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# boatman's quarterly review

...is published more or less quarterly by and for Grand Canyon River Guides.

Grand Canyon River Guides is a nonprofit organization dedicated to

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

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

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

Written submissions should be less than 1500 words and, if possible, be sent on a computer disk, pc or mac format; 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: 10:30–4:30 Monday through Friday

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# Presidential Blurbatum

OR THOSE NEW to Grand Canyon River Guides, the Guides Training Seminar is our single largest yearly activity. With one of our largest attendances ever, this year's land session was a huge success, thanks to the wonderful presentations. They ran the gamut from natural history to human history, from displays of cultural heritage to explanations of new park policies, and from goings-on in resource planning and conservation to descriptions of programs involving the public and young Canyon explorers. Many thanks to all the outstanding speakers, especially Superintendent Joe Alston and Linda Jalbert from the Park who helped explain policies going forward with the new management plan. We also would like to thank the Grand Canyon Association which has joined with us in presenting the GTs for the second year, and Teva, who continues to help support our activities.

I had the opportunity to be on the water for the upper half of the water session and was very happy to have helped several folks with a new experience: running a motorboat in the Grand Canyon. I consider myself very fortunate in being able work in the Canyon as a motor guide and in being able to show others how the big boats are run. An immense thanks to Arizona River Runners for outfitting the trip with the motor rig and camp gear.

During my tenure as President there have been only a few times within the organization when the issue of "motor versus oar" has surfaced, and in some unexpected ways. For example, the logo that ended up on our tee shirts this year was actually our second attempt. The first, a beautiful piece of artwork that would have, no doubt, made a stellar shirt, was passed over because it lacked motor guide representation. While it is not a rule of GCRG to make tee shirts that are inclusive of all guides, it is a rule that the organization is inclusive of all guides on decisions of policy and matters that require Board of Directors or member oversight.

I wanted to stress this fact about our group for a variety of reasons, but primarily because we are interested in gaining new members (or former members back). A balanced membership is able to speak to all Grand Canyon guides' concerns (or, just as importantly, to know when there aren't any concerns so we can call it a day and have a refreshing beverage). If you have ever benefited directly from GCRG's seminars, publications or organized trainings, think about becoming a member or getting a fellow guide to join. We like to think that our endeavors benefit the entirety of the guiding community, directly or indirectly, and that includes all guides.

I hope your season is going wonderfully and I'll see you on the water.

Joe Pollock

# Farewells

#### Luna Leopold

N THE NIGHT of February 23, 2006, the great hydrologist Luna Leopold died peacefully at home in Berkeley, California, at age 90. Thus ended a life so rich and so extraordinary that few can hope to emulate it. Among his accomplishments is being father of Grand Canyon hydrology.

Luna's wife Barbara had died almost exactly two years earlier after considerable illness, shattering Luna's world in the way that only couples who have been together for a long time can understand.

For my wife Baerbel and me, these events have brought forth the dismay of losing not only a very great scientist, but also the much stronger one of losing two good friends. Maybe ten years ago we had the honor and pleasure of becoming acquainted with these people, visiting them in summer at their cabin on the shores of the New Fork River near Pinedale, Wyoming, a place Luna was fiercely in love with, and where he observed attentively all living things, including the river. For several years he was afflicted with emphysema and was therefore tethered to an oxygen cylinder, which annoyed him greatly. Nevertheless, he was always a perfect gentleman of the kind we no longer see today, and his mind was as inquisitive and far-ranging as ever, even turning in the latter years to the notion that probable artifacts embedded in old surfaces near Pinedale might be evidence for human presence far earlier than has generally been accepted for the American continent.

Luna was the son of the legendary Aldo Leopold, author of A Sand Country Almanac and one of the fathers of modern environmental sentiments. This beginning gave Luna an undying reverence for the things of Nature, always a major component of his lifelong interests, leading him to being on the Board of Directors of the Sierra Club, among other things. But there is another interesting side to his family tree because (I hope I have this right) he could trace his lineage back to the Spanish Counts de Luna (featured in Verdi's Il Trovatore) and thus to the 14th-century Martin I, king of Aragon and Sicily.

Luna started his advanced education with a bachelor's degree in civil engineering from the University of Wisconsin, following with a master's degree in physics and meteorology from the University of California at Los Angeles, and concluding with a Ph.D in geology from Harvard. A true polymath, in other words. And his knowledge by no means ended there, because he was equally versed in subjects like history—even ancient history—so could and did quote such things as *The Persian Wars* of Herodotus with great facility. His writing style was unbelievably comprehensible and lucid, reminding me at times of Winston Churchill's prose. Nevertheless, he was always

kind and patient with those of us with vastly inferior writing ability. If you want to sample his writing, I recommend *A Reverence for Rivers*. To find this, go to http://eps. berkeley.edu/people/lunaleopold/ and look for reference 127.

His education completed, Leopold embarked on a 23-year career with the Water Resources Division of the U.S. Geological Survey, where he eventually became Chief Hydrologist. His modus operandi in this function is quite legendary: he would visit each of his scientists at least once a year, preferably in the field, when they would report to him on what they had been doing during the previous year. Upon finding sufficient progress and enthusiasm, Luna would then encourage them and support them financially, otherwise leaving them to carry on the work as they saw fit without interference; after all, they were big boys and girls and knew best how to achieve their scientific goals. Makes you turn green with envy, doesn't it?

During his Survey years, Luna carried out detailed, imaginative, and priceless studies in areas ranging from the East Coast to the entire Rocky Mountain West. His article "The rapids and the pools—Grand Canyon" in the remarkable U.S. Geological Survey Professional Paper 669, "The Colorado River Region and John Wesley Powell" is a good example. But he also found time to write several books. I still remember poring over Fluvial Processes in Geomorphology by Leopold, Wolman and Miller when I was a young graduate student in the early '60s, first learning thereby to recognize rivers for what they are—living things. This book is on the shelf a foot from my nose as I write now.

After retiring from the uses, the next position was a professorship in the Geology department at U.C. Berkeley, where he eventually became professor emeritus.

Luna's selected publications number about 182, of which quite a few are books. The last one is *Geomorphic Effects of Urbanization in Forty-one Years of Observation*, of which he sent me a reprint shortly before dying. Classic Leopold: unerring selection of a worthwhile study, keen observation over a long time, thoughtful quantification, highly useful conclusions.

Luna's achievements led to a host of recognitions and awards, including membership in the National Academy of Science, and the National Medal of Science, the highest recognition this country can give a scientist.

I could go on and on but my eyes are misting, so I should stop. Farewell Luna, farewell Barbara: the rivers, The River, remember you, and always will.

Ivo Lucchitta

#### Dr. BILL WENNER

NLESS YOU WERE around the river scene in the 1970s, and particularly associated with Wilderness World river trips, you may not have met Dr. Bill Wenner nor had the chance to run a trip with him.

I trust there are a few old timers around: Tom, Kyle, Jimmy, Jomo, Larry, Steve, and Vladimir who have a fond memory of a trip with Dr. Bill. Whale was one of his favorite shipmates; similar rowing styles and sense of humor.

After serving as a navy doctor in the Korean War, and completing his surgical residency at the University of Michigan, Dr. Bill moved his family to Monterey, California in 1957. While building his surgical practice, he threw himself wholeheartedly, and with little or no experience, into the outdoor life. Camping, hiking, backpacking, ocean kayaking in an old Klepper Folbot, and running flooding coastal rivers and Sierra streams in surplus inflatables of dubious virtue were all activities he shared with his children. Everybody survived, and learned a lot together.

In 1971, when his sons Henry and Bill enlisted as among the first boatmen for fledgling river outfitter Wilderness World, Dr. Bill followed his sons into river life with his usual enthusiasm. He became good friends with Vladimir Kovalik and Ronn Hayes, founders of the company, and made himself useful as company doctor, helping design the first aid kits for all the rivers, and over time quietly providing free medical care for any boatmen who needed it. He had a knack for filling under-booked river trips with friends and family, and was a valuable promoter of the joys of river-running with the doctors and nurses he worked with at the hospital.

Since 1966, Dr. Bill had been involved with a Buddhist monastery near his home, providing free medical care and lodgings to Zen students in need. Boatmen were added to the mix; quite a few guides found (sometimes extended) winter lodging at the Wenner Rancheria on the Carmel River; parking campers or Volkswagen vans in the yard or finding sleeping bag space. And if you had a medical problem, the Doctor was in.

Throughout the '70s, Dr. Bill was a feature on many Wilderness World trips, Grand Canyon and others, serving as trip doctor, baggage boatman, and just-one-of-the-crew. Of the many qualities he brought to a trip, he loved rivers. Any river. He loved the canyon, and being a boatman. However, at the hint of a medical emergency, he shifted to the skilled surgeon, E.R. doctor and ace wilderness medic he was. He always brought his own medical kit on trips; the really good one. Then, emergency over, he was back in the moment, and the rapture of being on the river and ready to dive in to wash the dinner dishes. He got a lot out of every trip; he also brought a lot to it.

In 1977 while serving as expedition doctor, baggage

boatman and crew on Wilderness World's first Usumascinta River trip (Guatemala) he met his soon to be third wife, Cynthia "Cynee" Gillette, a passenger on the trip. This river romance led to 28 years of shared adventure and love.

In the late '70s he and Cynee ran some Wilderness World trips, but he was more often found on private family river trips with his sons and some Wilderness World alumni, known as the Wild River Conspiracy.

In 1981, he and Cynee moved to the Pacific, first to Guam and later to the big island of Hawaii where they build a house in the lush rainforest near Volcano National Park. He continued working as a surgeon, E.R. doctor and clinic physician as well as substance-abuse counselor, while enjoying scuba diving, wind surfing, ocean kayaking and running in his spare time. When not working, he and Cynee took many trips to various parts of the world, including some off-the-beaten-track river trips. He continued working several days a week at a clinic in Kona until his mid '70s.

On Thanksgiving Day, 2005, Dr. Bill was at his home in Volcano when he passed away, in the company of his daughter Julie who had flown in from Montana. Despite the considerable pain he'd been in for some time, he departed peacefully, slipping briefly into the measured breathing of Zazen (Zen meditation) and then, onward, leaving behind the subtle Dr. Bill smile familiar to those who knew him. He was 70.

Dr. Bill helped a lot of people in his life, and believed in, and practiced, creative solutions to medical and personal issues; he naturally supported the mission of the Whale Foundation. For anyone who remembers him, feel free to make a contribution to the Whale Foundation in his memory.

And, I believe the old river doctor would wish to leave a message to all you getting-a-little-grey-around-the-muzzle river guides and guide alumni...get that prostate exam, fellahs. It's important.

For Dr. Bill; thank you for your many gifts: your healing hands, gentle humor, good company and great love. I'll catch up to you around the next bend in the river, and we'll resume the journey. 'Til then, cool running, no more all-nighters in the emergency room, no more pain, just the river flowing freely before you.

See you down the creek aways.

Henry Wenner

#### JUDY HERRING

UDY HERRING, of Flagstaff, Arizona, (born September 25, 1956; died April 26, 2006) began rowing for OARS in California in 1978, and boated for them through 1985. She rowed for SOBEK on African rivers in the early to mid 1980s and was the first woman to row the Zambezi River in Zambia. Judy also ran trips on the Omo River in Ethiopia, and on the Selous River in Tanzania.

Judy was a supporter of Grand Canyon Youth, and contributions could be made to GCY in her memory; P.O. Box 23376, Flagstaff, Az 86002.

Patrick Conley

## Announcements

#### FOR RENT:

1200 Square-foot, one bedroom, one bath house on three acres in Vermillion Cliffs. Contact Bruce Aiken at 928-638-2344.

#### LOST

A Garmin Etrex Legend GPS was left by a backpacker in the Deer Creek patio area possibly near the waterfall and foamy pool over Easter weekend. Please contact Bob Armstrong at 435-835-1271.

# Grand Canyon Youth Update

VELL, SUMMER is nearly here and our season is well underway. It has been an exciting spring for GCY with programs from across Northern Arizona. So far we've had groups from Sedona, Grand Canyon Middle and High School, Williams, two trips from Mount Elden Middle School, and our fifth annual Hopi youth trip. In total 127 young people have already been on the water so far this season!



Having fun on a Diamond-down trip.

One of our new trips this year was with Winslow High School, where two Grand Canyon river guides, Gretchen Younghans and John Napier are teachers. They worked with the administration to have the river program count for a half-credit and created a Grand Canyon Club complete with officers. Not wanting to leave anyone out, we worked to have 31 students on a double launch from Diamond Creek with eight guides, lots of gear and tons of laughs. This trip exemplifies what is great about Grand Canyon Youth and this community—teamwork, a sense of purpose, and a great sense of humor! All of our programs have their "magical moments" where the place, combined with the dynamics of the group, creates a positive impact.

There are some great summer programs coming up including our new Middle School Summer Program, which is a three-week program with the theme of "Adventures Through Human History." Students will spend the first two weeks in a day-camp type setting completing service projects at Wupatki, Elden Pueblo, and Sunset Crater, and doing hands-on activities at Willow Bend Environmental Center. The program culminates with a seven-day San Juan River trip with environmental educators and an artist-in-residence. In addition, we have our Grand Canyon science service-learning programs and a number of San Juan River programs. Please help spread the word to any middle or high school students you know who may be interested.

As always, if you have river gear, cold weather gear, or tents to donate please let us know. We are always looking for new guides, drivers, and volunteers to add to our list. You can also check out our updated website at www. gcyouth.org or give the office a call at 928-773-7921 or drop us an email at info@gcyouth.org. Thanks again to all those who support Grand Canyon Youth! Have a great summer!

Emma Wharton

# Signed, Sealed and Delivered an Epi Law is on the Books!

HE LAST ISSUE of the Boatman's Quarterly Review provided an update on an important piece of legislation sponsored by Arizona Representative Doug Ouelland that would allow an untrained individual to administer epinephrine to anyone suffering from a severe allergic reaction. Progressing rapidly through the House, Senate, and relevant caucuses, we are pleased to announce that Az House Bill 2110 was signed into law on April 11, 2006 by Arizona Governor, Janet Napolitano. However, be advised that this Good Samaritan "epi law" will not go into effect until ninety days after the end of this legislative session. Considering that the session may not end until mid-June, the law may not be officially "on the books" until very late this river season. Nevertheless, it represents a very significant step forward and one that should help dispel much of the ambiguity and liability concerns surrounding this difficult issue.

Title 36 of the Arizona Revised Statutes will be revised to add section 36-2226, to read as follows:

- 36-226. Emergency administration of epinephrine by good Samaritans; exemption from civil liability
- A. Notwithstanding any other law, a person may administer epinephrine to another person who is suffering from a severe allergic reaction if the person acts in good faith and without compensation for the act of administering the epinephrine and a health professional who is qualified to administer epinephrine is not immediately available.
- B. A person who administers epinephrine pursuant to subsection A is not subject to civil liability for any injury that results from that act unless the person acts with gross negligence, willful misconduct or intentional wrongdoing.

It is immensely gratifying to see how an issue can move from concern, to action and implementation, and finally to an end result that benefits this industry and indeed all citizens of this state. Gere had been very concerned about the lack of medical control in the commercial river industry for many, many years. It became increasingly evident that most discussions of the issue were framed in terms of the protocols for anaphylaxis, the only medical crisis requiring an authorizing physician that can swiftly become a life or death situation. The simple fact is, not only is medical control generally unavailable to river guides in the field, but even if it existed, the immediate action required by this situation could preclude using it.

Refusing to believe that this seemingly untenable situation would have no solution, AZRA guide Kevin Greif took

the issue to the next level by researching legal precedents, discovering the Oregon law and the American Medical Association's model epi legislation. Dr. Michelle Grua then took the significant initiative to contact Representative Doug Quelland, Chairman of the House Health Committee, whose own personal experience with a severe allergic reaction led to his deep commitment to sponsor a law addressing that emergency situation. Michelle wrote letters, made phone calls, and monitored the law's progress. Her regular contact with Representative Quelland throughout the legal process ensured that the law would contain wording bearing particular relevance to this industry.

Input from GCRG board members, our conversations with recreation law specialist (and GCRG life member) Iim Moss, and ongoing dialogue with "river docs" such as Dr. Michelle Grua, Dr. Walt Taylor, and Dr. Tom Myers, helped provide considerable clarity about liability concerns and the need for action. However, gcrg's most important role has been to take this issue beyond our board meetings to a more public forum. As an organization, we have a strong commitment to a balanced presentation of the pressing issues facing this river community and we hope that our series of articles in this newsletter has accomplished that goal. This victory is really the story of a quite a number of concerned individuals who took it upon themselves to delve into the heart of this issue, understand it from all viewpoints, disseminate it publicly, engage members in that dialogue, and support positive action.

And really, it all boils down to advocacy. Collective concerns fueled the momentum necessary to craft and enact a Good Samaritan law specifically addressing the administration of epinephrine in emergency situations where a licensed health care professional is not available. Volume 18:4 of the Boatman's Quarterly Review characterized anaphylactic shock as the "life and death situation that strikes at the heart of the [medical control] issue that drives liability concerns for river guides and outfitters alike." The Good Samaritan "epi law" sponsored by Representative Quelland simply yet effectively addresses this critical problem by providing the requisite clarity and legal protection so sorely needed when acting in good faith to save a life. The end result represents both a strong lesson about the power of individuals to enact change and a significant victory for all of us.

Lynn Hamilton
Executive Director GCRG

# Success for the GTS!

HE GUIDES TRAINING SEMINAR (GTS) land session is always guaranteed to feature top speakers in human, natural, and cultural history, fantastic food, a fun party, and engaged participants who learn, ask probing questions, see old friends and make new ones. This year was no exception. Looking back, it seems a virtual ménage of fascinating talks on the widest variety of topics and issues imaginable, yet a few images stand out and may give you a brief flavor of this year's event: Sharon Wilder and her niece from the Hualapai tribe dressed traditionally and dancing gracefully to their lovely "Bird Song,"; the frank discussion of sexual harassment issues by the Whale Foundation panel; Richard Quartaroli bestowing honorary neckties to Willie "Necktie" Taylor's compatriots: Jorgen Visbak and Loie Belknap Evans. From beautiful images, to the sobering and touching moments, the GTS had emotional depth as well as outstanding learning opportunities, all serving to enhance our understanding of the natural world, other cultures, human interactions and the need for mutual respect and dignity on the river.

