boatman's quarterly review

Dear Eddy • Prez Blurb • Guide Profilest • Mustard Pull Archaeological Excavation • Book Review • High Flow Experiment Back of the Boat • 1983 • GCRG Beginnings • CCC Anniversary

Gilen Canyon Dam, June 21, 1983 photo: Rudi Petschek

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... 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 Office Hours: 10:30–5:00 Monday through Friday

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Dear Eddy

N THE INTERVIEW with Ote Dale, she says "...It was about six months after that, that Regan and I got together. So that would have been in '77."

In 1977, I led a party on a 28-day private trip with a research permit, conducting studies for Dock Marston. One of the participants on my trip had friends who were on their honeymoon on a dory trip, and we had planned to try to rendezvous with them. We caught up with them at Granite, and we camped together. Regan was leading their trip, and Ote was cooking. We were invited to join them for supper, and if I remember correctly, Ote had prepared some of the best tasting tomato, avocado, and bacon sandwiches one could imagine.

The following morning, Regan looked over the rapid, and then ran one dory through it. He returned to camp and exclaimed, "Those waves must be ten feet high!" With that, the passengers walked the rapid, and the guides took the dories through. Ote and another boatman were in a small raft with the cooking gear, and they put-in last. We watched them carefully, as they made the classic run over by the right wall. We then put-in with our three rafts. We had two 13-foot Udiscos, and my eleven-foot Sears Roebuck Ted Williams "super strong", for which I had paid one hundred bucks, and which featured two chambers. Well, we did not hit the run exactly right, and my raft went end over end. When I surfaced, I looked up stream, and saw that the second raft had also gone over, and that the folks were sitting on the bottom, which was now the top! Only one of our rafts got through unscathed.

Well, 1977 was the last time that I flipped a boat, but in addition to remembering that harrowing event, I have never forgotten Regan's welcome invitation to join them for dinner, and those marvellous sandwiches that Ote made. As soon as I read those words of Ote's in the BQR, the whole scene flashed back in my memory. One can never underestimate the chances of closing a loop like this over a long time.

Bill Mooz

Prez Blurb

HO CARES ABOUT IT MORE than we do? It's been twenty years since Kenton Grua and a motivated rabble of river guides decided to pull together and form an organization. They aimed to have some fun, make their collective voice heard, and take a stand for the place they loved. That place, of course, is the Grand Canyon.

Sadly, Kenton is gone now. But Grand Canyon River Guides lives on, and many of those founding members are still telling the old stories and getting into the kind of trouble that makes new ones. We're celebrating our twentieth anniversary this year, and doubling that by focusing on what all the old-timers talk about the most: the '83 flood.

It's been 25 years since the river flowed 93,000 CFS, Glen Canyon Dam shook and groaned, and Crystal Rapids ate motor-rigs like candy. Sure, Crystal still gets hungry every now and then, but you should have seen...

Well, that's the thing. This year, along with the usual good stuff, the BQR is going to be full of reminiscing. Stories about high water, interviews from and about the old days, cool photos.

And even more good stuff is out there for you to come to. The Spring GTS is upon us, and it's going to be a great one. You'll be amused and educated from head to tolio. Some highlights:

- An '83 extravaganza: stories, pictures, film.
- A hands-on ropes clinic tailored for canyon work.
- The *Native Voices of the Colorado River* Program has started, and we're the lucky recipients of the first multi-tribal panel discussion. Very cool.
- River emergencies, dam issues, MRSA and tolio talks.
- Archeology, geology, biology, and dancing-ology to the band on Saturday night.
- The best raffle yet.
- All new: GCRG 20TH anniversary mugs. Beer included!
- The Whale Foundation Health Fair.
- Great food.
- More. Yes, even more.

Come on out and party, March 29-30!

And while we celebrate this crazy great place where we work, we can enjoy another great thing: somehow this bunch of river guides, opinionated individuals who can't even agree on how to properly cook a pot of rice, has been able to do more than have fun over the years. We've made a difference. We've touched people's lives, affected the way Glen Canyon Dam is operated, and influenced the way people think about the Grand Canyon. 2008 is an important year for the future of the Canyon. The Grand Canyon Working Group, a committee made up of Park personnel, representatives of scenic overflight companies, tribal members, and other stakeholders, has been debating the plan to restore natural quiet to the canyon. The heart of the matter is airplane and helicopter noise. We expect the park to make a final decision on the matter around the end of this year.

The board is working on representing GCRG's point of view. But this is something we all should be involved in, as individuals and as guides. Quiet places, free from the roar and drone of motors and civilization, are increasingly rare in this world. City people can forget the entire idea of quiet. They don't look for it when they come on river trips, they're shocked when they suddenly notice it—the openness, the feeling of space that's not just visual but expands all their senses. Often it becomes a favorite part of their river experience. It's one of the reasons the place touches them so deeply.

We know this as guides, even if we don't think about it all that much. This summer it might be worth paying a little extra attention. Notice where you feel the quiet and where it gets broken by the sound of airplanes and helicopters. Consider how it affects you and your group. Talk it out, help others notice. Consider how things are, how they should be, where compromises can be made and where lines should be drawn.

This year we can each make a difference. A simple letter you write will carry weight when the big decisions are made. Letters your passengers send might matter even more. We'll keep you informed about what's going on, who to contact and when. Like making the cut at Crystal, we'll want to have our timing, angle and momentum just right to get in where we want to be. I hope you'll spend some time talking it out and planning your run.

But back to the GTS. After twenty years, with all the great programs, the river trip, even a raffle and 20TH anniversary mugs, the heart still beats to the same rhythm: swapping stories, telling lies and dancing into the night. As Kenton said back then, it's "a good excuse to get together once or twice a year. Talk about shit and party."

I'm looking forward to seeing you there.

Sam Jansen

Guide Profiles



Kimo Nelson, Age 27

WHERE WERE YOU BORN AND WHERE DID YOU GROW UP? I was born in Honolulu, Hawaii. My father worked for the

foreign service, so from the time I was born until I was twelve my family moved every year or two. I grew up in Malaysia, Egypt, Oman, Indonesia, and the Philippines. When I was twelve I moved to Salt Lake to go to junior high and high school.

Who do you work for currently (and in the past)? I've always worked for crate.

How LONG HAVE YOU BEEN GUIDING? I started working as a swamper for my brother Abel in 1994. I've been on the river every year since.

WHAT KIND OF BOATS DO YOU RUN? I run s-rigs, snouts, 18-foot Avons, and 18-foot Havasus.

WHAT OTHER RIVERS HAVE YOU WORKED ON? I've also worked for CRATE in Desolation, Westwater, and Cataract Canyons, and on the Tatshenshini and Alsek Rivers in Alaska.

WHAT ARE YOUR HOBBIES, PASSIONS, DREAMS? When not on the river my time is dedicated to school, making art, private trips, cooking, hiking, and snowboarding.

MARRIED, FAMILY, PETS? I currently live with my girlfriend Mikenna Clokey who is also a CRATE guide.

SCHOOL/AREA OF STUDY/DEGREES? I have a BA in Environmental Studies and am currently studying painting at the Oregon College of Art and Craft.

Is THIS YOUR PRIMARY WAY OF EARNING A LIVING OR DO YOU COMBINE IT WITH SOMETHING ELSE? Aside from selling the occasional painting, guiding is my primary source of income.

WHAT'S THE MOST MEMORABLE MOMENT IN YOUR GUIDING CAREER? I did my last trip with my brother when I was

seventeen years old. He retired from guiding in 1997 to pursue a career in computer programing. On our last trip together he had me run his motor-rig through Lava. It was my first run and I was scared shitless, but I couldn't say no. I had a great run and I think I made my bro feel better about passing the torch on to me.

fihat KEEPS YOU HERE? I think the opportunity to live and work in one of the most beautiful and inspiring places on the planet keeps me coming back.



Walker David Mackay, Age 31

WHERE WERE YOU BORN AND WHERE DID YOU GROW UP? I was born and raised in Murray, Utah (a suburb of Salt Lake City).

I grew up around boats and rivers from the time I was born.

WHO DO YOU WORK FOR CURRENTLY (AND IN THE PAST)?

I've always worked for Colorado River & Trail Expeditions (CRATE). I started getting paid for it in 1995. Before then, I ran baggage boats and helped out.

How LONG HAVE YOU BEEN GUIDING? I've been a licensed guide since 1995, so for about thirteen years by the time the 2008 season rolls around.

WHAT KIND OF BOATS DO YOU RUN? Row, paddle, motor, and kayak. I've also run a lot of the canyon's rapids on a river board. In the winter, I drive a Safe Boat on the Great Salt Lake.

WHAT OTHER RIVERS HAVE YOU WORKED ON? Tatshenshini and Kongakut in Alaska; Green in Utah; the Colorado in Utah (Westwater Canyon and Cataract Canyon).

WHAT ARE YOUR HOBBIES, PASSIONS, DREAMS? Traveling and exploring, hiking, and mountain biking. I also like basketball and surfing. I'd like to bike across the country with my wife, Mindy. This year we pedaled from Salt Lake City to Kanab and saw a lot of things that you miss when driving. Like most guides, I have a great passion for the river and the river lifestyle, and enjoy collecting and reading old and rare books pertaining to river lore and history.

MARRIED, FAMILY, PETS? Mindy and I were married on November 29, 2003, on the rim of the Canyon at the Buck Farm Overlook. It was an awesome end to an awesome day when giant Condor #22 appeared and made a couple of swooping low circles above us. My dad, mom and sister, Bonnie, also work in the river business.

SCHOOL/AREA OF STUDY/DEGREES? I graduated from the University of Utah with a Math BS in 2000.

WHAT MADE YOU START GUIDING? I grew up in the river business. I'm a second generation river guide.

WHAT BROUGHT YOU HERE? I love the outdoors and rivers, and the Grand Canyon is the best of the best. It's my favorite place in the world.

WHO HAVE BEEN YOUR MENTORS AND/OR ROLE MODELS? My dad and mom, Bill Trevithick, Abel Nelson, Mary Allen, John Toner, Shawn Rohlf, and David Brown.

WHAT DO YOU DO IN THE WINTER? Dream of being in the Grand Canyon while brine shrimping on the Great Salt Lake.

Is THIS YOUR PRIMARY WAY OF EARNING A LIVING OR DO YOU COMBINE IT WITH SOMETHING ELSE? Half of the year I work on the Great Salt Lake in the brine shrimping industry. The best half of the year, I work on the river—mostly in the Grand Canyon.

WHAT'S THE MOST MEMORABLE MOMENT IN YOUR GUIDING CAREER? When Latimer Smith gave the "okay" sign by patting the top of his head after he fell 50–60 feet down from Thunder River. Watching him fall that distance and being helpless to do anything was awful. I will never forget how grateful I felt when he gave the okay sign.

WHAT'S THE CRAZIEST QUESTION YOU'VE EVER BEEN ASKED ABOUT THE CANYON/RIVER? "Is the river really going downhill, or does it just look that way?"

WHAT DO YOU THINK YOUR FUTURE HOLDS? I try to enjoy the moment without thinking too much about the future.

WHAT KEEPS YOU HERE? The connection to those I care about—family, friends, and co-workers; the Canyon, itself, and the interesting people I get to know and meet.

GCRG Mini Updates

GUIDES TRAINING SEMINAR

HECK THE GCRG WEBSITE, www.gcrg.org for an electronic version of the GTS flyer and a draft land session agenda. We do want to emphasize "*Draft*" because it may very well change (even several times) but it will give you an excellent idea of what the March 29–30 session will cover. Check back close to the session for the final version—you don't want to miss anything! Land session cost is \$35 per person, or \$30 if paid by March 1. River session costs are \$180 for the upper half (April 1–7) and \$230 for the lower half (April 7–15). If you're sponsored by an outfitter, they'll pick up the tab

ADOPT-A-BOATMAN

New full adoptions since the last BQR include: Les and Helen Hibbert, John Toner, and Richard Quartaroli. Fantastic new additions! An updated list of the partial adoptions includes: Brian Dierker (\$250 needed), and Dick McCallum (\$400 needed) Loie and Buzz Belknap (\$250 needed) Serena Supplee (\$500 needed). These stories need to be told, so send some \$ to help us complete these partial adoptions! Check the GCRG website for the most current spreadsheet of adoptions, sponsors, and status at www.gcrg.org/adoptaboatman. You'll be amazed by the breadth of the project to date.

Interviewing, transcribing, editing—we're busy with every aspect of this program! It's exciting to be making some good headway with many interviews completed (or near completion) and others on the docket. This spring will be see hours worth of tapes transcribed and edited, with the transcriptions and tapes eventually residing at NAU Cline Library to be incorporated into their Colorado Plateau Digital Archives. And many thanks to all the sponsors for their generosity and enthusiasm, as well as to the adoptees for their willingness to sit down with Lew Steiger and share their memories of boating in Grand Canyon. We'll be thrilled to start publishing some of these interviews very soon!

ADOPT-A-BEACH

We'll be doing Adopt-a-Beach sign-ups at the GTS land session. We need your help to capture the changes to Grand Canyon beaches in 2008, especially if the High Flow Test occurs! Adopt-a-Beach photos will eventually be incorporated into the Campsite Atlas Program spearheaded by Grand Canyon Monitoring and Research Center and Grand Canyon National Park. No other program matches the frequency of monitoring that Adopt-a-Beach provides. Thankfully, our extensive photo archive will soon have a home within a larger context of a comprehensive electronic, GIS-based atlas of all previously used and currently available campsites in the Colorado River ecosystem.

ADAPTIVE MANAGEMENT

You will note the press release about the proposed High Flow Esperiment in this issue, and by the time this BQR reaches you, we should know whether or not it has become a reality! Regardless of the outcome, we'd like to thank our tireless Adaptive Management representatives: Andre Potochnik, John O'Brien, and Matt Kaplinski, for their continued advocacy on behalf of recreational river running interests. We can say with certainty that without the Minority Reports submitted to the Secretary of the Interior by Grand Canyon River Guides, the Grand Canyon Trust, the Grand Canyon Wildlands Council, the Hopi Tribe, plus additional support from the Grand Canyon Private Boaters Association, the Department of the Interior would not be considering a High Flow Experiment for 2008.

The financial support of the Grand Canyon Conservation Fund (GCCF a non-profit grant making program established and managed by the Grand Canyon river outfitters), ensures GCRG's participation as in the Adaptive Management Program, as well as our endeavors on behalf of Adopt-a-Beach Program and the Guides Training Seminar. We deeply appreciate the commitment of river outfitters and the GCCF, supporting programs that positively impact the needs of recreation and the health of the recreational resource.

YEAR-END FUNDRAISING

We sincerely thank those of you who contributed to GCRG's year-end fundraising drive, as well to members who sent along extra \$ with their dues! Every bit helps, and together we have raised over \$11,000 in unrestricted funds to keep GCRG plugging away towards our goals. A list of contributors for the Fiscal Year 2007–'08 year will appear in a future BQR after the end of our fiscal year (June 30). Thanks a million for your support. It makes a world of difference!

fiebsite revision

We'll be working on a complete overhaul of the GCRG website with designer, Mary Williams, and techno-whiz, Chris Geanious. It will be a process, but when the new website is completed, it will be worthy of GCRG and of our vibrant guide community. Changes are good!

Come Join the Sahara Mustard Pull-March 28th

OST OF US HAVE DRIVEN down a road and seen lines of garbage bags, a sure sign that people recently walked through the area and picked up trash, helping to clean up the environment. Those bags often contain beer cans, styrofoam containers, tire pieces, and plastic shopping bags, all items that would have remained right on the ground where they were discarded for decades, changing the face of the landscape. Now imagine that each year, these items double or triple on their own, until a decade later, there is a complete blanket of beer cans, styrofoam containers, and plastic shopping bags on the ground, almost too many for a small group of volunteers to pick up. The only thing that might move them from their spot is a strong wind, or possibly a rain storm, either of which could push them downslope, possibly into a river or stream, where they might bob in the water until they land on a beach, and there too, of their own devices, they begin to multiply. Now, we all know that empty beer cans do not multiply on their own. It does happen, especially late at night, but it requires a human touch.

Now picture the landscape surrounding Lees Ferry, beneath the steep cliffs, alongside the Colorado River and Paria Creek, surrounding the campground and parking areas. Just a few years ago, there were just scattered individuals of Sahara mustard (*Brassica tournefortii*). Then the next year, there were hundreds, perhaps thousands, and the multiplication continued at warp speed.

In the spring of 2007, volunteers removed almost 35,000 Sahara mustard plants from the Lees Ferry area in just a few days, but perhaps 500,000 plants remained. Unlike the beer cans or plastic bags mentioned above, this plant is fully capable of multiplying exponentially on its own, creating a complete blanket on the ground. Envisioning them moving downriver to the limited beaches in Grand Canyon is not just likely, it is happening right now. These plants have been found as far downriver as Pipe Creek. Imagine pulling up to a beach, and rather than inhaling the intoxicating scent of pale evening-primrose (Oenathera pallida) or sand-verbena (Abronia elliptica) or perhaps catching a glimpse of the secretive desert broomrape (Orobanche cooperi), you fight through the tumbleweed-like dried tops of Sahara mustard, and while doing so, your shorts are ripped to shreds by the camelthorn (Alhagi maurorum) that is interwoven among the tall mustards. While not as skin ripping as camelthorn, Sahara mustard has the distinct potential of becoming as dominant and has demonstrated the ability to take over dunes and arid landscapes to the exclusion of native species.

So, hopefully you are not thrilled about campsites full of camelthorn and Sahara mustard, but what can you do? Before you begin to enjoy the fabulous line-up of the 2008 Guides Training Seminar, you can come on out and help line the River Road at Lees Ferry with garbage bags filled with Sahara mustard plants on **Friday, March** 28! If you are interested, please contact Lori Makarick at 928-226-0165 or Lori_Makarick@nps.gov to sign up for the event. Meet the NPS project leaders at 11 A.M. at the Paria River parking lot, or look for people donning bright orange safety vests and wielding geology picks. The plan is to work until at 4 P.M. that day, but any time you can give will be greatly appreciated. If you sign up and get there on time, you will even get to partake in the deli spread lunch, a sign of the season to come! Tools and gloves will be provided, but volunteers will have to wear close-toed shoes (no sandals or flip-flops), long pants and a long-sleeve shirt, and bring water bottles (three liter capacity). If you are lucky enough to be going on the riverbased GTS, you will get the rare, but highly satisfying opportunity to yank camelthorn plants out of the ground at Unkar and Crystal, the long-term control sites many of you have helped out with in the past. Not only will you get to wear work gloves and use shovels on the river, but you will also learn juicy tidbits about invasive plants that you can share with your future passengers.

Lori Makarick

Digging into the Past—Archeological Excavations along the Colorado River in Grand Canyon

RAND CANYON IS BOTH a natural and cultural There are few experiences as wondrous as running the Colorado River in Grand Canyon National Park. River runners descend into ever older rock units downstream from Lees Ferry, experience magical places such as Elves Chasm and Deer Creek Falls, and visit archeological sites such as Unkar Delta and the granaries at Nankoweap Canyon. Other evidence of the cultural aspects of the Canyon landscape includes many place names that reflect the Canyon's long human history, such as Havasu Canyon. Currently eleven Indian tribes claim cultural ties to the canyon. The tribes include: Havasupai, Hopi, Hualapai, Kaibab Band of Paiute Indians, Las Vegas Paiutes, Moapa Band of Paiute Indians, Navajo Nation, Paiute Indian Tribe of Utah, Pueblo of Zuni, San Juan Southern Paiutes, and the Yavapai-Apache Nation. Three Indian reservations, Havasupai, Hualapai and Navajo Nation, adjoin the national park boundary.

Despite the fact that people have lived in and used the Grand Canyon landscape for 12,000 years, archeologists know relatively little about the canyon's prehistory. Approximately four percent of the park's 1.2 million acres has been surveyed for cultural resources, and there have been few excavations of identified archeological sites. Given the National Park Service's mandate to preserve and protect these nonrenewable resources, archaeological excavations are extremely rare in Grand Canyon and only occur when the resource cannot be preserved in situ—i.e., in its original setting.

Since the closure of Glen Canyon Dam in 1963, the amount of sediment available in the Colorado River in Grand Canyon has been greatly diminished. This lack of sediment replenishment has incrementally increased erosion of beaches and alluvial terraces, and decreased the availability of sediment for aeolian transport. The impacts of this sediment-starved system include the erosion, deterioration, and even loss of archeological sites in the Colorado River corridor. The March 1995 Final Environmental Impact Statement for the Operation of Glen Canyon Dam mandates scientific studies of cultural resources in the area potentially affected by the operations and existence of the dam. Additionally, a variety of federal laws, regulations and policies, including the National Park Service Organic Act, Archeological Resource Protection Act, and the National Historic Preservation Act require preservation of archeological resources in Grand Canyon.

