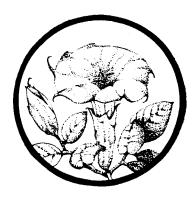
The Confluence

The Journal of Colorado Plateau River Guides

Volume 3, Number 1 Winter 1996



Frank Dodge Continued

Piedra River

Icebergs in Cataract

Atlas Tailings

Affordable Housing

Mr. Fix-It

Cataract Canyon's Historic Flow Regime

America Outdoor

Guide Training

Editorials

Microplate

Dolores River

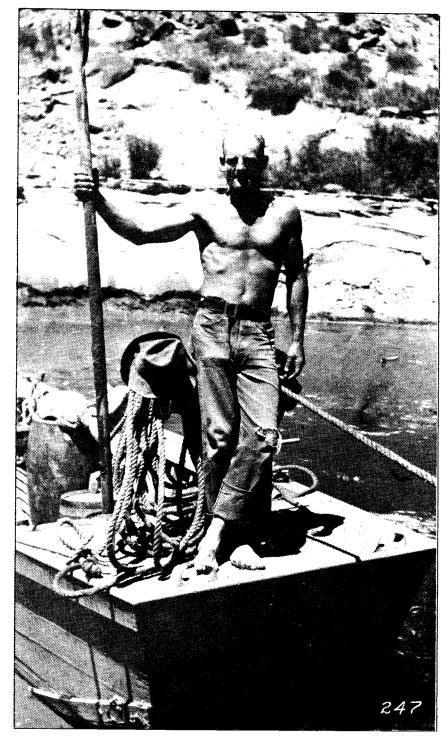
Paradox Basin

Big Bottom Pictographs

High Water Redux

Endangered Fish

(and more)



LaRue Collection #247: Frank Dodge standing on motor boat, Sentinel Rock Creek, Coconino County, October 8, 1921. Photo and caption by E. C. LaRue. Photo courtesy of the USGS, Denver.

The Confluence

...is the quarterly journal of Colorado Plateau River Guides, Inc. Colorado Plateau River Guides is a 501 (c) (3) non-profit organization dedicated to:

- * Protecting the rivers of the Colorado Plateau.
- * Setting the highest standards for the river profession.
- * Providing the best possible river experience.
- * Celebrating the unique spirit of the river community.

Guide Membership is open to anyone who works or has worked in the river industry of the Colorado Plateau.

General Membership is open to those who love the rivers of the Colorado Plateau.

Membership dues:

\$20 per year. \$100 for 6 years. \$195 for life. \$295 Benefactor.

General Meetings and Board of Directors Meetings will be announced.

Officers

President Vice President Secretary/Treaurer Susette DeCoster-Weisheit Michele Reaume

John Weisheit

Directors

Bluff Green River Moah

Vernal

Tom Rice Sean Brown Steve Young Vacant

Colorado Plateau River Guides P.O. Box 344 Moab, UT 84532-0344 (801) 259-8077

We need articles, artwork, poetry, photos, stories, and opinions. This journal is composed with Word Perfect 5.1 on an IBM PC. If you use a word processor, we can translate most programs at CNHA, which uses IBM and MacIntosh programs with various disc drives. Otherwise, please send your text double-spaced. Please include useful photos, charts, diagrams and artwork. There really is no deadline, but the beginning of each quarter works best.

A Disclaimer

The opinions and statements made within the pages of <u>The Confluence</u> are those of the author and do not necessarily represent the position of the guide membership, the board of Colorado Plateau River Guides, nor Canyon Country Volunteers. If you have an opposing or supporting viewpoint please send your comments to CPRG.

Affordable Housing Survey

On page 29 and 30 of this issue is a survey for you to fill-out concerning affordable housing for seasonal land and river guides. It is Moab specific but all are invited to participate. See page 28 for further details.

New Board Member

We give a special thanks to Tim Thomas for serving as the first vicepresident of CPRG. Michele Reaume is joining the board as our new vicepresident. We are presently short a Vernal Director and are asking for a willing volunteer.

CPRG Honorary Member Nominated

We have nominated our first CPRG honorary member for meritous service to our mission statement. When CPRG first started Jeanne Treadway, then executive director of Canyonlands Natural History Association (CNHA), helped CPRG to secure a 501 (c) (3) non-profit status through the CNHA umbrella called Canyon Country Volunteers.

Special Thanks To:

Peter Lawson for a Benefactor Membership. Michael Smith for a Lifetime Membership.

Financial Report

We have a balance of \$2700 before the printing of this issue.

Spring Meeting

The CPRG Spring Meeting will be held 9:00 a.m., May 3 and 4, 1996, at the Dan O'Laurie Museum, 118 E. Center, Moab, UT.

A Guide Training River Trip

There will be a river clean-up trip through Cataract Canyon May 6 - 9, 1996. Educational talks & activities will be conducted. Ask your employer for details.

Letters to the Prez

IN RESPONSE TO DRUG TESTING

Dear Susette:

Hello, it's just "squeak" here putting in my two cents worth. As you might have guessed, I was outraged by these new "prospectus" requirements. In particular the drug and alcohol thing. You know me, I choose not to use drugs; however, I don't think that my drug orientation has any barring on guiding rivers. I think you know as well as I do that some of the finest guides the Colorado Plateau has to offer, occasionally smoke dope. I do not condone it at all, I believe that the government involvement in peoples lives has already been over extended. This is just another bureaucratic endeavor to further infringe on people's rights. I think this bill is aimed at a class of people that do not have a large income and is therefore discriminating. I mean come on, has Bill Orten been asked to pee in a cup to ensure that he is doing an adequate job in congress. Furthermore if we could tell whether or not an individual was doing an adequate job in anything, politics or other wise, simply by the contents of their urine, well, we'd be living in a perfect world with perfect jobs for everyone. The fact is, drug testing has no barring on whether or not a guide can do his/her job.

The alcohol thing angered me even more. I can remember a Westwater trip when a strange man hopped on my boat and gave me two gallons of pre-mixed margarita. After a long day in the canyon we parked our boats, the other guides and I shared some of the concoction. After a wonderful dinner and desert with enlightening and slightly tipsy conversation we experienced an out break of champaign and whipped cream warfare. Sound familiar? Now, I would guess that if a city slicker policy maker were to hear that story, they might conclude that the presence of alcohol was inappropriate. But, that's not true. You were there, I would say that the people on the trip loved it. The folks on my boat drank all the mixture of the first bottle before we even got to camp.

Now, I think that to associate drugs/alcohol with unsafe river trips is an assumption that policy makers should not make. And I would ask such policy makers why and when did they start caring about the boatmun in Utah? Let's suppose I were to take a trip down Cataract for the first time and the water level was in the 60,000 cfs range. If my options were to go with a clean and sober first year boatmun or go with someone with years of Cataract experience, who may or may not be 100% clean and sober, I'd choose the experienced boatmun any day. I realize that this example is grossly over simplifying the issue at hand. I will say that experience is more valuable

when dealing with safety issues, than any other aspect of river running. I seriously doubt that any of the prospectus even mentioned experience. Quite frankly, I think that the government proposals have little to do with bettering river trips and therefore have no validity.

Lastly, I would like to draw attention to the task of enforcing such policies. Who will pay for this? Who is paying for the steps that have already been taken and can we boycott them (ok, ok, maybe I'm getting a little dramatic here)? But I mean jeeze, am I going to have to pull some clueless DEA agent out of The Room of Doom? Is this going to be a rewarded strategy thing? "Just nark on your fellow boatmun and we'll pay you more money". I think that enforcing such policies would be a costly, bureaucratic nightmare!

OK, enough squeaking for today. Here are my renewal dues. Good luck to all in CPRG, happy holidays.

Annie Tueller

A Response To Coffee Making

Dear Prez:

Been meaning to write you on this one. COFFEE. I too have been involved in numerous caffeine related discussions on river and off. As to the proper, best, or only way to make coffee. Some include: not the swing, but the egg shell method--where you drop egg shells into the coffee to make the grounds sink. The drizzle of cold water on top of the grounds, and, the beating of the side with your channel locks. I prefer a bit of the drizzle method (who has cold water--I use what there is!), along with the swing method--but ever since seeing a pot fly--I don't do the "round the world"... But I must agree--the most important thing is simply having coffee and making sure its strong enough to hold a spoon up. I fill the lid up with grounds--in a heaping manner and then add a touch more for a full pot (probably five handfuls!)

But the worst is simply not having any. And second worst is what I experienced on my last trip--filled the <u>can</u> of coffee with packets of coffee he found in the warehouse. They were INSTANT CRYSTALS! Whoever put them on the shelf in the first place should have to go thru what our fellow guide did--for the <u>seven</u> days we had to suffer thru instant coffee mornings. Thanks for visiting the other day--your vegies are delightful!

Carol Van Steeter

THE TAILINGS TASK FORCE

The Atlas Uranium Tailings Pile Near Moab

Dear Friends:

Thank you for your participation in the Atlas Tailings Public Information Meeting on November 16, 1995. Many of you have asked what you can do NOW, prior to the release of the Draft Environmental Impact Statement (DEIS). Our suggestions and an update follow:

1) If you haven't already done so, PLEASE REQUEST THAT A DEIS BE SENT TO YOU AT YOUR HOME STATE ADDRESS. Send this request to:

Mr. Myron Fleigel, Project Manager Uranium Recovery Branch U.S. Nuclear Regulatory Commission Division of Low-Level Waste management NMSS (5E2) 11555 Rockville Pike Rockville, MD 20850

2) William Sinclair of Utah's Department of Environmental Quality has expended a tremendous amount of energy and support on behalf of this project. You may also WRITE A "THANK YOU" AND "PLEASE CONTINUE SUPPORTING THE INTEGRITY OF THIS PROCESS":

William Sinclair, Director
Division of Radiation Control
Department of Environmental Quality, State of Utah
168 North 1950 West
P.O. Box 144850
Salt Lake City, UT 84114-4850

- 3) We plan to put together work groups to review the numerous technical areas within the DEIS. If you have expertise in a particular subject, special interest in a topic, or just want to help, please call Oni Butterfly at (801) 259-8683.
- 4) Since the meeting, Oakridge National Laboratory (ONL), an independent lab hired by NRC to prepare the DEIS, contacted the Task Force to ensure that they understand the scoping issues. It appears that they are making a concerted effort to address the Community's concerns. It remains to be seen how detailed the analysis will be regarding these specific areas of concern. The Task Force feels it would be premature to react to what we THINK might be in the DEIS so we are NOT encouraging you to contact any Congressional delegates at this point in time. However, this plan of action might be a VERY VIABLE one once the DEIS is released and had been reviewed.

Thank you for your continued support.

The Tailings Task Force

Editor's note: CPRG received the DEIS on February 20.

COBBLE TALES

by BRETT LECOMPTE

Like ancient black seeds
clustered together
on high, blond, alien sandstone,
lost cobbles
strain to recall
a jagged, icebound homeland
known as
Mountain.

In hushed whispers
beneath a sun too hot and dry,
they speak
of their savior,
of thick, cool, liquid wind
called
River.

The cobbles remember
the pilgrimage:
tumbling together,
smoothing youthful rawness,
collecting wisdom.
They cry,
"Why have you abandoned us,
O' Blessed River?
Return
and take us into your arms
again."

Insolent sandstone mocks
the mournful cries
of the odd, rounded Old Ones,
yet also dreams
of an afterlife of oneness
with
Ocean

Wilderness Medicine Seminars Winter and Spring 1996

WILDERNESS MEDICINE INSTITUTE, INC. P.O. Box 9; Pitkin, CO, 81241; (970) 641-3572

A. WILDERNESS EMERGENCY MEDICAL TECHNICIAN

This course is designed for outdoor leaders, search and rescue members, backcountry rangers, rural ambulance attendants, and other individuals who provide emergency care in remote settings. While fulfilling the DOT requirements for certification, this 180 hour program significantly expands the required topics to address the issues involved in extended care and introduces backcountry rescue techniques.

Classes are held in Pitkin, Colorado:

Cost: \$1,470 - \$1,495 Phone: (970) 641-3572 January 1 to 26 May 20 to June 14 July 31 to August 25

Price includes tuition, lodging and meals. Please call for additional listings.

B. WILDERNESS FIRST RESPONDER

This course is designed to provide outdoor leaders, guides, rangers and travelers with the knowledge needed to deal with emergencies in remote settings. It is an 80 hour curriculum, meeting all the DOT national standards for First Responder with additional protocols for extended care situations. Emphasis is placed on prevention and decision-making.

Classes are held in various western states from January to June, 1996. Please call for course information and prices: (970) 641-3572.

C. WILDERNESS/RURAL EMT MODULE

This module combines wilderness/rural issues with applications of emergency and rescue. The curriculum is based on the NAEMSP Rural Committee's guidelines and Wilderness medical Society's WPHEC curriculum. Approved by the National Registry of EMT's for continuing education credit.

Classes are held in Pitkin, Colorado: April 18 - 23; \$224; (970) 641-3572 Classes are held at the University of Utah: May 12 - 18; \$TBA; (801) 581-4512

D) WILDERNESS FIRST AID: MAY BE USED AS A WFR REFRESHER

Offered since 1975, this two or three day course is used by many organizations to introduce first aid and long-term patient care to trip leaders, camp counselors, guides and rescue team members. In addition it is often used for recertification by those with previous training.

Classes are held in various western states from January to June. Please call for course information and prices: (970) 641-3572.

