

american whitewater

March / April 2001

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Races,
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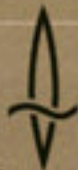
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american whitewater

D e p a r t m e n t s

Journal of the American Whitewater

Volume XLI, No.2

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Cover: Black Canyon of the Gunnison, Photo by Dunbar Hardy©;
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Desert paddler photo by Dunbar Hardy©



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A Sad Farewell

A few months ago Rich Bowers, Executive Director and former Conservation Director of American Whitewater, told us he would be resigning in April. After being an important part of our organization for almost ten years, Rich will be moving to the Pacific Northwest where his wife Stephanie has been named Development Director of Western Washington University.

While this is a terrible loss for American Whitewater, it is a wonderful opportunity for Rich and Stephanie to pursue new opportunities and grand adventures in our western shores. Moving can be as traumatic as the loss of a close family member. For those of us who have come to know Rich and work with him for the past ten years, this loss is magnified by the fact that it will be very difficult to find someone talented enough to follow in his footsteps.

When Rich first arrived at American Whitewater we had already been in existence for over thirty years, first as a loose collection of whitewater clubs from around the country, then as a bona-fide boating organization incorporated as a formal entity, in, of all places, the State of Missouri. In those early years, Directors would get together for meetings that included an overly-generous supply of beer, loud arguments, and occasionally some pushing and shoving. There were times when the organization was so destitute that it was a foregone conclusion that it would cease to exist.

By some miracle, Pete Skinner, Pope Barrow, and others managed to keep AW solvent. American Whitewater volunteers wrote the playbook on using the dam relicensing process to obtain whitewater releases. When some 400 dams came up for relicensing in the "Class of '93," it became obvious that there was no way that volunteers could handle this amount of work. Enter Rich Bowers, our first Conservation Director and full-time employee.

For the next three years, working out of Washington, D. C., Rich tore into hydropower relicensing like a west Texas tornado, whirling around the country from one project to another, making sure we had a presence in every major relicensing important to boaters. It didn't matter if it were the Penobscot in Maine, the Nisqually in Washington State, or the Tallulah in Georgia, Rich was there challenging public utilities, meeting boaters, and building partnerships with constituencies that could help carry the enormous load of relicensing. During his tenure, AW became a Steering Committee member of the Hydro-

power Reform Coalition in Washington, D. C., and Rich played a dominant role in developing new policy initiatives for hydropower reform within the Federal Energy Licensing Commission.



A tall man and naturally gregarious, Rich cut an imposing figure when dealing with public utility officials. He had the critical thinking skills to challenge their dogma and set them back on their heels when it was appropriate. His victories on the Tallulah and Nisqually were monumental. But in his early years it was his ability to get local boaters to organize that was the mark of his value to American Whitewater. Even though AW had been around for many years, it was Rich Bowers who raised the profile of the organization to the point where other people, not just boaters, started to take notice of who we are and what we do. In 1994 he was the first representative of the boating community to testify in front of the FERC at a roundtable to determine the Commission's authority to order the decommissioning of dams.

American Whitewater has never been a heavily endowed organization. There are no cushy expense accounts for traveling or meals, and there are no lavish hotel rooms or fancy rented cars. We are an organization that is driven by passion and commitment and we exist on the cheap. Rich Bowers accepted this life-style for the benefit of our cause. He stayed with friends on the road, often sleeping on someone's couch or floor, his only vice being a gluttonous addiction to Coke.

By 1996 our Board realized that AW needed more help if we were going to continue to chase the wagging tail of the relicensing dog, so Rich was named Executive Director, with the mission to build American Whitewater into a cohesive, financially stable, nonprofit organization. Soon we had staff people working on conservation, access, events and operations...giving AW a strong national profile.

Under Rich's watchful eye American Whitewater's membership grew significantly and foundation grants began to flow. Rich continued to travel, visiting charitable foundations, attending industry trade shows, and going to AW festivals, telling people what AW does to preserve whitewater. It doesn't matter where you travel in the whitewater world, people know who Rich Bowers is and what he has meant to American Whitewater.

It strikes me as strange how things in life work out. When Rich first came to American Whitewater, there was no employee manual or detailed description of what his responsibilities were to be. But Rich had a passion for boating and would have killed to get a job in conservation. He has since been a tireless workhorse. Rich's passion and vision have made us what we are today and what we will be in the future.

Occasionally we come across extraordinary people. People who make a difference with what they do with their lives and people who make the world a better place. Rich Bowers is one of those rare people. His time at American Whitewater has set a standard of excellence for all of those who will follow in his footsteps. He is, quite simply, the best!

Best wishes to Rich, Stephanie and their daughter Danna as they embark on their next great adventure.

Tom Christopher
AW Board Member

Kent Ford's

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Stop Buying Gold!

Dear Sir,

I personally found the action recommended the November/December American Whitewater opposing the gold mining activity threatening the Napo River watershed to be a bit lame. While certainly commendable to support the local C-PAN effort, the action is all too North American — write a letter and tell somebody else to take care of the problem. A more proactive solution is not to buy anything gold. The miners only do our dirty work for us each time we step up to the sales counter and purchase a golden trinket. And, yes, I recognize there are industrial uses of gold where the individual can have only a marginal impact.

Respectfully submitted,
Charles Buccola
Louisville, Kentucky

Editor's reply: Sounds reasonable to me. I, for one, do not have a single gold trinket to my name. I spend all my extra money on trinkets made of neoprene, gortex, Kevlar, graphite and plastic!

Compromise...Not Confrontation

Dear Editor,

Being an unbiased (I hope) paddler of many years, I would like to offer my opinion on the Virginia Chute confrontation on the Potomac described in a recent letter to the editor.

In the interest of everyone's safety the rescue clinic should have pulled their ropes as soon as they saw another group of boats coming.

The paddlers should have politely paddled through, eddying out if possible to thank the rescue clinic for acknowledging them.

The rescue group should have politely asked them to stay clear of the area where they were practicing, (since they were there first anyway).

The paddlers then could continue down river or hang out and learn some free safety techniques (and maybe offer a few of their own), then play in the hole.

River relations would have mutually improved for both parties.

Good Luck
Paddle Hard, Brace Soft
Francis Mauory
Athens, GA

Hammer to the Hammer!

Dear Bob,

In Italy they say "Basta," when they have had enough. I read in your July/August issue a piece (a letter to the editor) called 'Putting the hammer down.' Basta! For years I have watched, heard and read references to the one kayak manufacturer whom the author of the letter, Tom, seems not to want to mention. If you're going to hammer someone I think you should be more up front. However, perhaps there is no need to mention the name, for people like Tom have made the controversial sexist promotion that he writes about synonymous with the name, Riot.

I would like to put the hammer on the hammer. It is exactly people like Tom and all those who have complained about Riot and Corran in particular, that have given them exactly the image to succeed in sales to the white water world. Why, do they do well? Because the youth of today's boating world (being a large portion of it), sees the controversy, they understand that Riot stands for rebellion, controversial, lewd, who cares attitude, not following suit, and hell, if they paddle their boats they will share that image. In turn that will separate them, from Tom's crowd, righteous dude!

Tom bought a Hammer, why Tom? Because it was a good-looking boat, not! I suggest image Tom, you bought a radical design that you thought would set you up with the radical look. Or did Riot have tasteful advertising back then?

I find it ironic Tom would support Perception, when they claim to be 'fuzzy' from the drugs they supposedly took in the 70s. Ironic that he supports Dagger when they use extremely pretty women and teenage girls in their full-page ads. So they have clothes on, it's just appealing to different

male audiences. Ironic he supports Wave Sports, and they claim to have created the future of the sport. Well that's a lie. The future does not exist yet, so how could you have created it. What are they, Omnipotent? I suppose the Harmony ad with the half-naked male with the full breasts is OK, because he's male?

In short it seems Tom supports drug users, tasteful sexual advertising (tasteful to him that is), and false advertising making statements about the impossible, but he is against up front sexual advertising that is distasteful to him. Surely we are dealing with just preference here.

It's not that I support the Riot methods or Riot or Corran, in fact I would be happy to see them less successful for my own selfish reasons. The only way that's going to happen however is if all those who outwardly complain about Riot and Corran, to put it bluntly, 'Shut up.' Seriously, you will be passively causing their demise and the demise of their image that sells so very well for them, so much so they have not had to change their advertising ways for years. While I do not suppose Riot and or Corrans thoughts of women based solely on their advertising, I do guess they are clever marketers.

The only thing that will stop Riots style of advertising, is to stop feeding in to their image. If you say nothing, then in time they will go away, but what are the chances of that, Tom? You would have a better chance of selling that hammer, good luck!

Oh well, at least we have the Riot image to discover the dos and don'ts of the white water business world. We will do our best to be and act to the opposite of Riot and win our clients on performance and honesty. I only hope that works half as well as Riots image which is backed and supported by even those who do not like them. Ironic is it not?

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Please ~~read~~ this ~~carefully~~ ~~before~~ sending us your articles and photos! This is a volunteer publication. please cooperate and help us out. Do not send us your material *without* a release – signed by all authors and photographers (attached)!!!

The editorial staff of *American Whitewater* carefully reviews all material submitted for publication. We are particularly interested in receiving full-length feature articles, conservation and club news, special event announcements, articles pertaining to whitewater safety and short, humorous pieces.

Articles should fit our established format; that is, they should be stylistically patterned to fit into our Features, AW Briefs, River Voices. Conservation Currents, Safety Lines, Humor or End Notes sections. Exceptional photographs and whitewater cartoons are also welcomed.

If possible, articles should be submitted on a 3-1/2-inch computer disk. (Microsoft Word if possible – others accepted.) Please do not alter the margins or spacing parameters: use the standard default settings. Send a printed copy of the article as well.

Those without access to a word processor may submit their articles typed. Please double space.

Photos may be submitted as slides, black or white prints, or color prints. Keep your originals and

~~send~~ us duplicates if possible; ~~we cannot~~ ~~guarantee~~ the safe return of your pictures. If you ~~want~~ us to return your pictures, include a self-addressed stamped envelope with your submission. Because we publish in black and white, photos with a lot of contrast work best.

American Whitewater feature articles should relate to some aspect of whitewater boating. Please do not submit articles pertaining to sea kayaking or flat water. The best features have a definite slant... or theme. They are not merely chronological recountings of river trips.

Open the story with an eye-catching lead, perhaps by telling an interesting anecdote. Dialogue should be used to heighten the reader's interest. Don't just tell us about the river... tell us about the people on the river... develop them as characters. Feature articles should not be written in the style of a local club newsletter.

If you are writing about a commonly paddled river, your story should be told from a unique perspective. Articles about difficult, infrequently paddled, or exotic rivers are given special consideration. But we are also interested in well written, unusual articles pertaining to Class III and IV rivers as well. Feature stories do not have to be about a specific river. Articles about paddling techniques, the river environment and river personali-

ties are also accepted. Pieces that incorporate humor are especially welcome. Open boating and rafting stories are welcome.

Don't be afraid to let your personality shine through and don't be afraid to poke a little fun at yourself... and your paddling partners.

Profanity should be used only when it is absolutely necessary to effectively tell a story; it is not our intent to offend our more sensitive members and readers.

Please check all facts carefully, particularly those regarding individuals, government agencies, and corporations involved in river access and environmental matters. You are legally responsible for the accuracy of *such* material. Make sure names are spelled correctly and river gradients and distances are correctly calculated.

Articles will be edited at the discretion of the editors to fit our format, length, and style. Expect to see changes in your article. *If you* don't want us to edit your article, don't send it to us! Because of our deadlines you will not be able to review the editorial changes we make prior to publication.

American Whitewater is nonprofit; the editors and contributors to American Whitewater are not reimbursed. On rare occasions, by prearrangement, professional writers receive a small honorarium when they submit stories at our request. Generally, our contributors do not expect payment, since most are members of AW, which is a volunteer conservation and safety organization.

Release For Publication

I hereby release my work (literary, graphic or photographic) for publication in *American Whitewater* magazine.

■ I understand that my work may be edited or cropped at the editors' discretion.

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I accept responsibility for the accuracy of the information included in my submission. I have not libeled or slandered any individual, corporation or agency in this work.

I understand that all or some of my work may be reprinted at some future date in an American Whitewater publication.

I promise that this material has not been and will not soon be published by another magazine or publication and the rights to this material are clear and unrestricted.

I understand that once this material is printed in American Whitewater it may be reprinted or reproduced in other publications if I wish, providing I notify them that it has already appeared in *American Whitewater*.

I understand that the contents of American Whitewater Magazine, including my contribution, will be archived on the American Whitewater web site.

Signed _____

Date _____

This release must be signed by all the contributing author(s), photographer(s) and graphic artist(s).

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Purpose

American Whitewater

Our mission is to conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely.

The American Whitewater (AW) is a national organization with a membership consisting of thousands of individual whitewater boating enthusiasts, and more than 100 local paddling club affiliates.

CONSERVATION: AW maintains a complete national inventory of whitewater rivers, monitors threats to those rivers, publishes information on river conservation, provides technical advice to local groups, works with government agencies and other river users, and-- when necessary-- takes legal action to prevent river abuse.

RIVER ACCESS: To assure public access to whitewater rivers pursuant to the guidelines published in its official Access Policy, AW arranges for river access through private lands by negotiation or purchase, seeks to protect the right of public passage on all rivers and streams navigable by kayak or canoe, resists unjustified restrictions on government managed whitewater rivers and works with government agencies and other river users to achieve these goals.

EDUCATION: Through publication of the bi-monthly magazine, and by other means. American Whitewater, (AW) provides information and education about whitewater rivers, boating safety, technique and equipment.

SAFETY: AW promotes paddling safely, publishes reports on whitewater accidents, maintains a uniform national ranking system for whitewater

rivers (the International Scale of Whitewater Difficulty) and publishes and disseminates the internationally recognized AW Whitewater Safety Code.

EVENTS: AW organizes sporting events, contests and festivals to raise funds for river conservation, including the Ocoee Whitewater Rodeo in Tennessee, the Gauley River Festival in West Virginia (the largest gathering of whitewater boaters in the nation), the Arkansas River Festival in Colorado, the Kennebec Festival in Maine and the Deerfield Festival in Massachusetts.

AW was incorporated under Missouri nonprofit corporation laws in 1961 and maintains its principal mailing address at 1430 Fenwick Lane, Silver Spring, MD 20910 (301) 589-9453. AW is tax exempt under Section 501(c) (3) of the Internal Revenue Code.

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Events Central

By Jayne H. Abbot, Events Manager

The 2001 Season Takes Hold

It's been busy around here at the American Whitewater Events Office as the season seems to be about ready to kick into full steam and it's only January. Looking ahead to the spring, it's going to be an incredible new year for the sport of freestyle kayaking. NOWR has been busy adding new events to its menu (see the schedule for specifics) as we seek to expand the possibilities for local kayakers to participate in the competitive end of the sport. In early April, the calendar is chock full of events, from high profile competitions like the US Freestyle Team Trials, Kern and New River Rodeos to the 2nd Annual Tennessee Paddle-Race for the Obed and 3rd Annual Tallulah Festival, among many other new and existing events.

TEVA OREGON CUP

The Oregon Cup is set to take off this year on May 5-12 with \$20,000 in cash and prizes provided from Teva, the events title sponsor. The event has been redesigned to include raft races and a boaterX downriver race and is expected to take the west coast by storm. The event winds up on May 12 with a supreme party and awards ceremony, videos, live music, outdoor industry manufacturer booths and special guests representing local environmental groups, all courtesy of Teva.

The event supports American Whitewater's Northwest Rivers Conservation and Access Fund, Pacific Rivers Council and Boy Scout Troop 252. In 2001, the event will be supporting a lobbying effort in the Oregon Legislature as well.

\$20,000 Cash and Prizes to be awarded include \$10,000 for pro kayakers, \$5,000 for pro rafters and \$5,000 in merchandise to other classes. For more information on the event, go to www.okcc.org.



OCOEE

WHITewater

The inaugural Ocoee Whitewater Games will be held on Tennessee's Ocoee River between Cleveland and Ducktown on May 17-20, 2001. For the first time ever, American Whitewater's Ocoee Rodeo and the

United States Whitewater Slalom Team Trials will be held simultaneously on the same river venue as one all-star event. This late-spring competition will ensure warm weather and exciting whitewater for spectators as well as the expected 300-400 athletes who will be competing for prestigious spots on the U.S. National Whitewater Slalom Team and/or National titles, points and a \$5,000 cash purse in the whitewater rodeo competitions as the first of four events in the Gorge Whitewater Series.

Just downstream, the U.S. Whitewater Slalom Team Trials will pit current Olympians against other top up-and-coming athletes as each man, woman, and junior vie for a spot on the prestigious World Championship team. Cutting edge boat design and precise control and speed challenge the concept of man vs. nature through twenty slalom gates. The winners, making up the U.S. Team, will return to compete on the Ocoee September 21-23 in whitewater's premier event, the prestigious Slalom World Championships.

The event is co-produced by American Whitewater and OcoeeWhitewater.com, a project of the Copper Basin Economic Development Association (CBEDA). For more information, go to www.ocoee whitewater.com.

GORGE

WHITEWATER SERIES

Takes Professional Kayaking to the Next Level

A giant step was taken this winter for whitewater kayakers across the country. American Whitewater and Octagon Marketing, owner of the Subaru Gorge Games, have created the Gorge Whitewater Series. The Series is the extension of last year's highly successful Outdoorplay Freestyle Championships and will be comprised of four professional whitewater kayaking events held around the country. The Series will culminate in the championship crowning event at the 2001 Subaru Gorge Games in Hood River, Oregon, in July. The total cash purse for the Series is \$32,500 made up of a \$5,000 purse available at each of the earlier events, \$10,000 available at the Gorge Games and \$7,500 available for the overall champions. Purses will be divided between pro men and women competitors.