Grand Canyon National Park Service (GRCA) and the Bureau of Reclamation (BOR) conducted an intensive inventory of archeological sites in the river corridor between 1990 and 1991. This survey identified



Archaeologists excavating a storage room at Furnace Flats. Photo courtesy of Lisa Leap, NPS photo.



Excavation of a structure that had been cut by an arroyo at Furnace Flats. Photo courtesy of Lisa Leap, NPS photo.

475 archeological sites in a 255-mile stretch of the Colorado River between Glen Canyon Dam and Separation Canyon. Most of these sites consist of open habitation and roasting feature complexes, and are from the Early Formative Period through the Late Formative Period (A.D. 800–A.D. 1150), equivalent to the Pueblo 1 to Pueblo II time period. GRCA began monitoring these sites in 1992 as part of the cultural resources Programmatic Agreement for the Glen Canyon Dam Adaptive Management Program. Monitoring and evaluation of the 438 sites located within Grand Canyon National Park revealed that 161 sites may be adversely affected by on-going Glen Canyon Dam operations and that several sites required preservation activities such as stabilization, trail obliteration, or data recovery (such as excavation).

In 2006, GRCA archeologists obtained funding to conduct data recovery at nine of the most extensively eroded sites, where active erosion such as arroyo cutting and aeolian stripping is presumed to have accelerated since the closure of Glen Canyon Dam and where stabilization measures were repeatedly unsuccessful. In 2007, in consultation with GRCA and the affiliated tribes, BOR developed a formal treatment plan that identifies mitigation measures such as stabilization and/or excavation for the remaining impacted sites and addresses public outreach and education. The Bureau of Reclamation will contract for the excavation of three sites in 2008.

These archeological excavations along the Colorado River will provide a rare opportunity to glimpse into ancient lifeways and into the overall human story at Grand Canyon. The last major excavations along the river were conducted almost forty years ago: in the late 1960 and early 1970s, Douglas Schwartz excavated Unkar Delta and the Bright Angel Pueblo. Excavations give archaeologist an opportunity to answer important questions about who was living here, what they ate, when they occupied the area, and so on.



A living area with a hearth and ventilator completely excavated at Furnace Flats. Photo courtesy of Lisa Leap, NPS photo.

In order to excavate the nine sites mentioned above, Grand Canyon National Park entered into a cooperative agreement with the Museum of Northern Arizona (MNA). The project is under the direction of GRCA archeologist Lisa Leap and MNA archeologist Ted Neff and includes site testing, excavation, stabilization, analysis and curation of artifacts, and visitor interpretation. The \$1.2 million project is funded by the National Park Service via the Federal Lands Recreation Enhancement Act, which allows utilization of recreation fees to enhance visitor services, including interpretation of an area's natural and cultural history.

Work on the project began in fall 2006 with an archeological testing river trip to plan future excavations and to initiate archeological work, including surveying, excavating test units, and assessing site geomorphology. Tribal consultation has been an important part of this project since its inception. Representatives of affiliated tribes have visited all the sites planned for excavation with GRCA archeologists, and all support the excavations. After a tribal consultation river trip last August, Jan Balsom, Deputy Chief of Science and Resource Management, said, "An integral part of our plan is to include tribal scholars in the research and interpretation of these archeological sites. It is important that we maintain an open dialogue with all interested parties to make sure that we do the right thing with these sites, and that we incorporate tribal perspectives and share the park's cultural history with the public."

Archeological research can augment tribal oral histories in addition to enhancing the public's understanding of the Canyon's prehistory. In some cases, tribes are losing their histories because elders pass before stories are shared. With the tribal engagement in this excavation project, GRCA archaeologists and tribal representatives have a unique opportunity to share information with each other and with the public. Excavation work began in May 2007 when MNA and GRCA archeologists excavated two masonry rooms at a site below the Little Colorado River. Last September and October, crews excavated three structures exposed in arroyo cuts in a site known as Furnace Flats. At the conclusion of their work, archeologists backfilled, planted vegetation, and recontoured the areas to remove all evidence of the archeological excavation. To continue to protect the highly erosive and fragile nature of the Furnace Flats area, it remains closed to all visitation.

To meet the National Park Service's preservation mandate, backfilling, transplanting vegetation, and other stabilization measures following excavation will continue to be an integral part of all future work. Reburying a site after excavation is not a typical archeological practice, but is necessary in Grand Canyon to protect the sites from future degradation that would occur if these fragile structures were left exposed.

Outreach and interpretation of the sites is a critical component of the GRCA and MNA excavation project. Approximately 800 individuals on commercial, noncommercial, and research trips toured the excavations in 2007. Grand Canyon National Park will continue to invite river trip participants to visit sites while excavation work is ongoing. Excavation trips are planned for spring and fall 2008 and 2009. Lees Ferry rangers will inform trip leaders at the launch when excavations are in progress, and a GRCA interpreter will provide tours. Visits during the excavations are only a small part of the anticipated interpretive and educational efforts. GRCA and MNA plan future publications, exhibits, and other interpretive media. Currently, a multimedia slideshow from one of the Furnace Flats excavation trips is available online at www.dawnkishphotography.com/ GrandArchaeology/. An exhibit featuring the photographs of the excavations by Flagstaff photographer Dawn Kish will be in the Branniger Chase Hallway at the Museum



Archaeologists backfilling after excavation. Photo courtesy of Lisa Leap, NPS photo.

of Northern Arizona from March 1 through July 2008. This exhibit is sponsored by Grand Canyon Association, Grand Canyon National Park, and the Museum of Northern Arizona.

After the completion of the project, artifacts, photographs and video documentation will be permanently curated in the Grand Canyon National Park Museum Collection. The findings will be incorporated in future exhibits and public educational efforts at GRCA, MNA and various tribal visitor centers.

Balsom concluded, "The opportunity to excavate these sites in the Colorado River corridor is very exciting, and this research will almost certainly reveal new information about the human history and prehistory of Grand Canyon We think that the educational and interpretive components of this project really show what Grand Canyon National Park is trying to achieve. We work to preserve the Park's resources while giving opportunities to the public to experience them, whether it is via on-site tours to river trip participants while the excavations are in progress, or by planning future museum exhibits."

> Allyson Mathis and Lisa Leap GRAND CANYON NATIONAL PARK

Book Review

Grand Obsession: Harvey Butchart and the Exploration of Grand Canyon, by Elias Butler and Tom Myers; Puma Press; 2007; 455 pages; \$19.95.

You could read every book out there on the one and only Grand Canyon and you are still likely to come away empty and unable to humanly grasp the immensity or the character of that incredible and vast work of nature.

One exception. Read this newest book on the Grand Canyon and Harvey Butchart (1907–2002)—a man whose love of the canyon meant he hiked, climbed, floated and bushwhacked some 12,000 pioneering miles below the rim during 42 years. Then, through accounts of his adventures, you may be able to at least temporarily clutch that vast landscape in your mind.

This book required fifteen years of research and is woven into a masterful work about the human side of the Grand Canyon, as well as some physical features.

There's a lot written about the Colorado River exploration of the Grand Canyon, but this new book focuses on the hiking and climbing aspect of it. And who better to pinpoint than Butchart, who is believed to have hiked more in the canyon than any other known person. Harvey Butchart, the man who has walked over more of the Grand Canyon than any other alive or dead... - EDWARD ABBEY

Grand Obsession



HARVEY BUTCHART and the

Exploration of Grand Canyon

Elias Butler Tom Myers

Many famous places have their characters. For example, Yosemite had the legendary John Muir. The Grand Canyon has Butchart, and this book canonizes him as a larger-than-life character.

This is not a short work but is well footnoted and includes more than 150 photographs of Butchart and the Grand Canyon—plus some maps—making it a treasure. After reading it, you may appreciate and understand the Grand Canyon from a new angle.

As a Northern Arizona University professor of mathematics, Butchart looked like a typical bookworm, but his endurance and intense energy about the Grand Canyon caused a friend of his to claim the man was made out of piano wire.

He came across some magical Native American places, like an ancient salt mine; successfully climbed more than 80 canyon buttes/summits without today's modern gear (some of his climbing apparatus is preserved in a Grand Canyon museum); and loved the obscure paths much more than the standard Bright Angel or Kaibab trails.

Eventually a painful heel injury meant he had to have a park ranger helicopter rescue him on one of his adventures, and inevitable old age also equaled the last canyon trip for this "demon hiker." In some of his later years, he would travel by boat upstream from Lake Mead and explore side canyons without having to hike extensively.

From a Utah point, he also floated part of Glen Canyon, just before it disappeared under a new dam's backup of water.

The book also touches on tragedy. A collision of two aircraft once closed the area Butchart wanted to explore for about one year. He also lost a friend, Boyd Moore, to drowning in the Colorado River when their stunt of trying to cross the water on flimsy air mattresses (without wearing life preservers and during high spring runoff season) turned deadly. His body was never found, and Butchart temporarily abandoned the canyon and air mattresses as a result. That story alone is worth the price of the book.

Butchart's wife, Roma, and her many nights and days of being alone during her husband's long and frequent treks are also explored in detail. Anyone who has left a spouse behind for some intense hobby can relate to that aspect of this book.

It was also somewhat amusing that Butchart would bury his empty soup cans in the canyon, though more environmentally aware friends would sometimes dig them up and properly dispose of them.

Some of his and his wife's ashes were spread in the inner canyon. Others were buried atop Wotan's Throne, a mesa. Butchart Fault is one part of the Grand Canyon officially named in his honor.

Having my own lesser grand obsession with the Grand Canyon, Butchart was a man I wish I could have met. By proxy, this book is the next best avenue to knowing him now.

By no means sedentary authors, the book's two writers (both Flagstaff residents) also personally trekked into the Grand Canyon and used some of Butchart's guide books to relive some of his adventures. They wove some of that into their book. Their firsthand knowledge of Butchart's roaming grounds adds insight and flavor to the book.

Of all the Grand Canyon books out there, this one stands alone as a classic work showcasing man and nature at their best.

Lynn Arave

NOTE: This review was originally published in the *Desert Morning News* on Thursday, September 6, 2007.

More Than Fair: The Ladies Speak Up

The previous YEAR'S ISSUES of the Boatmen's Quarterly Review featured four of Grand Canyon's increasing number of outstanding female river guides: Fritz; Julie Munger; Susan Billingsley; and Ote Dale, who continue to leave their mark on river lore. Call them what you will—river guides, boatmen, female boatmen, boatwomen, boat hags (see Louise Teal's Breaking into the Current: Boatwomen of the Grand Canyon for some explanation and anecdotes about names)—they truly represent the objectives of GCRG: Protecting Grand Canyon; Setting the highest standards for the river profession; Celebrating the unique spirit of the river community; and Providing the best possible river experience.

Despite different backgrounds and paths to the River, these four women were united in their refusal to let gender inhibit their dreams of guiding in Grand Canyon. A few telling quotes illustrate how each of them pursued their goals on their own terms.

GCRG's intrepid interviewer Lew STEIGER: "Well, what about being a woman and breaking in, was that tough?"

FRITZ: "It was not something that, in my whole life, I ever really considered as something I needed to think about. Obviously. I never was bothered by... if I wanted to do something, I didn't really care what gender I was."

Lew: "What has it been like to be a woman in the river running world?"

JULIE: "I think the 'being a woman' question was easy to overlook. While I am a 'woman,' when I am boating I am a 'river runner.' I feel as if I have always been treated as part of the crew and judged by my ability to do the job."

Lew: "How did it feel for you being a woman then, with the river-running industry/community? Did you feel accepted or did you notice that same resistance you'd felt at NAU [as the first woman in their Forestry program]?"

SUSAN: "[In 1966 in Forestry] it was just women breaking into a man's career and they just didn't want women around. I never felt like they needed to like me or even particularly want me there, I just felt like it was something that I could do and I enjoyed—to me I just ignored it all." "I didn't [notice that same resistance], but I was pretty insulated. I ran with [my husband] George, and I had no trouble with any of the other boatmen that worked for GCE."

Lew: "Did you have a hard time gettin' along with everybody?

OTE: "Well for the most part—it was like [the men] would say, 'Ah, women can't row the river.' It wasn't

like they were really strong against it, it was just like, it was a man's world. And that's not what my daddy told me, 'cause I drove his tractors and did all the stuff that the boys did."

Though the interviews with these "unique spirits" have all been published very recently, in re-reading I found myself again caught up in their "stories from the heart." They're fun, moving, and exciting, everything you would want from a good river tale. Regardless of whether these stories feature women or men, the important aspect is that they highlight our colorful and dynamic river community. I defy anybody reading these interviews, as river runners and Canyon lovers, to not find them endlessly interesting and enriching. They touch at the soul of river running—the intrepid, adventurous spirit; the disregard for traditional boundaries and roles; the excitement of the unknown around the next bend; and the confidence that we can handle whatever comes our way. In doing so, they are rooted in the traditions and spirit of the American West, and in the reasons why so many of us become awed and in love with the fierce beauty of the Grand Canyon and the Colorado River.

This program was made possible in part by a grant from the Arizona Humanities Council (AHC). AHC has designated the Grand Canyon River Runners Oral History Project as a "We the People" initiative of the National Endowment for the Humanities. Any views, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect those of the Arizona Humanities Council or the National Endowment for the Humanities. We sincerely thank both organizations.

As part of the program evaluation, there is a questionnaire inserted in this issue of the BQR. It is postpaid, so please assist us by completing and mailing it back. Further analysis from the questionnaires will appear in a future BQR.

It brings us great pleasure to share these stories and these personalities with you, our fellow river travelers. Thank you for your continued support of our efforts as we continue to capture special stories that will outlast us all.

Richard Quartaroli

High-Flow Experiment Proposed to Improve Grand Canyon Resources

The following article was excerpted from a press release from the National Park Service on January, 17, 2008.

A N EXPERIMENT USING high flows from Glen Canyon Dam to study and improve Colorado River resources in Grand Canyon National Park has been proposed by the Department of the Interior. The goal of the experiment is to better understand whether higher flows can be used to rebuild eroded beaches downstream of Glen Canyon Dam by moving sand accumulated in the riverbed onto sandbars. Grand Canyon sandbars provide habitat for wildlife, serve as camping beaches for recreationists, and supply sand needed to protect archaeological sites. High flows also create areas of low-velocity flow, or backwaters, used by young native fishes, particularly endangered humpback chub.

The 2008 test would be different than previous highflow tests conducted in 1996 and 2004. In particular, scientists have concluded that more sand is needed to rebuild sandbars throughout the 277-mile reach of Grand Canyon National Park than was available in 1996 or 2004. Currently, sand supplies in the river are at a 10-year high with a volume about three times greater than the volume available in 2004 due to tributary inflows below the dam over the past sixteen months.

The proposed experiment is dependent on the completion of environmental review processes required by the National Environmental Policy Act and the Endangered Species Act. The Bureau of Reclamation (Reclamation) is in the process of preparing an environmental assessment of the proposed test. The environmental assessment is expected to be available for public review in early February 2008. This assessment evaluates the impact of the proposed test on a wide range of environmental and socioeconomic resources. A decision by the Department of the Interior is anticipated in late February 2008, with plans to conduct the high flow in early March 2008, if the decision is to move forward with the experiment.

The high-flow experiment and associated research activities, should they occur, will be undertaken cooperatively by scientists and resource managers from Interior's u.s. Geological Survey (usgs), Reclamation, National Park Service, and u.s Fish and Wildlife Service.

"The proposed 2008 high-flow experiment and the accompanying studies build on learning that occurred as the result of the experiments in 1996 and 2004," says John Hamill, USGS Grand Canyon Monitoring and Research Center Chief. "Given the current amount of sand in the system, we have a tremendous opportunity to learn more about whether high flows can be used to improve important natural, cultural, and recreational resources in Glen and Grand canyons."

"Years of study and unique environmental conditions allow us to move forward with an experimental flow that will provide the valuable information needed to protect the resources within Grand Canyon National Park," stated Steve Martin, Grand Canyon National Park Superintendent.

One of the proposed studies will document habitat changes and determine how backwater habitats are used by young humpback chub and other native and nonnative fishes. Other studies will look at how higher flows affect the aquatic food base, rainbow trout recruitment and emigration, riparian vegetation, nonnative fishes and archaeological resources in close proximity to the Colorado River.

During the proposed high-flow experiment, Reclamation will release water from both the powerplant and the bypass tubes to a maximum amount of approximately 41,000 cubic feet per second (CFS) for about sixty hours. If approved, current plans would call for the flows to begin increasing on March 4, 2008 with powerplant bypass flows to begin on March 5, 2008. If a decision is made to move ahead with the experiment, a final release schedule will then be announced.

Since 1996, releases from Glen Canyon Dam have generally ranged between 8,000 and 20,000 CFS. The increase to 41,000 CFS will change river conditions as well as the availability of campsites. It is suggested that all river users be prepared for variable conditions, including higher river flows.

"The water released during the test will not change the amount of water to be released over the course of the 2008 water year," said Larry Walkoviak, Regional Director of Reclamation's Upper Colorado Region. "The current plan of operations calls for releasing 8.23 million acre-feet of water from Glen Canyon Dam. That water flows downriver to Lake Mead for use by the Lower Colorado River Basin States and Mexico. The experimental flows are included within this annual volume. Monthly releases later in the year will be adjusted downward to account for the water released during the experiment."

The USGS'S Grand Canyon Monitoring and Research Center is responsible for monitoring and research activities in support of the Glen Canyon Dam Adaptive Management Program, a Federal initiative designed to assist the Secretary of the Interior in protecting the resources downstream of Glen Canyon Dam. The program includes a wide range of stakeholders, including American Indian tribes, Colorado River Basin States, environmental and ecreation groups, power customers and State and Federal cooperating agencies. The program, which helped guide the development of science activities for the experiment, is administered by Reclamation under the guidance of the Secretary of the Interior. Grand Canyon rafters, fisherman and other river users and hikers can call Grand Canyon National Park's River Permits Office at 1-800-959-9164 for additional information on how the high-flow event may affect their visit. Additional information is available at www.gcmrc. gov/research/high_flow/2008/.

Back of the Boat— The Whale Foundation News Bulletin

NEW MENTAL HEALTH PROGRAM

N JANUARY OUR Health Services Committee (HSC) implemented our new *Mental Health Program*. Here's what you can expect. If you are feeling depressed, struggling with addiction problems, dealing with chronic shoulder injuries, dial our toll-free Help Line (866-773-0773.) After you hear the recorded message, please leave your first name only and your phone number. In response, one of our Case Managers—either Susan Ash Ghiglieri or Paul Nockles—will return your call within 24 hours. In this initial conversation, Susan or Paul will assess your specific needs and determine which of the Whale Foundation services you may want to take advantage of.

Following this assessment, you may be referred to a specialist—such as a counselor, M.D., massage therapist or another healthcare professional. We have both male and female providers. And, we can provide counseling by phone, and, of course, work around your river schedule. Case Managers and Providers are professionals and maintain strict confidentiality of all client information.

Finally, for those guides who are uninsured or under-insured: the Whale Foundation has a nonmandatory payment policy for the first eight hours of therapy that is not covered by your insurance, your employer or another third party payer.

GTS HEALTH FAIR

We want to remind everyone that the Whale Foundation will host our *Health Fair* at the spring GTS on Saturday, March 29th. Last year 65 guides took advantage of these free services. Just look for our tent outside the warehouse on the Hatch pad. Our healthcare professionals will offer the full package:

1) screenings for skin, colon, and breast cancer along with diabetes and cholesterol,

- 2) take your blood pressure,
- 3) do oral and eye examinations,
- 4) discuss family health histories and more.

Also, we will have available informative pamphlets on pertinent health issues. If you are an uninsured or under-insured member of the river community, we strongly encourage you to take advantage of this incredible opportunity, and, again, it's *free!*

GTS LIAISON OPEN HOUSE

The Whale Foundation will host an *Open House* at the Spring GTS on Saturday, March 29th. The HSC is revitalizing the Liaison Program in 2008 and would like to hear your thoughts/comments. We welcome former and current Liaisons—as well as anyone interested in becoming involved in the future—to stop by our tent and let us hear your perspectives about ways that we can better serve the river community.

WINGDING VI

Another Whale of a Night: the sixth annual, fun-filled rendezvous of the Grand Canyon river family was held on Saturday, February 2, 2008 at the Coconino Center for the Arts in Flagstaff. Grand Canyon river guides came from around the West to be part of the celebration! About 350 of us bid on 165 auctions items-the proceeds from which will go to support the well-being of Grand Canyon guiding community. Many were responsible for the evening's success. To name only a few: we say hats off to Martha and Thad for another sumptuous dinner; to Jessie Pope for organizing the outstanding music; to Erika Andersson for ratcheting up the raffle, to Emily Perry for dialing in the bar, to Jeri Ledbetter for her unfailing work behind the scenes and to all the volunteers who helped set up, clean up, bake desserts, run the auction, the raffle, the beverage table, the front table and meet/greet team.

We couldn't pull it off without the help of everyone. As the old song goes: we get by with a little help from our friends! *Many thanks*!