E) WILDERNESS EMT/WFR REFRESHER

This recertification program qualifies as an EMT-B refresher for the State of Colorado and the National Registry of EMT's. In addition we will review and update the SOLO-WEMT and WFR curriculum. many other states will accept this refresher. Call the certification authority in your state to confirm acceptance.

Classes are held in Pitkin, Colorado: April 18 - 23; \$224; (970) 641-3572 WEMT Refreshers are \$225. WFR Refreshers are \$180. Price includes tuition only. Please call for lodging and meal information.

GUIDE AND OUTDOOR EDUCATOR TRAINING FOR THE 1996 SEASON

CANYONLANDS FIELD INSTITUTE, INC.

P.O. Box 68; Moab, Ut, 84532 (800) 860-5262; (801) 259-7750; Fax: (801)-259-2335

A. AMERICAN RED CROSS EMERGENCY RESPONSE: April 15 - 20, 1996

Instructors: Sheri Griffith and Jim Braggs

This 48-hour course is designed for any professional who may be called upon to give first aid in the line of duty; especially for outfitters and guides (replaces/exceeds Advanced First Aid, includes CPR). Lectures, videos, outdoor practicals. Provides 3-year ER and 1-year CPR certification.

Fee: \$195 (\$180/CFI Members). Deposit: \$75.

Note: Emergency Response Recertification Courses start in 1997.

REFRESHER - WILDERNESS FIRST RESPONDER: January 15 - 18, 1996

Instructor: Steve Lyons*

32-hour refresher course for those renewing Wilderness First Responder certification. Includes CPR. Provides 3-year WFR and 1-year CPR certification.

Fee: \$225 (\$210/CFI members). Deposit: \$75 (Optional lodging/meal plan available).

B. WILDERNESS FIRST RESPONDER:

January 20 - 29, 1996;

March 24 - April 2, 1996; May 28 - June 6, 1996

Instructor: Steve Lyons*

This 72-hour course emphasizes backcountry care in a prolonged transport context. Includes CPR and exceeds requirements for Red Cross Emergency Response; preferred by National Outdoor Leadership School (NOLS) and Outward Bound. Lectures, videos, outdoor practicals. Provides 3-year WFR and 1-year CPR certification.

Fee: \$400 (\$385/CFI members). Deposit \$150.

C. EMT REFRESHER COURSE WITH WILDERNESS EMT CERTIFICATION: March 11 - 19, 1996

Instructor: Steve Lyons*

This 56-hour course provides EMT-B recertification and provides Wilderness Upgrade based on recommendations of the Wilderness Medical Society. Meets State of Utah continuing education requirements for EMT. Outdoor practicals.

Fee:\$400 (\$385/CFI members). Deposit \$150

*Wilderness Professional Training courses taught by Steve Lyons, president, Wilderness Professional Training, Crested Butte, Colorado. Endorsed by the Wilderness Medical Society.

D. Ask about our: WHITEWATER ACADEMY FOR TEENS (ages 13 - 18); June 16 - 21, 1996

E. 1996 INTERPRETIVE AND RIVER SKILLS WORKSHOPS

Co-sponsored by Canyonlands Natural History Association, Utah Office of the Bureau of Land Management, National Park Service, Utah Guides and Outfitters Association, Colorado Plateau River Guides and Canyonlands Field Institute.

1.LEVEL I INTERPRETIVE SKILL: MAY 4 - 5, 1996

For first-year guides, this course presents an introduction to geologic principles, Colorado Plateau life zones, common plants and animals, use of field guides, naturalist "toolkit", and basic backcountry teaching skills. Outdoor practicals/video feedback. Based at Professor Valley Field Camp. Meals included.

FEE: \$50 (\$45/CFI members). Deposit: \$15.

2. LEVEL II INTERPRETIVE SKILLS: May 11 - 12, 1996

For trip leaders and experienced guides, this course presents special topics selected from ecology, geology, cultural history and public land issues. Included are principles of communication and course design. Bring your favorite "bag of tricks" to share. Outdoor practicals/video feedback. Based at Professor Valley Field Camp. Meals included.

FEE: \$50 (\$45/CFI members). Deposit: \$30.

3. LEVEL I RIVER SKILLS - COLORADO RIVER: April 19 (evening) - 21, 1996 or May 31 (evening) - June 2, 1996

For novice river guides and private boaters, this course offers an introduction to river ecology, boat rigging, rowing and paddling skills, throw ropes, safety practices, basic boat patching, low-impact camp routines and etiquette. One night at Professor Valley Field Camp and one night on the Colorado River. Meals included.

FEE: \$100 (\$90/CFI members). Deposit: \$30.

4. LEVEL II RIVER SKILLS - DOLORES RIVER: May 17 - 19, 1996

For boaters wishing to hone their paddling, rowing and river-rescue skills on technical (rocky) water. Exercises in "catching" eddies, strainer and foot entrapment rescues, shallow-water crossings, Z-line/boat wraps and boat repairs. Trip leadership, orientation talks, risk management, rescue protocol. Moab class session, two nights river camp. Meals included.

FEE: \$150 (\$135/CFI members). Deposit: \$50.

5. WESTWATER CANYON RIVER RESCUE - Colorado River: April 26 - 28, 1996

An intensive course for experienced boaters. Class session in Moab followed by river trip on Westwater Canyon. Special consideration for rafting high-volume rivers: instream rescues, rigging, swimming rapids, righting flipped rafts, Z-line/rope work, safety talks, trip leadership, rescue/evacuation scene management. Moab class section, 2 nights river camp. Meals included.

FEE: \$250 (\$235/CFI members). Deposit: \$80.

F. SCHOLARSHIPS

- 1) Full scholarship: Joy Ungricht Memorial Scholarship are awarded each year to women guides. One scholarship awarded for each interpretive and river skills/rescue course.
- 2) Half-tuition Scholarships: CFI Educator Assistance Scholarships are awarded to men and women guides, teachers, rangers, etc. to apply toward any guide course (medical, interpretive and river skills.
- G. IN ADDITION TO SCHOLARSHIPS, you can earn up to 2/3 of your tuition prior to a course through volunteer service at CFI. Please contact CFI for more information about scholarships, applications, and volunteer credit.

The Saga of Frank Dodge Part Two

edited by John Weisheit

For Part One please see <u>The Confluence</u> Issue 2, Volume 2. From a USGS publication compiled by the Tucson Office of the USGS in 1944. Brackets indicate editorial comment. Special thanks to Bob Webb.

1923 [Grand Canyon USGS Survey]

We left here [Lees Ferry] August 1, my birthday, and Mrs. Cockroft [wife of the USGS hydrographer stationed at Lees Ferry] had baked a cake and stuck in eighteen pieces of a candle, all she had, as a parting gift.

Freeman [Lewis R., boatman] had advocated the use of a 14-foot folding canvas boat for the rodman so I started off in that with my tongue in my cheek. It was easy to portage around rapids, such as Badger and Soap Creek, but below that I tried to run through a secondary rapid and the first wave slapped me out of it, filled the boat, and we went through side by each. The excitement that little upset raised makes me smile now. However, it wasn't long until, in lining it down a rapid difficult to portage [Cave Springs Rapid], someone either held a line too long or let go a line too soon. Anyway, it was crushed in the rocks and all we salvaged were the oarlocks [see photo next page].

We were running a stadia traverse, using a miniature plane table and special alidade with Beaman attachment. Our tie at the lower end were three monuments set up by Burchard [R. W., topographic engineer] the previous year at the end of the Canyon. This was to supplement the topography already done in the Park. Of course, as we went downstream from two to four miles a day, Burchard would sketch in roughly what was visible and intersect rim and intermediate points. It was good enough tie for latitude and longitude and there were already levels run in to the river at the Little Colorado, Bright Angel, Havasu and Diamond Creek.

I gave my Abercrombie and Fitch sleeping bag that Birdseye [Claude H., chief topographic engineer and trip leader] furnished, to the cook [Frank Word]. Those early bags were built for vertical rain only and had too much red flannel sewed in them for August weather anyhow. I was tough then so all my bedding consisted of was an 8 X 8 foot canvas; going almost naked, it meant that when I jumped ashore, I was practically landed for the night.

Not having a boat to run through a rapid and not wishing to be a bystander if anything could be done to help, and knowing the first boat through was always in danger of cracking up, perhaps injuring the boatman, too, and without aid available, I made a practice of going to the foot of a rapid with a coil of throwing rope. I'd

pick a spot I wasn't afraid of diving into if necessary, or a good rope-throwing spot, and wait for the first boat. Once LaRue [E.C., chief hydrologist] wandered down to where I was standing and asked, "Why do you always come down here, Frank, when the excitement is up at the top?" Well, I told him it was the only thing I could think of to give the first boat a hand if needed. "What do you mean," he asked, "Would you go after a boat from here to help?" And when I said, "Sure, I would," he turned about without another word and left me. I knew right then that in his mind I was nothing but a whopping liar. Several weeks later I vindicated my assertion. The lead boat [The Marble, Emery Kolb, lead boatman] went over a hugh rock, falling into a hole below, and turned over [Upset Rapid]. A third of a mile below it, there was I looking directly upstream and seeing all that went on. The boatman seemed to be muddled and was doing nothing except floating towards Yuma and points further south. The boat would pass me about seventy feet off, so judging its speed and my swimming, we met where I'd expected to meet. I grabbed for the painter and started back to shore. And was I a hero! That night Birdseye came to me and said, "I think you're worth a boatman's wages after this. From now on you're getting \$200.00." Don't let the above make you think I thought I was a hero. Hell no; but I've never got over the attitude of non-swimmers to what is possible and what isn't. The least little agitation to the water scares 'em -as it should -- but they keep thinking it's dangerous for

I forgot to mention there were four boats, two 18 1/2 footers [Marble; boatman, Kolb. Glen; boatman, Elwyn Blake.] weighing about 900 lbs. empty and two 16 footers [Grand; boatman, Freeman. Boulder; boatman, Leigh Lint]. With the loads carried, it brought the weight of the larger boats to at least 2,000 lbs., not to mention the oarsman and two passengers. Plus valuable equipment, maps, instruments, etc. Being strictly a business proposition, it was foolish to take chances. A lost boat would have meant the end of the survey. It was here Emory [Emery] Kolb used his head and Birdseye gave him his head. That is where Birdseye shone. Too many men hire a head boatman; then when on the river, seem to forget what he was hired for. And Emory was old enough to be able to read of others running a certain rapid and not let it influence his actions of the moment.

At Lava Falls the Little Colorado flood hit us. We'd been running on about 20,000 second feet and had camped at the head of the worst rapid in the river when at 10 p.m. the cook woke us all with a yell. He'd been almost afloat. I've forgotten the details, but I think the river rose in 24 hours to about 120,000 and the drift was a sight to be seen. Cottonwood trees battered and torn, road and railroad bridge timbers--well, let it go--you can imagine what 100,000 would pick up in the Little



LaRue Collection #362 - Wreck of the canvas boat Mohave at Mile 25.2. Photo courtesy of USGS, Denver.

Colorado basin. This held us up three days. In due time, we tied into the three reference points Burchard had established near the end of the Canyon and from there on we just rowed and sailed into Needles making that port on October 20.

[In 1924 Dodge goes to Alaska and does more survey work for the USGS]

1927 [Pathe-Bray Movie Production]

...a man named Bray in Los Angeles [wrote him a letter] asking if I would accept the job as head boatman for a movie outfit and what would be the price. Would I! I spent the night mentally jumping from \$500.00 per month (Emery Kolb's salary on the USGS trip, and too much) down to \$200.00 and finally decided they'd pay \$300.00, which seemed fair to my unwise money brain. Later I discovered that LaRue was signed up as technical advisor at \$250.00 per week and had a six month's contract. 1927 was a high peak in movie spending and

if I'd asked \$1000.00 I'd have got less not less than \$750.00 in the end I know.

On meeting Bray in Los Angeles, I found out he was so-called originator of the animated cartoon-that his wife wore the pants and controlled the purse strings-that in New York he had thought up the idea of making an educational or historical picture depicting Powell's river trip of 1869--that not having quite sufficient funds he must tie in with some going concern which turned out to be Pathe--that for the next four months, while I practically marked time in L.A. on \$450.00 a month (\$150.00 was for living expenses), they squabbled. All Pathe wanted was the gate receipts and they insisted on romance. There must be Love and plenty of it or who would care to look? So it was To Hell with Powell and let's call it "The Bride of the Colorado" with John Boles in the leading part to pull some female from those "terrific rapids". Four months were spent at the Joslyn Hotel with frequent telephone calls to Mrs. Bray dunning her for money. About twice a week I made a trip to Wilmington, to the Fellows and Stuart yard to inspect and give them a payment on the six boats being built



LaRue Collection #358 - A miner's cache discovered. Inventory: rubber boot, bucket, saw, brace, three bits, coffee grinder, shovel, 15 traps, hammer, tin snips, stew pan, gig, rivet punch, ax, awl, plate, flour sieve, piece of leather, and a handful of nails. Dodge is far right. Photo courtesy of USGS, Denver.

there. Once I took them an eleven hundred doller check which bounced and I was nearly killed where I showed up the next time. A check needed both Mrs. Bray's and the Pathe treasurer's signatures to be any good and this I'm sure she knew, but from the start to the end we all had trouble getting paid. I think she was working on the assumption that if she held out on us and the picture failed, she then wouldn't lose so much. If the picture was a hit, everybody would be sitting pretty, but we weren't in on a gamble; they were the gamblers, not us.

LaRue with his \$250.00 a week had an air-tight lawyer's contract with every i dotted and t crossed so was O.K. when calling for his check, but anyone who accepted Mrs. Bray, sight unseen, was just begging for trouble.

