER: It was really scary, incredibly scary. I can remember thinking, "We're going to have a boat flip here," and mostly hanging out on the highest side I could. If I had stepped on the low side the raft was going to flip. The water pressure reduced as the hours wore on, and nobody else washed out of the creek. The motor-rig customers had all gotten down earlier than us, and apparently had been at the mouth area when the flood hit. They ended up taking some of our customers, because now we're short rafts; a snout and one oar boat stayed in the mouth. Suzanne ended up gathering two more rafts. She had three rafts and had an epic experience herself. The motorboats took some of our customers, as they had some spare lifejackets, down to Tuckup, and picked up Suzanne and her three wayward rafts on the way. The last of the customers—those that had to come across on the Tyrolean Traverse rope system, and us guides, some of which ended up giving our lifejackets to the customers—went downstream in the dark at 45,000 to the camp at Tuckup. There were four trips camped at Tuckup: the two AZRA trips and two separate motor companies. The motor trips had their kitchens set up, and they invited us to come in and make dinner using their kitchens. It was well after dark, when we rowed into Tuckup camp with flashlights in hand. I remember how their flashlights looked like directional beacons from our rafts in the dark. I remember going over to the woman who washed away a bit later after dinner. She wasn't on my trip, but I wanted to talk to her, because I remembered seeing her face so vividly. I had actually thought she was dead when I saw her in the flood. I couldn't imagine coming down that flood and surviving, though I have my theory now as to why she did survive. I wanted to go talk to her. I found her up sitting against the cliff wall at the back of camp and introduced myself and told her I'd seen her come out of the mouth, and asked her what it was like. She was pretty deadpan, she didn't have a lot of emotion, and

she said, “You know I had given up, and I was actually at peace. And then the worst part was when that guy jumped on me!” (laughter) I was shocked. I couldn’t believe she would say that to me. I thought, “How could that be the worst part?! He saved your life!” But she must have already gone into that euphoric, hypoxic state by then, and was apparently not happy about being so brutally rescued! (laughs) I thought that was quite a fascinating revelation.

* * *

Oh, I do remember another story, about the drug-sniffing dogs.

QUARTAROLI: At Lees Ferry?

HESTER: I was there for that. There used to be a female ranger—an earlier female ranger than Peggy, who is working there now, I think. [Tommy Lee was Chief Ranger for Glen Canyon National Recreation Area: see Brad Dimock, “Andrew,” *Boatman’s Quarterly Review*, Summer 1994 (7:3):36]. This story is probably better shown in stand-up acting form, because the demeanor of some of those Alcohol, Tobacco, and Firearms guys was so interesting as the event unfolded. Basically, that morning the whole beach at Lees Ferry, from upstream to downstream, was filled with rafts, from motor-rigs to commercial oar rigs to a private trip at the downstream end. It was not long before the customers were due to arrive, and a cop car screeches into the parking lot and stops in the middle, not in a parking space. We all took note because it wasn’t a NPS car. Another one pulls in, and then another, and before we know it there’s three or four cop cars, and six or so officers wearing black SWAT outfits with vests. Most of them are wearing black. A dog gets out of one of the cars, a German Shepherd on a leash [probably named Andrew]. “Wow, what’s up?” we thought as we were putting the finishing touches on our rafts. The DPS officers confer for a little bit, and then they start at the downstream end of the beach with the dog, and they’re having the dog sniff the bows of all the rafts as they’re tied up to shore. They slowly walk as a group, but they’re all puffed up and looking very self-important, like they’re on a mission. Our AZRA trip was at the farthest upstream end of the beach. As they got near the Hatch boat in the middle of the pack it was pretty funny, because Steve Hatch pulled out a steak and was waving it in the air, saying “Here, doggie, doggie!” (laughter) Drifter Smith on *my* trip, “You guys are about twenty years too late. You should have been here twenty years ago!” he said muttering under his breath, he said a few other funny things along those lines. It was a slow, purposeful walk. But