KENTON GRUA MEMORIAL SCHOLARSHIP

The Whale Foundation awarded three *Kenton Grua Memorial Scholarships* in our second granting cycle (November 1st deadline.) The recipients were Brian Hansen–ARR, Nicole Corbo–CanX/GCY and Susan Detering–wRA. Support from throughout the Grand Canyon family has allowed the Foundation to award seven \$1500 scholarships to guides seeking further education in 2007. We encourage folks to apply for these grants. We provide awards to guides with traditional and with *non-traditional* educational paths. All applications are blinded before a rigorous review to insure impartiality. Applications may be downloaded from the website or mailed to you from the office. The next application deadline is June 1, 2008.

WHALE FOUNDATION BOARD OF DIRECTORS

The Whale Foundation welcomed Dave Edwards and Pat Rose to the board recently. We want to thank them both for donating their considerable time and talents in support of our river family. If you are interested in volunteering for the Board or in other capacities, please give us a call at 928-774-9440. We look forward to hearing from you!

2007 WHALE FOUNDATION ACCOMPLISHMENTS

The Whale Foundations's Health Services Committee and Support Services Committee report:

- ROVIDERS: 13–Mental health counselors 8–Physicians 3–Psychiatrists 1–Dentist 1–Optometrist 3–Certified financial planners 6–Physical therapists 1–Massage therapist 2–Transition planning counselors
- MENTAL HEALTH PROVIDERS: Free or reduced cost to individuals. The Whale Foundation paid \$6,225 for professional services to mental health providers in 2007. Mental Health Providers saw thirty individuals for a total of 140 hours, an approximate donated value of \$11,480 at an average of \$82/hour.
- PHYSICAL HEALTH PROVIDERS: Two Flagstaff healthcare professionals served sixteen guides free of charge donating \$2,385 worth of medical services.

ANNUAL HEALTH FAIR AT THE SPRING GCRG GTS: Eight

health professionals provided free screenings (a value of \$750./patient) to 65 guides at the 2007 Spring Guides Training Seminar. The healthcare professionals' generous donation represents a total value of \$48,750. The Whale Foundation paid \$2,032 for client's blood work.

FINANCIAL ASSISTANCE: A CPA donated \$1,150 in services to a Whale Foundation client.

THE WHALE FOUNDATION TRAINING AND OUTREACH IN 2007: The November Leadership Training Workshop was attended by fourteen individuals. The Whale Foundation provided lunch and a mileage payment for outof-town participants. In 2007 providers and supporters provided four BQR articles, hosted a panel presentation at the 2007 Spring GTS, and updated our website with articles on grieving and additional relevant information. In 2007 the Health Services Committee restructured the Help Line/Mental Health Guidelines. These changes were implemented in January 2008.

- KENTON GRUA MEMORIAL SCHOLARSHIP FUND: We have two granting cycles, June and November. Seven \$1,500 educational scholarships were awarded to:

 June
 November

 Nicole Corbo–CanX, GCY
 Nicole Corbo–CanX, GCY

 Susan Detering–wra
 Susan Detering–wra

 Brian Hansen–Arr
 Brian Hansen–Arr
- ¹/₄RAND ANYON ONSERVATION UND: The Whale Foundation thanks the Grand Canyon Conservation Fund for once again continuing their financial support of our community education/outreach efforts. We are grateful for this important partnership.

The Whale Foundation PO Box 855 Flagstaff, Az 86002 Toll Free Help Line 1-866-773-0773 Business: 928-774-9440 Web: www.whalefoundation.org Email: whale@whalefoundation.org

Connie Tibbitts-GCE

the 25th Anniversary

Hoover Dam, Mid-August 1983 photo: Rudi Petschek

Where We Began: 1983 Flood and GCES (for those of you who don't remember, GCES preceded GCMRC).

The FALL OF 1982 was wet and wild as the rains came, the ground soaked up moisture and the snows came. We knew we were going to be in for a big water year when the snows came early and deep to the high country. On December 6, 1982 after considerable debate, discussion, criticism and argument, Secretary of the Interior James Watt signed the directive to begin the Glen Canyon Environmental Studies (GCES) in the Grand Canyon. Political thought in Washington and Salt Lake City figured that if you threw a little money and effort into collecting data that the frenzy over the operations of Glen Canyon Dam would just go away—they always had in the past.

The spring of 1983 brought lots of excitement as the GCES began to ramp up. Since the early '80s we had been measuring the flows necessary to keep the trout happy below the dam and we thought we could get moving come summer. Unfortunately, what we saw was a runoff train barreling down the canyons. The winter lasted and lasted with a major snowstorm hitting the high country the end of May followed by a hot spell that resulted in massive and fast runoff.

By the time the Bureau of Reclamation (BOR) figured out that the amount of space in Powell did not measure up to the amount of water running off of the mountains it was too late. But, we have the spillways don't we. Why worry? Well worrying was in order due to the known inherent design flaw in the Glen Canyon Dam spillways. As a result, the BOR opened up the river bypass tubes and cranked the eight generators at the dam to full bore plus a little extra. The dam and power plant was rocking and the rocks were flying. Eventually of course the spillways were called into action and damage began—it was only a matter of time.

Doing science below the dam brought its own special opportunities for adventure. On several occasions I was asked to motor up from Lees Ferry to gather water samples. As one got within five miles of the dam you could feel the force of the river and a mist was rolling down Glen Canyon. Up on the dam itself the rumbling and shaking was unmistakable and not right—was this the way it was supposed to work? I was at the dam the day it was decided to close the spillways, add plywood to the top of the gates, and hope for the best. The water had turned a shade of red that was oddly similar to the color of the Navajo Sandstone. Concrete chunks the size of Volkswagen bugs were flying out the spillway and the anticipated smooth hydraulic jump at the base of the spillway had turned into a vicious surging and slamming back and forth. The Colorado River was in the midst of a smack-down match with the concrete edifice of the

BOR. It was a sight to see and feel. More than a few BOR folks were having sleepless nights as the water continued to rise.

Downstream things were happening fast and furious. River trips were being warned to "Camp High." The bottom line for me was the force and power of the river. Many of us had never seen the river flexing its muscle in such manner. Watching the Bureau engineers and water managers calculate and recalculate the risks and options led me to see very quickly that the Glen Canyon Environmental Studies were going to be changed before we got our first data collected.

Whether you like the Bureau or not, one had to admire the effort of the people who rallied to protect the dam. As the water rose against the plywood on the spillway gates, contingencies of all sorts were being made. Eventually the inflow to the reservoir began to go down, the plywood was replaced with steel plates and the spillway repairs were commenced. Downstream, sandbars and beaches were reshaped—some larger, some gone. The Canyon river corridor had a face lift that was unanticipated.

Never at a loss for an opportunity, a suggestion was made by several Basin states that the environmental studies were no longer needed due to the changed conditions. After all hadn't the dam rebuilt the beaches? We traipsed back to Washington, DC, one more time to confer with the political muscle. The result was that Secretary of the Interior James Watt decided—in perhaps one of his last acts before he was fired—that the studies would go forward but with some additional elements to assess. That story, my friends, is for another day except for one small post script:

Several years after Watt left Interior, I ran into him in the Salt Lake City airport. We chatted for a minute, talked about our meetings at the Interior and how he should have just paid us conservation types off as we were now actually going to do an EIS on Glen Canyon Dam. That was not part of the script that had been laid out for me in 1983. Some people don't change.

> *Dave Wegner* Former GCES CHIEF

Crystal Rapid, 1983— Georgie Goes for the Big One



Georgie's GI-Rig. Photo courtesy NPS/GICNP Museum Collection.

ATE SEASON STORMS in the spring of 1983 created unusual conditions in the mountains of the West. With twice the normal snowpack in place, a sudden thaw occurred during Memorial Day weekend followed by warm rains. Runoff flooded into the Colorado River, and the lake behind Glen Canyon Dam rose to dangerous levels, forcing engineers to release massive volumes of water.

Grand Canyon boatmen now faced a big, hungry river, and rangers from the National Park Service began preparing for water levels none of them had ever seen. A patrol headed downriver in two kayaks and a pair of 18-foot Domar rafts to assist any parties in trouble. Reaching Crystal Rapid, the rangers pulled in to take a look. A long one.

A bouldery delta on the right constricts the Colorado to a quarter of its normal width, increasing the velocity and force. As the river surged to 75,000 CFs and kept climbing, a dangerous hydraulic jump had formed. The compressed water shot skyward in a fluid wall, releasing energy in an immense wave which some boatmen estimated to be thirty-feet high. At the crest it broke back on itself, cascading upstream into a deep, boat-swallowing trough. Already the most hazardous rapid on the river, Crystal had turned into a monster.

A steady roar, punctuated by loud booms from tumbling boulders, came from the whitewater below. "The river was just about ready to crest over the delta, and there was this hydraulic jump," said Terry Brian. A veteran boatman, Terry hired on as a river ranger for a chance to run the big water. "It ran the span of the river —it was big. And if you ever got in there, you're toast. You're not going to make it out."

Stan Steck, hired to run kayak patrols, stood with five other crew members on the bluff. "We were shocked by what we found," he recalled. "I was the newbie, but even I was amazed with the spectacle. The initial view was of a wall of brilliant-white water centered in this amazingly emerald-green water. We were just dumb-struck for some time. It seemed unrunable. But a quick, realistic glance showed that a far right run would avoid the wall of water. Man, it was tall. And the sound! One could paddle, row or motor past, but you needed to know that the cut had to be made."

As the rangers studied the rapid, Georgie White rounded the corner upstream. She was piloting her G-Rig which carried thirty passengers. The 72-year old river runner wore a yellow hard hat and her trademark leopard-skin bathing suit. Georgie had pioneered a unique style of river running and built a boat to match. It resembled a floating island, 37-feet long and 27-feet wide, made of three oval bridge pontoons lashed side-byside with a sausage pontoon in the center of each—like a hot dog in a bun. A small frame supported the motor well, and everything else was rubber lashed together with straps and old rope. The boat sacrificed grace and maneuverability for sheer mass, normally blanketing the waves and holes. But this wasn't normal water.

"Georgie came around the Slate Creek eddy," Terry said, "and she shut off her motor. She's taking it in deadstick with no power, just drifting. She hunkered down into the motor well, she braced full-on in a sitting position, and she stuck her wrists in two ropes which were eye-spliced." Georgie was going for the big one. The rangers stood mesmerized by what was unfolding in slow motion before them. The raft plunged straight into the hole, hit the wall hard, and buckled. The fold rippled through the boat as it climbed up the sheer face. It hung for a moment at the top before slipping backwards into the trough, swallowed by the hole.

Georgie disappeared from sight, and water crashed over the bow high above. Trapped, the boat rotated right and then back to the left. "The raft danced in the turbulence," Stan said, "vibrating, pulsing, and moving downstream then back upstream. And the water just raged around it at a much faster pace. I expected the raft to roll upside down at any moment, amazed at the immensity of what I was watching."

Terry stood there with his mouth wide open. "As it climbed out," he said, "the wave would crash and the whole raft would buckle. Then it would spring back, and people would pop out. Not only were they catapulted out—they were also catapulted through the boat between the pontoons. It was just crazy."

As the raft continued to surf the face of the wave, Stan noticed small black objects appearing downstream. "At first I thought they were black bags," he said, "then I noticed one of them swimming, then it was obvious that most of them were swimming." Stan climbed into his kayak as the other rangers untied bowlines, preparing to push off on a rescue mission.

"I just paddled hard," Stan recalled, "punching through some waves on my way to river right, never once thinking that I was so close to a huge obstacle. There was loads of room on the right, and I remember just glancing over to my left as I passed, glancing down and into this hole of death. Wow!"

As the G-Rig washed out of the rapid, Terry saw Georgie crawl out of the motor well. "There was not a stitch of anything else on the boat," he said. "There was nothing, absolutely nothing. Gas cans, old food bags, and all the duffle—just gone. All she had was the fuel in her gas line, her motor, and that was it. She did the sensible thing—fired up the motor and motored over to the right just above Tuna Creek. She jumped out and tied her boat up. The passengers were all over the river."

Georgie had been running river trips since before the dam and wasn't intimidated by high water—or little else, for that matter. Having grown up without ever having much, she had learned to be tough and resourceful. Her rough edge had gotten her through some hard times, and she had little patience for soft passengers. Every once in a while, she liked to wake them up just to let them know they'd been somewhere.

The rangers rowed through the partially-submerged tamarisks on the right to miss the jump. They began snatching people out of the water and picking up others who were clinging to the rocks. Some were hypothermic, some crying, and others vomiting. Paddling along the broken rock on the river's edge, Stan came upon a handful of stunned passengers who had dragged themselves out of the water. Two fathers, fearing the worst, told him they had last seen their young sons swimming together. The current had swept the boys away, and they desperately needed his help.

Stan continued downstream and found the two terrified boys hidden in a cleft of rock. "They saw me," he said, "but continued to sob hysterically as they flailed at scrambling up the steep gully. I got the two boys to stop for a short while and listen to me. I asked them to stay put and not try to climb the vertical face, but they continued to cry and returned to climbing. Evidently I must have appeared as some kind of creature with a long, weird body that spoke English, bouncing at water's edge in the kayak. They were physically unharmed but emotionally traumatized."

The boys, about ten-years old, needed help, so Stan landed the kayak. Stepping out, he stood among the rocks in a blue paddling jacket, spray skirt, and green Patagonia swim shorts. "The boys stopped climbing at this point but continued to cry. I used their names which puzzled them a bit, as I continued to remove boating gear." They wanted to know how he knew their names, and he told them he had just spoken with their fathers upstream. "Their response," Stan said, "made my heart ache. One said, 'No! You're lying. I know they're dead! They're both dead! I know it.' And the other continued to cry."

He finished removing his outer layers. Being new to the job, he had overdressed and worn his uniform shirt, with the badge properly fixed, under his paddling jacket. His transformation into a ranger had an immediate effect on the boys. "They both suddenly stopped crying," Stan said, "as if a switch had been thrown. I continued to assure them that their dads were alive." He climbed up to the boys. "I sat with them, trying to keep them calm, an arm around each until a raft arrived." Once the boys climbed on the boat Stan never saw them again.

All of Georgie's passengers survived. And after offloading the ones he'd picked up, Terry Brian walked over to check on her. "She was standing in her motor well," he said, "and there was not a D-ring, there was not a bag, there was no gas can, there was nothing. There was only Georgie—but she still had a Coors can. She was just standing there in shock, and I said, 'Georgie, what happened?' And she looked at me and winked. 'I told 'em to hang on! They don't make passengers like they used to.'"

Scott Thybony

Memories of the "Way Too Fast Trip"

"WAY TOO FAST" STATISTICS:

Total length of trip: 72 hours

Time on the water: 26 to 28 hours (estimated)

Minimum Velocity (above Nankoweap Rapid) 7.0 мрн

Average speed on the water: 8.0 MPH to 9.0 MPH

Maximum Velocity 20 mph (estimated)

Rapids Scouted: Hance, Hermit, Crystal, Lava Falls

Camps: 24 1/2 (L), 94 1/2 (R), National (L)

Other stops: Bright Angel beach

Permit holder: George Marsik

Boatmen: Larry Stevens (lead), Wayne Ranney, Gary Kuchel

Kayakers: Joe Sharber, John Foss, Sharon Hester, Jeff Bowman, Chuck Carpenter

Passengers: Gwen Waring, Gayle Weiss, Vicky Fabres, Craig Newman (there may have been up to two others).

IKE ALL GOOD ADVENTURES, running the Grand at 93,000 plus CFS sounded like a good idea in a Flagstaff pub. A record snow pack in the Rockies was flooding the Canyon at levels not seen for twenty years. We'd been hearing stories of a hole to end all holes at Crystal, mangled 33-foot motor-rigs, whole trips flown out, a couple of fatalities. Park Service closed the river to commercial rafting. For an unruly mob of young river bums, that's not advertising, that's bait. Let's go take a look and see why they closed it—now there's a good idea!

The NPS was rumored to have closed the river after some especially horrendous wrecks of very large boats in the hole in Crystal. No one was quite sure what was happening but both private and commercial river trips were canceling their trips en masse. Officially the river

never closed and on July 1, 1983, George Marsik drove up to the river permits office at the South Rim and personally obtained a canceled permit.

We drove to Lees Ferry on the morning of July 2 and after repeated expressions of doubt from river ranger Tom Workman, we launched at about 3:00 P.M. It was soon evident that this would be a trip like no other. The first thing I remember about the water was that it was fast. Very, very fast. After only about thirty minutes, strange currents on river left marked the location of a completely submerged Ten Mile Rock (normally twelve to fifteen feet above the water). I was fully one mile downstream from House Rock Rapid before I realized that I had already run it! It was completely and entirely washed out and the water was so fast, I never even saw Ryder Canyon. Our first camp was made at $24 \frac{1}{2}$ Mile camp.

That first day's run was a relief for me. I had been a little uneasy at the put in, not knowing what to expect on the river, unsure if my skills were up to the unknown challenges below.

The water was fast and squirrelly through Marble Canyon, Redwall Cavern was reduced to a nondescript overhang, and most of the rapids washed out. Nankoweap was the first big surprise. In place of the riffle we knew, there was a narrow rapid on the left with Hermit sized waves, and a giant eddy on the right. On through Furnace Flats to the head of the Inner Gorge, things stayed pretty reasonable. But all that changed at Hance.

Hance was ugly. Make that double ugly. The rapid consisted of a series of enormous waves, the biggest I'd put near thirty feet, breaking and foaming at the top. A run of sorts down the middle looked plausible, with dire consequences promised if you strayed into the seething nastiness on either side. These waves had a curious property that I'd never seen before or since. Instead of being tall and broad, they were pointed, peaked at the top like a mid-ocean wave and oddly, they moved from left to right, and back again.

Between Hance and Crystal, all of the Inner Gorge rapids were under water. But what was there was worse. Through the Inner Gorge, the river was fast and turbulent, seething with constant boils, waves and holes the like of which I'd never seen, whirlpools and huge eddy fences.

We'd seen a couple of whirlpools before anyone actually got caught in one. When a whirlpool caught a



Redwall Cavern, July 3, 1983

photo: Wayne Ranney

kayak, the boat's tail would suddenly drop down, and it was already too late to escape. The boat would revolve slowly, the angle steadily increasing until the whirlpool reached its maximum depth, then it would slowly fill up from the bottom until the boat was at river level again, and the whole thing vanished as quickly as it formed. The bigger whirlpools were probably fifteen feet or so deep, as gauged by two or three feet of space between the bow of the kayak and river level, and an equal distance from the stern to the bottom of the hole. (Remember this was in the olden days, when a kayak was thirteen sleek feet of beauty, grace and speed—nothing like the stubby, sawed off little decked over snowboards people paddle around in these days).

Then there were the ditches, a mobile hole of sorts, usually just a little longer than a kayak, and a foot or three deep. They would form without warning or apparent pattern, and if one formed underneath you, suddenly you were up to your armpits in a foaming hole, all whitewater going every which way and no current to brace on. Those ditches weren't any fun at all. Staying right side up was strictly a matter of balance, no easy proposition as the water churned and bucked all around you. Like the whirlpools, the ditches would usually fill up from the bottom and let you go, but occasionally they would slam shut, more often than not tipping your kayak over in the process.

Another oddity was a wave that would form, a foot or so high, and run swiftly across the river, perpendicular to the current. Strange waves, but no particular problem for either raft or kayak.

Independence Day, July 4, would be a time of reckoning. Hermit was huge for sure but the entire "crisis" of the high water was initiated by a hydraulic jump, which created a thirty-foot hole and standing wave at Crystal Rapid.

The hole in Crystal was truly archetypal, the Mother of All Holes. Pictures of it are common enough, but let me assure you, it was bigger and meaner and uglier than any photograph can possibly covey. We scouted from a little rise of sand and gravel with a freshly cut vertical face adjacent to the river. While looking over potential lines through the rapid, I heard a splash from the river directly below us. Looking over the edge, I watched a beaver climb out of the water and begin making its way down the beach through the thick tamarisk. Oh hell, I thought, even the beavers are portaging.

Strong lateral currents that threatened to feed the hole anything that came within thirty feet had me plenty intimidated. Discretion being the better part of valor even in kayaking, I ran through the flooded tamarisk as far from that hole as I could possibly get. The rafts didn't have it quite so easy. They had to stay out of the tamarisk, and hump hard on the oars to keep free of the hole. Below the hole, nothing but giant twenty-foot tail waves, nadir and apex, time and again, a kayaker's roller coaster from heaven for a half-mile or more.

We spent nearly two hours here watching the runs of other trips and planning our own "sneak" on the right bank through the flooded tamarisk trees. Everyone made it through fine in the end. However, a driftwood log cracked the hull of our Ouzel dory in Waltenberg Rapid and we needed to make a time consuming repair below there.

Not far below Crystal we began to encounter abandoned motor-rigs. Some purposefully tied up, others obviously washed up. As I recall, we saw four or five of these abandoned boats in the miles below Crystal.