They had hired a young publicity man named Barber who was about six feet four and had exceptionally long and narrow feet; on pavement one had almost to run to keep up with him. Feet had always interested me for it's feet I think that puts a man in his proper place and as Barber was apt to brag, I'd look at his face and then at those long pointed shoes and think, how come? He'd rowed boats all over the World--had

sailed a schooner single handed from Kingston, Jamaica to New York, and had been a regular hell cat in the great out-of-doors. One day after making a recommendation that the Company supply one rifle for the whole party and ban private guns and cameras just to save space, Barber looked up and said, "Listen, I've got a .30-06 that I used in Mexico and I'd be glad to take it along for the gang." Then he continued to tell how many Mexicans fell to this gun while I figured it'd save buying a new carbine. Later, three days out of Green River, Utah, Barber brought forth an old Krag-Jorgensen musket with wood running up to its muzzle and using our very good, but now seldom seen, .30 U.S. Army cartridge, sometimes called the .30-.40. A crowd hovers around Barber as the first .30-06 shell gets half way in and sticks. A lot of arguing is going on so I pulled LaRue aside and told him the only similarity between the two was that both were .30 caliber and so were a lot of other guns, but the similarity ended there. "Better throw it in the river," I said, "and then get used to going without meat now and then." This LaRue did while Barber looked fit to be tied.

My first and only experience in Hollywood left

me with the impression that the place is run entirely on plain unadulterated "bull". Barber's feet turned out as I thought they would. Off the pavement he was helpless and if he'd sailed as he said he had, then I was the skipper of the *Merrimac*.

I saw to it that Owen Clark [Dodge met Clark at Lees Ferry in 1920; probably a part-time USGS employee] was engaged as a boatman and tried to get Cockcroft [Lees Ferry hydrographer], but his wife wouldn't allow it. Too dangerous, she said. That's a woman for you! So LaRue and I scoured the beaches, picking up a young college student who was a life guard at a pool. Hired two Russians who were expert swimmers and oarsmen, from the life saving business and, as LaRue had a friend in Alhambra who was crying to go, I took him as the sixth boatman. He, Val Woodburry, is one of Alhambra's leading men and a fine fellow he turned out to be, but I always think of him as my political boatman. He had the spirit just like Louis R. Freeman had, but he wasn't equipped physically. There was about 200 lbs. of him, set low over little tiny feet. There goes feet again. That leaves only large broad feet that are any good and that's correct for there is a heck of a lot of footwork to do in taking a "heavy party" through the Canyon, all on or over rocks both above and below water.

In August someone spotted a newspaper clipping about one Clyde Eddy leaving Green River, Wyoming [Green River, Utah] with a bunch of volunteer college students in three boats. That item almost wrecked our picture. "Why?," I asked and they replied, "Don't you see what their publicity will do to our publicity?" I didn't see, but then, I wasn't used to Hollywood's shenanigans anyway. Well, Eddy came through with only a couple of mutinies, a praying cameraman who quit here, near starvation and losing one boat, or was it two [one]? Parley Galloway (son of the old man!) [Nathaniel Galloway] did the trick really (If you can call it a trick?). The biggest trick is to get the young ones to do their proper share of the chores!

In some miraculous manner we got to Green River, Utah about Nov. 1, (1927) with the Governor and a bunch of school children to see us off. There were six boats and 13 men for the take off. LaRue, as technical advisor, was in charge. There was a movie director and two cameramen and Barber. Also a loaned Army sergeant to spread the bull via radio (which never worked) and John the cook, from Vienna. And of course, "us-uns", the boatmen.

I'd like to say we had exceptionally low water when I think of Cataract Canyon and our heavily laden boats, but I'm afraid someone might look it up and make me a liar [average 9000 cfs]. Anyway, in Cataract in one day we made but nine-tenths of a mile. As we quit in late afternoon we could look upstream and see smoke from our morning's fire.

LaRue had left word to expect us here at Lees Ferry in about three weeks. We were here in 21 days!

And so Hollywood, thinking it good publicity, not having heard from us by radio decided to increase gate receipts by claiming we had met "disaster" and were long overdue. They sent back to New York for Eddy [Clyde] to come to Lees Ferry to rescue us, incidently tying him up in a nice contract that prevented him from writing anything on his own trip.

In some hokus pokus way they got an army plane to come out from Texas and scour the canyons for us. This plane was wrecked near Cedar Ridge. By the papers and radio they had Indian runners out, skipping from crag to crag, and returning with "No*see'um." All this we knew nothing about. We saw no plane and certainly no Indians hopping from point to point. On arrival and on full stomachs, they spread the news that "The Colorado River explorers" were starving and had missed death by only a hair's breadth. They were building up interest in the coming De Mille [Cecil B.] super.

I met Eddy for the first time and he was just another business man with a dream come true. He had conquered the Colorado!

We piled into Buck Lowrey's Lodge [Lees Ferry; Dodge first met Buck at The Gap Trading Post in 1920] (now the engineer's house) or I should say Owen Clark's bailiwick since Buck had been living with him and did until the bridge [Navajo] was completed. Buck had an 18 year old Mormon girl from the ranch helping in the kitchen and I remember her standing in the doorway joining the two rooms, mouth agape and a dull glaze in her eyes as she tried to take in the wise cracks of these "Hollywood bigshots." She'd come to the door with plate and dish towel, stand wiping awhile until, unconsciously her hands would drop and she'd just look! Then she'd remember her hands and up they'd come again to resume work.

The gang knew about the battle of the checks so when we received ours here with only Mrs. Bray's signature on them we decided to strike. However, when LaRue and the landborn representatives of the Company took up the fight for us, we decided to go on to Phantom Ranch, but no further. We sent word around by car to Grand Canyon that it had to be cash this time or we'd be whittling the boats up for kindling. We knew the actors were to be at Hermit Camp and use Hermit rapids some 20 miles downstream for the love shots so we'd still be in good position at Phantom to make demands.

Halfway through Marble Canyon Eddy came to me and asked, "Frank, what have I done to make certain of the men in camp dislike me?" "Well, Eddy," I said, "You've just done gone and grabbed off too much of our publicity, don't you know. The blighters don't like it," or words to that affect. You see, some of them didn't like having him come out and rescue us and he being rather small it was sort of natural to have him resented in camp. Hell, it wasn't Eddy's fault. He was just being payed to act. As long as we got paid and ate well I could see no reason to dislike the son-of-a-gun so when

we parted at Phantom, Eddy said, "You'll be hearing from me; I have plans." Those plans turned out to be a river trip down a part of the upper Nile, but Owen said later that he understood it to be the upper Euphrates or Nile; it doesn't matter for Eddy was able to scare up only \$35,000.00 of \$100,000.00 asked for.

Our checks turned out to be of the single signature variety again so we settled at Phantom for an indefinite period with a guard at the boats. We'd change guard every two hours and about every two hours the phone would ring, a call for some boatman. When at last my turn came the conservation went something like this: Hello, this you Frankie?"--"Now, Frankie, I promise you those checks will be good"--etc.--"Mrs. Bray, this has been going on since July and we gave you notice--cash or nothing. We don't move without cash." In two days it was there, made up of certified checks, express orders, cash and what have you. They rustled around on top and got it somehow and I learned later that a high Pathe man had arrived and, being shocked to find how Mrs. Bray was handling things, had turned to and helped out of his own pocket.

It was tough to have to leave those thick steaks and Blue Ribbon beer, but we finally waddled down to the boats and took off for Hermit's rapid.

On Arrival, there was quite a gang waiting, half tourists and about half made up the cast, some hundred odd people altogether who cheered the lousy strikers as we come in sight.

That must have been a cold winter for mush ice began running pretty thick though not thick enough to interfere with crossing and recrossing at the head of the rapid. We'd arrived at a flat rate of \$25.00 for each boating stunt pulled off and, as they wanted to show Boles and the girl in action, they picked Owen for the female, (he was the nearest size) dressed him as a girl with golden curls and, as I was nearest to being Bole's size, we swapped clothes. They wanted us to capsize, but didn't have the heart to ask for it, only kept saying, "Come as close to that sunken boulder and wave as you can." Well, Owen lay down on the after deck making sure to expose his pretty knobby legs, (the curves were in the wrong places) while I manned the oars. The first wave hit us broadside at the top and over we went. We had an empty boat and I'd forgotten the difference there is between one that is loaded and

one unloaded and had taken this on the side on purpose to be able to maneuver better later on. About six cameras were clicking as we sped past, the while I was wondering and looking around for Owen and working to the stern and the long U bolt to hoist myself atop the bottom. When I made it I found Owen at the bow, hoisted him up and, remembering the cameras, clasped him in my arms saying, "I'm doing this for money, not because I like your looks for you look terrible." He had a gash across his cheekbone and was bleeding freely. A stocking had come loose from a garter and yellow hair plastered his face and altogether he looked not as a

heroine usually does. But a wave caught us in this embrace and over we went again so we slid into quiet water as we made the top the second time.

We spent a week here I think, running the rapid time after time in different poses, pulling dummies off wrecked airplane wings and at the end cut the boats in two leaving just a thread of wood at keel and rails and then shoving them out in the current hoping they'd break up in the rapid. One finally did come apart.

They told us the trip would end here for they were loaded with film so we climbed mules for the top about Christmas time with two weeks more to do in Hollywood for interior shots.

On getting into Los Angeles what should we see but a long string of studio cars lined up at the curb with painted banners telling the world that "The Colorado River Explorers return," "Colorado River Finally Conquered" and such tripe. We were scattered among the cars and when they ran out of beards and old clothes they waited until they'd found enough likely looking bums to place one of them or us an outside rear seat. Then we zigzagged through town--up main street and down broadway until finally we hit the studio and a banquet laid out on planks and sawhorses. Liquor flowed freely-- even the cops took too much [prohibition was repealed in 1933] to drive their motorcycles home to L.A.--but maybe they were studio cops! The next two weeks is just a hazy memory of doing the bidding of cameramen or directors mostly in camp scenes, but what does stand out clearly is that we were told we had to make a bow at the opening of a new Long Beach theater. They promised us we'd be well soaked and our senses dulled at the proper time which quieted the objectors. On this night we arrived early by a studio bus--were ushered to the rear and into one side wing off the stage and in peeking through the peep hole, we could see about ten pretty girls and several men occupying chairs in a semi-circle of about 50. The theater was filling up while someone started to make a speech when the door opened in our compartment and a voice said, "Here you are boys, help yourselves." There on the floor lay half a case of scotch, a pitcher of ice water and glasses. In respect to drinking, Hollywood is efficient. Here they had a bunch of punks in a new role and they weren't going to let us down. By the time we reached the stage singly, each one taking a bow, no one cared whether school kept or not. You'd have to stand there with a silly grin on your face while the Master of Ceremonies recited your great courage, but some non-believer high up in the gallery kept giving us the razzberry. Evidently a person of high intellect for everyone else clapped. Then a gentle push would send us to a chair where we just sat it out with Hollywood's best.

For more information please read the following books: Rough Water Man, a biography of Elwyn Blake, by Richard Westwood. River Runners of the Grand Canyon, by David Lavender.

AMERICA OUTDOORS CONFERENCE

by Michele Reaume

America Outdoors (AO) held their *Confluence* (the name of the AO conference) in Reno this December. AO is the alliance of Western River Guides Association and Eastern Professional River Outfitters. The slogan for this conference was *Improve Your Profitability* and there were workshops galore. These meetings addressed management stuff like strategies for risk management, hiring employees, teambuilding, peeking into customer service issues and hints to make for a productive staff meeting. Office concerns enveloped on how to increase marketing by working with travel agents, writing an operation plan in respect to agency permit policies and displaying retail items to increase in-house sales.

Also on the agenda were political issues. This, I believe, is the primary function of America Outdoors. Membership dues provide funds to pay Scootch Pankonin, a lobbyist, to maintain outfitter interests on Capitol Hill. Our own Action Alert's reflect some of these issues.

There were meetings at the regional level. Brian Merrill, of Western River Expeditions, is presently the delegate for Utah, where matters are first fielded in the America Outdoors chain. This permits a trend to be identified on the regional level or as a national eruption requiring intervention on the Hill.

Another activity encouraged the sharing of ideas amongst the attendees. The sessions were titled Operations Network. Thirteen tables espousing a mediator for a twenty minute discussion about such topics as: evaluating employee performance, contract labor/workman's compensation, dealing with drugs & alcohol, employee benefit programs, guide school and training, what's new in river rescue, conducting orientations, maintenance and care of equipment, and an equal amount of office topics. There were many outfitter/employer ears at these These sessions could serve as a neutral sessions. ground for expressing guide perspectives and can add to our knowledge of guide circumstances at the national level. Digested, this could add clarity to a guides future. I suggest CPRG make an alliance with AO--to act as a subcommittee on appropriate issues.

Beth Harper, founding owner of Man of Rubber, represents the commercial members voice on the America Outdoor board of directors. Beth is an exhibitor, not an outfitter, and also chairs the committee examining guide schools and training. This is an example of a possible alliance CPRG could undertake with America Outdoors. Who better to regulate the guides than a guide association? CPRG already has a committee researching into this topic (Consider this an invitation for you to

document your concerns and write CPRG). Recently the commercial members have been granted voting rights on AO general policy. This inclusion indicates a dynamic to empower those affiliated with the outfitter/touring business. Guides should be represented too. Do you agree?

Richard Clark conceptualized a professional guide training program and stipulations were ratified. He is the steering committee chair for the Professional Guides Institute (PGI). During *Confluence* Richard also conferred with Karla VanderZanden, of Canyonlands Field Institute, concerning our proposed PGI for the Colorado Plateau.