The GTS is a fairly massive undertaking and a lot of time and effort go into making it a success. Of course the very heart of the GTS is the wonderful speakers themselves who come from near and far to share their stories and their expertise. We sincerely thank each and every one of them for all that they have done to further the education of the guiding community. In turn, these fine speakers are supported by honoraria from our newest GTS partner, the Grand Canyon Association. Our funding partners also include our staunch supporters, the Grand Canyon Conservation Fund (a non-profit grant-making program managed by the Grand Canyon river outfitters) and the commercial outfitters themselves, who have made the GTS possible from the very beginning. Teva Sport Sandals has also graciously sponsored the GTs for many years, and generously handed out gift certificates to innumerable happy and now well-shod guides. Our GTS speakers and funders alike fervently believe, as does GCRG, in the power of environmental education to build advocacy and stewardship for Grand Canyon. The GTS would simply not exist without their considerable support and efforts.

And while we're in the thanking mode, the Hatch Family has again provided us with the perfect home for our event. We know how much work Steve Hatch and crew must slog through to get their warehouse ready for the onslaught, and we couldn't be more appreciative. The oh-so-necessary audio-visual equipment was all courtesy of Northern Arizona University's Cline Library, Richard "the tech man" Quartaroli, and Arizona Music Pro. Food-wise, we thoroughly enjoyed every morsel of Martha Clark's ambrosial cuisine which still somehow manages to be "cuisine" despite cooking for well over a hundred ravenous guides. The tasty coffee came from Helen Yard's bird friendly, organic coffee company, Toucanet Coffee. You can order some yourself by calling toll free at (888)779-1856 or send Helen an email to hyard@infomagic.net. We thank Mogollon Brewery for donating all the beer—four kegs tapped at once through the neatest modified cooler imaginable; a big hit of course! Our outstanding "emcees" (gcrg president, Joe Pollock on Saturday and Brad Dimock on Sunday) kept things moving along and ensured that we weren't falling woefully behind schedule. And thanks to all our kind and energetic volunteers who hauled equipment and set it all up, folded mountains of t-shirts. cleaned up afterwards, and brought everything back to where it belonged. Whew, what a load of work! But the last (but not least) of the kudos go to all the guides, private boaters and general members who love the canyon and the river so deeply that they can never learn enough. That spirit will draw you back next year, so we expect to see you there, and bring all your friends too!

Lynn Hamilton

# The GTS River Trip 2006

ACH YEAR A DIVERSE band of river folk gathers at Lees Ferry to share ideas, new friendships and tales of times past. As years come and go faces change but the Guides Training Seminar remains. In March of 2006 the GTS river session began again. River guides of all backgrounds, scientists, historians and students of the Canyon come to mutually enhance perception and understanding of the Canyon and its myriad aspects.

At the helm is Martha Clark Stewart, this year's phenomenal trip leader; guiding the group ever so gracefully and steering the dynamics this way or that. "That's right, we're going on a 'short hike' today" says Martha, and up or away we go. We climb up into the Redwall across from the Bridge of Sighs. We traverse the many meanders of Nankoweap Creek to Kwagunt Creek. We ascend the trail up Stone Creek in the rain and mist and head down the elusive crack and chimney chute along Galloway Creek. We discover the many surprises of Surprise Valley. Boulder hopping our way along Kanab Creek we reach the oasis that is

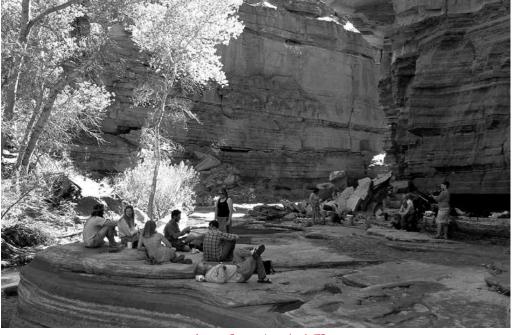
call us a bunch of #@\$\$\*\*!"

In the mornings we're lulled not only by coffee's call but also by a violin playing soft and sweet, and before long, the familiar cry "let's go boating!" Good runs and bad runs, paddle runs, Lava runs, adrenaline runs. In the afternoon and evening we hike, we learn, we interpret; as days go by we share vignettes of our lives and what draws us to the river, and to each other our lives become art. We feel fortunate not only to enjoy Melissa Crabtree's company on the trip but also to listen to her music; how many river trips boast professional singer/songwriters?

The GTS 2006 is deeply honored to have along for the ride Harvey Butchart's old hiking buddies: Bill Mooz and Jorgen Visbak, number 200 on the list of folks down the Colorado. No one on the trip will ever forget Jorgen hiking Thunder River on his 86тн birthday and discovering a brand new surprise in the valley, a cold beer strategically placed for him in the shade. Happy 86тн birthday Jorgen!

In addition to guide types, a host of unique interpre-

tive specialists accompany us on the trip. On the upper portion we are awed by Brad Dimock's lively showmanship— Brad spicing up our days by giving "Geology 101" lessons with nothing but a stick and two pie plates. Lisa Gelczis shows us all the correct way to determine reptile versus mammal scat at Redwall Cavern, not to mention she allows Richard "Q" Quartaroli to pose the question, "What



Canyon Serenade a la GTS.

Whispering Springs. Then for our final hurrah a quick jaunt up Diamond Peak, but in the words of Martha "You gotta want it!" Or, in the words of one of the guides, "If we don't do this hike Martha is going to

exactly is the advisability of grinding poo between your fingers?" We also have a fabulous team of "Newlywed Geologists," Karl Karlstrom and Laurie Crossey; Karl there to educate the masses and Laurie there to correct



Flotilla time.

Karl when he drops a billion or so years off any given Schist. On the upper portion of the trip, our motor rig is deftly guided by Arr's own Adopt-a-Beach poster child, Joe Pollock. A first in years for the GTS is the addition of Hualapai River Runners bringing refreshing insight into the Canyon and its history. Their spirit, enthusiasm, and camaraderie are a delight to all.

At Phantom we welcome a new batch of folks and bid a fond farewell to those hiking out. On the lower portion we are joined by an eccentric gaggle of interp folks. Peter Huntoon's blunt wit makes us re-examine our geological dogma and our use of sunscreen. Peter out-hikes even the youngest and fastest of us, day-in, day-out. Our minds and perceptions are expanded infinitely by Larry Stephens" impromptu hikes, science projects, and oral histories. At Unkar we pull more of that invasive camelthorn under the



GITS togetherness.

NPs ranger Shana Watahomigie's direction—always graced by her quiet and calming personality. We count on no less than laughter and merriment from the incomparable Fred Phillips who also reiterates the importance and broad scope of a project to remove tamarisk throughout the Canyon and Southern Arizona. Sam Rector brings us facts and figures and lots of incentive to wash our hands and filter our water when he talks about water quality along the Colorado. At mile-200 camp we are all wowed by our own artistic abilities under the guidance and encouragement of Pamela Mathues as she leads an impromptu art session. Geoff "Carp"-enter awes the crowd upon returning from Whispering Springs with a captured spiny lizard's hemipenises (yes, two halves...) and who can forget waking up to a Grand Canyon Pink Rattlesnake

in a tube at Back Eddy Camp! Zeke Lauck also joins us to represent Adopt-a-Beach and continue with the updating of the catalog photos for each individual beach (whew!).

Every person on the GTS brings something new and exciting to each day's river miles and ultimately each of us experiences the Canyon in our own way. Though we come to the river as individuals we transform into a cohesive whole and for a brief moment we share the same ideals, joys and toils. Though our experience is new and unique we remember we are not the first to travel this way and indeed will not be the last to share moments with the Canyon. In the end we go to the Canyon, to rivers and to wilderness because nature gently puts us in our place and reminds us all of our smallness. We can only hope that what we do is worthwhile, that the ideas we exchange will endure, and that our knowledge and stewardship will continue to enhance and protect the Canyon and the river experience we so love.

#### Adam White & Ori Meadows

Additional note from GCRG: The GTS river trip is such a wonderfully cooperative endeavor. This year, guides representing ten outfitters as well as a few lucky freelancers came together to learn more about the Canyon and the river, gain better guiding skills, and forge strong and lasting bonds. Our big thanks to Jon Stoner and Arizona River Runners for their significant logistical assistance, help with the food purchase and the food pack, and for providing the motor-rig. We also appreciate the support of all river companies for sponsoring their enthusiastic guides. In the awed words of one of this year's GTS river trip speakers, "The new crop of guides were a wonder to behold; fun, funny, competent, fierce and just plain good." Many outfitters also provided oar and paddle boats and helped in a number of valuable ways. Thanks to all the wonderful interpretive speakers (we bow to your wisdom!) and to all the individuals who made the 2006 such an incredible trip. Finally, thank you Martha for such an amazing experience!

# Back of the Boat— The Whale Foundation News Bulletin

#### GTS HEALTH FAIR

N MARCH 25, thirty-four brave souls interrupted their lunch break at the GTS to run the gauntlet at our third annual Whale Foundation Health Fair. Originally conceived by Dr. Tom Myers, we offer free screening for various potential problems including cardiovascular issues, skin cancer, colon cancer, breast cancer, prostate cancer, oral and dental health, diabetes, depression issues and physical therapy advice. Vouchers for blood tests and mammograms were given out and the results will be forwarded to the guides who participated. Thanks go to all the health care providers who volunteered their time and expertise: Drs. Norm Hanson, Michelle Grua, Rich Haag, and Walt Taylor, Alan Motter fnp and Wyatt Woodard fnp, Pat Heinz CNM, and Kelly Rowell PT as well as Kim Fawcett and Fran Joseph from the Whale Foundation. We also thank Hatch River Expeditions, Alliance Medical Lab, Northern Arizona Radiology, Soroptimists International of Flagstaff, and the Sedona Cancer Center for their various contributions to this worthwhile effort. We'll be back next year!

#### SCHOLARSHIP APPLICATION UPDATE

For those guides interested in applying for a Whale

Foundation scholarship, we will include two grant cycles per year rather than one. Our deadlines are June 1, 2006 for fall and December 1, 2006 for spring scholarships. Please download the form from our website (www.whalefoundation.org). Our grantees are selected in a "blind" application process.

#### Doug Mallek Memorial Celebration

In January, family and friends gathered at Martans Restaurant in Flagstaff to celebrate Doug Mallek's life. During the event, folks contributed an additional \$747 to a Whale Foundation memorial fund that was established following Doug's death in early December. Thanks to the many family members—both immediate and extended—who honored Doug by supporting the well-being of our Grand Canyon guiding family with their donations.

The Whale Foundation P.O. Box 855 Flagstaff, Az 86002 – 0855

Toll Free Help Line: 1-866-773-0773

Business: 928-774-9440

Web: www.whalefoundation.org Email: info@whalefoundation.org

# The Whale Foundation Presents— Beyond Consenting Adults

THE WHALE FOUNDATION honored me at the Spring Guides Training Seminar, asking me to chair a panel on "Mutual Respect and Safety." That sounded pretty innocuous. Dull, even. I agreed to do it. But when I found out what the panel was convening to discuss, I was stunned and saddened. Here is the gist of what I said:

\* \* \*

I've been involved in the river community for some 35 years now. I don't plan on leaving any time soon. I've received more from this community than I can ever repay. Consequently, I've put a lot of my energy not just into river trips, but into the community itself, through work with GCRG, through writing, through speaking. I believe in this community, and know we are a talented, intelligent, creative, and caring lot, a group of truly outstanding individuals. So I had gotten it into my head that we were above some of the common failings of the world above the rim. Turns out we're not.

The problems of the world are everywhere. We are not immune. I'm not saying that the river community is especially fraught with problems. We aren't. But we do have the same problems everyone else does. Should anyone doubt that, the Whale Foundation was founded as a direct result of Whale, a boatman with depression and substance issues who took his own life. He was one of us. We have problems. But I do see two things that make our relationship to those problems unique:

One is that we exist on the River for a week or two, sometimes longer, in an instant society where we dictate and enforce reality. This may repress some problems that exist elsewhere, whereas other problems may take on surprising magnitude and heft. Same problems, unique manifestation of those problems.

The other unique thing is that the Whale Foundation came into being. Rather than bury our heads in denial and let the chips fall, many in our community chose to turn and address these issues. Alcohol, depression, drugs, job stress, health care—these are universal problems. One can address issues three ways: *ignore* them and hope they go away; be *reactive*, and only deal with incidents after they happen; or be *proactive*: acknowledge problems and begin addressing them before they recur. The Whale Foundation is choosing the latter.

The problems we are here to talk about today—issues of mutual respect and safety—are likewise not unique to us. They differ from the problems I mentioned above in that *those* are problems we inflict primarily on

ourselves, though others may be affected. Today we're here to talk about the problems we inflict on *others*. I wish we did not have to deal with them, but the fact is: we do. They are here.

The issues comprise a broad and troubling field, involving boatmen, trainees, passengers, and staff back at the office. Problems range from adultery and underage involvement, to hazing and trainee abuse, to sexual harassment, coercion, and assault. All of these tend to amplify when alcohol is involved. You may be a witness who does not know how or when to intervene; you may be being preyed upon by another; or you may be the abuser that has convinced yourself that this is okay. It's not. These are ugly things—things that can not only damage the entire trip, but can permanently alter a person's life.

Please note: the Whale Foundation is not suddenly going on a great crusade or trying to become the morality police. The opposite is happening. Members of the community have been coming to the Whale Foundation with these issues, asking for help. Today we are beginning the conversation on how to deal with these issues.

Many folks feel that interactions between "consenting adults" are okay—those mutually agreeable escapades covered by the old saying, "What goes down on the River, stays down on the River." That's all well and good. But what we are talking about today are issues that go beyond "consenting adults." Lest an issue slip by unnoticed, let's spell them out:

Adultery is frowned upon most everywhere for a reason: although the two folks involved in a tryst are almost certainly consenting, someone else is by definition involved. And whether or not that someone is on the trip or back at home, that someone is probably not consenting and is almost always getting hurt.

Underage relations are taboo because this society has judged that people under eighteen are not "adults" nor are they old enough to "consent." That's why they call it statutory rape.

Hazing is often a fraternity-type thing, doing unto the new inductee what was done unto you: making the newbie do things beyond their share, inflicting humiliation upon them, or just being an all-out turd to them. This can be sexual or non-sexual. It can be dangerous. We've all seen it, and at times it has run rampant. It can be cyclical, but cycles are made to be broken.

**Sexual harassment** can be as seemingly innocent as an offhand innuendo; it can be more pointed and intentional; and it can range into unwanted physical contact. It includes things said and things done, and can go from irritating to humiliating to terrifying.

**Sexual assault** is the big one. That's when someone imposes sex on another not because their victim desires it, but because the victim fears for their job, their safety, or well-being. We also call this rape. Because that's what it is. It's not just a felony: it's dead wrong.

Each of these issues has a confusing flip-side as well: Married or underage individuals may find a guide extremely attractive and come on aggressively. New guides may work overly hard or try to sleep their way to the top, then, finding their efforts unproductive, become vindictive and accusatory.

All these gradations are present in our community. Every one. Each manifests a loss of respect: for another, for the trip, for the community, for oneself. It is well past time to begin addressing this openly and honestly. We should neither over-react nor under-react, but act we must.

The Whale Foundation is responding on several fronts:

- I) Because information on these issues is often either gossip, unreported, or confidential, we have prepared an anonymous questionnaire. We are asking all members of our community to fill it out and return it. For these purposes we do not want to know who. We just want to know what you are seeing, even if that is nothing at all. Initial response indicates that—although by most counts things are not quite as bad as they once were—these issues are real and in need of action. If you have not filled one out, please contact the Whale Foundation for a copy (www.whalefoundation.org, info@whalefoundation.org, or 928-774-9440).
- 2) We are talking openly about these issues in hopes that it will do two things:
- a) It will raise awareness and make it well known that this is not okay by any stretch of the imagination. Perhaps by discussing what is okay and what is not, we can work toward more of an honor code within our profession. Take the time to talk to other staff members about what they have seen or experienced. You may be surprised.
- b) It will let folks know that there is someone to talk to if you are involved in an uncomfortable situation. You are not alone, and we do care. Call. (Help Line: 866-773-0773.)
- 3) We are presenting a seminar this fall, called **Mental Health Training: Sexual, Substance Abuse, and Hazing Issues.** We'll announce the date in the next BQR along with further details. We hope guides from every outfitter will be able and willing to attend.

The bottom line: this is a tremendous community and by pulling together we can make our lives on the River far better. The last thing the Whale Foundation wants to do is to tell people they should no longer have fun down there. (That would count me out.) We should all have an insanely good time in that most wonderful and powerful of all places. But if having a good time means someone else has to have a bad one—that's a problem. Come in and talk to someone.

The Whale Foundation
Toll Free On Call Help Line 866-773-0773
Web: www.whalefoundation.org
Email: info@whalefoundation.org

**Brad Dimock** 

# Books—New and Old

There's this River... Grand Canyon Boatman Stories
2ND EDITION EDITED BY CHRISTA SADLER

HE SECOND EDITION of There's this River... Grand Canyon Boatman Stories recently hit the bookstands and oh what a beauty! I took it for a test drive on my April dory trip in the Grand Canyon. Since I hadn't seen it yet, I thought it'd be nice to pass it around the campfire and have people read a few stories

along the way. The first edition had become a useful tool in my box of boatman tricks. This one was even better.

In passing the book around the evening circle, I asked people to pick a story and read it. They did. And, they ranged from the almost adolescent twelve-yearold boy to the 80-year old sterling grandfather. Grandfather Paul, with a resonant Paul Harvey voice, told us "the rest of the story." The various readers captivated their audience of fellow river travelers with intriguing tales of a vibrant river culture.

These tales ranged from the well-tested stories in the book's first edition to even more amazing and touching stories in the second edition. Can you imagine crawling into your sleeping bag with a rattler already at home? When a couple of kayakers hurtle down

the Little Colorado River in flood and live to tell about it, how does the judge punish them for their flagrant misdeed? Was it too much beauty or the heartbreaking loneliness that took the Whaler's life? How could three headstrong boatmen row at breakneck high water speed through the canyon while numerous river trips were struggling for their very survival? To what ridiculous ends will a love-crazed kayaker strive to unite with his fiancée? Oh,

and the flash floods ripping boats, trees and hapless people into the river!

