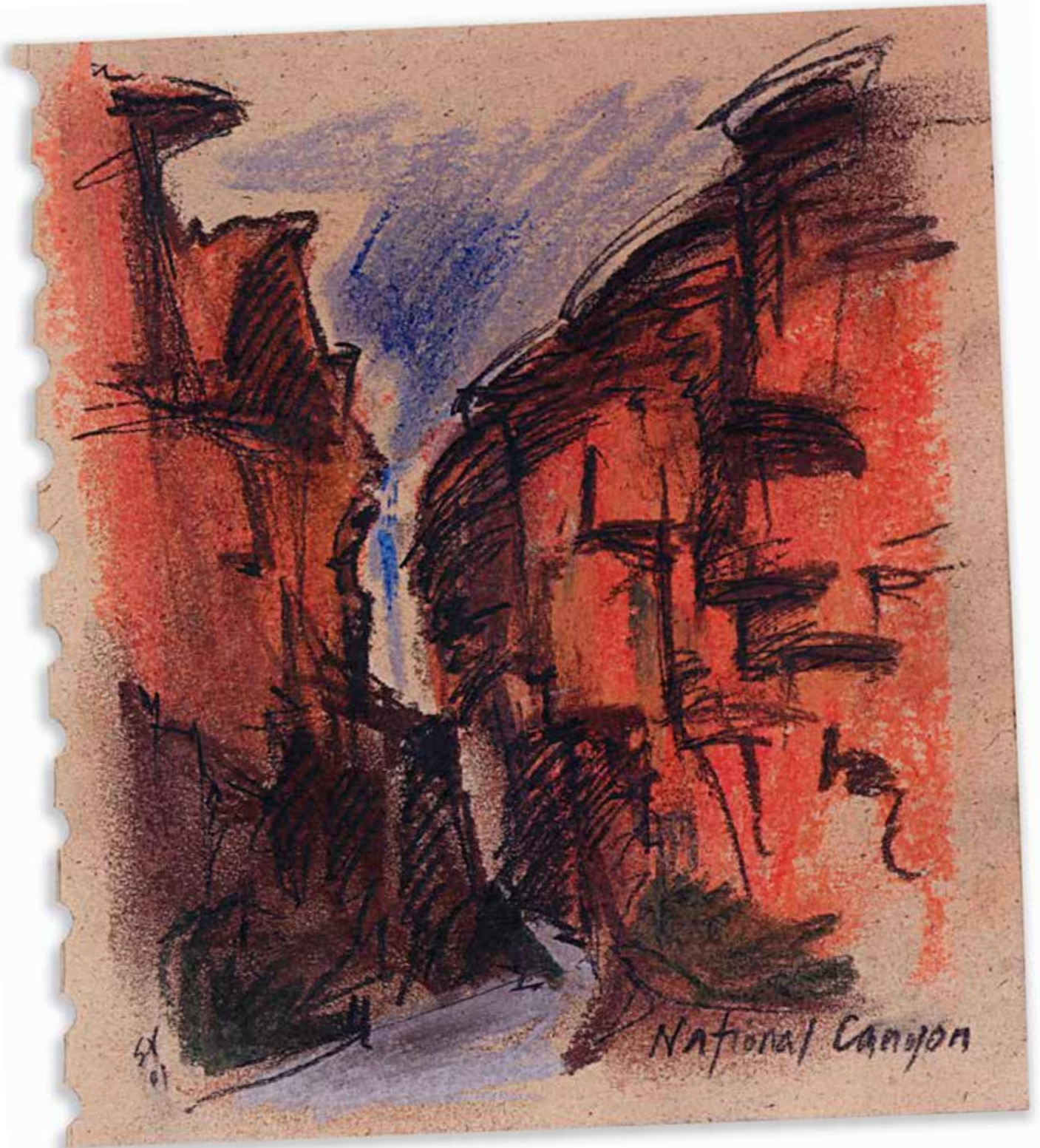


boatman's quarterly review

the journal of Grand Canyon River Guides, Inc | volume 15 number 4 | winter 2002-2003



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Curmudgeons' Chronicles

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.
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Cover art by Sandra Vlock

Continues...

DURING THE FIRST YEAR and a half that I worked in Uganda, from late 1976 to early 1978, in the far western rainforests at the eastern foot of the Mountains of the Moon, the nation was literally being ground into bloody mush under the boot heel of the genocidal dictator Amin Dada. Amin's troops were slaughtering the nation's elephants for ivory for foreign exchange hard currency. And they were slaughtering anyone from the wrong tribe, just to make politics simpler. During those dark times I maintained rare contacts with students at Kampala's Makerere University, once known as the finest university south of the Sahara. The students there lived in dorms. And the dorms had slogans. And these slogans were printed on t-shirts that these students wore to reveal to one another that they still held, deep in their hearts, hope that the sun would someday rise again over a free Uganda.

Once such slogan simply read, "The Struggle Continues." As all of us who have gone to bat over conservation issues know, there are no true victories after struggling to win conservation battles. Instead, unfortunately, each "victory" is only a delay that forestalls the destruction planned by the political powers that be, who often remain intent on grinding up nature's beauty and converting her body parts into cash. But as we also know, should we fail to struggle to achieve such delays, the world will become a far poorer place in which to live.

We have recently seen the scoping process by the National Park Service to "gather" citizen input regarding the shaping of the new Colorado River Management Plan (CRMP). Indeed, many of us gave our input. This "CRMP" title, however, is a bit misleading. The "Management" is not ecological in scope, in the sense of, say, managing natural resources to maintain a natural river and/or river corridor. Instead it is merely allocational with regard to who gets to run the river, how they get to run it, when, and how much. Nor, of course, does the "Colorado River" Management Plan manage boating usage on the entire Colorado River, only the 226 miles of it between Lees Ferry and Diamond Creek.

Even so, Grand Canyon Park's overall scoping process for the CRMP did attract an estimated 15,000 comments from the public. This would have made those students in Kampala green with envy. We here in America are lucky beyond measure that our forefathers considered freedom of speech an inviolable right vital to the democratic process, which admittedly often turns out to be a far messier process to manage

than a dictatorship. So thank you all, regardless of your motives or goals, for participating in this messy process.

The period for comments in this stage of the CRMP has now ended. But you will get another chance to let your thoughts be known once a draft is proposed. When that time comes, remember, the CRMP is supposed to serve *your* best interests, not that of the administering agency.

In the meantime other battles loom. The proposed pipeline and pumping station from Badger Rapid up Jackass Canyon to supply Peabody Coal with water to slurry coal to the Mojave Generating Plant in Nevada almost slipped into reality as a last minute “oh, by the way, we’re going to built this, too” assault on Grand Canyon.

This intended use of this Colorado River water in Grand Canyon was to replace water currently being over-drawn from the vanishing aquifer on Hopi traditional land. Peabody Coal has been advised that a renewed mining contract with the Indians is contingent upon Peabody finding “other” water. Due to the Upper/Lower Basin division drawn up in the 1922 Colorado River Compact and subsequent agreements, this “Indian” water from the Colorado must be drawn from the lower basin, downstream of the Paria. The Navajo perspective on the Jackass location for drawing this water is that the Navajo Reservation runs to the shoreline (if not into midstream) of the Colorado; therefore the pipeline, et cetera, would be situated on Navajo Land subject to the decision of the Navajo Nation. Hence, it should be built.

All that really stands in the way, at the moment, of implementing this decision to use Colorado River water from Grand Canyon National Park solely to facilitate the profits of a commercial mining company many miles east is the “inconvenient” fact that Colorado water belonging to an Arizona tribe would be shipped entirely to Nevada—a currently illegal arrangement.

But top minds (legal ones, anyway) are now working on legally bypassing this illegality. When and if they identify a loophole in this shell game of water rights, the Jackass pumping/infiltration location, or an alternate one downstream of the Paria may suddenly become a *fait accompli*.

Only you can prevent this incredibly dangerous precedent from opening the first sixty-one miles and the final hundred or so on Grand Canyon National Park’s left side from becoming the equivalent of a Gold Rush hydraulic mining site.

Yes, it is up to you.

The struggle continues.

But we, unlike those unfortunate Ugandan

students, possess the legacy of a Bill of Rights. Again, how lucky for us.

On a very different note, if you missed the GCRG Fall Meeting, you did miss out. Tom Moody, former president of GCRG, presented a barely-authorized version of the birth of the association and an insightful grand tour of the evolution of the boatman’s quarterly review. Tim Whitney brought us up to date on the latest resources of the Whale Foundation, a lifesaver for river guides. Scott Rogers reported on the alarming decline in native, endangered fish in Grand Canyon and the ecological challenges we face in rescuing native fauna from the depredations of exotic predators and from operations of the Bureau of Reclamation. The Sierra Club’s Rob Smith briefed us on the legal legerdemain of the Jackass pipeline project. Ranger Mike McGinnis discussed new NPS Commercial Operating Requirements changes and considered suggestions from our guide membership for improvement of said requirements. The NPS’ Jeffrey Cross advised us on the next steps of the CRMP process. Former GCRG President Brad Dimock took us on a fascinating journey into the mind, the boat, and the epic solo journey of Canyoneer Buzz Holmstrom—by doing the thing himself. Chuck Higgins, regional public health consultant for the National Park Service in Denver, took us into the nonexistent mind of the Norwalk virus and presented a well considered epidemiological mystery solved, explaining how the tiny things made so many people sick in the Canyon last June. Dave Edwards and Geoff Gourley presented us with a dazzling but heart-rending romp through the inventive, inspired, and sometimes hilarious life and river-running times of Kenton Grua, GCRG’s visionary founder and twice president. And, finally, Bill Gloeckler’s band rocked the meeting to its roots during the grand finale.

Grand Canyon River Guides extends its thanks to all of the above people, to Lynn Hamilton, Executive Director of GCRG, for her organization and hard work in making the meeting happen and and to Teva for sponsoring our meeting. Our thanks go too to everyone else who donated their time, energy, and heart to our cause.

None of this—the GCRG Fall Meeting—would have come off half so well but for the generosity and dedication of Bruce and Nancy Helin, who again generously provided the facilities of the PRO warehouse for the entire meeting. Thank you, Nancy and Bruce!

Michael P. Ghiglieri

In Memorium

KENTON “FACTOR” GRUA

THESE WORDS CANNOT CONVEY the sweeping extent of our loss at the untimely death of one of our own, Kenton Grua. Kenton, a.k.a. “the Factor”, was a brief, blazing comet of a man whose trailing colors have seared their way into the collective conscience of our souls, forever changing the lives of those who loved the canyon as he did. Some years ago, he was given the nickname “Factor” because that’s what he was—that intangible, undeniable, intensely dynamic factor that you always had to take into account whenever you were with him, be it down river, up a trail—wherever—he was always a factor.

Kenton got hooked on rivers at age twelve on a birthday present trip with his dad down the Yampa through Dinosaur with Shorty Burton as his guide. He knew from that first trip that he wanted to be a boatman, and with an early demonstration of the intensity and conviction with which he lived his entire life, he never wavered from that goal. He started with Hatch River Expeditions in ’69, and then began with Grand Canyon Dories, where he worked most of his commercial seasons.

Always somewhat of a restless spirit, he embarked on grandiose adventures too numerous to count, but with which many of us are familiar—his hike through the canyon in ’76, the speed run on the high water of ’83, founding Grand Canyon River Guides, jumping the chasm at Deer Creek narrows, climbing to the Anasazi footbridge—and on and on—any one of which, taken by itself, is a remarkable feat, but when viewed together, are daunting and awe-inspiring. Yet, it was never the notoriety that he was after—rather, it was the love of the challenge to himself and the desire to endeavor to *do it right*. In fact, he’d rarely mention any of these accomplishments to you unsolicited. You could know him for years and never hear him recount his exploits. And *that* is what I think I’ll remember most about him—his quiet, confident humility.

It would warm his heart to know that what people recall the most is his gentle, loving support that he gave as he worked and learned alongside them, mentored them and championed the river and her needs. But I’m not trying to deify him—nor would he want that—he was a complex, improbable combination of qualities—most endearing, others maddening—all of them forthright and earnest.

I will always chuckle at his incessant “Factorizing”—

deciding to rearrange his hatches just as you’re pulling away from shore, gear scattered all over his decks, with his head below deck, buried waist deep, aware of your departure, but engrossed nonetheless; discussing, impassioned, his theory on the formation of columnar basalt or the origins of the canyon and the now extinct course of the river in her earlier days; his gentle way of encouraging the most apprehensive of passengers up and over a ledge, so that they might behold the splendor of the canyon that he loved so

well; regaling passengers with the history of the canyon and its geology, always ignoble in his delivery, never pretentious; waking up at three A.M. and looking over to see his headlamp on—still on; him rattling around his boat, playing guitar or flossing his teeth or rethinking some project for the thousandth time; his resolute commitment to the mission of GCRG and his unflinching pursuit of what was right for the canyon—not what was right for the outfitters or the privates or the Park Service, but what was right for the *canyon* and for the *guides*, the stewards of that wonderful place.

Selfishly, though I relish my memories of him on the river, my most treasured memories will always be those of Kenton as he was in more recent times. He had

scaled back his trips downstream, in pursuit of the one adventure that had, until recently, eluded him—parenthood. Like a duck to water or a boatman to a rapid, he hit it straight on, with his heart wide open, never happier or more content than when he was playing with his three children. As he did with the canyon, he had the courage to follow his heart and change course in midstream, against all odds, in pursuit of the nourishment that his soul so sorely craved. He had finally done it all, and his peace was obvious to those who knew him.

How fitting that a man who lived life so fully would die in such a perfect way, on a beautiful day, riding down a rolling mountain trail under fading summer skies, and without the slightest hint, slip peacefully from the bonds that hold us here, moving on to that next great adventure. I know I’m not the only one who will miss the sight of that hard, hairy body rowing his dory downstream or maneuvering his motor rig through the Big Ditch. I will remember him as he always was—smiling, intense, and oh, so in the moment. So between now and then, ’til I see you again, I’ll be loving you. Love, me.

Michelle Grua



FRANK WRIGHT was a legendary fast water man, highly respected among those who ran the undammed Colorado River. His guiding career spanned the transitional years of 1948–1957.

Frank was my dad's [Norm Nevills] head boatman, a position he wryly likened to chief cook and bottle washer. River running was a seat of your pants proposition in the 1940s. My dad and Frank had met in Blanding, UT, and daddy had offered to trade Frank a San Juan river trip for mechanical repairs he was doing on one of our vehicles. Frank arrived in Mexican Hat the morning of the launch. He looked around and wondered where the second boatman was because he only saw my dad busily getting the two boats ready. Daddy told him the other boatman hadn't shown up but he knew—he just knew—Frank would make a great boatman! I wonder if he knew how great? At any rate, Frank demurred, so my dad brought out his biggest gun...my mom. In telling me this story, Frank smiled in memory and said softly "Well, you know Doris—how could anyone refuse her?"

In spring of 1949 Frank and I were on a San Juan-Glen Canyon trip together. He would become a constant during my lifetime although I couldn't know that then. After 1949, Frank took time to come see me and also wrote to me throughout the years. The presence of that steadfast man meant more than he could ever know. He had such an air of quiet competence it was easy not to notice his expertise in everything he did—it simply looked easy. He was a pilot, a creative mechanic, a perfectionist boat builder, a fine photographer and a thoroughly gifted river man.

Sandy Nevills Reiff

HE CALLED ME his true friend, loved the fact that I went barefoot, signed his letters "Love ye." What began as an intellectual pursuit attached to an academic project became a very deep friendship between two people separated by age, gender, and religious belief, but joined by a common love for an immense and unforgiving landscape and the way one feels on a boat on a river in a canyon.

He would tell me to begin at the beginning, and the last thing he told me was to write about our friendship.

I was writing a master's thesis on early river-running in the Grand Canyon. Sandy Reiff asked Frank if he would share his memories of these times with me. When he began to speak of the river, the years fell away from his face and the most amazing blue eyes were sparkling and dancing and he was a young man again.

Sometimes when I showed up he would be in the garden, tending his tomatoes, or in the kitchen making his delicious white bread, or in his shed mending a hole in a chickie pail. We would talk for a few hours and then part ways again, sometimes for months or for years. But I always knew I would be welcome, and that he would only gently chastise me for not visiting sooner.

Frank was an honest man, and a loyal man. He hesitated to speak ill of anyone, alive or dead. He cherished his friendships with men and women, especially those who were a little wild. He loved his children and his grandchildren and his great grandchildren. His eyes were saddest when he talked about the son who was gone from him.

I know he missed the river, but he didn't want to go back. Too different now, he thought, too crowded. And although he spent a great deal of time in some amazing places in Grand Canyon, it was the other stories I enjoyed the most—his childhood in the Four Corners, the

time he hiked back to Blanding while building the Abajos road because the crew had consumed all their food save some potatoes, floating with Georgia O'Keefe in Glen Canyon as she painted, the times he spent in Glen Canyon with Tad and Katie. He missed Glen Canyon—one entire wall of his living room was a beautiful print of one of his photographs of Glen Canyon, off-setting the huge picture of the Salt Lake Mormon temple which occupied another wall of the living room. Although he cherished his time in the canyons, he did not romanticize his experience or his times—he often told me that his days on the river were consumed more by concern for his passengers' safety than any spiritual wonderment of the landscape.

Most of the time I miss him more than words can express. I remind myself that now his amazing spirit, as reflected in those incredible eyes, is free of the limitations of his aging body. I remind myself that he was living in a world without his son and without some of his closest friends. I remember everything about all the time we spent together, and I keep a photograph of him, at Elves Chasm on the *Sandra*, very close to me.

Nancy Nelson



L YING ON THE BACK DECK of the *Sandra*, in “fisheye” position—face down, head hanging over the stern, legs spread-eagle in front of the splashboards, toes hooked under the ropes—I feel the change immediately and know, without a glance, that Frank has taken back the oars. The blades cannot be heard entering the water, they slide into the ripples like a kiss; the stern no longer jerks from right to left; one gentle nudge and the boat moves with the river’s purpose, to a channel written for him in Braille on its chocolate surface—doesn’t even have to see it, feels it through the seat of his pants. The blades rise from the water with a motion as smooth and compliant as the breeze against my cheek. Frank rests, allowing the river, the weight and design of the boat to do the work. This is what Norm Nevills meant when he called Frank Wright “a natural.” He was a picture of the dedicated, reliable riverman.

But let this boatman speak for himself:

“From the beginning the rivers gave me a whipping at most every turn. The first one taken with Norm Nevills was a nightmare from beginning to end and the others taken with him weren’t much better: Always under pressure and most of the time too damn tired to care what happened to whom. Never the complete freedom do as I pleased because there was always responsibility whether I liked it or not. My back and arms ached from pulling on oars. I was fooled by the smug grin on the face of the water and sucked into deep holes and into other dangers. I lay awake at night listening to the talking of the waters in the rapids, taunting and defying me to come out and fight! I have held my tongue when people have been rude and thoughtless in their actions and words. And when I tried to fight the river with motors it just laughed and ground up props and other equipment about as fast as it could be placed in the water. I have been cursing the river under my breath at the same time that others have been enjoying the thrills that only a person in a boat on a wild river can experience. I have gone to bed so tired that nothing except a river song and a sky full of stars could give me adequate reasons for ever wanting to see a river again.”