Attention guides: we each need to motivate a personal involvement. Standards are being set for us and there is room for your input. PGI proposed that guides or candidates become members of PGI and that after completing 50 credit units of instruction become a certified interpreter of natural history. To remain qualified, the guide must stay active in continuing education classes. Guides or candidates can attend universities, PGI, Colorado Plateau Professional Guide Institute (Canyonlands Field Institute), or various firms specializing in appropriate material supported by PGI standards for professional guides. This meeting acknowledged that CPRG is investigating the merits of guide certification program utilizing the PGI curriculum.

Until December 31st, 1995, membership dues of \$30.00 will list an individual as a charter member for life. Beginning January 1st, 1996, dues will be \$35.00 annually.

Last year, Don Brigg's video about the ancestors in the Grand Canyon debut at *Confluence*. This time David Brown, AO Executive Director, aired a twenty minute video detailing the steps to planning and executing a community river clean up. The video hosts a glimpse of riparian ecology, emphasizes safety, and contends with the nuts and bolts of organizing a location, the volunteers, media coverage, equipment needs, entertainment for a festive atmosphere . . . the video wonderfully documents all aspects involved in an urban river cleanup.

Next year, the *Confluence* will be held on an island off the Georgia coast. AO is plugging for outfitters to bring as many staff members as possible. If your company could use some teambuilding, or you recognize other merits by attending, you might want to plug your employers to sponsor your attendance next December.

Editor's Note: CPRG is a member of PGI to stay current with their correspondence and to be involved with decision-making processes.

From the Recovery Program for the Endangered Fishes of the Upper Colorado

by the U.S. Fish and Wildlife Service, Denver

A Fact Sheet

Interactions between non-native and endangered fish in the upper Colorado River basin.

Background

The information in this fact sheet was compiled primarily from biologists with the Colorado Division of Wildlife, Utah Division of Wildlife Resources and the U.S. Fish and Wildlife Service. Additional information was provided by technical experts at the Bureau of Reclamation, Western Area Power Administration, BioWest, Colorado State University's Larval Fish Laboratory and Utah State University.

During the past 100 years in North America, 40 species and subspecies of fish have gone extinct; another 364 fish species are threatened with extinction. Biologists studying these fish believe the primary causes are habitat changes, such as construction of dams and introductions of non-native fish. For example, in some Western sates non-native brook trout have displaced many native greenback cutthroat trout, bull trout and arctic fluvial grayling. The U.S. Fish and Wildlife Service has received petitions to list each of these three native fish species. In California's Sacramento River Basin, striped bass have become the major predator on salmon smolt.

Only 14 fish species are native to the upper Colorado River basin; eight of these now are either listed as endangered of are candidates for listing. More than 40 non-native fish species have been introduced. In fact, though comparative numbers of native fish is quite low. For example, at the confluence of the Colorado and Green rivers in Utah, biologists have found that 95 percent of the fish species are non-native; only five percent of the fish found in this part of the river basin are native.

Several studies have shown that certain nonnative fish adversely affect native Colorado River fish. For example:

*In field studies on Utah's Duchesne River, Utah State University researchers found that 1 to 3 year-old Colorado squawfish constituted five percent of the diets on northern pike, even though squawfish made up a much smaller portion of the available food base in the river. The researchers also concluded that a single northern pike could consume more than 100, year-old squawfish per year.

*Researchers at Colorado State University's Larval Fish Laboratory have documented red shiner predation on razorback sucker larvae.

*At least four studies have shown predation by channel catfish, green sunfish and carp on razorback sucker eggs and larvae.

*In a study of predation on Colorado squawfish and various non-native fish, largemouth bass showed a strong preference for native fish, eating twice as many young squawfish as red shiners and as much as 20 times the number of squawfish as green sunfish.

*Young Colorado squawfish have been found in the stomachs of channel catfish collected in the Dolores River, even though squawfish are very rare in this river. Also, researchers have found a handful of squawfish that died trying to eat channel catfish whose spines become lodged in their mouths.

U.S. Fish and Wildlife Service Role

The U.S. Fish and Wildlife Service is the federal agency responsible for implementing the Endangered Species Act. Section 7 of the act states that federal agencies shall ensure their actions are not likely to jeopardize the continued existence of any threatened of endangered species.

In occupied habitat of endangered fish, the Service favors removing existing non-native warmwater fish, where this is realistic and cost-effective. For example, northern pike exist in the Gunnison and Yampa rivers, but are not managed by state wildlife agencies. The Service believes controlling this species in these waters will help recover endangered fish. Given that state agencies have primary responsibility for managing fish species that are not federally listed as endangered of threatened, the Service will work toward controlling non-native warmwater fish only in partnership with state wildlife agencies.

The Service does not advocate eliminating warmwater sport fisheries in the upper basin and never has, even in designated critical habitat. To the contrary, the Service actively supports developing recreational fisheries in the upper Colorado River basin as long as such fisheries are consistent with endangered fish recovery. For example, the Service operates national fish hatcheries in Jones Hole, Utah, and Hotchkiss, Colorado, that annually produce 3.5 million trout each year. The Service stocks these trout in Colorado River reservoirs for recreational fishing purposes. In addition, the Service recognizes that some streams have been dramatically altered, making it impossible to recover endangered fish to their historic numbers or range.



Photo courtesy of Katharine Rinker

Florence Barnes stands next to a Colorado squawfish caught in the Yampa River during the early 1930s. Colorado squawfish were called 'white salmon' and were said to have grown as long as 6 feet. Now endangered, they exist in the Colorado River Basin and nowhere else on earth

Non-native fish stocking procedures

To address the sometimes competing goals of recovering endangered fish and stocking game fish, the Service and sates of Colorado, Utah and Wyoming jointly developed interim procedures for stocking non-native fish in the upper Colorado River basin. The document spells out those situations in which non-native fish species can be stocked without review, those where stocking is prohibited altogether and those in which proposals will be reviewed case-by-case. Following are other highlights:

*Trout can be stocked without review anywhere in the upper Colorado River basin, even though there were minor adverse impacts on endangered fish. (Trout dominate sport fishing in the West. For example, the Department of the Interior's 1991 "National Survey of Hunting, Fishing and Wildlife-Related Recreation" reported that 91 percent of Colorado anglers fished for trout, compared with only five percent that fished for catfish or bullheads and only three percent that fished for muskies [sterile hybrids of northern pike and muskellunge].)

*Smallmouth bass can be stocked without review upstream of Flaming Gorge Dam in certain standing waters separated from rivers occupied by endangered fish

*Black crappie, bluegill, channel catfish and largemouth bass can be stocked without review in certain standing waters or isolated ponds and reservoirs.

*Proposals to stock walleyes, yellow perch, wipers or tiger muskies will be reviewed case-by-case according to proposed stocking location, potential for the fish to escape into habitat occupied by endangered fish, measures that could offset harm to endangered fish and other criteria.

*In Colorado, ongoing stocking of non-native fish, as allowed in certain existing lake management plans, can proceed without review. This is the case for the following lakes and reservoirs: Rio Blanco, Hallenbeck, Mack Mesa, Chipeta Lakes, Crawford, Narraguinnep, Puett, Summit and Totten.

*In stretches of river currently occupied by endangered fish, stocking of non-native fish species other than trout is prohibited.

Control of northern pike

The Service and the Colorado Division of Wildlife have agreed to work cooperatively to remove a number of northern pike from the Yampa and Gunnison rivers. The

approach being considered is to capture northern pike when they congregate during the spawning season and to relocate them to lakes for sport-fishing. The Colorado Division of Wildlife has approved the Gunnison proposal and plans to haul the live-captured fish to Harvey Gap Reservoir.

Control of channel catfish

The Utah Division of Wildlife Resources, with funding from the Recovery Program, is evaluating methods for suppressing populations of catfish and other non-native species. This report should be available in fall 1995 and then will be evaluated by the Recovery Program.

FROM A NEWS RELEASE OF SEPTEMBER 11, 1995.

Construction of endangered fish "refuge" ponds got the thumbs-up on September 7, as decision-makers working to recover rare Colorado River fish endorsed funding for pond excavation in Grand Junction and Craig, Colorado., and Big Water [near Lake Powell] and Ouray, Utah. Biologists will use the waters to maintain various genetic strains of endangered razorback suckers for adult brood stock, stocking and research.

The Implementation Committee (IC) is composed of representatives from federal and state wildlife and water-resource agencies, private water user groups, hydroelectric power distributors and environmental organizations.

"These ponds will give us more space to hold and protect endangered fish, which will directly impact our ability to recover these species," said John Hamill, a U.S. Fish and Wildlife Service biologist who directs the Recovery Program. "We need to have adequate facilities in more than one location. Then if an accident occurs at one site, we still have a backup population of fish in another."

Endangered fish currently are held in ponds on the Horsethief Canyon State Wildlife Area near Fruita, Colorado, the Ouray National Wildlife Refuge near Vernal, Utah; and the Valley City National Wildlife Hatchery in North Dakota.

The number of razorback suckers has dropped dramatically in recent years. Upstream of Lake Powell, there are only about 500 wild adult razorbacks left. Researchers believe the primary reason for the fishes' decline is lack of suitable habitat, caused primarily by dams, which have blocked fish migration paths and altered river flows, and non-native fish, which are believed to compete with the prey upon endangered fish.

The IC also endorsed construction and evaluation of a fish ladder around Redlands Diversion Dam on the Gunnison River.

Conservation groups have expresses concerns that endangered fish would be harmed by the stocking of non-native fish in the Upper Colorado River. Also, fish such as bluegill, black crappie and largemouth bass are currently held in ponds that are in the 10 - 50 year flood plain. Colorado Division of Wildlife had previously agreed to remove non-native fish from private ponds in the zero to 10 year flood plain. This would be a voluntary program involving landowners who are willing to participate. Once non-native fish were removed, the proposed procedures would allow for restocking the ponds with trout. Trout are not considered a threat to endangered fish and could continue to be stocked anywhere in the upper Colorado River basin.

FROM A NEWS RELEASE DATED October 9, 1995

A public survey concerning the endangered fish of the upper Colorado basin was conducted by Colorado State Human Dimensions in Natural Resources Unit. The survey found that 66 percent of the 897 respondents support efforts to protect endangered fish, another 21 percent oppose such efforts and 13 percent had no opinion.

The research team collected the data last year via a telephone survey of residents of western Colorado and eastern Utah. Of the 897 respondents, 168 were elected local officials, 300 were anglers, 125 were members of environmental groups and 304 were members of the general public.

Along with specifically supporting recovery efforts, 59 percent of those contacted voiced a "positive attitude" toward saving endangered fish. Twenty-five percent had no opinion and 16 percent said their attitude was negative. Eighty-one percent agreed that these endangered fish are as important as endangered birds and mammals. Seventy-two percent agreed that fish should be recovered whenever possible. Thirty-eight percent thought the fish should be recovered to become sport-fish. Seventy-five percent thought stocking nonnative fish in the river basin should be permitted only if it does not harm the endangered native fish.

Overwhelming majorities of elected officials, anglers, environmentalists and representatives of the general public thought endangered fish have a right to live in the river basin if they can be recovered. That opinion was expressed by 98 percent of the environmentalists, 95 percent of both the anglers and general public and 88 percent of elected officials. Just 29 percent of those surveyed said the existence of endangered fish was not important to them, while 76 percent thought it was valuable to have self-sustaining populations of fish.

FROM A NEWS RELEASE DATED November 29, 1995

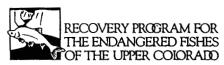
Connie Young, information and education coordinator for the Recovery Program for Endangered Fish of the Upper Colorado River Basin, would like to offer to CPRG members their free newsletter subscription. Also, educational brochures, color posters, historical accounts booklets, fishing license holders, field indentification card and fact sheets.

The educational items mentioned above would be a great compliment to your ammo can library. We reviewed many of the these items and found them to be of high quality and of a great educational worth, especially the publication, *Historical Accounts of Upper Colorado River Basin Endangered Fish*. We feel that it is important not to underestimate the great interest our guest's have concerning our fish populations.

Contact:
Connie Young
U.S. Fish and Wildlife Service
P.O. Box 25486
Denver Federal Center
Denver, CO 80225

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A W 1893

by Jim Knipmeyer

In the October 25 entry of the notes for his 1947 float trip down the Green and Colorado, river-runner Harry Aleson briefly mentions seeing a "hand-lain rock wall" at the mouth of an unnamed side canyon on the left bank. He and companion Georgie White [Clark] camp immediately below. After dinner they went up along the canyon wall and ascended the talus to a ledge at the level of a dry waterfall. They found the hand-layed rock wall to be a part of a stock trail. Just above the level of the built trail, Harry went down along the shelf a short ways until it narrowed. Upon returning, he found lightly scratched with stone at about head level: A W 1893.

Often times Harry did not take maps along on his float trips. In his river notes he would meticulously log every side canyon and point of interest passed, but instead of locating them by mileage he would carefully note the time, such as 2:31, 2:32, 2:44, etc. So, while a precise location of a particular feature is sometimes difficult to pinpoint, a general location is possible. Thus, a search for the "A W 1893" inscription, which I had never heard of before, except in Aleson's diary, could be narrowed down to a two or three-mile stretch of the Green River. But the exact location would depend on his physical description of the spot.