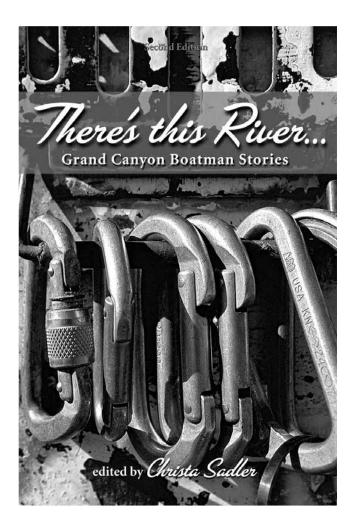
And the wildlife...what do you do with a half-starved Irish setter that shows up around your campfire one rainy night, or a desert bighorn ram that threatens to send you flying for your unrepentant arrogance. Or, how do you save an injured hawk cowering in the bank-side bushes? These short stories evoke fear, humility, tenderness, curiosity, heroism, and human frailty beneath the daunting

canyon walls along the banks the Colorado River. And there are more...

The stories of the first edition are still there with a host of new ones to keep us entertained. A rugged Geoff Gourley paintinglike photograph graces the cover which, along with the rest of the book, was designed by Mary Williams. There are many beautiful new reproductions of boatman art that richly augment the first edition. Scott Thybony writes an inimitable foreward and in so doing, could not help but tell one of his own river stories. There is a glossary of boatman terms and short biographies of the authors. Taken together, this book provides a cogent view of the Grand Canyon boating culture, one of the most unique and eclectic communities in the lower 48.

I recommend this book for all people captivated by moving water, the play of canyon light on the walls, and the warmth of river friendship. This book encourages us to write our stories, to celebrate the rich and eclectic experiences of our fellows. Maybe I'll even write down some of my own. "Oh, and did I tell you about the first time I quit the river..."

River people, like the Native Americans before us,



hesitate to put pen to paper, preferring the campfire or late night boat party to spin their yarns. This book bridges that gap. It begins to preserve the rich history of river people, some no longer with us. It is invaluable and timeless, and there are no doubt new editions yet to come!

There's this River—Grand Canyon Boatman Stories (ISBN: 0-9776983-0-0; Paperback; 6x9 inches, 264 pages; more than thirty illustrations, including 24 color plates) is available at local area bookstores or from This Earth Press at www.thisearthpress.com, (928) 774-8436.

Andre Potochnik

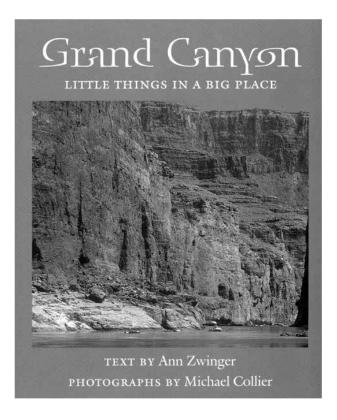
Grand Canyon: Little Things in a Big Place, TEXT BY ANN ZWINGER, PHOTOGRAPHS BY MICHAEL COLLIER, University of Arizona Press, 2006, ISBN 0-8165-2432-7

NE OF MY FAVORITE cartoons depicts a cat staring intently at a blank wall. The caption reads, "Cats can see things we can't." It reminds me of Ann Zwinger, only in her case it is more, "Ann sees things we don't." Once she points them out, we see them too.

I know. I had the treat of spending 22 days on the river with her several years ago. Every chance I got I followed her to see what she was seeing. It was almost always something I had never seen, yet something that had been there all along. Early in the trip she was crawling across the sand at Redwall Cavern, picking up small bits of dangling grayish debris filled with black specks. "What is this?" She asked. I looked at it and shrugged. She finally arrived at the wall and began tracing it upward. "Ah hah!" she said. "Look. It's bits of spider web laden with midges." Sure enough it was. I watched her eyes and mouth widen as her gaze went up the wall and across the ceiling. With awe and delight she pointed out to me that the entire ceiling of Redwall is covered with one giant, endless, pearly, luminescent spider web. I've since shown it to hundreds of guides and passengers: the world's largest spider web. And of course it was there all along.

Ann Zwinger's new book is like a trip down the river with her, following her as she sees entire universes where we blindly trudge along the same old trail. In every camp, on every hike, she finds some new wonder. But lest we bog down in the details of each Little Thing, she also stops here and there to marvel at the greater picture, the Big Place:

Life on the river keeps us a little more alert, grants a little more balance, assurance. It blesses us with a chance to contemplate our place in time and space, to look at an abundant natural world in great working order and feel reassured by the little things that winnow the air and hide



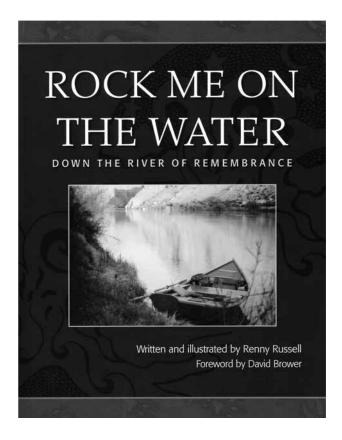
under ground cloths and crawl up stems to shed skins, of the hairy or spiny or thorny plants that bloom with such passion. Maybe that's something to take away from a time like this—a reassurance of life and living that comes with reestablishing our link with a heartening natural world, recognizing the beneficence and rectitude and unmitigated honesty of an environment that works by rules that join plant, animal, and mineral. It's understanding the order and chance that combine for such rich surroundings: the vivid blue of a canyon sky, the song the river sings to each of us, and the bright stars that are like good deeds in a naughty world. After all's said and done, life here is a respite, a chance to regroup, learn to tie a bowline, appreciate a flower, welcome new thoughts and ideas, reestablish connection to the natural world. An arrowweed branch, rocking in the morning breeze, reminds me to give thanks for one more day on the river.

This small volume, the seventh in University of Arizona Press's Desert Places series, is illustrated with Michael Collier's wonderful black-and-white photographs—carefully composed images that—like Zwinger's delicate prose—showcase the miraculous that we can so easily miss.

Brad Dimock

Rock Me onthe Water: Down the River of Remembrance BY RENNY RUSSELL

Russell, author of the Sierra Club's all-time best-selling, coffee table book *On the Loose* has come out with another fabulous book and incredible addition to river libraries. His eight year odyssey to bring *Rock Me on the Water* to fruition has resulted in a powerful and exceedingly beautiful book that will be an important contribution to environmental literature. Yet, considerable financial assis-



tance is needed if this book is to reach all of us who would love to own it. The first thirty digitally printed copies cost an astounding \$1,145.00 to produce. As Renny says, "I may be a naive dreamer, but I believe that publishing conglomerates are draining the literary life and creative juices out of artists and small publishers. Corporate publishing is replacing the feel and soul of a handmade book. If you believe that real books can be self-published without the big houses manipulating an author's work, crushing his vision, discarding him like so much refuse; if you believe that books can find their audience simply by word of mouth—as On the Loose did—and without grotesque six-figure marketing budgets; if you feel that even

though America suffers from book glut, books like *Rock Me on the Water* can still find their way into the hearts of readers who hunger for an authentic story in an age of technological sterility—then please join me in a quiet revolution to change the way books are published and distributed." What Renny needs now are allies and the financial support of philanthropists and venture capitalists to help print more copies.

Terry Tempest Williams (author of Refuge: An Unnatural History of Family and Place and Red: Passion and Patience in the Desert) writes:

Finally, we have the gift of Renny Russell's raw, honest voice once again, after On the Loose shaped and influenced an entire generation. We return to the fluid landscape of the Green River, where Renny's brother, Terry Russell, drowned. This poignant memoir fills in the gaps, and opens our eyes to grief and love and the profound healing nature of wild country. We see how two brothers found their passion in the heart of the Colorado Plateau as our nation was at war in Vietnam. And we see how the brother who is left behind moves forward in time by honoring history, both personal and geologic, not as a distraction but as a handhold to the continuity of life. Renny Russell has written his way back home. His explorations on the page become an open door to the beauty in one wild heart.

You can contact Renny at Animist Press, нс 81, Box 628, Questa, NM 87556, (505) 586-1926, www. rennyrussell.com.

The Antiquities Act: A Century of American Archaeology, Historic Preservation, and Nature Conservation, EDITED BY DAVID HARMON, FRANCIS P. McManamon, AND DWIGHT T. PITCAITHLEY

NEW BOOK, The Antiquities Act: A Century of American Archaeology, Historic Preservation, and Nature Conservation, edited by David Harmon, Francis P. McManamon, and Dwight T. Pitcaithley is now available through the University of Arizona Press. The Antiquities Act, as one of the most important pieces of conservation legislation in American history, is responsible for the preservation of diverse parks, including Grand Canyon. This book presents a definitive assessment of the Antiquities Act and its legacy while offering an opportunity to reflect on its continuing importance and new opportunities for implementation in the 21st century. To order please contact: University of Arizona Press, 355 S. Euclid Ave, Suite 103, Tucson, Az 85719, www. uapress.arizona.edu, ISBN: 0-8165-2560-9, \$45 cloth; or ISBN: 0-8165-2561-7, \$19.95 paper.

# So Many Comment Periods, So Little Time...

RAND CANYON RIVER GUIDES IS CONTINUALLY working to protect Grand Canyon and the river experience on many levels. Some endeavors should be readily evident—this very newsletter, the Guides Training Seminar, our Adopt-a-Beach program, and GCRG's advocacy as part of the Adaptive Management Program governing the operations of Glen Canyon Dam. However, while those efforts in and of themselves would seem to be enough to fill our plate to the brim, there are always others that may not be so widely known. Following our big push on the Colorado River Management Plan, GCRG has been involved in several major comment periods that bear mentioning at this juncture. In the past five months, Grand Canyon River Guides has submitted comments to the following processes:

# THE DRAFT PROGRAMMATIC AGREEMENT CONCERNING IMPACTS FROM THE IMPLEMENTATION OF THE COLORADO RIVER MANAGEMENT PLAN ON THE CULTURAL RESOURCES OF GRAND CANYON NATIONAL PARK

Deep concern was expressed by GCRG about potential, adverse impacts of the new CRMP on the fragile and non-renewable cultural resources in Grand Canyon. We were also desirous of a way to stay involved with the CRMP as it moves forward in order to lend our unique perspective to the changes and challenges that the new plan will surely elicit. Grand Canyon National Park invited our organization (among other stakeholders and interested parties) to participate in the development of a cultural programmatic agreement to protect these National Register listed or eligible historic properties.

# Draft 2006 National Park Service Management Policies

Grand Canyon River Guides had serious concerns about the rewrite of the 2001 NPS Management Policies which could profoundly affect all entities within the National Park System, including Grand Canyon National Park. In our view, the Draft 2006 NPS Management Policies represent a fundamental philosophical shift from all previous drafts in their interpretation of the 1916 NPS Organic Act, its key language, and subsequent legislation. Accordingly, GCRG called for the 2001 NPS Management Policies to be retained, while also providing detailed observations and recommendations about the new draft document.

# Development of an Environmental Impact Statement (eis) related to overflights at Grand Canyon National Park

Our historic involvement in the overflights issue was spearheaded years ago by the tireless efforts of GCRG past-president, river guide, and pilot, Jeri Ledbetter. Please take the time to read our comments in this issue outlining our recommendations for the development of an EIS on airtours in Grand Canyon. When the EIS is finally available for public comment, we will urge all our members to actively participate by weighing in with their own important perspectives.

The comments outlined above, as well as our official CRMP statement can be found on the GCRG website, www. gcrg.org. Because timing occasionally precludes using the Boatman's Quarterly Review as a public outreach vehicle, GCRG relies on our guide and outfitter email lists to disseminate information about any public processes that require action. We would like to expand our guide email list as well as begin a more comprehensive general member action list, so that GCRG can easily disseminate time-dependent information and gather input from our membership. If you would like to be included in these email lists, please send us a note to gcrg@infomagic. net. Time is so often "of the essence" and the ability to quickly communicate can increase our effectiveness as an organization.

Grand Canyon River Guides was formed to provide river guides and river runners a strong, unified voice and an effective means by which to put forth our long-term vision for this special place. From the Grand Canyon Protection Act to the present, it has been the profound responsibility of this organization to "act whenever a canyon resource is threatened or the quality of the Grand Canyon experience is compromised." Those words from Grand Canyon River Guides' mission statement should inspire all of us to be passionate and ever-vigilant stewards of Grand Canyon and the Colorado River.

Lynn Hamilton
Executive Director GCRG

# Overflights

OLLOWING IS GCRG'S letter of comments sent to the United States Department of Transportation, regarding Overflights in Grand Canyon

April 25, 2006

To Whom It May Concern,

Grand Canyon River Guides, Inc., (GCRG) founded in 1988, is unique in that it provides a unified voice for river guides and river runners in defense of the Colorado River corridor through Grand Canyon. Our non-profit educational and environmental 501(c)(3) organization is comprised of over 1,800 individuals who are passionately dedicated to the continuing preservation of this national icon. Consequently, Grand Canyon River Guides' goals are to:

- Protect the Grand Canyon,
- Set the highest standards for the river profession,
- Celebrate the unique spirit of the river community and
- Provide the best possible river experience

GCRG's early involvement with the Grand Canyon overflights issue demonstrates our great measure of concern about an industry that continued to expand exponentially despite the Overflights Act of 1987, President Clinton's 1996 Earth Day mandate, repeated protection efforts by Senator John McCain, and frequent legal challenges. In her 1995 testimony at a faa Public Hearing, past GCRG president Jeri Ledbetter crystallized the critical importance of a resource at risk—natural quiet, the absence of manmade sound:

"In a world that is so oppressed by the clamor of technology, there are few sanctuaries. Only a tiny fraction of the earth's surface is set aside for wilderness values. Those small remnants of wilderness, although protected on the ground, are increasingly subjected to an onslaught of mechanized sound from the air. Areas free from manmade noise are truly our most endangered habitats."

The National Park Service formalizes this sentiment in the following sections of the 2001 NPs Management Policies:

- Section 4.9 "The National Park Service will preserve, to the greatest extent possible, the natural soundscapes of the barks."
- Section 8.4 "The Service will take all necessary steps to avoid or to mitigate adverse effects from aircraft overflights."

These policies also make it abundantly clear that the importance of natural soundscapes is deemed as critical as all other natural values and therefore worthy of *equal* protection. Use levels, access, and impacts are all care-

fully examined in light of the of the Park's conservation mandate where resource protection must remain the top priority. It is now time for the conservation mandate to be strictly applied to the "onslaught of mechanized sound from the air."

Grand Canyon River Guides views the proliferation of overflights as a primary example of a mode of access that negatively impacts the experience of other visitors as well the environment itself. Our members experience this firsthand as they boat and hike the canyon, exploring the majesty of this crown jewel of the national park system.

It is important to note that the commercial river industry is strictly limited because of its potential adverse impacts on both the physical and social resources of Grand Canyon National Park. It is now time for the commercial air tour industry to be similarly scrutinized and constrained. With air tours currently numbering over 100,000 annually (not including non-tour or high altitude overflights), Grand Canyon River Guides' overriding concern centers on the degradation of natural quiet as a profoundly important Park resource. We contend that this essential quality which is so rare in our everyday lives has essentially vanished in Grand Canyon, necessitating definitive action for its restoration. In light of that concern, Grand Canyon River Guides offers the following recommendations for the development of an Environmental Impact Statement related to overflights at Grand Canyon National Park:

Recommendation #1: Incorporate an alternative BASED ON AIR TOUR NUMBERS THAT PRE-DATE ANY PERCEIVED PROBLEM. The Overflights Act of 1987 (Public Law 100-91) was passed by Congress because the number of flights in 1986 was deemed inappropriate, yet that number more than doubled in the ensuing ten years and now accounts for approximately one quarter of all air tours nationwide. Going back even further, Section 8 of the 1975 Grand Canyon Enlargement Act acknowledged the impacts of aircraft and helicopter activity and included the first legal use of the phrase "natural quiet." Restoration should proceed from the point that predates where Congress first indicated there was a problem and should not be based on an assumption that current air tour numbers (or even 1986 levels) are remotely acceptable. Including this alternative in the EIS will also provide a baseline against which all other alternatives can be accurately measured.

RECOMMENDATION #2: FOCUS ON THE NECESSITY OF PROTECTING NATURAL QUIET AS A CRITICAL RESOURCE, RATHER THAN THE NUMBER OF NOISE COMPLAINTS VERSUS SATISFIED AIR TOUR CUSTOMERS. The real issue here

is the preservation of natural quiet and the natural soundscapes of Grand Canyon. The 2001 NPS Management Policies clearly state, "The Service will not allow visitors to conduct activities that unreasonably interfere with... the atmosphere of peace and tranquility, or the natural soundscapes maintained in wilderness and natural, historic, or commemorative locations within the park." The air tour industry can always play the numbers game to their advantage citing numbers of visitors served while ignoring the on-the-ground ramifications of that access, but any meaningful dialogue revolves around resource protection as the bottom line. No type of visitation should be allowed to expand relatively unchecked in our national parks, as resource degradation will always be the result.

RECOMMENDATION #3: ALL ALTERNATIVES SHOULD INCLUDE KEY ELEMENTS OF THE 1987 OVERFLIGHTS ACT AND ENSUING COURT DECISIONS SUCH AS (BUT NOT LIMITED TO) THE FOLLOWING:

- Specify curfews. The existing early morning and early evening curfews are crucial to the ability of river and backcountry visitors to experience the stillness of a Grand Canyon morning or the magnificent quiet of the early evening hours.
- Consider impacts from all aviation noise (not just commercial air tours). Although the primary focus should be on low flying aircraft, all aviation noise in aggregate contributes to the degradation of the natural soundscape of Grand Canyon. Relevant factors are frequency, amplitude, duration, the physical characteristics of the landscape, and the level of ambient sound in the area.
- Apply the Park Service's interpretation of "on any given day" rather than the faa's assertion of "average annual day." There is no question that air tour noise is omnipresent every day of the year in Grand Canyon. Under no circumstances should the sound level of the non-tour season be averaged with the peak season noise. Doing so would allow an increase in summer noise levels above the current standard.
- Incorporate the NPS goal of 50% of the park achieving natural quiet (no aircraft audible) 75% to 100% of the day. Even with this weak definition, the FAA admits that substantial restoration of natural quiet has not been met. Yet, this standard is the absolute minimum that should be adopted.
- Designate flight free zones and air tour corridors. Any
  progress that has been made in restoring natural
  quiet is largely due to the creation of flight free zones
  that shift air tour noise away from places in time and
  space.