Then, the boatman does an end-o:

“But in spite of all the trouble I have had and the adverse conditions I have had to put up with, the river trips have given me more pleasure and satisfaction than any one thing that has happened in my life—the wonderful people I have met there, the interesting conversations I’ve enjoyed, the many things I’ve learned from others—people helping me to see things from a different angle. Do I need glasses?”

Frank was an “original”, though he professed he never wanted to be a riverman. He was a machinist, a music teacher, a gentle, generous soul who hated conflict, a man of the old school—where a handshake and a few words sealed an agreement. Because of his honesty and responsible nature he was taken advantage of by his church, his business associates and friends. Such things left scars, hurting him deeply, yet rarely if

ever would he let his feelings show, much less express them in words, or take any of his defectors to task. He was a man in his mid fifties, of heavy duty Mormon faith, deep in family responsibilities, always trying to make ends meet. Until the “We Three” trips he’d never had the opportunity to relax on the river, to see it for its true beauty and mystery. Then and there he formed a relationship of thoughtful awareness and genuine love for the place—he began to see-hear-feel the canyon and the river through his own new eyes; then emotions, hitherto held in check, came rushing as he pulled those beautiful scenes from the developer in his darkroom.

“I would like to spend a whole year with you and Tad doing the things that we like to do—run rivers and take pictures in the summer, travel and give lectures in the winter. None of that hurry stuff though! Just enough work to make us appreciate the fun we could have—look what happens to those who work too hard without playing a little—they get heart trouble, don’t they? I still get sick in the tummy when thinking of reasons that could blast the dream Castle and our plans for the 24th to Hell! [our 2nd “We Three” Glen Canyon trip]. Well, anyway I have lived in one for a short time and know what it is like to be really happy and no one can take those happy memories away from us”

Whatever happiness Frank found with us cannot be equalled or even measured against *what he did for us and for so many others*. He was councillor, dearest friend and sole support, all my years on the road from gig to gig; from one end of the U.S. to the other; from one love affair to the next, in and out of two marriages; through triumphs and rejections, there was always Frank. The letters, the photos, the tapes, the phone calls, the *support*—always it came when most needed, in the hardest and saddest of times. Frank never left the oars.

Katie Lee

(Frank Wright’s quotes taken from the Katie Lee/Frank Wright letters file: Sept 29,1953–Sept 19, 2002)

F RANK WAS A CONSUMMATE BOATMAN. One of the stories down through the years came from a trip with Jim Rigg. Frank said they would line Lava Falls and there arose quite a discussion, that it could be run, this was how etc. Frank finally said not a word, but turned, went back upstream, put on his life jacket, got in the *Sandra* and took off. Lava did everything it could to Frank, he remained upright, but went down around the corner through Little Lava before he could get to shore. By the time he worked his way back upstream the remaining boatmen were lining the rest of the boats through. Nothing was said.

Joan Nevills Staveley

FRIENDS AND FELLOW Grand Canyon River Guides mourn the loss of Sabra Lynn Jones, MD who was tragically killed in an accident at Havasu Canyon on August 12, 2002.

Born in Berkeley, CA. in 1957, she graduated with a degree in Physiology from U.C. Berkeley in 1980. Sabra attained her MD on an honors grant from Yale Medical School in 1984, and completed her residency through Georgetown University. She became the only board certified interventional radiologist in the Four Corners area.

Sabra's limitless energy and compassion for the less fortunate was reflected in her medical services at various medical centers on the Navajo Nation and Zuni Pueblo, where she used her special language skills to communicate with patients in Navajo, Hopi, Zuni, and Spanish. She worked with the Gallup Radiologist Group at Rehoboth McKinley Hospital in Gallup, NM until her death.

Sabra also was a board member of Nepal SEEDS (Social Educational Environmental Developmental Services), "providing relief at the most basic grass roots level to some of Nepal's poorest villages." Sabra made several trips to Nepal to participate in these projects. She also completed an eleven day bicycle trip to raise funds for a Mexico orphanage.

In 1973, at the age of sixteen, Sabra completed her first Grand Canyon river trip with her father. Her sense



of adventure and insatiable curiosity kept bringing her back to become more intimate with the canyon. The spiritual centers of her universe became the Nubri Valley, Nepal, home to many SEEDS projects, and the Grand Canyon.

Sabra's openness with people, hardworking can-do attitude, love of life, family, friends, patients, and dedication to her work will be missed by all who came to know her.

She is survived by her mother, brother, and sister. Contributions in Sabra's memory can be made at www.nepalseeds.org.

Steve Boccagno

PATRICK MARK GEANIOUS passed away on Sunday, October 13, 2002, in Phoenix, Arizona. He had been ill with cancer for a year and a half.

Patrick was a Grand Canyon river guide with over 150 trips. He made his last run in June and July 2002, running every rapid in spite of the, at times, nearly debilitating symptoms associated with advanced metastasized melanoma. Patrick exhibited incredible courage and strength throughout this trip.

Patrick came to the River in 1979 and ran trips for the next 23 years. He was a favored running mate and a favorite with the passengers. Patrick's legacy lives on in the careers of the numerous boatmen he introduced to Grand Canyon River running. He mentored a dozen or more into the avocation he loved so much.

Patrick graduated from Eureka High School, Eureka, Illinois, in 1973 where he excelled academically and lettered in football, baseball, and wrestling. He attended Western Illinois University from 1973 to 1975, and graduated from the University of Illinois at Urbana in 1978 obtaining a Bachelor's degree in Zoology.



In 1996 Patrick earned a Master's degree in Occupational Therapy from the University of Washington, Seattle. For the past six years Patrick had worked in several Phoenix Elementary School districts, doing physical therapy with grade-school students with severe developmental and physical disabilities. Patrick felt that helping children cope with and overcome their disabilities was one of his greatest and most cherished achievements.

He is survived by one sister, Mary Beth Geanious and three brothers: Michael, Patrick and Chris.

Patrick, Michael, and Chris all worked as commercial guides in Grand Canyon and ran many trips together during the 1980s and '90s. The Geanious brothers have logged over 600 trips through the Canyon between them. They had the good fortune to run together again this summer during Patrick's last trip.

A memorial fund has been created in Patrick's name to benefit disabled children in Arizona including those he worked with. Send donations to:

Patrick Geanious Memorial Fund
166 Chaco Trail, Flagstaff, AZ 86001

Chris Geanious

NATHAN MARSTON

NATE WAS A Dock Marston grandson; he loved the River. When your grandfather, grandmother, and father are all among the first hundred river runners, there is an overwhelming heritage that draws you to something so wonderful as the Canyon.

He loved it, however, in his own way. It gave him peace and a sense of being. He wanted to be a part of the canyon and loved its natural beauty, changes in the river itself, and how people influenced its future.

Nate's one Grand Canyon trip was the family charter in 1992. He loved every minute of the twelve days. At the end of the trip ten Marstons had run the river.

Nate was diagnosed with a form of bone marrow cancer called Multiple Myeloma in 1996. He was not able to take part in the family trip on the Salmon in 1998, but his wife Dianna and daughters Kaela and Sorrell were on the trip.

The next Marston Grand Canyon trip was 2001 and Nate's health had deteriorated significantly. Although there was a chance that he would not see her again, Nate insisted that his daughter, Sorrell, go on the trip. She grew up on the trip and "lived" on the paddleboat. At the end of the trip, fifteen Marstons (four generations) had run the river. Kaela chose to stay home to be with her father, but promised to go down the Grand Canyon soon. His wife, Dianna and Kaela,



are committed to make it seventeen.

Nate was proud of his grandfather's research in the canyon and wanted to finish some of his work while recovering from his stem cell transplant.

His goal was to

research the River, read, and complete his grandfather's work, and help people see the River as it was, where it is today, and its future. The disease would not allow Nathan to white water raft the canyon any longer but the prospect of research and helping to finish some of his grandfather's work gave Nate the strength to go through his treatment that offered him the best chance to overcome cancer. The river is many things to each person, but for Nate it was its natural beauty, the strength of the water, side canyons, wildlife, flora and fauna, its history, geographic formation, and cultural history.

Nate died on May 17, 2002, peacefully with his family around him.

Dianna Marston

WILLIS JOHNSON

WILLIS JOHNSON was picking watermelons in Green River, Utah, When Buzz Holmstrom and Amos Burg floated into town in search of a helper. The story goes that Willis began campaigning for the job by showing up each evening, telling them grand stories, then leaving before he could finish the tale. They took him on to find out how the stories ended.

Johnson proved a strong helper, steady cameraman, and steadfast friend on the trip, and joined Holmstrom the following year for his uprun of the Snake River. He then rowed the Middle Fork of the Salmon with Burg, Doc Frazier, Frank Swain and several other Vernal boaters. Although Johnson spent the majority of his years as a miner, he continued to run the San Juan, Glen Canyon and the rivers of Idaho whenever he could.



Johnson, who died in his sleep on July 21, had been suffering from Alzheimers Disease for the last few years. He had been to a family reunion in Salt Lake City that afternoon. As his sister Cora Lee Johnson

describes the afternoon, "He didn't respond much to anyone. I don't think he moved too much. But one of the nephews said to him, "Uncle Willis, are you about ready for a river trip?"

And he threw both his his arms in the air and said "Yes, river trip, river trip!"

Brad Dimock

Whale Foundation Liaison Program and List

THE WHALE FOUNDATION'S LIAISON PROGRAM is ready to go! The program was created to provide a personal link between the river community and the Foundation's services. We're happy to announce the first round of Liaisons have undergone a full day of training with licensed therapist Sandy Reiff and are ready to serve.

The training is provided to assist Liaisons with recognizing signs and symptoms of depression, dealing with a potentially suicidal person, and helping folks recover from post-traumatic stress syndrome. Perhaps you, or someone you know, simply need a shoulder to lean on, a compassionate ear, someone who understands the challenges guides face on their days off river. The Liaisons have volunteered to serve as friends and listeners. They are aware of the Whale Foundation's programs of support, recognize the confidential nature of their role, and able to offer suggestions or options for successfully navigating the off-river season.

As we move into winter, a time when many of us are confronted by the harsh realities of life off the river, we wanted everyone to have access to the list of Liaisons, their emails and phone numbers. We plan to have volunteers from each company and a few freelancers trained and available, but don't feel locked into calling the Liaison who represents your outfitter or hold back talking with someone because your representative has not yet been trained. Contact any Liaison with whom you feel comfortable. If you do not receive a response within 24 hours, please contact someone else on the list, or the Whale Foundation directly.

If you are interested in becoming a Liaison, please contact the Whale Foundation. Our next training session will be in Flagstaff, Friday, Jan 17th, from 9-3.

We are very grateful to everyone who's taking part in this program. Have a happy, healthy, successful winter!

The Whale Foundation, PO Box 855, Flagstaff AZ 86002-0855, 866-773-0773 (toll free) www.whalefoundation.org

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The First Annual Whale Foundation Wedding

THE WHALE FOUNDATION (WF) is planning its first fundraising extravaganza to help fund our efforts to support the Grand Canyon guiding community and celebrate the joy of our connection to one another! The First Annual WF Wingding will be a wonderful dinner/dance party—with live and silent auctions, plus a raffle—held at the Coconino Center for the Arts in Flagstaff on Saturday February 8, 2003

from 6-11 P.M. Currently we're planning the "mother of all potluck dinners", a cash bar, live music and a stunning array of boatman art and talent. If you'd like to donate an art piece or service, or volunteer to assist us with organization and set-up, please contact us! Admission is free. So, invite all the right people, bring your rich uncle, come feel the love and dance the night away!

Things to Remember on the River Trip of Life— Waltenberg to Diamond Creek

THIS IS THE SECOND HALF of a collection of health tips from the Whale Foundation. Let's go down now from Waltenberg to Diamond Creek. Hopefully these bits of advice will prove helpful.

As we get older we have to work harder to be healthy-and that usually means two things-better diet and exercise.
Exercise gives you more energy.
Exercise helps you sleep better.
Run or hike different routes.
Don't run through pain from injury
Obesity prematurely ages your weight-bearing joints.
Increased physical activity helps in many ways; blood pressure, weight, heart, bones, blood sugar and risk of falls.
Drink lots of water.
Be your own dietician.
Don't drive after drinking.
Extra calcium and vitamin D for women over forty.
Yogurt.
Be careful of tequila.
Saturated fats from butter, margarine, fatty meats, high fat dairy products and fast foods are not beneficial.
Omega 3 fats from salmon, mackerel, tuna, canola and flaxseed are beneficial.
Too much alcohol increases the risk of breast cancer and osteoporosis as well as liver disease.
Don't chew tobacco.
Avoid anabolic steroids.
Be wary of creatin supplements.
Use antibiotics wisely.
Eye exams periodically after age fifty.
Ask your doctor about daily low dose Aspirin over age fifty.
Have your blood pressure checked if you're 35 or older or have a family history of it.
Have a pelvic exam and Pap smear periodically.
Bone density test after menopause.
Have blood lipids checked by age 35.
Have a prostrate specific antigen blood test at age fifty and after.
If you take Ibuprofen or other anti-inflammatory drugs in large doses over a long period have a blood test to monitor your liver and kidney functions.
Have someone to share feeling with.
Don't obsess over things you can't change.
If you feel isolate, depressed or unable to cope, tell someone.
Remember Whale Foundation's help line: toll free 866-773-0773.
If you're stopping an anti-depressant such as Prozac or the like, taper down over two weeks or more.

Avoid bar fights.
Stay out of jail.
If you're in jail, get a corner bunk.
Learn CPR and other levels of emergency medical care.
Wear layer is cold layer.
Be careful on ice.
Don't shovel heavy snow in cold weather.
Be leery of motel jacuzzis.
Avoid cat litter exposure if pregnant.
Avoid deodorant vaginal sprays.
Cut toenails straight across.
Cut toenails before long downhill hike or run.
Don't go in a sauna if dehydrated after strenuous exercise.
Don't use decongestants or drying agents for sinus infections in our dry climate.
Blow your nose in the shower to clear your sinuses.
Sleep is good.
Try to make your sleep schedule consistent.
Use bedroom only for sleep and sex.
Ski under control—sort of.
Don't set bindings too tight.
Don't take golf too seriously.
Avoid exposed open areas during a lightning storm.
If you can't, hike with someone taller than you.
Get in a low hollow place during lightning.
Avoid real heavy weight lifting.
Lighter repetitive lifting is better.
Don't do sit-ups with legs out straight.
Never sit more than two hours-in car, plane or raft.
Wear ear protection when shooting.
Be careful with real loud noise.
Country music is good.
Make sure your ergonomic set-up is good at your computer.
Don't pass over a solid yellow line.
Don't dive into unknown water.
Be cautious around dogs you don't know.
Don't put your body in the middle of a dogfight.
Don't run or hike in the woods during hunting season.
Oil in the ear canal if a live bug is driving you crazy.
Watch for black widow spiders in woodpiles or basements.
Read the fine print and learn how to utilize your health insurance.
Have the courage-and determination-to change.
You're never too old to change habits or try to be healthier.
Seek diverse friendships.
Guts feelings are usually worth listening to.
Make sure the cure isn't worse than the disease.
"Do unto others as you'd have done unto you".
Pick your battles,

Listen to your body,
Accomplish something every day,
Exercise for your needs,
Remember rest, ice, compression and elevation for acute sprains or strains,
Leg cramps when hiking or running can result from lack of conditioning, dehydration or electrolyte problems,
Ice sore joints after exercise,
Use arch supports or shoes with a good arch if you have foot pain,
Wiggle feet up and down on arising to stretch Achilles' tendons,
Walking is excellent-especially at a brisk pace,
Exercise with a good friend-human or canine,
Exercise at least thirty minutes at least four times a week.
Good posture habits.
Yoga.
Massage.
Glucosamine/chondroitin can help degenerative arthritis.
Don't rely on water alone in extreme heat; electrolytes help.

Don't forget the ultraviolet exposure to your eyes and skin on water or snow.
Apply sunscreen twenty minutes before exposure.
Keep an eye on your skin for changes.
Moderate aerobic exercise can lower blood pressure and elevate HDL (good) cholesterol levels.
Minimize greasy foods.
If you're a vegetarian, be a conscientious one—make sure you're getting enough protein, iron, vitamin sources, etc.
Wash fresh fruits and vegetables.
Use vegetable oils for cooking.
Cook with a pal.
Visualize positive outcomes.
Do good deeds when you can; you'll benefit from it.
Share feelings, that means you, guys.
Moderation in all things—except moderation.
Healthy is more fun than unhealthy.
That's it; better make the pull-in for Diamond.

Walt Taylor, M.D.



Sandra Vlock

Nefarious Schemes

WE TAKE IT FOR GRANTED that national park status affords protection from resource exploitation. We can't imagine in our wildest dreams that an industrial project could be built in the Grand Canyon. Yet the unthinkable almost happened, and still may.

In late September, Grand Canyon River Guides heard a rumor about a pipeline project proposed for Jackass Canyon. We contacted Southwest Rivers who in turn steered us to Rob Smith, the Southwest Director of the Sierra Club, for substantiation.

As background information, the Bureau of Reclamation was asked by the Bureau of Indian Affairs to find a source of Colorado River water to be used to slurry coal to the Mojave Power Plant in Laughlin, Nevada. Previously, the water had been pumped from the Hopi N-aquifer, but with their springs and streams jeopardized, pressure was on to find an alternate source. The Hopi Tribe gives Peabody Coal Company until 2005 to find an alternative to pumping from the aquifer or lose its right to mine coal on reservation lands when the current contract expires.

Enter Senator Jon Kyl. Using the end of the legislative session to his advantage, Senator Kyl quietly added language for a major water development in Grand Canyon onto an unrelated bill that sought to resolve water rights for the Zuni Tribe and other water uses on the Little Colorado River. Full environmental review would not be required, according to another of the bill's changes. No public hearings. No public notice. No environmental review. Unbelievable.

The amended bill would have authorized water to be leased to the Salt River Project (SRP) and removed from the Colorado River "between Lake Mead and Lees Ferry" to be used "only for mining related purposes... and for slurrying coal from the Black Mesa and Kayenta mines". Therefore, this water development project should not be confused with other "pipelines" proposed for Northern Arizona that would bring water to dry communities in the region. It is clearly industrial infrastructure dedicated solely to the current and future needs of the non-renewable fossil fuel industry.

To add fuel to the fire, the Bureau of Reclamation conducted an appraisal study concentrating on the mainstem of the Colorado River within the lower Colorado River Basin below Lees Ferry. The specific location of the proposed infiltration gallery (pumping station) would be at the debris fan of Badger Rapid (River Mile 8) at Jackass Canyon. The pipeline itself would go up the side of the canyon, across the Colorado Plateau and the Echo Cliffs to the Peabody Coal Mine. The study finds "no fatal flaw" with the proposed location despite clearly

admitting to the following facts:

- The potential exists for wildlife disturbances, loss of recreational opportunities (hiking, fishing, camping), scenery loss and noise pollution.
- "The area through which the proposed pipeline may be constructed is rich in prehistoric and historic cultural resources going back perhaps as far as 10,000 years. A project of this magnitude will have an adverse affect on cultural resources". (Page 40, Bureau of Reclamation Appraisal Study).
- This portion of Grand Canyon would have to be withdrawn as "potential wilderness" as the proposed use is inconsistent with wilderness values.
- The study would also have serious ramifications for the boundary of the National Park. In fact, it could ripple into a national park de-designation of a substantial section of Marble Canyon. (Note: Although the boundary has been disputed by the Navajo Nation, the Solicitor's Office, Bureau of Land Management and National Park Service have all agreed that the park boundary is the east rim of the river canyon, about 700 feet above the river here, and the Navajo Reservation's western boundary is a quarter mile from the Colorado River. Despite evidence to the contrary, Senator Kyl continued to contend that the area was not within the boundary of Grand Canyon National Park).