Each event in the Series will offer competitors and spectators alike a variety of kayaking disciplines, including extreme racing, down river racing, down river freestyle and hole riding freestyle. The Series events will include the following:

Ocoee Whitewater Games May 18-20
Potomac Whitewater Festival June 1-3
Animas River Days June 8-10
Subaru Gorge Games July 14-22

"We are extremely excited to be involved with the Gorge Games," said Rich Bowers, Executive Director of American Whitewater. "Gaining national attention for river conversation issues is American Whitewater's mission and working with the Gorge Games team will be very rewarding for our members and the paddling community in general."

"We saw this as an excellent opportunity to expand the Subaru Gorge Game's involvement with the sport of kayaking and support American Whitewater's efforts in river conservation," commented Rufus Frost, Director of Adventure Sports for Octagon. "We liked what Outdoor Play started last year and saw it as a great fit for our plans to build a series of feeder events in each Subaru Gorge Games competitive category."

The Gorge Whitewater Series welcomes the support of our national promotional partners; Hooked on the Outdoors and Paddler Magazine, as well as premier industry sponsor Lotus Designs. In addition, local marketing plans are being drafted to ensure that everyone knows when the Gorge Whitewater Series is coming to town.

Octagon is the sports and entertainment division of the Interpublic Group of Companies (NYSE:IPG), one of the world's largest advertising and marketing communications groups. Octagon offers clients marketing-led expertise across all major disciplines that make up the sports and entertainment market including athlete representation, event management, consultancy, property representation, merchandising, and TV rights sales and production. Only three years since its inception, Octagon employs over 1,200 people in 41 offices in 19 countries.

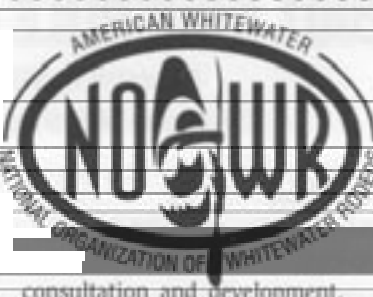
NEW NOWR LOGO ARRIVES!

After two months and nearly two dozen entries the new NOWR logo makes its ready to make its mark on freestyle kayaking. Tom Palmer, the kayaking farmer from Schooley's Mountain, New Jersey, submitted the winning design.

Tom is 52 years old, lives on a farm and considers the Tohickon his home river, but frankly admits to hanging out with Ken Sanders and friends at the River's

End near Ohiopyle, PA when there is good water. Tom's favorite play river is the Upper Yough, whether he's playing it or it's playing him. Tom is an artist and has other logo works within the industry, the "WS" logo for Wave Sport. Tom is a big supporter of American Whitewater and has agreed to donate his logo winnings (\$200) to American Whitewater's conservation programs. **THANK YOU TOM!**

Tom is available for custom logo



consultation and development.

E-mail the events office for more info amwwevents@aol.com or call Tom directly 908-852-5934 (daytime only).

Thanks to Tom and to all the other logo contest entrants:

Jeff Goold
Joey Hall
Charles Hall
Eetu Ahtiainen
Brenda Ernst
Kasey Moore
Marna Powell
Brandon Bassett
Sean Beyer
Matt Hasenbalg



& Tricks

• Edited by Sam Drevo

Splat Wheels

by Eric Southwick

A splat wheel is a cartwheel where the hull of the boat is against the upstream surface of a solid object like a rock. Before attempting a splat wheel you must be able to recognize splat rocks and its surroundings. This is extremely important. The water surrounding the splat rock should be deep and the current above not too powerful. You should be able to differentiate between a rock that is undercut, and one that is not. If you know the difference, read on. Otherwise ask someone who does so they can point out the hazards and risks.

Approach your chosen splat rock from upstream, floating sideways. As you advance upon the rock, look for the seam line which is created by the pillow. On the seam line, initiate a stern squirt with a powerful back or forward sweep. As the stern sinks into the seam, the bow will lift into the air against the rock. Make sure to keep your weight forward for stabilization and rotation. Reach around for a reverse sweep looking in the same direction you are twisting. To complete the cartwheel, keep switching back and forward sweeps. Using momentum, continue the spinning energy in order to perform multiple ends.

If you do pin, roll around and pull yourself up on the rock side. If you're on the edge of the rock, place the blade in the downstream current and pull while wiggling your hips to set your boat free.

Splat wheels are super fun and make river running more enjoyable. Have fun and be safe!

Eric Southwick executing splat wheel. Photos by Tanya Shuman



2001 SCHEDULE OF RIVER EVENTS

Presented by AMERICAN WHITEWATER
Celebrating whitewater rivers across the country

AMERICAN WHITEWATER FESTIVALS

Tallulah Festival	April 7	Tallulah, GA	Mary Beth Bundrick	706-754-4318	info@tallulahfallsgeorgia.com
Tennessee Paddle 2K	April 6-8	Wartburg, TN	Dale Robinson	865-909-2622	daler@tennesseepaddle.com
Stoney Creek Rendezvous	April 21-22	Johnstown, PA	Steve Podratsky	814-266-9595	spodratsky@aol.com
French Broad River Festival	May 11-13	Asheville, NC	Chris Donochod	828-236-1209	www.frenchbroadriverfest.com
Salmon River Whitewater Festival	July 7-8	Pulaski, NY	Dan Murn	315-298-6475	dmurn@pacs.cnyric.org
Black River Festival	July 28-29	Watertown, NY	Chris Koll	315-652-8397	cko11234@aol.com
Deerfield Festival	August 4	Charlemont, MA	Mike Coleman		coiemanm@beaconarch.com
"Don't Call This a Festival River Rendezvous" September 1-2		Belfort, NY/Beaver River	Chris Koll	315-652-8397	ckot11234@aol.com
Gauley Festival	September 22	Summersville, WV	Phyllis Horowitz	914-586-2355	whiteh2o@catskill.net
Russell Fork Rendezvous	October 1-8	Haysi, VA	Brent Austin	859-278-2011	surfin@kymtnet.net
Moose River Festival	October 13 ?	Old Forge, NY	Chris Koll	315-652-8397	ckoll1234@aol.com

Gorge Whitewater Series, in partnership with American Whitewater - \$32,500 Pro Cash Purse! A multi-disciplinary event series crowning the best paddlers in the country! Overall winners purse of \$7,500!

(Ocoee Whitewater Games (\$5,000))	May 18-20	Ducktown, TN	American Whitewater Events	828-645-5299	www.ocoee whitewater.com
(Potomac Whitewater Festival (\$5,000))	June 1-3	Great Falls, VA	Pervis Major		www.potomacfest.com
(Animas River Days (\$5,000))	June 8-10	Durango, CO	Four Corners Riversports	970-259-3893	info@riversports.com
(Subaru Gorge Games (\$10,000))	July 14-22	Hood River, OR	Subaru Gorge Games	541-386-7774	www.gorgegames.com

American Whitewater Cascade Series

A series of premier level races from mild(er) to wilder held across the country.

Tennessee Paddle - Race for the Obed	April 7	Wartburg, TN	David Benton	865-220-0956	dbenton@icx.net
Canyon Creek Extreme Race	May 9	Clark County, WA	Keith Jensen	503-285-0464	acks@teteport.com
French Broad River Race	May 12	Asheville, NC	Chris Donochod	828-236-1209	www.frenchbroadriverfest.com
Great Falls Race	June 2	Great Falls, VA			www.potomacfest.com
Colorado Creekin' Festival	June 23-24	Durango, CO	Taylor Beavers	970-385-5750	taylorbeavers@hotmail.com
Black River Race	July 28-29	Watertown, NY	Chris Koll	315-652-8397	ckoll1234@aol.com
Gore Canyon Race	August 23-25	Kremmling, CO	Paul Tefft	970-923-3955	paultefft@enviro-actionsports.com
Animal Upper Gauley Race	September 24	Summersville, WV	Donnie Hudspeth	304-658-5016	dhud@geoweb.net
Ohiopyle Falls Race	Sept/Oct ?	Ohiopyle, PA	American Whitewater	301-589-9453	www.americanwhitewater.org
Russell Fork Race	October 6 ?	Haysi, VA	Brent Austin	606-278-2011	surfin@kymtnet.net
Moose River Race	October 13 ?	Old Forge, NY	Chris Koll	315-652-8397	ckoll1234@aol.com

RiversLiv 2001 NOWR Series- Presented by American Whitewater

San Diego Paddle Surf Festival	March 31 - April 1	La Jolla, CA	Preston Holmes	858-453-9209	pholmes@ucsd.edu
Gilman Falls Rodeo	April 14	Old Town, ME	Peter Lataille	207-862-2922	creekpeter@aol.com
Styrofoam Cup Intercollegiate Reg. Champ	April 14-15	Bryson City, NC	Will Leverette	828-771-3770	styrofoamcup@hotmail.com
open to college students and juniors only					
Kern River Festival/Teva Cup (\$2,000 purse)	April 20-22	Kernville, CA	Terry Valle	818-340-3083	tvalle@ix.netcom.com
Tariffville Whitewater Rodeo	April 21	Tariffville, CT	Michael Phelan	413-748-3469	mpriverbaol.com
Trinity River Freestyle Rodeo	April 28-29	Big Flat, CA	David Steinhauser	530-623-6293	splash@trinityrrrafting.com
New River Rodeo	April 28-29	McCoy, VA	Chris Smith	email only	chris@riversway.org
Teva Oregon Cup / May 5-12 (\$20,000 in Cash and Prizes)					
Maupin Daze	May 5-6	Maupin, OR	Dave Slover	541-395-2201	allstar8teleport.com



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Boater and Rafter Xcross	May 7	Maupin, OR	Dave Slover	541-395-2201	allstar@teleport.com
Canyon Creek Kayak & Raft Extreme Race	May 9	Clark County, WA	Keith Jensen	503-285-0464	acks@teleport.com
Bob's Hole Rodeo & Raft Slalom	May 11-12	Estacada, OR	Keith Jensen	503-285-0464	acks@teleport.com
Coosa River Whitewater Festival	May 11-13	Wetumpka, AL	Lonnie Carden	334-272-0952	knewton@beilsouth.net
Wyoming Whitewater Championship	May 26-27	Jackson Hole, WY	Aaron Pruzan	307-733-2471	jacksonholekayak@wyoming.com
Wenatchee River Rodeo	May 27	Leavenworth, WA	Chris Joosse	206-484-1274	chrisjo@wolfenet.com
Bigfork Whitewater Festival	June 1-3	Bigfork, MT	Mike Dezanni	406-892-2674	bigforkwhitewater@hotmail.com
Boise County Throwdown	June 8-10	Boise, ID	Sam Goff	208-368-9837	www.boisecountythrowdown.org
Headwaters Championship / FIBARK	June 14-17	Salida, CO	Susan Dempsey	719-539-4686	susan@amigo.net
Colorado Creekin' Festival (waterfall rodeo)	June 23-24	Durango, CO	Taylor Beavers	970-385-5750	taylorbeavers@hotmail.com
Skyfest	July 7-8	Index, WA	Julie Albright	206-782-4566	jules@u.washington.edu
Black River Rodeo (non-pro only)	July 28	Watertown, NY	Nancy Weal	315-788-2538	fishinsp@hotmail.com
Wausau Freestyle Kayak Championship	August 25-26	Wausau, WI	Julie Walraven	715-845-5664	design@dwave.net
Ottawa River Rodeo	September 1-2	Bryson, QB	Paul Sevcik	416-222-2223	paul@equinoxadventures.com
Canyon Doors Rodeo	September 25-26	Fayetteville, WV	Backcountry Ski & Sports	304-574-4005	www.bcski.com
Kootenay Rodeo		Cancelled			
Get Yer Boat Salty Surf Contest	October 20-21	Oakland, CA	Elaine Baden	510-893-7833	CalKayak@aol.com

OTHER EVENTS

Futaleufu River Appreciation Festival	March 2-3	Futaleufu, Chile	Jodie Deignan		info@futafrinds.org
IR Triple Crown/US Freestyle Team Trials	March 31-April 7	NC and TN	Penstock Productions LLC	828-268-0676	www.penstockproductions.com
Cheat River Festival and Race	May 4-6	Albright, WV	Kerry Manier	304-329-3621	foc@cheat.org
Mountain Sports Festival	June 1-3	Asheville, NC			www.mountainsportsfestival.com
World Freestyle Championships	June 25 - July 1	Sorte, Spain	Lluís Rabaneda		www.rocroi.com/wwcfreestyle
American River Festival	September 7-9	Placerville, CA			
Export A - A Whitewater Rodeo Challenge	October 6-7	Bryson, QB	Paul Sevcik	416-222-2223	paul@equinoxadventures.com

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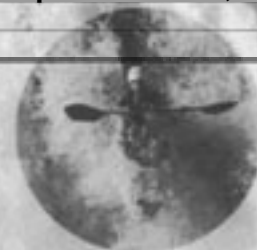
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(CO) June 8-10

SUBARU (OR) July 14-22
GORGE GAMES

► Outdoor World Championship

Gillman Falls Rodeo (ME), April 14
Styrofoam Cup (NC), April 14-15
Kern River Festival (CA), April 20-22
Trinity River Freestyle Rodeo (CA), April 20-22
New River Rodeo (VA), April 28-29
Teva Oregon Cup (OR), May 5-12
Coosa River Festival (AL), May 11-13
Wyoming Championship (WY), May 26-27
Bigfork Festival (MT), June 1-3
Boise County Throwdown (ID), June 8-10
Fibark (CO), June 14-17
Colorado Creek'n' Festival (CO), June 23-24
Skyfest (WA), July 7-8
Wausau Championship (WI), August 25-26
Ottawa River Rodeo (QB), September 1-2
Canyon Doors Rodeo (VA), September 25-26
Get Yer Boat Salty (CA), October 20-21

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WERNER

Director's Cut

Final Cut

By Rich Bowers

After nine plus years, this is my final article as Executive Director for American Whitewater. Following a long-held dream to live as a family in the West, my family and I are moving to Bellingham, Washington, home to the San Juan Islands, Mt. Baker, and the entire undiscovered territory (for me) that makes up British Columbia. My wife will be working at Western Washington University, and I, amazingly, find myself the "trailing spouse," free to paddle, ski (or board if my daughter has her way), and generally make a nuisance of myself in a new area.

Looking back over the past near-decade of activity, I am proud to have been a part of what American Whitewater has accomplished. When I started with American Whitewater in early 1992, I was the only full-time employee in our history. Today, we have ten full and part-time paddlers working on rivers, access, and events, and we expect to increase this in the coming months. In 1992, our membership was just hitting the 2,000 mark, and has grown to more than 8,000 today. Back then, American Whitewater received no support from environmental foundations. Today, our successful work of restoring rivers generates foundation support for nearly one quarter of our annual revenue. Early on, American Whitewater was a small annoyance to a few developers. Today, the organization and our membership are seen as a major force for river restoration, and the leaders in river access.

American Whitewater was a successful conservation voice long before I got here. But our ability to address river issues expanded dramatically when we hired full-time experts like Rich (Rainey) Hoffman, John Gangemi, and Jason Robertson. If you look at the history of river conservation in this country, you will see the hand of paddlers in almost every issue. If you look at whitewater river efforts, you will see employees; members and volunteers from American Whitewater fully represented. American Whitewater's legacy of river restoration over the past nine years has been incredible, and I am very happy to have been a part of this.

At the 1992 Gauley Festival board meeting (my first as an employee), the directors voted unanimously to establish a committee to address the growing problem with river access. This led to the publishing of the American Whitewater River Access Policy in 1996, and the start of our current River Access Program. As predicted then, access remains one of the biggest priorities impacting river users and our Access Program has become a cornerstone of our mission and goals.

What was true for whitewater in 1992 is true now:

- "Rivers are their own best motivator"
- "Work to develop coalitions among all river users"
- * "Leverage the hell out of everyone who can help us reach our goals"

These beliefs, stated in my first article as an employee, have shaped our efforts over the years and we have been enormously successful in reaching the goals we have set for ourselves. Especially the third point. Over the years, American Whitewater has been able to "leverage the hell" out of developers, agencies, river managers, volunteers, and others. The result is better river flow, improved access, new runs, improved local economic growth, and the understanding by all that paddlers are an effective and dramatic benefit for rivers. While I have played a part in this, it is our board, staff, and volunteers that turned this into a reality.

I want to thank everyone for allowing me to have the best job in the world! It's been a pleasure to work with American Whitewater, first because we got so much done, but equally due to the great people I have met and worked with, the great experiences I've enjoyed, and the great rivers that I have been involved with. In all of my time at American Whitewater, I have found paddlers to be the very best of people. Honest, driven, precise, and committed. It has been a real pleasure to work with all of you, and to represent you on so many important efforts.