RECOMMENDATION #4: THE EIS SHOULD INCLUDE A THOROUGH EXAMINATION OF THE IMPACT OF AVIATION NOISE ON BIRDS, MAMMALS, INSECTS AND AMPHIBIAN POPULATIONS IN GRAND CANYON. Human-caused sound can elicit both subtle and more substantial alterations of habitats and

the complex relationships of denizens in those habitats. The incorporation of acoustic ecology and bio-acoustic principles can elucidate the extent to which sound and acoustics play an important role in the healthy ecosystems that must be maintained and protected in Grand Canyon National Park. Sound intrusion can adversely affect mating, hunting, predator avoidance and other behavior that is necessary for species reproduction and survival.

RECOMMENDATION #5: ONE HUNDRED PERCENT OF AIRCRAFT (BOTH FIXED WING AND HELICOPTERS) SHOULD BE REQUIRED TO TRANSITION TO "QUIET TECHNOLOGY" WITHIN A FIRM, YET REASONABLE TIMEFRAME. Although quiet technology does not engender significant inroads in reducing decibel levels (i.e. quiet technology is not really quiet, just a bit less noisy), it is a useful tool in aviation noise reduction and one that should be mandatory. However, we stress that moving to quiet technology should not allow air tours to increase under the assumption that if it's quieter, it's somehow acceptable and we can have more of it. Noise emissions should meet a pre-determined criterion, and if this is not possible, those aircraft should be phased out. GCRG further suggests that this standard should apply not just to air tours, but also to the approximately 1,400 annual river-related flights used for the Whitmore exchanges allowed by the 1987 Overflights Act. The transition to quiet technology should be considered the "cost of doing business in Grand Canyon" and a strict requirement integral to operating responsibly in one of the most astoundingly beautiful places on earth.

RECOMMENDATION #6: REPLACE SOME HELICOPTER AND SMALL PLANE TOURS WITH LARGER CAPACITY FIXED WING PLANES. Using larger capacity, twin engine fixed wing planes with quiet technology can efficiently reduce the number of flights, and make them less impactful, while maximizing access.

RECOMMENDATION #7: EXAMINE NOISE IMPACTS IN SENSITIVE AREAS (FLIGHT FREE ZONES). Simply put, noise travels. This effect is exacerbated in the desert environment of Grand Canyon where ambient sound levels are quite low. As aircraft noise moves laterally into flight free zones, it should be monitored and the impacts discerned in terms of disruption of natural quiet, interference with the visitor experience, and environmental consequences.

RECOMMENDATION #8: REQUIRE A CAP ON THE NUMBER OF AIR TOUR BUSINESSES, AS WELL AS ON THE NUMBER OF FLIGHTS. All other forms of visitation and commercial activities are carefully regulated in Grand Canyon National Park, from river trips, to backcountry hiking, to mule rides, and even hotel rooms. The Park Service has strict limits for these uses, in spite of virtually unlimited demand, because their goal is the protection of resources and the quality of the visitor experience. In fact, the overarching NPS mandate specifies, "when there is a conflict between use and conservation, the protection of

the resources will be predominant" (2001 NPS Management Policies with intent derived from the Organic Act). Reasonable and responsible limits should extend to All forms of visitation, however transient, including air tours. The profound necessity for this action is clear when viewed against the astounding growth of the air tour industry in Grand Canyon.

RECOMMENDATION #9: REQUIRE LIMITS AND RESTRICTIONS ON AIRLINE/JET OVERFLIGHTS OVER GRAND CANYON.

As previously mentioned, the broader ramifications of all overflight noise must be reviewed and assessed. We suggest that airliner overflights should not be given on an as-requested basis. Strict limits should be enforced and routes altered to ensure commercial jet noise compliance. Perhaps airlines could bid on overflights and sell seats on such flights at a premium with some derived funds going to a sound monitoring program to determine impacts of air traffic noise on wildlife.

RECOMMENDATION #10: UTILIZE ALL AVAILABLE MODELING AND AMBIENT SOUND DATA. There is a tremendous amount of good information that should be incorporated in any Eis. The Park Service's Natural Sounds Program, for example, helps parks to "protect soundscapes by monitoring sounds, both appropriate and intrusive—establishing ambient baselines and assessing potential impacts." The program deals with "whatever sounds are appropriate for individual parks and the reason they were established" ("A Sound Resolution: Curbing Noise Pollution in the Parks," NPCA Magazine, spring 2006). Other models such as INM Model and the Noise Map Simulation Model could also be useful in assessing progress towards achieving substantial restoration of natural quiet. However, we caution against linking the data from the Volpe Center Acoustics Facility (Depart of Transportation/FAA), although logically based on quantitative acoustical monitoring, to subjective human response via a park visitor survey process. As mentioned previously, the main focus should be on the continued degradation of the natural soundscapes of Grand Canyon as a key resource in need of immediate restoration and protection.

RECOMMENDATION #11: STOP THE END RUNS TO
CONGRESS TO CHANGE THE OVERFLIGHTS ACT OR
"CLARIFY" ITS INTENT TO MEET THE DESIRES OF THE AIR
TOUR INDUSTRY. This battle has been waging for far too
long. Legal challenges, riders on congressional bills,
and stalling tactics have been standard fare, while the
air tour industry has continued to expand relatively
unchecked in the interim. An EIS coupled with definitive and unassailable rules should have been set nearly
twenty years ago. Both the FAA and the National Park
Service should now focus on what they do best—maintaining the safety of America's airspace, and protecting
the values for which our national parks were established.
Demand should always take a back seat to resource
protection, lest we lose those very values for which these

parks were set aside as our national heritage. We have the opportunity to make meaningful progress with this issue through this Environmental Impact Statement, the stakeholder assessment process, and the 2008 deadline. All relevant parties must be totally committed to following this process through to its conclusion without further legal maneuvering. Forestalling ongoing battles and non-compliance is a necessity.

Grand Canyon River Guides sincerely hopes that our comments will be considered sufficiently substantive for incorporation into the development of an Environmental Impact Statement on the effects of Grand Canyon airtours on this precious resource. Many of our members spend a good portion of their lives in the depths of Grand Canyon and we have been deeply privileged to experience, appreciate, and contemplate natural quiet on an intimate level. Having that experience, and knowing how much that precious resource is at risk of disappearing altogether, prompts us to defend natural quiet's continued existence as a defining characteristic of Grand Canyon.

History teaches us that natural quiet and the natural soundscape in Grand Canyon have been both highly valued and cherished since the park was formed. References can be found throughout writings in the early 1900s—three quarters of a century before the term "natural quiet" was even coined. Recalling his impression of a day spent tracking sheep across the upper terraces of the Muav Gorge, Charles Sheldon wrote simply yet eloquently:

Besides the magnificent views of perpendicularly walled canyons and cliffs, I was most impressed with the profound silence—not a breath of wind today, not a sound, not a rustle of grass or weeds, not an insect murmur, not a falling rock. Silence absolute. (Carmony & Brown, 1993:11)

"Silence absolute," an essential element of the feeling of solitude, provides special perspective on the vastness of Grand Canyon where we can leave the trappings of civilization behind us and experience wilderness on its most basic level. This is part of what makes the Grand Canyon experience profoundly life altering and life affirming. As caretakers of this experience and as passionate stewards of Grand Canyon's natural resources, the members of Grand Canyon River Guides recognize that it is our distinct obligation to vigorously defend the continued existence of natural quiet for the generations that follow.

Sincerely,

The Board and Officers
GRAND CANYON RIVER GUIDES, INC.

# Willie "Necktie" Taylor— Leather and Rope, Berkeley to Grand Canyon

Wilson Beigle "Willie" Taylor was the co-owner of Taylor's Trunk Shop, or Taylor's Leather Goods ("Since 1891"), 2213 Shattuck Avenue, Berkeley, California. From 1948 to 1956, he accompanied Dock on many significant powerboat traverses on the Colorado River through Grand Canyon. Not really a boatman, Willie seemed content to be the best passenger around,

helping out all he could on the river and in camp. Bill Belknap wrote that "Willie is utterly worthless around a boat, but he has a happy faculty of saying the right thing at the right time and everybody loves him."

In 1948, Dock and Willie upran from Lake Mead with Ed Hudson and his son in the Esmeralda II, built and driven by Hudson, getting to the foot of 217-Mile Rapid, a new record. Willie wrote to Hudson on July 8тн: "In spite of all the talk I would leave tomorrow for a river trip. I guess I am a hopeless case of a river rat like all the rest of you." The same four were joined by Bestor Robinson in the Esmeralda II for the first successful powerboat downrun in 1949, allowing Willie to make Marston's list as one of the last of the first 100 through Grand Canyon.

Belknap rode with the two Hudsons and Willie in the Esmeralda II in 1950, with Marston, Joseph Desloge, Guy Forcier, and Jordan Rust in a Chriscraft. The "Essy" had motor trouble, so Hudson and Belknap rowed her sternfirst into Tuna Creek Rapid. For June 17, Belknap wrote: "Pushed sideways up against the cushion wave against the wall...[the "Essy"] heels way over and Willie goes overboard, under the boat, into the hole around the corner and down river. We lose sight of him immediately. For once I'm really scared as I'd hate to see anything happen to Willie. Fortunately Marston has seen our plight and gone on downstream to pick up Willie."

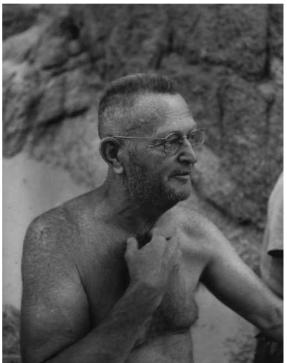
Marston recorded: "The Es healed up and Willie sprawled off into the river and disappeared. We started down river and Joe and Guy watched for a head and

sighted Willie as he came up about 100-feet down from the Es. There was a lot of rapid below. We swung below Willie and pulled around as he shouted. A line didn't reach him so we circled again and this time the line, heaved by Guy, took hold with a turn or two around Willie's neck. I poured on the coal to stay clear of a small hole in the rapid below but Guy shouted to me to shut off the power. I looked back and saw we were holding Willie under in the hole. We dropt

down thru the rough and it wasn't long before Guy had Willie over the side. He had taken some water but. was in good shape except for some bleeding from his outer ear and a sore neck from the rope...We named the rapid Willie's Necktie Rapid." Two days later: "Willie is still a baritone but the swelling is mostly gone." Belknap added, "Willie Taylor, of course, has given up river travel forever after his ducking, but I suppose he'll be rarin' to go again next year." [1]

The night before, Belknap stated that "the Colorado River Quartet, composed of the two Hudsons and Willie and I, record a couple of songs on the tape recorder." Both Dock and Willie were members of the Bohemian

Club, a San Francisco men's club, and sang in their Chorus. The Club announced a "Quartette Night, under the leadership of Bohemia's master of the upper register, Willie Taylor, Sire." Singer Katie Lee met Willie on two of her three Grand Canyon trips. In 1954 Willie wrote: "If you do not shock easily, I can sing you a number of songs. Unfortunately they do not pertain to the Colorado or the scenery or even the cuts and bruises you get on the trip." Loie Belknap Evans recalls that when she was a little girl, Willie taught her what he called the "Pink Kimonee Song." Katie included a similar song, "Down the Line" with an added verse on her "Loves Little Sisters" album of songs about "ladies of the evening." Loie surprised us at the GTS with a recording of Willie singing that bawdy number.



Willie rubbing his neck. NAU.PH.96.4.93.40A, Bill Belknap Collection

The 1951 trip was without Hudson. Willie rode with Dock and there was a fleet of three inboards and two outboards, the first outboards down the river driven by Jimmy Jordan and Rod Sanderson. More powerboats in 1954, "Each craft was powered by two fifteen-horse-power Evinrude outboard motors. It was the first time twin motor operation had been used on the Grand Canyon run." [2]

Another Marston powerboat trip departed Lees Ferry June 4, 1956. Dock's trip log: "Shortly after lunch [on the 5тн] Willie developed agonizing pains. We landed in Redwall Cavern to let him rest...cruised on to Harding with Willie...Willie's severe pain continues. [Dr.] Josh [Eisaman] diagnoses the situation as a heart condition and feels no other fits the symptoms. He did what he could to quiet Willie." The next day, June 6, they were "(u)p at five. Willie had slept fairly well but had wakened Josh during the night due to great pain. Josh advised getting him to Phantom as soon as possible but not to put any strain on him...We pulled in at Mile 44 1/2 on L to await other boats. Willie was suffering severely so we carried him up in the shade. He insisted he was going to die. His color was very grey. At 11 AM Josh told me Willie had passed on. A gathering of all present agreed without dissent that Willie should be buried in the Canyon. We selected a site in a side alcove and buried him there. Frank ["Fisheyes"] Masland said a prayer. We marked his name and date on the rock wall above... Willie had his wish that should he die in the Canyon, he should remain there." At Phantom Ranch on the 7TH, they "sighted [Ranger] Dan Davis on the beach... Eisaman and I decided we should make a formal report to the Coroner at Flagstaff so we kept mum." [3]

June 6, 2006 marks the 50TH anniversary of Willie's death. As you pass the small side-canyon below the Eminence Break camps, or as you run through Tuna Creek Rapid and make the turn at "Esmeralda's Elbow," please let your passengers know about Willie "Necktie" Taylor, and maybe sing a little song in his honor.

#### Richard Quartaroli



Willie's plague. NAU.PH.97.46.132.47, P.T. Reilly Collection



Photo of "Willie's Neckties" from NAU.PH.96.4.46.111.97 Bill Belknap Collection

#### Notes

- 1) Hudson abandons the "Essy" and he and his son chopper out. For accounts of the rescue of the "Essy," see Bob Rigg in BQR 10:2 Spring 1997, Susie Reilly trip log in P.T. Reilly Collection, and Lavender River Runners of the Grand Canyon.
- 2) Jorgen Visbak gave an excellent talk and slide-show on the 1954 trip to close out the 2006 GTs land session.
- 3) Willie is one of only two known Grand Canyon river runners buried in the Canyon. Peter M. Hansbrough, who died July 15, 1889, on the Brown/Stanton Expedition, is buried just upstream from Willie. For Garth Marston's and Bill Beer's reminiscences of Willie's death, see BQR 7:4 Fall 1994.

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Otis R. "Dock" Marston Papers, The Huntington Library: [Box:Folder] 226:26; 286:37, 38; 287:10; 288:7, 17; 291:14;

P.T. Reilly Collection, NAU.MS.275. Bill Belknap Collection, NAU.MS.288, NAU.PH.96.4.

#### Acknowledgements

Thanks to Katie Lee, Loie Belknap Evans, and Buzz Belknap for their reminiscences of Willie. Thanks also to Katie Lee for sharing her letter from Willie, August 18, 1954, on Taylor's letterhead. Thanks to Bill Frank, The Huntington Library.

"Willie's Neckties" are currently in production, and are a musthave for Willie stories in Marble Canyon and at Esmeralda's Elbow/Willie's Necktie Rapid, not to mention those latenight eddy floats, Alive Below Crystal parties, Lava Fallies celebrations, or last-night No-Talent Shows. Please contact Richard Quartaroli, richard.quartaroli@nau.edu, to place your order. \$12.50 will get you a necktie (colors limited, subject to availability), plus an information packet and more photos.

# The Grand Age of Rocks Part 2—Grand Canyon's Three Sets of Rocks

HIS ARTICLE, which describes the geologic history of the rocks exposed in Grand Canyon, is the second of a series of three articles about the age of Grand Canyon rocks. The first article was published in BQR 19:1. A third article describing how geologists date rocks will be published in a future edition of BQR.

Geologists, beginning with John Wesley Powell, recognized that there are three main packages or "sets" of rocks exposed in Grand Canyon (Figure 1): the crystalline rocks of the Inner Gorge, the tilted rocks of the Grand Canyon Supergroup, and the layered sedi-

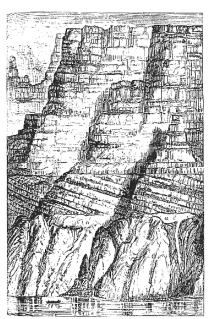


Figure 79 .- Section of wall in the Grand Canon.

Figure 1: Figure 79 from John Wesley Powell's Exploration of the Colorado River of the West and its Tributaries. Although this illustration does not correctly portray the contacts between the three sets of rocks it clearly shows that Powell recognized the three main packages of rocks exposed in Grand Canyon.

mentary rocks in the upper two-thirds of the canyon walls. As knowledge of Grand Canyon geology increased. individual rock units, or formations, were identified. Today, more than a hundred formal stratigraphic names are applied to mappable rock units found within the canyon.

When guides or park rangers interpret the canyon's geology for the public, their stories often focus more on individual rock layers,

particularly the easily recognized, flat-lying sedimentary rock layers, and less on the overall stories of the three sets of rocks exposed in the canyon. The individual rock layers are like snapshots of the geologic past. Using the three sets places these snapshots into an album that gives an overall context to the story of each rock unit. For example, the Redwall Limestone was deposited in a

shallow ocean approximately 340 million years ago, yet it is only one of many sedimentary rock layers deposited on or near a coastline that moved across what is now northern Arizona for about 250 million years. And the story of these coastal sedimentary rocks is only one of three major stories of rock formation at Grand Canyon. Using the three sets of rocks can make this whole story of all Grand Canyon rocks easier to tell.

We use the informal term "sets" for the three main packages of rocks exposed within the canyon ("set" is not a part of the formal stratigraphic hierarchy like "group," "series," or "complex"). The three sets are differentiated not only by stratigraphic position, but also by age, rock type, and the geologic setting in which they formed (Table 1). The Vishnu Basement Rocks consist of all the crystalline rocks exposed near the bottom of Grand Canyon. The Grand Canyon Supergroup Rocks include sedimentary and volcanic rocks deposited in coastal basins that tilted as joined continents separated. The Layered Paleozoic Rocks include the 3,000–4,000 feet (900–1200 meters) of flat-lying sedimentary rocks that make up the "stairstep" canyon (Figure 2).

## VISHNU BASEMENT ROCKS 1840-1680 MILLION YEARS— THE MAKING OF THE CONTINENT

The Vishnu Basement Rocks include the Precambrian metamorphic (recrystallized by heat and pressure) and igneous ("fire-born") rocks exposed in Powell's "Granite Gorge." This assemblage records the building of North America by collisions of volcanic island chains with the continental landmass. These collisions generated intense heat and pressure deep within the crust, forming metamorphic and igneous rocks as moderately-sized mountain ranges formed at the surface. Like the basement of a house, basement rocks are the foundation of a continent. No older rocks exist beneath the Vishnu Basement Rocks.