Grand Canyon River Guides joined many other environmental organizations in emailing action alerts to as many members as possible, lacking time for a wider alert by mail with the bill rapidly coming up for consideration. The overwhelming volume of calls Senator Kyl received appeared at first to prompt him to remove the "offending language" from the bill. A few days later it was in there again, and not shortly thereafter, removed once more. It was enough to make our heads spin and confusion reign. Is it in? Is it out? Did we win? What's happening?

The end result is that the Zuni water bill passed by itself without the pipeline amendment, however the issue is far from dead. In actuality, the language was pulled from the bill because the Central Arizona Project (CAP) objected to transferring Arizona water to Nevada. Senator Kyl has given every indication that once this "technicality" is worked out, the proposal will once again be considered in the coming year.

We have included for your review the letter that Grand Canyon River Guides crafted and sent to Senators Kyl, McCain and Bingaman. To date we have no response. Your voice is needed as well. This project

mustn't be allowed to resurface. We urge you to continue contacting these Senators and put forth your objections to this pipeline proposal within a pristine area of Grand Canyon National Park. Their contact information is as follows:

- Senator Jon Kyl at (202) 224-4521 or you can email him by accessing his website at <http://kyl.senate.gov>
- Senator John McCain at (202) 224-2235 or by email at john_mccain@mccain.senate.gov (Note: Senator McCain should be thanked for his continued protection of Grand Canyon and urged to help find alternative, sustainable solutions).
- Senator Jeff Bingaman (Chair, Energy & Natural Resources Committee) at (202) 224-5521 or by email at

senator_bingaman@bingaman.senate.gov (Note: Senator Bingaman is an environmental friend and his committee has jurisdiction over national park matters.)

We want them to know—we're watching and we're ready to defend Grand Canyon...

Lynn Hamilton

SOURCES: "Peabody Coal/Black Mesa Mine Water Supply Appraisal Study", prepared by the Bureau of Reclamation, Phoenix Area Office/Phoenix, AZ and Technical Service Center/Denver, CO—Preliminary Team Draft, September 2002.

GCRG's Pipeline Comments

Below are the comments submitted by GCRG to Senators Kyl, McCain and Bingaman on October 15th, 2002 regarding the proposed pipeline project in Grand Canyon (Badger Rapid/Jackass Canyon site). To date, no response has been received. The latest word is that the "offending language" is no longer in the Zuni water bill. However, the Bureau of Reclamation appraisal of the site unbelievably finds no "fatal flaw" so the threat may indeed reappear in 2003 if Senator Kyl can figure out how to resolve some technicalities. Our initial email action alert had such an enormous effect that Kyl's office actually begged people to stop calling. If they insist on pushing this proposal again, they "ain't seen nothing yet"! So, get informed by reading the article by Michelle Grua in this issue. We'll be ready, waiting and watching!

GRAND CANYON RIVER GUIDES, INC. (GCRG) was founded in 1988 to provide river guides with a collective voice regarding resource management issues in Grand Canyon National Park. Our non-profit 501(c)(3) educational and environmental organization is made up of over 1,900 river guides and river runners who care deeply about Grand Canyon and the Colorado River. Although larger organizations may address broad environmental issues in the Grand Canyon and the Colorado Plateau region, only GCRG focuses solely on the current issues of the Colorado River corridor through Grand Canyon.

Grand Canyon River Guides strongly opposes the amendment to congressional bill S.B. 2743 proposing the construction of a pumping plant and pipeline within Grand Canyon. Towards that end, we urge you to prompt the Bureau of Reclamation to abandon their appraisal of the Jackass Canyon/Badger Rapid area for this proposed project. The Colorado River in the Grand Canyon should not be used as a water source for development and industrial infrastructure.

The area in question is currently part of a boundary dispute, and this type of construction would have serious implications for the final resolution of the boundary, as well as setting a precedent concerning resource exploitation within the National Park System. A pristine area of any National Park should not be sacrificed to industrial development for the sake of expediency, while alternative and sustainable solutions are out there waiting to be explored. Arizona's Grand Canyon is a World Heritage site and the jewel of the U.S. National Park System that should be protected and preserved for all generations to enjoy.

We strongly encourage you to remove this amendment from the Zuni water bill. A source of water should be identified somewhere other than within the Grand Canyon. Construction of this magnitude, with its implications for the boundary and the National Park, should be considered separately, on its own merits, not as a small part of a settlement resolving water rights for the Zuni tribe and other water users on the Little Colorado River. The National Environmental Protection Agency (NEPA) process was created just for this type of proposal, and a full-scale Environmental Impact Statement would be necessary to fully judge and compare both the long-term impacts and potential benefits of an alternative that planned to construct pumping stations and pipelines within the National Park.

We are cognizant of your commitment to the preservation of Grand Canyon's natural resources and cultural heritage. Grand Canyon River Guides shares that commitment, and we trust that you and your staff will do what is right for Grand Canyon and the Colorado River. We would like to hear from you by October 20th so we can inform our membership of your position.

*The Officers and Board of
Grand Canyon River Guides, Inc.*

2002 Debris Flows and Floods in Grand Canyon

GIVEN THE ON-GOING DROUGHT in the Southwest, the summer of 2002 wasn't expected to have many floods or debris flows in Grand Canyon. The general failure of the summer monsoon this year confirmed that it shouldn't be an active season. That all changed during and following September 7th, when several important debris flows occurred between the mouth of the Little Colorado River and Phantom Ranch. More widespread streamflow flooding caused significant changes over a wider area, and the Little Colorado River had one of its largest summer floods in a long time, peaking at about 11,500 cubic feet per second (cfs) on September 11 and pushing the Colorado River up to 21,500 cfs. Following the record debris flow season of 2001 (Fig. 1), the combined effects of the 2001-2002 debris flows changed debris fans along the river corridor more than at any period we know of since perhaps 1966.

The storms of September 7th were monsoonal only in the sense that they occurred during the summer. The Arizona monsoon generally consists of a mixture of moisture generated from the Gulf of Mexico and the eastern North Pacific Ocean. This moisture travels into Arizona guided by several large-scale circulation features, including high-pressure systems that set up over the Midwest and the Caribbean Sea (known as the Bermuda High). This summer, those guiding systems sent most of the summer's moisture into New Mexico and west Texas, leaving us dry for much of August. What happened on September 7th was very unusual: a frontal system from the Pacific Ocean drew in low-level moisture from two tropical cyclones, one west of Baja California and one just southeast of its tip. This potent slug of moisture caused widespread rainfall in Arizona between September 6th and 10th.

The storm resulted in what appears to have been a debris flow at Sheer Wall Rapid and eleven debris flows between Lava Canyon and just upstream of Grapevine Rapid. Most of these debris flows came from river right, and many of the tributaries, or at least their contributing areas, were relatively small. Between 1984 and 2001, when debris flows have been counted in Grand Canyon, an average of 4.6 occurred per year (Fig. 1). The 2001 summer season had the highest annual total with fifteen. The 27 debris flows in 2001-2002 have left a mark on Grand Canyon that will remain at least until another significant flood is released from Glen Canyon Dam. These flows caused changes to at least seven riffles or rapids, although none of these changes are significant to navigation of the river; eliminated one heavily used camp (lower Rattlesnake Camp); and created several low-water sand bars that may be useful if flow releases remain low.

The largest debris flow in 2002 occurred at Unkar

Rapid. Unkar Creek spewed a large amount of cobbles and boulders onto its debris fan, raising its surface by perhaps as much as six feet. Most of the new deposition is on the upstream side of the debris fan and away from the beginning of the rapid, which appears to be unchanged. Something similar occurred at both Sheer Wall Rapid (from Tanner Wash on river left), except in that case flow around the left side of the debris fan has been choked off and a small sandbar has formed directly under the waterfall in the canyon's mouth. Finally, a debris flow caused significant aggradation on the small debris fan on the left side of Sockdolager Rapid. This debris flow, the second from Hance Creek in three years, left levees that are quite visible to those bold enough to take their eyes off the whitewater looming below.

A small but highly significant debris flow occurred at lower Rattlesnake Camp. The river grapevine reports that a private trip with a number of long-time Grand Canyon guides was camped at the lower beach that gets first shade in summer. They took a hike in the rain and returned to find their camp demolished, with the kitchen and their kayaks blown out into the river. Fortunately, no one was hurt at the time and their motorboat was undamaged, although if they had been in camp injuries and or death would have been likely. This debris flow barely reached the Colorado River but deposited considerable sediment throughout the camp, including some boulders up to nine feet across.

Smaller debris flows occurred at Lava Canyon, constricting the right side of Lava Canyon Rapid but not

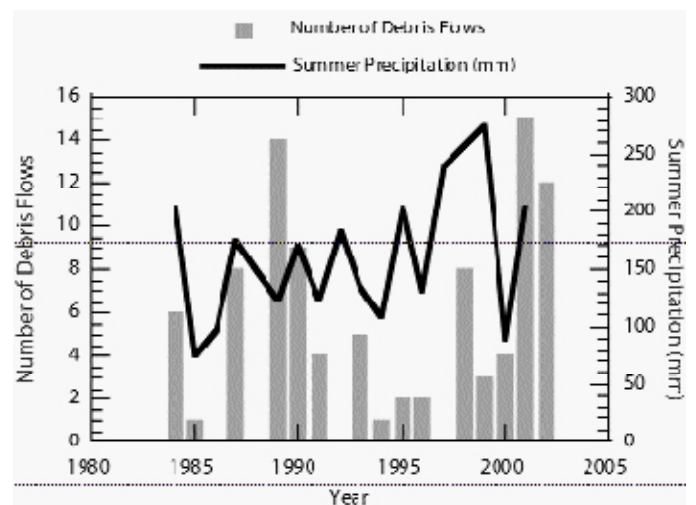


Figure 1. Number of debris flows in Grand Canyon, 1984-2002, compared with summer precipitation at the South Rim.

changing the run; at Basalt Canyon, increasing the drop through a previous riffle; at the Forbidden Zone across from Cardenas Creek, where an upstream canyon deposited a small new debris fan and the downstream canyon (mile 71.2R) reconnected a small island with the right bank; at a previously fastwater reach at mile 73.9, creating a small rapid; at the riffle at the mouth of Escalante Creek, shifting the channel from the right side to the center; and at the second riffle downstream of Sockdolager Rapid, creating a sizeable new rapid that is quite startling. Innumerable mass movements that can only be described as “wet avalanches” occurred between Hance and Grapevine Rapids, including a really interesting saturated slope failure on the left side just below Hance. Check that one out on your next trip.

Several significant floods occurred in tributaries this year as well. Two—at Carbon Canyon (mile 64.7 R) and Blacktail (mile 121 R)—caused changes to heavily

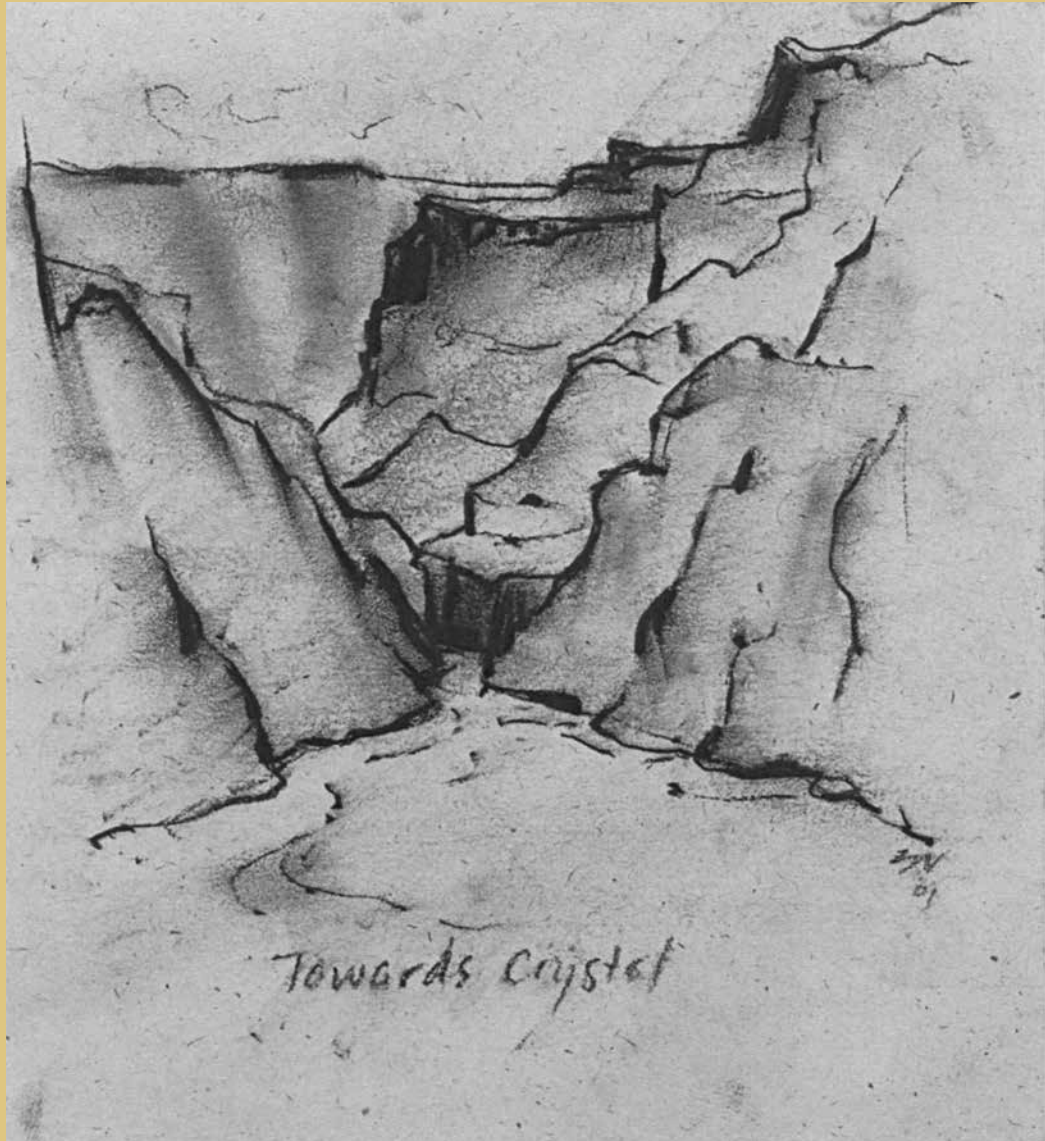
visited sites. The Blacktail flood was one of the few that occurred in July, when a brief period of thunderstorm activity affected Grand Canyon. The September 7th storm affected a broad area, including Lees Ferry and most of the left-hand tributaries from 60-Mile Rapid down to Palisades.

On your next Grand Canyon trip, expect to see lots of new, low, muddy sand (if releases remain low) and enlarged or changed riffles or rapids from Lava Canyon Rapid to Grapevine. You might want to keep in mind that the lower Rattlesnake Camp has been eliminated from the camping choices between Unkar and Hance.

*Bob Webb and the USGS
debris-flow monitoring crew*



Sandra Vlock



Sandra Vlock

Grand Canyon Trust CRMP Comments

THERE ARE AS MANY perspectives on the Colorado River Management Plan (CRMP) as there are concerned individuals involved in this important process. For those of you interested in what the Grand Canyon Trust has to say, you can view their CRMP comments on their website. They will be posted on the Grand Canyon Trust's home page, www.grandcanyontrust.org; just click on the "What's New" section to view a PDF file.

The Trust's comments focus on ecosystem health—why the situation is so dire and what the Park must do to improve it. In the Trust's words, "While much is made of such issues as allocation, the steady and precipitous decline of the health of the Colorado River as it flows through Grand Canyon is the single crucial issue that must be addressed now and cannot wait until another day." So get informed!

Coincidence?

ON JUNE 17, 1902, Congress passed the Reclamation Service Act. Three months and six days later, on September 23, John Wesley Powell died.

Norwalk Talk

THE NORWALK VIRUS and the fact that it made more than 130 Grand Canyon river runners sick this last summer garnered national attention with press in major newspapers and through the involvement of the Center for Disease Control (CDC). New reports show that water flowing into the Colorado River from the sewage treatment plant inside Glen Canyon Dam may be the culprit. Ironic to be sure. As many of you know, and too many have experienced first-hand, the Norwalk virus is a highly infectious agent that causes acute gastrointestinal illness. While most healthy adults recover within 24–48 hours, it can pose health risks for the immuno-compromised, the elderly and the very young.

Chuck Higgins, the regional public health consultant for the National Park Service in Denver, recently addressed attendees of the Grand Canyon River Guides Fall Meeting on November 2nd. Chuck informed us that work is now underway to break down the genetic code of the viral strains found in the river and in the treated wastewater to see if they match. Should the virus prove to be resistant to the level of chlorine used in the wastewater treatment plant, there will be ramifications—from the way that water is treated, to the way river guides filter their water while on the river. It may have national implications as well since Norwalk-type viruses are commonly present among the general population.

Much more work will be done in the ensuing months to substantiate the source as well as develop protocols for prevention. The Park Service will be working together with the Coconino County Health Department, the Grand Canyon river outfitters, and members of Grand Canyon River Guides to mesh science with practicality and feasibility as much as possible. Look for more information in upcoming BQR's and at the spring Guides Training Seminar. The heat is on to finalize their findings and review all public health related practices on the river before the start of another river season.

If you are interested in viewing the preliminary summary of the outbreak investigation, you may contact the GCRG office for a copy of this scintillating document. We'll be in touch!



A Wilderness River

IN HIS FALL BQR ARTICLE, *Wilderness, Motorized Rafts, and the Grand Canyon*, Mark Grisham provides a creative, outfitter's version of the wilderness history at Grand Canyon. Below I'll attempt a less-creative, river running conservationist's version and address some of his relevant points later. The significant issues at hand are the importance of Wilderness to the future of the Canyon and its implications for guiding.

Grand Canyon River Guides, first and foremost, is dedicated to "Protecting the Grand Canyon." Wilderness provides the highest level of protection afforded by any land designation. No other classification protects public lands, national parks included, better. In fact, none comes close.

Congress passed the Wilderness Act in 1964,

In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States... leaving no lands designated for preservation and protection in their natural condition...

Congress' motivation was simply to "secure for the American people of present and future generations the benefits of an enduring resource of wilderness" free from the encroachments of a hurried, noisy, ecologically destructive industrial free-for-all.

Congress also recognized that wilderness designation provides an important layer of protection not guaranteed by National Park status alone. It required the National Park Service to inventory all roadless areas, including Grand Canyon, for wilderness suitability and provide interim protection of wilderness character. One needs only to drive to the South Rim to experience the full potential for urbanization in a "protected" national park. Wilderness' most obvious benefit is the prohibition of development including roads, administrative or commercial buildings, power lines, suspension bridges, cable cars, etc.