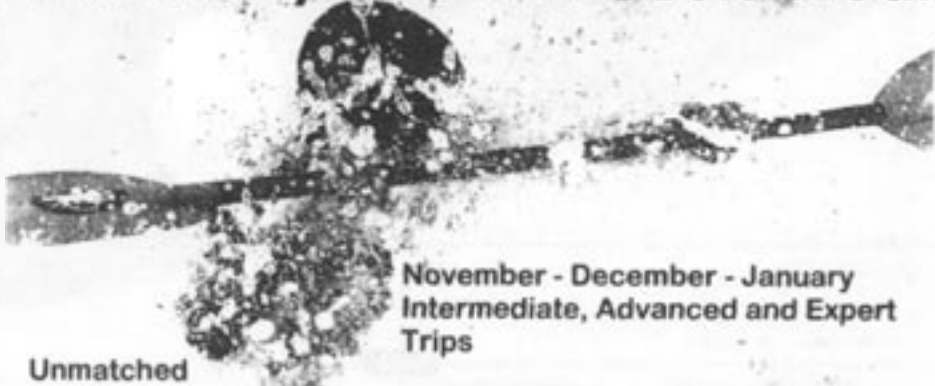
Before signing off, there are a few people who played a key role in setting me on my course. I need to thank each of my board of directors, who, to a man or woman, are the most dedicated, focused, and rabid river people I have ever met. To my staff, who are the most effective river crusaders I know, who have been just a great team, and with whom I enjoyed every working (boating and skiing) day. I want to recognize the efforts of Pete Skinner and Pope Barrow who introduced me to hydro work and my role as Conservation Director, and whose cantankerous style with developers (I'm being nice here) paved my way for so many early victories.

Finally, I want to thank Pope Barrow for being my mentor in those early years, and for continuing to set the bar for river conservation. When I think of great river people, I think of Pope's singular focus, his unwavering work ethic for rivers, and his ability to quickly determine the right course of action. Pope breathes, drinks, and lives rivers, and he is dedicated to making sure everyone else lives rivers too! Thanks, Pope, for your help, guidance, humor, and ability to keep the fun in rivers.

When first hired, I said that "As a father, I have a responsibility to my daughter to guarantee that she has the same or greater (paddling) opportunities, whether she decides to use them or not." Thanks to the efforts of so many, I leave believing that we made a difference, that rivers are better for our work, and that we had a lot of fun doing this!

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The **Black Canyon of the Gunnison...**

"Heaven on earth
with a detour
through Hell"

Photo by Lisa Lynch,
Black Canyon National Park

By Major Tim Kelley
AW Board Member

Curtis had set a blistering pace the whole day, but I was determined to keep up on the last carry. But when I crested the false summit pain finally overwhelmed pride, and I set my kayak down. The cramps in my shoulders and a bruised hip had demanded a short pause. After a few minutes, I wiped the sweat from my eyes and shouldered the boat one last time. I was physically spent and emotionally soaring when I topped the final crest and finished the mile plus climb up Chukar Trail. Heaven on earth with a detour through hell best described the . . . indescribable images that filled my head and dulled the pain. For 8-1/2 hours, we had paddled, portaged and climbed 15 plus miles of the most physically demanding terrain I had ever "kayaked." I had finally made it down the Black Canyon of the Gunnison.

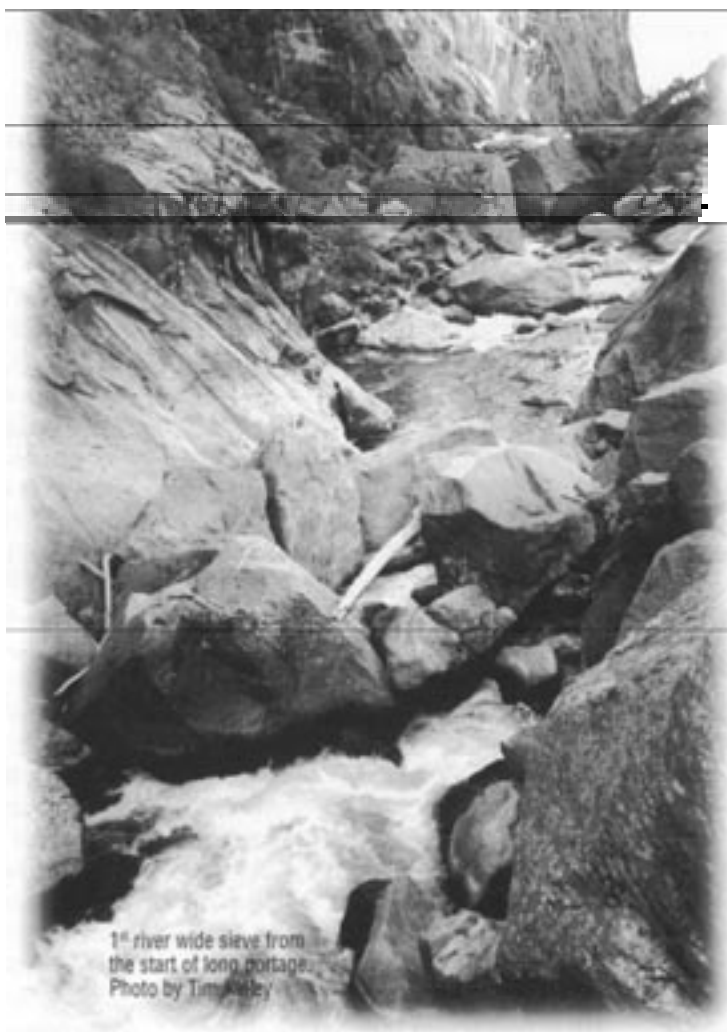
Curtis and I didn't talk much as we waited for the other 6 in our group to finish the hike. The journey seemed a blur. The Black Canyon was every bit the challenge I had expected, mentally as well as physically. The run required a level of commitment greater than any river I had done.

Photo by Bob Gedekoh

The remote setting of this deep wilderness canyon was just the surface of the commitment. The Class III, VI, and V rapids were nameless drops with consequences far exceeding that normally associated with their difficulty. Sieves or siphons were a common hazard in most rapids. Tackling the run in a single day magnified all of this. The features of the canyon and the river were like no place I had ever been. Waterfalls poured through holes cawed in massive boulders and disappeared. Boulder piles swallowed the river whole like it was a tiny creek. The giant talus, groves of poison ivy, and mid-day heat made the portages pure torture. The Black Canyon was mind boggling!

Curtis Burge and John Banker had shown me down the Black Canyon in early September along with the "Boyz of the Nez Perce Van." Eight is probably too large a party for this run, but quick scouts, conservative boating, and 1,000 cfs made the run fast and for the most part epic free. Our only close call came when one of the Nez Perce Boyz dropped his boat as we were all portaging the second Class V rapid.

I had finished the portage and was in my boat waiting for John or Curtis to give me Beta on the Class IV drop that lurked just around the house-sized boulder that blocked my view. I heard a boat slam into rock and someone yelled, "Grab the boat!" A few seconds later the boat flushed by. I looked to Curtis for quick beta, "Hug river-right and catch the next eddy . . . river-right SEIVE just below the eddy. . . run the river-left channel." A couple guys had throw bags out and shore safety set on the two-story boulder above me. I peeled out and saw the boat stuck in the horseshoe hydraulic



of the 4-foot drop I was about to run. I hesitated upon seeing the boat and lost what little speed I had. I knew I was going to get backendered so I went for a screw-up. The river gods were kind, and I pulled it off, landing next to the eddy. I watched the helpless boat mystery in the hole and surface 3 or 4 seconds later on the boil-line. Each cycle the boat looked like it was going to flush into the river right channel and disappear into the sieve. I finally nudged it off the boil-line with my bow and nudged it into the eddy with a hand shove as I drifted toward the river right sieve. Making the left channel was easier than I thought and in the end, no harm — no foul.

Float bags and luck had saved the boat. It was our only miscue that day, but made clear how small the margin for error was on a run this remote. It reminded us that the little things were what caused problems on trips like this. Staying focused for the Class Vs was easy. Fighting the complacency brought on by fatigue adds to the dangers of this run.

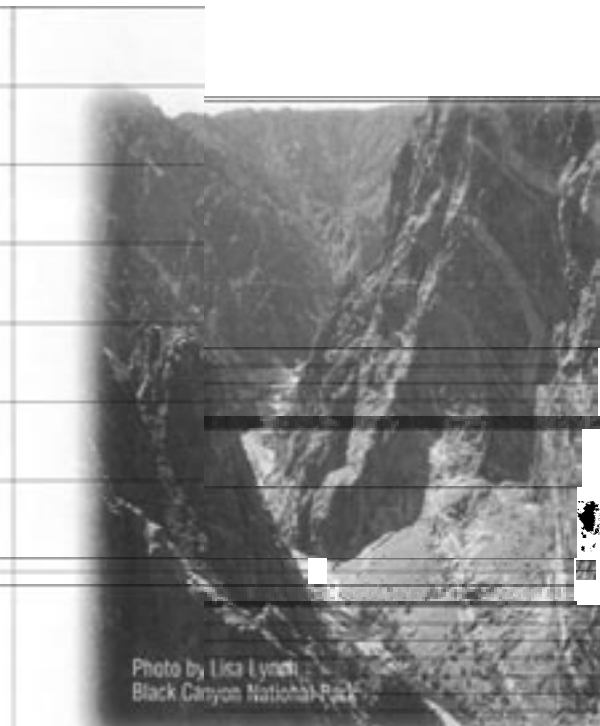
The hazards of the Black Canyon were magnified in 1997 by Chuck Kern's death. I met Chuck in 1989 while he was attending St. Lawrence University, in upstate, NY. I had sold him a Jet and gained a brother. (Jet: Jim Snyder squirt boat design before the Pro Jet, T-Bird and Big Foot; Dancers and Lazars still ruled the surface, and Fun Forever was the hottest video.) Over the next eight years I watched Chuck become one of the best paddlers in the country. His death and several others of 1997 put an exclamation mark behind the objective dangers of whitewater. (See Mar /Apr '98 AW Journal for the details of this accident.)

Since Chuck's death I seldom paddled without thinking about him in some way. Not about his death or the dangers of

paddling, but the pure joy we shared paddling with each other for eight years. Squirting the Ottawa and Gauley from top to bottom; running new lines on the Bottom-Bottom Moose; doing laps on the Narrows of the Green; my Bachelor Party on Gore Canyon at 3,000 cfs, knowing only where to put-in and take-out. His death had left a void much greater than the loss of a paddling partner.

So the Black Canyon had become a lot more than just a wilderness Class V trip to me. Chuck's death added to my connection with this special place. Each time I visited the canyon, I left wanting to discover more of its past, more of its hidden secrets.

1969 may stir memories of Apollo Eleven, the "Miracle Mets," or the Beatles breakup, but my memories of 1969 are of a 5 year-old boy's fishing trip with his grandpa. That was the first of many trips to the ancestral lands of the Ute Indians they called Tomichi, known now as the Black Canyon of the Gunnison. The Canyon has captured my attention ever since. Grandpa was a fly-fisherman. As



soon as I could cast a fly in the water instead of the willows on the bank, I graduated from grasshopper to apprentice fly-fisherman. The only thing Grandpa complained about more than bait fishermen, was Texans and taxes. Every summer we fished the tributaries of the Gunnison.

Grandpa was hardened by the depression of Southern Colorado's dust bowl. He was rough around the edges and had a bark that was more intimidating than the portages in the canyon. He was as mysterious to a young boy as the Black Canyon itself. Each time we went fishing, I uncovered more of his secrets and felt a special bond no one else shared. Each time I visit the canyon, I discover more of its dark secrets and fall deeper under its spell.

Grandpa died of cancer in 1991. The summer before his death we spent a week together reliving those magical trips. I had orders sending me to Korea and we knew this would be our last time together. Laughs, lies, and with tears in my eyes, I said goodbye to the man who spawned my passion for the outdoors with a fly rod and the love only a grandpa and grandson can share.

Memories of Grandpa and those fishing trips had surfaced when I watched trout rise for their evening meal in the calm pools. That evening the sky had all the makings of a mag-

nificent sunset as I said goodbye to Curtis and the boyz. I didn't want the day to end, so I drove to Sunset View and watched the light show from the South Rim. The gold ribbon of "Tomichi" traced its path west into the sun. I smiled remembering how Grandpa had led me to believe the Black Canyon was the Grand Canyon.

I was alone, but Grandpa and Chuck were there with me in spirit. The brilliant colors faded to black, and I left the park that night having discovered some of the inner canyon's secrets and re-discovered that rivers had more to offer than Class V drops. The Black Canyon will always be my Grand Canyon.

Three weeks after the Labor Day run and a couple of chiropractic visits later, I was back for another one-day journey through the Black Canyon. This time Scott Sullivan and Dunbar Hardy joined me. It was their first trip and secretly I hoped I would recognize the start of the portages and the easiest routes through the maze of talus and dense patches of poison ivy. Dunbar needs little introduction to AW readers. He is the paddle school director at Four Corners Riversports in Durango, CO and a talented writer and photographer who paddles the world.

Scott was one of Chuck's best friends. They traveled together working as Technical Reps for Perception. They were charter members of the rodeo circuit. Chuck had competed in the 1995 World Squirt Championships in Germany and had made both the U.S. Squirt Team and the Freestyle Team for the 1997 Worlds. Scott was the Squirt Team alternate and struggled with the decision to paddle in Chuck's place. We had talked about it at Chuck's wake, which was held a few days before the Worlds. I felt, as did everyone who knew Chuck, that he would have wanted Scott to paddle in his place. Scott finished 4th. As Chuck would have said, "Good one!" Scott and I talked a lot about Chuck the night before our run. We knew he would be with us in the canyon.

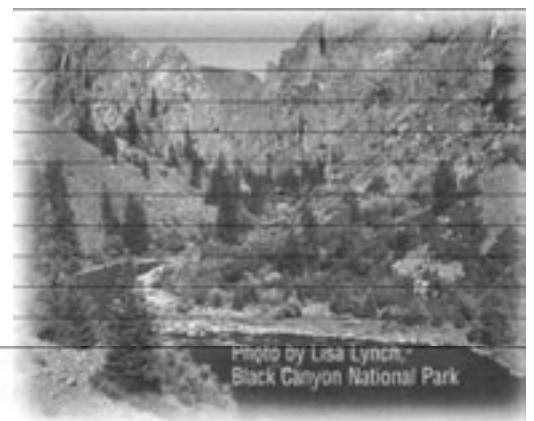
My first run now seemed like a

guided tour. Route finding both on and off the river was the intimidation factor this time. The water level had dropped to 740 cfs and I wondered how this would change the rapids. I wondered what the names of the rapids were. I had worn out the pages of Colorado Rivers and Creeks (CRC II) and used their website,

www.kavakin8colorado.com, to access topographical maps. I read every old guidebook and article I could find that mentioned the Black Canyon, and I even posted inquiries about the rapid names on Mountainbuzz.com.

All this produced the names of just three rapids and their locations. I vaguely remembered the sequence of the Class IV and V rapids interspersed between my known reference points. But by far the most important beta for this run was knowing the best way to portage the "unrunable" drops/sections. So much so that CRC II devoted 113 of its text and a detailed illustration to explaining the best way to portage the "Unrunables." To Quote CRC II, "The proper attitudes to have for this long carry are resignation and indignation—just carry and don't look back. If you set your mind to it, it's not so bad. The river sieves out about four times in the 213 of a mile below the waterfall. Wasted time and a harder portage will greet you if you stay at river level and contemplate boating."

Short runnable sections exist between the giant sieves that completely swallow the river in this 213 of a mile. Smaller sieves and siphons, however, lay hidden throughout this section. One of these claimed Chuck's life. They are almost undetectable at certain levels and many can only be iden-



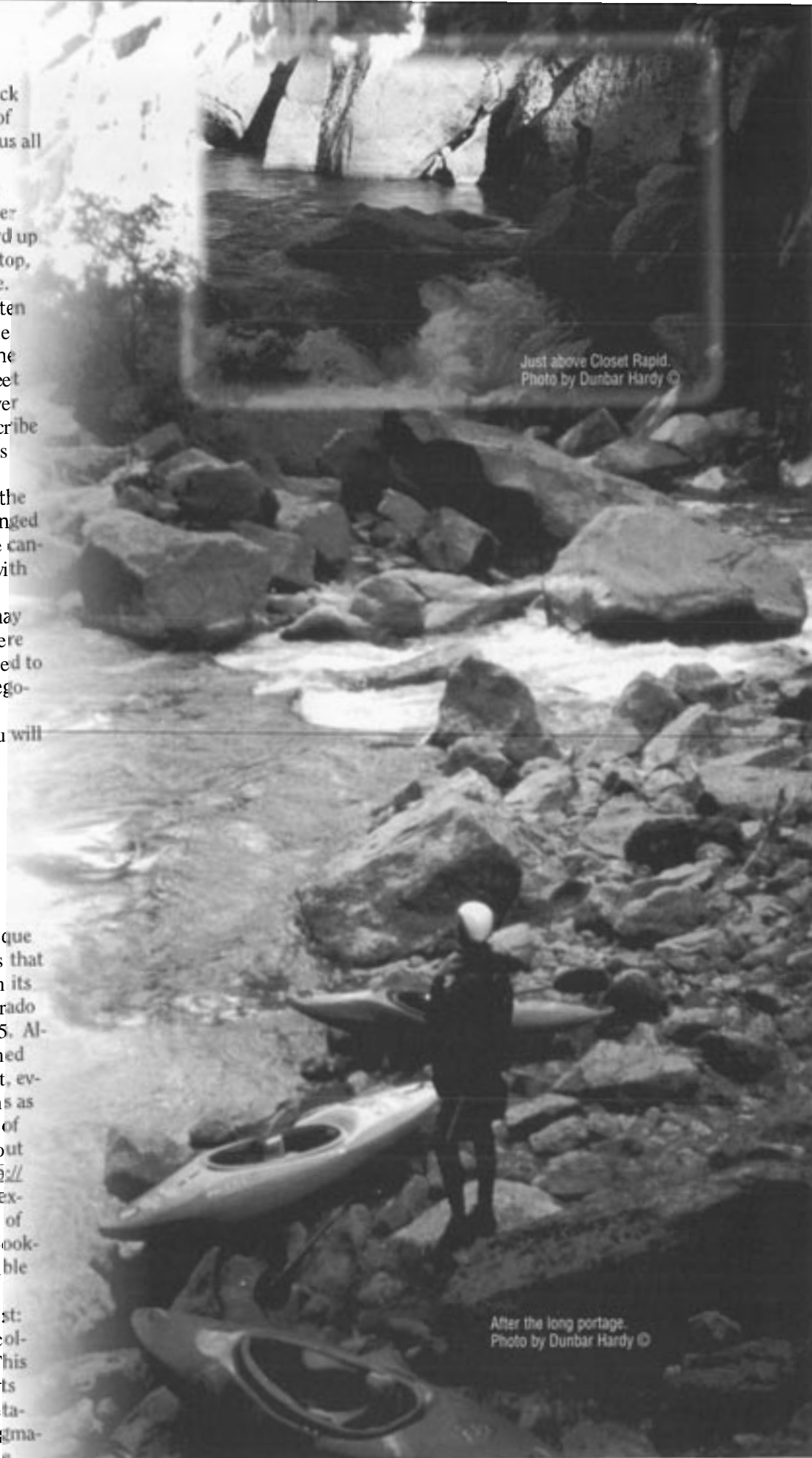
tified from downstream looking back up river. Although we spoke little of Chuck as we paddled, he was with us all day. I felt him in the confidence I gained as I recognized the horizontal lines of the big drops; in the whisper that reminded me to keep my guard up all day; and in the voice that said stop, look, and enjoy this awesome place. During the first major portage I often set my boat down and walked to the highest vantage to look down on the river below. The river drops 360 feet per mile through the sieves and over 60-foot boulders. Words can't describe the sights and sounds of the earth's basement.