The location was finally found at about Mile-82 (depending on which map or guidebook you are using!). Harry's "hand-lain" rock wall, actually a built-up portion of the

stock trail, was spotted from the river first. There also was a small side canyon, which entered the Green over a dry "waterfall", and talus just to its left which would provide access. An examination soon revealed not one, but three "A W 1893" inscriptions, one of which, however, had the added notation just below it, "Bristol, N.Y."

Who was "A W" and just what was he doing in the upper part of Labyrinth Canyon along the Green River in 1893?

The answer was found in a 1964 letter from Hazel B. Ekker, long-time resident of the town of Green River, Utah. Arthur Wheeler was one of three brothers who, in 1884, settled some twenty miles south of the San Rafael River. She described them as "all bachelors from the state of New York." They planted alfalfa and fruit trees and "engaged in the business of stock raising". Arthur left for the Yukon River country in quest for gold in 1898.

So, Arthur Wheeler was in the area in 1893 and probably kept some of his cattle down on the small bottom along the Green River below the "dry waterfall" of the side canyon. While by river mileage it is some fourteen or fifteen miles from the inscription site to the Wheeler brothers' ranch, because of the winding and twisting course of the Green, from the head of the old stock trail where it tops out on the east rim of the canyon, it is only about eight or nine miles over relatively flat plateau surface to the ranch area. Even today, dirt tracks of vehicles lead between the two points.

This also may have been the location described in a newspaper article in <u>The Denver Republican</u> of June 4, 1893. The article, by reporter and correspondent Lute H. Johnson, was telling of the April-May trip of the steamer "Major Powell"

down the Green and Colorado rivers to Spanish Bottom at the head of Cataract Canyon. While Johnson's description sounds more like the so-called Horsethief Trail much farther down the Green, he also stated that, "Three years ago (1891), after a systematic search, it was discovered by Arthur Wheeler, a cattleman of the locality, and has since been known as Arthur's Pass.

Editor's Note: The Wheeler's assisted Frank Kendrick and Frank Brown in 1889 for the DCC&PRR survey.



Jim Knipmeyer at the inscription site. Photo by Jim.

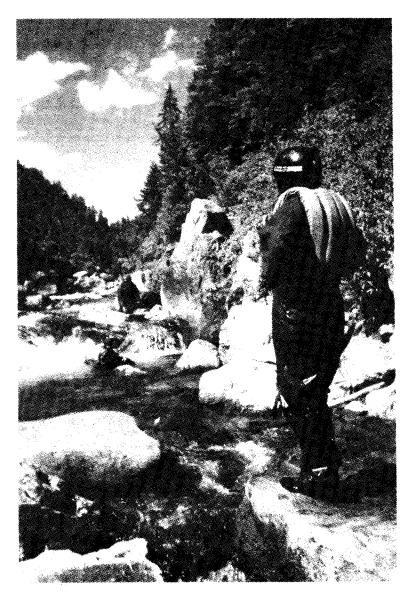
Three Gals on the Piedra

by Michele Reaume

High Water marked the cubic feet per second (cfs) charts for this 1995 river season in Utah. High water was also said to be seen in Colorado. My two companions and I were not interested in high water. We simply desired to run a creek, since there'd be water flowing late into the summer. Karla VanderZanden, Tamara Wiggins and myself, Michele Reaume, rendezvoused in Durango, Colorado, with our sights were on the Piedra River; we moseyed down the Animas River first.

I ran the Piedra in the spring of 1994 with Geoff Burbey, a co-owner of Highlands Unlimited, a horse outfitter out of Durango. Geoff hopes to lengthen his pack season with a combination tour of trail riding and paddling the Piedra; that spring trip was a logistics exploratory.

But this is 1995; three on the Animas River. Karla and I are in inflatables kayaks and Tamara is in a hard-shell kayak. We were told the river had dropped significantly overnight. The Animas River provided a fine float despite that fact.



Loathsome stretch beyond Mudslide. Photo by M. Reaume.

Santa Rita was an interesting ledge hole. Tamara warned, "Steer around it." We eddied behind the bridge abutment. Other kayakers surfed, agitated and surfed some more; a fine showing. The kayakers signaled, "It's your turn." Tamara indulged the crowd after their coaxing. She crept into the edge--held her position--

soon satisfied--she paddled out. Tamara confides that this is her first time entering *Santa Rita*.

The kayakers signal again. Me? I shrug--then nod-why not attempt to surf! My attempts were paltry--I choose to shift my weight--I am kneeling near the bow of the Achilles inflatable--I paddled upstream, timing a gentle drop into the ledge trough. *Viola*! *Surfing*! But how the hell do I get out? I dump out--self rescued--get to shore and drag the boat upstream to do it again. That's the kind of exhilarated challenge the *Santa Rita* can induce.

After the Animas, we soak in a hot spring and ruminate. What will the Piedra be like with this enormous cfs drop? We don't care. Tamara's boyfriend, Dave Derosiers, is up from his Grand Canyon ranger job, celebrating his birthday

and driving our shuttle. We decide to commit to a descent of the Piedra.

Dave leaves us at the Hunter Bridge camp. On the water, right away, Karla drops behind a sleeper, however, it's a keeper. Karla lodges a low brace. Her boat responds by bucking in place. Karla doesn't look amused nor panicked. She applied herself to avoid a swim.

The boxes were boulder choked. Our first congestion was circumnavigated by lining the boats. We were very elaborate. Soon, we began dragging the fuckers. There was no water! And Tamara was concerned about pinning. Piedra is not a Spanish word for rock for nothing. The Piedra hosts a variety of traps at this level, so it's easy to support Tamara's instincts regarding portaging.

Then Karla swept up upon a rock. The inflatable sticks. Karla is on a rock budging her boat. I'm on land now. I receive her toss of the rescue bag. We lift the line for oncoming Tamara to glide beneath. I am pulling. Karla demonstrates we should use another angle. By this time, Tamara joins me. Heaving, the boat comes free.

The ruse to portage Mudslide is executed after a nap in the sun. The section beyond is loathsome. Kala and I labor the inflatables over rocks. Tamara discovers a kayak paddle wedged in the rock array along her route. After this section, the paddling is smooth until a thirty foot tree lies across and on the surface of the Piedra. Our boats are easily lobbed over top.

The vehicles are in sight. Over beers kala is heard to utter, "There were moments when the Piedra had epic overtones of the Karnali River in Nepal (Kala was part of the first descent of the Karnali River.) It took ten days to travel the first twenty miles of the Karnali. We had to work our way downstream lining and portaging. Hiking out was not an option. Our headspace queried, when are we going to get out of here?" It took three of us eight hours to travel ten miles on the epic Piedra.

ICEBERGS IN CAT

by Peter Winn

Disclaimer: This story is as true as any 20 year old river

story can be.

Scenery: Mother Nature

Lights: God Director: Fate

Scene I - Christmas Eve at the Slide

Whhoooshhhh!!! At first John thought a beaver had attacked his Yampa. It was one of the first models, only two main chambers, and suddenly one of them was acting like a hotcake. Or maybe coldcake is a better word. A sharp piece of ice rotating on an eddy fence had cut a liquor bottle sized hole in it. To fend off hypothermia, John rowed like the devil and made it to shore just as his oar lock settled into the river. Some of you may remember John Thomas, he was a Westwater guide and ranger in the 70's, then a Grand Canyon ranger. His name is on an old oar blade in the ranger station at Westwater. Now he's a dad, married to Jen Lawton, also a Westwater guide and old Grand Canyon river ranger, living in Salt Lake.

When's the last time you read the directions on a can of Barge? It says "Use at room temperature." What if room temperature is 20 F? One thing I know about river guides, they're innovative. First we did what we always did, which was ignore the directions and just put the stuff on, which of course didn't work - we couldn't get the brush into the glue. So we put the glue into a double boiler and put a gas lantern up next to the bottle of Southern Comfort that was stuck in the hole so the water would drain out. When everything was warmed up, we drank the Southern Comfort and hoped the patch would hold. We didn't have a chance to think about what our families and friends were doing that evening until we got the tube to hold air.

I can't even remember what we had for dinner. I do remember it's the only trip I've ever packed food for where we put the meat and other stuff we wanted to stay frozen into uninsulated metal boxes, and put the stuff we didn't want to freeze into insulated boxes without ice. We didn't need to bring any ice, it was everywhere. Big sheets of it, sometimes almost blocking the river. The eddies were completely frozen over, and the river was slush in the morning. Sounds awful, but it was great, as long as it was your turn to row so you could warm up. When the sun was shining, it was like a perpetual sunset.

We'd originally planned to spend three days hiking in the Needles and three in the Maze. In the winter, there's water everywhere out there, so you don't need to carry a gallon a day (of course, you've got to carry twenty-five pounds of extra clothes, etc). After the ice bite experience, we decided to blow off the Needles hike, figuring we'd need three extra days in Cat to patch the rafts. We had enough fuel, glue and booze to get through safely, we just needed the time. Little did we know how badly we'd need it.

Scene II - The Maze, Three Days Later

We'd brought along a copy of The Monkey Wrench Gang, first published the year before, and found Hayduke's last stand (this was long before the sequel, Hayduke Lives). What an incredible place. We did a loop within a loop, the big loop taking three days. We went from Spanish Bottom up to the Dolls House, then out over the top of Tibbett Arch (I think, see Disclaimer), to Lizard Rock, then over to Beehive Arch and upper Jasper, then back to Spanish Bottom from the north. At Lizard Rock, we did a little loop, down into one finger of the Maze, near Hayduke's last stand (those mice have got prime real estate!) and out another finger, it's as easy to get lost as the name suggests.

There were eight of us, four men and four women. We forgot about the river ice and how sharp it was. Instead, bizarre ice worms in the pot holes and spectacular hoar frost crystals took over. George Ruffner, a biologist from the Museum of Northern Arizona, owned and rowed the second raft. He, Gwen Waring and I had planned the trip over Thanksgiving during one of those three foot snowstorms Flagstaff is famous for. Both of them are now parents. Gwen and her husband, Larry Stevens, own Red Lake Publishing, which is the source of There's This River, a collection of Grand Canyon river stories.

At the Confluence, the Green was also choked with ice, so it took a long time to row down to Spanish Bottom. It was Beth's turn, and she had a lot of trouble getting her oars into the water. They had a tendency to bounce off the ice, and if you rowed too hard, you just added an ice anchor under the raft. If you've lived in Moab for a few years, you might know Beth, she's another parent, along with her husband, Phil Roy (busy, aren't we). Fortunately, she had a bottle of Bristol Cream Sherry, so it was easy to be patient.

The lack of open water sufficient for rowing raised another issue - Lake Powell. Could it melt all of these icebergs? What if it couldn't? We had topo maps of Cat, but nothing for Lake Powell. We didn't know how we'd escape from the canyon if the lake was frozen.

Scene III - New Year's Eve at Odin's Temple

It's a good thing there was a lot of firewood at Waterhole Canyon. We were numb. Numb with cold, numb with fear. We'd nearly lost a loaded boat where the river flowed under the ice at the head of the lake. And we thought Cat was going to be the big problem. Fortunately, the rapids broke up the icebergs, so we didn't get any holes in the rafts, just lots of slush. I didn't fall in and die of hypothermia, or this would be a Paul Bunyan tale (see the Disclaimer). We built a fire that was eight feet long and two feet wide so we could all stand around it, and drank Black Russians. It makes me shiver just to remember this scene.

Beth was rowing the lead raft below the Big Drops when the ice began to build up on the banks. First a foot or so, then more. We were looking for a place to pull over for lunch when we came to the ice dam at the head of Lake Powell. We signaled to John to pull over, and Beth had no choice but to crash into a six foot bank of ice on river right. George and Gwen found handholds, and I climbed the ice bank with the stern line looking for a tie down. I nearly fell into a crevice almost immediately before George pulled me back. It went down into the river, brrrr. With some help, I managed to get to the boulders above the ice, a bad spot to camp. We finally found few flat spots about 100' up the talus slope. Hauling our gear up there really warmed us up.

The river flowing into Lake Powell was frozen over, big time. Huge bergs which had formed after the rapids were being whipped like cream. If we hadn't stopped we'd have become fossils for sure. The ice was thick, at least ten feet, full of crevices, covered with snow, and it went as far as we could see. No escape that way. So John and Mike and I trudged off a mile or so downstream to the first side canyon, Waterhole, looking for a way out. After several failures, we found a fifty foot crack and managed to climb up high enough to see that a route to the rim was feasible. As we headed back, it started to snow.

The next morning, the ice on the lake had advanced upstream so far that George's raft was stuck in it. Getting the raft out of the ice was an engineering feat. Then we had to haul both rafts 100' up the talus slope so we could deflate and stash them. When we opened the valves, no air came out. We had to breath on the valves until the ice seal broke so we could deflate them. Bizarre! It took us almost all day to stash everything. We even pissed on the rolled up rafts (at least the guys did) so the rats wouldn't use them for nesting material (good thing we had some biologists along). Then we hiked to Odin's Temple for an eight foot long fire and a less than enthusiastic New Year's party.

The next morning, Mike and I climbed the crack, but this time all the hand and foot holds were covered with snow. Frozen fingers are no fun at all. Climbing was so much more difficult than it had been the previous day that we decided to just drag the other folks up, using the raft bow and stern lines tied

together. When Nancy reached the top, her heartwarming smile was gone for the first time. Her smile had been a barometer of the trip spirit, and it was now obvious that she thought we were in trouble. We spent that night on sloping, snow covered ledges, tied together so we'd act as anchors for each other. Brrrr again.