A second wilderness benefit, the mandate to provide "outstanding opportunities for solitude and a primitive and unconfined type of recreation," is often referred to as the "wilderness experience." Within wilderness, the agency is required to provide recreational opportunities by first protecting the wilderness' ecological integrity, and secondly limiting, when necessary, the frequency of encounters between individuals and groups. On the river this can be accomplished through group size and launch limits grounded in ecological and social science research. This approach allows the individual to derive her or his "experience" based on an intact ecosystem free from crowds.

The Wilderness Act defines wilderness as "an area of undeveloped Federal land retaining its primeval character

and influence...which is protected and managed so as to preserve its natural conditions..." This third benefit, the mandate protecting natural abiotic processes such as flooding and fire, as well as biotic integrity, provides the legal framework for protection and restoration of native species. Ecological and experiential protection benefits of wilderness are tied directly to the minimum requirement concept discussed below.

Wilderness is defined as "an area where the earth and its community of life are untrammelled [uncontrolled] by man..." Wilderness "management," an apparent contradiction of terms, applies only to human induced influences that impair wilderness character. Recreational use often creates the most conspicuous impacts, but human activities such as predator control or fire suppression (or dam construction) often result in widespread ecological degradation. Short-term intervention, such as prescribed burning, predator reintroduction (such as wolves or pikeminnows) or modification of dam operations may be necessary to restore naturalness. Long-term preservation requires naturally ignited fires to burn on a landscape scale, protection of all native species in natural patterns of abundance and distribution, and, perhaps, dam removal.

In wilderness, it is imperative that any management intervention in natural processes or visitor experience consist of the minimum necessary to achieve explicit, mutually agreed upon goals conforming to law and a management plan subject to public scrutiny. This means that if an action is deemed necessary, such as restoring natural fire or reducing recreational impacts, the agency should consider the least invasive methods first. This rigorous application of the precautionary approach (do no harm) allows for necessary action, but avoids heavy handed, irreversible management techniques. This fundamental tenet of the minimum requirement concept is the cornerstone of wilderness management and it applies to all administrative actions conducted in wilderness.

In summary, wilderness protection provides the best long-term assurance for the full spectrum of natural process to operate freely while allowing the greatest opportunity for individuals to explore that environment without impairing it.

Of course, only Congress can actually designate a wilderness area. While this hasn't happened yet at Grand Canyon, Congress also implicitly "designated" in 1964 roadless portions of Grand Canyon and all other similar National Park units as wilderness study areas. Grand Canyon produced a valid wilderness proposal submitted to the Secretary of Interior. National Park Service policy requires that "proposed" wilderness areas be managed the same as designated wilderness and with the expect-

tation of eventual wilderness designation (USDI 1999, Section 6.3.1). Until Congress addresses the wilderness question through legislation, the Park Service is required to manage most of the park, including the Colorado River as wilderness.

Prior to completion of the current wilderness recommendation, the Park Service allowed a substantial increase in use. After the Wilderness Act was passed in 1964, visitor numbers on the river burgeoned from about 550 people annually to nearly 10,000 in 1970. The agency recognized the need for new regulations to counteract the resulting degradation and embarked on a two and a half million dollar, ten-year river-wilderness planning effort (USDI 1970:8; 1980). In 1980 the agency produced a plan that conformed to wilderness experiential and ecological standards by spreading out most use over six months, reducing group size, and phasing out motors. Motors are prohibited by the Wilderness Act (Section 4(c)). It also increased the commercial allocation by about eighteen percent in order to facilitate the transition from motors to oars.

In response, outfitters convinced Utah's Senator Hatch to insert an amendment to the 1981 Department of Interior appropriation bill withholding funds necessary to implement the 1980 river plan. Although the legislation applied only for 1981, the Park Service's upper echelons disregarded the Wilderness Act, its own regulations and policies, ecological and experiential protection, and extensive public involvement. The result was the 1981 river plan that institutionalized crowding and congestion, increased use, and motors, and avoided hard decisions regarding ecological impacts from dam operations and recreational use.

The Park Service is currently revising its Colorado River Management Plan (CRMP). Two big issues, wilderness protection and non-commercial access will have to be addressed. The non-commercial folks have a twenty-year waiting list to get a trip, and large groups, dam operations, motorboats, and helicopter exchanges continue to impact the Canyon's ecological and experiential aspects. Although most conservationists' concerns lie with continued impacts to the Canyon's ecological and experiential aspects, the overriding concern for the 29 million-a-year river running industry is the prospect of phasing out motors.

In his BQR article, Mark Grisham states wilderness advocates endorse substantial reductions in commercial use. Neither the Grand Canyon Wilderness Alliance (representing five million members), the Arizona Wilderness Coalition nor the Sierra Club have endorsed any such proposal. Achieving wilderness goals by reducing recreational impacts through reducing group size limits and spreading out use, and phasing out motors does not demand a reduction in the number of visitors enjoying the river (see *Wilderness and the End of Guiding*, BQR Volume 13, No.1). The current CRMP process allows

us the opportunity to explore a range of alternatives regarding ecological protection and access issues.

Mark further asserts that "motorized trips are the principal reason why Grand Canyon river trips are accessible to a very broad range of the general public, from young children to the elderly, to those with even severe disabilities..." Actually, professionally guided trips, oar or motor, provide access to those who don't know how to run the river (or don't know people who do) but can afford that service's cost. Commercial trips are expensive, affordable principally to society's upper income levels. For example, about fifty percent of passengers surveyed make over \$100,000 a year, an economic elite representing about eight percent of American society (Hall and Shelby 2000; Jonas 2002). Suggestions that commercial trips, motor or otherwise, provide "greater and broader public access" are disingenuous at best. While opportunities for expanding access to currently disenfranchised publics exist (see Crumbo 1998), the industry has yet to seriously promote real improvements in access for these groups.

Wilderness designation would assure the highest level of protection of the Canyon's ecological and experiential treasures. It would not decrease and would probably increase the opportunities for the broadest range of access for the American public. Guiding opportunities would remain and the "unique spirit of the river community" could celebrate for decades knowing we did our best to preserve the Canyon we cherish.

Kim Crumbo

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The Changing Rapids of Grand Canyon

IT COULD BECOME A GREAT Grand Canyon trivia question: historically, which rapid had the greatest rise in elevation at its head? Many informed people would reply that it must be Crystal Rapid because of the infamous 1966 debris flow that changed a riffle into a monster. More recent evidence suggests it could be Lava Falls, which had six debris flows between 1939 and 1995. The answer, which may surprise you, comes as a result of a major advance in our ability to monitor changes in rapids in Grand Canyon. We've learned how to compare airborne survey data, known as Lidar and flown in 2000 over the entire river corridor, with the data surveyed in 1923 by the U.S. Geological Survey. This is the second, and by no means the last, article in this series to use this new comparison to evaluate how Grand Canyon Rapids have changed.

SHEER WALL RAPID (MILE 14.3 ⁵/₈)
Sheer Wall Rapid is an interesting piece of whitewater that very few people pay attention to these days. It sure caught John Wesley Powell's attention in 1869: the scariest rapids he found were the ones he couldn't easily portage boats around. In his book (Powell, 1895), Powell describes in great detail how they scouted the rapid by climbing through crevices and ledges to get a view of how best to portage it. On higher water in 1872, Powell and crew ran it after another careful scout (Dellenbaugh, 1908). No one else has paid much attention in print to this rapid. Fortunately, Franklin Nims, Robert Brewster Stanton's photographer, scrambled up on a ledge to capture Sheer Wall as it appeared in 1889 (Fig. 1).

Although Sheer Wall Rapid is benign compared to many others, it does have the characteristics of its name. The rapid is in the middle of a long reach of narrow canyon where the river cuts through Supai Sandstone. Tanner Wash, which drains seventy square miles, cuts through a slot in the Supai on river left, dumping all of its



Figure 1. A—Sheer Wall Rapid (mile 14.3), December 31, 1889. True to its name, Stanton's photograph shows that Sheer Wall Rapid presents little opportunity to portage.
(photograph by Franklin Nims, number 289, courtesy of the National Archives).



Figure 1. B—Sheer Wall Rapid (mile 14.3), January 1, 1992. The old debris fan has been smoothed and reworked and a new debris flow deposited material into the head of the rapid.
(R.H. Webb, Stake 2247)

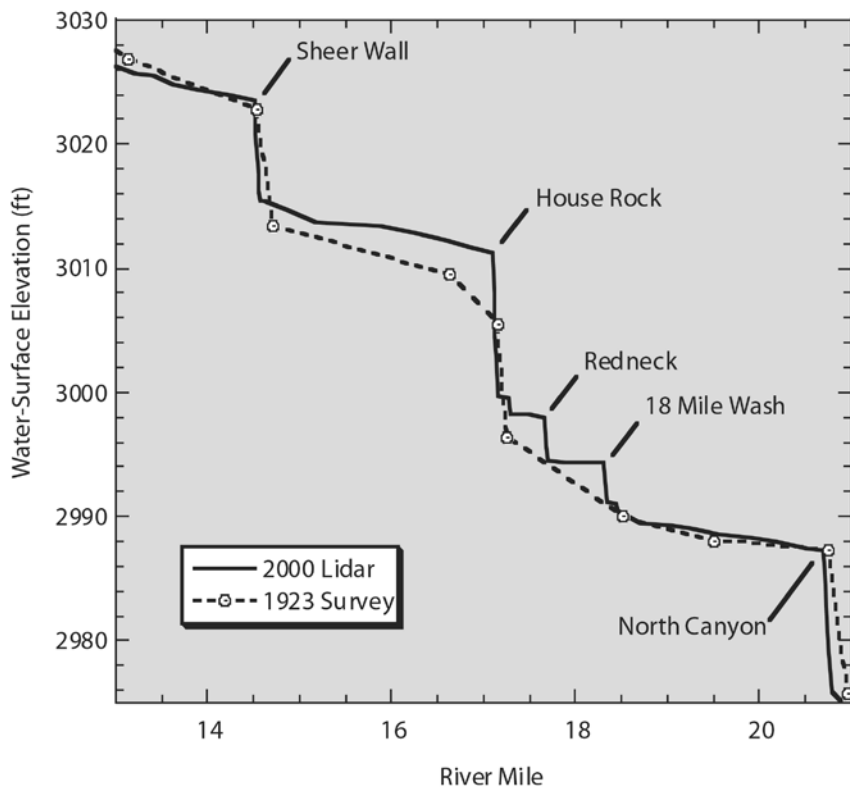


Figure 2. Changes in water-surface profile of the Colorado River in upper Marble Canyon from Sheer Wall Rapid to just above North Canyon between 1923 and 2000.

material into the river via a low waterfall. Constrained laterally by the sheer sandstone walls, the river is forced to pool up, then pour over the top of the debris fan in a unique and ordered fashion. At low water, the debris fan is visible on river left, but it is submerged at discharges higher than about 20,000 cubic feet per second (CFS). Sometime between 1889 and 1992, at least one debris flow entered from Tanner Wash, adding material and raising the head of the rapid by a foot (Fig. 2). The lack of precision in determining the year of the Tanner Wash debris flow is due to the scarcity of photos taken at river level. Interestingly, due to pooling from the debris flow at House Rock, two and a half miles downstream, the overall drop at Sheer Wall actually decreased by roughly a foot between 1923 and 2000. Debris flows can enhance the drop through rapids, and downstream debris flows can take it away.

Oh by the way, a new debris flow appears to have aggraded that debris fan in September 2002. It didn't seem to change the rapid, but it sure felt friskier.

HOUSE ROCK RAPID (MILE 16.8 R)

In 1923, Colonel Claude Birdseye led a U.S. Geological Survey team through Grand Canyon, evaluating the feasibility of dam sites and surveying their potential capacity. The maps produced by the Birdseye team were

a remarkable achievement and represented the first comprehensive water-surface profile of the river. Birdseye's boatmen ran House Rock Rapid on August 4, 1923, while his survey team, walking around, measured a drop of nine feet. They had portaged Soap Creek Rapid earlier in the trip but felt House Rock posed no great danger. Birdseye boatman Leigh Lint described House Rock in his diary as a "straight chute of large waves which about half filled the cockpits of three of the boats." The rapid was considered by old-timers to be a wet, but simple, drop. In response to Otis "Dock" Marston's survey of difficult rapids, Emery Kolb included Soap Creek, Hance, Horn Creek, Granite, Hermit, and Lava Falls; House Rock was not on his list.

Experienced river guides know all too well that things are different now: House Rock Rapid is the biggest thing at lower water levels in Marble Canyon. At around 10,000 CFS, you enter left and pull hard to the right to miss the big hole on the left at the bottom of the rapid. If you pull too

early, the right side is a rumble run over shallow boulders. If you pull too late and go over the guardian lateral, that hole will flip your 18-foot oar boat as if it were a piece of balsa wood. Those boats doing their best flotsam impression through House Rock tend to become flotsam (and jetsam) below the hole.

House Rock Rapid gained prominence sometime between 1966 and 1971 (Melis and others, 1994). During that time, one or more debris flows pushed into the river, constricting the current against the left wall and forcing the current toward the large hole at the bottom of the rapid (Webb and others, 2002). Martin Litton thought the big change occurred during the 1966 storm that created Crystal Rapid; Brian Dierker didn't disagree but thought it kept changing through the late 1960s as more sediment was added from Ryder Canyon. The rapid Birdseye experienced was formed by a mature, modest, and unobtrusive debris fan on river right (Fig. 3A). Though the waves were large, the run through the rapid was straight and free of rocks. Today, however, a large collection of rocks cover the old run and boats are forced down what used to be the left side. The hole, present but easily avoided in 1923, is now more of a factor as they say.

Of all Grand Canyon rapids that we could compare for change between 1923 and 2000, House Rock had the greatest rise at its head of all—just shy of six feet. Inter-

estingly, not only did House Rock Rapid constrict and aggrade, but Redneck Rapid (mile 17.4 L) and 18-Mile Wash (mile 18.0 L) downstream also added new material between 1923 and 2000. The rise at 18-Mile Wash resulted from a well-documented debris flow in 1987 while the rise at Redneck resulted from a rockfall in 1973 or 1974 (Melis and others, 1994). Figure 2 shows how the drop through House Rock was decreased by downstream pooling at Redneck Rapid. In 1923, Elwyn Blake noted that below House Rock, “the river was smooth for...five miles,” an observation confirmed by the Birdseye survey data. That’s certainly not the case now.

Marble Canyon is filling in with boulders. In the past century, Sheer Wall and House Rock Rapids had large, rapid-enhancing debris flows, while Redneck and 18-Mile Wash saw events that created new rapids out of calm water. Eventually, North Canyon, which has seen no debris flows historically, will experience a large event, possibly drowning out the drops at Redneck Rapid and 18-Mile Wash, thus returning the reach of river between House Rock and North Canyon to a state Elwyn Blake would recognize. And part of Boulder Narrows could be submerged in the process.

Bob Webb, Chris Magirl, & Diane Boyer



Figure 3. A—House Rock Rapid (mile 16.8), August 4, 1923. E.C. LaRue’s photograph of the rapid and upper pool during the Birdseye Expedition shows a wide, straight, facile rapid. (E.C. LaRue, number 34B, courtesy of the U.S. Geologic Survey Photographic Library)



Figure 3. B—House Rock Rapid (mile 16.8), November 10, 1990. A large debris fan covers the center and right runs of the old rapid pushing the flow left toward the large hole at the bottom of the rapid. That hole, not shown, was also photographed in 1923. (R.H. Webb, Stake 1701A)

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Rough Water

BENJIE HOWARD (a GCE boatman) once told me that his life was about finding and living in the sweet spots. I've heard things like that from a lot of people but the cool thing about Benjie is that he really does—more than anybody I've ever known. His life and music defines the sweet spot. Listening to it leaves you with a sweet feeling like nailing your line on a tough rapid.

Benjie's new CD, *Rough Water* is an amazing collection of home-grown stories told in a most authentic,



genuine, and artistic way. "None of them are fiction, I'm just telling the story of my life." Even though many of the songs are not necessarily about running river, they are songs that are close to the hearts of the people that we hang out with. They define part of our collective river

running culture.

He says that he never actually learned how to play the guitar, which is of course news to all of us who have been privileged to hear him play. "When I began running river I only had two songs." *Rough Water* is his second release. Benjie's collection of songs mirrors his river running experiences. His boating and music have literally grown up together. Maybe that's why his picking and vocals feel and sound so much like the river.

In addition to playing guitar and performing the vocals on the CD, Benjie also wrote all of the songs, with the exception of the title track. The song "Rough Water" was originally a poem written by Gary Howard, Benjie's father, as a gift to his boatman son. Adam Boesel later set it to music. "There was never any doubt that 'Rough Water' would be the Title track, it just fit." The CD is also the first effort of Benjie's production company, Black Tail Records. Producing was a totally new experience for him. "Taking songs from the campfire to the studio is a lot more complicated than you would think. It was a good time."

In his acknowledgments and dedication, Benjie says that *Rough Water* is "...to all the folks who work down in the ditch and who still believe in romance... and to all the pickers and paddlers on their way to the put-in." Well that would be us folks. This one is of and from our river family. Give it a try, you will not be disappointed.

You can order *Rough Water* by sending eighteen

bucks to Blacktail Records, P.O. Box 70853, Seattle, WA 98103. Make sure you include your address so they know where to send the goods. Two of those bucks will be donated to Cascadia Exploration Company's "Kayakers for Clean Creeks" project. Phone, 206-909-7917. Email: blacktailrecords@earthlink.net.

Roger Patterson

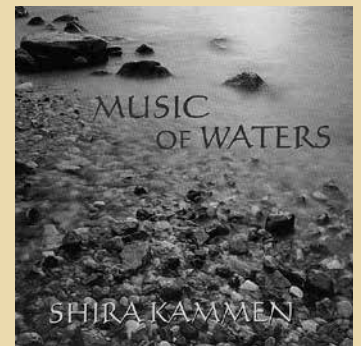
Music of Waters

A NEW CD THAT CELEBRATES the vast and magnificent landscape of the Canyon and the Colorado River has arrived called *Music of Waters*. *Music of Waters* features original modal compositions as well as traditional songs and tunes. It is strongly influenced by the music of the Middle Ages and the Renaissance as well as by Celtic, Eastern European and other folk styles. The CD was recorded in the wild and beautiful side canyons of the Grand Canyon and in the Desert View Watchtower on the South Rim. Performers on the CD are Shira Kammen (vielle, fiddle, voice, medieval harp), Peter Maund (hand drums), Danny Carnahan (octave mandolin, voice, guitar, fiddle), David Morris (viola da gamba, voice), and Cheryl Ann Fulton (harp).

Music of Waters grew out of several river trips down the Colorado River through the Grand Canyon—a journey which is an unsurpassable joy and adventure, an intense challenge and a great privilege. Those trips have been among the best experiences in my life. The depth and intensity of that river passage through the Canyon can call on every part of a person—it speaks to wonder and bliss, fear and harshness, miniscule soft and grand beauty; it calls on hardiness and flexibility, humor and courage, humility, acceptance, patience and spontaneity with its awesome power and sweet gentleness—and everywhere there is music.