My preoccupation with finding the names of rapids at some point changed to finding out all I could about the canyon and its history. As I paddled with Scott and Dunbar, I'm sure my recountings of early exploration may have been a bit boring, but they were polite about it and at least pretended to listen. You have the option of foregoing this historical information...I won't know. But if you skip it, you will be missing some wild tales of wild times indeed.

The Birth of the Canyon

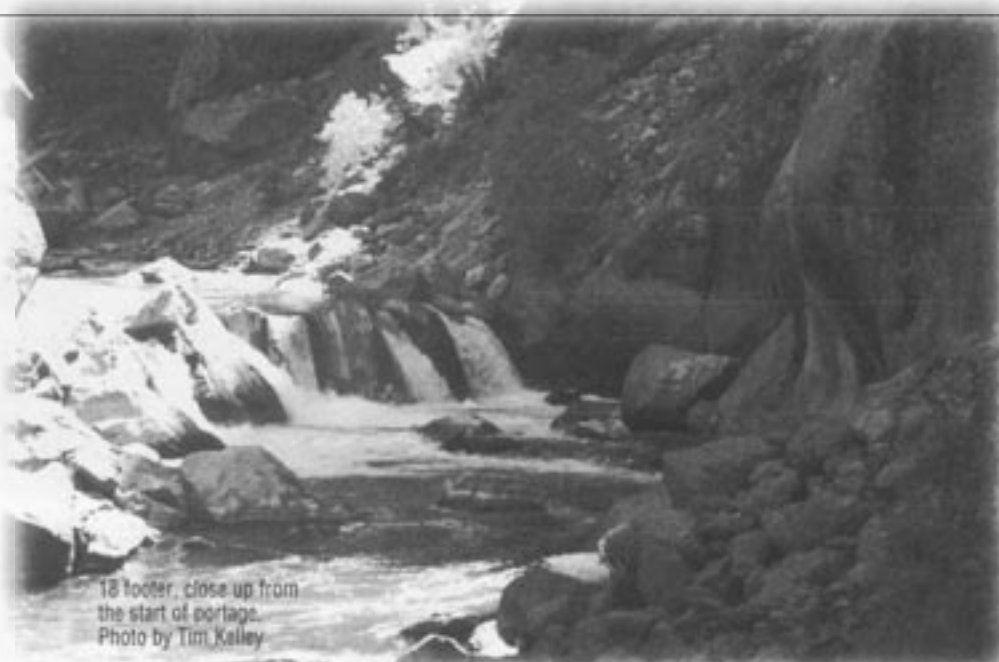
It was largely because of its unique combination of geological features that the Black Canyon was preserved in its wild state. It's one of the few Colorado canyons that defeated the railroad. Although the upper Canyon was tamed by the Gunnison Diversion Project, everything below East Portal remains as it was 100 years ago. The erosion of 100 years in this canyon totals about one inch. The Park's website, <http://www.nps.gov/blca/webvc/geology> explains the basic geological history of the canvon. The Visitors Center bookstore has even more and is accessible through the website.

A couple notes of special interest: Pegmatite makes up all the light colored bands in the canyon walls. This was once hot magma that forced its way into the cracks within the metamorphic rock and cooled. The Pegmatite in Painted Wall cooled into the



Just above Closet Rapid.
Photo by Dunbar Hardy ©

After the long portage.
Photo by Dunbar Hardy ©



18 footer, close up from the start of portage.
Photo by Tim Kelley

The Uncompahgre Utes

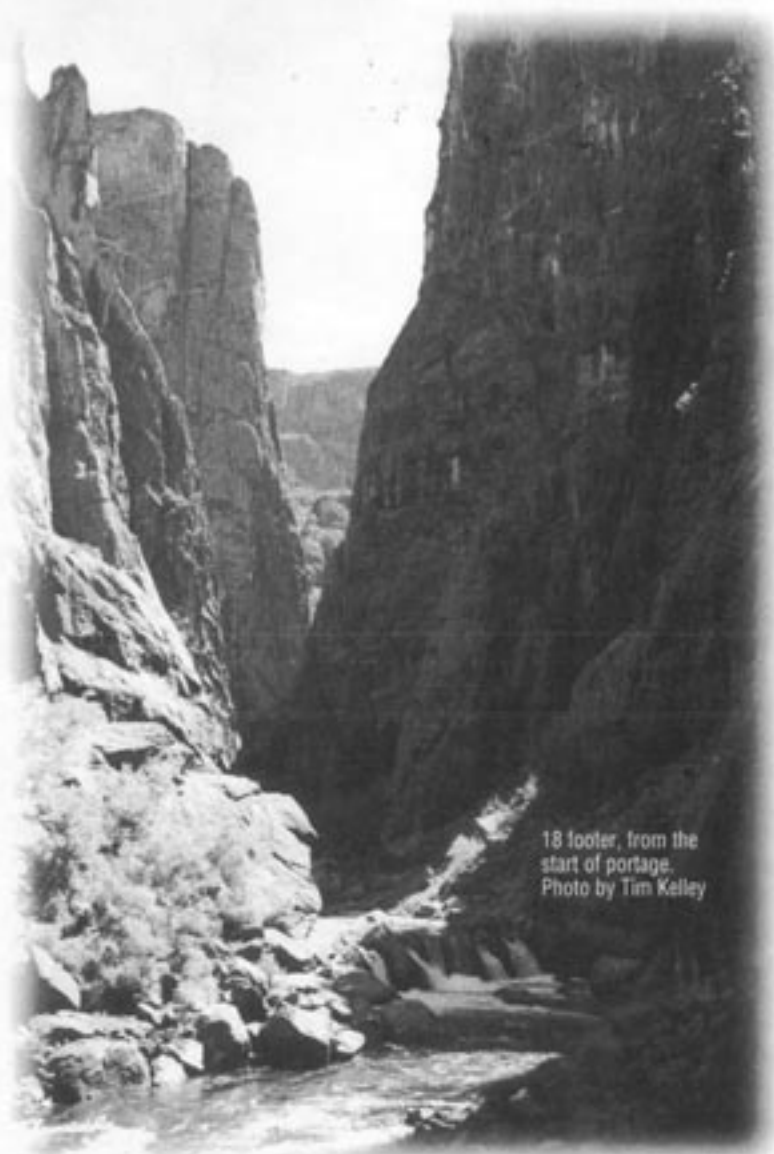
The Gunnison drainage was part of the ancestral lands of the Uncompahgre Ute Indian. They called the area Tomichi, which roughly translated means "land of high cliffs and plenty water." During the spring, summer, and fall, the Utes lived on the rim of the Black Canyon. By hunting and gathering the Spartan resources of the area, they managed to narrowly escape starvation.

Working with natural resources did not always guarantee elegant results. The Utes often constructed their shelters, called wickiups, by piling brush around a cone of poles. Unfortunately, wickiups looked little different from loose clumps of brush, causing the Utes to go down in history as "the builders of bad lodges."

shapes of two dragons, making it the easiest reference point in the canyon to identify. Painted Wall, the highest cliff in Colorado, marks that the worst of the portages are over. The best campsites for this run are found along the river in the shadow of Painted Wall.

What is especially intriguing about the geology though, is that some of the rock making up the floor of the Inner Canyon is over 1.75 billion years old. It is called Basement Rock because no other rock lies below it. The Gunnison has exposed the earth's very soul. To quote Ed Lucero, "a place for Soul Boating." The Black Canyon is more than a majestic wilderness chasm with Class IV-V drops, horrendous portages, and poison ivy that grows over 5 feet tall. When you paddle into the Narrows you feel "it."

The slanting rays of sunlight scarcely penetrate this deep and narrow canyon's dark gray walls of schist and gneiss, hence, "Black Canyon." Visitors to the rim inevitably experience vertigo looking down. But that is nothing compared to that of those on the bottom looking up. The giant boulders you step on and boof off are unimaginably old, and the isolation only enhances the sense of prehistoric times. This is intimidating and has kept all but the most determined from passing through its walls.



18 footer, from the start of portage.
Photo by Tim Kelley

The Black Canyon was of no special significance to the Utes and although trails existed into the canyon, there is no hard evidence of the Indians in the inner canyon. The Indians didn't even mention the canyon to the Spanish explorers.

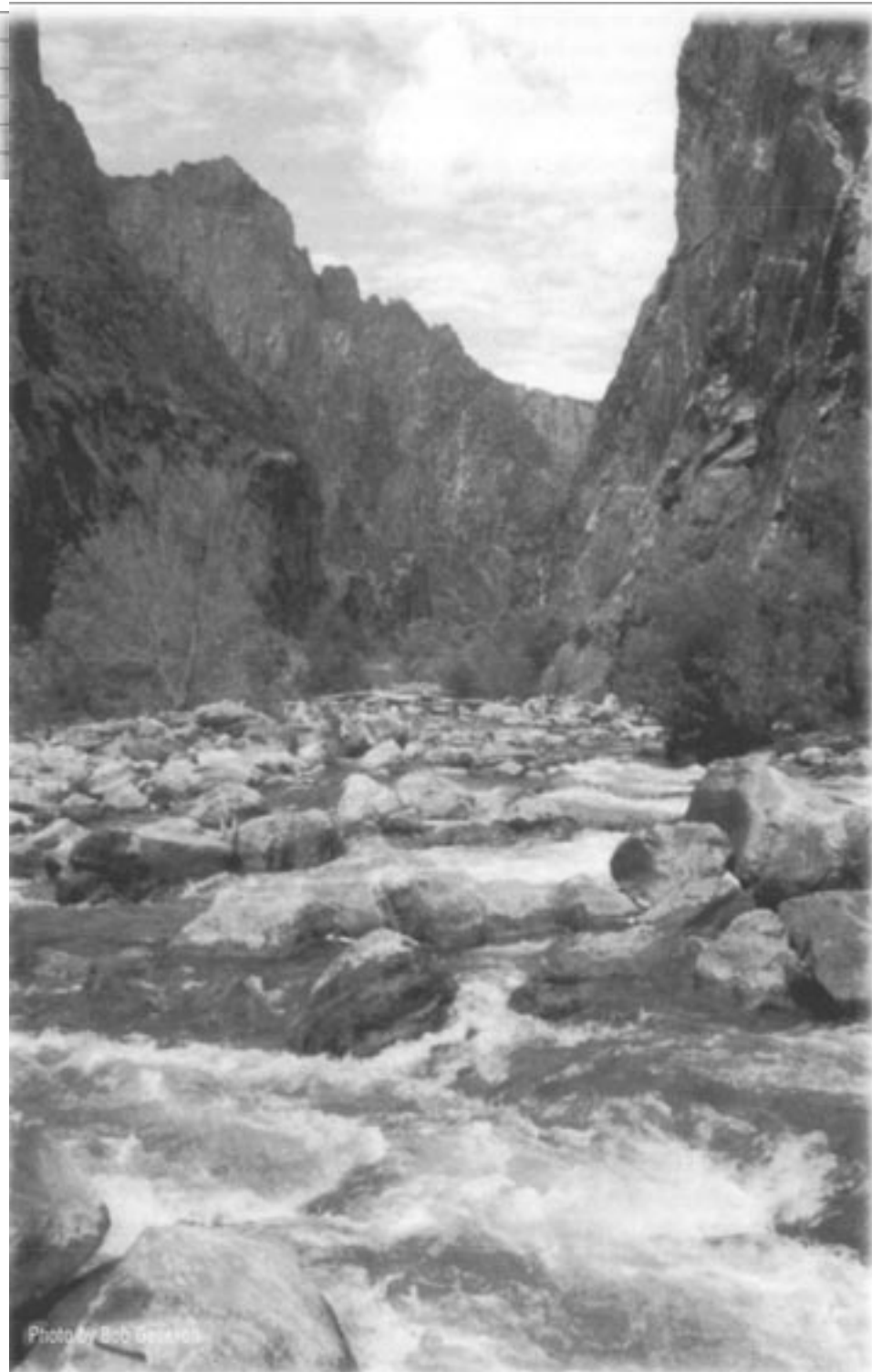
Early Exploration Western Colorado

Spanish explorers arrived in 1765. CPT Jaun Maria de Rivera led a silver-seeking expedition into the region. He carved his name on a cottonwood tree where the Uncompahgre River joins the Gunnison. In 1776 the Dominguez-Escalante expedition, seeking a safer route from Santa Fe to the West Coast missions, passed through the area. Father Escalante made the first detailed study of the region, but missed the Black Canyon all together. He found Rivera's inscription near present day Delta, CO. Father Escalante named the Tomichi, the "San Javier."

In 1809 two trappers, Samuel Spender and John Workman, entered the region from the east and are credited with "discovering" the Black Canyon of the Gunnison. Trapping and hunting flourished in the Gunnison Basin until the 1840s when European fashions shifted to new designs.

CPT John W. Gunnison

In 1853, CPT John William Gunnison, led his expedition through Colorado. The expedition's mission was to survey between the 38th & 39th parallels and determine the feasibility of a transcontinental railroad along this line. They reached the Front Range by August and constructed a wagon road over the "Sangre De Cristo Pass," present day LeVeta Pass. They then climbed over Chochoyopa Pass and down into present day Gunnison, CO. They intersected Tomichi Creek and followed it to the present day Gunnison River. CPT Gunnison mistook the present day Gunnison River for the Grand River (present day Colorado River). The expedition continued west and cut a wagon road as it went. Near Blue Mesa Dam, they entered the Black



Canyon. Here horses and wagons were lowered over cliffs using ropes. After just a few days Gunnison determined this impractical and climbed out of the canyon and passed completely around the 90-mile obstacle.

By October the expedition continued into Utah. Gunnison split off a detachment of twelve men from the main body, and under his command left to explore Sevier Lake. Two days later

Gunnison was killed along with eight others in a morning ambush by a band of Paiute Indians seeking revenge for the killing of their chief. Four men from the detachment escaped death and made it back to the main element of the expedition.

Gunnison had concluded that the routes along the 38th parallel were not suitable for a transcontinental railroad.

The information he gathered throughout his career was helpful in the future development of the west. He recommended a route along the 41" parallel he had traveled in 1850 as the preferred route through the Rocky Mountains. His expedition built the first road connecting the Front Range to the Western Slope. The river he mistook as the Colorado was given Gunnison's name. The Town of Gunnison was established in 1873, and a county was also named after him.

A botanist named Kreutzfeldt, who had been on many expeditions, painted a different picture of Gunnison than one might expect. Kreutzfeldt referred to Gunnison in his diary as "our uppermost scoundrel," "our ass of a captain," "the old dog," and worse. Kreutzfeldt was one of those killed with Gunnison. This was highlighted in "Vanguard for Expansion, Army Engineers in the Trans-Mississippi West 1819-1879" written by Frank N. Schubert, U.S. Army Historian. I mention this not to discredit Gunnison, but highlight group dynamics. I have no doubt that army captains in 1853 got along with tree huggers about the same as they do today. Group dynamics were critical for all the early explorations of the canyon. That fact remains just as true for trips even today.

Early Exploration of The Black Canyon

Ferdinand V. Hayden surveyed and mapped Western Colorado. Hayden had also explored and surveyed the Yellowstone region. His survey, its photographs and painting, directly impacted on Yellowstone becoming the nation's first National Park in 1872. In 1874 the Middle Division of the Hayden survey skirted the north rim of the Black Canyon, establishing several survey stations. An unidentified geologist was lowered 1000 feet into the canyon and commented that "no man could go further and live." The Hayden survey believed the Canyon inaccessible.