It took another day to make it to the rim and the jeep trail from the Maze area to Hite. It was still over forty miles, or three days, to Hite. It was space walking. Everyone was in their own space, enjoying the scenery as best they could while nursing numb feet. Nancy practiced smiling again, while Beth, Gwen and Laurie, all musicians, played symphonies in their heads. Mike mourned his frozen camera, John and George wondered if the piss would keep the rats away from their rafts, and I wondered how many friends I was going to lose.

Epilogue - Odin's Temple Three Months Later

After the ice melted, we drove back to the head of Waterhole Canyon and climbed down to the rafts. The piss had worked, the rafts held air. We put them in the water and rowed to Hite. There was evidence on the river bank that the ice had gotten to be twenty feet thick. It's a good thing we found a way out of Cat

or we'd have become icebergs ourselves. It was the kind of adventure that makes for an unbelievable river story. Of course, it's best told in July, when you're dying for some ice.



Photo courtesy of Peter Winn.

High Water Redux

by C. V. Abyssus

Regarding "High Water Remembered" (The Confluence, Vol.2, No. 3, Summer/Fall 1995), John Weisheit may be both right and wrong when he stated that it "(s) eems Frank Wright and the Mexican Hat Expeditions crew in 1957 got to experience the Colorado River at a flow of 100,000 cfs and held that [high water] record until 1984." It is not evident whether the author is referring to a record on the Colorado River in Cataract Canyon or not, but there were several parties boating in the Grand Canyon around the same time.

At least one oar-powered and three motor-powered trips left Lees Ferry (LF) in June, 1957, and boated during the flows of over 100,000 cfs. The Harris-Brennan outfit took off Thursday, June 6, as the river was up to 85,000 and rising fast. The LF gauge recorded 107,000 two days later. Marston's three motor boats put-in the afternoon of the 10th with that day's flow at 118,000. Georgie White launched June 17, with the gauge reading 104,000, but back up on the 18th to 114,000. All three of these trips were motored-powered; Harris-Brennan and Marston used hard-hulled boats, while White ran a G-rig comprised of a 27-foot and two 22-foot pontoons. Exact completion dates are not now known by this author to correlate river flows with trip dates.

P. T. "Pat" Reilly was once again readying hard-hulled, oar-powered boats, leaving Lees Ferry shortly before Dock. Reilly first boated Grand Canyon with Norm Nevills in 1949, then with Frank Wright, and the Rigg brothers of Mexican Hat Expeditions (MHE) in the early 1950s. Getting away from "cataract" of "sadiron" boats, Pat, leading his own non-commercial trips, started building or finishing hard-hulled craft, pre-cursors to dories.

Reilly camped at President Harding Rapid on the 12th. Sometime that night, the peak of 126,700 cfs passed. Reaching Bright Angel Creek on the 16th, one hour and thirty-two minutes from Hance, Reilly's party cached their boats and hiked out; they retrieved the boats the next year. The entire run of Marble Canyon and part of the Grand Canyon had been done over 114,000 cfs, the highest water ever attempted by oars through these canyons of the Colorado River.

Information regarding these trips, dates, and flows came from copies of Reilly's river logs, part of the P. T. Reilly Collection, housed at the Cline Library, Special Collections and Archives Department, Northern Arizona University, Flagstaff, Arizona. Permission to quote from the collection for publication is required from P. T. Reilly.

Response from John Weisheit

Thanks for the information C.V! I have a copy of the USGS Water Supply Paper from 1957 for the Colorado River Basin. I have transcribed it below as a table.

June 1957 Lees Ferry USGS Gauge

Day	Discharge	Day	Discharge
1	49,100	16	106,000
2	55,400	17	108,000
3	60,800	18	108,000
4	65,200	19	102,000
5	72,900	20	93,800
6	83,400	21	90,800
7	95,800	22	91,800
8	107,000	23	95,800
9	113,000	24	97,800
10	118,000	25	90,800
11	121,000	26	85,500
12	124,000	27	87,600
13	123,000	28	90,800
14	114,000	29	93,800
15	106,000	30	94,800

Note: The flow stayed in the 90,000 cfs range for the first week of July.

I apologize for giving incorrect information concerning Frank Wright and Mexican Hat Expeditions as holding the 1957 Colorado River high water record and am therefore am wrong in concluding that Cataract Canyon guides broke that record in 1984 with a flow of 114,900 cfs. P. T. Reilly maintains such a record to the present time.

I do challenge the rig you described for Georgie's 1957 run through the Grand Canyon. Such a rig (using 27 and 22-foot pontoons) was described by Georgie in her river log concerning a trip she completed through the Grand Canyon in 1955. If you will refer to The Confluence Vol. 1, No. 3, Summer 1994, page 4, you will notice a picture of Georgie's rig as it appeared on her 1957 Cataract Canyon traverse. I perceive this picture to show a rig that consists of three 33-foot (could be 27-foot) bridge pontoons tied together with the center pontoon off-set by about four feet to accommodate an outside motor compartment. I would think that the same rig went through the Grand Canyon in that same month of 1957.

Green River at Green River		be1	Colorado River below Dolores River		Cataract Canyon without San Rafael Flow	
		Dolores				
Date	Peak in cfs	Date	Peak in cfs	Date	Peak in cfs	
05/19/95	26,300					
06/03/96	40,400					
05/29/97	63,000			1		
06/25/98	23,500					
06/27/99	48,200					
00						
01				1		
02						
03	ļ					
04						
06/10/05	33,900					
05/31/06	36,500					
06/11/07	48,100					
06/21/08	25,000					
06/13/09	62,000					
05/16/10	28,800					
06/21/11	27,600					
06/12/12	54,600					
06/02/13	26,700					
06/02/14	50,800	06/03/14	65,600	06/03/14	114,300	
06/14/15	19,200	06/13/15	33,600	06/13/14	52,400	
05/12/16	30,300	05/11/16	46,900	05/12/16	77,200	
06/27/17	66,700	06/19/17	73,200	06/19/17	131,000	
06/25/18	43,300					
05/30/19	19,900					
06/03/20	49,100					
06/16/21	64,100			1		
06/12/22	45,800					
05/31/23	42,000	05/29/23	47,100	05/29/23	87,200	
05/22/24	24,300	06/16/24	49,900	06/16/24	63,600	
06/04/25	20,100	06/01/25	27,700	06/01/25	46,300	

Green River at Green River		Colorado River below Dolores River		Cataract Canyon Without San Rafael Flow	
Date	Peak in cfs	Date	Peak in cfs	Date	Peak in cfs
06/18/57	42,600	06/10/57	63,400	06/11/57	101,200
06/01/58	37,900	05/30/58	48,800	06/01/58	81,700
06/22/59	16,400	06/11/59	21,200	06/16/59	35,700
06/11/60	15,200	06/06/60	25,200	06/06/60	37,700
06/04/61	13,100	05/31/61	20,500	06/03/61	32,400
05/15/62	31,600	05/14/62	43,800	05/14/62	75,300
05/15/63	9,370	05/21/63	12,100	05/21/63	19,860
05/26/64	21,000	05/28/64	28,600	05/28/64	48,900
06/15/65	29,800	06/19/65	37,000	06/18/65	64,800
05/13/66	13,800	05/11/66	17,200	05/11/66	28,400
05/30/67	22,300	05/27/67	20,500	05/27/67	39,200
06/09/68	28,800	06/07/68	30,600	06/07/68	58,000
05/16/69	20,500	05/23/69	19,000	05/22/69	38,000
06/12/70	23,200	05/24/70	35,000	05/24/70	56,600
06/21/71	21,900	06/19/71	22,800	06/20/71	44,400
06/11/72	19,700	06/10/72	19,000	06/10/72	37,700
05/25/73	30,300	06/16/73	41,600	06/16/73	66,400
05/14/74	26,800	05/12/74	24,700	05/12/74	49,700
06/11/75	27,900	06/09/75	29,200	06/10/75	54,800
05/26/76	18,000	06/07/76	15,600	05/26/76	29,200
06/10/77	7,600	06/10/77	4,970	06/10/77	12,570
06/16/78	23,100	06/17/78	30,800	06/17/78	53,900
05/31/79	28,800	05/30/79	44,600	05/30/79	73,100
05/27/80	23,300	05/23/80	38,400	05/25/80	58,000
06/12/81	12,000	06/09/81	11,800	06/09/81	23,700
05/08/82	19,900	05/06/82	22,200	05/06/82	37,000
06/27/83	44,200	06/27/83	60,500	06/27/83	104,700
05/20/84	47,200	05/27/84	69,500	05/27/84	114,900
05/12/85	26,800	05/06/85	43,200	05/10/85	68,200
06/08/86	35,400	06/08/86	34,100	06/08/86	69,500
05/21/87	13,600	05/19/87	30,500	05/19/87	43,000

a	River t River	Colorado River below Dolores River		Cataract Canyon without San Rafael Flow	
Date	Peak in cfs	Date	Peak in	¿Date	Peak in
05/09/26	24,000	05/27/26	47,500	05/27/26	71,200
06/19/27	32,700	05/20/27	48,400	05/21/27	78,700
06/01/28	44,400	06/01/28	62,200	06/01/28	106,600
05/29/29	41,900	05/27/29	58,600	05/27/29	99,300
06/04/30	22,500	06/01/30	40,200	06/01/30	60,200
05/21/31	12,800	06/09/31	17,400	06/09/31	27,150
05/26/32	36,600	05/24/32	49,600	05/26/32	79,700
06/19/33	27,400	33/د/06	42,700	06/13/33	68,300
05/17/34	6,260	05/13/34	16,800	05/13/34	22,600
06/16/35	30,700	06/16/35	53,200	06/16/35	83,900
05/21/36	28,800	05/18/36	38,300	05/18/36	63,300
05/21/37	26,800	05/17/37	39,200	05/19/37	63,900
06/02/38	30,600	05/31/38	51,400	06/02/38	78,800
05/07/39	17,400	05/24/39	25,000	05/24/39	40,700
05/17/40	15,700	05/14/40	25,000	05/14/40	38,600
05/30/41	26,800	05/15/41	63,400	05/15/41	83,400
05/31/42	32,000	05/28/42	50,000	05/29/42	76,500
06/05/43	29,300	06/04/43	32,700	06/04/43	
06/04/44	27,900	05/17/44	51,900	05/18/44	59,300 72,500
06/09/45	23,000	05/13/45	32,400	05/16/45	59,400
05/02/46	18,000	06/19/46	26,600	06/12/46	
05/14/47	32,600	06/22/47	38,100	06/22/47	43,300
05/26/48	27,600	05/23/48	50,800	05/23/48	60,300
06/21/49	32,700	06/21/49	53,200		75,600
06/06/50	29,800	06/04/50	23,300	06/21/49	85,900
06/03/51	30,300	05/30/51	29,100		52,100
05/11/52	45,200	06/10/52	56,300	05/30/51	55,600
06/18/53	27,800	06/15/53		05/10/52	100,200
05/27/54	18,400		38,000	06/16/53	60,700
05/29/55	14,200	05/23/54	12,200	05/25/54	27,100
06/03/56	29,500	06/10/55 06/04/56	17,200 30,000	06/10/55 06/04/56	27,400 59,000

Green River at Green River		bel	Colorado River below Dolores River		Cataract Canyon without San Rafael Flow	
Date	Peak in cfs	Date	Peak in cfs	Date	Peak in	
05/22/88	16,900	05/20/88	14,300	05/22/88	28,600	
05/16/89	7,840	05/25/89	9,670	05/15/89	15,210	
06/14/90	11,000	06/12/90	12,200	06/12/90	22,700	
05/24/91	12,400	06/16/91	18,400	05/24/91	30,000	
05/14/92	10,700	05/29/92	17,100	05/29/92	24,600	
05/31/93	25,100	05/29/93	47,600	05/30/93	70,700	
05/22/94	11,700	05/21/94	15,000	05/21/94	26,600	
06/19/95	29,300	06/19/95	51,400	06/19/95	80,700	

Flows of historic river trips.

Expedition	Date in Cataract Canyon	Flow in cfs
Clyde Eddy	July 2, 1927	54,200
Pathe/Bray	November 6, 1927*	8,800
Glen and Bessie Hyde	October 22, 1928	8,210
Harold Leich	August 27, 1933*	3,970
Bus Hatch	August 1, 1933	5,640
Nevills/Clover	June 23, 1938	59,400
Nevills/Goldwater	July 14, 1940	3,890
Aleson/Georgie	October, 31 1947	9,810
Aleson	September 6, 1951	5,050
Georgie	June 13, 1957	88,600
Somerville (up-run)	July 4, 1965*	36,200

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Professional Guide TrainingComing Soon To A River Near You

By Tamara Wiggans

"Comparing Notes: The Art and Craft of Guiding" The Colorado Plateau Professional Guide Institute

Familiar with either? The first is the them of this spring's annual Guides Training Seminar organized by the Grand Canyon River Guides. The second is being developed by the Utah Guides and Outfitters, Canyonlands Field Institute, the Bureau of Land Management, U.S. Forest Service, National Park Service, Utah State University and College of Eastern Utah, Colorado Plateau River Guides, and Canyonlands Natural History Association.

As we speak, there are plans to create a nationwide Professional Guide Institute under the auspices of America Outdoors, the national guide and outfitter organization. The Colorado Plateau Professional Guide Institute may ultimately be a regional chapter of this national program.

National Program Purpose

To improve the guiding and outfitting industry by promoting:

- * Resource protection.
- * Responsible shared use of public lands.
- * Professionalism and ethical behavior in guiding and visitor contact work.
- * Working partnerships among outfitters, guides, land managers and agency seasonal employees.