Contact me at sheenaqoj@earthlink.net if you would like to receive a copy of *Music of Waters*. Two dollars of every CD sold through the BQR will be donated to GCRG.

Shira Kammen



Who Killed the Grand Canyon Dams?

BYRON E. PEARSON'S NEW analysis of the Grand Canyon dam battles will turn a few heads. In this revisionist account, he points out in elaborate detail that although the Sierra Club and its allies created a nationwide furor over the mere thought of damming Grand Canyon, public opinion then, as now, is often only tenuously connected to political process. (Witness today's overwhelming congressional endorsement of the war on Iraq in spite of huge public trepidation.) In *Still the Wild River Runs*: Congress, the Sierra Club, and the fight to save Grand Canyon, Pearson details the intricate moves of congressmen, senators, water and power moguls, and Stewart Udall, the zealous Secretary of the Interior, as they tried to push a gargantuan version of the Central Arizona Project through congress. The bill included not only the Grand Canyon dams (a high dam at Bridge Canyon, backing a reservoir into Grand Canyon as far as Deer Creek, and the Marble Canyon Dam, which would have made Lees Ferry a marina), but hints of diverting a portion of the Columbia River to Arizona to quench the insatiable Southwest.

In 1965 and 1966, as Arizona struggled to gain the support of Colorado, California, and the Pacific Northwest to push through the Pacific Southwest Water Plan, the Sierra Club and other organizations waged a national public relations war, culminating in David Brower's famous newspaper ads: "Should we also flood the Sistine Chapel so tourists can get nearer the ceiling?" The Internal Revenue Service promptly pulled the Sierra Club's tax exempt status, creating an even greater national uproar and tens of thousands of additional letters to Congress.

But Pearson points out that in spite of this, and in spite of detailed testimony to Congress showing the utter economic fallacy of the dams, Udall and the Arizona delegation pushed merrily ahead. When the bill went to Congress, Udall was confident of more than enough

votes to pass the bill. It was months later that the bill died in the rules committee of the House, killed by political intrigue from one Northcutt Ely, a California water strategist, who simply did not want Arizona to claim its share of water—a share that California had long been helping itself to.

In the following two years, Udall and senior Arizona Senator Carl Hayden, then in his 48th and final year in the Senate, realized they would both be out of power soon, and rushed through a more pragmatic, scaled-back, damless Central Arizona Project. Whether the pragmatism of removing the dams was in any way influenced by public opinion is unclear. Pearson says no. Yet the public awarded full honors for the defeat to the Sierra Club, launching it to the forefront of environmental activist groups of the day.

Just what would have happened had Ely not suffocated the original bill is unclear. Senator John Saylor of Pennsylvania, the bill's most vocal adversary in the House, had agreed to a bill including a low Bridge Canyon Dam. Hayden was confident of passing it in the Senate. But Lyndon Johnson would still have to have signed it, and Ladybird, whose preservationist confidant Sharon Francis was very anti-dam, may well have talked him out of it. We'll never know.

It is a complex and disheartening tale. It shows in baffling detail how public opinion is ignored, even scorned, by the dealmakers and power brokers that run the government. It's all about pork and backscratching, committees and seniority. Thankfully, many laws have passed since that time to give the public and conservation organizations some, if only a tiny bit, more leverage with the lawmakers. (Laws the current regime is bent on repealing.)

Warning: don't read this when you are tired or distracted. The words are big, the sentences long, and the plot insanely complex.

Brad Dimock

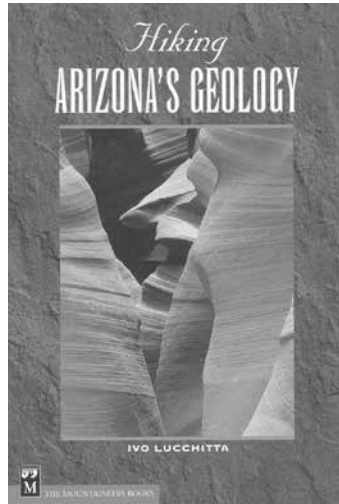


More Book News

GRAND CANYON river guides know better than most the amazing geologic stories this place has to tell. And though the Canyon is an open book of geology, the state of Arizona offers up a host of other places that are also steeped in fascinating geologic tales.

If the Canyon has whet your appetite, then you'll want to get Ivo Lucchitta's book, *Hiking Arizona's Geology*, stuff it in your pack in the off season, and go exploring.

Lucchitta, a retired geologist with the U.S. Geological Survey in Flagstaff, has walked untold miles in the state and produced this compilation of 41 hikes, covering all of Arizona's major geologic provinces: canyons, mesas, and volcanic fields of the Colorado Plateau; peaks and creeks of the central Transition Zone; and calderas and washes of the Basin and Range. Many of his destinations are in lesser-trod areas—the Coliseum Diatreme, Centennial Wash, Parson's Trail, and Monte Vista Lookout—adding to their appeal.



As any true field geologist will do, Lucchitta puts our noses “on the outcrops,” looking closely for fossils and garnets, faults and folds, sandstones and redbeds. Though a top-notch scientist, Lucchitta delights in sharing what he knows with non-geologists. He skillfully connects otherwise disjointed snips of information into an overall appreciation of process, the real story of geology.

Each hike is prefaced with brief information on distance, elevation change, degree of difficulty, and desirable maps. With this book, you'll want to go out and hear what the rocks have to say.

Hiking Arizona's Geology is available for \$16.95 in paperback at local Flagstaff bookstores, through Amazon.com and through the Mountaineers in Seattle at www.mountaineersbooks.org.

Rose Houk

Calling All Georgie Stories

MANY YEARS HAVE PAST since Georgie handed over her leopard print flag for me to fly in her honor in hopes of keeping her spirit alive in Grand Canyon. It has been an honor to fly it on my motor rig and to have it draped on my row rig for every trip since her passing. My trips have been full of Georgie stories of my own and occasionally someone would tell me of a story they had.

It has come to me as I start to write my own experiences down that we need to gather up as many stories about Georgie as we can and it is my hope to include them in my book about the personal relationship and experiences that I had with Georgie. I hope to include a chapter or two of the many stories that I receive.

It is like everything else in the written word of Grand Canyon river experience. Many of the legends and story tellers are moving on and if we don't capture these stories they will be lost. I feel personally responsible for many things regarding Georgie—mostly because of the relationship that we shared and for the continuing personal obligation that I need to tell our story and hers on a more personal level.

In gathering these stories I hope to have that oppor-

tunity in sharing many aspects of Georgie. I have heard so many great stories of encounters and witnessing her that I only wish I could remember the specifics., I have many of my own I can only imagine what is out there over so many years.

The stories you send in will be read and possibly published in a portion of my book. If so, I will contact you. They can be funny, sad, or just plain “Georgie” stories as we know her and experienced her—only as she could be.

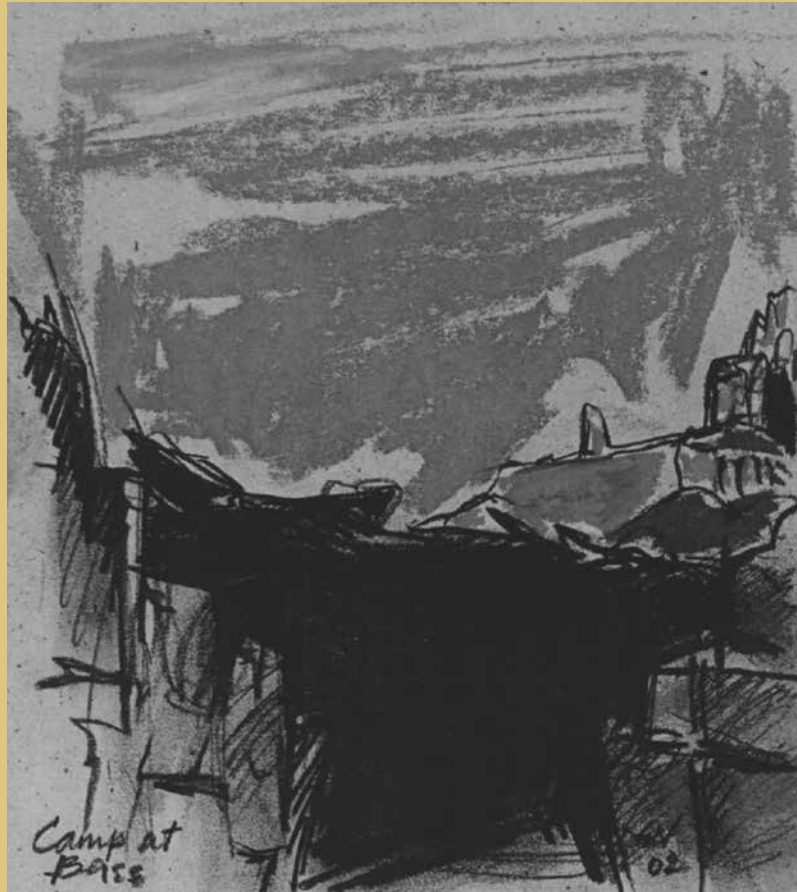
So, I am asking for anyone who would like to join me in bringing as many stories together about her. They can be short or long—no limits—and you can submit as many as you would like.

You can email them to riogeorgie92@aol.com or send the snail mail to:

Teresa Yates Matheson
2270 E. Hubbard Ave.
Salt Lake City, UT 84108

Thank you for your time and I hope to hear from you. See you on the river next summer.

Teresa Yates Matheson



Sandra Vlock

Adopt-a-Beach Windup

THE RIVER SEASON IS OVER and the year is winding down, but we're gearing up once again to formulate our analysis of the 2002 season Adopt-a-Beach program photographs. Continuity and longevity are the beauty of our program. We're in our seventh year now, which means that we are able to establish trends and causalities *over time*. As long as this is a managed river, our program will be necessary to provide long-term oversight.

If you've adopted a beach in the last two years, supported our efforts in any way or work within the Adaptive Management Program of Glen Canyon Dam, you should have received the Adopt-a-Beach 2001 Season Analysis. If you would like to receive a copy, please contact our office. The Executive Summary is also posted on our website, www.gcr.org for wider public access.

We extend our sincere gratitude to all of you who have volunteered your efforts over the years. Your hard work and dedication are the program's lifeblood.

Adopt-a-Beach wouldn't exist without you. We'll have sign up's for the 2003 season at next spring's Guides Training Seminar land session (March 29–30) or you can call or stop by the office next spring to get involved. We are pushing to get *all* of the beaches covered for 2003 (including beaches in the Glen Canyon reach as well as below Diamond Creek). This will be crucial so that we can determine what the experimental flows are doing to our beaches!

And again, we thank all of our volunteers, the Grand Canyon Conservation Fund, the Grand Canyon Monitoring & Research Center and individual GCRG members for your support of our efforts. This modest program plays a role in protecting Grand Canyon, and you have been an integral part of making it happen.

*Kate Thompson, Abby Sullivan
and Lynn Hamilton*

Adopt-a-Beach 2002 Adopters

THANK YOU 2002 ADOPTERS! As you'll notice from the complete list below, Wilderness guides established and photographed two new Glen Canyon reach beaches. Also, two beaches below Diamond Creek (Travertine Falls and Gneiss) have been added to our dataset. This gives us a much better overview of what's happening to beaches throughout

Glen and Grand Canyons. You'll notice that the NPS did a lot of monitoring, picking up "orphan beaches" that wouldn't otherwise have been covered. This included diligent efforts by many NPS friends: Dave Desrosiers, Bryan Edwards, Linda Jalbert, Simone Langness, Bil Vandegraff, Brenton White, Greg Woodall and others. Thanks for taking up the slack

	Dam Island Beach	Wilderness guides (Glen Canyon Reach)
	Lunch Beach	Wilderness guides (Glen Canyon Beach)
11.0R	Soap Creek	Jeff Sorensen
12.2L	Salt Wash	Andre Potochnik
16.0L	Hot Na Na	Kevin Johnson, Clint Anderson
19.1L	19 Mile	Mark Franke, John Torgenson
20.4R	North Canyon	Nancy Redfern
23.0L	23 Mile	NPS
29.3L	Silver Grotto	Matt Winfrey
34.7L	Nautiloid	Mike Hipsher, Tillie Klearman (lower)
37.7L	Tatahatso	Jon Toner
38.3L	Bishop (Martha's)	Geoff Carpenter
41.0R	Buck Farm	Marijka Billingsley
65.6L	Nevills	John Middendorf
76.6L	Hance	Larry Hopkins, NPS Science
83.0L	Grapevine	NPS
84.0R	Clear Creek	Tim Whitney
84.5L	Zoroaster	BJ Boyle
91.6R	Trinity	Andre Potochnik
96.1L	Schist Camp	Dave Stratton, AJ Reeves
96.7L	Boucher	
98.0R	Crystal	Daniel Graber
99.7L	Lower Tuna	NPS
107.8L	Ross Wheeler	Jeff Sorensen, Bob Dye
108.3R	Bass	NPS
109.4R	110 Mile	NPS
114.3R	Upper Garnet	NPS
114.5R	Lower Garnet	NPS
131.1R	Below Bedrock	Bert Jones
132.0R	Stone Creek	Michael Ghiglieri
133.0L	Talking Heads	NPS
133.5R	Race Track	Jacob Sack
133.7R	Lower Tapeats	NPS
134.6L	Owl Eyes	Steph White
137.0L	Backeddy	Nancy Helin, Jeff Sorensen
143.2R	Kanab	Drifter Smith
145.6L	Olo	Brenton White (NPS)
148.5L	Matkat	NPS
149.5L	Upset Hotel	NPS
155.7R	Last Chance	Dave Desrosiers (NPS)
164.5R	Tuckup	Susan Wykstra
166.4L	Upper National	Larry Hopkins
166.6L	Lower National	Nicole Corbo
230L	Travertine Falls	Andre Potochnik, Wayne Peterson
236.0L	Gneiss	Joe Pollock

P.T. Reilly

I've got some very definite opinions on it—
most of my opinions are definite.

P.T. Reilly is a name most casual Grand Canyon boaters do not recognize. But Pat Reilly stood tall in the era between the early expeditions and the upswing of modern commercial boating. Pat and his lifelong love Susie ran the Canyon from the late '40s thru the early '60s, and came back for two finale trips in the early '80s. Reilly began rowing with Nevills, went on to design a new generation of hard-hulled boats, run the highest water ever run in Grand Canyon, and become one of the area's great historians. His history of Lees Ferry was published three years after Reilly's 1996 death. Five years later Susie rejoined her high school sweetheart.

Between 1993 and 1995, Lew Steiger, Karen Underhill, and Richard Quartaroli logged some 95,000 words of conversation with P.T., with occasional interjections from Susie. What follows is a combined, pared, and edited Life of Reilly.

Brad Dimock

STEIGER: You mentioned that you came from “pioneer stock...”

REILLY: Well my grandfather, Houston Bevers, was one of the early cattlemen of Palo Pinto County, Texas. I was born in Texas. He drove several herds to Kansas. I guess I come by it naturally.

STEIGER: Was your dad in the cow business too?

REILLY: No, he wasn't. No, he was kind of an inventor. He developed vegetable presses. You wouldn't know what those were, but it takes the knowledge of a general machinist. I worked with him for a while on it.

STEIGER: So that must have been why you moved from Texas to California?

REILLY: No, my mother brought me from Texas to California when I was three months old—I never knew about it. I grew up in California, except for a year up in Idaho. We had a ranch on the Clearwater River—a hundred and sixty acres on the Clearwater—and I learned how to handle an axe and cut down big timber and hunt, fish.

STEIGER: What was your degree in school? What did you take your education in?

REILLY: (laughs) Well, it'll kill you—Literature. Geology was my first one—then I kind of shied away from it.

STEIGER: But you played sports in college?

REILLY: Yeah, football and track. I'm a tennis champ and handball champ.

Suzie went to UCLA and she graduated in the summer

of 1930. I stayed out a year. A friend of mine and I worked in a mine up near Placerville on the American River. Then I started my freshman class in college the same year Suzie started her freshman class at UCLA.

STEIGER: And you guys got married in 1937.

REILLY: New Year's Eve.

...

REILLY: Unless you lived through the Great Depression, you had no idea what it was like. You couldn't get a job—there were no jobs available. I joined the United States General Land Office in August of 1936, and I worked my way up and was a surveyor for them until



P.T. Reilly as college football star

I quit them in July of 1940. Then I could see the war coming on. Not being a dummy, I relied on my old tool-making experience and went to work as a toolmaker at Lockheed. And then pretty quickly I was put in supervision, and I spent a quarter of a century in supervision at Lockheed.

STEIGER: And they must have geared up in an enormous way.

REILLY: Oh, they geared up to beat hell! When I joined them they were still making the Model 10 and the Model 12 and the Lodestar.

STEIGER: You're talking about "coming from pioneer stock." I was wondering if that affected you in your river-running career?

REILLY: No, it just set me up. I guess it made me able to handle it. What really got me into my river-running



Susie Reilly at mile 70.8 in Glen Canyon, 1952

career was, in 1946 my mother gave me a subscription to *Desert Magazine*. About the second or third issue I saw an ad for Norman Nevills. I'd been working at Lockheed in the Tooling Division and I worked nine months without a day off—ten hours a day on five days and eight hours on Saturday and Sunday—and I was *beat*. I told Suzie, "Let's take this damn trip."

We went, and I was real antsy to get at the oars and it happened that Norm had a problem with oarsmen. He had a fellow named George Wing, this "scat-back" from BYU and later a professional player for the Salt Lake Sea Gulls. It happened to be George Wing's first trip as a boatman, and I could tell he didn't know beans about

handling oars. He was our boatman—Suzie and I were in his boat. I started ragging him right off the bat to let me handle the oars. And finally he gave in to me, and Norm saw how I handled them. At the end of the trip (chuckles) he offered me a job! And I said, "You mean to say you'll pay me to take a vacation like this?!" And he said, "Sure!" I said, "Hell yes! You've got your boy!"

STEIGER: What were some of the circumstances of that one?

REILLY: Well Norm was running from Mexican Hat down the San Juan and we went a hundred and thirteen miles down the San Juan and seventy-eight miles down the Colorado to Lees Ferry and took the boats out. I got my hands on the oars, oh, I think the second or third day. We had a "death march" through Paiute Farms. I think we were out of the boats more than we were in them, for three days. If you hadn't run the San Juan in the early days, I tell you, you wouldn't know what I'm talking about. The river was all spread out. We took off, and the God damned Norm told me that May 1st was the best day. Well he was lying right through his teeth! Soon as we got off the river, the river rose to 4,500-second feet—and we had less than 1,000. And you know what the San Juan would be at 1,000 second feet, natural water. It was a death march.

Well Norm offered me a job of boating for him when he saw I could handle a boat by our experience in 1947. So in 1948 Frank Wright and I—who was a Mormon from Blanding—started out with Norm, together.

STEIGER: And right down the Grand Canyon?