By August 1882, the Denver and Rio Grande Railroad reached Cimarron. In December the railroad sent Byron H. Bryant to explore and survey the Black

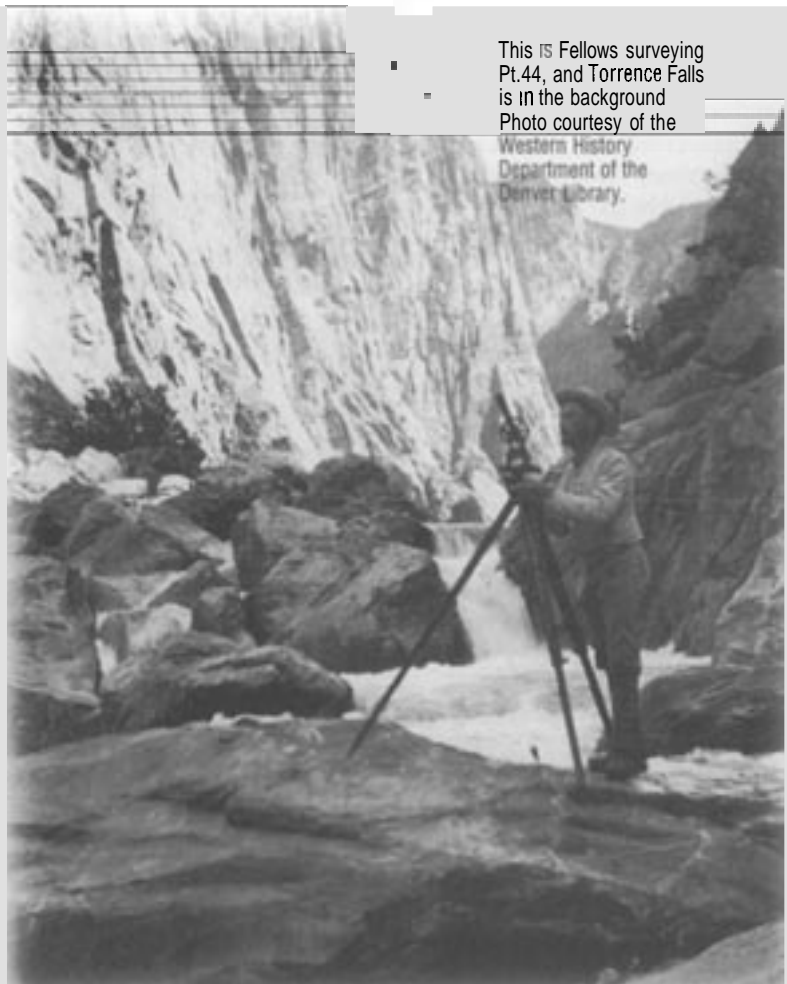
Canyon. Bryant and his crew worked from the north starting just below Cimarron. They expected to complete the survey in 20 days. Climbing up and down the few accessible gullies, they were only able to partially complete the job from the north rim because sheer cliffs and open water made the task impossible. It took them 10 days to move to the south rim, and all but three of the crew quit. Bryant and three men completed the survey by March. The survey concluded that using the Canyon for a railway line was not feasible. The railway line was routed over Cerro Summit and on to Montrose.

Settling of the Uncompahgre Valley

After the Meeker Massacre in 1879 by the White River Utes and the death of Uncompahgre Chief Ouray in 1880, the Ute Indians were forced from their

Colorado lands onto an Eastern Utah reservation. The Uncompahgre Valley was now opened to settlement. Montrose became a town in 1882. By 1884 demand for water far exceeded supply. The Uncompahgre could not irrigate 30,000 acres, much less the 100,000-acre irrigation demand the homesteaders placed on the basin. This resulted in numerous foreclosures and farmers having to abandon their land for lack of water. Those who stayed began considering the diversion of Gunnison water into their own valley by means of tunnels or canals.

A French gold miner and dirt farmer named F.C. Lauzon shared this idea with Lynn Monroe, the Editor of the "Montrose Enterprise," who realized the valley's economy was tied to water. The two began a campaign to make this a reality. This was the start of the Gunnison Diversion Project as it became known. This campaign led to the first recorded attempt to pass through the inner canyon.



This is Fellows surveying Pt.44, and Torrence Falls is in the background
Photo courtesy of the Western History Department of the Denver Library.



1900—FIRST ATTEMPTED PASSAGE OF THE INNER CANYON

By 1900 no one had yet traversed the length of the Inner Canyon. Five volunteers planned to survey the Black Canyon to determine if the diversion tunnel was feasible. The volunteers included William W. Torrence, superintendent of the Montrose Electric Light and Power Company; John E. Pelton, a wealthy landowner and lake resort proprietor; J. A. Curtis, Delta County Surveyor and Civil Engineer; M.F. Hovey, farmer and former miner; E.B. Anderson, a rancher. All were married and had children except Torrence. Hovey was the oldest at 55, all but Torrence were over 47, which was the life expectancy in 1900.

Pelton had the most river experience and by most accounts was the leader. He had explored the Yukon before the gold strikes and boated in the rivers of the West from the headwaters of the Columbia to the Rio Grande. All the others were hardened frontiersmen except

Curtis, who was considered the tenderfoot by the group and made the butt of many jokes. Curtis had been surveying the Canyon from the Rim all that summer and was essential to determining the feasibility of the project.

The two boats they used were made of stout oak frames bound with iron and covered with canvas. They each weighed 400 lbs empty and were named the City of Montrose and the John C. Bell after a Colorado congressman from the Western Slope. Cargo included provisions for a month, cam-



eras, surveying instruments, including an aneroid barometer, compass, surveyor's chain, and notebooks, all stored in waterproof tins.

On 5 September, in true western

style, they signaled by revolver shots that the expedition was under way from the mouth of Cimarron River. Low water forced them to shoulder the boats, making only three-quarters of a mile the first day. On the second day, about two miles below the Cimarron junction, the John C. Bell was being lined through a rapid when both bow and stern broached. The force of the water fragmented the boat and it sank with most of the provisions and equipment. Only the blankets were saved as they floated down stream. Wet and dejected, the crew cooked dinner and dried out over a driftwood fire. The next day they traveled 11 miles in the remaining boat and linked up with a support party who came down from the rim. At this point all five men left the canyon. Pelton went to Denver and convinced Senator E.O. Wolcott to introduce a bill into the U.S. Senate to appropriate the funds for the tunnel. This was an election year and the politics of Western Colorado irrigation heavily influenced the Democratic Party's legislative agenda.

They returned to the river on 25 September. They would make only four more miles in the next week. The remaining boat was used mainly to cross the river when travel along that bank was no longer possible. They used a "striding" technique, with one man standing in the center of the boat with a long pike to keep the boat from crashing into rocks.

Only one accident happened during the journey. Hovey was lining the boat when he lost his footing and fell 30 feet from a boulder, landing on his head. He suffered a severe laceration. Another close call happened at the beginning of the last four miles of the trip. Curtis and Anderson were in the boat and the other

three were lining it down river stern first. One of the men in the boat signaled to drop the line because he believed they could handle the boat alone. The current caught the boat

and all aboard were headed for a big drop. Curtis, the "tenderfoot," jumped out of the boat onto a rock and grabbed the boat, holding it until a line could secure it.

This final week was hell. One day they were only able to move 1,500 feet. The canyon amazed them with the signs of its power. In places, driftwood was 42 feet high and high water marks on the cliffs were even higher. One boulder was of special note. The water had cut a hole in a rock. The hole was but an entrance into a bowl that would hold 8 to 10 men. Water exited from a hole in the bottom.

They had almost reached the Narrows (The Narrows is just below Balanced Rock View on the north rim.) and despite the determination of any first descent party, they realized that they did not have the means or methods to proceed. Torrence appears to have taken charge at this point. He located a steep ravine near the Narrows on the North Rim. They ate all the remaining food and the next morning they left the "Falls of Sorrow," a rocky cascade about a quarter mile upstream from the Narrows. Everything was left behind. One paper reported, "Bidding farewell to the boat was the saddest part of the day."

This was likely staged. Once the decision was made to abandon the expedition, I would have been dancing a jig. Carrying a 40-plus pound kayak in this terrain was more than I wanted, let alone a 400-pound rig that was almost useless. Torrence, however, may have been inspired by the challenge of a first "descent." He wrote in his journal, "With our present equipment we can go no farther. The Black Canyon is not impenetrable. If I get out of this scrape alive, I shall come back."

By most accounts Torrence was flamboyant, energetic, and, at 29, felt invincible. The goal of this expedition was to raise interest in the project and determine the feasibility and best location for the diversion project. The Chasm Walls made it clear a tunnel was the only option. The issue remaining was to determine the most cost-effective location and design. The expedition and the exaggerated accounts of the trip did gain political and financial

backing from the Colorado State legislature and U.S. Congress. Pelton's trip to Denver in the middle of the expedition was clearly planned to gain political attention and secure funding a month before elections.

Friends and relatives tracking the group's progress had feared the worst when they didn't see any activity on the river while the group was climbing out of the canyon. Accounts of the climb out vary from source to source, but most likely it was a long day to the north rim. The draw they climbed out of is very steep and Torrence was probably the only reason they were able to negotiate two large boulders that block the route. Once atop the north rim they hiked 15-miles to the nearest ranch. They arrived back in Montrose on 1 October.

1901—SUCCESSFUL PASSAGE OF THE INNER CANYON

The exaggerations of the 1900 expedition had provided the political hype needed to make the Gunnison Diversion Project a viable reclamation project. Abraham Lincoln Fellows was the resident Hydrographer for the USGS. Based out of Denver, he was in charge of hydrographic and irrigation studies and surveys in Colorado and adjoining states. He was directed to conduct a detailed survey to determine the geological structure of the proposed tunnel area, the potential construction difficulties, and the probable cost of the project. The state also appointed Fellows to determine the site of the tunnel. In the summer of 1901, Fellows along with six others began to survey the terrain between the Uncompahgre and the Gunnison, which was known as the Vernal Mesa.

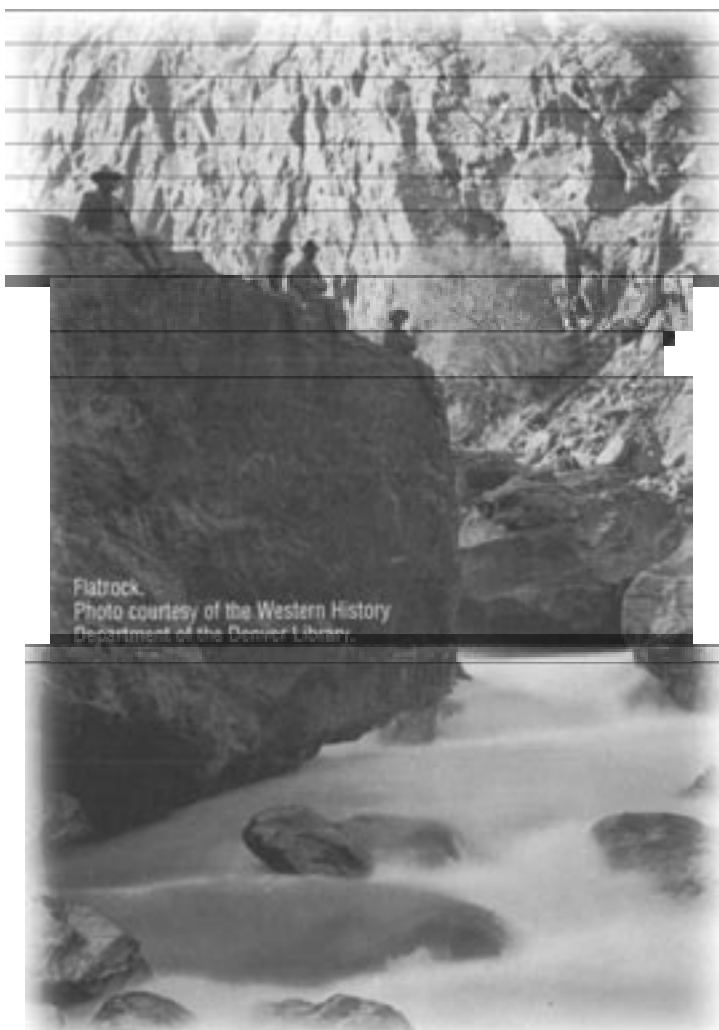
Fellows decided to run the river for an up-close examination of the canyon from its floor. An old trapper and hunter of the area named Moccasin Bill told Fellows that although there were Indian trails down into the canyon, it was impossible for mortal man to go through and live. Bill had ven-

tured about half way through and knew that no man could go further.

Fellows returned to Denver at the end of July in preparation for the trip. He wrote, "It was under these far from encouraging conditions and with the prophecy heard from all sources that I would be killed if I undertook the trip. In Denver I arranged all routine work and set my affairs in order, and then left, upon August 3rd, for the scene of my future labors, - and possibly to eternal rest."

Like the 1900 trip, accounts of this expedition vary in detail, many exaggerating to gain notoriety for the diversion project. (The primary sources of the following account are from Fellows' records that included a manuscript he used for a slide show he gave long into his later years. Fellows illustrated these lectures with 3"x 4" glass lanternslides that were made from his original film. They are all hand colored and can be found with the rest of Fellows' records in the Western History Department of the Denver Public Library. The other source is Dr. Richard G. Beidleman's article, "The Gunnison River Diversion Project", Colorado Magazine, July 1959. Dr. Beidleman was a professor at Colorado College, Colorado Springs, CO. He extensively researched newspaper and magazine articles, books, and government documents. I obtained this article from the Western State University Library in Gunnison, CO.)

Fellows planned to travel light, taking only the most essential equipment and supplies. He wanted only one assistant to come along. A volunteer who was a good swimmer, strong and athletic; strictly temperate and a good companion; unmarried and familiar with the country.. He hoped Torrence would volunteer, and he did. Torrence was 30 and Fellows 36. The two formed a solid team, although after the trip neither seems to credit the other much. Fellows was the exact opposite of the flamboyant Torrence, who did things from the "seat-of-his-pants." Fellows was meticulous in business, and in life never missing a detail. The dynamics of this did not seem to effect the expedition, but did seem to effect their relationship for years after.



Flatrock.
Photo courtesy of the Western History
Department of the Denver Library.

A woman traveler was heard to remark to her companion that she was glad the conductor had put those two tramps off the train." I guess river runners have always been considered less than desirable.

At 3:00 p.m. on August 12th they started down what Fellows called, '(The Grand Canyon of the Gunnison.'" They frequently swam through deep water, and walked along boulders that formed the talus of the canyon walls. Fellows wrote, "Easy walking was never to be found unless it was a very few feet upon some gravel bar. Occasionally on these bars we found bear tracks. We would proceed along one side of the river until we came to

some distance out into the stream, making as rapid progress as we could. We rested only when it was too dark to travel."

By the 14th they had passed the wreck of the John C. Bell and that evening linked up with A.W. Dillon at the mouth of Trail Gulch. Dillon was a member of the Vernal Mesa survey crew that was still mapping the area. Fellows arranged for Dillon to bring supplies to three points along the canyon. Dillon was instructed to wait at each spot until the two arrived, or there was no hope that they would ever arrive. They stayed at this camp for two nights as Dillon went to Montrose for fresh supplies and new shoes. The sharp rock and water had ruined the ones they were wearing.

Fellows wrote, "We were more than glad of a chance to rest. We tried to fish, but there were no fish because of cyanide used in the stamp mills at Lake City. Also, because of that we had to rely on side springs for drinking water."

They parted company with Dillon the morning of the 16th, day five of the trip. Dillon carried out several rolls of film and Fellows' notes. Fellows noted that at this point the character of the canyon started to change. "The geo-

The planning was heavily influenced by the lessons of the previous year's trip. They decided to use a 4'x 6' rubber air mattress, subdivided into several airtight compartments. Ropes were attached for lashings and to hang on to. This would also serve as a bed at night. Other equipment included one of the first Kodak roll film cameras, basic survey instruments, provisions, blankets, and "...longies so we would have something dry to sleep in at night." The equipment was encased into three rubber bags weighing about 35 pounds each. These were lashed to the mattress or portaged on a shoulder. They also used two 600-foot silk ropes, life preservers, and hunting knives.

They planned to go right over the rim near the Narrows, but at the last minute took the train over Cerro Summit and down to the Cimarron River. Fellows wrote, "The conductor kindly stopped the train upon the exact spot where I told him we wished to get off.

a point where it was absolutely necessary either to cross, or to swim for



Fellows taking a swim.
Photo courtesy of the Western History
Department of the Denver Library.

logical formation was a gneiss and mica schist, and the apparently vertical cliffs, instead of being met with occasionally, now became almost continuous. At times we would traverse along reaches looking like mill ponds with the sky and canyon walls reflected in the depths of the blue water, but again we would come to rapids and water falls as turbulent as the waters of Lodore. The canyon walls seemed to be hemming us in from the outer world."

They portaged Flat Rock Falls at noon on the 16th and camped about a half mile above the Narrows. (Flat Rock is the first Class V rapid below East Portal. Some refer to it as Day Wrecker.) Fellows wrote, "On the morning of the 17th we again started out upon what we expected would be the most perilous portion of our journey. Others had been as far, but no one had ever gone far beyond. We made an early start for we expected the day to be a hard one, and about 11 o'clock that morning we reached the point where Pelton's Party left the second boat. We found a piece of rope still fastened to the rocks and some of the provisions and supplies they left. Their leader had told me that it was impossible for a man to pass through the gorge and live."

Fellows and Torrence found a cache of fruit left from the previous summer and according to Torrence, "We opened cans enough to satisfy our hunger and went on."