No single formal stratigraphic term refers to all igneous and metamorphic rocks exposed in Grand Canyon. We chose the informal name "Vishnu Basement Rocks" for these rocks: "Vishnu" because folks are familiar with the Vishnu Schist, and "basement" indicates the type of rock assemblage and implies that these rocks are exposed at the bottom of Grand Canyon. The names "Vishnu Schist" and "Zoroaster Granite" are relatively well known, but they are only two of at least 25 named rock units in the Vishnu Basement. Even the formal term "Granite Gorge Metamorphic Suite" (Ilg, et al, 1996) only includes the Vishnu, Brahma, and Rama Schists, and excludes all igneous rocks found in the basement complex. The three schists formed from different

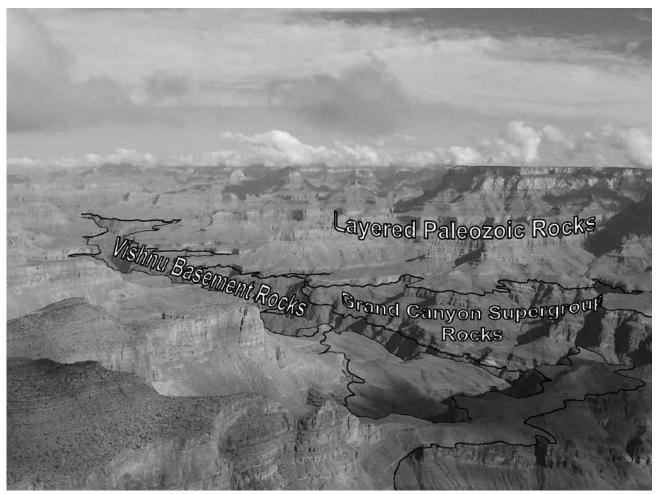


Figure 2: Girand Canyon from Moran Point showing the Vishnu Basement Rocks in the Inner Giorge, the tilted Girand Canyon Supergroup Rocks, and the Layered Paleozoic Rocks.

rock types, the Vishnu Schist metamorphosing from sedimentary rocks, and the Brahma and Rama Schists from volcanic rocks. Unlike the metamorphic rocks, no single term includes all the igneous rocks (plutons). Each pluton is a discrete igneous intrusion with its own crystallization history and its own name. Calling all of them "Zoroaster Granite" incorrectly oversimplifies this complex assemblage of crystallized magma chambers, dikes, sills, and plutons.

Detailed geologic reconstruction and absolute age determinations have unraveled the geologic history of the Vishnu Basement Rocks (Karlstrom et al, 2003). The oldest rock in Grand Canyon is the Elves Chasm Gneiss, only found near Elves Chasm (River Mile 113–116.6). It formed 1840 million years—90 million years ago before any other rock found in the canyon. The specific origin of the Elves Chasm Gneiss is unclear, it may be a fragment of older continental crust, or may be part of the "basement for the basement." Most of the Vishnu Basement Rocks formed between 1750 and 1680 million years ago. These rocks started as the sediments

and volcanics of volcanic island chains near proto-North America between 1750 and 1730 million years ago (similar to the East Indian island chains adjacent to Asia today). The ancient islands began colliding with each other about 1740 million years ago, with peak metamorphism and igneous intrusion occurring 1700 to 1680 million years ago when the island chains themselves collided with the continent.

## Grand Canyon Supergroup Rocks 1200-740 Million Years—The Rifting of Continents

The Grand Canyon Supergroup Rocks consist of two main groups of rocks separated by nearly 300 million years of time, the older Unkar Group and younger Chuar Group. Separating these two groups of rock is a thin section of sandstone and mudstone called the Nankoweap Formation. Capping the Chuar Group is another thin sequence of mostly sandstone called the Sixtymile Formation. The Supergroup is mostly sedimentary rock with only a few interlayered igneous rocks, such as the Cardenas Basalt. These rocks were deposited

Table 2: Grand Canyon's three sets of rocks

Set	Geologic Age	Numeric Age	Rock type(s)	Geologic Setting	Layering
Layered Paleozoic Rocks	Paleozoic	270–525 m.y.	Sedimentary	Coastal plains alternately above and below sea level	Coastal plains alternately above and below sea level
Grand Canyon Supergroup Rocks	Precambrian	740–1200 m.y.	Sedimentary with some igneous	Basins pulled open as ocean basins develop	Basins pulled open as ocean basins develop
Vishnu Basement Rocks	Precambrian	1680–1840 m.y.	Metamorphic and igneous	Metamorphic and igneous	Island chains collisions with the continent

near sea level in tectonically active basins formed by faulting or rifting, somewhat like the modern basins of the Basin and Range in Nevada.

At least some of these basins, such as the ones in which the rocks of the Chuar Group were deposited, formed as an ancient supercontinent called Rodinia split to open a new ocean basin. Active faulting during deposition allowed great thicknesses of Supergroup sediments to accumulate. The cumulative thickness of the entire Grand Canyon Supergroup is about 12,000 feet (3,700 meters). Their ten degree dip resulted from tilting and faulting that continued after deposition of these sedimentary rocks. The Supergroup rocks are visible along the Colorado River, especially from Carbon Canyon to Hance Rapid, near Shinumo Creek, and from Bedrock to Tapeats, where down-faulted blocks protected them from erosion before deposition of the Layered Paleozoic Rocks. For more information on the geologic history of the Supergroup rocks, see previous BOR articles on the Supergroup (Timmons, et al, Winter 1998–1999, and Dehler, et al, Summer 1999).

Usually, a sedimentary rock's numeric age is based on the presence of distinctive index fossils. Unfortunately, the Precambrian Grand Canyon Supergroup Rocks are so ancient that they formed before life developed hard parts. The few fossils found in Supergroup rocks suggest these rocks' great antiquity, but cannot pinpoint their age. Fortunately, the igneous Cardenas Basalt and a few volcanic ash beds or zircon grains in sedimentary rocks have been successfully dated. They bracket the ages of the Unkar Group at approximately 1200–1100 million years (Timmons, 2005—2003, personal communication) and the Chuar at about 770-740 million years (Dehler, et al, 2005). The base of the Unkar Group was recently estimated to be closer to 1200 million years rather than the previously reported 1250 million years based on a new age determination of zircon grains (Timmons, et al, 2005). The age of the base of the Chuar Group is equally elusive, but emerging data suggest that it began

forming about 770 million years ago. This is an area of active research and uncertainties remain for the age of these hard-to-date rocks.

The Nankoweap Formation was tentatively dated at 900 million years using paleomagnetism, which measures the natural magnetism preserved in rocks from their time of formation and utilizes worldwide correlation to infer geologic age (Timmons, 2005—2003, personal communication). The Sixtymile Formation has not been dated, in fact, it may not contain any datable material. Its age may remain only as inferred as younger (but how much younger is unclear) than 740 million years. Absolute ages provide important constraints on the age of the Grand Canyon Supergroup, yet our knowledge of these rocks' history is incomplete.

## LAYERED PALEOZOIC ROCKS 525-270 MILLION YEARS— THE QUIET EDGE OF A CONTINENT

As with the Vishnu Basement Rocks, no single term delineates all the flat-lying sedimentary rocks of Paleozoic age exposed in the cliffs and slopes of the upper canyon walls. Each geologic formation in the Layered Paleozoic Rocks records an individual depositional environment. Together, these rock layers form a comprehensive look at a quiet continental edge. For example, the Coconino Sandstone reveals an ancient coastal sand dune field, but the Coconino is only a single snapshot of this time as the coastline migrated with advancing and retreating seas. Although individual rock layers in these "Layered Paleozoic Rocks" are more easily identifiable to most canyon visitors than individual formations within the other two sets, we can learn more by putting their geologic snapshots into the context of their set or album.

Determining numeric ages for the Layered Paleozoic Rocks was a challenge because no reliable absolute age determinations exist for these sedimentary rocks. However, many of these rocks, especially marine units like the Kaibab Formation, contain abundant fossils. Through fossil correlation and relative age relationships, geologists assigned geologic ages for each rock unit (Beus and Morales, eds., 2003). We used these geologic ages and the Geologic Time Scale 2004 to assign numeric ages for each rock unit as shown in the first article of the series in BQR 19:1.

Of course, a single, inferred numeric age for sedimentary rock can never be entirely precise. It obscures the reality that most sedimentary rocks are deposited over long periods of geologic time. Still, a numeric age is valuable as a way to communicate the age of rocks to people who are not familiar with the Geologic Time Scale and the relative age of geologic periods like Mississippian and Pennsylvanian.

It is important to note that deposition of sediments was not continuous in the Grand Canyon leaving significant gaps in age between some adjacent rock layers. These gaps in the geologic record, produced by erosion or nondeposition of sediment, are known as "unconformities." The largest unconformities separate the three sets of rocks, but there are also gaps within individual sets like the Layered Paleozoic Rocks. For example, a large unconformity exists between the 505 million year Muav Limestone and the overlying 385 million year Temple Butte Formation.

#### SUMMARY

Each of Grand Canyon's three sets of rocks displays an important segment of Grand Canyon history. The Vishnu Basement Rocks illustrate the formation of this section of the North American continent. The Grand Canyon Supergroup rocks record the opening of an ocean basin to our west. The Layered Paleozoic rocks provide a wonderful series of snapshots along the (now) west coast as life evolved in its shallow seas and coastal flats. Each of the three sets is unique, requiring different dating techniques to determine their ages. Radiometric dating techniques revealed the absolute age of the igneous and metamorphic rocks of the Vishnu Basement Rocks, and also provided dates on volcanic and other datable units in the mostly sedimentary Grand Canyon Supergroup. Relative dating, index fossils, and geologic correlations were used to determine the geologic age of the Layered Paleozoic Rocks, and numeric ages were then inferred. Our next article will overview the specifics of these dating techniques themselves.

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- Acknowledgments: Mike Timmons, Ron Blakey, and Karl Karlstrom provided valuable insight into the ages of rocks exposed in Grand Canyon and assisted us with our compilation of best numeric ages.

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# **Brad Dimock**

HAD A FRIEND in high school who was two years older than me. He graduated way ahead of me and came back when I was a junior, and said, "Hey, I found a school you oughtta go check out, in Arizona." A good friend of his had gone to Prescott College. I got the catalog and they had cool pictures—people rock climbin' and stuff. So I went. I don't know if I read the catalog, but they had cool pictures and it was out there, way far from New York, and there were cactus. I thought cacti were cool, so that's where I went.

The first thing that happened when I got to Prescott College, there was a thing they did—they still do, I think—kinda like an Outward Bound course, they take all the freshmen out to rattle their cages a bit; and they took me down Grand Canyon.

Off we went on this really bizarre Grand Canyon trip. We had this kind of wild character who taught at Prescott forever, named Vern Taylor, and Vern was the "Old Man of Grand Canyon." He'd been down there a bunch; he'd done a lot of travertine studies and he'd take these little yellow duckies and tie two together and go through Grand Canyon in them with another researcher...just wild, you know, smaller than sport-yaks.

But Vern got it in his mind that Prescott needed a motor-rig. He bought one from Ron Smith, a big ole' "S" rig, side tubes and everything, and we had that on our freshman orientation trip. Then we had a paddle boat as well. Some of the kids got to go in the paddle boat, and everybody else sat on the motor-rig; and after a day or two, the boatmen who were runnin' the paddle boat got spooked that they needed these guys who they'd already taught how to paddle, so nobody else got to paddle in it. If you weren't in there in the first day or two, you didn't get in. So I never really got to go in it except one day, I think. But it was weird, because...well, Day One, we were gonna leave, and then neither of the motors worked. But the Quist brothers were there and Vern knew them—and I think it was Bob and Clair— they stayed up all night at that gas station that used to be there at the ramp, fixin' our motors. Meanwhile, the paddle boat had already left.

**STEIGER:** They left before they realized you couldn't start the motors?

**DIMOCK:** Yeah. So they were down at Six Mile Wash or something, bivouacking with no gear. Oh, God, then we spent a night at Badger and a night above House Rock, and a night at House Rock, and then I forget how the schedule went from there. But you had to have everything lashed on that motor-rig so that you couldn't move it. Nothing would budge. And we all wore helmets.

STEIGER: On the motor-rig! (laughs) Say it isn't so!

DIMOCK: It's true!...it was an interesting trip. But it really didn't make me think I wanted to go be a boatman or spend much time down there. It did get me interested in geology...So I went back to college, was studying geology, biology, and art. The next year, around Thanksgiving, this guy I'd met workin' in the dish room—we washed dishes—he said, "Hey, I'm goin' down Grand Canyon. We're takin' a private trip down at Thanksgiving. You want to go?" And I went, "Okay." So we did a paddle trip over Thanksgiving—\$#@ing cold Thanksgiving it was, too! Our wet suits froze every night, so we were sleeping on them, puttin' 'em under the sleeping bags so they wouldn't freeze...We did pretty good, but we got down to Granite over Thanksgiving



"I believe this is a boat."

Moose Lake, Adirondack Mountains, New York, late 1960s.

Arthur Bicknell, photo

weekend, and Vern had told us that you could not run on Thanksgiving weekend water, so we laid over for four days at Granite, just because he had said we had to. He wasn't even along! (laughter) (Steiger: "Just forget about runnin' on Thanksgiving.") Yeah, just don't even...The water didn't change a bit for four days, and then we kept going—you know, went on our merry way. Vern also told us we had to portage Lava Falls, so we did. We didn't flip on that entire trip. We all fell out at Pipe Creek, hit a big wave on Thanksgiving Day, and all fell out of the boat, got back in over there on the right somewhere. I don't remember a lot of the runs.

But I got off that trip and got this idea. I had wanted to be on the fire crew with all my buddies, but I was such a weenie-armed geek that I washed out. I couldn't swing an ax right, so I couldn't be on the fire crew with all the cool guys. I said, "Well, maybe I could be a helper on a river company or something." I figured I could never row, so I applied as a helper to all the motor companies. Of course they didn't write back, except for one. Canyoneers said, "Come on up for an interview."

So I hitchhiked up to Canyoneers and Gaylord [Staveley] was out that day, as it turned out, but Joan Nevills and Pete Lindemann—Dan's older brother—talked to me for a couple of hours. They hired me as an interpretive assistant. I did my first trip, commercial, in probably June of '73, at twenty bucks a day. I never swamped a trip for free—one of my small claims to fame. Got a raise after my first trip to twenty-five a day, from twenty. Pretty soon I was assistant pilot, and I worked two seasons swampin'—or actually, interpretive assistant and assistant piloting. You're never a "swamper" or a "boatman," you're an "interpretive assistant."

In '73, '74, everything I studied at school had to do with Grand Canyon at that point. You know: geology, biology, archaeology, boating, expedition stuff, outdoor leadership. So I kinda got a degree in bein' a boatman; and in '75 I went back for another season of being an assistant pilot, and the lead pilot didn't show up. The day before the trip, I went in to Gaylord and said, "You know, I think I could probably drive the boat if Ed doesn't show up." Gaylord said, "Well, I think you could, too." The next day I was trip leader, because Cameron wasn't old enough.

Tough assignment here—BQR oral history with the guy who actually invented the BQR; and then...thought to publish oral histories in it!

Made tougher by the astounding career Brad has had and continues to have (Prescott College; Canyoneers; Sleight Expeditions; Grand Canyon Dories; Wilderness World; Grand Canyon Youth Expeditions, Sobek, Tour West, GCE, AZRA...he's worked for half the companies in Grand Canyon,



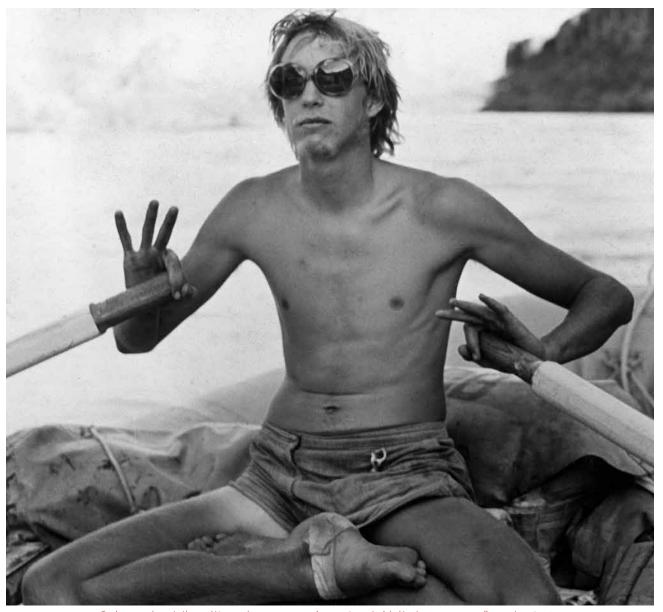
Brad's first home in Flagstaff, behind Canyoneers warehouse, 1973.

and on rivers all over the world.) Since he "retired" he's gone on to re-create some of the coolest trips ever...Buzz Holmstrom, the Hydes, Bert Loper...and he keeps building replicas of these very cool historic boats...no end in sight there...and writing all these great books about their operators....

This endeavor was made tougher still by the fact that the following excerpts came from five or six mostly weehour sessions spread out over the last twelve years. Worse, when we started recording them, somebody—it must've been Brad—said "Ok, the whole truth and nothing but the truth!" To which someone—me? said, "Ok, right. We'll just



Scouting Upset, 1974 Prescott College Kayaking trip. What dog...?



Early experimentation with rowing, yoga, sunglasses, beard. Limited success on all counts. 1975

seal them, then. Yeah, that's it. These will be sealed until we're dead." So we had that going for us throughout.

Brad Dimock gave birth to the BQR and ran the thing practically single-handedly for years on end. He religously took his name off a million things he did in that publication because he thought it was tacky to see it in there more than once, or even at all sometimes. The idea that since he's let go of the BQR and moved on, we can just go ahead and publish stuff from this long old interview we were only going to make public after he and yours truly were both dead has got to be making him squirm like crazy. Sorry, Brad. It's all my fault. And by the way, "Thanks for the memories."

\* \* \*

Yeah, Cameron [Staveley] was the other Canyoneers boatman. Cam and I ran together for a couple of years. Once he got old enough, he led a lot of the trips. I did a lot of my training under him. He's real quiet, a real good boatman, good driver, read water very well. One day I was drivin', and I was really gettin' it, you know. I was catching a Tour West boat, and they were faster than us. I was really excited, 'cause I was finally gettin' it! For like two hours I was gainin' on this thing, and then I caught one bad swirly, it took me off into an eddy for a minute. Cameron, the first thing he said to me all day, he just looks over, "You're not readin' the water." (Steiger laughs) (Dimock swears under breath.) Bastard!