REILLY: No, we started out running... Oh, we had run maybe two or three San Juans, and *then* do the Grand Canyon. But in 1949, I think I got... I forget how much time I got off from Lockheed, but by that time I was getting a reputation for—they gave me what I wanted, in other words. And I think I took two months off. And we ran two or three San Juans, then we went up to Green River, Wyoming, and ran down to Jensen, Utah. Then we took the boats out and went down to Lees Ferry and went down to Hemingway Harbor—on August 1. Frank Wright, Jim Rigg, Norm Nevills, and I were the four boatmen. We had four boats.

STEIGER: At that time, you could still count the number of people that had been down the Grand Canyon, couldn't you?

REILLY: Oh, hell, yeah! I've got a complete list in here. I'm 105 or 106. Jim Rigg and I had made our first trip together, and we share 105 106.

STEIGER: So, *that* was your first trip through the Grand?

REILLY: 1949 was my first trip through Grand Canyon.

STEIGER: When you got there to the put-in on that first trip, do you remember what kind of flow you had that year?

REILLY: We had high water. We took off in about

45,000 second feet. Norm wasn't a high-water man. If he'd have had the means, he would have laid over a week or so.

STEIGER: Just to let it drop down a little bit?

REILLY: Let it drop down. He was a low-water man. And I was tickled to death.

STEIGER: I wonder what it felt like, just setting out, just pushing off from the Ferry and heading on down there?

REILLY: Well, there was nothing to it. I was lucky that Norm knew some of my interests, because he put Eddie McKee in my boat. He used to be Naturalist Chief Ranger at Grand Canyon. He's investigated the little horses, the pygmy horses, when the agent spread all the baloney about the midget horses, you know. I learned more geologic knowledge from Eddie than I did in a whole year in college geology. Because the people teaching the course just didn't know—it was all theory. When Eddie, reached down and picked a fossil up or he reached over got a piece of hematite, he'd give you the whole history of the thing. I just wouldn't of missed Eddie McKee for anything. He and I corresponded. Eddie was a great guy. My kind of guy.

STEIGER: So that one was about 45,000. And how many days was that trip?

REILLY: Nevills's normal take-off day was July 12. He took three weeks. He had to squeeze it in two or three weeks, because many of his people had three weeks' vacation.

STEIGER: When I think of 40,000, man, to us, in this day and age, 40,000, we call that high.

REILLY: Well you call that high because you've never experienced anything else!

STEIGER: What was the normal camping routine on a trip like that?

REILLY: Frank and I handled the kitchen. Frank and I got along swell on the cooking and the camp chores. He was an old Mormon "do-it-all-er" and a very good man. Frank was just a good boatman. He wasn't afraid of anything. Frank would run the rapids as they came up, and just think nothing of it. I thought Frank was one of the best boatmen that Norm ever had. Frank was A-OK. ... and Jim Rigg did the dish washing. Jim Rigg owned the flying service at Grand Junction.



Crew scout...P.T. Reilly, Frank Wright, Jim Rigg, Norm Nevills

STEIGER: Was he a pretty good boatman?

REILLY: Oh Jim was a good boatman. We were *all* good boatman. Jim was pretty good at anything he tried. He joined in 1949. He'd never rowed with Norm before 1949.

SUZIE: Bob Rigg was a fine...

REILLY: Bob was a *fine* boatman!

SUZIE: He said he was uneasy every time he'd get out on that tongue, and before it dropped down, he talked about being a member of the "Cottonmouth Club". But he was expert, he really was.

STEIGER: Did you stop and scout a lot of stuff?

REILLY: No.

STEIGER: Did you have troubles with the boats turning over or anything like that?

REILLY: No. Never flipped a one.

STEIGER: Did Nevills always go in front and everything?

REILLY: We had our positions. Norm ran first, Jim Rigg ran second, Frank Wright ran third, and I ran fourth.

STEIGER: And that was that?

REILLY: That was that. We always held those positions.



P.T. running Devbendorff

STEIGER: Why did you guys line Lava Falls?

REILLY: Lava Falls was usually lined. They didn't get there at the right stage of water to where they could run it. You're getting into something that's a little bit over your head. The reason I'm saying that is that Lava Falls was probably—Bob Webb will back me up on this. I proved to him by my pictures, Lava Falls has probably changed more than any rapid on the river.

Oh, it's changed to beat hell! You wouldn't *believe* the changes! In the late forties, Lava was unbelievable. I've got some movie footage at Lava Falls, you wouldn't believe it. You wouldn't see how a fish could get through there.

STEIGER: What was it like? Why was it so hard?

REILLY: Well, a big comber over to the right was a monster. It was higher than the ceiling. And the waves, at that stage of water, the waves in all the other parts were just tremendous. You couldn't possibly stick a sixteen-foot boat through there and expect not to get spilled... unless you had a boat down below for a pickup. And Lower Lava was booming at the same time. But then about 1953 or 1954, there was a hell of a flood down Prospect Wash, and I mean a *big* one. You know Prospect Wash spills over the rim. And it washed cinders into the rapid and filled up the rapid that you wouldn't believe. It made it a lot easier to run—especially if you wanted to make a sneak traverse down the left-hand side and then cut over in back of the big comber. Well before they had this big flood, Prospect Wash, it was, I'd say roughly twice to three times as bad.

STEIGER: So, when you lined it, did you line it down the left side?

REILLY: Yeah.

STEIGER: And that was quite a production to do that?

REILLY: Oh, it was hard work! We unloaded the boats, took the boats down empty. I did it differently from the way Norm did it. He had one line on the aft end of the boat and they just got a bunch of guys down to pull the boat down, lift it over the rocks through bull strength and awkwardness. And I had two lines on the aft end of my boats.

STEIGER: How many Nevills trips do you figure you ran?

REILLY: Gee, I never have counted them up. Of course the post-war program at Lockheed was rather austere. Some years I'd get more time off than others. I guess that I would do at least two San Juans and a Grand Canyon. I know one year, in 1950, Jim Rigg sent one of his Bonanzas up to Boulder City to pick up Suzie and me. He let us off at the Grand Canyon and we walked down the trail and met the boats and I did the second half. Suzie went along.

STEIGER: You did several Mexican Hat trips when the Rigg Brothers and Frank Wright had it?

REILLY: Well, I rowed for them in 1950 and 1951 and 1952. And then in 1953 I put my own first party through. I got the boats from my friends up in Green River, Wyoming. And then I built my own two boats in 1954. And Steve Fulmer came out from Muncie, Indiana and ran with me so I had a three-boat party. I got all the passengers.

I tried to guess the peak, and I tried to be on the river during the peak. In 1957 I ran the highest water ever run—127,000 second-feet.

STEIGER: What was it that got you out there on the peaks of those flows?

REILLY: Well, Norm always set his take-off date on July 12. He didn't care about what the flow was, the snowpack, he set it July 12, and he based his advertising on that, and that was it. Well, I thought that was the wrong way to do it. I took the Water Resources, contacted them and got their publications, and got the snow depth and water content forecasts, and I gauged my take-off date by the peak. In 1957 I hit it right on the nose! Two days after I took off, the river peaked at 127,000 second-feet, and we were down at Harding.

STEIGER: Now *why* did you want to catch the peak?

REILLY: Well, all these other blokes had done it at low water, and I knew what to expect at low water, and I wanted something *better* than low water—and I *got* it!

SUSIE: I don't think you chose to run on water *quite* that high.

REILLY: I didn't care how high it was.

SUSIE: Didn't you?

REILLY: If it had been 150,000, I'd have done the same thing.

STEIGER: So what did it feel like to be out there on that kind of water?

REILLY: Oh, no different. You've got almost 127,000—you've got about 126,000 over by that Boulder Narrows, which is in that picture covered by by water. That hull—my boat's seventeen feet long. You could drop my boat in that big hole... That's the one where the oil drums went in—sometimes we'd see them bob up a couple of hundred yards downstream, some of them we never did see bob up. We saw big logs go into that hole. Sometimes they'd bob up two or three hundred yards downstream, sometimes we never did see them.

STEIGER: Was it hard to miss that thing?

REILLY: No, nothing to it! I rowed my boats... I tied my boats up just below this big rock to the right and we climbed up the talus and went out on the talus and studied it.

My most impressive time on that high water was at Nankoweap, when I saw that whirlpool and that log turned on end. I'd seen the river was way up in the creek bottom, and then I saw this God-awful hole, and as I watched it, this log got closer and closer. It got into the rim of the whirlpool and it stood on end and the damned thing kept on circling and it was drawn down deep. I never saw anything like that. I've seen Nankoweap at low water, and I've seen it at high water. And I can never figure out how that whirlpool, that God-damned log, got sucked on in. It was at least fifteen feet long, and it swirled and went down out of sight, and I never *did* see it come up.

Then I encountered that rapid going *upstream*, right over close to the shore. *It* had waves in it three or four feet, on the Nankoweap side. I gauged it at four. Going upstream and it had waves and they were breaking. I

wouldn't have believed it if I hadn't seen it. I'm careful about who I tell that to now, because a dude with no experience, they wouldn't know what I'm talking about.

STEIGER: I'm trying to grasp 127,000.

REILLY: Well all you've got to do is look at Boulder Narrows.

STEIGER: Was anybody else down there then?

REILLY: No, I was the only one in the Canyon. Frank Wright and Jim Rigg came down about two weeks after I went through.

STEIGER: But was it dropping then?

REILLY: Oh yeah, you're not going to hold a flow like that for a long period of time.

NDERHILL: Could you hear the rocks moving? On the bottom?

REILLY: Oh, you hear the rumble all the time. In high water, we could hear the rumble. The rumble was most pronounced when I was at Elves Chasm in fifty-eight. I think there was about seventy thousand flowing and you could listen, the rocks were actually rumbling.

STEIGER: So it was high. Yeah, I've heard stories that that was a pretty scary spot right down there. [points at photo]

REILLY: Oh, that spot? In my view, Granite Narrows, just above the big cave—you know where the cave is—that at high water is probably the most dangerous point in the river. You wouldn't *believe* the cross-currents in there. You'd have to see it to believe it. And unless you see it at high water, you *couldn't* believe it! I *couldn't* believe it, and I have probably had more experience than anybody on the river today. But if I hadn't seen that with my own eyes, I wouldn't have believed it. I'll tell you one thing: At high water, you see things you never suspect you'll see at low water.

STEIGER: At that point in time, what did you think of this plan of going down on the peak? (laughs)

REILLY: Oh, I didn't regret a *bit* of it! I thought it was great. The *problems* are different, and you have to compensate for the difference in problems. That was where I developed the idea—and I think it's a good one—that you have a different technique for different stages of water, from the low to the high. I'll tell you one thing: you sure don't run low water like you do high! (laughs)

The thing that surprised me in the high-water trip: we were going down to the twenties there—24-1/2 Mile Rapid, that was a lollapalooza! I think if I'd have stopped and looked that over, I wouldn't have had the guts to run it, but we piled into it wide open. I had Susie, and I've never taken any chances with her, but I swear to God, some of those waves were twelve, fifteen feet high, and I'd be just full of 'em. The usual character of that rapid was completely gone. Just didn't resemble the old 24-1/2 Mile at all. And it was continued down through 25 Mile. We piled right down through the middle of it, and when I came out, I thought, "Well, I was lucky that time."

Because I'm an old skin diver, and being in the water doesn't bother me a damned bit, but Susie never did any of that stuff. And I would do something dirty if she got dumped overboard.

STEIGER: Well, to me the thing that I notice about 40,000 is that you get these boils and whirlpools. When I think of 127,000—did you get stuff to come up and chase you?

REILLY: No, they don't chase you—they're moving. I notice in one of the high water years—I forget which one it was, but down in the Granite Gorge, we saw several of these moving whirlpools.

I think the biggest one was about four feet across, and it was a real funnel and it was ringed. And it was maybe four or five feet deep. They would appear and swirl like hell, and then they'd peter out. But I ran one—I even forget what year it was—down around 222 or someplace down in there. I piled into a rapid—of course I was kind of an idiot, I liked to go right down the middle of everything—and I piled into this rapid, went right down and a hell of a whirlpool grabbed me and pulled my boat down to where the water was just about to come over the edge, the gunwale, into the cockpit, and then it released. And I blinked and wondered, "What in the hell is going on?!" I looked back and I couldn't see anything.

In 1957, in a high-water year, I think it took me an hour and fifteen minutes to go from Hance down to Bright Angel, and we pulled up—the beach was almost covered—and we pulled the boats up and they were awash and we tied them up to a mesquite tree or something. I got pictures of that. And then we left it there for the season. We came back the next year and ran them down.

STEIGER: Okay, 1957, you guys went through on 127,000 and you stopped at Phantom and chained the boats up there on the beach so nobody

could get 'em?

REILLY: Well, two reasons: one, to keep 'em from being washed away; and another one, to keep the dudes from foolin' around with 'em.

STEIGER: Yeah. And when you got to Phantom, it was about 120,000 or somewhere in there?

REILLY: It was between 120,000 and 115,000.

STEIGER: And you guys were just thinkin', "Hey, this is a little too high to go on through," at that point?

REILLY: Well, the lack of campgrounds is what got me. All the campgrounds, there wasn't a bit of sand in



High water parking at the base of Deer Creek Falls

the Canyon. You can't conceive of the Canyon being that way.

STEIGER: With no sand?

REILLY: No sand at all. There was just *nothing* down there. Nothing—get up in the rocks and kick a couple of 'em around to where you can be half-way comfortable. 1958 had high water also. That's when the river hit 103,000–104,000.

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It's a pity we never got to the 1958 trip in these interviews. Reilly and gang hiked in to Phantom, retrieved and loaded their boats, and headed downriver on flows close to 100,000. At Lava they were confronted with the option of either running a rapid so huge they thought they might flip all three at once, or casting off the boats and giving up. They chose the latter, hiked out and caught a ride to Lake Mead. They found the "Susie R" off Sandy Point and Georgie towed in the "Flavell", but Steve Fulmer's "Gem" was not found for years, until it finally turned up in a driftwood pile on the lake. The 1959 trip ended in an equally bizarre fashion. We'll get to that in a minute...

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UNDERHILL: What is your opinion of Powell's wide hulled boat?

REILLY: Stinking! Awful! That man was a scientist, and if he had a brain in his head, after he got through the Green River, he would have built new boats. He pushed them through Grand Canyon and he had a fine crew. But I don't see how he ever got as far as he did, to be honest with you. Powell had keel boats, Stanton had keel boats. Hell, if there's anyplace in the world you don't want a keel boat, it's in the Grand Canyon!

STEIGER: I'm wondering what you were thinking that led to the *Flavell* and the *Susie R.*, and to the subsequent boats, because that was a huge leap. What is it that a boat has to do?

REILLY: I guess my own boat evolved by studying history. I realized that Flavell, and Galloway put their boats down bow first. Of course I'd been brought up with Nevills. I think Nevills great contribution to river running was breadth of beam. If you stop and think there'd never been a boat made by anybody that had a beam that Nevills had. He had the first wide beam boats. But this old blunt stern, Nevills himself told me, don't ever put anything out in the corner of these boats. Keep everything to the center and in the middle, all you can. I thought, "Why does the damn fool have his square corners out there anyway? What do they do, they don't



The "Susie R" waiting at Lake Mead after her "ghost run" through Lava Falls and beyond at 100,000 cfs.

do anything. “ I figured that Nevills’s boat would run better bow first then it would stern first.

STEIGER: Well the cataract boats, you usually went stern first then?

REILLY: No, always went stern first. I’ve got pictures of me in rapids bow first, but it didn’t amount to anything. It depends on the flow and your knowledge of the Canyon and the rapid.

SUZIE: They were so broad, and so wide open.

REILLY: That blunt stern gave you nothing.

SUZIE: Couldn’t spin, when you wanted to twirl. Pull away from a wall, and they were so awkward.

REILLY: The sadiron boat is a lousy boat. I could see the defects in the boat by rowing the damn thing! You couldn’t maneuver Norm’s boats. They weren’t anywhere close to being as maneuverable as my double-enders. It was an evolutionary boat.

STEIGER: I guess you sort of helped contribute to that.

REILLY: Well I contributed *most* of it! I built the first double-ender. Once I got down there, I saw the problem, and I saw that nobody had built a boat to counter the problem, to answer the problem. And I thought I could do it! The problem was building a better boat to take on the rapids. The old Nevills sadirons were a pain in the neck! They were no damned good.

I was influenced, I think, quite a bit by Flavell. Of course Flavell took an open dory down, you know. I wanted a pointed bow to enter the waves, and boy did it make a difference! That’s why they’re pointed at both ends—do away with these stupid corners! My first job was to get all the passengers inside the boat. Get them off the deck, like sitting on the coiled rope like Nevills had. I couldn’t understand why Frank and Jim didn’t redesign those lousy boats. They didn’t, they built a new set of them just like the old ones. I guess they were infatuated with Norm. So, they went their way and I went mine.

I kept the wide beam and I increased the air-proof compartments. A number of them. And I got them so each one of them were individually sealed. I put sealed bottles like you have a plastic bottle of Clorox and put the lid on real tight. So, it wasn’t just empty space, it was all full of added buoyancy. In other words I was taking up room for water. See, I built my boats in 1954. The *Suzie R.* was the first one, and the *Flavell* was the second. Both of them had fiberglass hulls, pointed at both ends, but they were totally different inside. I know the *Suzie R.* had, I think, twenty-five different air compartments, individually sealed.

Incidentally the fellow who did my lettering, was Harper Goff. He was Disney artist. I thought that was pretty nice. A Disney artist, of Harper’s magnitude, doing the lettering on my boats. Oh, he advised a color change too. I went all over east Los Angeles getting Aztec Red and Beryl Green—white’s easy. I bowed to him because color was his life. I went out and got the shades

and painted it. Hand painted it. It was a very good boat except that no two, I never built two boats the same. Every one was refined from the previous one.

My boats, my double-ender, with all the compartments in them, were the biggest improvement in Colorado River boating that’s ever been made. They’re a forerunner of Martin’s dories today.

STEIGER: When it comes to actual boat building, how did you go about, when you sat down and built your first boat?

REILLY: Well, I made a female mold. I used this one-eighth inch Philippine mahogany plywood, four-by-eight-foot sheets, and I made me a female mold. Then I used plaster and filled in where I wanted curves, instead of sharp corners, and filled that in. And that’s what that boat that you saw there, how that was made, my first two boats. The *Suzie R.* and the *Flavell* were both made in those molds.

STEIGER: So it didn’t break your heart there wasn’t any kind of an aesthetic disagreement between, say, fiberglass and just a purely wood boat?

REILLY: No, I didn’t have any aesthetic feelings about either one. I finally came to the conclusion by trial and error that fiberglass wasn’t what it was cracked up to be: It was too darn brittle. It got punctured real easy. Both chines, both my fiberglass boats were punctured on both beams within about twenty inches of the bow and stern. And it had been patched and patched and patched, and had patches on top of patches. By that time the patches weren’t even sticking very well. That’s why I was coddling them. So I scuttled ’em in 1959 at Pipe Creek. Filled ’em full of rocks and took a mineral hammer and punched holes in ’em and shoved ’em out in the current—goodbye. Boy, I took pictures of them as they took off downstream. They were getting lower and lower in the water. It was sad. But it was the best thing for them. They served their day.

We sent Joe up the trail and he got the pack train down to pack our stuff out the next day, and they did. And I walked up. And so we didn’t have any boats.

STEIGER: It seemed like you were kind of disgusted with the whole affair.