The 1900 trip is generally considered to have been lead by Pelton, but it seems that Fellows would have made some reference to his companion, Torrence, who had, after all, also been on the first expedition. This tone runs throughout Fellows' records, most directly in the following comment that refers to the greeting the two men received upon completing the trip. "We, or rather Mr. Torrence, was received with open arms upon his return to Montrose, and neither of us will ever regret the trip." This could just be Fellows' formal tone, but I think Fellows may have been a bit jealous of the press Torrence received, not just from the local papers, but also from several magazine articles.

Fellows' daughters later expressed quite a bit of unhappiness at the status that Torrence was given by Dr. Beidleman and others with respect to the history of the project. The dynamics of any expedition, but especially a first descent, brings out the best and worst in group members. Partners end either best friends or . . . part ways.

In contrast, Fellows speaks very highly of Dillon for the support he gave the expedition. Fellows wrote, "These orders were faithfully followed, and it was largely due to the devoted assistance of this man (Dillon) that the exploration was a success." I think Torrence and Fellows probably worked well together and developed a strong bond during the run, but personalities and personal agendas fractured this in the years that followed. Group dynamics for a run like this are as important as paddling skills. This may explain why many paddlers prefer to paddle with a select few.

The details of the 17th are exaggerated in most accounts. The Bravado version goes something like this: The two solemnly said goodbye to each other and jumped into the swirling waters and disappeared under the rocks; Fellows first, followed ten minutes later by Torrence and the raft. When Torrence came into view below the slide, Fellows pulled him out by the collar onto a rock. The men hysterically locked arms, laughing, and Fellows cried, "Who says the Black Canyon is impassable!"

Dr Beidleman's version: "Where the first expedition had given up at the Falls of Sorrow, Torrence and Fellows jump into the swirling waters, shouting 'goodbye' to each other, and went over the falls, both coming out alive but exhausted on a projecting rock in the calmer waters below. They lay there for hours, recovering their strength and senses."


Fellows' own account was much less exaggerated and probably closer the truth. "When about noon, we reached the lowest point attained by earlier explorers and saw before us the mighty jaws, past which there was no escape, a feeling of nervousness and dread came over me for the last time. Right then I made the only discourag-

ing speech that was made during the entire trip, and I said to Torrence, 'Will, your last chance to go out is to the right. You can make it if you wish, but if we cross the river at this point there is no return; we must go on.' Torrence said, 'Here goes nothing!' And he commenced to pull off his coat. Nothing further was said. We swam the river, reaching a similar point of rocks on the other side, but still above the gorge. Through the narrow opening where the water was of unknown depth and velocity, and below which it was believed there were high falls, we saw a bonfire kindled by Dillon on a huge rock below the jaws of the canyon. He had come down by a most precipitous path for our encouragement. Again we plunged into the foaming water and in a few minutes we had passed through the jaws of the gorge and were safe among enormous boulders below."

The narrows are 40 feet across, and was originally selected as the point of diversion for the tunnel. They initially planned to build a dam across the gorge and take the water through a very large tunnel and develop power with the surplus water. This was a very plausible plan and had many points in its favor. The plan changed because the canals necessary to carry water were too costly.

Torrence and Fellows lunched on food Dillon had brought down to "Whirlpool Rapids" and continued on around 1:00 p.m. Fellows wrote, "We were soon obliged to cross the river again, where we clamber along gigantic boulders, often as large as a good-sized house, the peculiar characteristic of which was that the nearer the water the larger and more impassable the boulders seemed to be. In consequence we kept ascending the side of the talus until, when darkness fell, we were a long way above the water. We made camp under a huge shelving rock against which the roaring of the river reverberated and echoed like demons howling over their prey."

"On the morning of the 18th, we hoped that our greatest difficulties were passed, but we were doomed to disappointment, for on that day we encountered some of the most trying experiences of the trip. At the very start



Run below Closet Rapid.
Photo by Dunbar Hardy ©

we came to a gorge where gigantic boulders had fallen in from the cliffs, the water flowing 100 feet or more beneath these boulders. They were packed closely enough, however, so that they formed a dam in high water. The boulders were smooth and polished to such an extent that it was only with the greatest difficulty they could be surmounted. It took us six hours to traverse less than a quarter of a mile. At times it would be necessary for one of us to climb on the shoulders of the other, clamber to the top of some huge rock and draw our supplies up and the other man by means of a rope which we carried with us. Again on the other side there might be a deep pool where we were obliged to swim, into which the water boiled from the caves above and sucked out again through the crevices between the boulders below. In one of these pools I was drawn completely under the water in an eddy. I fully expected to be drawn into the crevices of the rock below, but by dint of the hardest kind of swimming, succeeded in getting into still water. At this time Torrence felt that he would not see me again."

"All things have an end however, and about 1 or 2 o'clock we passed this gorge and emerged to where the canyon opened out to a slight degree. Here we met an experience most unusual to hunters or explorers. To appreciate the situation you must understand that we were out of provisions, having lost or spoiled those with which we had been supplied. We were hungry, and sick, and exhausted, and were losing flesh, as we had throughout the

trip. [Torrence reported to have lost 12 pounds.] At this critical stage, while climbing along the side of the canyon thirty or forty feet above the stream, I stepped out from behind a large rock to a spot where there were some small bushes. As I forced my way through these bushes, up sprang two young mountain sheep which apparently had fallen asleep and which I had come within three feet of stepping upon. One of them was so dazed that it sprang over the cliff and broke its shoulder upon the rocks below. It was hard on the poor sheep, but our salvation. Though the game laws of Colorado forbade one from having any portion of a mountain sheep in possession, a hind quarter was immediately added to our supply and a good portion was cooked and eaten."

There is a picture at the Denver Public Library in the Fellows collection of Torrence holding the dead sheep. While eating the sheep Fellows reflected on a fall he had taken earlier in the trip. "I had fallen 20 feet, but so fortunate, if it might be so called, as to land in a bed of wild gooseberry bushes, which kept me from breaking any bones, but had other unpleasant features as I spent some time picking thorns out of my clothes and body. Those thorns didn't seem so bad now."

Soon after this they came to what Fellows called, "the most beautiful part of the entire canyon." The river pitches down over a succession of falls, which Fellows named in honor of his companion, Torrence Falls. (This is just upstream from Transit Point 44.) Fellows pined, "At the foot of Torrence

Falls is a beautiful little grove of cottonwood trees, and there we found shelter from the rain that was falling, building a fire and making ourselves as comfortable as possible. We were compelled to move on soon, and so until dark trudged along through the rain, crossing the river a number of times in the hope that we might be able to reach the mouth of Red Rock Canyon where we expected Dillon to meet us again. In this, however, we were disappointed and darkness came upon us when we were still a mile above the longed-for spot. We camped for the night under the sheltering cliffs, putting up our rubber sacks to keep off the rain, and making an enormous fire out of driftwood."

On the morning of the 19th, the eighth day, it was still raining. At about 10 o'clock, they reached Red Rock Canyon, where Dillon was waiting for them. Red Rock Canyon is just short of the park's western boundary. Fellows wrote, "He had come up the river about three-quarters of a mile and met us, and I was glad, indeed, to turn my pack over to him for a time. By noon we were at the camp which he had made at the mouth of Red Rock Canyon and he was soon busily engaged in cooking us a good dinner. It rained all that afternoon and was still cloudy the next morning. We were seriously tempted to leave the canyon, for we had passed through all the most important part of it, and I hardly expected to be able to obtain any information of value below. But the fever was upon us, and we thought it would

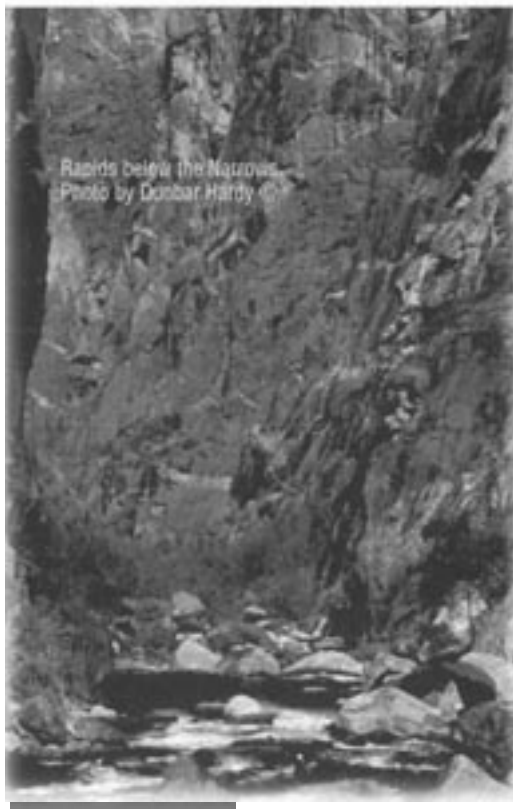
be a great pity when we were so fully equipped not to go entirely through the canyon. Moreover there were still some doubtful points that needed to be cleared up."

They left Red Rock Canyon packing only a lunch. Fellows estimated that they had about 8 miles to move down river to reach a ranch house. The river completely filled the bottom of the gorge and they had to swim most of the way. This slowed movement and the distance to the ranch was considerably greater. Fellows wrote, "That night we camped without bedding and without food or water upon a bleak hillside. Having passed through all of the canyon that was of any interest to us and having reached a horse trail, we decided we had gone far enough and directed our course toward Delta."

The next morning the two came across a camp of men cutting hay who gave them a feast of cold oatmeal and pie. They hired a ride into Delta and took the train into Montrose, arriving around 1:00 p.m. Fellows wrote, "We were strange looking objects. Our clothing and shoes were ragged and worn and with a luxuriant growth of beard and a covering of dirt acquired in the last few miles of our trip" These men had portaged and swam over thirty miles in nine days. They were bruised from head to toe and each lost over ten pounds. The jaws of the canyon had let them pass.

Fellows later wrote in a report to his boss, "During the year past I have grown a good deal more than a year older. Some of the things that I have gone through have been enough to age a man rapidly. I have made a good many friends and acquaintances, and upon the whole think that I can look back upon the year with satisfaction. I can not say that I am much richer in this world's goods, and perhaps not in the goods of the next, but I have had a fairly good time and may have done some good."

Fellows lobbied to become the Colorado State Engineer, but he was never selected. He was deeply staked to the



Progressive Era idea that reclamation was good for the country, and he clashed with Interior Secretary Newell on the carrying out of the principal. He eventually resigned from the project in 1905, shortly after tunnel construction began. He died in 1921. Torrence reportedly moved back to NY. See the side bar for details of the diversion project that was the first of many to steal the power of western slope rivers.

Paddling the Black Canyon

This beta is based on two runs, one at 1,000 cfs and the other at 740 cfs. Paul Tefft's video, *Meltdown Madness*, has excellent footage of several drops. The water level in the video was higher than a 1,000 cfs. The first two miles of the run are easy Class II and III. Enjoy the view! Flat Rock Rapid, the first Class V, is about two miles below the put-in. The river bends back to the right slightly and disappears into a small maze of boulders. Scout river right from atop the massive Flat undercut boulder. The right hand portage is very easy. There are sieves on river left which come into play if you miss your line or lose control in the entrance drop.

John Banker called this drop Day Wrecker. It could easily be that. Curtis and I decided to run it. The entrance was hidden from our view as we scouted from river right. John and the "Nez Perce Warriors" set safety for us. I was impressed they made quick decisions and didn't wait to see how our runs turned out before making their own decisions. I went first and was very surprised to find the approach was a 6 to 8 foot drop into a mean diagonal hole. At 1,000 cfs this grabbed my tail and tried to backender me. After the diagonal I made a 90-degree move back to the right between two large boulders. This channel flushed into the giant Flat Rock. I moved back left to avoid the undercut and finished in the pool below.

The water was pushy at 1,000 cfs and this line is undoubtedly harder at higher levels. This is the most technical Class V above the long portage. My run wasn't perfect, but I was able to maintain control and make the moves. I was psyched! I didn't see Curtis' run, but he said that he had backendered in the diagonal, made a quick roll, and got back on line, running the rest clean.

Flat Rock was easier at 740. Scott, Dunbar and I all had clean runs. Running this with a loaded boat would make it much tougher.

The next two horizon lines were Class III + drops that John and Curtis recognized, so we paddled-on. I didn't remember these drops on my second run with Scott and Dunbar, so we scouted.

The Class V where we almost lost the boat during the first run is the next rapid. It is a river wide drop with 3 distinct ledges. Each ledge has a diagonal hole that flushes to river right and drains into a nasty sieve. Curtis said it was runnable, but we all quickly decided to carry on river right. It looked easier than Flat Rock, but more difficult to scout and the margin for error seemed much less.

I wanted a little more time to scout this one if I was going to run it. That wasn't in the cards for a fast one day



Scott Sullivan portaging Closet Rapid.
Photo by Dunbar Hardy ©

run. It's against my nature to walk a drop that I know I can do, but paddling the Black Canyon in a day is not about ego or the challenge of each individual rapid. We focused on speed and conservative boating. This rapid looks much harder at 1,000 cfs than 740. The portage on river right is more of a pain than Flat Rock, but nothing like what awaits downstream.

The next significant rapid is what we considered a mandatory portage at 740 and 1,000 cfs. Two giant boulders block the river. Water pours through a small slot in the center of the river, which is not wide enough for a boat. The majority of the water goes through a blind slot on river left, that we couldn't scout. It was a short river right portage.

A massive boulder in the center of the river marks the last big drop before the Narrows. This is a deceptively tough Class IV drop with two possible lines. It is easy to scout and portage on river right. The picture of Torrence scouting this drop 100 years ago is exactly as it looks today. These ledges are pretty straightforward; however, the hydraulics are sticky.

We passed through the Narrows or the "Jaws of the Canyon" as Fellows called them. Here the Canyon walls on both sides are

sheer and only 40 feet apart. The 1900 expedition never made it past the Narrows. This means the "Falls of Sorrow" are just above the Narrows. Ranger Paul Zaegner, the park's authority on this, concurs. He believes the "Falls of Sorrow" are a quarter mile above the Narrows. The Narrows are directly below Balanced Rock View on the North rim. There is a photograph of the Falls of Sorrow, but I couldn't recognize it as any specific drop above the Narrows. Maybe I'll figure it out next year.

Below the Narrows you start to see the colored bands of Painted Wall. As I paddled through the deep moving pools of the Narrows, Curtis told me about the next Class V that was just beyond the horizon line. We scouted from river left and found a three-ledge drop with nasty holes that flushed river right into giant undercut boulders and a sieve. Curtis said this rapid had spanked more than a few. I felt really good about the line at 1,000 cfs. The first two ledges were the crux, and there was little room for error. The last ledge/hole, although mean, didn't have consequences.

Curtis and the Boyz set safety, which was not easy. Doubt started to surface as I paddled into the last eddy above the drop. The view of the entrance was blocked from shore, so I didn't get a good look. The horizon line hid the drop until the last second. As I paddled forward, just a few feet from the lip, the correct route came into view. I adjusted my line and ran clean. The current was more chaotic and stronger than I anticipated. I was clean over the second ledge, but lost my line in the chaos of the boil, and headed for the meat of the third hole.

The water was surging out the back of the hole, breaking the boil line. I was able to bridge the hole and land on the surge. Letting the water grab a rail, I rocketed through the chaos like it was planned.

This rapid requires a more precise line than Flat Rock. At higher levels I'm sure this becomes very pushy with much meaner holes. Curtis decided not to run it. We talked about his deci-



Scott Sullivan portaging the big one.
Photo by Dunbar Hardy ©

sion over lunch. I wondered if I was taking too many chances? I had felt good about my lines and the way I had been paddling all day. It shocked me when Curtis didn't run it. He had run much harder rapids and had run this one before, but said he just didn't feel "in the zone." Curtis said he didn't feel

I was in over my head, which settled my doubts.

I wondered what Chuck thought? Our group dynamics and individual decision making made that trip awesome. It was essential for a quick safe run. It gave us all confidence and trust in each other's judgment. Eight is a huge group for this run, but the way we moved in buddy teams and teams of four made our numbers manageable.

The lines in this same rapid



Tim Kelley, lip of the falls.
Photo by Dunbar Hardy ©

were much harder to hit at 740 cfs (my second trip). I hit the entrance drop head on at this level. The second ledge was really nasty and clean only on the far left. I was a bit too close to the boulder that guarded this line and had to let go of my paddle with one hand. The eddy line just below the drop spun me backwards. The third drop was much tamer so with a little ad-lib, I backed it down safely. Dunbar went next. He chose a slightly different line and ran the first drop much cleaner. He was a bit further right in the second drop and the hole started to munch. It surfed him immediately to river right. He used every trick to maintain control as he slammed into a giant boulder. He was able to work free and avoid the sieve, but washed into the undercut. It was more like a cave at this level, and he was able to role without incident. Having seen two less-than-stellar-runs, Scott opted for the far left line and joined us in the pool below.

This Class V rapid empties into a fast moving pool just before the 18-foot waterfall. The waterfall lands in a pool about 100 yards above the first major portage.

We scouted the waterfall from river left. There were three chutes at these levels that appear "runable." The center one appeared to have the cleanest landing. John Banker ran this one at 1,000 cfs. He had just enough water to clear the lip, but no chance for a boof. He went deep but clean. Others, however, have reported a piton rock deep in this drop.

The far-left chute is not inviting with a shallow landing. Everyone else ran the right chute boofing left. This line is actually in the very center of the drop and the most obvious. Of the seven runs on this line at 1,000 cfs, no one hit rock.

At 740 cfs there was very little water over the falls, so you must land almost flat. Scott and I both had dean runs and soft landings. Dunbar, having had one too many flat landings, chose to portage.