Additional Goals on the Colorado Plateau

- * To stimulate understanding, appreciation, and stewardship of the natural environment and cultural heritage of the Colorado Plateau.
- * To stimulate visitors to consider their roles as stewards of natural and cultural resources in their own regions.

This All Sounds Great But

There seems to be a big push right now to train guides. God knows we need all the training we can get. And the rivers need all the advocates they can get. But where is the push for training coming from and are we as guides asking the right questions?

Perhaps some of the impetus for developing guide training stems from the new concessions/contract prospectus requirements happening at the Grand Canyon (and coming our way soon), which asks

outfitters to outline their guide training program. Formerly, guide training involved a trainee working trips for no pay (swamper, baggage boat, intern) until he or she had enough trips to get a license.

Professional guide training goes beyond rowing the boat to teaching guides how to talk to their passengers. Interpretation, interpersonal skills, problem solving, and familiarity with public land issues are just a few of the components of a training curriculum being developed right now on the Colorado Plateau by Canyonlands Field Institute.

The nuts and bolts of presenting workshops, classes, trips, or printed materials gets more complicated, especially here on the Colorado Plateau. We have many rivers, with many miles between us. Who pays for the training? Will training remain optional? Will there be a formal certification? Could certification eventually become a requirement for employment? What skills, specifically, do we need to learn or improve? Will certification really reflect a guide's value? Do we lose diversity of character and style by requiring everyone to fit into a mold, i.e., "the certified guide". Do we lose people, like a friend of mine, who has a completely different interpretation and style in just about everything he does? The people on trips invariably adore him even though he is, guite frankly, a blatant yet entertaining liar.

The permitting agencies want guide training. The outfitters also want it. Mixed feelings are what I'm getting from other guides I've talked to, especially about certification.

"We don't need no stinking badges" was one response a few years ago from a Grand Canyon river guide. We have a long tradition of learning from each other and from the river itself. There's no greater teacher than plain old mileage -- experience. But eventually, most guides also agree that they want to improve their skills and they are all for broadening their guiding horizon with training.

There's no point to the whole thing if the guides don't participate. Financial sponsorship by outfitters and permitting agencies would help too. Classes or trips could be held in different towns, on different rivers, and not during the peak boating season when everyone in on the river working. These are just a few ideas. In typical guide fashion, I have plenty of opinions and advice, but I'm too busy boating to be on the committee.

In a profession where knowledge, techniques, and skills are evolving at an amazingly accelerated pace, I still believe, that when in doubt, Keep It Simple Stupid. It will, as always, be interesting.

What do you think?

Colorado Plateau May Be Rotating Around Monticello, Utah

Taken in part from an article that appeared in the Salt Lake Tribune.

A recent study suggests the Colorado Plateau is rotating clockwise at a rate of a little less than your fingernail grows. Vernal, Utah, is moving eastward one millimeter each year, or about three fifths of one mile every million years. Flagstaff, Arizona, is moving west northwest at 2.5 millimeters annually. Pie Town, New Mexico, is moving west 3.5 millimeters annually, or somewhat more than 2 miles every million years. This news was released this fall after the meeting of the American Geophysical Union.

Some scientist are skeptical, saying that part's of the earth's crust is stretching out in the West. The Jet Propulsion Lab in Pasadena, California, used surveying data collected from 1980 to 1993 by radio telescopes in the above mentioned towns. The telescopes measure how long it takes light to arrive from distant quasars, which are super-bright objects in distant space. Slight changes in arrival times provide precise measurements of the motions on Earth's ever-shifting crust.

Some scientists have argued the Colorado Plateau is a "microplate" rotating within the North American plate. The study indicates the Plateau is rotating around a pole about 40 miles west of Monticello, which would roughly be in the Dark Canyon Primitive Area. Some studies have suggested the axis may be in west-central Colorado.

From: Earth Science Expeditions

Needed: First Descent Participants for the Man Wan Gorge of the Mekong River, SW Yunnan, China; April 19 - May 9, 1996.

Earth Science Expeditions (ESE) is seeking kayakers, oarspersons and passengers. Flows exceed 30,000 cfs and participants need big river experience. The climate is mild. Maximum expedition size is 10.

Cost: \$5000. \$4500 if you make a \$500 deposit before March 15. If you bring your own kayak the cost is reduced 10%. Approximately \$1500 of the fee is tax deductible. Round trip airfare to Hong Kong is an additional \$700 to \$1200, depending on where you live. ESE is planning additional trips in October, 1996.

For more information contact:

Peter Winn
202 North Avenue #102
Grand Junction, CO 81501
970-242-7108; Fax: 970-243-9226; e-mail: pswinn@aol.com

River Madness July 21, 1996

Support the Muscular Dystrophy Association

Two events on the Fisher Tower Daily:

Down River Race

The Outrageous River Parade

For more information contact: Paul at The Club Rio in Moab 801 259-6666

Small Boat Seminars for 1996

The following small boat seminars will be offered by Canyon Voyages. Classes are taught by certified instructors of the American Canoe Association (ACA). They are designed for kayaks, canoes, and touring boats.

Whitewater and Flatwater Instructor Certification.

Classroom time with practicals on the Fisher Tower Daily. April 11 - 14. Instructor: Kent Ford.

River Rescue for Kayakers.

June 29 - 30.On the Fisher Tower Daily. Instructor: Ken McCarthy.

Play Boat Clinics in Westwater Canyon.

Must have Class III kayaking skill. April 27; sponsored by Prijon. October 4; sponsored by Perception.

Kayak Demo Day on the Fisher Tower Daily.

July 6. Try before you buy.

Raft Demo on the Fisher Tower Daily.

June 22. Sponsored by Jack's Plastic, Aire and Maravia.

Kayak Lessons and Roll Clinics.

Ongoing - April to October In the pool or on the Daily; beginning to intermediate levels. Instructors: Various ACA certified instructors.

For more information contact:

Canyon Voyages P.O. Box 416 Moab, UT 84532; 800 733-6007

The Pictographs at Big Bottom (Lathrop Canyon)

by Dave Focardi

What do these mean? "These" being the petroglyphs and pictographs you take people to see. Who knows what the meaning is? You can't even tell what the artwork created by your friends means, let alone thousand year old pictographs. However, I can describe some interesting observations of the Lathrop pictographs; meaning the Big Bottom pictographs on river left across from Lathrop Canyon.

This article refers only to the "rainbow" pictograph furthest upstream, near the granaries. On the summer solstice, the overhanging roof creates a triangular shadow, the point of which moves down the panel. From the time the roof shadow forms to the time the point reaches the bottom of the rock face takes about 2 1/2 hours, moving fastest toward the bottom. As the point moves down, it just touches the leftmost side of the rainbow at about 9:30 am. Before and after the solstice, it is to the right. Leading up to the solstice and afterwards, when viewed at the same time of day, it would appear to move left, stop at the left edge of the rainbow, and then move to the right.

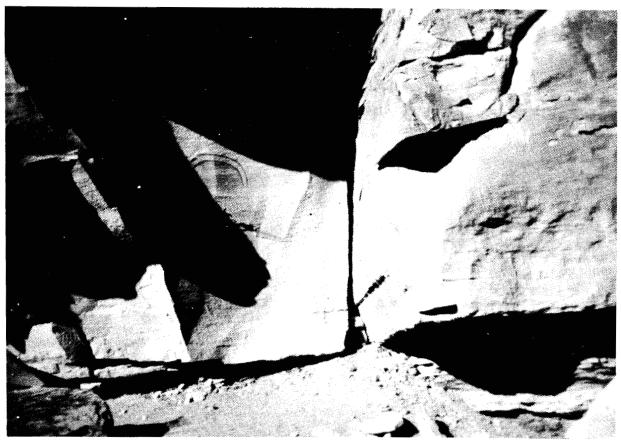
What happens during the winter? I was there the day after the winter solstice (not 1995, as the park was closed) to see what would happen. Observational data are that the shadows appeared and moved off the panel in a 2 1/2 hour time period. There were no obvious alignments with the pictographs.

So much for observational data--here's the fun part. What could this mean? First of all, there is plenty of evidence elsewhere in the southwest for Aanasazi solstice markers--pick up a copy of "Living the Sky" from your local bookstore or "The Book of the Hopi" by Frank Waters.

Obviously, I feel the panel is at the least a summer solstice marker. The shadow moves fast enough to see even to a casual observer between 8:30 and 11:00. On the winter solstice, the shadows are interesting, and move rapidly, although there is no obvious alignment that jumps out at you as on the summer solstice. Jenny, my wife, pointed out that watching the shadows for a few years would certainly let you know where you were in relation to the solstices, which leads to some interesting questions. If the shadows on that panel act as a calendar, so would shadows anywhere, so is that panel solarly significant? I haven't been there on an equinox, so I don't know what happens then, although I am hoping

that the roof shadow is on the small circle to the right of the rainbow. Another shadow forming feature is a knife blade of sandstone hanging in a crack of rock to the left of the roof point. this a natural rock feature? When did it Was it form? placed there? If: so, when and by whom?

After observing the shadows the last week of October this year, I had hoped the knife blade shadow would pass over the small



Big Bottom Pictographs. Photo courtesy of Dave Focardi.

circle on the right on the winter solstice. Not so. It would however, have passed over the circle a few weeks before the solstice. Could it have been a mark for a Soyal (Hopi winter solstice ceremony) type ceremony that begins several weeks before the winter solstice?

Some interesting information from Nancy Coulam, the

Park archaeologist, was a carbon date of 1215-1275

A.D. for the granary on the point. Also there is little or no evidence of year round occupation, so the site was probably occupied only while farming the bottom lands. The Anasazi also became more concerned with time and planting schedules toward the end of the Pueblo III period (corresponding to the carbon dates). As you can see, the questions are so numerous and unanswerable, and as easy to support as refute, that we'll never know anything to any degree of reliability. However, if you can watch the panel between 9 and 10am four days before or after the summer solstice, its an interesting show. For even more fun, when the moon is really bright, it also makes interesting shadows. Bear in mind that the moon is opposite the sun. That is, when the sun is high in the sky during the summer, the moon is low in the sky (where the sun would be in the winter). Theoretically, the solar and lunar shadows should be similar during the equinox. Guests and boatmun can be entertained at all hours of the night and morning watching these phenomena. Feel free to send photos to CPRG or to me, Dave Focardi at Sheri Griffith River Expeditions or at PO Box 1367, Moab, 84532. Please include the date and time. Or, just call me and tell me what you saw, because if you are anything like me, you may take photos, but you will never get around to sending them.

Boating the River of Sorrows

It started as a fun summer job, getting paid to do what I love, and to do it with friends. In fact, if it wasn't for my friend Steve Arrowsmith's love of rivers, and especially the Dolores River, I may have avoided a 10-year unintentional career (sound familiar?). Steve loved the Dolores so much he offered trips at half the price of other commercial outfitters just to get people, himself, out on the Dolores. Although McPhee dam would foreseeably thwart any more 8,000 cfs high water years like the one in 1983, Steve none-the-less based his company, Humpback Chub River Tours, and his hopes, on the Rio de Dolores -- the River of Sorrows. I wrote the following story about a day on the Dolores after my first season with Humpback Chub, it brings back memories, of a special place, and a special person -- enjoy!

It's hard to get up, the warmth of my sleeping bag beckons me back and a heavy dew leaves the smell of grasses blowing across a yet shadowed valley. I finally manage to shake off the sleepish effects of the wine we had with our lasagna dinner last night, followed by the sharing of music and tales from our first day of rafting. Looking around I see a few folks squatting around a small fire, cherishing a quiet moment, and the warmth of a fresh cup of campfire coffee. It's cool now, but soon the sun will hit camp, raising temperatures and spirits, turning thoughts from the warmth of the fire to the call of the river.

The Dolores River, that is what brought us all down here to southwest Colorado. Originating in the San Juan Mountains, the Dolores grows is size as it descends west through the higher mountain elevations, then turns northward near Dolores, Co., where our journey began. From our camp this morning we will journey further through canyons of red sandstone and towering ponderosa pines, all capped by a pure blue sky. We are guests here, guests of the Dolores. Often we sit back on our rafts and spend lazy hours floating by a continually changing panorama of beauty, to which mere words can do no justice.

Today however, is the day we hit "Snaggle Tooth", a rapid aptly named for a jagged tooth of rock which proves a hearty challenge to the boatmen, and keeps the hearts of everyone along beating strongly. But that is still hours away and right now my attention turns to the beauty of a new day on the Dolores dawning clear and bright. A brightly colored Western tanager chirps gaily on a nearby branch. The sun is now upon me as I watch a soaring hawk glide silently across the sky.

Floating the Dolores also gives one time for personal reflection and thought. An inner peacé fills me as I relax and abandon myself to the slow and steady pace of the river. I share these feelings with my companions, who seem lost in similar feelings. Our trip will bring all in our group a bit closer together, river trips always seem to provide new friends. Before we're off today one of our crews reads an excerpt from Down the River, written by Edward Abbey, a fellow river runner trapped by the beauty of the Dolores River. "Sandstone walls tower on the left, five hundred feet above the Dolores River. The walls are the color of sliced ham, with slick, concave surfaces. Streaks of organic matter trail like draperies across the face of the cliff. Desert varnish. a patina of blue-black oxidized iron and manganese. gleams on the rock. A forest of yellow pine glides by on our right, so that we appear to be still in the high mountain country while descending into the canyonlands."

So having put our thoughts again on the river, we continue our journey, a journey I wish could continue indefinitely. The sun is getting higher, a voice I cannot quite hears beckons me on, and I must go. Off again floating free, wind, sky, sun, water, trees, cliffs -- I love them all.