\* \* \*

Originally what they would do is take one snout tube and lacerate the front pointy part, that chamber, into about six strips, and then glue 'em onto the back of another snout, so you had this really funky place.

About the time I got to be a pilot, Russ Sullivan came in as the shop manager and over the winter, he tore the rubber all apart, and cut the whole snout part off of the back tube, and cut that first bulkhead off, and then took what would be the second chamber of the snout and pulled it clear up over the back chamber of the forward snout, so it made it six chambers, instead of seven—turned it into a thirty-two-footer. He redesigned the frame...there was more room on the boat than there had been before, even though it was five feet shorter... and really made a pretty tricked-out boat. He built these huge iron hinges instead of the trailer hitches, and those things were bomber! You could put 'em anywhere—we tried!

Oh, yeah, full load, twenty people on each boat. Always ran the hole in Crystal. Always hit the top hole in House Rock, pointed left so that it didn't knock you too far to the right that you couldn't still get off of Pour Over Two—'cause you couldn't not go off both of 'em. You were nobody. We ran everything we could find. We'd run the left edge of the right run at Lava so we could hit that huge crasher at the top of Lava, and still get all the bottom waves. Huntin' for the big stuff.

[The boats] worked. They were so heavy, and especially after Russell worked 'em over, they were so solid they were just about unbreakable and unstoppable. And so they didn't snap and whip around like a lighter boat does, and people didn't fly off 'em. It was just "ka-schperr" It was like a bus. If you snout rode, you flew, you fell off. But we had very few injuries on any of the trips I was on—almost none.

Took one down the left at Bedrock one day. On purpose. That was in '77 [late summer, about 28,000 cfs]. Actually, I think I was pretty good at that point with a motor-rig. I could put it just about anywhere—gently, delicately. Backed down the left side of Bedrock and eased the stern over into that far left eddy, swung the bow past the island, and motored straight out, never touched it. (With feigned braggadocio) "I'm the best boatman in the world!" And then the next day you crash into a rock, "I'm the worst boatman in the world!"

STEIGER: That's pretty good, though. You backed in there.

**DIMOCK:** Backed down the left. See, it was short enough, it would swing.

STEIGER: This is the old Canyoneers boat?

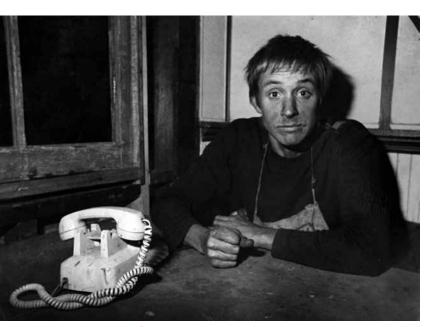
DIMOCK: This is the thirty-two-footer. So that was the "acne" of my career there.

But in '73, that first year I worked, in midsummer, Prescott College wanted to do an exploratory in Cataract Canyon, and I got word of this, and I wanted to go along, so I took a trip off from Canyoneers and went up and learned to row—Delahunt and I. You know Day? Well, Day and I decided to split a boat, and we both learned to row. (chuckles) All that flat water, and then a couple of rapids, and then flat water. But some people told us what to do. You know, you pull on one and push on the other, and it turns. Tuck in here...We thought that was pretty neat, so we took off down there, and we did pretty well. We went down there, the lake wasn't really full yet. I think there was still a riffle at Gypsum, or near Gypsum. But we went back, and in '74 I did a couple of Diamond Creek trips with Prescott College, rowing. I started to think rowing was actually pretty cool, and maybe I could row. And then in '75, Gaylord said, "I'm starting a rowing program, and I'd like you to head that up, Brad." I was very flattered. I was the only one in the company who'd rowed, other than Gaylord. So we got these big Maravia Chubascos that were a lot heavier than the ones they built later. It was a heavier material, but classic Maravia seam failure stuff. But we thought those were pretty neat, and we were supposed to go out in a couple of weeks. I said, "You know, I haven't ever rowed through Grand Canyon, and maybe we should do a training trip. Will that be okay?" "Oh, sure."

So we took off and rowed these things down through, and figured out how to do it, kinda, and went down a couple of weeks later with the folks. [Tim] Cooper was in on that, and myself, and Jim Norton. And we did one a year of those, and I really liked it. So I kinda had gotten this taste for rowing, and I wanted to do some more rowing, and Gaylord was thinking that this wasn't



Labor Day, 1976, Mile 27. Right pontoon has been removed to use as bridge to shore. By nightfall no part of the boat was touching water.



Remodeling the tenement: Leviathan, 1976

Photo: Michael Cooper

gonna work out, and he was going to phase the rowing program out. To me, it was kinda the death knell for my career there. And more or less, I'd been pretty happy. I was lead pilot by then. Cameron had left to go to school, so I was the top dog at Canyoneers—and doin' some pretty wild stuff in those boats.

But in the spring of '77, the famous low water, when they shut the dam down because of—I forget what it was that year—something.

STEIGER: Yeah. Was that because of Rainbow Bridge?

DIMOCK: I thought that was '73. That was the low water of '73, which is what I was training on originally. My first few trips were big water, and then they shut it down in the fall of '73, and I worked the whole fall, back to back, doin' these just zero water trips. So in '77, they did it again in the spring for some reason, and I got a call from Gaylord, who actually asked for Cooper.

Cooper and I had bought "Leviathan" that winter—'76/'77, this \$25,000 tenement from the bad side of Flagstaff—falling down, junk cars, rabid dogs. The whole building rented for \$305 a month for five units, total. Coop named it. He was into words. It was big, cumbersome—it was gray, mammoth.

**STEIGER:** It had already been sectioned into apartments?

**DIMOCK:** Yeah. It's a historic building, one of the oldest in the county. It was where the first Catholic mass was held. It was built by the guy who later hired these five brothers from back east, name of Babbitt, and then they bought him out. Anyhow, they added on, and added on, and added on. It became a dance hall and a brothel later on, and then a kind of sleazy apart-

ment—which is where we showed up. So we put all the money we had down on it, and had no dough to survive the winter on. We lived on beans and had food stamps. God, we were just destitute. We didn't care.

STEIGER: It was such a smart thing to do.

**DIMOCK:** Well, it wasn't smart. It turns out that it was a good thing to do, but there was no intelligence involved. We were lucky. Even a blind pig finds an acorn once in a while.

When we first had the building inspector over to see where we needed to go, he said, "Burn it. Burn it down. We'll get the fire department over here, and we'll just burn this thing down. It's the best thing we can do. There's no way you'll ever get this to code. The first thing you'd have to do is rewire it. That'll cost you more than the building's worth." And then he went away, and we're just kind of goin', (whimpers) "Waa."

But Coop knew Brian Dierker, and Brian Dierker knew everyone in town. So pretty soon we had some good advice. Anyhow, we rewired the whole building, up to code, and did this and did that, and finally got the thing livable. But in spring of 1977, Coop was off somewhere with his family, and I was home alone. I'd just taken one of the exterior walls off the building, so the rooms were wide open to the street. And I got a phone call. It was Gaylord Staveley, and he asked for Coop, because Coop always just seemed so much more competent than I did. He was so %#!in' cocky, that's why. I said, "Coop's not here. I'm here." He said, "Well, Ken Sleight just called from Phantom and he needs a boatman tomorrow."

I just took this huge moldy old piece of carpeting, about twenty feet long, that I had—which I was going to carpet the house with—and nailed it on the side of the building. Just made a wall of carpet over the side of the house, and left for a week or two—I didn't know how long I'd be gone.

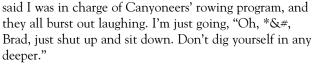
Sleight had two trips on the water. One was an eight-day motor trip, and one was a twelve-day rowing trip; and neither one of 'em booked full, so he combined them into a ten-day rowing-motor trip. He had six rowboats and one of 'em had a motor; and then in the flat stuff, they'd tie 'em all together in a six-pack and motor it.

The crew I got put on there with—it's in the Vaughn Short poem—"Kim and Mark the Crumbo two, a couple of Bobs, and a guy named Stu." It was Kim Crumbo, Mark, his brother—Mark O'Neill now—Bob Whitney, Bob Shelton, who still does an occasional trip for Sleight, Stu Reeder—it's the first time I'd met any of these guys—and me.

I drove up to South Rim and met Crumbo. They had a hotel room. So I met him at the Bright Angel Lodge, and I walked in, and I was really nervous and paranoid. They didn't know who I was. I introduced myself and



Brad, 1978 Photo: Rudi Petschek



So we hiked in at dawn, and I met Ken and Vaughn Short. I'd never met either of them. They were hiking out. That's where the poem ends, Vaughn's poem. And off we went. It was kind of—I hadn't rowed that much. I had rowed for Staveley, rowing those Chubascos for a couple of years. But all told, I'd probably done five or six river trips in a rowboat. And here we were on about 1,500 CFS—Horn Creek, 1,500 CFS. It was wild.

But actually, I did okay. I did pretty good, really. What I didn't realize was that as soon as Ken started walking out, Stu Reeder immediately abandoned his boat and took Ken's, because Stuart had a bad boat. It was a brand new Rubber Fabricators Salmon. Nice boat, bad glue, and the thing just leaked everywhere. By the time you got loaded and ready to go, it was already gettin' down towards marshmallow. So I pumped it frantically, all trip long.

We got down through a lot of stuff, saw some things I'd never seen before, and will never see again, probably, down there. (Steiger: Did you guys go far right in Horn Creek?)

We tried to, yeah. Stu went off that falls. You know that big hole that used to be at the bottom of Horn Creek, that really isn't there anymore, it's just a wave now.

**STEIGER:** The big hole?

DIMOCK: The wall. That wasn't even there, it was too low for that. That was a falls, sort of going over, and we had to go right of that—sort of a ghost run. Granite was just a rock pile. Hermit was pathetic. Crystal was



Brad, 1980 Photo: Rudi Petschek

just rocks—no real scary #\*@\$% out there, you know. Serpentine was nasty, nasty, nasty, though—just a ledge. Two-thirds of the way down you had to thread it in just the right place. There was a rapid about a mile below Deer Creek, where right now it's just sort of a riffle that goes down the right side, runs along the Tapeats—not much of a riffle at all: had the biggest @#! hole in it you ever saw, almost flipped Bob Whitney. Huge hole. But we got down to Lava, and Whitney and I had decided we were running right, down this series of waterfalls: crash, crash, crash—and the rapid was over by about halfway through. But Crumbo—and he always has been this way—never would go for the big stuff. He'd always go for the rock run. He and the other guys went over there, and started scoutin' the left. There was this pinball run down there. But it was there. Whitney and I scouted the right, they scouted the left. We got ready to go, came back up, and the passengers are runnin' around, "Brad, Brad, your boat blew up!" Apparently it scared some of the people half to death, because it went off like a canon. The whole front end had de-laminated, right at the bulkhead. So you've got four chambers, and two of 'em blew up at once, of the main boat. And of course no self-bailing floor. There's no fixin' it. And that took the wind right out of our sails.

So we thought about it for a bit, and then Whitney and I de-rigged. This was back in the early days of hauling out crap, and the idea was, that since it was so disagreeable, everybody had to have one can. (Steiger: There was a good idea.) That was a good idea, huh? (laughter) Everybody had some of the garbage, and some of the crap. We just started rearranging everything, and put all the crap and all the garbage on my boat, and just made it into something that was expendable. Then we



Ken Sleight boatmen, 1978: Brad Dimock, Mark Sleight, Kim Crumbo, Tim "Mertz." Mertins



Brad with balls, 1982 Photo: Suzy Mcttugh

rolled it up—the whole dead front end—rolled it up, 'til it rolled right up, and rolled a thwart tube in it, so it was a little round boat. Moved the frame way back, so I had this little round boat that was really heavy on one end.

STEIGER: And the frame is probably just two-by-sixes, or somethin'?

**DIMOCK:** Oh, no, two-by-tens. Big, heavy, two-by-tens, red. And pins, of course. But they were these things that a lot of those Utah guys were rowing that was a solid yoke, iron yoke, with a pin right through the

oar. And then you bungeed that down so there's no way that it could come off. You know, it just broke, or ripped the oar lock apart—the oar stand, which was a bunch of boards. So then I got in Whitney's boat, and we just towed my boat out and let it go. It had a beautiful run on the right, and we went down the pinball run, down the left.

We finished that trip on schedule—two days behind the original schedule—but on the new post-Phantom schedule we made it on time. And by then I'd decided I wanted to go work for Sleight.

\* \* \*

I got along really well with Ken Sleight. I worshipped him. I mean, I thought he was so cool. I thought the world of him. He was kind of a cowboy—tall, lean, womanizin' kind of a guy. Never had his #\*@\$% together; was always scattered from here to there, and was just tryin' to pull it together at the last minute. And he drank a bit, and didn't live anywhere. He lived in the cab of a two-ton truck. He honestly did. He did not have a house. (Steiger: No property?) He had a house that he bought from Stu Reeder in Green River, Utah, the south end of Long Street. Yeah. Stuart, when he worked for Mackay, I guess, had bought this little hovel for a couple thousand bucks in Green River. And then he sold it to Ken. But Ken didn't have a bedroom in it. It was just his office.

**STEIGER:** So Ken's stuff was just in his truck, and he was just forever on the road?

DIMOCK: He didn't have any stuff. Ken was in his truck. He'd sleep on the road. It was the damnedest thing. And he still does it, he drives all night. He'll show up somewhere to give a talk. I'll say, "Why don't you come over to the house tonight?" "No, I'm drivin' to Green River." Off he'd go into the night. You'd swear you'd never see him again. "Seldom Seen." Creature of strange habits. But a really neat guy. He was goin' into some real hard times, I think, then, because that was the year they outlawed fires in Grand Canyon, and that just crushed him...That year they outlawed fires, and Ken made this tearful, impassioned speech on behalf of wilderness and fires and camping out. It fell on deaf ears at the Park Service. He ran that next year, but then he sold his company to Mark [his son], and kept his Desolation permit for a little while, and then he sold that, and just sort of vanished from the face of the Earth.

But he's back, he's Ken again. I've seen a lot of him in the last four or five years, and we get along just great, still. He's the sweetest person—completely selfless. He's like a lot of those real hero types, you know, like Martin [Litton]—They may have this wild charisma and a lot of personal faults, but they live for the cause, and that's Sleight all over the place. He lives for the cause, for the



Brad, 1982 Photo: Rudi Petschek

fight. He's run for office a few times. He said, "The thing you want to remember if you run for office is never run for anything you might win." (laughter) Just get up there and say what you believe, and get those viewpoints out there, and get a few votes. For God's sake, don't win.

\* \* \*

After that first trip with the Sleight boys, Brad went back to work for Canyoneers and then the next year got on with Sleight Expeditions and Martin Litton's Grand Canyon Dories too...This isn't going to be a comprehensive Brad history, by a long shot. We racked up almost three hundred pages and didn't even touch on several of his more wellknown exploits...i.e., the first successful descent of the flooding Little Colorado, with Tim Cooper, who tells a pretty good rendition of it in Christa Sadler's new "There's This RIVER;" or the first, or was it the second? descent of Tapeats Creek, with duct-tape helmets and the Dories' Metzler canoe, which they risked life and limb to accomplish, only to find out afterwards that Dugald Bremner had beaten them to it a couple days earlier. Or was that vice versa? We never even mentioned the three-day speed run in one little Callegari with Carol Fritzinger, Kyle Kovalik and Helen Yard in 1983 on about 50,000 CFs...

\* \* \*

The high water, '83 through '86, was really almost as intense as anything that's ever happened in my life. To run dories through the gorge at 40,000–50,000 [cfs]... again and again and again and again...And I was usually leading. At that time I lead almost all the trips that I was on. Tremendous amount of responsi-



Brad, 1985 Photo: Rudi Petschek

bility, and working with the dynamic of the crew, you know, having the big heavy meeting a few days before Crystal of "how do you guys want us to handle Crystal?" Because Crystal was almost impossible in a dory at that level. I mean, the odds were you would make it, but there was no guarantee. It got almost everyone. It didn't get Rudi [Petschek], and Eric [Sjoden] didn't get knocked over. Almost everybody else went over. (Steiger: At some point.) Yeah. I think Rudi went over elsewhere. But Crystal, I will never forget the intensity of that, because there was no entry. The feeder wave comin' off the right shore was so tall. I remember the



Tim Cooper and Brad Dimock celebrating their descent of the Little Colorado River, 1978.

first time I really went down and looked at it, there was something horribly wrong with it. If you looked at it from the front, it just looked like a regular breaking wave that you could pop through. But if you went to the back, and looked at the back side of that wave, none of that water was coming towards you—it was all going sideways. It was in a lateral stall. And if you busted through the initial foam of that, and didn't have any momentum, you'd still get carried. You could surf on the backside of the goddam thing. The water stopped dead. Lookin' at it, straight down at it from the sky, you could see why that was, because the river was turning very sharply there, and somehow you just didn't notice that from the shore. But the river was turning right back, and the water was pooled way over on the right, and just rushing off to the left. And that explosion wave was moving sideways. You couldn't get through it very often, or very dependably. Like I said, most boats didn't flip, but it was not at all unusual to flip one or two or three boats on a day at Crystal with that kind of water.

STEIGER: What were the techniques?