The Granite Narrows was one of the most troubling spots. With a channel only 76 feet wide, the currents were roiling and unpredictable. Mounds of water would rise up instantly beneath our boats and throw them across the channel and into the wall. Hazards such a driftwood logs battered the boats as they swirled upwards and sank in the whirlpools. After exiting the Narrows we observed Deer Creek Falls splashing into the Colorado River. Only the roof of Poncho's Kitchen could be seen. We traveled 75 river miles in about eight hours, all the way down to National Canyon. The huge boulder bar that is normally the camp was submerged and we rowed well into the mouth of the canyon to camp next to the limestone cliffs.

Memories of paddling up Matkatamiba and Olo, the usual beaches under thirty or forty feet of murky river, a motor-rig tied up under Deer Creek Falls, paddling



Deer Creek Falls, July 4, 1983

photo: Wayne Ranney

grand canyon river guides

up Havasu looking down on the tops of trees, easy, fun boating through this whole section.

Every Grand trip is a story in itself, a story that ends with the exclamation point that is Lava Falls. Camping at National, I've never been able to think of much besides tomorrow's run of Lava. Any honest boatman, if there is such a thing, would admit to occasionally losing a little sleep the night before Lava, and that night I lost my fair share. If Crystal was bad, Lava must be grim. All my worries were for naught though, as so often our imagination engenders fears that exceed the reality. After Hance, the Inner Gorge, and Crystal, Lava was almost anticlimactic.

Our final day, July 5 brought us to Lava Falls. We scouted long and hard but the rapid was nothing but a set of beautiful, (and huge) V-waves that allowed for easy passage. The run was right down the middle, through the washed out pour-over ledge at the top. What a thrill!

Lava always has a sense of finality to it. The last real obstacle, and the trip is closing. A few more miles of fast fun water, and out to Diamond Creek by mid afternoon. Too intense, too focused above Lava, in the few miles down to Diamond Creek, for the first time on this trip Jeff and I took a little time to play—surfing holes and waves as we found them.

Strange and weird currents continued to amaze us as we made our way to the take-out at Diamond Creek. On normally flat water near 205-Mile Rapid, my boat was lifted fifteen vertical feet on a boil that came from nowhere. I surfed down its side and into a whirlpool that whipped me around once or twice. Others had similar experiences. We landed at about 2:00 P.M. after running



Floating by the mouth of Olo Canyon, July 4, 1983 photo: Wayne Ranney

58 miles in just about six hours. I estimate our total time on the water for the trip at between 26 and 28 hours.

Talmud tells us that the decade of one's twenties are for pursuing, however it is silent as to what one should pursue. For some of us, dreams of red rock and white water were enough.

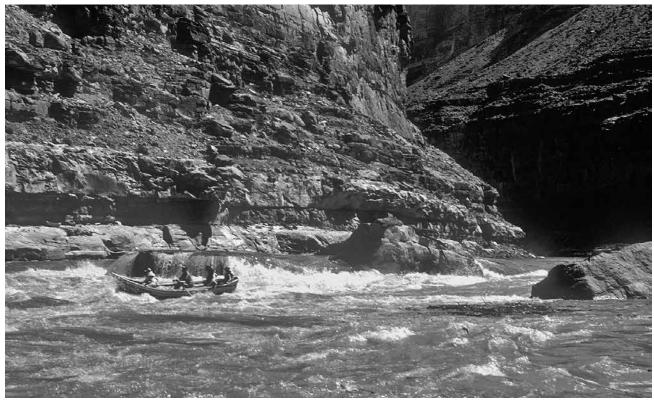
Joe Sharber Wayne Ranney



Lava Falls, July 5, 1983

photo: Wayne Ranney

boatman's quarterly review



Coby Jordan rowing through Boulder Narrows, July 1, 1983.

photo: Rudí Petschek



John Giriffith on an Expeditions trip, rowing under Deer Creek Falls.

photo: Mike Yard



AzRA trip camped at the mouth of Olo Canyon, early July, 1983.

photo: Dave Edwards



Row trip running empty through Crystal at about 75,000 cfs, early July 1983.

photo: Joanne Nissen

The Three Day Grand Trip of 1983

T STARTED OUT SO BENIGN in early May—the first trip we floated on 6,000–12,000 CFS. Early May was cool with some rain, but not overly wet. It was different, however, at home in Southwest Colorado very wet as it was throughout the Colorado River basin. Lake Powell was full as were all the reservoirs in the basin, and I had frankly expected higher water, but the BuRec was very sparing in their releases.

At the beginning of the CBS National News in late June, Dan Rather announces that the Grand Canyon is flooding. A camera shot through the tamarisks showed a huge hole. "My God, that's Crystal" I thought. I immediately called Mike Walker at OARS.

"Walk, what's going on?"



Gilen Canyon Dam-full steam ahead. June 21, 1983. Photo: Rudi Petschek

"The River's closed to commercial running; some big rigs were dumped in Crystal with injuries and two deaths." he said. "Get your butt out here, we're running a three-day training trip." So the stage was set.

July 1st I was off early to Flagstaff to rendezvous with the rest of the crew, but first I made a side trip to Page to see Glen Canyon dam spilling. A maelstrom of water in the trailrace after exiting the spinning turbines, with the four jet tubes shooting 12,000 CFs halfway across the river; there was at least 45,000 CFs from those two sources. Then the spillways: laminar flow out of the right portal, but the left portal is belching water in a manner unbecoming of an engineering wonder. "Something's wrong with that." I'm thinking.

July 2nd, Lees Ferry, four P.M. The water is way up the ramp, covering the power source for the electrical pumps. Being a fairly wide section, the vertical rise of the river was not exaggerated, maybe six feet, but the speed—it was trucking!

Before we know it, we're at Badger; no rapid but the water quickens with some very powerful boils and surges, and you could feel that power through the oars and how it affected the boat. Ten-mile rock is covered, forming a hole. On down to Soap Creek, where there's no rapid whatsoever, as well as House Rock—just fast water. We can see boats and a group camped at Ryder as we scream by. The next site on the tour is Boulder Narrows, which we run on the right without incident. The river is lapping at the driftwood log deposited in 1957 flood of 127,000 CFS and pouring over the right side of the boulder.

We camp at 23-mile on the left. The next morning we run 24 1/2 Mile and get a taste of what is to come. In big water, above 50,000 CFS, tail waves act differently than at medium or lower flows; they don't break or consistently come from the same direction. Somewhat like rogue waves on the high seas, one second they're not there, and the next moment they appear from one side or the other and you have to turn the boat into them as best you can.

We float to the back of Redwall Cavern. Rumor had it that a 37-foot motor-rig had flipped at the top left of Nankoweep, so we are a bit anxious to see what's there. Onward we cruise to Hance. Scouting from the boats, it looks pretty straight forward: set up to downstream ferry under the huge hole formed by the large boulder on the left and bust the lateral, thus avoiding the tail waves downstream. This becomes a recurring theme: row like hell then get the god beat out of you in the tail waves.

Onward into the gorge and the "suckys." The boils and whirlpools are constant and tremendous; huge whirlpools forming where there were none; boats being sucked down until water sometimes flows over the tubes then after a bit being released as the maelstrom disappears as quickly as it forms. Looking downstream I can see the heads of people in the next boat, but that's all as they're caught in a sucky; there's a three-foot vertical differential. All the while the water is moving downstream at ten to twelve miles per hour with no eddy. Sockdolager, Grapevine, and Horn Creek are totally gone; 83-mile, Zoraster, and all the smaller ones will disappear for years.

Its late afternoon when we reach Granite Falls, and we scout again from the boats as we float over the tops of the tamarisk forest at Monument camp.

We finally pull in on the right at 94-mile, camping high. A Moki rowing trip is camped on the left, and a small private trip with one of Randy Fabrese's "Ouzels" camps with us. A 70-mile day with no flips—not bad.

July 4th, again up at daybreak. Although we're seasoned now, there's a bit more tension in the air, for we are soon to be at river mile 98 and we'll get to see what all the fuss is about first hand.

The roar of Crystal is always stupendous, but today it's on another scale. The hole looks bigger than it did on the nightly news. More correctly themed a hydraulic jump, it has moved down from where the original hole was. It has grown in magnitude so much because the energy forming it is from all the water in the tongue converging at that point and has no place to go but up.

The far right side run is exciting but uneventful as there is enough water over there. At the bottom there is almost a pool, if you will, formed by the tamarisk downstream, and it's a perfect spot to pull in. I reach the pool behind the tamarisk and am captured by the "Sirens of Crystal," and the river takes me out to the eddy line juxtaposed from the hole. Curt Smith snaps a picture of the boat, (Jerry Mallet is in the bow), and makes a million bucks, I guess.

Its about 9:00 July 4th, 1983. The flow is later to be stated at 92,000 CFS. Being mesmerized by the upper part of Crystal, no attention was paid to the lower two-thirds, and after floating by the hole reality sets in. Huge tail waves all the way down, any one of which could flip a rowboat. I don't feel so smart right now, but everything goes fine for everyone. At the bottom of Crystal an upside down motor-rig is tied up on the right: a product of the initial encounter when the river got up into the 70,000 CFS.

At Bass we pull in to chat with Wilderness World. We all have a special gleam in our eyes as though we're on some kind of, well, psychotropic drug—but this time its old fashioned adrenaline. Everyone we encounter looked the same way. The river has imparted an energy to us that can't be described in words, only felt. The rocks above Waltenburg form another huge boil and the Ouzel with the private trip tagging along with us flips in it, but is righted quickly. The water is cranking and in no time we are just above Elves. We see another flipped motor-rig pulled in on the left—another statement of the power of Crystal at this stage.

Randy's Rock is covered and the water is flowing over the top of Bedrock with plenty of room on the right to avoid it. Deubendorff hints of a rapid but nothing more.

At Granite Narrows the word from the old timers is this is a rough spot and it proves to be. Just after the entry there's a powerful surge from left to right that smashes our boats into the right wall. It's unavoidable.

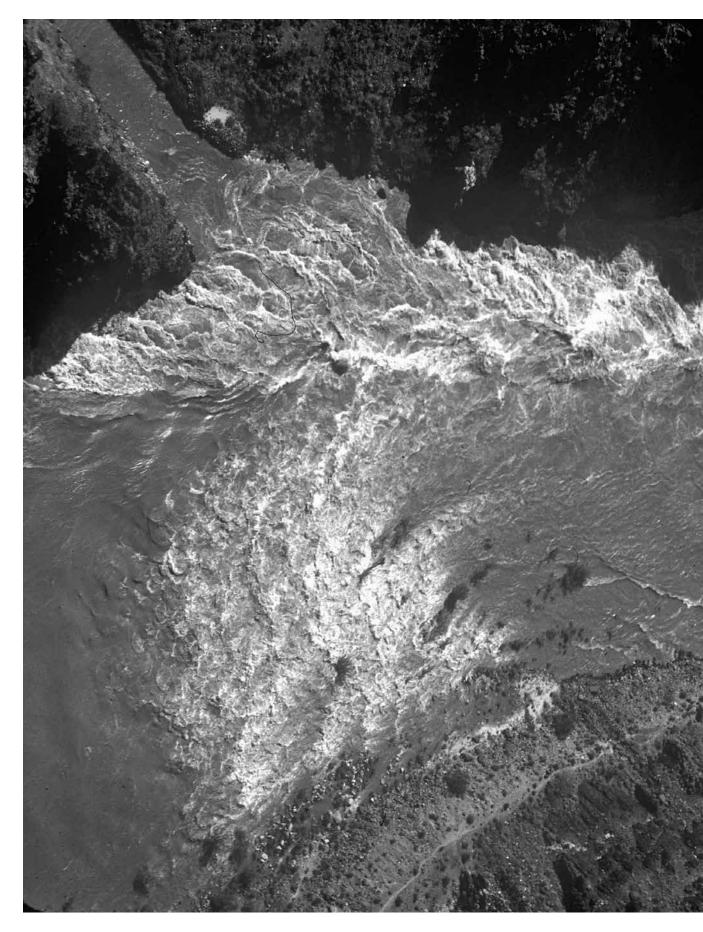
Downriver we go fast and furious. We pull into the eddy at Olo and could step off the boat in the mouth of the canyon. Fern Glen, mile 168, becomes our third night's camp. 74 miles this day with two scouts and knocking off two huge rapids, again, not bad for a day's work.

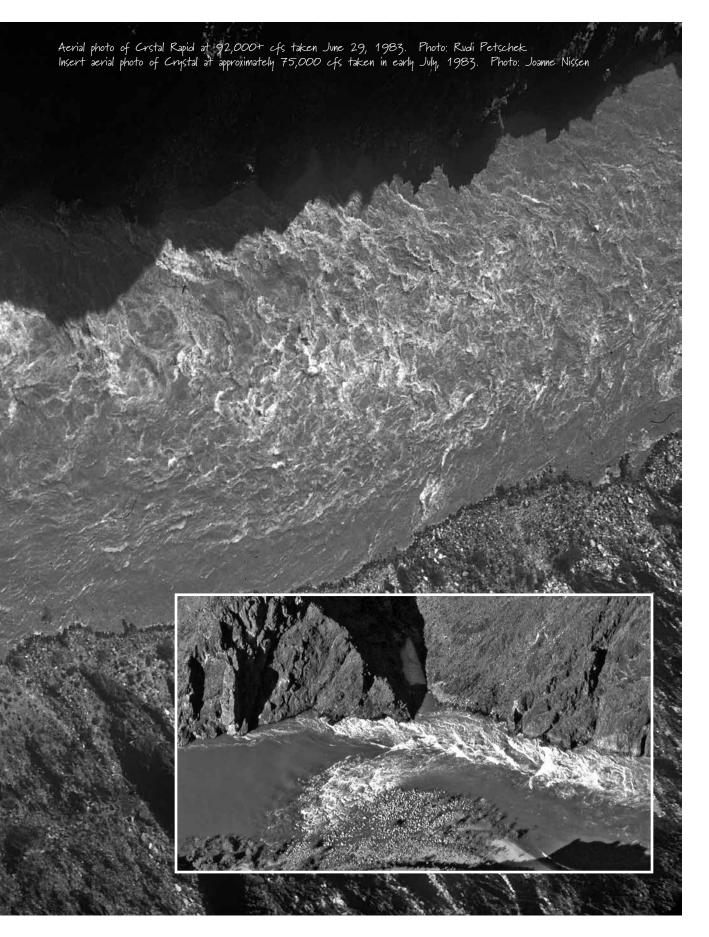
In the morning I notice a little wet sand; the river has peaked and is inching down. Just inches though.

Not a word has been mentioned about Lava. Old habits die hard and we pull in on the right. Although the left side would be a better scout, the right side provides a wonderful view of this magnificent stretch of water. What was normally the rapid is now a beautiful tongue racing down to a vortex of water formed by a titanic lateral coming off what was the black rock. It's way under with laterals feeding from the right. Below us the large lava rock that pushed boats out when running the right side is a huge pour over. The rock two hundred yards down stream on the right from where the falls normally end now forms a large lateral that has to be avoided as well.

Providing we can bust the lateral on the left to avoid both laterals downstream and then get right below them to stay off the wall, we should be okay. To this point however, we've not had great success in getting over laterals of this size. The theory works in practice and the runs are great. We pull in below lower Lava and gaze back up at what we've just run. The beauty of Lava at that level is etched in my brain; so much water flowing down it, such a beautiful sight to see. We push off and continue down stream. The Tapeats gorge below Pumpkin Springs has now disappeared and the river is lapping on a sandstone bench. It is a great wide river that turns the corner at mile 209 covering the entire island, racing breakneck downstream. In a short time we are nearing the take-out at Diamond Creek, wondering if we can make the pull-in. Unfortunately we can, and again, about 4:30 July 5th, 1983 we take-out, ending our three-day Grand Canyon trip.

Steve Nicholson





Snippets From 1983

In honor of the 25TH anniversary of 1983 we're trying something different here—a kind of fruit salad of reminiscences from that wild-ass year. These little snippets may not all make perfect sense unless you were there then or know these people. There's a loose end or three left dangling of course, and this truly is just the tip of the iceberg...but hopefully a certain sense will come across, too, of just how big a year that was for everybody involved.

Crystal Rapid became a monster for a few days—at 72,000 cfs *as the river was coming up. When the river hit* 92,000 CFS, *it changed something in there and the real monster was never seen again.*

KENTON GRUA [WHO WITH RUDI PETSCHEK AND STEVE REYN-OLDS SET THE SPEED RECORD (36.5 HRS) THROUGH GRAND CANYON ON 72,000 CFS ON JUNE 27,1983 IN A DORY NAMED EMERALD MILE]:

go, "What do we do if they wave us in?" "Wave back," says Rudi. We fantasized that it might be okay, actually...not getting the call and everything. But we kinda knew the truth, too. [laughter] We knew we had God on our side, though...John Thomas [the ranger on duty] was pretty cool. He didn't even wave. Before we even got close he turned and walked off the motor-rig, started heading up the hillside to watch us run. 'Cause he knew we weren't pulling in. And after he turned around he never looked over again. He was just looking down at his clipboard and walking, talking on his radio, reporting that we were coming by, I think.

STEIGER: Did you have any idea what was down there? [At Crystal Rapid...just after the rapid had been closed to the public for safety reasons following a series of motor-rig catastrophes.]

GRUA: Yeah, we knew there'd be a big one down there...But basically we were totally unprepared for what we saw. We're just going, oh man, we've gotta get through this thing...we look down, we see where we've gotta go, you can see where that lateral starts and you know you gotta be in above that lateral or you're dead meat. But there were rocks there, really shallow rocks. There was a little tamarisk tree out there waving in the current and behind it looked like a pour-over and I just went, "God, can I go over that?" So I came in just as close to it as I thought I could and it went UHN-UHHHHHH...I hit that lateral and we just went whooooooosh. Got the big surf right out to the very center of the hole and just lined it up and got it straight... I just pushed hard and stood up and went forward with Ren. Me and Ren were plastered against the bow but you could feel it before you ever got

there, you know? There was no way. It just snapped us straight over. I had hold of my oars as tight as I could grip 'em. I was thinking, I'm not letting go of these f*@#!ing oars cause they're tied to the boat! You know, you didn't want to get away from the boat at all, and, uh, I hadn't even completed the thought; they just went—bing, bing—and I was gone. I went down, down, down...felt myself coming back up, still getting tossed around and pfoo!—cleared the water out of my eyes and two feet away was the *Emerald Mile*. I just hollered "Yeah baby! Here we are! Don't worry, I'll get you right side up!" And I hear this gasping and I look over. About ten feet downstream is Rudi so I stick my foot out for him...We were just going wHOAAA...It was an intense flip, really intense experience underwater. It seemed like forever.

It wasn't a regular hole. It was perfection in a hole, you know? You had about, maybe a hundredth of a percent chance of making it through. If you ran it a hundred times in a dory, you probably wouldn't make it through once.

So Ren was about forty feet away right out in the middle of the river swimming along and the *Emerald Mile* was headed for the right shore...Me and Rudi got on top of it and loosened the flip line and we were just haulin' ass down the right side and we're going oh man. Now we're getting' close to the shore. We got it on its side and almost over, started to come over and—flunk!—the flip-line broke. Shitty old flip-line, and—MMMWHOOM! It goes back down and two seconds later: Crunch! Crunch! We tag a pour-over. But all it did was take off the very tip of the bow and the stern posts...

DAVE WEGNER [BIOLOGIST—FORMERLY THE HEAD OF GLEN CANYON ENVIRONMENTAL STUDIES I AND II]: When I was working in Fort Collins for the Fish and Wildlife Service, we were starting to do some work on the biological opinion below Glen Canyon Dam. So I had actually started to take water quality samples long before 1983 at the dam, and in the reservoir itself. But in 1983... of course you always take samples right below the dam so that you can check what's comin' out of the thing. And that spring, as the waters started to run down the middle of State Street in Salt Lake City-and all over the Intermountain West there was flooding and things going on-I was beginning to say, "Certainly they're not gonna let this happen at Glen Canyon Dam!" I remember sitting in meetings with Wayne Cook, and the folks in Salt Lake City kept saying, "Oh, don't worry about it, we have plenty of space, nothin's gonna happen." But every week the numbers would keep coming up and up and up and up on the forecasts and on what was actually coming into the reservoir. I just happened to be down in Page, doing my monthly samples, and checking things out. They had turned on the spill-

ways, and they knew the spillways were gonna have problems—especially when they lose the sweep at the end of it. A normal, good hydraulic spillway, when it *works*, is that water, as it comes out of the spillway, out of the end of the tunnel, should have a nice smooth sweep to it, so when it hits the end of the flip bucket at the end, it's thrown way up in the air, and then out into the channel itself. When everything is workin' right, it's a very nice, smooth, very beautiful...[indicates upward arc]...Yeah, that's how it should look. You've got all that kinetic energy of all this water going at roughly 125 MPH, comin' down that spillway. You gotta find *some* way to get rid of that energy. So what they typically do on spillways is throw it up in the air, so that *some* of that energy is dissipated in the air before it comes back down in the water. Well, what was happening in Glen Canyon is that you could stand either at the base of the dam, or overlooking it, and the water wasn't sweeping—there was no sweep to this water—it was actually surging. If you take a look at some of the old videos, you can still see it. This water surges back and forth, it pulsates, and that's not good hydraulics, because that means that you don't have good sweeping hydraulic flow, good laminar flow comin' through. And then you started to see chunks of stuff come flyin' out of there. STEIGER: And you saw this yourself?