In memory of Steve Arrowsmith. Tim Thomas.

The Creative Fix-It Shop

by T-Berry

Field repairs are misfortunes that every outdoor enthusiast experiences at some point in time. Most likely in order to accomplish the repair(s) one might not have all the tools, materials and/or creative luck required. Since the equipment that fails is following the "Laws of Murphy" and no other basic physical concepts, the enthusiast is required to make the repairs with what is on-hand. So within this article you will find some field repair ideas that pertain to basic river trips or to normal repair problems.

STOVES and BLASTERS

Blowing sand can wreck havoc while in the kitchen. You say your stove burners don't seem to work with much gusto? Try the following tips:

For the small burners on the PARTNER stoves unscrew the burners on one side. Plug all the pipes leading into the missing burners with your fingers (or someone else's fingers). Open all burner controls and blow air back through the one vacant burner tube with your raft pump. Air should blow back out where the propane usually comes in. Work your way from the burner farthest away from where the propane hook-up is. After the first one is pumped-out good, close the burner valve and continue on the next one in line. After all are clean reassemble and try again. Theoretically sand comes in at the propane hose hook-up and goes down the burner valves. There it clogs the jets leading out to the burners. You need to blow air in the opposite direction of the propane flow to dislodge the sand that robs the stove of it's high performance.

For the big blaster/hot water heater burners you actually need to disassemble the burner from the frame. Unscrew the brass jet/valve that leads to the cast iron burner at the iron pipe or rubber hose that carries the propane to the burner. When the brass jet/valve is of it's own space you can use a bread wire tie to ram inside the valve and clean the debris that clogs it. Be sure to open the valve and clean in the opposite direction of the gas flow. Use a pump as needed. When reassembling put a small amount of high-temperature silicon or TEFLON tape on the threads of the brass jet/valve where it screws onto the iron pipe or rubber hose that carries propane to the unit.

Stove repair is tricky. Don't attempt the repair if you are going to damage the stove. No stove is worse than one that hardly works.

Above I mentioned high-temperature silicon for repairing stoves. The high-temperature works wonders on old dish buckets that rip on the seam. Just goop the silicon on the leaking seam and let dry. When its dry you can go back to heating the pail on the stove with no worries. This only works for the remainder of the trip -- replace it when you get home.

PUMPS

Sand can cause pumps to lose air pressure. To fix take apart and clean thoroughly with a paper towel and re-oil with a vegetable oil from the kitchen. I've found that a continuous splash of kitchen oil every once and awhile will make the pump work better for a longer duration. Most folks use graphite or heavy lubricants; when added with sediments and/or sand it creates some of the most durable and malleable sandstone ever found within the Colorado Plateau. This sandstone really isn't the best lubricant or sealant for a pump. So by using something a little more water soluble, like olive

oil, and re-oiling periodically, your pump problems will almost go away. Another thought about the "more water soluble" oil is that it will be easier to clean when you disassemble/assemble the pump.

COOLER LIDS

Everyone knows about putting plywood on the lids to a cooler Right? The plywood makes it more rigid and keeps the shap of the lid from being disturbed while using it as a seat. When the shape of the lid is compromised the seal is also compromised which causes the cooler to lose ice sooner. Unfortunately the plywood adds weight to the lid and every time you open and close the lid the hinges break a little sooner too. So when you put the plywood on the lid, take the hinges off the cooler and shoot the vacant screw holes full of LIQUID NAILS or something similar in hardness like epoxy. Reassemble the hinges to the cooler and let dry for several days. Theoretically the screws should be anchored into the injected glue stuff. Once hardened the screws will have a harder time stripping-out and causing hinge failure.

OUTBOARDS

Your water pump dies. You have no spare motor or spare parts. So take the existing remains of the water pump out and reassemble. Where the return or exhaust water is "pissed-out" of the motor, there might be an adapter or connector in the hose. Take an old fuel line with it's priming pump and connect the old fuel line to the return/exhaust water hose at the above mentioned adapter. Make sure the the direction of the flow on the fuel line is going to pull the water through the engine (an arrow on the priming bulb dictates the direction). Use a glove and have a friend or another boatmun pump the water through the system manually. The glove is needed on the pumping hand, i.e., the hot water coming out of the engine is going to get pumped through the priming bulb held in the pumper's hand. Oh yeah, don't expect to run at full throttle; manage your speed and manage the temperature of the water you are pumping. If it is really hot, then slow your motor down. You will not be able to cool the engine as well with this system. If care is taken you will get home and the motor can be fixed with very little expense.

There is a good chance you need not pull the old water pump out. I've seen this work with the old pump in place. But as most motor savvy folks know, the water pump might be dead from a blockage of sediment. By removing it you might realize you can fix-it by clearing the obstruction.

Well hopefully there are some ideas in the above article for everyone. Next time I'll try a topic like field repair for vehicles, major raft repair, or major outboard motor repair. Plus, if any interested reader has some ideas -- send them in Especially if there really bizarre -- like repairing burned-out lower units on an outboard with kitchen oil, bailing wire, and a plastic jelly jar shim.

Affordable Housing for the Moab Area

The next page is designed to be filled out, torn out and mailed to: CPRG, P.O. Box 344, Moab, UT, 84532.

If you do not live or work in the Moab area, you can still participate in the survey. The information you provide will help Affordable Housing Projects for the future in other communities. Please maintain your anonymity but do indicate in the margins where you live and work.



Colorado Plateau River Guides

P. O. BOX 344 @ MOAB, UTAH 84532 @ (801) 259-8077



SEASONAL LAND AND RIVER GUIDE HOUSING QUESTIONNAIRE

The Colorado Plateau River Guides (CPRG) is a member of the Grand County Affordable Housing Working Group (AHWG). The AHWG was formed by Grand County and Moab City, Grand County Housing Authority, Southeastern Utah Association of Governments, Utah Job Service, Moab Chamber of Commerce, Grand County School District, and a diverse group of local business owners. The group's goal is to implement policies designed to increase the number of affordable units in the area.

With the financial assistance of both the Moab City Council and the Grand County Council an independent consultant has prepared a study of the existing housing situation in the Grand County area. The Moab City/Grand County Affordable Housing Needs Assessment Study identified a substantial need for housing units that would service the seasonal worker group. That's us.

CPRG has been an active participant in the AHWG meetings with the specific goal of identifying methods to remedy the housing problems that seasonal land and river guides experience each spring. A strategy presently being explored by the AHWG is to modify existing local zoning codes that allow landowners and developers to build affordable owner-occupied, single-family dwellings for residents who work in the schools, hospital and service sectors. Theoretically, this approach could make available a number of rental properties presently occupied by people who could qualify to purchase a home. If successful, this approach should help those guides and workers who live in the community year-round.

The CPRG supports this approach for permanent community housing but is of the opinion that other options might better address seasonal workers who spend the off-season living and working outside of the Grand County area. The CPRG believes that most landlords would prefer to rent their dwellings to people who could commit to long-term leases, rather than rent to seasonal guides and workers. This approach does little to modify the existing housing problem for seasonal workers.

The AHWG has examined the potential for the construction of both dormitory-type housing and/or improved campground facilities as a way to accommodate seasonal workers. These two less-expensive housing options could be modeled after the "co-housing" model that has been successfully instituted in numerous communities and universities nationwide. The most notable component of co-housing developments is shared kitchen, laundry and community rooms. Bedroom areas are exclusively private. This approach is typically far less expensive than traditional home designs. In campground facilities vans, campers, and tent sites could substitute for private bedrooms.

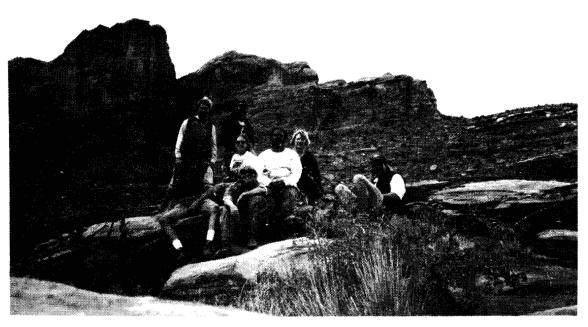
Grand County Code has been modified to allow certain dormitory-type developments in commercial zones. Moab City Code does not presently allow this development. If the idea gathered additional support, perhaps the Moab City Council would consider amending its code to allow these uses.

As part of the CPRG's contribution to the working group's effort we have developed a questionnaire to gather information on seasonal guides housing conditions; and, what types of alternative housing options may work here. Please take the time to read the questionnaire and respond to the questions as best as you can. Hopefully, the results of this questionnaire will assist the AHWG in selecting housing solutions that best fit our specific needs. Thank you for your cooperation on this important issue.

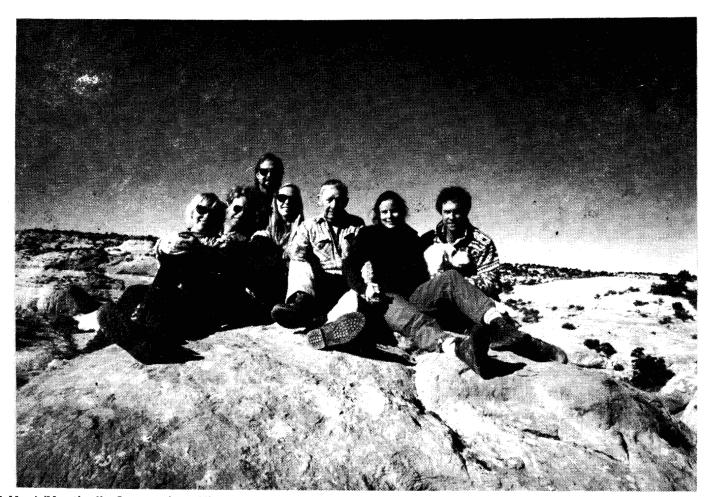
SEASONAL LAND AND RIVER GUIDE QUESTIONNAIRE

<u>Instructions.</u> Please respond to the questions listed below to the best of your ability. If a question asks for additional information please respond. You can use another piece of paper is you need additional space. Please print your legibly-so we can read and/or decipher your responses. Thanks!

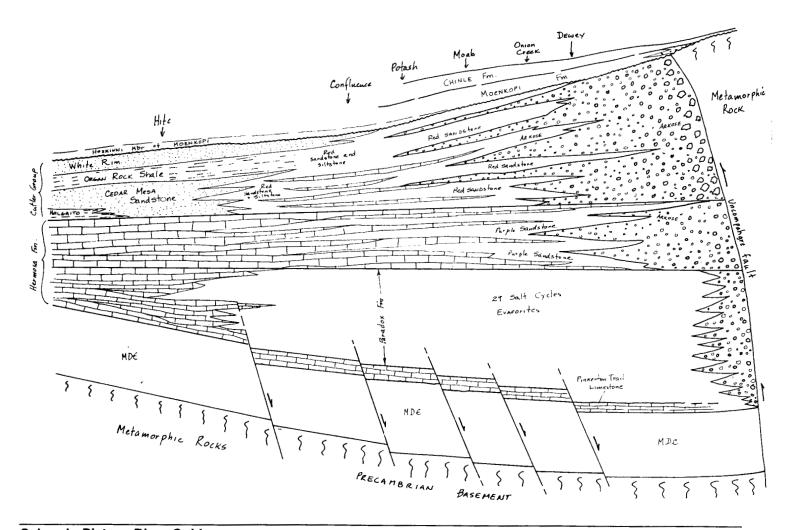
SEC	ection I-Demographics				
1.	7 8	 	Fema	le	
2.3.		е	Marr	ied or Partnered	-
SEC	ection II-Guiding History and Information	Ŋ			
4.	. How many years have you been employe	d as a se	asonal guide in 1	the Grand County	/ area?
5.	. How many years do you anticipate being	employ	ed as a guide in t	the Grand County	rarea?
6.	. What month of the year do you arrive in	the area	for seasonal wor	·k?	
7.	. What month of the year do you leave the	area afte	r completing yo	ur seasonal work	?
If y	ECTION III-DESCRIPTION OF LIVING SITUATION I you have worked as a guide in Grand Cour this is your first season guiding in Grand C	nty in pre	evious years plea	ase answer Ouesti	ons 8 & 9.
8.		mployed	as a seasonal gu	aide in the Grand	County area?
	a. Rented Apartment		b. Rented Ho		
	c. Rented Trailer		d. Rented Tra	iler Space	
	e. Camping on Public Land		f. Camping or	n Private Land	
	g. Company Provided Housing		h. Other		
9.	Did you enjoy this living arrangement? If you responded no, answer why not.	Yes		No	_
SEC	ECTION IV-INCOME HISTORY				
10.). What is your gross monthly income from	guiding	·		
11.	l. What do you consider an affordable payn	ient for l	iving quarters?		
SEC	ECTION V-LIVING SITUATION PREFERENCES				
12.	Would you consider living in a facility tha storage space, shower, and laundry? Do	it had a c mitory/	community kitch Rooms	en with locking re _ Vehicle/Tent C	efrigerators and amping
13.	3. Would you prefer a single company facilit	y?	, or a multi-c	company arranger	nent?



Hiking after the CPRG Spring Meeting, 1995. From left to right (by the elbow): Tim, John, Susette, Joe, Nancy, Jose, Rose, Steve.



A Moab/Monticello Connection. Hiking on Kent Frost's birthday in the Canyon Rims Recreation Area. Left to right: Susette, John, Don, Denise, Kent, Carol, Kita and Scott.



Colorado Plateau River Guides P.O. Box 344 Moab, UT 84532 (801) 259-8077