DIMOCK: Row like a bastard into it. I wish to hell I knew as much then as I do now. I'd push it just to see...I don't think it'd work, but it'd probably work as good as pullin' did. Because if your angle wasn't absolutely precise, you were doomed. And so most people, when they didn't make it, they were maybe a little off. But a lot of people were dead straight into it, and they still didn't make it...It was really intense, and what we came up with was a system that sort of evolved. I don't

think any one person was in charge of it. People were walking, and we would go through with two boatmen in a dory. One would highside and one would row. Once you got that boat to shore, below, whether you flipped or not, then the two of you would come back, and the other one would row their boat. And so it was this bonding thing. And a lot of that was never decided 'til on the hill at the scout. You'd just kind of look at somebody and go, "You wanna go with me?" "Yeah, let's do that." And we'd pair off. It was something that the passengers were not really included in at all—just incredibly high energy, high anxiety, high tension deal—a very

elemental thing. And when we were through, we were so high on that. More, certainly, than the people who had been sweating in the sun, and then marching for half a mile across hot rocks, to get back to the boats. But it was obvious enough when we were out there, what we were going through. Almost always it was not a problem. It wasn't divisive in the trip. I think a couple of times some people were pissed off. We usually gave 'em a good enough show. We couldn't take 'em. It was just negligent to even consider takin' people out there. We came so close a couple of times to the worst case scenario, which was being cut in half by your boat in the rock island, 'cause they're hard boats, and unless you had 45,000 [CFS] or more, there were rocks out in the island that you could hit, and we did hit. We busted boats into a million pieces. If you were in the water when that happened—I don't know how many people thought about that—I thought about it every time, every minute I was out there—just the thought of being crushed to death (snaps fingers) like that, or cut in half, or somethin'. You were risking your life if you're on the downstream side of a boat. If it hit you against a rock, it would kill you—I'm just sure of it. So, you know, everybody, I'm sure, had their own things. But I was pretty hardwired to be on the bottom of the boat like that. And I almost always was, just almost instantly on the bottom. (STEIGER: Went through a few flips, though.) Yeah. Not so many in Crystal, but I was in several flips, and some really, really horrible runs in Crystal. I went with some people that had some pretty bad rides, and I had a few



Upside down in Crystal Rapid in the mid-1980s.



A rare moment of apparent competence.
Photo: Rudi Petschek

myself. We cracked the *Mono Lake* just about in half out there one day.

You'd make that entry, and either it would work, or it wouldn't—and usually it wouldn't, it seemed like, at 40,000 cfs—you just couldn't get through it. Then it was: do you flip there in that feeder wave, or do you get surfed out and flip in the Land of the Giants going down towards the big hole? The big hole was still there, and it was huge. That flipped a lot of boats, because once you're in the Land of the Giants, you are goin' into that hole, no matter what. There was no way around it, you're goin' in. Then it was just ka-bloom! That run I remember on the Mono Lake, goin' in there sideways. And just boom! You're just gettin' beat to hell, and just out there [high-siding], across the gunnel, hitting that thing, and just flying up, and then the whole thing just falling back into the hole, and doing it again. And then there's (boosh!) coming out the side like a melon seed. (Steiger: This is you in the Mono Lake?) That's me and Ron Thompson, who was the boatman. He was washed out. I went and grabbed him, put him back at the oars. (slaps hands together) Washed him out again. Pulled him in again, just as we were about to hit Big Red at the bottom of the rock island, and I just got on one oar and pulled for all I was worth, to try and pivot away from the thing. We hit just off center, and just tore the guts out of the boat, then pivoted off it. Aluminum boat. Split it in two. It just cracked the whole side open, in the chines. A weld ripped. It ripped along the chines, and it ripped the bulkhead—almost sank it. We got it in below Crystal, above Tuna, and floated it up with thwart tubes, because it turns out they didn't weld the bulkhead

between the two side hatches to the bottom of the foot well. So the water could go from foot well to foot well, once it was a foot deep. I guess it didn't rip a bulkhead into the crosshatches—it might have sunk it...So we filled those with thwart tubes and inflated 'em and rowed it to Bass Camp and laid over, gave Ron the sledge hammer and some earplugs. And Bass Camp rang all day. Boom! Boom!

STEIGER: He pounded the dents out?

DIMOCK: Well, pounded it close enough we could duct tape it shut. Yeah. Just hundreds of layers of duct tape.

...Those were wonderful, wonderful times. It was nothing you enjoyed doing, but to have done those runs at Crystal with those people...

STEIGER: You said two days in advance you'd have a crew meeting?

**DIMOCK:** Sometimes a couple days, sometimes maybe the night before at Granite..."Do you want to do it before or after lunch? Do you want to do this?

Do you want to do that? Do you want to make teams now?" We made some mistakes early on. I used to team up with Mitch sometimes, who's taller than I am. The two of us could right a boat in a second, with our height. But then we had a boat with two little teeny guys on it, that couldn't get it up. And, "Oh! the tall guys should go with the short guys." Yeah, like Kenton is in a bad way when he's upside down. He does not have the altitude, the leverage, to turn a boat up. I righted one myself once, in Hermit. (Steiger: All by yourself?) Yeah, it got knocked over in the fourth wave, and it was just one of those "catch the gunnel and start up." I think I was standing on the gunnel, about to go up on top, and there was another big wave. I think I just had a rope and pulled it up. Just went (ka-wham!). Sounded worse than it was. I wish I could think of more to say about runnin' Crystal in that water.

STEIGER: How about that day when Elena [Kirschner] was rowin' the baggage boat?

DIMOCK: Oh, God! I don't remember the whole day that well, exactly who was doin' what. I might have the notes somewhere. We had probably six dories. Elena was just getting her training wheels, she was runnin' the raft, which was a big Avon Spirit. I think we had a real frame on it by then—yeah, we had a Big Fella aluminum frame and cooler, and a reasonable load of baggage—heavy, but reasonable. We had three people that wanted to go first run. I said, "Okay, I'll ride with somebody." And so I rode through with Elena. She wanted to go in the first group. Is that it? I think that's it, yeah.

Well, it didn't work out, anyhow. We went left,



Looking at it won't change it. Scouting Granite Falls.

come plowin' into that lateral, and it would just clobber ya', it would kill ya', it'd stop ya', half the time flip ya'. We didn't flip, but we filled up and surfed out into the Land of the Giants, and just all hell broke loose. I don't remember exactly the details of how badly we got beaten up, but we got pretty well trashed out there. Didn't hit Big Red in the rock island...I just started bailing, and bailing, and bailing, and bailing, with a big five-gallon pickle bucket, and watchin' the shore go by. Elena was pullin' for all she was worth for the right shore, and not getting there. We went by Thank God Eddy, the other three dories are in there. My dory's still above the rapid, and we're headin' for Tuna. I just kept bailing and watching the shore until I saw—there's this barrier that's really a bitch to get around, to climb. I saw it coming. I said, "Elena, we'll see ya'," and just dove in and swam ashore. That's when she started to hate me. (laughs)

**STEIGER:** No she was impressed by that. I remember, 'cause she told me that story. Did you have to swim very far, do you remember?

**DIMOCK:** I have no idea. The things that were done out there a lot of times were—you know, you had so much adrenalin in you.

STEIGER: According to Elena—it was "Gotta go, darlin'."

**DIMOCK:** Had to leave.

STEIGER: There she was, all by herself on this unbe-

lievably full boat, which I guess she got it in above Tuna.

DIMOCK: She got it in above Tuna. And she counted the buckets of water, and we later calculated it was more weight than a Volkswagen she bailed out of that thing. That bottom end would have been like this, full of water...So I swam ashore, and hiked all the way back to the top of the rapid, got my partner, and went down and ran Crystal.

Then another day, we got there, another six-boater, and I forget how this happened, but it ended up Mike Davis and I both had to go through three times, 'cause we had a couple people that either got beat up in the first run, or just didn't feel up to it. Boy, that was exhausting. And Mike was in a flip, too, I think on his second run through, with Kenly. That's the trip we camped at Tuna, on the right at about 45,000 [cfs]. It was time to stop, there were about 500 trips ahead of us. There were no camps below. I had a great hike, went way the hell

up Tuna Creek. God, what a beautiful place.

STEIGER: Dugie has a picture of you...

**Dimock:** Me and Mitch.

**STEIGER:** Vertical in the new wave, I think it is, muddy water. Yeah, you in the *Skagit*. I don't know if that rings a bell or not. I remember seein' one of those... Unbelievably violent.

Dimock: God, it was so huge. I consider myself really lucky to have been that age, at that level of skill, of resilience, of strength, right then, in dories. I mean, rafts were gettin' creamed there, too, but somethin' about it...It was scary enough in rafts—I was freelancin' still—but in the dories it was just intense—really, really intense.

STEIGER: I remember hearin' stories about Regan [Dale] and those guys with their combat boots—those Vietnam ones.

DIMOCK: Well, he wore those from the seventies. We wore helmets. (STEIGER: Not a bad idea, either.) It started to get to—I mean, at first the married men started bringin' 'em, and then we all started goin', "You know, I'm not proud, I'll wear a helmet out there today." And then Kenton, of course, had his whole outfit, which took him quite a while to get into—wet suit and helmet and pads and bumpers and boots. But he had a whole series of flips. He had like ten years or something without a



flip, and then he couldn't keep it right side up to save himself...I think Kenton thought he couldn't flip for a long time, and believed it so hard that he didn't, maybe. Then once he knew he could flip, maybe he lost his conviction. I don't know. Kenton was really good. I think he actually slipped a notch for a while, but now that he's in his pushmobile, I think he's gotten really good again...

But it was so cool to be there, doin' that. And the crews had gotten very, very tight—a very tight family. Some of us went through various major emotional crises during the eighties. "85 was big, a lot of mitosis going on there, people splitting apart and rejoining with other best friends' girls. Versa visa. I was in the thick of that, and found out how much support I really had from some of those people who I didn't really know that before.



As he'd planned it. Bio Bio River, Chile, late 1980s.

It was really pretty touching, in a way, to find out how much that group of people took care of each other. It's amazing. Still is. It's still out there. It's a lot more dilute. We've got a huge trip together this summer—a seventy-two-person trip on the Snake. It's almost entirely that crowd and their families.

\* \* \*

I know, we should backtrack a little, back to '85. During all this incredible high energy, I was also breaking up with my girlfriend of seven years...Carol Fritzinger. And that was pretty hard on both of us. By that fall,

I was a bit of a mess. I'd got involved with a bunch of other gals, and just was runnin' around like a chicken with my head cut off, didn't know what I was doing, really depressed, and working pretty hard at drinking my way out of it, with a fair amount of success, actually, at times. (Steiger: Self-medicating.) Yes. But I did a lot of off-season trips with the early science—Humphrey Summit Associates, workin' with Tom Moody and Mike Yard and Brian [Dierker] and [Steve] Carothers. Some real neat trips. But on one of 'em, in the fall of 1985, an oars trip pulled in, and this guy, Mike Boyle, was on it, who I barely knew. But even if you barely knew Boyle, you were his best buddy, he was just the greatest guy—one of the world's great boatmen, I always thought. He said, "Well, what the @#!'s wrong with you, Dimock?

What's your problem? You know what you need? You need to come down to Chile. Come kayak along on one of our Bio Bio trips." I said, "Yeah? Yeah, that's a great idea!" I didn't think much of it for a while. And then I decided that yeah, maybe I should. He'd given me his address, and I wrote him. and he had me call Sobek. Sobek said, "Sure, come on down, we've got kayaks here, and you pay your \$200 training fee," or whatever, "and you can go along."

I got this idea I was just gonna go on a little walkabout, and try and get my #\*@\$% back together, take my self-help books, and go down and spend a couple months in Chile, where I didn't speak the language, and see what happened—which was a really scary thing for me to do. I remember I was absolutely petrified when we landed in Colombia, and I couldn't find

my plane. I had to switch planes. Couldn't speak the language.

Anyhow, I went down there just after Christmas in 1985, and fell in with the Sobek boys, who at the time were Gary Lemmer and Jim Slade and—!@#, who else was on it? I can't remember at the moment. I should. But they kind of put up with me. They didn't know who I was—some dory flake. Lester—Alistair Bleifuss—was on that first trip. We went off to go down the Bio Bio, and I was in an old Hollowform kayak. Started workin' on learnin' a few words of Spanish, and paddlin' along with these guys who somehow got it in their mind that I knew what I was doing enough in a kayak that they

didn't have to watch me—which was really disconcerting, because I was in over my head in a few spots, I thought.

But immediately, when we got on the river, I realized that, you know, "I wonder if they ever needed to hire somebody else in the next two months, if they'd consider hiring me?" And then I heard a rumor. Well, Mike Boyle, who I'd come down to see, had gotten crushed in Lava South a few months earlier, and had been flown back to the States, so there was going to be an opening... Yeah, between the boat and the wall at Lava South broke his sternum. So he wasn't even there. So there was this chance of another boatman maybe being hired the next trip, and I was just so excited to be out of the United States, away from this life that was not really doing that well for me. I'd stay up until after everybody else was asleep, partyin' with people, and laughin'. I'd be up an hour before anybody else got up, makin' coffee and takin' it to everybody. That made big points, by the way. (Steiger: Yeah, the old swamper trick.) The old swamper trick. Make sure you're the first one up, coffee's ready, all those things. And don't make any noise. I was the ultimate swamper, just runnin' around, tryin' to take care of everything I could, and help out, and be there, and be the life of the party, tell everybody funny jokes. I was havin' a ball. I just got my ass kicked in Lava South, too—went bouncin' down the wall, upside down, and came flounderin' out of there, and paddled up to 'em, and I'm goin', "Jesus Christ, you see what happened?" And they're goin', (shouts) "Help us goddammit! We need oar stands!" A couple of 'em had sheered oar stands off on the wall, and they were headed into the next rapids. All of a sudden I was rescuing them, paddling from boat to boat with oar stands and Allen wrenches and carrying ropes. At the end of the trip they said, "Well, you're rowin' next trip." I said, "Fine. I'd be happy to." And so the next trip I was a boatman for Sobek. On the Bio Bio.

STEIGER: Which nobody else was doin' then, huh? DIMOCK: No. There were maybe one or two Nantahala trips a year...But that was really, really, really exciting for me, because I fell in with a crowd of boatmen who were very senior to me in that realm, that type of boating. Stan Boor, Butch [Carber], [Jim] Slade, Bart Henderson.

STEIGER: What do you mean "that type of boating"? DIMOCK: High gradient rubber boating, very technical, dangerous stuff. Class V. Occasionally Class VI, I think, at Lava South. There was a move there that was about as bitchin' as that same one at Crystal, you know, at high water. There's the move, fat chance you're gonna make it. If you're damned lucky and hit it just right, you might make it...Oh, God. There was this huge, house-size rock—entry move that you have to get left of, and then you'd come back beneath it, and then hug that boulder bar as you went down into the maw of death. Then there was a big guard rock, and then a

big ski jump rock, and you wanted to go "over there." But there was no way it could conceivably be done, unless you were in the perfect position, with the perfect momentum, and damned lucky. Bart and I, we came up with it. Well, Bart had said he had seen a paddle boat go there once, which is a whole different thing. He said, "Well, there's gotta be a way around doin' this goddam down-the-wall bull#\*@\$%." And so we looked at it that next trip, and just looked, and looked, and looked, and looked, and looked, and looked. There was one place you could stand, where you could see that maybe it was hypothetical. Anywhere else you looked, it was obviously impossible, couldn't be done in a rowboat. But we went, and we did it. (STEIGER: You guys both made it?) Yeah. I think there are people who got really good at it. I got pretty good at it. We were better than fifty-fifty on it. It was really good. A lot of times you'd go right off that ski jump rock. Once I just jumped it straight ahead, and just slid down the back side. But that was fine, 'cause you missed the hole, you didn't go into the wall. But that was about as intense as Crystal, only we were takin' people through it, 'cause that was the company way. I would tell people, "If I had a choice, I would not go through it as a passenger. I think it's pretty dangerous." But people wanted to do it. There was a lot of macho, sort of ingrained in Sobek...I think that's probably changed now, but there were a lot of pretty eager beavers.

The one thing that opened my eyes to it was that very trip, when we invented that new run, Bart and I... we went down there, and we had a charter trip of river runners, who knew it was beyond their capabilities. They were, you know, Class III, Class IV boaters. But we figured they're all gonna want to ride through this. They came down and looked at it, and talked for a while, and pointed at things. They said, "We're all walkin'. This is not a good rapid to be in a boat." "You're smart." It was tough. But God, other than that, we had so much fun...I feel really, really lucky to have been on two big waves, to have caught two of the great rides: Sobek at its peak, and Grand Canyon Dories at its prime.

It was fun to be at the two extremes of boating, you know—running a wooden boat in really huge, huge, huge hydraulic water, and running a rubber boat in really steep, boulder drop, vicious water. (STEIGER: Millions of rocks.)...Yeah, that's as good as I ever was.

The Bio-Bio was a heart-breaker in the end. That's my own little glimpse into what it must have felt like for the people who used to run Glen Canyon. The Bio Bio wasn't Glen Canyon, but it was a place I really fell in love with. Had some wonderful, wonderful experiences there—and then to see it destroyed was just really sad. There were some places that I really got into down there, that were sort of trademark things that "we do on Brad's trips." One of 'em was a place that was about



Flying off the Omo River, Ethiopia, in a gutted DC3, 1986 with Alam, our native guide.

a half a mile from one of the camps down towards the end of the trip, where you walk up back along a dirt road and up into this side canyon that was kind of like Upper Elves, only way more water, which is this amphitheater with a thousand waterfalls and ferns and flowers and fuchsia. It was unbelievable. It's "the prettiest place in the world," is what we called it. And people agreed, you know, we'd go in there. A few years after I quit, somebody—I think it was Bruce Keller—came up and said they were camped below there, and watched them dynamite that. They blew it up. They blew up that whole place. For gravel. Oh, God, did that hurt. I just had to go lie down. I can't believe they would do #\*@\$% like that. And it was just incredible.

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Oh, I'd always loved publishing. I never really got too involved with it, but I always loved it. When I was a little kid, we had these hand-crank ditto machines that made those little purple things, and I always liked to

hang around those. I liked office supply stores. There was just this penchant. (laughs) When I was in high school, three of us had an underground newspaper for about a year—"Gintaag" it was called. It didn't mean anything at all. We got quite a bit of acclaim in high school for being...We weren't really rabble rousers, we were sort of more philosophical. Then I didn't do much more with it in college. I got involved with their newspaper for a month or two but drifted off. Did a lot of photography, graphic design, and an awful lot of boating...So when I came to GCRG, they had this newsletter, and [Tom] Moody just sort of dragged me into it. At the same time, I had kinda taken over a little occasional publication that the dory guides did called The Hibernacle News, and I did my first one of those in Flagstaff after the company moved. I learned how to run a Macintosh and pretty much took it over from Moody. Then we got a bigger Macintosh, and I got a bigger program, and I just kept learning and learning—editing, formatting. I've been kinda the editor and chief for a couple of years now. What used to be a little mimeograph sheet, now it's a thirty-six-page magazine—ridiculous, out of hand, out of control, but it's fun. I enjoy that, and I'm trying to teach Shane Murphy how to do that now [1994] and pass a lot of that off 'cause I think it's dangerous for one person to identify themselves with a cause like gcrg too much, or for other people to identify, to start to mix one person with an organization, like Dave Brower being the Sierra Club. It was good at the time, but it's probably better for both of 'em to separate a little, I don't know.