WEGNER: Oh, yeah....you started to see chunks of stuff come flyin' out of the spillway there. Well, they knew this was gonna happen, because it had happened the year before at Yellowtail Dam...There was concern in Salt Lake City, obviously, that you open the spillways, and somethin's gonna happen. So we were takin' extra water samples and just tryin' to keep track of what was happening. But when the end of the spillway tube started to surge, and then you saw things come flyin' outta there...the engineers knew immediately what was goin' on, and they were pretty smart about this. Wasn't a total shock, 'cause like I say, it had happened earlier at Yellowtail, which was the same sort of spillway design. So they knew this was probably gonna happen again-and lo and behold, it did. Then the river started to turn sandstone color comin' out of the spillway, so you knew it'd gotten through that eleven feet of concrete, and it was into the abutment, which at that point the Bureau shut the spillways down. Actually, they were shuttin' 'em down all the time, to go in and check, and that's why they knew the damage was occurring. They'd send those guys down in those little carts. How would you like to be the guy who goes down there? You know, to take a look at what was there. Then finally they shut 'em totally off, and they sent one guy on the cart down there. Here you are, you're goin' down into the maw of the giant down there, not knowing what you're gonna find. You're on this cable, being lowered down there on essentially a go-cart type of frame, and they found the hole, and it was a big hole. So then the question became essentially, "Do we continue to

run the spillways..." 'cause the reservoir was still comin' up and up and up. "Do we run the spillways and incur more damage, or are there alternative ways to handle this?" And the alternative way was where, "Well, let's put the reservoir into what they call surcharge," which means go higher than it's supposed to go.

And that's where the plywood came in, because they essentially had to go scrounge up marine-grade plywood in Page to slap on, because the weak link is the top of the spillways, 'cause it's lower than the crest of the dam...And so they slapped on this marine plywood and they held for almost a week or so, until they got a contractor in on an emergency basis to build the steel spillway gates, which went on over the 4TH of July weekend.

BRAD DIMOCK: Those went up eight or twelve feet—those steel ones?

WEGNER: Well, the plywood was eight feet, but the steel ones, I think went up eleven feet, but we could check on that for you.

DIMOCK: The plywood was sideways at four feet?

WEGNER: I think they had two levels on it at one point, but we should check on that.

STEIGER: Now, the guy runnin' the dam was Tom Gamble?

WEGNER: Tom Gamble, yeah.

STEIGER: Were you present when they made that decision or anything?

WEGNER: Well, I wasn't in his office. That decision was made with Tom Gamble, and it was made with Upper Colorado Region folks—Wayne Cook and John Newman—and probably the Denver folks, I would imagine, were in this discussion also. I wasn't there when they made the decision, but I was there when they were starting to slap the plywood on there...All four of the hollow jet tubes were wide open, the generators were goin' full bore. The only other option was to use the spillways, and hope to God that it eroded into the sandstone abutment and not into the dam. But there was no given on that, nobody knew what would happen. There were a lot of anxious days there, hours, when even with the steel gates on the dam on the top of the spillways, when was it gonna stop?

And there was a huge collective sigh of relief when it peaked out and the water actually started to go down a little bit. Of course once it had started goin' at Glen, it just dominoed throughout the rest of the Colorado River system, and Hoover spilled, and all the dams downstream, they flooded out all those folks who had moved in along the Lower Colorado River and the water actually got to the Sea of Cortez—imagine that! I think there's actually still some lawsuits down in Mexico that haven't been resolved yet on that whole 1983 thing.

Amazing things were going on. The amazing thing is that 1984 was actually a higher water year. They had just been releasing a lot of water over the course of the year, and they were actually very, very concerned going into December–January about what would be happening in 1984.

TIM WHITNEY [THEN A BOATMAN FOR FORT LEE COMPANY, WHICH HAD JUST BEEN PURCHASED; NOW A BOATMAN FOR ARIZONA RIVER RUNNERS AND CO-OWNER OF RIVERS AND OCEANS—A TRAVEL COMPANY]: I saw like, maybe 60,000 CFS that first year with Del Webb. That was really different. There were two very different styles between Fort Lee Company and Sanderson River Expeditions; and it sort of became the Sanderson "way." I remember it was a difficult transition for me.

One day, when we were putting a trip together, Bill Sanderson said, "Let's go down to the dam." So we got in the car, a few of us went down there. The jet tubes were all running, the diversion tunnels weren't running. This is '83, probably May. I think I headed for New Guinea in June. So we went down there, and the whole place was quaking... it was maybe 50,000 CFs or somethin', you know. I mean, it just seemed like the entire mass of concrete that was there, was quaking. We could stand right behind the jet tubes, and they were all...We went down through the tunnel to the base. Oh, I remember too that there was so much water coming *around* the dam through the Navajo Sandstone, that we had our wipers on full blast at that point in the tunnel. The tunnel was just raining water. As soon as you got down well below lake level, below the top of the lake, but just before you broke out into the sun again, the wipers were on full speed. And that's before...Then it was just a couple of years later, or maybe even the next year, that they resheeted the inside of the tunnel, so that it was dry again...So yeah, we got down there. We had access to that place. They had the one-day trip then...Bill wanted to go down there because I think he knew that the jet tubes were runnin' and he wanted to see what the effect was, from all of his involvement there. I'm not sure, I don't think he was a high-scaler, but he was definitely in on the construction of that dam-then in security, too, I think. I should ask Byron about that. But he did want to see what was goin' on down there. So we stood, we looked at it, and the water's just gushing out and creating like maybe a fifteen-, twenty-foot hole out in the middle of the river in the tail race out there. It's just a giant hole where all four tubes are arching out into the river and then converging.

We started talkin' about the river a little bit, and people who were runnin' holes, and this and that, different styles and everything. I said, "I'm just not into runnin' big holes down there, like some guys." And he said, "I don't either not anymore." Turns out they were down there...I think it was a Chris Craft trip. It was a hard boat, hard hull trip. Maybe in '57, which is when I think...There was high water. I don't know if there was higher water later, but that's the water that *he* thought and I think put the logs up on Boulder Narrows. So they went down there, and it was high water, and he was drivin'. They went around to the left, and he thought he had the power and felt pretty comfortable, and so he just kind of eased over towards the hole to look down in the hole that Boulder Narrows was making, because it was ...Niagara. And he said, "I got over there and I got a little too close and I felt the whole boat being drawn in backwards, down into this hole. I just punched it, put everything we had in it. We *just* got out of there. I've never gone near a big hole like that ever again."

And so we had this thing in common: we had this little river story that he told, and both about running big holes, and "some guys in the company do, and I just don't," and he didn't either. So we had kind of this thing in common. Then we were friends after that, and I was glad, because he had some other stories, and we'd always go down to the rig, down to the Ferry, and always made sure that we had a little riggin' juice, that there was a twelve-pack that came along. He made it fun down there, too. He loved being down near the river.

STEVE BLEDSOE [FIRST A BOATMAN FOR HATCH, THEN FREE-LANCE AND SCIENCE, NOW AN ARTIST]: In '83 I ran a high water trip, Fred Burke called us in to...Pete Resnick and Magoo and I to run a trip, and who was? ... there were some other boatmen too...but it was great, I got to see the high water. We were at Unkar and the helicopter came by and dropped us a note saying it was going to 75,000 CFs. Then, we got above...the passengers went out at Phantom. They were scheduled to go out at Phantom. And we got to Phantom and took off, we were floating above Crystal and I ran into a Hatch trip, saw some old buddies, Terry Snyder... asked them if they were going to stop and look at Crystal. They go. "Yeah, think we're going to stop. Are you going to stop?" and we. "Nah, everything's washed out." (laughter) So we were... I was the head boat and I'm coming up to it, and I'm just hearing this huge roar, thinking. "Maybe I should have stopped..." (laughter)... and starting to peek over and look at this thing, and I mean it was...and I knew: it was hard right. We all made perfect runs...I think we just ran it straight. And then we spun around and got to the bank, I pulled over I think on the right bank and we all just jammed in there and our eyes were as big as cantaloupes, you know, we're just. "Good God!" Yeah, they all saw me jamming. Hard right! Hard right! Yeah it was...I wish we'd stopped, you know, just to see it. 'Cause it was just...huge.

Yeah, it probably came in handy to have empty boats. I remember looking at that hole and going. "I'm *not...*" and just hard, hard right over that swell, I just remember a swell over there on the right and that was it. And then I thought. "Oh shit, what've I done to these guys behind me?" (laughs) I'm leading them into... (laughter) But everybody made beautiful runs...Dick Clark was on that trip! It was the ambassadors from all over the world.

STEIGER: Oh yeah, the "Dip-Trip! That diplomat trip. And you guys were doing it because AZRA had decided it wasn't smart to go down there in paddle boats right then, and now they needed some motor-rigs...which was probably a pretty smart call, huh? Those diplomats probably didn't really need to be out there in a bunch of paddle rafts along about then.

BLEDSOE: Yeah. I remember when that helicopter came over, we were sitting there with the diplomats from I think it was China...China and Guatemala, and the helicopter came by and dropped that note "Camp High..." and Pete Resnick ran over and grabbed it and he came walking back, everybody's going, "What? What is it? What is it?" And Pete goes, "China has just attacked Guatemala! You are to evacuate immediately!" (laughter) These guys go, "Naaah..."

MIKE DENOYER [NOW AN OUTFITER WITH GCE, BUT THEN A BOATMAN FOR WHITE WATER EXPEDITIONS]: 1983 was a

hoot. Knock on wood, we never had a problem on that one. But I keep thinkin' of things like that strong leftto-right current at Granite Narrows. The first time I was there, I don't even know what the water was, maybe it was 60-70-80-90,000 cFs-whatever it was. It was goin' up, of course, each week. You go through the Narrows, the first time through there, when it was the real strong leftto-right current, and we're in a big Grand Canyon White Water rig at that time...you pointed your bow straight to the left bank and gave it all the throttle you could. Just to stay off of that right wall. A lot of times it'd still slam you into the wall. I remember going over there, and you'd hit that wall, and there'd be an orange streak along the wall from the White Water boxes, right? Hittin' there. So then the water would go up again, and you'd come through again, and you'd finally get a better jump on it, anticipate a little bit more, and you just squeak by, two inches to spare and miss the wall. But you look at the wall, and there's a yellow streak on the wall. (laughs) You come by next week, and there's a *blue* streak on the wall. Then as the water dropped, after it maxed out at 92,000 CFS or whatever it was, it started dropping back down and you'd look up at that wall, you know, thirty feet up on the wall, whatever-you see an orange, blue, yellow, green...from the different companies' boats that slammed into that wall.

Uh-huh, yeah. I was down there every week that whole summer. That was the season where I started out at Lees Ferry, I'd go out with the folks, I'd be off the river by say, ten o'clock in the morning. And Earl Leisberg would be there to fly me back. I'd be back on the river by noon that same day, with a new bunch, and go on down. Roxanne would meet me at the Ferry. She'd bring fresh clothes down—she did, or Paul did.

STEIGER: So you had like two sets of clothes and that was it?

DENOYER: Yeah. It was fun though, it was just good to be down there, and have a good time. It was really fun seeing all those different water levels. Of course, you'd go around a corner and there'd be, you know, the Georgie rig upside down and twisted and tied up. There'd be Western boxes and fuel tanks and motor boxes all over the place

tied up and stacked up on the walls. We go around a corner, and there's the Cross boat tied up, upside down. Then in another two miles, there's the Tour West boat, or whatever company it may have been—a lot of people had problems down there at Crystal. Then just that eerie feeling, going around corners, seein' a boat there. A very, very, strange feeling to me. Of course all the folks would see this, and it would be real quiet...That was definitely an interesting year. A little hectic at times, a little fun at times. Remember that sign that was up on the left side of Crystal? They had a "Danger, do not enter" sign, or something. (laughter) A road sign, yeah. As you'd come by, this "caution" sign that someone stuck up. I don't know if the river wiped it out, or the Park took it down or somethin'. but it was down there. Oh, yeah. Helicopters comin' over, droppin' these little...these little baggies. "Camp High. Be Safe." I remember one of 'em I picked up was around the Tanner area somewhere, and I picked the bag up and pulled over and camped someplace on the right side above Tanner. You know, they were sayin' they were going to release 90,000 cubic feet at noon, or it was released at noon yesterday or something. And I said, "Well, what the hell is 90,000 CFS going to do?" You'd never seen that kind of water...or not anyone that I knew that's been down there has ever seen that kind of water, so I didn't know how high it was going to come. So we pulled over and set up camp at the highest possible piece of beach we could find, and I had about half-a-dozen lines goin' off the boat, all over the place, and we were waitin' for the water to come. Water came up about a foot-and-a-half. That was it.

DAVE STRATTON [BOATMAN FOR TOUR WEST]: The trip leader, the other guy—and this was *my* first trip I'd ever ran with this guy—that was the last river trip he ever ran. I saw him on the golf course a couple of summers ago, and he said, "You doing it?" I said, "I'm still doing it." That just scared him to death, and I can understand that. That would be a pretty scary thing to go through. But that ended his river running career right there—a little bit *too* scary. But the other kid is still working.

I was on this trip in the Grand Canyon in 1983, and we had a boat tip over in Crystal. I didn't actually see it happen, but I was just getting ready to run the rapid, and Suzanne Jordan was there with AZRA. She came running down and said, "You just had a boat flip." Immediately my heart was going about a million miles an hour. She said, "You've got to get down and get your people." So we got everybody off except for my two helpers, and two guys on my boat volunteered to help out. One of them was a paramedic and said, "We want to go help out." I said, "Well, we may end up flipping too, possibly. No guarantees there." He said, "Well, we want to go for it."

I got through okay, and went down there and chased the boat down and didn't really make any dramatic rescue, but did get to the boat and get some people out of the water. Several of the people were there hanging on the boat, some had gotten on top of it. Of course that's a welltalked-about story, still.

Before 1983, Crystal was just a different route, but you didn't have the rock garden and you had the big hole in the middle that we just went around to the right side of it. And on occasions, we used to say, "Okay, you guys," if we had a really rowdy bunch of people, "you guys want to hit the hole? Okay, we'll hit the hole, hang on." And I'd just idle down the motor so I wouldn't swamp out. That was before I started rowing—did all motor trips then. So 1983 came, and the water started coming up, and rapids start changing and stuff. So we were told to stop and look at it—at Crystal.

We stopped and looked at it that day, and it was funny, because we had it planned out what to do, and the other guy just didn't do what he was supposed to do. The trip leader didn't run the boat—it was a trainee—but the next week he was running his own boat, so he was running everything on this trip too, and he'd had the right number of trips, and he'd run Crystal before, but not at this water level. We got up there and said, "Okay, you see the tammies that are in the water—you've got to be running right over those, and don't worry about the motor, just stay out of the middle of the river, just stay out of the main current. You get in there, and it's over." We pretty well knew. You could see the hole was pretty bad. I didn't want to take a chance. "You just gotta miss the hole. There's no hitting the hole today." Just head for that tammie that's out there where we scout from now.

I said, "Just head for that thing, and if you get anywhere where it's rocky, and have to lift, then lift, but if you're there, you'll be to the right and you'll be basically okay." He took off and ran it, and I guess the trip leader who the week before had ran it, had probably ran it about what—I think he said it was about 45,000 cubic feet, and he went through the hole and he made it. For some reason this time they just ended up in the middle of the river heading right for it. And the results weren't good at all. In fact, last night, I just...Well, I'd seen little, small pictures, but I hadn't seen really the whole sequence like we did in that little talk last night. It was pretty incredible. Actually, the guide, the trainee then, still works for us-_he never did quit. The other one, that pretty much scared him. Yeah, the trainee came back and ran trips again. He's from Idaho, he's not a hobo, and so he works mainly up in Idaho. But he *did* come back and run again. I had to kind of give him some respect for that, because I'm sure that is a terrible thing to live with. It wouldn't be so much just flipping, but when you have a death, that's a whole other thing. I'm sure that's something that's probably always going to be on *his* conscience, to an extent. But he came back, anyway, and faced the river.

After I got through the rapid—okay, I got through Crystal and then headed towards Tuna. I kind of expected to start seeing people down there. I didn't really think at the time...Well, the river's going about 70,000–72,000 CFS. Plus, they had already ran and turned over, and I hadn't even left yet. I was just pulling out, and that's when Suzanne came down to me. So when I got down there, I didn't see anybody. I ran on down, and I think Agate, I'm sure, was washed out. I got into the jewels, and the first person I came to was this guy. When I saw him, I immediately had a bad feeling. The closer I got to him, the more I thought that this guy was gone. So we took our little ring buoy and tied it on the end of the bow line, and my helper jumped in and hung onto him, and then the other guys pulled him in and we got the body up onto the boat. And I just kept driving—I wanted to keep going. I said, "Let's give him some CPR." They checked and there was no pulse. The one guy had been a paramedic and he said, "I just don't think this guy is going to make it. I don't think we can get him back around."

DAN DIERKER BOATMAN THEN FOR GRAND CANYON YOUTH EXPEDITIONS AND WILDERNESS WORLD; POTTER; BUILDER NOW; PHILANTHROPIST]: On the flood of 1983, I was rowing for McCallum. I'd been rowing for WiWo [Wilderness World] while the water was coming up. And then when it boomed, it was Brad and Fritz and Brian and myself, and Dennis Harris, the baggage boatman. Yeah, Dennis Harris' first baggage boat. June. Put on at 70,000 CFS. McCallum had two trips going out. He and Yard [Mike] were doing a youth trip. We had two launches that day. The ranger, John Dick, came down to the Ferry. There were about four trips getting ready to leave, and this ranger comes down and goes, "The river's closed, I'll be back in fifteen minutes." And McCallum just goes to the phone and calls up the superintendent. I was way impressed with McCallum. Looking back on it, it was a great moment for him. He calls up the superintendent and says, "Well, you can't stop me from going." The superintendent goes, "Sure I can, you won't be insured." McCallum goes, "You have it all wrong, pal. You're a rider on my policy, and we're leaving." And that's why they couldn't stop the commercial outfitters, but they could stop the privates.

McCallum also said, "Hey, I was down here before the dam. This river's fine, you've just gotta go in the right place. You've gotta go in the right place when it's low, too. Screw you. Bye."

STEIGER: 'Cause he had run with Georgie and those guys before the dam?

DIERKER: Yeah, he ran before the dam. Hell, they didn't used to think they could run it under 40,000 CFS before the dam. They thought there wasn't enough water in there. (laughs)

They'd get off the water at 40,000 CFS, in the 1950s. Yeah, too low. "We could hurt ourselves." No, I'm dead serious. That was Georgie's deal. Forty thousand was too damn tight for those motor-rigs. Now there's other guys who rowed down there that said, "No, it's fine."

So off we go on our little high-water adventure, and you know, it was great.

One of my first memories of it is, "You better not dick around leaving." You know how usually when a rowing trip takes off, there's somebody brushin' their teeth, and somebody messin' around coiling the rope. And somebody up there, you know, talking to a passenger, and you all kind of head off. We did that once. There were no eddies either. We were way down there before we could stop over, and everybody goes, "Wahoo! Hoo-hah!" You know? And then we pulled out of there, and we dicked around, and God, everybody was gone. After that we realized that it was like, "Gentlemen, start your engines!" You've got all the ropes tied, all the people in there, all the jackets on, and everybody with their boats on shore, whether you were holding them yourself or somebody holding them. You'd look around and go, "Are you ready to go?! Are you ready to go?!" Because if you didn't leave all at the same time, you wouldn't see anybody until they stopped. You wouldn't be in a group, and you wanted to be in a group then.