Dunbar wrote in the March/April 2000 AW Journal about recovering from the broken back he suffered running a waterfall in Ecuador. That article reminded me of my own mortality. I had broken my back in 1993 when my parachute collapsed at just under 100 feet. Dunbar and I had talked a little about our accidents the previous night; about lying in a hospital bed not knowing how bad the injury really was, about facing the mental demons of self-doubt, and about how special life is. Facing my own mortality had changed my life and put



Black Canyon of the Gunnison.
Photo by Dunbar Hardy ©

things into perspective. It reminded me how special the passions of life are, but that they are just a part of life, and not all of it. I couldn't help but reflect on what Chuck might think...

The start of "The Portage" sewed as our lunch stop. The view in both directions was truly breath taking. The adrenaline from the last two rapids combined with the view made this my favorite location in the Canyon. I looked down at the river, which disappeared under a boulder pile like it was

a small creek. Framed in the distance was Painted Wall, the Dragons' tails just visible. The black shadows cast by the south rim made the scene surreal. My thoughts drifted to Chuck. . . a more magnificent cathedral I could not imagine.

For the past three years I had felt a void when I paddled. Here, close to the spot where Chuck Kern died, I found closure. I talked with Chuck along the portage and told him about my little girl. Before the trip I wasn't sure how I would feel in the canyon, but never expected it would be so positive. Scott and I didn't talk about his feelings much, but I think he felt the same.

My mind was soaring when we started the portage, but reality soon brought me back to earth, or rather, hell. Missy Sullivan watched our slow progress through binoculars from the South Rim. 100 years earlier, concerned family had looked for Torrence and the other four members of the 1900 party. We covered the two-thirds of mile of the first major portage in a little over two hours. Missy commented later on our "snails pace." There is no real trail. The talus, heat, and poison ivy combined to kick my ass!. It wasn't hard to relate to what Fellows and Torrence must have felt. I moved ahead of Scott and Dunbar hoping to find the best route. I often would climb too close to the cliff face and have to back track.

On my first trip I had followed John Banker. He had taken me on quite an odyssey, crossing the river twice and crawling over giant boulders and through caves. It was cooler and avoided most of the poison ivy. This was not an easy route to find and I'm not sure at what level this route becomes unsafe. Curtis had followed the route suggested in CRC II and made it in an hour and change. That guy is an animal. I've been warned not to go mountain biking with him.

We washed at the end of this leg in a pool before we crossed the river for a shorter, but no less precipitous portage. We lowered by rope down a steep slope to run a Class IV drop back to

river right. Next we portaged a beautiful waterfall that pours onto rocks. To me this is the most beautiful drop. It is pictured twice in CRC II. I'm not certain where Transit Point 44 was, but this could likely be Torrence Fall:

We put on just below this and ran down past the best camping sites, which are the beaches with cottonwood groves under the Painted Wall, just below SOB Gully. Not having yet spent a night in the Canyon; next year I'm planning a slow two-day run. Explore more of the run and do a little fly fishin' with Grandpa.

Closet Rapid was next. A continuous Class IV that was possibly the most enjoyable of the run. Shortly after Closet is the last portage, generally done on river left. The last portage is pretty easy.

I don't know much about this last section. I have heard that some of the drops have been run. The character of this section reminded me a little of the mazes on Great Falls of the Potomac. I caution anyone thinking of running it.

The last few rapids after this final portage reminded me of the Upper Yough. From here it is a good hour of hard paddling on Class II-III water mixed with some of the best fishing in Colorado. The take-out is at the Chukar Trail beach, which you can't miss. This is the put-in for the 13-mile Gunny Gorge Run. Chukar is a mile hike on a nice trail that climbs about 2000 feet.

The Black Canyon of the Gunnison is no longer a dark mysterious place to me. It's not a cemetery or burial ground. It's a spirit world that lets me spend time with Grandpa and Chuck, a cathedral with paintings that dwarf the Sistine Chapel. Everyone should find a space like this; beyond the rapids, beyond waterfalls. A journey that exacts a demanding price, for a priceless state of mind.

About the author: Major Tim Kelley is a newly elected member of the AW Board of Directors. A graduate of West Point and an Army Ranger, Tim is currently stationed in Colorado Springs, not far from the ranch country where he was raised.

Below the Falls.
Photo by Dunbar Hardy ©

"But when I am alone in the half light of the canyon all existence seems to fade to a being with my soul, and memories. And the sounds of the [Gunnison River], and a four count rhythm, and the hope that a fish will rise. Eventually, all things merge into one, and a river runs through it. The river was cut by the world's great flood and runs over rocks from the basement of time. On some of the rocks are timeless raindrops. Under the rocks are the words, and some of the words are theirs. I am haunted by waters."

"I've said I told you all I know. If you push me far enough, all I really know is that he was a fine fisherman."

"You know more than that, he was beautiful."

"Yes, he was beautiful. He should have been. You taught him."

"It is those we live with and love and should know who elude us."

(quotes from "A River Runs Through it" by Norman McClean)

THE GUNNISON DIVERSION PROJECT:

The Politics of Reclamation and Water Diversion

In 1894 Ouray, Montrose and Delta Counties financed an overland survey by Richard Winerah and Walter H. Fleming (the present tunnel followed this survey). The two concluded that water could be diverted from the Gunnison River. The uncertainty of construction costs made it next to impossible to secure funds from the State legislature from 1894-99. In 1900, Western Colorado Representative John C. Bell and John F. Shaford of Denver promoted the irrigation and diversion projects in Washington. Senator E.H. Newlands of Nevada also supported these projects. Bell introduced a bill that would have the federal government build the project and allow the citizens to repay the costs over time. The bill was tabled for the session, but was included later in the Newlands Act, which authorized the U.S. government to get into the reclamation business. (Newlands later became the Secretary of the Interior.)

The 1900 expedition was the shot in the arm the Gunnison Diversion Project needed. The exaggerated tales of the adventure captured the interest of voters and politicians. Combined with engineers declaring that a tunnel was feasible, conditions were set for success on the political stage at both the state and national levels. Newly elected State Representative Mead Hammond of Paonia and C.T. Rawalt of Gunnison County introduced house Bill No. 195 in April 1901 to the Colorado legislature. It proposed to construct, maintain, and operate State Canal No. 3 in Montrose and Delta Counties: the creation of a board of control; the use of convict labor in constructing the project; the issuance of certificates of indebtedness (providing for the sale of water) and making an appropriation for construction.

The Bill asked for \$50,000, but the Finance Committee approved only \$25,000. The Project was finally "funded."

This was almost identical to the 1899 State Senate Bill No. 310. Bill No. 310 had asked for \$75,000 to cover the cost of construction. It was tabled because of insufficient funds and the project was deemed impractical. I'm sure engineers knew these were ridiculously low estimates, but higher estimates would have certainly doomed the project in the legislature.

Meanwhile U.S. Congressman John C. Bell, who's bill had been tabled the previous year, was making every effort to make this project a priority with the New Reclamation Service in Washington D. C. As a result, the USGS authorized an additional \$4,000 to conduct a detailed survey to determine the geological structure of the proposed tunnel area, the potential construction difficulties, and the probable cost of the project.

The Tunnel

A.L. Fellows reported the tunnel feasible after he and Torrence completed their passage of the inner Canyon in 1901. John "Tenderfoot" Curtis of the 1900 expedition, who was now the Deputy State Engineer, was given the task of determining the best location for the tunnel. The plan was to run a tunnel from the vicinity of Serpent Point (below Painted Wall) diagonally Southwest to 4 miles northeast of Montrose. Aspur tunnel would extend upstream to the Narrows, where a dam was to be placed. This would allow the system to gravity feed. In November 1901 the state began constructing a road to the West Portal. Tunnel construction on the West Portal began in December. The State had only approved \$25,000 for the project, so construction stopped within a year.

In June 1902 the federal Reclamation Act had been passed. The Gunnison Diversion Tunnel was one of the first five projects taken up by the Reclamation Service.

The USGS continued its surveys to determine the best location for the tunnel. Extremely cold

weather stopped topographical mapping of the area in December and a preliminary report was completed in March 1903. This report was enough to convince the Secretary of the Interior to approve the project.

Surveys continued in 1903 and that winter there was a reconsideration of the location of the tunnel. The Upper Location, as it became known, was the same as the site proposed in 1894 and had been recommended again in 1900. The Upper Location was finally selected in May 1904. The following reasons were cited: it had easier access to the canyon portal; it reduced construction - shorter tunnel length; no large dam at the Narrows or spur tunnel down to Serpent Point; required fewer miles of canal; and it increased the amount of land that could be irrigated. On June 7, 1904 the Secretary of the Interior set aside \$2,500,000 for the "Uncompahgre Valley Project."

Road construction started in July and would connect both ends of the tunnel. The final six-mile stretch that ends at East Portal exceeded 23% grade in places. (This road is still in use today. It was upgraded for the construction of the Crystal Dam and the maximum grade was reduced to 16%. It will smoke your brakes if you're not careful.) Tunnel work began in January 1905. The contractors experienced financial difficulties and by the end of May 1905 the contract was suspended. The Reclamation Service made the decision to serve as the general contractor for the completion of the project.

The difficulties and dangers of construction equaled those experienced by the canyon expeditions. Crews worked round-the-clock on one of three shifts. The rough bore of the tunnel was completed in July 1909 and the official opening of the tunnel happened in September with President Taft in attendance. Fellows and Torrence were in attendance as was Captain Gunnison's cousin from New York. The first water was turned into the tunnel on July 6, 1910 and the East Portal diversion dam was finished in January 1912.

The intake is seven feet below low water line and the tunnel capacity is now 1100 cfs. It is 30,582 feet long and falls 2.20 feet per 1000 feet. The area of the irrigation project is 146,000 acres. The original scope of the project was completed in 1923 and cost \$6,715,074.41, about half of which was for the tunnel. By 1938 project expansion brought the total cost to \$8,976,484. Users were originally charged \$35 per acre for water rights. In 1979 the cost was dropped to \$13 per acre. As of 1993 this price remained unchanged.

The Taylor Park Dam on the Taylor River, a tributary to the Gunnison, was completed in 1937 as part of this system. The Blue Mesa Dam at the entrance to the Black Canyon was constructed in 1965. Its storage is coordinated with the Taylor Park Reservoir to optimize fishing, wildlife, and recreation benefits. Morrow Point Dam at Cimarron and Crystal Dam above the intake of the Gunnison Tunnel store water for the Uncompahgre Valley Water Users Association (UVWUA), as well as for other projects including the Central Project in Arizona and California. The Blue Mesa, Morrow Point and Crystal Dams now work as a single unit and are known as the Curecanti unit. The Ridgway Reservoir on the Uncompahgre River was constructed in the 1980s and also stores some water for the UVWUA.

(Those interested in the details of this groundbreaking diversion project that shaped Western diversion projects for the last century should read Volume 8, Number 4, Journal of the Western Slope Fall 1993 "Moving Day in the Uncompahgre" from Mesa State College. You can obtain a copy from the Black Canyon Visitors Center.)



BETA PERMIT:

Black Canyon of the Gunnison has been a National Park since October 1999. Over half the Park is a Wilderness Area and requires a backcountry permit. The permit is a formal registration for anyone visiting the Wilderness Area. There is no fee. You can obtain a permit from the Visitors Center on the S. Rim, at the East Portal drop box which is right next to the put-in, or phone (970) 249-1915. You check out with the Visitors Center or call upon completion of your trip. The permit also serves as rescue insurance. If the Park has to rescue someone in your party there is no charge if you have a permit, proper equipment and have not consumed alcohol or drugs. You can check with the Visitors Center, a park ranger, or read the bulletin board at the East Portal put-in for other park regulations regarding the wilderness area.

Difficulty:

The characteristics of this river are best described as Giant boulders sitting on smaller rocks. In a word, sieve. Class V with mandatory portages is what "Colorado Rivers and Creeks" rates the run. This is a serious run that requires solid Class V skills, with the discipline to boat conservative lines. Missing an eddy or messing up your line can quickly become a terminal mistake. Paddling with lack of control will put you and your group in danger.

Running the river is actually the easiest part of this trip. Portage and poison ivy are the trademarks of this run. Steep talus fields, dense patches of poison ivy, and hot weather combine for one of the worst mandatory portages in the lower 48. It is a small price to pay, though, to paddle Class V in one of the most breathtaking places in the world. Making this run in a day will test your endurance and guarantee a sore shoulder, back and leg muscles for even the most fit. Being in good paddling shape is only half the battle here. Running drops after portaging for two hours will also effect your paddling ability. If you are in a group paddling this for the first time, definitely plan to make this an overnight trip.

Water Levels:

The river is dam controlled. Levels are reported by the Gunnison below East Portal gage. A ranger posts the current water level each morning at the East Portal bulletin board.

The Run:

14 miles from East Portal to Chukar Trail or 28 miles to Gunnison Forks.

SEARCHING FOR WATER: A MOROCCO KAYAKING ADVENTURE

Story and Photos By Dunbar Hardy

I wasn't really sure if this was a good deal, as I hadn't brushed up on my Islamic. I could tell that Mohammed, in his non-existent English, wished that we would conclude our bartering, as he was very eager to watch our exploits with the kayaks. Soon enough the deal was done—three camels for the day to carry our kayaks for 5 diahrams (equal to about \$10). We were going boating in the middle of the Sahara Desert in Northern Africa.

The very word—Morocco—filled my mind with visions of sweeping sand dunes, beautiful coastline, and funky dressed folks not speaking my language. I had to look on a map to find it; and there it was, at a juncture of continents. Moroccan culture is influenced by Africa to the south, the Islamic Middle East, and Europe to the north. Further sniffing around revealed rumors of big mountains with some skiing, surfing on Atlantic swells, and challenging rivers in a dramatic setting. With enough adventure options before me, I rapidly made plans and headed across the ocean with my kayak in tow.

All foreign adventures begin in the international terminal of the airport. The gang consisted of myself, Dustin Knapp, Brennan Guth, Land Heflin, Brad Ludden, and Stephen Byrd. We immediately felt the absurdity of this adventure as we dragged our boats into line at the Royal Air Maroc counter. People simply stared at us and began speaking excitedly to each other in Islamic. None of us knew a word of the language, and we concluded that these people had probably never seen kayaks before. Nor did they know that a culturally-ignorant group of males would be exploring their home in search of whitewater.

It is a helpless and humbling feeling to lose something that is deemed essential. However, that is what we all felt as we arrived in Marrakech and our boats filled with all of our paddling gear were nowhere to be found. The utter absence of any knowledge of their language became obvious as I tried to describe to the airport workers exactly what our lost luggage was. I think I humored and entertained them more than actually helping our cause. It took about 5 days for all of our boats and gear to show up. I think the workers might have gotten the idea with the boats, but they said something about needing water and being in a drought. Whatever. . .

A whole new country sprawled out before us, and the map filled me with excitement and curiosity. We packed everyone and our boats into our landcruiser and then braved the insane traffic of Marrakech to make it into the mountains. Quickly we realized that all of the road signs were in Arabic and we had no idea where the hell we were going and how we were going to get there. Trying to ask for directions was pointless without any



The gang eating at Djemaa el Fna ■ Marrakech, Morocco



Mohammed in Erg Chebbia Morocco



Brad Ludden dune boating, Erg Chebbia, Morocco.

knowledge of the language, so we just decided to keep driving.

We headed towards the mountains, which loomed tantalizingly in the distance. As we got closer we saw glimmers of white snow coating the peaks, and our excitement grew. Not even sure of what the speed limit was, we increased it in anticipation of what we were sure to find. Some hard-to-pronounce rivers had been recommended to me from various friends of friends in some bar in Kathmandu a few years before. I even had scribbled notes and a rough map on a cocktail napkin at the advice of a Spanish paddler. That is all we were going off of; we could figure out the rest as we went.

Days of driving had worn us down. Mostly scouting out very low water to dry riverbeds is what really did us in. Our spirits sunk and we felt aimless and foolish wandering around this faraway country with these dumb looking multicolored things on our roof and no boatable water to be found. I tried to rise above it all and take in the culture and enjoy the scenery, but somehow couldn't avoid the crankiness that comes from not having expectations met. We squabbled, we sulked, we drove, and we became more desperate, wondering if we would even boat at all.

In the midst of our frustrating desert driving adventure we found a real oasis with water—whitewater. The Oum er Rbia River does not roll off the tongue, but it does roll through a beautiful rural valley. We followed the river up its valley and watched the gradient increase as we climbed to its headwaters. Our spirits soared and our greasy unbathed noses pressed against the dusty car windows as we drooled at our first sight of Moroccan rapids.

The put-in was ultimately obtained by hiking our boats upstream along a well-worn trail used by local goat herders. We walked upstream as far as we could before we ran out of water. Yeah, ran out. This river was spring fed and comes pouring right out of the base of a 2,000 foot cliff. Multiple channels ran out the base of the cliff and then joined together into a single channel containing a couple hundred CFS of boatable water. Next to all of these channels on either bank were thatched tearooms. The locals literally chilled out here in the shade sipping tea and listening to the sounds of the running water. Of course we had to visit with the locals for a bit, having some tea before we could focus on paddling.

The Oum er Rbia River at its source is a beautifully unique setting, and the difficulty of whitewater is to be respected as well. Putting in, the constant current carried me swiftly past the rows of tea huts with cheering locals. I was unable to stop in this constricted beginning section, and the ledges came one after another as I boogied my way through this first section of the river. We were thrilled to get wet, pleased with the quality of the water, and in awe of the beauty of the setting. After multiple runs through this top section we made our way downstream through more rapids. That night we slept along side the river under a sky full of stars. It was a familiar feeling in a foreign place - fatigued from playing hard, warm in my sleeping bag, the glow of a fire on me, and the sound of a river flowing past my feet: a good night.