REILLY: No, I was disgusted with fiberglass. I knew that fiberglass wouldn’t stand up in the Grand Canyon. And I didn’t really know one way or the other if I was ever going to build more boats or not, but if I *did*, they weren’t going to be fiberglass. And I wanted to perpetuate my design, sort of like you see in the little model there. But they were going to be wooden dories.

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UNDERHILL: Did you ever have any mishaps in the canyon?

REILLY: If I thought I would have a mishap I, ran solo. I've dumped twice. I dumped with Joe. From just plain damn fool carelessness. That's all my fault. In 24-1/2 Mile. Well, I was busy looking for this spot—I knew I was awful close to where Stanton had photographed the spot where Hansbrough and Richards were drowned. And I had my eye on that cliff and Joe Szep and I—he was my passenger—we piled into the rapids, and I had my attention riveted on the historical phase and not on what I should have had my attention on—the business at hand. And a big old lateral comes up and breaks right toward the tongue. Well I saw that thing, but it didn't register—I was interested in something else, interested in the spot I was aiming for. And this big lateral got me. Anyway, we dumped. I've been a skin diver and swimmer a good part of my life—and I was going to hang onto the boat come hell or high water, and I yelled to Joe—I thought he was in the eddy—I said, "Joe, catch the eddy and make shore and come down with the other boat." But when I got opposite the wall where Hansbrough and Richards met their end, a hell of a side current caught me and it straightened my legs out. I was hanging down on the right side of the boat, which is upside down. And they straightened my legs out, and it was going to pull my shorts off, and I spread my legs, kept my shorts from being pulled off, and I hung onto the boat. I stayed with it through 25 Mile and Cave Springs, and landed on the left-hand bank. I think I'd been in the water for maybe a couple of miles, but I stayed with the boat and saved it. And when they came down we turned the boat over and I bailed her out and then the only thing was lost oars. We found an oar floating around in an eddy. I think we never did find one of the oars, but I got by. I always traveled with two spares.

UNDERHILL: What was your other flip? What was your other upset?

REILLY: My other Upset was...

SUSIE: In Upset.

REILLY: Upset. Upset Rapid. That was calculated. That was one of the four or five rapids that I might spill in. I ran the first boat of course, I knew I'd have to make a sharp swing to the right to get past that hole. I didn't cut it quite close enough. It's my own fault. Nobody's fault but mine. Most of my spills have been my own fault.

UNDERHILL: What was Crystal like in those days?

REILLY: Crystal wasn't anything before the big flood hit, but it was the longest rapid in the river—it was a mile long. It dropped quite a bit. Used to be a nice little stream, about twenty feet wide. Clear water coming down, cottonwood trees. Didn't have that big fan there. It was just a plain old ordinary cut bank. Little bit of a sand bar. We just piled-into it wide open. But after the flood washed those big boulders down and ran the fan out there, good God, no.

STEIGER: How did you get started wandering around and wanting to go up the side canyons and stuff like that?

REILLY: Well, it just seemed to me to be the natural thing to do. It seemed to me to be a bunch of damned foolishness to take the trouble to go through Grand Canyon by river and not see what's up the tributaries.

SUZIE: Did you tell how you discovered the Bridge? Keyhole? That's an interesting story.

REILLY: Oh, the Keyhole. Well, Martin is a good pilot, and Martin and Dock Marston and another chap and I were four of us in a Cessna, and I was following the Sinyala Fault. Martin always put the plane right where I asked him to, and we were following—I was taking pictures and we were off to the side so I could photograph Sinyala Fault. It crosses the river at 138-Mile Rapid—that's what causes the rapid. And I took all these pictures and we never saw anything—none of us in the plane. And when we got the pictures back, I was sitting in my living room in Studio City, California, and I looked at a picture I'd taken, and God damn, I saw a big old opening. That's where I discovered Keyhole Bridge—sitting in the living room in my home in Studio City, and discovered it that way.

And our next river trip was made a day after the two planes crashed opposite Little Colorado. This was late in August. And we hiked up to Keyhole, and there were three of us. Steve Fulmer started out, but there was Martin, Bill McGill and I. And the three of us got up there—Fulmer didn't make it. And I got the discovery photo in there, and plus a photo I took from the ground to verify it.

...

STEIGER: I wanted to talk about Glen Canyon Dam.

REILLY: Well, you can't very well mix politics with your natural desires—the two just don't go together. See, the politicians are going to do what they want to do regardless of how you feel about it. I hated to see Glen Canyon Dam go in. At the same time, so God damn many dudes were coming in, and they were going through hell bent for election and didn't know what they were doing or what they were seeing and never got away from the river. That part didn't rub me very well either.

STEIGER: So with Glen Canyon Dam, what did you think of that when you saw that one coming?

REILLY: What the hell *could* you think about it?! The decision was made back in Washington. A single guy had no say. River runners are not politicians. We weren't politically slanted toward keeping track of what was going on in Washington. That's the sad truth. I know I wasn't. I'd just begun to get interested in the political end of it. I was *really* into it for the Marble and Bridge Canyon Dams.

STEIGER: Do you remember the first time you ever met Martin Litton?

REILLY: Martin was a feature writer for the *Los Angeles Times*. That's how he got interested in the River. He

wrote a feature going out with Riffey at Tuweap, and went out to Lava Falls and photographed that. And I don't know whether he got ahold of me, or how he learned about me, or I got ahold of him. But anyway, we got together and as soon as I learned he had rowed crew at UCLA, I perked up a little bit. Good boatmen were always scarce and hard to get. So in 1955 he and Esther went as my passengers. And Martin had had a pack trip up in the Sierras. The mule or horse or whatever he was on threw him and he sprained his shoulder and he had it in a sling. I got pictures of him in the sling in that year. Down about a mile below Upset on the right, I had a favorite camping spot—I forget whether there was water coming down there—anyway, it was a nice sandy place. I don't think any of the modern dudes ever have noticed it, but I usually camped there. I asked Martin what he thought of it, and Martin said, "It's fantastic. It's something I've always wanted to do." And I said, "There's nothing like it in the entire rest of the world." By that time I had known that he had rowed crew at UCLA, and I asked if he thought he could do it, and he said, "Yeah, I think I could do it." This was 1955 that we had that conversation. So in 1956 I took Martin as a boatman.

STEIGER: You guys started something that's still going on today.

REILLY: Yeah! Well I introduced the dories to the river, and Martin had his finger in it. Anyway, Martin ran with me as a passenger. He and Esther went as passengers in 1955, he rowed as a boatman with me in 1956.

He got the itch again in 1962. That's when the big wigs at *Sunset* magazine wanted to go down. We got Bill Lane and Frank Chambers and three or four others. And then he ran with me in 1964. So Martin has made five trips with me. I say I broke him in on the river.

STEIGER: Would you say that you guys got along pretty good?

REILLY: Oh, we got along swell!

STEIGER: Did Martin do a lot of work and stuff? He seems to be...

REILLY: Well, only on his boat. But on the 1962 trip, most of the people were his. Martin got it, and in fact those people his. Frank Chambers and Bill Lane and all that Menlo Park bunch, Martin got. Frank Chambers was a big man in the financial world.

STEIGER: Moving on to the 1962 and 1964 trips, those were a huge deal in the history of the river. Did you guys think that Marble and Bridge Canyon dams were going to be built then?

REILLY: We knew they were going to fight for 'em. Martin was torn between two driving forces: he was dead set against the Redwood expansion in Northern California; and he was dead set against the dams in Grand Canyon—Bridge and the one in Marble. So he took Bill Lane, the publisher and owner of *Sunset* magazine, and Frank Chambers, the banker, and Jack Best, Phil Hyde and his wife, and several others. That was in 1964.

And we knew the Sierra Club had promised to resist it strongly. And you might say the Sierra Club—Dave Brower, I can't say enough for Dave Brower.

STEIGER: But I'm curious, because I had the impression that the 1962 trip *was* about politics—that Martin calls up and says, "P. T. we gotta run this trip, because we're gonna go to war against these dams."

REILLY: Martin's the one that said "How about another trip through the Grand Canyon?" "Martin, we don't have boats. We have to build boats." And he said he got these guys that are just real antsy to go. I guess they had seen some of Martin's movies and they wanted to go, and Martin wanted to know if I'd put a party together and take them down. So I got commitments out of them.

He said, "Well, hell, if you'll get a hull, I will. We'll get this guy up in Rogue River. I can get him to build us hulls, and we can both finish the interior to suit ourselves." I said, "Okay, you're on." So I had a real hot tooling program with Lockheed at the time. I think I was working ten hours a day, five days a week, and eight hours on Saturdays and Sundays. And I said, "Okay, we'll do it." And that's when Martin got this guy on Rogue River to build our hulls, and he brought mine down to me. And then he and I finished our hulls. We had to put all the interior in: the hatches and the compartments and everything, and we had to deck it over. There were no decks on it—just a plain, open dory is what it was. So we got those built and that's why Martin's boat and my boat were different. I'd come home every night, and I'd work out in my patio until ten o'clock on my boat. And we got our boats built. I named that *Susie* Too. That's the one that exhibited at the South Rim. Martin put it there. And we had my boat trailer, of course, and we saw each other's results when we got to Lees Ferry. And we took the boats down.

Well, the boat turned out to be real good, real fine. I was quite happy with it. I didn't think it was going to be too much when I first started out, but after I'd been at the oars for five minutes, I thought, "Hey, we got something here!" So every mile I ran the thing, I liked it better. In fact, I think the dory that we had then—not talking about payload—they were the best boats to appear on the river, up to now. See, Martin's gone overboard a little bit. He's gone for greater payload.

In 1964 Dave Brower got me to lead the party through. Martin and I both had our cataract boats. We had a smaller boat called *Lucky Pierre*. (laughs) So-called because it was always in the middle. (laughs) We had a guy that was supposed to be a mountaineering guide on the Sierras. And Martin—we were desperate, we couldn't get a man for this other boat—and Martin finally got him, and we took him on, and he spilled three times. I rescued him all three times and his passengers.

STEIGER: Well, when you started on that trip, did you actually think you were going to whip these guys? Did



The "Susie R" waiting at Lake Mead after her "ghost run" through Lava Falls and beyond at 100,000 cfs.

you actually think that you were going to stop these dams from being built?

REILLY: It hadn't gotten that far yet. We weren't that involved with the dams yet. It was to more or less get what photographic evidence we could, and get everything we could to support the fight that we knew was coming up in Washington.

SUSIE: Martin was an official with the Sierra Club, so he was deeply into it.

REILLY: Yeah, Martin was on the board.

SUSIE: He was rabid on the subject.

STEIGER:: Well, he was, I know. We kinda give him a lot of credit for...

REILLY: Well, you can't give him too much. If it hadn't been for Martin's get-up and go, that thing never would have gotten off the ground.

UNDERHILL: Well, let's talk about the 1964 trip. And how you were able to go on that.

REILLY: Well, 1964 was frankly to gather the material to build Francois Leydet's book, *Time and the River Flowing: Grand Canyon*, to combat the Bridge Canyon and Marble Canyon Dams. Francois was a passenger, and he was an ex-newspaperman from San Francisco. And he and his wife Patience, she ran the upper half. Martin had

a pretty high powered bunch together. He had Frank Chambers get me a leave, a six months leave...as much as I wanted. I just took six months. Arranged everything. I took them down and knowing the Canyon like I did, I tried to hit the best spots at the best times. You know, most photogenic and things that would illustrate the points. In essence it 's what allowed this book to be made.

STEIGER:: It's easy to look back in retrospect and see that as being a very significant trip—which it was. I think my perception of that is that that book ended up making a big difference.

REILLY: Oh, I think the book is when the whole vote in favor of us. Congress was undecided, and when we put a copy of Francois' book on every congressman's and senator's desk, they thumbed through that thing, and boy, the vote was overwhelming against it.

STEIGER:: At the time that you were on the trip you got the word that they were going to turn off the water and stuff, and you guys should abandon the trip.

REILLY: We knew the water was going down. We were pulled in, we had a camp made a little bit below Whitmore. There was a good campground there. We had our wood all together and the fireplace all

made, and everything, and suddenly this airplane comes buzzing up the canyon. And once it spotted us where we were, the head ranger wrote us a note .

UNDERHILL: (reading note) "P.T. Reilly river party: The gates at Glen Canyon Dam were closed yesterday morning, May 11. The river flow has been cut to 1,000 cubic feet per second. It is important that you leave the river by Whitmore Canyon. If you agree, three of you wave something white the next time we pass. Others remain away from the three and remain quiet. If you concur by waving, we will notify persons on your permit to meet you at the end of the Whitmore Canyon Road. (signed) James W. Packard, Chief Park Ranger."

REILLY: That stuffed shirt!

UNDERHILL: (still reading) "If you receive this note and *do not* wish to leave the river, one person should stand alone and wave something white."

STEIGER: So you had to decide instantly!

REILLY: Oh, we decided right off the bat, hell no we weren't going to let those henhouse bastards run us off of the river! Martin had a white shirt. He tore that white shirt off and he waded out in the river up to his crotch, and when that thing came back down the river, Martin was out there waving (chuckles) the God-damned white shirt.

The ranger didn't have the brains of a pissant, and the pilot had thoughtfully put on the flow at Glen Canyon and at Grand Canyon. So with those two figures I could evaluate how fast the river was falling. That's why I broke camp, got the stuff loaded back on the boats and we took off like a bunch of striped-butted apes and got down. This was about four o'clock when we got that. We rowed like hell 'til it was dark, and we camped up in the rocks, little bits of sand. We made about twelve, fifteen miles that night. I think we had a cold dinner. Don't even think we made a fire. We got up at daylight the next morning, and we rowed from there down to Separation Canyon. I think we rowed fifty miles, just about even. When you're rowing fifty miles, you're doing something.

REILLY: My last trip that I led was in 1964. I sold Martin my dories and my outfit in 1965.

UNDERHILL: Why did you stop running the Colorado River in 1964?

REILLY: I recognized I was getting too old. Ten years before that I would have piled into a rapid and run it and thought nothing of it. I got to looking at the thing and thought maybe I better line this son of a gun. I got more cautious and I didn't have the physical strength that I used to have. I used to be strong as a bull. But as you get older you don't have that young-man strength anymore. And there's no use in pretending I did and getting in trouble. Just damn foolishness.

STEIGER: I know the last trip you actually *made* you weren't leading it, but I know that you went down in the mid-seventies or at some point there. Was it the eighties?

REILLY: Yeah, 1984. And my only baloney trip was in 1982, with John Hoffman.

UNDERHILL: What do you think were the most important factors to consider, as you were preparing for a pre-dam trip? What kinds of things did you think about in terms of your planning?

REILLY: Well, it was my vacation. I thought the trip had been grossly magnified...as to how hazardous the rapids were and everything. And I figured it's useless to seek out the most ferocious water in the west and then to line it. I was more objective about it. I lost a couple, three hundred dollars on every trip. It didn't bother me a bit! It was my vacation. And I was willing to spend that if I could get a compatible group of people together, have a good trip. That was all I was after.

UNDERHILL: Do you think today that it's the commercial element that motivates people?

REILLY: Oh, it's all commercial! Good gosh! They wouldn't be riding the baloney boats down there if they weren't commercial. They take a payload, dump them, and go back for another payload. Ring the cash register.

On the whole, the commercial aspect is what deadened me. Might as well, been pumping gas or something. To me, if it could of been a prolonged and a sensitive thing, just for the enjoyment of the episode, it would of hit me swell. But anything you make money on, I'm not going to go. I knew it was totally different, and I was teed off, of course, when I saw... I think I counted twelve or thirteen baloney rigs that they had at Hance waiting for the water to come up. Well that was something that was totally foreign to me, and I thought, "Oh, Christ, that I should live to see this day!" But I did.

Brad Dimock

Curmudgeons' Chronicles—

The dark side of river history

HISTORY IS BY AND LARGE determined by historians. Those whose opinions and writings remain popular are those who determine what “really” happened. The importance of a historian being impartial, thorough, and honest cannot be overstated. Yet on occasion, even good historians succumb to the dark side, and their biases, opinions, and distortions come to be presented as fact. Grand Canyon has had its share of both types of history. The roots of the darker side are five-fold.

POSSESSORY INTEREST: Beginning with Powell, river runners have shown the human foible of feeling that those who came later were irrelevant, that Johnny-come-latelies had little merit, that their own expedition was the last one to truly matter.

RELECTIVE SLANTED REVISIONISM: Robert Brewster Stanton kicked off “attack-history” with his assaults on Powell and James White. Although his negativism was certainly warranted in places and counterbalanced by Powell worshipers such as Dellenbaugh, Stanton’s Colorado River Controversies goes beyond honesty into deviousness—a tradition that others would follow.

FREUDIAN POP PSYCHOLOGY: By the late 1950s, trendy intellectuals were brandishing Freudian and pseudo-Freudian analysis with great abandon at cocktail parties and around the campfire. It was all the rage to analyze people based real or imagined traits and relationships, and all too often, people began to believe their own psychobabble.

EGOS AND FEUDS: In the 1940s and ’50s, egos were raging on the Colorado. Nevills cut a broad swath, as did his boatmen Dock Marston and P.T. Reilly. Harry Aleson, Bert Loper, Georgie White and others all were drawn, not always willingly, into the swirl of name calling, baiting, feuding.

THE CURMUDGEON EFFECT: Although Stanton and, later, Marston and Reilly, did strong, honest, and comprehensive research for the majority of their lives, as they reached their seventies and eighties their opinions began to calcify as their objectivity decayed. Some may remember Dock Marston’s embarrassing speech at the Boatman’s Training Session in the mid seventies, wherein he psychoanalyzed and defamed most known boatmen and explained how he, Marston, had driven Nevills to suicide. Fortunately—at least in the case of all three aforementioned historians—their main bodies of strong research remain intact for current and future generations to consult. With good luck, that will be their legacy.

However: In order to put the accusations and allega-

tions fomented by these gentlemen to rest, I feel that, rather than sweep them back beneath the carpet to fester, it is better to let them wither in the noonday sun. For that reason I have assembled an addendum to the P.T. Reilly interview, wherein he describes much of the feuding and bile, and showcases some of his own and Marston’s latter-day opinions. By knowing where these rumors originated, and in what company they grew, it can help today’s audience evaluate these tales for what they are. And rather than condemn Stanton, Reilly, or Marston, it is important to understand that this segment of their legacy, although it does exist and has tainted much modern storytelling, is but a wart on otherwise brilliant careers.

Brad Dimock

UNDERHILL: What interested you in historical aspects of river running?

REILLY: I guess it was Nevills’s incessant, ah, display of—his so-called dramatic ability of distorting history. Norm really got me interested in the history of the place, mainly because of his wild stories. Hell, I began to read the stuff that had been written, and I saw that the early runners were amazingly inefficient. I saw Powell’s deficiencies, and I saw Stanton was a con man.

UNDERHILL: Any particular example come to mind of powerful myth where you know that something was not true?

REILLY: Well, I guess it started out with Powell. And Stanton and Nevills, certainly magnified it. And Nevills completely distorted things beyond all reason. It was awful. But I didn’t know enough about it to tell how much he exaggerated. Then I started digging into it. It was awful.