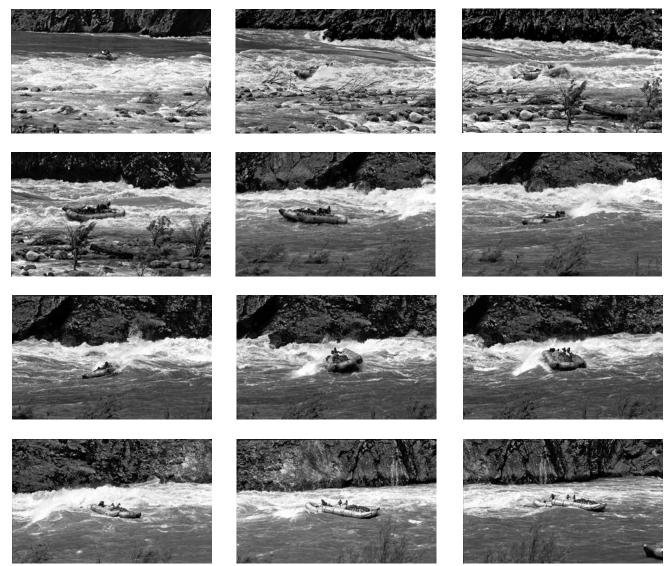
Probably one of the more interesting things was going into Granite Narrows down there, because that current would just slam you into the right. McCallum, when he left, he goes, "Be watching Granite Narrows." We were goin', "What the hell you talkin' about?!" So, we went in to do the little porthole there, you know the door, the narrowest part, and all of a sudden this current was just smashing—and it was flat water, just totally flat. It was Brian first, then myself, then Brad, and then Fritz I think was kind of the order, and then Dennis. Brian went in there and I just see him get *raked* into the wall, and I'm rowin' a Chubasco. Brad and I are on Chubascos, Fritz and Dennis and Brian are in Rogue Rivers. So (chuckles) Brian just gets slammed into this wall, and then the current carries down along it, and so he's just getting drug along the wall. And I'm behind him in a Chubasco. I go, "Oh great, I'm gonna go in there and pancake on my brother and kill him. My mom will really hate me, because she likes him best." So, I go in there, and I caught the rear end of his boat, just the back corner, I just mowed into it, and it shot him out of there like a rubber band, up against the wall. Well, I think Fritz did stay off of it, without slamming into it, 'cause she saw what was happening to all of us. But you'd slam in there, turn sideways and then get raked down the wall. Flat, you know, tearin' off your whatever. Motor-rigs were slammin' into it. There was paint for years, way up. Motor-rigs would go in there, blowin' out side tubes.

DAVE EDWARDS [BOATMAN FOR AZRA AND SCIENCE; WORLD-CLASS PHOTOGRAPHER]: I'll tell you a story. There was a time in 1983—it was before the Havasu flood—and I was on a trip with Martha Clarke and Miles Ulrich [phonetic spelling] and Suzanne Jordan was leading it. I think there was another guy, perhaps I'll remember in a second. There were two AZRA trips running close together, and we got down to 24 1/2 Mile rapid, which is always a rapid that gets our attention, but in this case, we stopped to scout it. It was running at 62,000 CFS, we stopped high up and walked down. We looked at the waves, they were mostly standing waves, and I think we were confident we could take it straight away. Mind you, we'd been through quite a few rapids upstream, and some of them washed out, some of them still active, but this one we figured we could do just fine. We had two paddleboats rigged as oar boats. They were Maravias, and the people that had designed the boat had the "D" rings in the wrong place, I remember, and you couldn't strap the frame down tightly. This proved to be a problem, as you'll see.

I was the second boat in. We rounded the corner, and what we hadn't noticed, because we hadn't been on 62,000 CFS before, is the waves would break forward maybe two, four, five times, and then sideways once; and then forward, forward, and then break in a regular way. But they were not breaking consistently. And so we went in and immediately we knew something was wrong, because Miles Ulrich's boat was ahead of me, it stood right on its tail, did a fishtail, and dumped everybody out, and then we were right behind. I started hollering at these folks in my boat at the top of my lungs, "High side! High side! High side!" So they started throwing their weight around. I must have had some good people in the boat, because we didn't turn over. I shouted to the guy behind, "Look behind, how are the boats behind? Look at the Maravias." And he said, "One's over. Martha's over. Suzanne's over." I said, "Which one, damn it?!" He said, "Both." And so there we were with two boats upside down, some elderly people in the water, a big mess on our hands, grapefruits floating all over the place. The grapefruit box had been torn off one of the boats-it was bizarre. And so we started hauling for shore and getting the people, just gathering folks as fast as we could. We finally made it over below 28 Mile on the right. It was a long ways downstream. Mind you, it's 62,000 CFS, moving really fast. We had people in the water a long time, and we're missing a couple of people. They were washed down to another AZRA trip that had a very bad experience there too, but didn't turn over any boats. They were waiting downstream and picked up those people. We got to shore, Suzanne came in rowing the Spirit that had dumped everybody out, towing the Maravia, pulling an extremely fast current, and violent eddy water, and got to shore. Miles Ulrich was a strong fellow, but she took the oars, and while she rowed, he bailed like mad, to just lighten the boat up. They didn't have anybody else in that boat, as I recollect. She made it to shore, and then we pulled over the Maravia, and she said, "David, dive under the boats and see if there's anybody under there," so I did. There wasn't anybody under the boats, but there were bags hanging down. We used to carry drink bags, very foolishly, not being tightly tethered to the boat. I cut those free and we hauled those to shore. Then other people were tending to the shocked people, because they were definitely going into shock. So that was going on, we

got *them* taken care of, got *them* warmed up, got people looking after them, and everything was reasonably stable, at which point Martha was standing there like a wet cat, I remember, and Suzanne said *[in Southern accent]*, "Ah want to talk to you down the beach." And we went down the beach. We got down well out of sight of the passengers and Suzanne looked at us and she said, "I almost died. That one almost got me." And she began to shake a little bit, then she started to cry. Not a lot, just a little. She said, "I was trapped between the frame and the boat." We'd gone out with improperly prepared boats. These Maravias weren't ready, they weren't made right. And she had been thoroughly wedged between the frame and couldn't get out. I don't know, she took off her jacket or did something, got out of there finally, but she almost died. But the thing that I was struck most by, she did that, then got in the boats, then towed them to shore, then saw to everybody, controlled the entire situation until it was totally safe, and then, only then, did she allow herself to feel anything. There's a good boatman right there.

Yeah, there are a lot of Suzanne stories, there are a lot of them. There's so many different experiences down there, different people—some of 'em short, some of 'em long. But that's one I'll never forget. A very brave person, I think. (long pause) Lost a lot of grapefruit that day.



Not-so-easy motor run through Crystal at approximately 75,000 cfs.

Photo: Joanne Nissen



Exhausted guides, Louise Teal and Don Briggs, getting a little rest after another high water day.

Photo: Dave Edwards



Abandoned motor-rigs below Crystal.

Photo: Dave Edwards

High Water of 1983

ATE WINTER, EARLY 1983. The snow pack in the Rockies, headwaters for the once-mighty—still beloved Colorado, is about seventy percent. March enters capricious, feisty. Snow starts to fall. Lots of it. A thousand river miles upstream of Glen Canyon, flakes drift from muddled storm clouds, meld themselves with others of like mind, adding to that vast white frozen blanket, crumpled by mountains. Inch by inch, foot by foot.

We drive the 128 miles from Flagstaff to Lees Ferry for our first river trip of the season—early May—rig the rafts in record time, and drive to the dam twelve miles upstream. Beers in hand, we stand at the dam overlook, observe the spectacle. Our tribe is all shorts, flowered skirts, t-shirts, floppy hats and flip-flops. The tourists walk around us, keeping a safe distance. Six hundred feet below, turbines running full steam ahead, plus four outlet tubes shooting water like colossal fire hoses from the foot of the dam. Wasted power to the engineers, for us... We look at our feet, feel the earth vibrate, chuckle nervously.

The spillways have been tried in order to lower the lake and make some room for all that snowmelt. They're in sandstone. Oops. They're being held in "reserve" after chunks of rock the size of apartment buildings were observed flying out. The water is flooding into the reservoir from Cataract Canyon at around 200,000 CFs, and they're releasing it at 45,000 CFs...the upper limit without the spillways. The water, already at the dam's brim, continues to rise, inches daily in a lake nearly two hundred miles long.

It's JUNE. The river is now at 55,000 CFS and rising. Assessing the extraordinary situation, our guide's councils agonize, debate, procrastinate, and ultimately cancel our upper-half paddle-boating charter group of diplomats from around the world.

On the river ahead of us, another AZRA trip will hike their passengers out early at Phantom. No guide has seen such water. What's downstream in the Gorge? What about Crystal Rapids?

A complicated strategy is assembled. Suzanne, our trip leader, will hike down to Phantom and join the guides from the other AZRA trip whose passengers just hiked out. They'll float down, sans clientele, for a look-see. Any unrunnable rapids, deadly eddies, un-campable camps? Can we still run a safe trip if it goes higher? Recon, lubricated by snowmelt, adrenaline and Scotch.

Meanwhile, the rest of us will deadhead to Phantom and ckeck out the upper half. Thus, the entire river scouted. Expecting carnage, we pad the rum and tequila with duct tape and foam. Priorities. If everything seems copasetic, Suzy will hike back in at Phantom and I we'll continue downstream with our original lower-half folks.

We step into our rafts at Lees Ferry. Always an occasion—this time extraordinarily so. We float through House Rock, usually the first big spine-tingler, standing on our seats, hands on hips, gawking. Gone. A riffle. We float into Redwall Cavern, touch the ceiling from our boats, floating twenty feet above where we normally play Frisbee and cavort on the dune. Anxious each time we hear the thunder of the next rapid, we find each runnable, many gone. Confused, unpredictable, thumping waves in those that remain, wide cheat-routes where necessary. So far, so good.

Kim Crumbo, Vietnam vet and Park Ranger, dropped a package from a chopper hovering above our tiny little boats upstream. Choppers in the Canyon are never good news. Ziploc baggie weighted with river sand, tied with a red ribbon. Note reads "Glen Canyon dam released 65,000 CFS this A.M. Should reach you in about seven hours. Camp high, stay safe. Love, The Park Service."

We pow-wow over rum and cokes, agree that it should be runnable at least to 75,000 CFs, maybe more.

Deadheading to Phantom, we have three days off before Suzanne and the new clients hike in. The other guides will hike out at Phantom for a break. I prefer to stay. A hike is in order. Upper Clear Creek sounds good. I haven't seen that yet. I can hitch a ride back to Phantom Ranch on one of the multitude of rafts floating the river this time of year.

Packed light for the desert, no tent, up Bright Angel creek, right at the fork and up 1,000 feet to the Tonto Plateau, east to the appointed drainage. Two days of paradise. I return to the river. Almost.

The last half mile of side canyon, typically a jaunt along cobbles, has become a deep lake of exquisitely cold water, backed-up Colorado River water, bounded by unclimbable cliffs. No lifejacket. No wetsuit. Too lazy to hike all the way back to Phantom twelve miles away. I bundle my possessions into plastic bags, then back into my backpack.

Using my pack as an air-mattress, paddling my hands and feet crazily, I barely make the main river corridor, exiting the freezing water naked, gasping and near hypothermic.

I clamber upstream over sharp ribs of black, greasy schist and glassy white quartzite to a familiar eddy with a clear view far upstream. No beach left, but on this ancient mortar I will wait for the next raft and hitch a ride to my awaiting vessel five miles downstream. Nobody comes by all afternoon...

Next morning, I wait, and I worry. Hours pass. The clients arrive first thing tomorrow. After lunch, a motorrig, all 38 beautiful blue rubber feet of it, whines into view, 35 horses plowing its travelers and their duffel downstream. I wave, they pull into the eddy at my feet. Dave Clark, boatman extraordinaire, offers a spare lifejacket. I bound on board, seating myself in the center of the rig.

Ahh. Afloat once again.

The water has indeed risen. 75,000 CFS. Scuttlebutt has it going higher. I make a mental note to scout an uphill escape route as we float. Who knows? The dam just might blow.

Suzanne joins me at the Phantom boat beach and we observe the nervous clients. She saw a Western Expeditions motor-rig flip end over end against the wall in Crystal last week. Crystal is ten miles downstream. That's a bit over an hour at current speeds.

"Wait'll you see Crystal, Jeffy! It's amayzin'." Over and over in her beloved Alabama accent, 'till my guts wrench. The beach, like all the others, is underwater, sand shifting below dark, cold currents. Strategize. Boat order. Hand Signals. Joel, Moley, Kevin. Can't imagine a better crew. A ranger approaches.

"Georgie just flipped in Crystal!" Too loud. Inscrutable sunglasses offer the only reply. A nearby client's head rises, faces us. Our ranger is oblivious. "There were injuries!" The client gently places his half-filled river bag on the sand, strolls over.

"Is this a good idea?"

"Y'all will walk around Crystal rapids. We'll run the boats through empty and pick y'all up below" says my lovely trip leader.

This simple logic seems somehow to satisfy him and he walks back to inform his wife, who has the thousand-yard stare going but good.

Horn Creek rapids, first big one past Phantom. There is usually one rapid that gets to me, I can't seem to wire, each season. At present, it's Horn. Hard to be chatty with the new folks as we come around the corner.

Gone. Buried. We look back, shake our heads, not sure where we are for a moment.

Granite Fall's thunder and spray is at least familiar. We cheat it, hurtling along the left shore, avoiding the colossal curling breakers along the right wall. The scout rock at Hermit, normally a high and dry vantage point from which to scout, is the top of a diagonal wave barreling into the infamous "fifth wave". This usually perfect, straightforward feature has transformed into a monstrous curler paralleling the current, the perfect surfer's tube.

Each rapid has a finality about it. One step closer to Crystal. The clients do not notice our silence, our significant glances to one another.

Stepping ashore at Crystal, tremors felt through flipflops again, go up our spines and into our numbed skulls. We are silent, the passengers now keenly aware. They can't read rapids, but they can read us. I imagine hundred ton boulders the size of houses, placed there by an incomprehensibly massive flood of mud and rock twenty years past, tumbling, colliding downstream. The air thumps, muffled bass drums throb the atmosphere.

Camp—gone. We tie to the crag usually behind it, fasten our insignificant craft to it's top. Tamarisk trees wave like palms in a tempest far from shore, only the tips visible above the chocolate current. We sweat, not from heat. Swing the rafts into the eddy behind the cliff, preparing to camp on the mountain from which we usually enjoy a panoramic scout. It is strangely comforting to leave the shuddering earth, climb back aboard our boats to start unloading. Suzanne has other ideas.

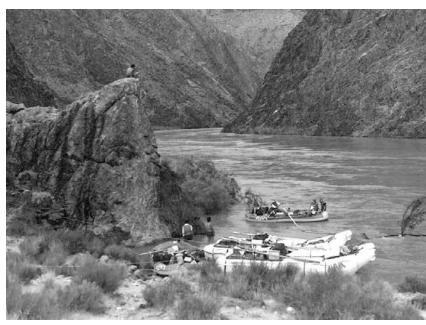
"Leave yoah boats alone." We look up from the rigging, baffled.

"Y'all have to go see the size of this hole befo' it gets too dahk. You just won't bleeeve it! Now you get down offa yoah boats right this very minute."

We crawl off our boats and follow her to the overlook. The roar slams us in the face as we top the rise. The

beast is at hand. Jaws drop. Jaws that have seen some really big water all over the world over years of extreme, pioneering rafting and kayaking. Each of us is silent, looking deep into our souls, seeking courage for the morrow. Suzy smiles, in ownership, exultant.

We turn our backs on our fate, eager to dull our senses. I mutter under my breath that we have to think of a way to describe the scale of things for later, when memories fade and stories get smirked at by guides who weren't there but know better. We agree, after fruitless attempts utilizing hyperbolic adjectives, that you could chopper a locomotive over the hole, perpendicular to the current, lower it until its top was below and within the crest of the breaking wave—and no part of it, not the ends, not the bottom, not



AzRA camping above Crystal.

Photo: Richard Kocim

the sides—would touch water. No Shit, as we boaters like to say.

After dinner, clients safely tucked in, we stray over to the firelog and, one by one, absent-mindedly pick up our instruments. Not a word is spoken—no words needed. We play, at first softly, introspectively, then, as the hours roll on, imperceptively faster, louder. Unconsciously building to a crescendo of pent-up thrill and tension...youth and destiny, compelling us, song following song, into harmonic frenzy.

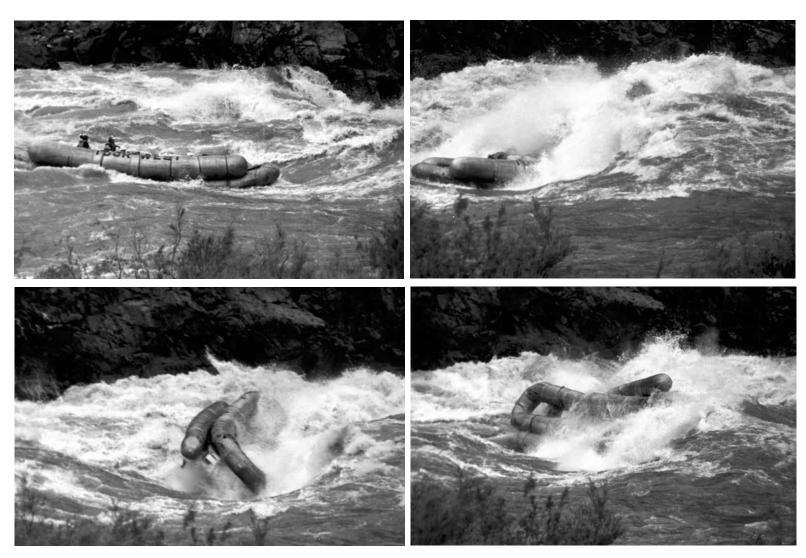
Dawn, Crystal morning, clear and hot. I step off my craft and my feet recall the vibrating earth. Final scout. Joel and I are both rowing Snouts. Heavy, lots of keel, awkward to turn, impossible to correct once they do. The others are in the usual 18-foot "bucket" boats. They wish they were bigger, we wish we were lighter and more maneuverable, all wish we were downstream. As we are about to cast off, I sneak an illicit beer to settle my stomach, calm nerves. WiWo, another rowing trip, pulls in. Suzanne, ever safety conscious, decides we'll watch their run, asks them to wait in the eddies below and "spot" us, just in case.

They agree. Like us, desiring to get downstream of the fiend as fast as possible. They run it with clients aboard, pulling backwards hard to the right, looking over their shoulders past the tammie tops. It can be done. We walk upstream to man the boats, again. Get it over with already. A motor trip appears, ties up. I see what's coming, pull Suzanne aside.

"Please, Suzy. I'm gonna be sick. Let's just run it, okay? We're all set. WiWo's downstream..." The stance, the eyes behind mirrored sunglasses. "Please?"

We glumly drag ourselves back to the viewpoint. Their guides come up to scout. Suzanne recognizes the old-timer leading the trip. She'd seen him nearly capsize here last week, on lower water. That time they hadn't scouted, just ran the hole as usual. When they hit, a wooden storage box weighing a few hundred pounds sheared away, nearly taking his head off. Newly humbled, on bigger water, he'll cheat it.

They file back towards their waiting passengers. Got a feeling in my bones. I take one of our clients, a



keen photographer, downstream, wade across the ponded mouth of Crystal Creek to an excellent vantage point directly across from The Hole. Talking is useless. Standing shoulder to shoulder, we converse by shouting. And we wait, unable to see the boats upstream.

A lone boat appears over the horizon of the tongue, past our crowd gathered on the viewpoint a hundred yards upstream. The rig is just off the left wall. They will turn to the right momentarily, use the momentum to cross the river, towards safety on the right. They continue steadily, still along the wall. The old boatman sits off to one side of the motor well, his trainee at the helm. I wipe the sweat off the back of my neck with my bandana, turn to Dick.

Too loud, even for the roar, I shout, "Do you have a fresh roll of film?"

"Yeah. Why?

"See that pink dike in the wall? If they don't turn before they pass that, it's over."

They pass the granite marker, Dick and I begin to scream. Can't help it, too much inside. My arms in the air, palms out, like a benediction. On the far shore, hands in the air, mouths wide. Soundlessly they scream. The boat slides faster and faster into the throat. Old-timer starts to wave his arms at his pilot-trainee. Too late. The boat swerves wildly to the right, lines up once more, to hit it straight. No-one, neither the audience nor the actors, utters a sound. They slam into the hole straight on, 35 horses adding its momentum to a 25 MPH current, all souls willing it over the crest. The hole stops them dead.

Like a dinosaur on a relentless treadmill, they surf. One full minute ticks by, still they surf. Dick hand-cranks the camera. Click. Click. Click...hearts beat. The boat slides off into a familiar, deadly angle. The clients begin shouting again, willing it up and over. But we guides remain silent. Been there.

I hadn't expected two-inch webbing to sound like that when it snapped. Artillery explosions. The boat disappears, tubes flailing wildly. Entirely gone. Thousands of pounds of buoyancy—sunk. Lifejackets appear a hundred yards downstream, thankfully containing heads. WiWo's rafts careen out of their eddies in hot pursuit, in an instant



Photos: Richard Kocim

are out of sight around the next bend. My gaze returns to the belly of the whale. Nothing. Then, like Moby Dick, it rises, thirty yards to the left of where it disappeared, still trapped in the hole. It is tearing itself to bits there furious, frustrated. Once again, it sinks. For a moment, it seems as if it were just a bad dream. It gracefully resurfaces fifty yards downstream, floats out of sight in pursuit of its brood. We are left alone with ourselves and the river.

Radios transmit the news to the rescue choppers via the commercial airliners. People are in the water. The water is in flood. Tons of boat have just landed on their heads. We are helpless, the rapid still to be run.