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In terms of rowing technique and what I know about it...I think it'd be good to talk to a few others: people like Regan [Dale] and Andy [Hutchinson], people who are pushing their own personal envelopes with rowing.

STEIGER: Well, it's amazing how there are different schools of thought, and how much more is known. You look at kids startin' today, and how...I think they don't even—you'd never realize how much you're bein' saved from, just by virtue of gettin' to go with people that already went through so much—not havin' to reinvent the wheel.

**DIMOCK:** Well, yeah. I mean, I can—and this isn't really about me, it's just about the knowledge that's out there—I found that with a new guide, when I was the old trip leader and had some young guides I was workin' with, I could teach them something just in a rapid scout that took me ten, fifteen years to figure it out, of just bangin' my head and my boat and passengers against the wall, over and over again. You know, like how do you get through Granite right-side up in a dory?...And how to get through Dubendorff. The reason that you miss that run over and over again—I didn't know why

for a long time—'cause that's not an eddy. That water's flowing right through that island, and out into the hole. So people punch in there, and they sit on it, and they're gone. They think they're in an eddy, they think they're in slow water next to an island. Even Holmstrom saw it, he describes it. The water is flowing out of that island and heading left. So it's just deceptive. Things like that. How to hold onto your oars. And that's true, I think, in all the aspects of guiding—how to deal with people, how to do this hike, how to set things up safely at a major rapid—stuff we had to figure out that took us so long to figure out. I think all of us, all people, fight change to some extent, so it takes a long time to make these changes, unless you're with a pretty loose group in trip protocol. But God, nowadays, somebody new comin' into the system, and you've got these boatmen on the trip who everybody from Drifter Smith to these hot young people that came in and learned from really top-notch boatmen, and got really good, really fast. That wasn't there when I started, really.

STEIGER: Yeah. Fred Burke does a trip with Ted Hatch—he does one trip, and then the next thing you know, Ted needs a bunch of boatmen, because he's got a big ole' Sierra Club trip, and Ted says, "Here, Fred, drive this boat for me. You've been down there, you know what to do! Follow Dennis Massey."

**D**імоск: Yeah.

STEIGER: "Just follow Dennis."

DIMOCK: I learned from Danny Lindemann—he drove a decent boat. And Cam Staveley, who was seventeen. They were like God to me. I mean, they knew everything. But they did not have many trips under their belt, and they were figurin' it out as they went along. We'd never heard of Matkatamiba Canyon, we didn't know what was beyond the first pool at Havasu. We knew a couple of camps and used 'em pretty regularly. Could barely get the boat rigged within two, three hours after the passengers showed up at the Ferry. We were still flailing.

It's interesting to sort of follow the history of the boating community from the time I showed up, to where it is now. When I showed up, I remember this one outfitter—I was headed to Vernal—I said, "Anything I can do for you up there?" He goes, "Yeah, firebomb Ted Hatch's warehouse." Just in jest, but there was no, or very little, company-to-company camaraderie. There were a few people who had friends in other companies because of their schedules or something. But mostly, from the perspective that I saw, there was very little camaraderie. There was no open hostility, you didn't mess with people, but that was Tour West, and that was Hatch, and Western...very separate. And it came slowly, but it came, I think, in the early 70s, with this huge explosion of river running around '69, '70, '71, when a

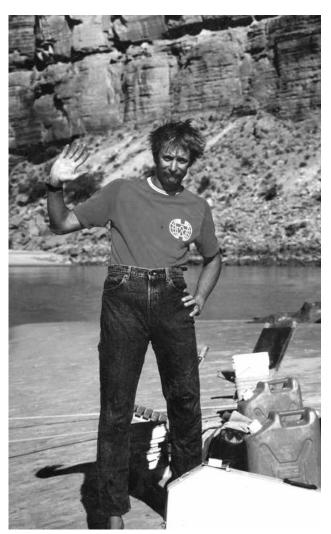




Brad Dimock taking river trip entertainment in the last century to its peak... Pinwheels of Fire, Grease Bomb.
Photo: Rudi Petschek

lot of us showed up for the first time. All of a sudden, there were a zillion of us goin' down there.

But one of the things I saw change it was the beginning of what was then the BTS, the Boatmen Training Seminar. The early ones were up at South Rim, and we went up there and camped out in, I think, probably the Mather Campground. I met these people like Dennis Silva and O'Connor Dale and people from different companies. Bob Whitney. We all got together and, "Hey, we're all in the same boat. Hey, we've got great stories. Hey." And it started to happen. I saw a lot of it happen at the training seminars, where you just put 'em all in the same bucket and stir it. We did one early on—I think it was in the seventies—up at Lonely Dell—one of the last events where they actually let people stay there. We all camped. Again, this big hodgepodge of boatmen from every company. And you go, "Wow! A Western boatman who's really cool! A Tour West guy who's not a Martian!" Developing these connections. You'd know one person in that company,



Running for Tour West, early 1990s.

and so pretty soon you knew a few. And it started to grow. I just tried as hard as I could to get on every guide training seminar, every guide training trip that I could get on. Not only the camaraderie, but the information you were getting, doing trips with Bill Breed and Steve Carothers and Art Phillips and Bob Euler and Carl Tomoff—all those guys. I did probably ten or twelve of those. I got a tremendous amount of information. I would hound them all day long, follow 'em around, sit around at night, ask 'em questions.

STEIGER: I remember the whole motor/rowing thing kind of isolated...I was workin' for ARR, motor company, and I thought that the controversy kind of made it worse for a while there. There was a point where people weren't really speaking to each other. And there I give Kim Crumbo credit, 'cause it seemed like right after that settled down a little bit...I remember goin' on this BTS trip that Crumbo ran—he organized it. My first experience with it was he got Fred [Burke] to donate a boat, and Fred wanted me to drive it. I was like, "Go on a Park Service trip? As a volunteer? No way! I'm not goin' down there on a Park Service trip for free! You're gonna hafta pay me!" (laughs) And then I get there, and it was one of the best trips I ever did in my whole life. Within five minutes of being there it was like, "This is so cool!"

DIMOCK: Oh, they're fabulous. They're fabulous.

STEIGER: It really did—there was that shift where all of a sudden we were all kind of in it together. Then I guess gcrg was kind of another little...

DIMOCK: Well, Grand Canyon River Guides didn't come along 'til the late 80s. And it was already happening in the 70s and early 80s. Another thing that I saw really change the isolation was '83, '84, '85, the big water. All of a sudden we were pretty damned glad to see each other. When we'd get to Crystal we'd go, "Hey, you guys runnin' second? We'll wait below." Or, "Would you wait below for us, until we get a couple boats through here?" You know, boats were gettin' swept away, and it just became increasingly clear that we were all in the same boat. And it was good. Every bond you made with another company, it was good for everybody. Then I think the next real step was Kenton's boat club [Grand Canyon River Guides (GCRG).] Which was a little contentious at first, because Kenton is such a figure. It took a little while to really draw people in. But one of the great saving graces there that I saw was when [Tom] Moody came in, who was just a genius at being all inclusive. And when we got a couple issues that we could all unite behind...

STEIGER: Really safe issues for the whole—I mean, who doesn't want to save the Grand Canyon? We don't have to be a union!

**DIMOCK:** There was "Save the Grand Canyon," the banishment of Bego for fireworks. They were threatening to basically ban him as a career boatman. And the other

one I think was a new alcohol guideline that interpreted by a bad ranger could basically ban a boatman for life for havin' a beer, or being said to have a beer while on duty. And everybody fought like hell on that, and really brought that group together. It was about that time that the guide training trips were about to be dropped by the Park Service. I think it was Kenton I remember saying, "Well, we'll take over. Grand Canyon River Guides will take on the burden of doing that, of trying to raise the money from the outfitters," and took it over. We struggled to make 'em the biggest and the best for a long time, before a lot of us went out in flames from workin' so hard. We had a big blooming of the old school of boaters. It's basically like throwin' the biggest party of your life. We were doin' three-day grs's at that point. But they were huge melting pots of people. And runnin' the river trips every year, and every year it built on this whole community of boatmen that began to come together. I kind of began to focus on it at a certain point. I guess we should talk about it a bit. To me, that was hugely important, was that community. When I got involved with GCRG, there was something missing from

their mission statement, I thought, and it was about community. We struggled and struggled with it—and is it still in the BQR? I can't remember. It was something like "celebrating the unique spirit of the guiding community."

**STEIGER:** So that was you that wanted to put the goals on the masthead? Or was that Moody?

DIMOCK: [Moody]had the first three. Then I came up and struggled for that fourth one. We all came up with the language. To me, there were a couple of things going on with the community, and one was that there wasn't much pride in it. A lot of boatmen... You know, I mean pride with other boatmen, but to your family, to other people, you're pissin' your life away on the river. I wanted to try and draw in the historical aspects, and printing the interviews was how to do that: Here's a very cool person who pissed his life away on the river and just, helped change lives... And so as I got more and more involved with GCRG, that was always one of my main things. I had to go to the stupid meetings, and I had to fight irritating issues... But what I really liked was pushing towards community, having the GTS be as big



Rowing his replica of Buzz Holmstrom's boat, "Julius" through Hermit.

Photo: Kate Thompson

and broad as it could, getting everybody on the river, not just a couple of companies—and writing about it. To me, that's been my favorite project, and I feel like things have happened a lot in that area, to where that boatmen's bond has really become, I think, bigger and stronger as a result.

**STEIGER:** Yeah, that's kinda comin' in handy now that we're gettin' old and fallin' apart here.

DIMOCK: Well, it is. With Whale's suicide, and the birth of this Whale Foundation—it was another one of those ideas. At first I think it was [Bob] Grusy and Robby Pitagora and a couple others are going, "Well, great idea, but what are you gonna do?" And they have taken that thing by the horns and it is tremendous what they're doing. They're savin' lives—with a couple other people who are mostly nameless. I've just heard tales from Sandy [Reiff] and some of the others involved, and they're basically takin' the gun out of their hands, metaphorically—people who are in big trouble.

I mean, this crowd that came in, in the early 70s—we're the gray-beards now. We show up at meetings, some of us still do trips now and then. I'm goin' back in, gettin' my license again to do a few. But we didn't have anybody ahead of us to look at—just a few people. Mostly, they turned into outfitters, the people ahead of us. There weren't that many of 'em, or they came and went real fast, before it became a lifestyle. So we're kind of out hangin' ten still, out on the front of this wave of this profession. It's very, very interesting. We just had our first intervention a couple of weeks ago of a group of senior guides goin' in for somebody we thought was gonna die or kill someone. And it might work. My God, it might work.

... When the first people had to quit drinking



A signature like no other.

within the community, there was not much sympathy for alcoholics. And man has that changed. You see it in a lot of outfits now, there are functioning recovering alcoholics on the crews. And they're respected. So it's the change of the definition of courage. "Are you brave enough to drink with us?" "Are you brave enough not to?" Are you strong enough to stand up for yourself and help other people with what, in many lives, has become a problem? And I think that's a very cool thing. I think it's happening in society at large. But to see it happen in a community with that much "Yahoo! Whoopie!" in it, and that much—there is machismo, even in the women in the guiding community. To see the intelligence and the sensitivity and the creativity strong enough to balance this all out into something that can evolve and can change. It's never gonna be like it was in the 70s or the 80s or 90s. It keeps changing.

STEIGER: What was this intervention? You guys intervened on an old-timer that was havin' a tough time, and it seems to be workin'?

DIMOCK: Well, it's too early to tell what's happening, but it was...To me—I think to all of us—it was one of the most frightening things we'd ever done. But one guide, Mike Boyle, started callin' us up and sayin', "Look, our buddy's goin' down, and I can't watch it anymore. I want to do something. Are you in?" We all said yes. We worked with Dick McCallum, old outfitter who used to be a counselor and is counseling again, and spent a month going to meetings with each other and building up this plan, and rehearsing it and fine tuning it, to where we went in.

STEIGER: Before you attacked him.

**DIMOCK:** Before we went in.

STEIGER: What our generation is up against, too, as we're gettin' older, we're gettin' to where we're about to fall off the edge. You know, you get depressed because these things are pilin' up on us, and the end of that last trip, or the fallin' out of the rotation...the glory days of river runnin' are fast receding in the rear view mirror. You get to the point where—I think a lot of us, you know, you can see the writin' on the wall. It's not gonna be that much longer that you're gonna get to do it. Or even, who knows?...we've seen so many of our peers disappear on us overnight.

DIMOCK: Yeah. The thing, I think, that's so seductive about the river lifestyle is that problems are finite. You get home and you've got these canker sores of life that you have to deal with that go on and on and on and on, and you wake up in the morning and they're still there. On the river, you've pretty much solved it, usually by nightfall—whether you flip the boat or somebody broke their leg, or you were worried about the camp you were gonna get. Solve it, slam a few beers, have a gin and tonic, cook dinner, tell stories.



Now, working for AZRA, 2005 Photo: Exic Christenson

And "yeaaahhhh!" you're out there in this great wild environment which is totally controlled and really tame in real life, but not that tough. But yeah (whew!) man, is that seductive. (STEIGER: Boy, has it been fun.) Boy, has it been fun. So yeah, and it's gonna keep being interesting, watching this community go on into the next decade and the one after that...I'm not lookin' very far into the future, because I've just seen so much change in my life. I never would dream at any point in my life that it could end up where it is five years from then—the direction it's gonna take. When I work on history, I look at Bert Loper's life at any certain point, or Buzz Holmstrom's—these people are in this place, the robber barons have taken control of the country, it's gone into economic collapse, there is no hope for the future. Fast forward. Here it is, ten years later, it's totally different. Everything fell. Or, we saved the world from Hitler. Or Communism collapsed in two days. That was a good one. Or, this has become an ultra-right theocracy in the last four years—the United States. Wow, I didn't see that comin'. What next? So I've given up despairing about it. I'll fight and push, and certainly won't just resign my ideals and go with it. I say just keep pushin' in the way you want to go, 'cause you've got no #\*@\$%in' clue, the magnitude of change that's possible for no apparent trigger. Head forward with cheer.

### **Businesses Offering Support**

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

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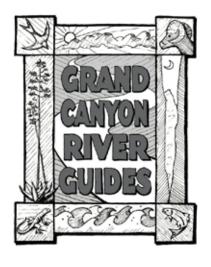
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THE DESIGN for this year's GCRG t-shirts. They make great gifts or just additions to your wardrobe. Come track one down at the office or give Lynn a call.



### Thanks, Gerry

spen Printing lost friend and long time pressman Gerald Weishapl in late May, he was 68.

Jerry was a craftsman who took pride in the quality of his work. (Remember the great color print of Georgie?)

We will remember him standing at his easel reading through the BQR as the big press churned away behind...

Aspen Printing

# June 30, 1956 Grand Canyon Mid-Air Collision— 50th Anniversary

HERE WERE MORE than a few tears amongst the almost-128 in attendance at the May 3RD Canyon Country Community Lecture Series in NAU's Cline Library. Local flight paramedic and author Dan Driskill told a spellbinding tale of human tragedy, emotion, and sacrifice when he recounted the mid-air collision of United Airlines and TWA airplanes over Grand Canyon on the morning of June 30, 1956. All 128 passengers and crew aboard both planes perished, with the wreckage crashing on Chuar and Lava Buttes, across from the confluence of the Little Colorado River. Driskill is currently writing a book about the event, one that led to creation of the Federal Aviation Administration and the Air Traffic Control System. An article by Driskill will also appear in a forthcoming issue of the BQR. Some July 1956 news articles from the Arizona Daily Sun may be found online at www. nau.edu/library/speccoll/index.html.

On June 30, 2006, around 5:30 P.M. at the Shrine of the Ages, Grand Canyon National Park South Rim, there will be an event sponsored by the Grand Canyon Association (GCA) to commemorate the 50TH anniversary of the tragedy. Driskill will be joined by author and Grand Canyon Airlines pilot Mike

McComb and Embry-Riddle Aeronautical University professor Dr. William Waldock, in a panel discussion and presentations moderated by Cline Library Special Collections Librarian and GCRG past-president Richard Quartaroli. For more information, please see GCA's website at http:// www.grandcanyon. org. Whether you are able to attend this event or not, please remember to mention this seminal event in



Illustration by Mel Hunter, "Life Magazine," 42(17)(April 29, 1957):151, from "Air mystery is solved," by Mary H. Cadwalader

Grand Canyon history to your fellow boaters as you travel along the River this season, and perhaps tip your hat as a gesture of remembrance to the 128 folks who perished.

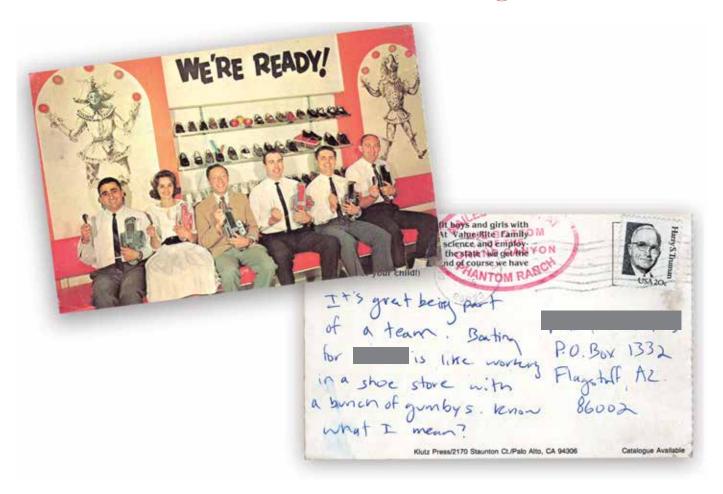
Richard Quartaroli

#### Care To Join Us?

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!

General Member	\$30 1-year membership
Must love the Grand Canyon	\$125 5-year membership
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With whom?	\$500 Benefactor*
	\$1000 Patron (A grand, get it?)*
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Must have worked in the River Industry	split twig figurine pendant, and our undying gratitude.
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Phone	\$13 Paul Winter CD
	Total enclosed

## Postcards From the Edge



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, Arizona Humanities Council, "Circle of Friends" contributors, Flagstaff Cultural Partners and innumerable GCRG members for their generous and much appreciated support of this publication.

Box 1934 Flagstaff, AZ 86002

# boatman's quarterly review

GRAND CANYON GRIVER GUIDES

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