As soon as I went through the Canyon, Dock Marston made a habit of getting hold of all the passengers. He was building a case on Nevills, and he contacted all the passengers, and evidently he thought I was a pretty good one, because he and I got to corresponding and he really interested me in getting the record. And both of us, preferred to get the actual truth of what really happened. And we didn’t like to repeat the bunch of baloney like Nevills. I just trying to gather the record. As it happened. Some of it’s rather astounding. And ah, I guess you can say that some people rather hide the truth, and maintain their fiction. And I like to try to break through that.

STEIGER: What was your opinion of Marston? Sounds like he was pretty knowledgeable both about

the river *and* about the history.

REILLY: Dock was. He went right to the original source. He was an ornery old goat, and you couldn't trust him, but he *knew*. (laughs) Dock and I had many years of a fruitful relationship. What broke it up, he double-crossed me. And I told him off about it, and that ended it.

STEIGER: Well, you said that he was making a case against Nevills. Why was he so interested in doing that?

REILLY: Because Nevills fired him.

UNDERHILL: Why do you think Dock Marston started running the river?

REILLY: Well, he started in 1942.

UNDERHILL: What made him get interested, do you think?

REILLY: I think he had grandiose ideas about his ability to write. Dock never did learn to write. His writing is atrocious. Really bad. He never learned to structure grammar. He never learned how to compose a paragraph...a single thought, and this and that. It was just something he didn't know.

STEIGER: Now, let me get this straight: Powell, you didn't think much of him.

REILLY: I don't think much of Powell.

STEIGER: As a river runner, or as a scientist, when it comes to Powell?

REILLY: Well, neither one. I think in the case of Powell, he was clearly trying to shoot himself into the public recognition with the other surveyors.

STEIGER: Stanton?

REILLY: Well, Stanton was an engineer who was primarily used to spending other people's money, and he sure spent some on that. Now, Stanton had a *heck* of a good crew. Every time Stanton got in trouble, which was pretty often, MacDonald would bail him out.

STEIGER: Who were the individuals that really stood out as being the best?

REILLY: Galloway and Flavell. They knew what they were doing. I named my second boat *Flavell*. They were good boatmen. They recognized the job. Before them, all of them went down the rapids backwards. Looked over their shoulder as they went down. Galloway backed down. Faced downstream. Flavell turned his seat around. I take my hat off to those two. To me they were the forerunners of the modern, technique—from Nevills on up to Litton.

Flavell had a open boat. That's a hell of a job taking an open boat through the Grand Canyon. Dock claimed he was homosexual. And that he trapped coyotes down on the Delta, and took them at that time to the only office where you could redeem the pelts and get the bounty—San Fernando. And that's where he met the Mexican fellah. Flavell called him Montoss or—something like that—some Mexican name. We never had gotten the guy's name straight. But ah, Dock

claimed that he was Flavell's boy. An Flavell was a homosexual and all that. Well, I didn't see any evidence of that whatsoever. Dock was kind of hung up that way anyway. (laughter)

SUSIE: He accused everybody of being a homosexual.

REILLY: The Kolbs were just laughs. You see, Emery's brother, Ellsworth, he was the one that was the dare devil, who would do anything. What Ellsworth did scared the hell out of Emery, and he was sitting there wringing his hands, and Ellsworth was out just having a good time and didn't know any better. Emery Kolb is pathetic. Poor old guy. He exposed himself in the 1923 trip when he got a job as head boatmen. And he—couldn't fill the bill. Emery was a chicken boatman.

STEIGER: Well, and then those guys that took the bear down?

REILLY: Eddy? They didn't know from nuthin'. I don't have much respect for Clyde Eddy. I wouldn't give that ass the time of day. Clyde Eddy, the less said about him the better. He was as neurotic, as they come. Some of his crewman were very good.

STEIGER: Well, they had to be pretty competent to take a bear cub.

REILLY: No, they didn't know any better. Now that was a good trip to illustrate that going through the Canyon wasn't the heroic thing that Stanton and Powell had built it up to be—Powell especially. I hold that as a black mark against Powell, "Only superhuman people can do this." Baloney!

Then came down the Dusty Dozen. Not a heck of a lot can be said for them. [laughs]

STEIGER: Did you know the Hatch boys? How did they strike you?

REILLY: Well, I don't think too much of them. I knew the old man.

STEIGER: What was he like?

REILLY: Just a big old country hick—not too big—a little old country hick.

After Flavell and Galloway, the next good boatman, I think, who went all the way through, was Buzz. Well, he had his personal miseries, but he know how to handle oars, and that's all you can ask of a boatman, Can he handle the oars? And he ran solo. I don't you could throw mud at anything that Buzz did. When I read Vince Welch's little ditty about Buzz (chuckles), and I had to smile. Didn't act like he knew Buzz was homosexual.

STEIGER: (in surprise) Oh, I had never heard *that* one!

REILLY: Buzz was queer as a goat. That's why he killed himself.

SUSIE: That's why he committed suicide. Oh, his was a very sad story.

REILLY: Buzz was a good boatman, a *heck* of a good

boatman.

STEIGER: How did you ever find out that he was...

REILLY: Well, he had domineering mother. Buzz's mother had literary ambitions, and she cleaned up Buzz's journals as best as she could. If you get a supposed copy of Buzz's journal with everything's cohesive in it, and the sentences are complete, you can bet damned well his mother worked 'em over. Buzz had very little education. In the first place, he couldn't write anything very good. His mother rewrote Buzz's diaries to suit herself. She thought she was literary.

Of course Dock had a lot of screwy ideas about just about everything, and he said that he could understand Buzz being homosexual, he had a domineering mother and a very weak father, and he was just homosexual, that's all there was to it. Why did *you* think Buzz killed himself?

STEIGER: Well, let's just go down the list. After Holmstrom, just running through the characters of the times: How about Bert Loper? What did you think of him as a boatman?

REILLY: Lousy!

STEIGER: Really?!

REILLY: Oh, one of the worst!

STEIGER: And Nevills?

REILLY: Oh Norm ran a lousy operation!

SUZIE: It was haphazard. Oh, it was kind of pitiful.

REILLY: Norm just wasn't educated enough to know what it was all about.

SUZIE: And he didn't get along well with his boatmen.

REILLY: He didn't get along with *anybody*. He had a little man's ego, and he just...

SUZIE: Was difficult.

REILLY: Nevills got more cautious as he grew older. Of course, I was thirty-eight when I made my first trip through the Canyon. Norm wasn't quite forty-four when he got killed. He was just coming into his prime as a boatmen. But Nevills had practically no education. And he was a little guy. Little guys seem to have to prove themselves more than big guys do. He had quite a cross to bear.

You get into a little river feuds. Larabee and Aleson hated Norm, and Norm hated them. Don Harris hated Nevills, and Bert Loper hated Nevills. Oh, they were feuding to beat hell! So they were going to use Bert Loper to take the play away from...they knew what a publicity hound Norm Nevills was, and they were going to use the "Grand Old Man of the River"—Harry Aleson gave him the nickname—and they got all the publicity generated about that, and they took off about a week ahead of us in 1949. They'd balonied old Bert into thinking he was going to lead the trip against the hated Nevills. Well, they didn't intend for Loper to lead that trip at all. Well hell, the old fool shouldn't have even been on the river at eighty years old, and he wasn't leading the boat, and he tried to shove

to the front all the time and they didn't want him to do that. And they took the lead away from him, but old Bert figured out a way to out-fox them. So he shoved off first before they got the camp gear stowed on this fateful day, and he piled into 24 1/2. He had a passenger named Wayne Nichol. Wayne Nichol said that Bert just entered the rapid and he was slumped over the oars—he was just too damned old to do it, is the truth of it.

I saw that boat right after it was pulled out of the river. We came by three days later, and the boat was... I've got pictures of it. He used shingle nails to build it! Oh, it was the lousiest boat! That poor guy had no more idea how to build a boat than I have of atomic science. There was no rock to it at all. It was the most terrible, most horrible answer to running a rapid. God himself couldn't have rowed that boat and made a respectable showing.

• • •

REILLY: Nevills fired Dock Marston and gave me his job after the 1948 party. And that just teed Dock off something awful. So Dock set up with Ed Hudson to run motors through the Canyon.

Well Marston was jealous of Ed. And it was his misdirection that got them hung up in the eddy on the mud bank going upstream. Marston wanted to take credit for getting the *Esmeralda* through in 1949. Marston was going to be navigator. He wanted to be kind of bold in bringing that out. Dog that he was. I can see it as plain as anything. You've got to go with the outflow. Follow the curve. He tried to cut a bend too close and he got the *Essie* stuck. It took them, two or three hours, to get it off. That's when they burned out the head gasket, by running the engine so fast and all the power and everything.

STEIGER: So there wasn't any love lost, in other words, between him and Dock Marston then.

REILLY: Well, there was no love lost between Marston and Ed Hudson. That was a big feud. They hated each other's guts. (laughter) In the old days there were a lot of loves and hates that you had to really get in there and probe to learn them all. That's what it boils down to.



Sandra Vlock

Stuff We Need

GCRG WILL BE producing new t-shirts prior to the Guides Training Seminar in late March, but we're lacking a new design. So call us if you're interested in donating your time to design something super for Grand Canyon River Guides. We know how much creativity there is out there!

GCRG always needs volunteers to help with filing and things of that nature. The piles seem to grow when we're not looking. Liz Sharp has been a fabulous help lately. Sandy Bernstein has helped many times over the years when she's in town, and Lynn Roeder has pitched in as well. I don't know who created the myth that computers make for less paper, but it couldn't be farther from the truth! So give us a call. We can always work around your schedule and there's almost always something that needs doing!

So many of you gave generous contributions to GCRG over the past year. You know how much it has meant to this organization. But, the calendar year is winding down and we'd like to mention that if you still have a few shekels rattling around in your pockets, you could still send them our way for a tax deduction. We'll never turn away money and we always can use more!

Thanks for everything!

Announcements

SWIFTWATER RESCUE COURSE

Rescue 3 is offering a Swiftwater Rescue Course in Salt River Canyon and Globe, AZ on March 7-9, 2003. The cost of the course is \$300 but there may be a discount to GCRG members. Call Steve Harris at 1 (800) 359-2627 for registration and details.

GUIDE TESTING

In general, you can expect guide testing to be available at the GCRG office at 515 W. Birch in Flagstaff, AZ on the fourth Tuesday of a given month at 1:30 P.M. (probably with a December exception). It is crucial to contact the GCRG office at (928) 773-1075 or at gcrg@infomagic.net to confirm a testing date. GCRG needs to know how many people plan on coming and also require your contact information in case the schedule changes. Please bring everything with you (including *all* your certifications)—same as you would if you were taking the test up at Lees Ferry. If you need a copy of the current Commercial Operation Requirements, please contact the Lees Ferry Ranger at (928) 355-2232.

FOUND (IN EDDIES)

Women's size seven Chaco Chong and a size twelve old style Teva Ultimate Thong. Call (435) 635-4144.

River Runner Photos

AT THE Old Timer's Guides Training Seminar last spring, photographers Dave Edwards, Geoff Gourley and Kate Thompson captured innumerable river runners on film—both old timers, contemporary guides, and future boatmen. As a continuation of the "Legends" photography series pioneered by the late Dugald Bremner, their work has created an amazing legacy by documenting, celebrating and capturing the very essence of the river running community.



Some of you previewed the photographs at Grand Canyon River Guides' Fall Meeting on November 2nd. As a fund-raising effort for GCRG, these wonderful photographs are now readily accessible to a wide audience for both viewing and purchasing. Check them out on the web at www.mindspring.com/~gcrg/. See yourself, your friends, other canyon legends...the photos are wonderful.

Lynn Hamilton

Wilderness First Aid Courses 2003:

Sponsored by GCRG & Desert Mountain Medicine

WILDERNESS REVIEW (RECERT) COURSE—March 25 27, 2003 (two and a half days)

Prerequisite: Desert Mountain Medicine (DMM) will accept anyone who has had and kept current a Wilderness First Responder (WFR) certification (80 hour course) through Wilderness Medical Associates, WMI, SOLO, NOLS, DMM and other Wilderness medicine providers.

Location: To be determined, but definitely in Flagstaff, AZ.

Lodging & Meals: On your own.

Certification: Renews your certification for three years plus two-year CPR certification.

Cost: \$165

BRIDGE COURSE—March 31–April 4, 2003 (five days)

Purpose: to upgrade from a Wilderness Advanced First Aid (WAFA) certification to a WFR certification.

Prerequisite: WFR graduate. Same reciprocity with the wilderness medicine providers indicated above.

Location: Northern Arizona University, Flagstaff, AZ.

Lodging & Meals: On your own.

Certification: three-year WFR certification and two-year CPR certification.

Cost: \$235 (for those of you who got a letter from us, please note reduced price).

WILDERNESS FIRST RESPONDER—March 16 24, 2003 (nine day course)

Prerequisite: None.

Location: Northern Arizona University, Flagstaff, AZ.

Lodging & Meals: On your own/

Certification: three-year WFR certification and two-year CPR certification

Cost: \$400

Class size is strictly limited. Send your \$50 non-refundable deposit with the application below to us at PO Box 1934, Flagstaff, AZ 86002 to hold a space. Checks can be made payable to GCRG. If you work for an outfitter who pays one hundred percent of course costs, just let us know that you'll be attending and we'll take care of the rest. The courses are already filling, so act now! GCRG reserves the right to cancel any classes due to insufficient enrollment. Call the GCRG office at (928) 773-1075 with any questions.

FIRST AID COURSE REGISTRATION

Circle one: Review Course Bridge Course Wilderness First Responder

Name _____

Address _____

City _____ State _____ Zip _____

Phone (important!) _____ Email _____

Outfitter _____

Type of current 1st aid _____

Businesses Offering Support

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

Canyon Supply—Boating gear 928/779-0624
The Summit—Boating equipment 928/774-0724
Chums/Hellowear—Chums & Hello clothing 800/323-3707
Mountain Sports 928/779-5156
Aspen Sports—Outdoor gear 928/779-1935
Teva 928/779-5938
Sunrise Leather—Birkenstock sandals 800/999-2575
River Rat Raft and Bike—Bikes and boats 916/966-6777
Professional River Outfitters—Equip. rentals 928/779-1512
Canyon R.E.O.—River equipment rental 928/774-3377
The Dory Connection—Dory rental 928/773-1008
Winter Sun—Indian art & herbal medicine 928/774-2884
Mountain Angels Trading Co.—River jewelry 800/808-9787
Terri Merz, MFT—Counselling 702/892-0511
Dr. Jim Marzolf, DDS—Dentist 928/779-2393
Snook's Chiropractic 928/779-4344
Fran Sarena, NCMT—Body work 928/773-1072
Five Quail Books—Canyon and River books 928/776-9955
Canyon Books—Canyon and River books 928/779-0105
River Gardens Rare Books—First editions 435/648-2688
Patrick Conley—Realtor 928/779-4596
Design and Sales Publishing Company 520/774-2147
River Art & Mud Gallery—River folk art 435/648-2688
Fretwater Press 928/774-8853
Marble Canyon Lodge 928/355-2225
Cliff Dwellers Lodge, AZ 928/355-2228
Mary Ellen Arndorfer, CPA—Taxes 928/525-2585
Trebson & Fine—Attorneys at law 928/779-1713
Laughing Bird Adventures—Sea kayak tours 503/621-1167
North Star Adventures—Alaska & Baja trips 800/258-8434
Chimneys Southwest—Chimney sweeping 801/644-5705
Rescue Specialists—Rescue & 1st Aid 509/548-7875
Wilderness Medical Associates 888/945-3633
Rubicon Adventures—Mobile CPR & 1st Aid 707/887-2452
Vertical Relief Climbing Center 928/556-9909
Randy Rohrig—Rocky Point Casitas rentals 928/522-9064
Dr. Mark Falcon—Chiropractor 928/779-2742
Willow Creek Books—Coffee & Outdoor gear 435/644-8884
KC Publications—Books on National Parks 800/626-9673
Roberta Motter, CPA 928/774-8078
Flagstaff Native Plant & Seed 928/773-9406
High Desert Boatworks—Dories & Repairs 970/259-5595
Hell's Backbone Grill—Restaurant & catering 435/335-7464
Boulder Mountain Lodge 800/556-3446
Marble Canyon Metal Works 928/355-2253
Cañonita Dories—Dory kits, hulls, oars, etc. 970/259-0809
Tele Choice—Phone rates 877/548-3413
Kristen Tinning, NCMT—Roling & massage 928/525-3958
Inner Gorge Trail Guides—Backpacking 877/787-4453
Sam Walton—Rare Earth Images, screen savers 928/214-0687
Plateau Restoration/Conservation Adventures 435/259-7733
EPF Classic & European Motorcycles 928/778-7910
Asolo Productions—Film and Video Productions 801/705-7033
Funhog Press—AZ Hiking Guides 928/779-9788
Man to Rubber, Inc. 800/437-9224
Capitol Hill Neighborhood Acupuncture 206/323-3277
CC Lockwood—Photography books 225/769-4766

GTS Spring 2003!

IT'S TIME TO MARK your calendars for the 2003 Guides Training Seminar! Dates are as follows:

- GCRG Spring Business Meeting—Friday, March 28, 2003 (Location to be determined)
- GTS Land Session—Saturday and Sunday, March 29-30, 2003 at Hatch River Expeditions warehouse in Marble Canyon, AZ.
- GTS River Session—
 - April 1-7, 2003 (Upper half—Lees Ferry to Phantom Ranch)
 - April 7-15, 2003 (Lower half—Phantom Ranch to Diamond Creek)

Anyone and everyone is welcome to attend the Land Session. The fee for the weekend is \$25 unless you're sponsored by an outfitter (in which case they pick up the tab). The GTS River Session is open to guides who have work in the canyon during the upcoming river season. Cost per half of trip will be \$150 (same sponsorship policy applies). The GTS is your best opportunity to learn the latest about resource issues plus up-to-the-minute interpretive science revolving around the natural, cultural and human history of Grand Canyon. We'll have more details in the next issue of the BQR and in the postcard we'll send to guides after the first of the year. For now, just count on coming! See you there!



Sandra Vlock

Care To Join Us?

If 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

Must love the Grand Canyon

Been on a trip? _____

With whom? _____

Guide Member

Must have worked in the River Industry

Company? _____

Year Began? _____

Number of trips? _____

Name _____

Address _____

City _____ State ___ Zip _____

Phone _____

\$30 1-year membership

\$125 5-year membership

\$277 Life membership (A buck a mile)

\$500 Benefactor*

\$1000 Patron (A *grand*, get it?)*

*benefactors and patrons get a life membership, a silver split twig figurine pendant, and our undying gratitude.

\$100 Adopt your very own Beach: _____

\$_____ donation, for all the stuff you do.

\$24 Henley long sleeved shirt Size____ Color____

\$16 Short sleeved T-shirt Size____ Color____

\$18 Long sleeved T-shirt Size____ Color____

\$12 Baseball Cap

\$10 Kent Frost Poster (Dugald Bremner photo)

\$13 Paul Winter CD

\$17 Lava Falls / Upset posters (circle one or both)

Total enclosed _____

Scuttled



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 Ruth H. Brown Foundation, Teva, Chehalis Fund of the Tides Foundation, and innumerable GCRG members for their generous and much appreciated support of this publication.

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boatman's quarterly review

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