The second boat of the pair, tied upstream in a stand of shrubs, preparing to cast off—is ignorant of this.

They shove off, too late to do much good, miss the hole by a mile and disappear. Fifteen minutes later, choppers appear, Kim Crumbo leaning out of the door, radio in hand, clad in a wetsuit. Later, we get the news. Some broken bones. One dead. Older gentleman. Swam ten miles.

We turn towards our own boats, still chafing in the eddy, check our rigging one final time. Once again, boats appear upstream. The private trip, in small oar boats, scouts hastily. We are left to observe. Two out of three miss the hole. The third misreads, ends up riding the steep but glassy right edge of the hole, a 45 degree slope. They stall, the 16-foot boat a tiny toy taking up less than a third of the wave, and surf. The two passengers, leaning over the bow tubes like sailors trimming in a stiff wind, urge themselves over the crest. Still they surf. Water curls off oar blades in a graceful arc. As one they turn their heads over their shoulders, stare into the maw. Slip down the face of the wave. Gone. Again, life jackets appear far downstream. Again, no sign of a boat. It reappears at the crest, twenty vards to the left of where it entered, leaps clear of the water, a pirouette with a backwards double summersault, reenters the hole. Disappears. We have time to ponder this. It surfaces far downstream, pouring water like a submarine, upright. We cheer. The lonely vessel disappears downstream.

It's our turn. The eighteen footers have perfect runs. Suzy ends up at "Ego Beach", a shoreline immediately downstream from the hole, so named because it's the first catchable eddy after a perfect run. And that's in normal water. The beach well buried, she ties up against steep cliffs to wait for Joel and me in our snouts.

Joel smiles and offers to let me go first. Once cast off, I become tranquil, serene. The music will play itself. I float by Joel, catch his eye, standing on the brink, not five feet away. He raises his hand. Farewell. I pass over the tops of my marker trees, concentrating on one solitary thing; the angle. I do not turn to look over my shoulder at the approaching beast. I see it from within, rouse myself, begin rowing. I pass the hole, offer a war whoop, counting coup.

Suzanne's voice, insistent, commanding, brings me

back.

"Jeffy! Row! Row! Come heah! Row!"

Ego beach. 75,000 CFS. In a snout. Not a fuckin' chance. Still, it's a job. I have to try. Keeping her voice to the back of my head, not daring to turn around or lose strokes, I row. She screams, I row.

An instant of no screaming. Then; "Stoppppp...!"

Yeah. Right. I lean on the oars, try and slow the momentum. Now able to turn around, I notice colorful figures moving fast. I careen into her fully loaded boat, knock it clean out of the water, tearing a neat two-foot hole amidships.

Georgie's upside-down motor rig is at 110-mile. It has been there a week—a ghost-ship. We float into the mouth of Olo canyon, usually a 25-foot climb with a fixed rope. I blow by the mouth of Havasu, unable to cross the eddy line—a first. My comrades find me downstream in a very bad humor. Rumor has it someone's missed Diamond, the take-out eddy 65 miles downstream.

Lava Falls, last of the big rapids. Just get through this one, and you've made it. The water is now at 100,000 CFS, when you add the usual leakage around the dam.

We tie up far upstream on the left side. Unusual, as we've never run left. But this day is not usual. We guess the left will be open, based on our new knowledge, keeping our fingers crossed.

Suzy wants me in the lead. The eddy lines have been consistently swallowing our 18-foot rafts, tipping them on edge, sucking them down to the gunwales, often filling the rafts with water in a split second. We've settled into this chaos by dropping the oars, all occupants sliding towards the center, leaning this way and that, praying for the Gods for release. We smoke the run.

Diamond Creek is today. Our take-out. Every rope on board is tied end-to-end, coiled neatly onto my rear quarter-deck, within quick reach. Beyond take-out is twelve more river miles, then 33 lake miles. I love my job. *Nobody misses take-out.*

I have a plan. I am going to scrape the paint off my stern, entering the huge take-out eddy at it's upstream boundary, where the eddy line is the narrowest, just like we learned as trainees way back when. Perfect angle, oars ready.

Flawless. My three women passengers lean into the center of gravity, all encouragement and love, facing me over the duffel. Way upstream in another world, a disembodied voice echoing off the black cliffs. With a southern accent.

"Puullllll Jeffy pulllll!"

I am in and I am perfect. For one, glorious instant.

A whirlpool yawns beneath me, sucking my enormous craft down so deep that, though still on my rowing seat in the center of my boat, normally four feet above the river, I am sitting in the river, bow pointing towards the sky, oars ripped from my hands like a kite in a gale. I grab the duffel lines in front of me, emitting a guttural scream. My passengers, leaning in from the other side, faces not two feet away, eyes like fish; silent, smiles gone.

In the background, the voice; "Pullll Jeffy pullll goddammit! You miss that eddy and yoah fiaaddd. Fi-adddddd, you heah??"

Inspirational. My best buddy.

We twirl like driftwood, three times 'round. Nothing for it but to wait until it lets us go. And swear. I try to calm myself by reassuring the women.

"Pull, pull Jeffy...yoah fiaaaaaaad!"

We slam against the right shore. Yes. The *right* shore. A new voice chimes in as I reach for my oars. Might as well have a look over my shoulder, since I have no idea what to do with them.

It's Paul, the warehouse man and truck driver. Big guy. The four-ton truck is backed up to the water's edge up the side canyon, the take out beach utterly gone. He has an unbuckled life jacket draped over one shoulder, a throw bag in his right hand, one end tied to the trailer hitch.

"Come-on Rainy! I got ya!"

The current is going about ten miles an hour. We're on the far side of a 100 yard wide river, rushing headlong into Diamond Creek rapid, sideways.

A sense of humor is critical at times like this.

Lumbering the behemoth with wild and ineffectual pivot strokes, we end up aiming at Paul. Clearly we'll never make it. I aim us for the bend of the cliffs forming the head of the rapid, hoping for a lucky bounce.

"Hold on, ladies!"

Unlucky bounce. Attention returns to the river as we plunge into Diamond Creek rapid. I've run Diamond a few times, am aware of an eddy on the left below. More frantic rowing and pivoting. We careen into the eddy, I drop the oars, grab the coils. Fortune smiles at last as we edge close enough to the rocky shore for me to step off. All I have to do is tie up.

Unfortunately, my arms no longer operate. Past their limit, full of lactic acid, disobedient. Waddling like a monkey, trying to keep from dropping the coils by using my knees to hold up my arms, the coils whip, one by one, away from the ever-diminishing bundle. Just before the last few disappear, along with my boat and my clients, I pitch what's left onto the earth, collapse on top, praying to the desert Gods.

McDonalds couldn't be so bad.

Over the roar of the whitewater, I hear a faint sound... "squeak...squeak...squeak." Rhythmic. Determined. Familiar.

I manage to sit up, still sitting on the coils. Kevin's long blonde hair whips by, head bending forward, backward, forward again.

"Wow! Kevin! You came after me!!!"

He turns ever so slightly, not missing a stroke. Spittle

flying from his lips, bug-eyes hidden by mirrored sunglasses, he spits "Hey, man...I like ya, buddy...but not *that* much!"

I lay back down, relieved. Another series of squeaks. Suzanne.

Saved. Again.

We walk the folks and their gear back upstream to Diamond. They gladly leap ten feet into an empty raft attached with a line to shore. Time for this trip to end. The whirlpool swallowed Joel and Moley as well, shot them left instead of right. Joel will drive and meet us at Pearce's Ferry, thirty miles into Lake Mead, on the morrow.

We raft the boats together on the lake, rummage for food and drink. As we drift off to dreamland, someone asks; "Hey...what if there's current all the way to Pearce's Ferry? What if we miss that eddy, too!?"

Jeffe Aronson

Filming the Flip for the IMAX Movie Hidden Secrets, September 1, 1983 on 28,000 CFS

THE REPLICA OWELL boats constructed for the IMAX movie *Hidden Secrets* were so tippy that just setting foot inside one would flip it instantly. But with ballast under the floorboards they became so stable that two experienced boatmen, Bruce Simbala at the oars and Kenton Grua at the sweep, were unable to deliberately tip one over for the camera in Hermit Rapid's huge waves. With one-armed Daniel 'T' Majetich sitting amidships in the role of Major Powell



Photo:s Rudi Petschek

and hanging on for dear life, they aimed for the first huge wave and let go of the oars. In the next roller they leaned outboard but the boat didn't notice. Kenton pretended to fall overboard, Bruce followed suit, and when all else failed they tried to pull the boat over in a desperate attempt to salvage the stunt and their \$250 bonus. But the trim boat steered itself through wave after wave, straight as an arrow and steady as a rock, while the boatmen made fools of themselves on largeformat film. *"Nobody will believe that! On a big screen nobody will believe that!"* hollered a furious Keith Merrill, the film's director/producer.

I told Keith that any staged flip was bound to look phony on screen, that for a realistic flip they should try for a successful run . . . over The Falls at Lava. Kenton argued persuasively for \$500 apiece (\$1,100 in today's money) to justify the additional risk. What Hermit had denied Lava Falls would assure, as he steered the boat into the monstrous hole.

Success came in an instant with real drama to follow when the usual fifteen second run turned into twelve anxious minutes of rescue. Two big motor-rigs standing by for this purpose chased the flotsam downstream as Kenton and Bruce struggled with the up-side-down boat, climbed onto its bottom, held on for a while, then fell back into the current. The wreckage floated past Lower Lava Rapids, where a dangerous maelstrom against the left wall trapped boat and survivors beyond the reach of assistance. It swirled them and churned them and thrashed them around to the horror of powerless onlookers. Kenton and "T" managed to disengage from the violence but an already exhausted Bruce succumbed. sucked down by the whirlpool into the river's depths for what seemed like an eternity. Up he came downstream for a single quick breath before the vortex sucked him under again. Then another long dunk, another short gasp, and still once more after that. As the turbulence finally subsided halfway down that treacherous wall, Bruce floated to the surface, limp and spent, to be rescued at last.

The footage was superb. Keith Merrill was ecstatic. Bruce watched his ordeal daily, hundreds of times, as he ran the projector that delivered the scene onto IMAX theater's huge screen. The boat went on public display and the late Kenton Grua, adding to his many accomplishments, conceived of and established the organization that publishes the page upon which I write these memories twenty-five years downstream.

(For more on this story, see BQR 11:1, pp. 34–35)

Rudi Petschek

Grand Canyon River Guides: The Beginning

This interview excerpt was recorded with Kenton Grua probably the key founding father of GCRG— on December 7, 1997, in Flagstaff. (In August of 2002, Kenton passed away suddenly due to an aortic aneuryism.)

* * *

STEIGER: ... So, politics, the history of GCRG. Do we need to say anything more about Martin Litton? I mean, just as a precursor to you gettin' involved with GCRG. Because it's interesting that here was this...well, okay, you go to work for the Dories, you work there for twenty vears, and you spend all that time with "M.L." learnin' about his history and stuff, and then all of a sudden he sells the company. And what happens? You start Grand Canyon River Guides and go after Glen Canyon Dam? That strikes me as being not entirely coincidental. So, "How did Martin fit into that picture, and how did he influence you?" You said earlier that originally you got with the Dories because you wanted a job rowin' in the Grand Canyon, and then later on you found out about all these things that Martin had done for the Canyon and the rest of the world. So, just...where did all that stuff fit in?

GRUA: It definitely had a lot to do with it, as you know, because you and I were kind of co-conspirators to a large extent on Grand Canyon River Guides' beginnings—as well as a lot of other people.

STEIGER: Well, I didn't have *anything* to do with the beginning of it. My recollection was I worked for Martin that last year, and did that last trip ever with you, which was really when I first met you. I mean, I knew of you forever. You were like a legend in my mind, and I was pretty thrilled to get to know you. But then I went off. I was like in New York that winter. And then I remember getting a bulletin saying here was "Grand Canyon River Guides," that you had started—big meeting at the Hatch warehouse. I mean, I got the newsletter informing everybody of it.

GRUA: (chuckles) First "newsletter."

STEIGER: Yeah, which was this little mimeographed sheet. I got it, I think they forwarded my mail, and it was like, "Whoa, here's Grand Canyon River Guides. Well, that sounds pretty good."

GRUA: Meeting at Hatchland.

STEIGER: Yeah. I instantly was for it. I thought, "This is the coolest thing." But I didn't have anything to do with...I mean, my sense of it was that this was something that hatched in the mind of Kenton. It was another one of those things that people had been saying, "Well, we need to do this," forever, but I don't think anybody but *you* was really serious about doin' it.

GRUA: Well, I think a lot of people were really ready to do it. Yeah, I think it was a big combination of watchin' Martin headed out the door, Grand Canyonwise. Or at least it looked like he was gonna be headed out the door, sellin' the company and claimin' he was gonna retire—though he still hasn't really, probably never will-which is good, which is really good. But you could just see a void opening up there that had to be filled. And also, just the whole boating community is such a cool thing, that it was really time to finally put something together, sort of a boatmen's club. WRGA [Western River Guides Association], which was originally probably really a boatmen's club, it had turned into an outfitters' organization, and then it'd just kind of-it was kind of dissolving too at the same time that Martin was selling the company. So there really wasn't anything goin' on, and a *whole* lot of stuff seemed like it *was* goin' on, though it seems like it always is. (chuckles) We just kind of keep reinventing the wheel and never quite solving these things. We just put another bandaid on things, and go on, stumbling down the road.

Actually, originally, the first glimmerings of it, is we put together a little meeting. I guess it was Brad [Dimock] and I and a few other people, mostly, that thought it was a great idea. And so the most likely meeting place—or the most guides that could get together was at Brad's house here in Flag. So we just kind of called it more of a party than a meeting there. But it was the "original" meeting of GCRG. That was a full house.

STEIGER: That was that winter?

GRUA: Yeah, the winter before that first spring meeting. Everybody went, "Yeah, great idea, let's do it. You're in charge!" (chuckles) To me, in terms of at least...

STEIGER: It *was* your idea, right? I mean, you were the one that said, "Let's start an association!"?

GRUA: Yeah. Actually, it was a lot of Mike Taggett and me, up in Hurricane, because at that time I was up in Hurricane. The Dories had been there for years and years, and it was lookin' like we were gettin' uprooted from there. So there was a lot of change goin' on; and Taggett and I talked endlessly about it. He was really generous with his facilities and his new toys—Apple computers and stuff like that, and the new little Macs you know, the very first Macs that came out.

STEIGER: The little bitty ones.

GRUA: Little teeny screen, and little itty bitty computer. That was a cool machine. That really started a revolution. So we put it together on that—you know, the first mailings. Called around, got ahold of the Park Service, got as many names and addresses as we could from them; called all the outfitters and tried to, as much as we could, get their crew mailing lists. And some of them were cooperative, and some of them weren't at all cooperative. (chuckles) 'Cause they were goin', like, "You want *what*?! You're doin' *what*?!" And so we were tryin' to keep it really above board, and more of an environmental, Canyon-oriented thing, in terms of guides as a group.

My biggest thing that I wanted to do was—well, first of all, have a cohesive group or club that we could belong to that would give us more of a voice in what was going on, both with the outfitters and with the Park Service in the Canyon, because, really, I mean, who cares more about it than we do? And a good excuse to get together once a year or twice a year.

STEIGER: And have a party! (laughs)

GRUA: Party. Talk about shit and party! I think that's still the best reason we have for existing, and I hope it continues to exist for that reason. Really, it's kind of amazed me how much it's taken off and become its own thing. It's a lot like havin' a kid and then watchin' it grow up and turn into whatever it turns into.

STEIGER: It was pretty amazing, huh?

GRUA: Yeah, I sure hope it keeps goin'. I think it's the best hope the Canyon has right now, really—GCRG. And that's comin' from not really bein' very involved in it myself, anymore, other than I sure like to go to the meetings. I mean, I guess I'd say I was involved, but I'm not right now what I would call contributing a whole lot ...of opinions. I'm kinda punched out of the work. I did put in some time the first three years or so.

STEIGER: A *lot* of time.

GRUA: And not just me—Denice [Napoletano] was key. She was the first secretary. She was the one who really did the footwork, and made it happen. And she worked her tail off for three years on it.

STEIGER: Also, to clarify—just 'cause I don't think it's anywhere else on this tape—this big shake-up, this big transition that we're talkin' about is Kenton worked for Grand Canyon Dories, Martin Litton, which was his little river company that was based in Hurricane, Utah. But Martin kinda got in a financial jam and had to sell the company to George Wendt, who owns OARS; and John Vail, who owns Outdoors Unlimited. What year was that? Was that '88? Yeah, '88. So there had been this little dory scene, there was this beautiful warehouse, and really a beautiful, incredibly idyllic little life that went on for everybody that worked for the company. You lived right there in Hurricane, then?

GRUA: Yeah, out behind the warehouse.

STEIGER: So Martin had to sell the company, and all of a sudden the dories are goin' to Flagstaff, and they're gonna be run under OARS. All this is happenin', "and oh, by the way," in addition to you gettin' ready to make that change, you and Denice are havin' to deal with *that* transition, and then *you* say, "Well, by the way, we

ought to start this little association." But you were in Flag, and Brad was in on the initial...You guys called a meeting?

GRUA: Yeah, we kind of knew. It was really, I guess, the original, initial thing was me and Taggett and Denice, sittin' around 'til all hours in Hurricane, and other dory...Jane [Whalen]...there were other dory people there involved, goin', "Yeah, this is a good thing, we gotta get this goin'." It was time.

STEIGER: Mike Taggett was a dory boatman too.

GRUA: The inventor of Chums! Eyeglass retention devices! Jane. Ellie [Ellen Tibbetts] was around. I imagine Coby [Jordan] was in on a few discussions. You know, it was like whoever we could grab around there. Some of the Sleight boys—Walt [Gregg], I imagine, was in on a few discussions. Mike Grimes.

STEIGER: I take it, for you, it was like the speed run, like once you got goin' on it—you were goin' on it.

GRUA: Yeah, it became something that really had to be done, and that the time was right for. So then we called this meeting at Brad's house to get the Flagstaff half of the Canyon in terms of what they thought about it, and it was a really successful meeting. There were a lot of people there, we had the whole house packed... Everybody said, "Yeah, let's do it. Let's get together." So we kind of scheduled a time for a spring meeting, and talked it over with Hatch, and went back to Hurricane and did that first newsletter and mailed it out to everybody we could mail it to. Dropped a few bucks on the postage.

STEIGER: Who paid for the postage and all those things?

GRUA: Ah, we did originally. I think we fronted a bunch of money to it, Denice and I. Taggett might have put in a little bit. But then I think everybody got paid back—not for time or anything, but for direct expenses—out of the first dues. It's always pretty much paid for itself. I made it a loan, I think, a \$500 loan, or something like that, early on, but it paid me back—no interest or anything—but short-term loan, too, was paid back within a matter of four or five months.

STEIGER: Okay, so you rolled the idea around with Taggett, there was a meeting in Flagstaff, and there was a bigger meeting at Hatch, and the newsletter gets sent out. I remember gettin' that newsletter and instantly goin', "Yeah!" sendin' my money right in. "Okay, sign me up for that." I mean, it *was* that kind of thing where it didn't seem to take...Do you remember what the membership curve looked like? Didn't seem to take much prodding before there were a couple hundred people on board.

GRUA: Yeah, we had a lot of people get on board right away, and then there were a lot of people who were real suspicious of it, really like...

STEIGER: "Is this gonna be a union!?"

GRUA: Well, it was like the "Flagstaff Rowing Mafia,"

too. I think there's still a little element of that, you know, though we try our best not to make it that way. I don't feel like I'm "Rowing Mafia" at all—I love motors, and the best people down there are the motor guides. We're all totally interdependent. I think it works really well the way it is.

STEIGER: Now, why do you love motors?

GRUA: Well, they have a *place*. They take lots of people through, which is good or bad for the Canyon. I mean it's bad because of this continuing demand, which is just gonna keep growin', to *see* the place. And that's what we're kinda facin' now, politically, more and more, with the big private waiting list. It's a limited resource, and too many people want to do it. But the more people we show it to, the more people are gonna either want to come back and see it, or tell a friend and they come see it. It's just like this ever-expanding ripple. You know, you throw a rock in the pool and it just keeps goin' and gettin' bigger and bigger and bigger. That's what we're facin' now, and have been for a long time.

STEIGER: It's ironic. Yeah! Who *trained* all those private guys!? Who got 'em *started*?!

GRUA: But then on the positive side of that, is right now we're talking seriously about taking out Glen Canyon Dam. Taking it out. We used to sit around and talk about blowing it up! Seriously or not. But we're not doin' that anymore, 'cause that would be nuts anywaywe always knew it was. But there is a chance in our lifetimes that we could get rid of that thing. I think that has a lot to do with what we've done, so there's the positive and the negative, the vin and the yang of what we do, and that's why I've kept guidin', and I think most people who are serious about guiding and showing people the Canyon *have* to feel that way. You have to believe that what you're doin' is-even though you're lovin' it to death—it's better than killin' it with a dam and a reservoir. A million people boating through the Grand Canyon in a year would be better than having a reservoir. If all those people stopped goin' through for a few years, it'd recover. If you build a dam and drown it, you're talkin' about a magnitude-more time before it comes back and recovers. It will. Glen Canyon Dam, we always know it's gonna go, there's no way. No matter what we do, it's gonna go...But I'd like to see what was there. That really excites me, because you've heard it, and seen pictures of it. But man, to have it back, wow.