they eventually had the dog sniff all the rafts including our rafts last. They then stepped back a little ways away to confer a bit, when a couple of them come back over with the dog to the AZRA boats, and said, “We’d like to board your boats.” I said, “Everyone here is the captain of their boat. You can get on *my* boat, but you’d have to have permission to get on anyone else’s raft. They had not introduced themselves. So I said, “My name’s Sharon Hester. I’m the trip leader for this trip. And what is your name?” The officer in charge gave me his name. Then those two walked back to the huddle of SWAT guys up by the upstream power outlet and started conferring again. Now I was worried, “I wonder what they’re up to?” I sent Anthea Elliott over to talk to the Grand Canyon ranger who was standing to the downstream side of the ramp, where now there’s the *palapa*. Anthea asked her, “What’s going on?” The rangers apparently were quite upset because they were never told that DPS was going to come in to do this raid or whatever they were calling it—activity. The NPS rangers said they were never informed about it, and she was quite upset with the whole event because they had been left in the dark. She said to Anthea, “Yes, they can get on your boat if the dog gives the signal to warrant it.” When Anthea came back and told me this, I said, “Okay, this is the plan. As soon as the customers show up on the bus, we’re not doing a safety talk. We’re all just throwing them on the rafts, and throw them their lifejackets, don’t even tie the bags on, just throw ’em in the boats. And we’re going to launch immediately, there’s nothing they can do once we’re out in the current, and I’ll take the heat if they say we were trying to escape arrest or something. (laughs) But we’re going to just go, and there’s nothing they’ll be able to do.” But before our passengers showed up, a Western [River Expeditions] bus shows up, and their bus parks in the middle of the dirt ramp and all their passengers start piling out of the bus. It was families, kids and grandmas.

The dog and four or five of these DPS officers get all puffed up, and take the dog into the middle of the growing crowd of people getting off the bus. The river passengers have plopped their dry bags on the ground, and they’re slathering sunscreen on each other, adjusting their hats and their sunglasses, and they’re all excitedly talking. The officers start walking the dog through the oblivious group of people that are standing around, having just gotten off the bus. The DPS guys are observing the dog closely as he sniffs everybody’s bag one by one. For the most part, the customers aren’t really noticing the dog and the cops, because they’re just looking for the bathroom or at the river and the rafts. But as the cops keep wandering

amongst the group, and which is growing as more people are getting off the bus, it becomes pretty clear they're mostly grandmas and kids, and they might be in the wrong situation. Their puffed-up chests and broad shoulders start to become narrower, and they start hunching over, as they become more aware of the crowd they are in the middle of. Instead of focusing on the dog, they start looking very sheepish, in the middle of all these families, like, "What the heck are we doing here?!" They very embarrassedly slunk over to their huddle by the power outlet, where they've been previously, to have another discussion. Maybe they decided they were at the wrong venue (laughter) for their operation. Our bus pulled up about then and *our* people started to get out. The officers got back in their cars and quietly left. I didn't have to go to Plan B which was basically pile everyone on the boats and get the hell out of Dodge.

* * *

QUARTAROLI: Our final question: Why the Grand Canyon, why the Colorado River?

HESTER: I was introduced to the canyon at a very young age. I was about eighteen, I knew I always wanted to work outdoors. That first raft trip was transformative for me, as it is for a lot of people, just realizing there's this amazing place you could be in, and be part of this great tribe of people, and in incredible circumstances, as most people who've rafted down the canyon, or love the canyon know. As a guide you often affect people's lives, and help them have that transformative experience. For me it was such a moving and strong experience I wanted to come back and have more of it. Over time I realized I was part of and assisting in the guests experience, that feeling of being over-awed or having some epiphany or transformative moment. I thought, "Wow, this is what it's really about, the simple things in life." Being in the canyon drills that down into people. The basic things in life are connecting with other people. Everybody needs the same things, and you have to work together down there to get them. I don't think there are many other outfitted tours where everybody works together so much as a team than on a raft trip in the Grand Canyon. I liked that experience, I liked being part of that, and kept coming back.

The career changes that I made, I tried to make them as short-term as possible, (laughter) so I could still spend as much time in the canyon as I could. It did work that way for a long while, where I could still guide quite a bit and be part of other people's transformative experiences, while still having those

special moments myself—I loved being part of that community and seeing the canyon through the guests' eyes for the first time, seeing that awe people have when they are down there. Many of them come away gaining a lot, not just new human connections—everybody needs to care about everyone else, but they can also come away with a sense of protecting the environment or the Grand Canyon itself, and doing things that promote well-being among communities and/or the environment. I think for me, being able to still be a part of all that is important. Working as a guide in the Grand Canyon is a career or a way to make money for a lot of people—not that they're going to make a lot of money—but more than that, it is a way for them to influence other people and keep reminding people what's really important in life. I like being a part of that, even though I don't guide much anymore. I still get a great kick out of seeing or talking with people who have come back from their river trips. They often come off their trips extremely moved by the experience. It's not just that they had fun, or saw a beautiful place—it's often a lot deeper experience than that, it's great to be part of that.



Sharon with her dad, Joe, on one of his many Grand Canyon trips as an assistant – this one in the 1980s.

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