STEIGER: So you actually envision yourself walkin' up those canyons?

GRUA: Oh, yeah. I think it'll happen. I think politically it might not happen, but I just watch nature, I watched '83, and that almost got it, and I can see a lot bigger water than that comin' down the river. So every winter I pray for it.

STEIGER: I tend to agree with you— it's not if, it's when. But in terms of where we're at, here...of GCRG?

GRUA: Well, maybe we should come back to just

boatman's quarterly review

the whole reason for guiding and the *good* aspect of all the people that love the Canyon is that the Canyon is protected. And when we started down there, that wasn't the case.

STEIGER: When you started?

GRUA: Yeah, it was just barely beyond the dam phase. I mean, the whole political climate in the country has changed that much in this last thirty years. Back then there were still a lot of people—a whole lot of people in favor of damming the Grand Canyon, building reservoirs there. We were really more lucky than we realized, not to have 'em. And that was Martin's legacy that he left us. He was the original guy to sort of in a way sacrifice the place by popularizing it, by taking people down. That was always his philosophy. I don't think he was ever in it for the money at all. He was in it to tell people about it, and he knew at the same time he did *that*, showed it to people, got people addicted, that it would change the experience, and make it-just crowd the place up. You know, you love it to death *that* way. But that's far and away preferable to having it under a reservoir. And then I don't think we dreamed in those days that we could even be entertaining something like the Glen Canyon Institute, and dismantling the dam. So who knows where it's gonna go from here?

STEIGER: My sense of the situation is that Grand Canyon River Guides had a *lot* to do with the Grand Canyon Protection Act, and the Glen Canyon Dam Environmental Studies, Phase II. I'm not sure of that, but my sense of it was just by rallying—it wasn't the guides they listened to, but by us rallying our powerful customers that we take down, and those guys writing letters to *their* congressmen, that's what really helped grease the wheels.

GRUA: Well, that's just what I'm saying. That's where our strength *is*, because we're teachers down there, and we can mobilize people with a lot of different strengths in different parts of the country, who come down to, a lot of them, just to *do* it because their friends did, or whatever, and it changes 'em, and they come back out goin', you know, "We've got to do everything we can for this place—and for other places." Yeah, I think we did. As I recall, on the Grand Canyon Protection Act, Congress got more mail on that, actual mail, than on any other congressional issue.

STEIGER: Yeah, for that year—or maybe it was *ever*? GRUA: Maybe ever, I'm not sure, but it was a big issue. STEIGER: Well, I know that we generated a hell of a lot of mail.

GRUA: Yeah, and that's the collective "we." It's the "we" that took people down, and towards the end of the trip, after everybody was pretty thoroughly addicted, we'd drop the...

STEIGER: And it seemd like pretty much everybody everybody working down there did that for years and years. GRUA: Yeah, a lot of guides were doing that. And I think that *does* go back to GCRG. It was the organization that did that, and that's what got us kinda where we are now, too, in a way. So a symbiotic relationship.

STEIGER: So there was that first meeting, membership poured in, there was a little mimeographed newsletter. About how many pieces of paper was that thing?

GRUA: Just a couple. I think we even got a few dues right there at that first meeting at Brad's house. We kind of decided what the dues would be, twenty bucks a year. I think it's *still* that. No, we went up to twenty-five, right?

STEIGER: Yeah.

GRUA: Still a bargain. Then we went back, and then it was pretty much me and Denice—largely Denice putting the addresses together and the mailing lists, and putting together this first newsletter and mailing it out. Then we got together at Hatchland. It wasn't a *huge* turnout, probably about fifty, sixty people, but a lot of support.

STEIGER: That's where you elected officers?

GRUA: Yeah. [STEIGER: Drew up the bylaws?] Yeah, we came up with the bylaws beforehand, and they were sort of...we borrowed a lot of stuff from Western River Guides Association bylaws—kind of adapted them to what we were tryin' to set up. So we had those all sort of typed up to hand out, and let everybody vote on. Then right on the floor there, we nominated officers president, vice-president, secretary, and board of directors—which is still about the same thing. I think it was six or eight? Six board members. Yeah, I got nominated (chuckles) for president.

STEIGER: Oops!

GRUA: Elected right there on the spot, so it was all over. Denice was the first secretary, and Billy Ellwanger, of Hatch fame, was the first vice-president. The first board of directors, who was that?

STEIGER: I can't remember.

GRUA: I know [Tim] Whitney. Boy, we need to go back in the records.

STEIGER: Yeah.

GRUA: Were you on it?

STEIGER: Not the first time. Not until the second round.

GRUA: They were two-year terms, but that one turned out to be a three-year for some reason. (chuckles)

STEIGER: For you as president. We didn't get around to having an election because nobody else wanted to do it until [Tom] Moody came along.

GRUA: Yeah, that's what it was, it was hard to find someone else to do it.

STEIGER: No fuckin' way!

GRUA: Everybody was pretty involved, but finally Moody stepped up to the plate.

STEIGER: But I remember it was a long, arduous... The focus pretty quick became "What are we doing with Glen Canyon Dam?" What was it—didn't Bruce Babbitt come and talk to the first Guides Training Seminar that we ever put on?

GRUA: Right, yeah, in Flagstaff. He was the keynote speaker.

STEIGER: And how did the Guides Training Seminars go? My recollection of that was, I remember bein' there at that one meeting at the South Rim. The Park Service wanted to do away with 'em. "Forget about guide training, we don't need that, that's not important!"

GRUA: Well, they'd *been* doin' it.

STEIGER: Butch Wilson and Ken Miller, they wanted to nix that.

GRUA: Right. They'd *been* doin' 'em, but what happened was Mark Law got in there, and that sort of drove Crumbo out of the River Unit, and Kim Crumbo...

STEIGER: ... had developed the whole program.

GRUA: ...pretty much *was* the Park Service's guides training program. So they really didn't have anybody to take it over. None of those guys wanted to be bothered with it. I think that was the first good thing they felt like they got out of Grand Canyon River Guides. You know, "We could use these guys to pass that elephant to."

STEIGER: Well, I remember going to a meeting with you. I don't know how I got involved in it, but I was there—you and me and Dave Edwards and Denice, I think. I don't know if Edwards was there or not, but I remember sittin' in a room with Ken Miller, Butch Wilson, maybe Mark Law too, and *asking* them, "Please, please don't do away with the guides training seminar. That's a really good thing. We want you to keep that up." And they said, "Well, if you guys want it so bad, you do it." Wasn't that what...?

GRUA: Yeah, they said they'd work with us, but they wanted us to take it over.

STEIGER: To *do* it.

GRUA: They'd help facilitate it—and they always have, they still do send people on it, and they provide equipment, and actually really help out there, but the real leg work of puttin' it together...

STEIGER: That became, early on, one of GCRG's tasks. GRUA: Uh-huh.

STEIGER: And the very first one, you invited Bruce Babbitt. Was that you?

GRUA: Yeah, he came to the rim. He just did the keynote address on the rim part of it.

STEIGER: But didn't he come and give some kind of inspirational—on the dam, didn't he? I remember he gave some kind of speech that fired everybody up.

GRUA: Yeah, well, in his keynote address, that's a lot of what it was about—about just our part in the whole picture, how important we were, and mostly from the aspect of the contact we have with our clients and the public at large, in that respect.

STEIGER: Well, our clients *are* the public.

grand canyon river guides

GRUA: Oh, absolutely, and some pretty influential public at that, a lot of 'em. Yeah, I think we did a lot to at least grease the wheels for gettin' the Grand Canyon Protection Act passed.

STEIGER: Yeah, I sort of remember *all* the working boatmen really did punch in on that one. It was easy to get our people to do it. The enemy was far away, and not one of us, and it was easy to get everybody fired up about taking better care of the Grand Canyon.

GRUA: Yeah.

STEIGER: I have this fond memory—one of my favorite Kenton stories that I like to tell-and you ought to correct me if this is wrong. I remember goin' in, suddenly we started getting to go to these meetings. There was the Glen Canyon Environmental Studies II, and then suddenly there was the Environmental Impact Statement, full blown, that was gonna be done. And then there were all these meetings of all these government agencies who were gonna figure this out, "Well, what are we gonna study?" and blah, blah, blah, and I remember my recollection of this...I'm bein' a bad interviewer here, I'm supposed to ask short questions. But I remember we'd go in there and all they were talking about at first were the low flows. (Grua chuckles) Do you remember? [GRUA: Uh-huh.] I remember we go in there and we're tellin' 'em, "No, no, if you're worrying about the beaches, you gotta look at the high water," which nobody wanted to hear. And you, in those days you had a big beard down to about chest high. I don't remember if you had a pony tail or what, but you looked kind of like Hayduke, and you were president of Grand Canyon River Guides! I remember you were in there talkin', and you said all this good stuff and *nobody* would listen. You could just see their eyes glazing over. I remember you went home that night and shaved, got a haircut, and went in there the *next* time and said exactly the same thing that you had said the first time, and all of a sudden everybody was like nodding and paying attention to you now. Do you remember that?

GRUA: Oh, yeah.

STEIGER: What brought that about?

GRUA: You mean the idea, or just them payin' attention? (laughs)

STEIGER: No, the idea was obvious. How did you figure out to clean up your act and all that stuff?

GRUA: Oh, that's an old story. (laughs) It doesn't take much to figure out. I mean, it's still that way, it always will be.

STEIGER: That was pretty hilarious. Yeah, so you went to meeting after meeting, stayed up late, put out a lot of kind of mimeographed newsletters...Those first ones were...they weren't too bad.

GRUA: They weren't mimeo, they were like "Kinkoed."

STEIGER: They weren't bad, but they were a lot different than the ones now.

GRUA: Oh, yeah, it's nothing like what we have now. We kind of went to that as Brad [Dimock] started to get more and more involved in it.

STEIGER: Yeah, he really shined that thing up.

GRUA: Really. I mean, Brad and Tom Moody took GCRG and made it what it is, there's no doubt. And Jeri [Ledbetter] with her...

STEIGER: With the books and all that. Organizational skills.

GRUA: ...membership drive.

STEIGER: Yeah, I know, that's definitely a collective thing. What else do we need to say here? What do you think? About the history of GCRG? What else stands out for you?

GRUA: Just some great parties! I mean, it has made the river community a lot closer. Everybody grumbles about it, that we're not doing anything for the guides. But I think if you look—you don't even have to look closely—to see that a *lot* has happened for the guides. At this point, not for everybody, but the company that I work for, and several other companies, are starting off with 401-κ s. And they could do a lot better—everybody could—and you're always gonna just keep grumbling about it, but I think the collective energy of just having a guides' organization, that really *does* make a difference-at least in terms of Park Service management policies, and Bureau of Reclamation dam management policies-that gives a collective credibility that makes the outfitters start to go, "Yeah, these guys really are committed, and maybe they're in there for the long term, and maybe we should start treatin' 'em a little bit better." So it's like a friendly "union" that hopefully...I mean, I think it's done a lot for a lot of us, and hopefully in not the too distant future, it's gonna do a lot for all of us. I mean, our theory is to guilt the outfitters, essentially, into taking better care of the people that are working for them, and for the Canyon. That's a big part of it too. I think our main focus should continue to be the high road, and that's protecting the Grand Canyon, and rivers in general, and sort of a philosophy in general that we want to espouse and pass on to the people we deal with. So I think it's done that, will continue to do that, hopefully. I hope we can be proud of it in another fifty years, when we're sittin' around in rockin' chairs.

STEIGER: We did have some good parties, didn't we? (laughter) I can think of a couple in particular. (laughs) GRUA: Oh, man! Hopefully we'll have a bunch more.



United States District Court Judge Rules in Favor of National Park Service in Lawsuit Challenging Grand Canyon National Park's Colorado River Management Plan

The following article was excerpted from a press release from the National Park Service on November 28, 2007.

N ORDER WAS FILED in the United States District Court for the District of Arizona today by United States District Judge David G. Campbell in favor of the National Park Service (NPS) on a lawsuit titled River Runners for Wilderness, et al., vs Stephen P. Martin, et al.

A coalition of four wilderness advocacy groups had brought suit against the NPS in March 2006, under the Administrative Procedures Act, challenging the Park's 2006 Colorado River Management Plan, which among other things, permits the continued use of motorized rafts and support equipment in Grand Canyon National Park. A hearing was held on October 26, 2007 in the United States District Court for the District of Arizona in which Judge Campbell heard oral arguments on the case.

"We are pleased with the ruling and that Judge Campbell recognized the agency's discretion and authority to make difficult and at times controversial decisions," stated Steve Martin, Grand Canyon National Park Superintendent. "We look forward to working with all user groups, including wilderness advocates, as we continue to implement the Park's Colorado River Management Plan."

A copy of the Court Order can be found on the Park's Web site at www.nps.gov/grca/parknews/index. htm.

Announcements

JOB

Angel's Gate Tours is looking for experienced Grand Canyon guides to lead sightseeing tours, day hikes and the occasional backpacking trip in Grand Canyon. We are specifically recruiting experienced Grand Canyon boatman and other Grand Canyon backcountry professionals. Please contact us if you meet the following requirements:

- Minimum wfr certified, with CPR. (More advanced med certs are also acceptable).
- Good driving record. (One minor ticket is usually okay)
- Must be able to pass Arizona DOT physical (this is pretty simple, basically it verifies that you can see, hear and move well enough to safely drive a vehicle).
- Outstanding Grand Canyon knowledge. (You know your schist from shi-nola, and can present complex material in an entertaining manner).
- Hiking experience on all South Rim trails.

This is an excellent opportunity for Grand Canyon backcountry professionals that need to spend more time in town due to family, children, dog issues or other constraints. The majority of our tours and hikes depart from and return to Flagstaff daily. Please visit our website at www.SeeGrandCanyon.com and call (928) 814-2277 to schedule an interview. Angel's Gate Tours is an EOE.

WFR COURSE

Just wanted to let you know of a Wilderness Medical Associates wfr Recert course coming up: April 28–30 Lake Powell, Az.

The course will be: \$275 for three days including comfortable group camping and certification includes CPR. Folks from any 64-plus hour wFR are accepted with precourse packet.

You can access the schedule through WMA's website: http://www.wildmed.com. For more information contact Lucca and Tom at Rescue Specialists Inc., PO Box 224, Leavenworth, wA 98826; 509-548-7875; rsi@amerion.com

Grand Canyon Celebrates CCC Anniversary

N MARCH 31, 1933, President Franklin Delano Roosevelt signed legislation creating the Civilian Conservation Corps (ccc). The first ccc boys arrived at the Grand Canyon on May 29. The Grand Canyon Association and Grand Canyon National Park will mark this 75TH anniversary with an exhibit and a symposium titled "Saving the Park and Saving the Boys, the ccc at Grand Canyon, 1933–1942." The free exhibit, which runs from May 31 through October 31, takes place in Kolb Studio on the South Rim. A formal opening reception occurs the evening of May 30. The exhibit will start with a symposium featuring scholars, a panel



Construction of River Trail by CCC enrollees. Enrollees working on ledge. Blasting area. Circa 1935. NPS.

of ccc enrollees, and history walks, May 30, 31 and June 1. Registration for the symposium begins January 31. Participants may register for the symposium by going to the link on the park's website: http://www.nps.gov/grca/ historyculture/ccc.htm.

Exhibit goers will learn about the despair of the Great Depression, the fear of a possible "lost generation" of young men, and the feeling of hope that the ccc brought to poor unemployed young men and their families. Historic photographs and artifacts, never before viewed by the public, will be on display. Attendees will learn about the many things the ccc accomplished at Grand Canyon and the positive changes it brought to ccc boys and their families.

Donations from the Grand Canyon Association funded the project. Exhibit team members include Bob Audretsch, James Schenck, Pam Frazier, Pam Cox, and Michael Anderson. For more information contact Bob Audretsch at bob_audretsch@nps.gov or 928-638-7834.

National Park Service historian John Paige stated that the ccc advanced park development by ten to



Overview of CCC tent camp 818 at Phantom Ranch. Bright Angel creek on right. Circa 1935. NPS.

twenty years during the program's first 24 months. Some have called the 1930s the "golden years" of the National Park Service in large part due to the almost unlimited labor pool provided by the ccc. Grand Canyon National Park had as many as four 200-man companies working simultaneously. Ultimately seven different companies worked at Grand Canyon: 818, 819, 847, 2543, 2833, 3318 and 4814. The most significant ccc accomplishments at Grand Canyon include trail building, the South Rim Community Building, the beautiful stone wall in the Village, the trans-canyon telephone line, and trail shelters.

Bob Audretsch

Businesses Offering Support

Thanks to the businesses that like to show their support for gcrg by offering varying discounts to members.

Asolo Productions—Film and Video Productions 801/705-7033 Aspen Sports-Outdoor gear 928/779-1935 Blue Sky Woodcraft-Dories and repairs 970/963-0463 Boulder Mountain Lodge-800/556-3446 Cañon Outfitters-River equipment rental 800/452-2666 Canyon Arts-Canyon art by David Haskell 928/567-9873 Canyon Books—Canyon and River books 928/779-0105 Canyon R.E.O.—River equipment rental 928/774-3377 Capitol Hill Neighborhood Acupuncture-206/323-3277 CC Lockwood—Photography books 225/769-4766 Ceiba Adventures-Equipment and boat rentals 928/527-0171 Chaco Sandals-Pro deals 970/527-4990 Cliff Dwellers Lodge, AZ-928/355-2228 Design and Sales Publishing Company-520/774-2147 Entrance Mountain Natural Health-Dr. Mische 360/376-5454 EPF Classic & European Motorcycles—928/778-7910 Five Quail Books—Canyon and River books 928/776-9955 Flagstaff Native Plant & Seed-928/773-9406 Fran Sarena, NCMT-Body work 928/773-1072 Fretwater Press-Holmstrom and Hyde books 928/774-8853 Funhog Press—AZ Hiking Guides 928/779-9788 Hell's Backbone Grill-Restaurant & catering 435/335-7464 High Desert Boatworks-Dories & Repairs 970/882-3448 Humphreys Summit—boating & skiing supplies 928/779-1308 Inner Gorge Trail Guides—Backpacking 877/787-4453 Jack's Plastic Welding-drybags & paco pads 800/742-1904 Dr. Jim Marzolf, DDS-Dentist 928/779-2393 KC Publications—Books on National Parks 800/626-9673 The Kirk House B&B-Friday Harbor, WA 800/639-2762 Kristen Tinning, NCMT-Rolfing & massage 928/525-3958

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New River Babies

KATHERINE AND DAVE SPILLMAN are delighted to announce the arrival of their second daughter, Cooper Cassidy on February 1, 2008. She weighed 6 pounds and was 18 inches long. Their first daughter, Mackenzie, is excited to have a baby sister.



LYRA COCONINO THEVENIN was born on 2/7/08 to Fred and Alex Thevenin; She was 6 lbs, 6 oz and 18 3/4 inches long. The parents are in awe and can't wait to take this 4th generation boater on her first river trip in October.



Native American River Guide Training

JOIN US FOR A MULTIDISCIPLINARY, 10-day river guide training and cultural education course, June 10–19 on the San Juan River. Learn to interpret and communicate the importance of your cultural heritage with clients and fellow river guides with the guidance of Native American elders, river guides and instructors, as you gain skills necessary in becoming a river guide.

- River and classroom instruction will include:
- Basic river guiding and navigational skills
- Intro to river safety and rescue
- Local cultural and environmental interpretation
- Native food preparation
- Leave No Trace certification
- NAU 3-credit course—option: PRM432a

The course is sponsored by the Ecological Monitoring and Assessment (EMA) Program and NAU Outdoors. For more information, visit www.emaprogram.com or contact Nikki Cooley at the EMA Program, nikki. cooley@nau.edu; 928-523-0715.

Nikki Cooley



Katrina and Lyle learning swiftwater rescue skills.

Care To Join Us?

\$30 1-year membership

f you're not a member yet and would like to be, or if your membership has lapsed, get with the program! Your membership dues help fund many of the worthwhile projects we are pursuing. And you get this fine journal to boot. Do it today. We are a 501(c)(3) tax deductible non-profit organization, so send lots of money!

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Photographic Proof of High Water Whirlpools!



Photo: Dave Edwards

Thanks to all you poets, photographers, writers, artists, and to all of you who send us stuff. Don't ever stop. Special thanks to the Walton Family Foundation, the Arizona Humanities Council, "Circle of Friends" contributors, and innumerable GCRG members for their generous and much appreciated support of this publication.

Box 1934 Flagstaff, AZ 86002

boatman's quarterly review

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