After spending time in the Oum er Rbia drainage, we decided to venture over the top of the High Atlas Mountains and see what was on the other side. The town of Ouzazzarate is unique in its whitewashed stuccoed architecture, and its palm tree lined streets on the verge of the Sahara Desert. We hung out here on the main street at a café drinking



Local-Erg Chebbia.



Land Heflin, Brad Ludden and Brennan Guth-to the put-in, Oum er Rbia.



Brad Ludden and Brennan Guth, Oum er Rbia River.

tea, watching the scene and, in turn, being watched by others. We didn't blend, and we had ceased trying.

Slicing through the south side of the Atlas Mountains was a river we were on our way to check out, the Dades Gorge. Another road paralleled the river in the lower section, and then it climbed steeply away from the river as the canyon walls closed in. As we climbed up seemingly endless switchbacks, the river abruptly exited from the sheer sandstone cliff walls and began to snake its way out into the rolling desert land downstream. Again, the river looked low, but for our now anxious tastes it was indeed enough water to float our boats. The Dades Gorge was a crack through rock; sheer walls rose over 2,500 feet directly out of the river. In some places no more than three boat lengths separated the canyon walls. As we rounded one last bend in the gorge, rays of sunlight beamed down on us and illuminated the water below. The feeling of floating felt so pronounced as we peered high above us at the rim of the gorge and the puffy Moroccan clouds beyond.

Our curiosity carried us directly out into the middle of the desert. We sought out the highest sand dune in Morocco, and found it to be over 800 feet high. The dune's name was Erg Chebbia, and invoked images of camels and desert wanderers dressed in turbans and billowy cloaks. This is where we met Mohammed and made our deal for the camels to get to the top of these dunes with our kayaks in tow. Yeah, we rode camels, and slid our boats down the dunes, but the absolute stillness and spaciousness of this part of the Northern Sahara Desert was humbling. Never had I felt such peace, never had there seemed to me such endlessness to any outdoor scenery.

Sometimes the search is about seeking and not really finding anything. I left the country exhausted and expanded from all that I had experienced and seen. Morocco is a country full of diverse culture and scenery yet sometimes low on the water. I do not regret the effort spent to get there or to drag my boat around.

I am again appreciative to the following companies for their support - Necky Kayaks, Werner Paddles, KAVU, Lids Helmets, Lotus Designs, Snapdragon Designs, 5.10 Shoes, Watershed Drybags, Salamander Paddling Gear, Powerbar, Chaco Sandals, and Smith Sunglasses.

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Stephen Byrd, Oum er Rbia River, Morocco.



Land Heflin on the Oum er Rbia River, Morocco.




Endless shopping,
sidewalk in Marrakesh.



Stephen Byrd, Brad Ludden and
Dustin Knapp scouting the
Ourika River, Morocco.

Brad Ludden and Stephen Byrd, Dades River Gorge, Morocco



CHEATED ON THE CHEAT CANYON

JULY 2, 2000
By U. Star Mitchell

"You'll never beat the river, the river lets you go."

On July 2, 2000, I beat all odds and cheated the river out of one more sacrificial death—mine. After breaking the C-1 vertebra of my neck in an awful thrashing, the river turned me loose. In the past few years, the rivers have not always been so merciful. Indeed, the rivers have been greedy, taking more boaters' lives than usual.

The 4th of July weekend started out fine. I met Jamie Deehan (OC-1) at the Urbana, Maryland parking lot on July 1st. Jamie was accompanied by 15 workmen from his landscaping crew and three kayakers, Eric Gervais, Scott Valcon, and me. We drove to the lower Youghiogheny River and were joined by Jeff Davis (OC-1). Jamie's landscaping crew was in five rubber rafts, with one man paddling solo in a rubber ducky.



The hardboaters' job was to shepherd the rafts down the river.

The following day, Jeff Davis and I set out to do the Cheat Canyon. The water level was 1'5". I was pleased with this water level, feeling it would not be a serious challenge. But I would have preferred more paddlers accompanying us. My prayers were answered when Bob Opachko pulled into the parking lot with his kayak. The three of us set out under a clear blue sky and a temperature just right for paddling.

We covered about eight miles, and it had all seemed easy. We came to Lower Coliseum, also called Pete Morgan's Rapid (Class IV). I saw Bob already through the rapid, downstream on far river-right. I stayed behind Jeff on river-left/center and waited in an eddy, watching him vanish down a chute between two boulders. Unfortunately, I let down my guard. I was tired. I suppose I had become complacent. I came out of the eddy to follow Jeff's path. Too late, I realized that I was not on line. This was more of a challenge than I had expected.

The velocity of the water was intense. The chute was narrow. I had not gotten as psyched for this as I should have. I was too far right. It was too late.

I flipped the way a boater flips in any fast, high velocity rapid. Like an automobile accident, it has happened before you see it coming. My instincts must have been with me since I was "kissing the deck" as my Perception helmet met a boulder with an impact that seemed like an 80-mile-an-hour head-on-collision. The pain in the lower back of my head was excruciating, and lights flashed before my eyes. My face was driven down into my deck, jamming my teeth into the underside of my upper lip and chipping off my left front tooth.

I didn't know then, but a jerk from a roll attempt probably would have paralyzed me for life. The acute pain told me one thing—just get out of that boat. I popped my spray skirt and wet-exited. (Later, in the hospital, no doctor could believe that I did not lose consciousness from a blow so intense that it fractured my first cervical vertebra on both sides.) I have always been accused of having a hard head, now apparently literally as well as figuratively.

My usual instinct to grab the boat and hang on to my paddle were gone. Somehow, I knew I could not deal with these items. I don't know where the paddle went. (Bob later found it jammed in a rock near where I had flipped.) When I surfaced my boat was tagging behind me like a forgotten dog. I shoved it away. Pain told me only one thing could be saved—me.

My old fashioned (12 year old) high float Extrasport PFD (with total shoulder coverage) rode high around the sides of my full cover Pro-tec helmet and kept my head up straight. I touched my hand to my mouth and saw blood on my fingers. A recirculating eddy on river-right tried to jam me under an undercut rock. I shoved at the rock and pushed myself away. Then Bob was there in his kayak, offering me his stern grab-loop. I reached for it, but the grab-loop was set too far up from the end of the stern. I could have kicked. I could have lunged. I could have grabbed it, but pain told me, don't; don't reach out! To the best of my memory, from the time I wet-exited my boat and surfaced, I never turned my head left or right.

A hip-rope from Jeff, thrown from his

boat, came at me. I missed. Jeff jumped out of his boat, hopped onto a rock ledge, yelling "Rope!", and threw again. This time I caught the rope, put it over my right shoulder, and Jeff pulled me out of the river onto a ledge. My lower body was still in the water; my upper body was out of the water. I was lying on my side, still holding onto the rope, my head held straight by my arm and the shoulder pad of my old fashioned life jacket. Jeff asked if I was OK. My answer was, "No, I'm not." I said I had suffered something like a whiplash.

I could see up-river where my unruly boat was mischievously playing in an eddy while Bob struggled to capture her. I saw a group of kayakers in an eddy. Their gazes were fixed on me. Even from the distance, I could see that they had looks of concern as I continued to just lie half in the river and motionless. We had seen very few other people all day, some of whom were now ahead of us. I was happy to see this group. I knew we were going to need them.

Going around and around in a whirlpool about twenty feet away, I saw my favorite water bottle and asthma inhaler. My request to Jeff to go after these two items was met by a stern reprimand from him. With me lying on the side of the river with a possible spine injury, saving those two items was an absurdity, he retorted. I guess my asthma inhaler drowned, but later in the day, on the way to the hospital, I saw my beloved water bottle in the van and thanked Jeff for retrieving it after all. He just gave a disgusted growl concerning my "value system."

The other kayak group joined us. From that point on, time and people became a blur to me. The other group of kayakers eddied-out around us. The group consisted of Bruce Berman, Dan Dunnwold, Ted Ludwig, Mike Mariani, and Robin Morris. As I lay in the water, Jeff asked me to move my extremities. Although everything seemed to work, Jeff suspected that I might have a spine injury.

I remember a stern command from Jeff when he and Bruce started to lift me up out of the water. "Wrap your arms tightly around your head," he directed, "Your neck

may be broken!" I wrapped my two arms tightly around my helmeted head, and like a forklift pulling up concrete, Jeff and Bruce gently lifted me straight up out of the water, and sat me down on the rock ledge by the riverside.

I asked Jeff to put both of his hands on the sides of my head and gently lift up. I look back at this as something that might have been dangerous, but Jeff obliged me and gently pulled up on both sides of my head. Like being put in traction, it made me feel better. Who knows, maybe he set the vertebra back into place.

Then Bruce began a neurological exam. He poked me; he prodded me; he checked my pupils; he touched my spine up and down. There was a definite center of pain on my neck at the base of my skull that indicated a soft tissue injury or a fracture. I continued to maintain that I thought I had had something equivalent to a whiplash, but Jeff and Bruce agreed this should be treated as a fracture.

Jeff and Bruce had never met before. Jeff is by trade a carpenter. Bruce is an artist and furniture designer. Fortunately for me, the two men have had a great deal of training in wilderness survival and river safety. Jeff is an instructor and the chairman for the River Safety Committee of the Canoe Cruisers Association for Greater Washington, D.C., a certified instructor trainer in Swift Water Rescue & Safety for American Canoe Association, previously a first aid & CPR instructor for the Carpenters' District Council, and certified in Wilderness First Aid. Bruce is the current director of education and former president of Three Rivers Paddling Club. He is also a business partner with Tom McEwan in the Calleva Mexico River Trips—he does river guiding and kayak instructing in Mexico.

The Cheat Canyon is truly a wilderness. There is no road or railroad along this deep-set, raging river. Quickly, the two men began to improvise. Both have since told me that it was a unique experience and unusual for two strangers to just meet upon the riverside and work so well together to create a lifesaving, masterpiece device. Jeff later told me they

had worked together like "two people with one brain, while doing something that neither had ever done before."

Bruce pulled part of the foam wall out of his kayak. He also retrieved from his boat his trusty saw. Like soul mates, they began to make a stabilizing collar for my neck. One would carve the foam and try the device to my neck. I would whine and moan about the collar hurting or digging in at a certain location. The two men adjusted the fit, evaluated the work, took turns making cuts, and, in the end, determined slots were needed for my ears. They duck-taped the neck collar to my high-float life jacket, locked the zipper up with duck tape, took an ace bandage out of my first aid kit, tied it around the newly crafted masterwork and safety-pinned it to my jacket. My neck was now held securely and completely immobile. I asked for some aspirin from my first aid kit. The consensus was that I should take Advil or Motrin, but I stuck with the Bayer aspirin that I carry and downed two. About an hour had elapsed since I was injured.

Jeff and Bruce had discussed someone paddling out and calling for a helicopter. But since the accident had happened about 5:15 p.m., they felt it was doubtful that a helicopter could get there before dark. Even if it could, we did not know if it would be able to retrieve me from that part of the rugged canyon.

The next hurdle was how to get me out of there. A long Class III rapid lay below us, followed by two to three miles of tricky river. There was only one canoe in the group—Jeff's 13'8" solo. Jeff first tried to get me to take a normal kneeling position in his limited bow space. This was just not going to work for me. The position was killing my knees and I wasn't stable. Bruce, a kayaker, said, "Sit." My legs placed over the airbag just didn't work. So the two men let air out of the front airbag. With help, I slid my legs under the airbag and sat with my back against Jeff's saddle. Jeff was left with a heavy, burdensome load, no room to swing his paddle for crossbow draws, and no room to bail water.

Just before we pushed off, I asked,

"Shouldn't I be wearing a helmet?" My own full-cover Perception helmet would not fit over my new collar. Mike Mariani graciously handed me his Grateful Head helmet and took mine. We readjusted every strap on Mike's helmet to fit my head. Afterwards, it must have taken poor Mike at least 30 minutes to readjust his helmet.

The little boat, the carpenter, and I began our treacherous river descent. We slammed over rocks that beat my poor bottom and caused me to yell out in agonizing pain. I apologized to Jeff for my bellowing.

A large boulder loomed before us. Jeff gave out an exasperated groan that told me what I feared might happen, we were going to flip. A swim for me could have meant death with a capital "D." I wasn't sure the borrowed helmet would even stay on my head in turbulent water. I would need to work my legs out from under that airbag, then swim, then hopefully, be saved again. I grabbed the thwart in front of me, pulled up on the left side with all of my might, and tilted my weight and body into the rock. I didn't want to be dead weight leaning the wrong way. The boat piled broadside onto the boulder. We slid off, still right side up. I breathed a sigh of relief. Later, Jeff claimed he never thought we were going to flip. The sound he made as we approached that rock, however, made me fear we might.

Bob, Dan, and Robin led the way down the river, trying to find the easiest route, stopping to see that we had safely made each rapid. Jeff labored under the oppressive load in his boat. The rapids were quickly filling the boat with water. I asked Jeff if he could bail. He said, "No, not with you sitting there."

"The boat's so full of water, we're going to sink to the bottom of the river," I wailed! Jeff gave me the bailer. I had little room and chose not to make big motions, but I did manage to bail whenever we came to calm water. I tried to give as much assistance as I could—leaning into eddies, etc.—but, of course, it was Jeff's bull strength and expertise that got us down the river in his little solo canoe. He's a prince of a man!

Without a paddler, my kayak needed to be transported down the river. In a difficult,

technical river, towing a boat is never an easy task. Bruce put my spray skirt on my boat to keep as much water out as possible and jammed the paddle through the top of the spray skirt. Then he began towing her with his webbing and carabiner. No luck! The boat got hung up in the rapids and rocks. Bruce had to release my kayak and lost both his webbing and carabiner. Jeff yelled to them, "Just leave the boat if you can't get her down the river! We've got to go on or else break into two groups!" Bruce told us to go ahead and that he, Mike, and Ted would get the boat down the river, which they did manage to do.

I've never been happier to see a take-out than when we arrived at Jenkinsburg Bridge. Mike Mariani's girlfriend, Melanie Wellington, a pediatrician, greeted us there. Robin and Melanie walked me up the rough beam and dirt steps. Melanie started to ask me some questions to get an idea of my mental state. Melanie and Robin helped me get out of my wet river clothes, leaving my collar and life jacket intact. I didn't want the hospital to cut off my best rubber-fuzzies.

After the boats were loaded on my GMC van, Jeff, Bob, and I started the take-out "goat trail" road around the mountains. That morning when we had deposited my vehicle at the take-out, we had seen an abandoned automobile hanging on the side of the unfenced dirt road. From my vantage point in the front passenger's seat, I saw that the automobile had now flipped off the side of the road and rolled down the mountain. The drive to the Albright Bridge put-in takes about 50 minutes. We wanted to retrieve Bob's car so he could lead us to the University of West Virginia's Ruby Memorial Hospital in Morgantown. After retrieving Bob's car at Albright, we drove to Kingwood, WV to pick up my purse and Marylu Davis (Jeff's wife) at the Heldreth Motel.

From the time we left the Cheat take-out until the time we arrived at the hospital in Morgantown, we had probably driven about 60 miles. The accident happened around 5:15 p.m., but we did not arrive at the hospital until about 9:00 p.m. The hospital admitted me at once. They only asked to see my driver's license. A swarm of doctors and

nurses gathered around me. First they tried to lay me down with my "home-made" collar and life jacket. That was met with blood curdling screams of distress from me. They saw that wasn't going to work.

They started cutting my collar off. I loudly protested repeatedly, "Please don't cut my life jacket off; you can get it off without cutting!" They obliged me, and gently removed the life jacket. As the next layer of polypro was cut off, I was glad it was my oldest one. They put some kind of heavy-duty support on my neck and a board behind me and lowered me to a horizontal position.

Then it began: endless questions, neurological exams, poking, prodding, sticking me with probes, x-rays, and CAT scans. I think every intern/resident in the entire hospital came to interview me and ask the same questions. My view of the world was horizontal. Peripheral vision was limited to the rolling of my eyes. There were so many doctors, nurses, and "people" around, I had trouble remembering them or their names. All were extremely kind and attentive. After numerous tests, Dr. Joseph L. Voelker came in and told me I had fractured my C-1 vertebra on both sides. He told me I was exceedingly lucky, since this injury usually results in death or complete paralysis from the neck down.

I later heard a staff member exclaim to someone in the hall, "She walked in!"

A female staff member was working over me and needed to reach across, thus putting her arm pit in my face. She apologized for her behavior. I responded with, "Oh, I hope I don't smell, we paddlers usually stink to high heaven when we come off a river." The male staff member standing to my right said, "We wish all of our patients came in out of a river. Most of them reek of alcohol, vomit, and motor oil." It was a grand relief to me to know that there were other people who smelled worse than paddlers just out of the river.

Jeff, Marylu, and Bob were allowed in to visit me. I discussed with Marylu the possibility that I might be transported back home to the D.C. area, but I had also been told that I might need surgery that night! The doctors were interested in Jeff's wilderness training and the methods he had used to save me

from paralysis. In reality, the Styrofoam collar attached to my life jacket was similar to the halo and vest I was later put in. Jeff and Bob talked to the doctors about what they had done on the river, and the interested hospital staff gathered around and listened to Jeff and examined the Styrofoam collar.

Jeff called my daughter in Maryland at about 10:20 p.m. to tell her about my accident. Deneva said that she and her sister-in-law would drive to Morgantown the following day. It was pushing 12:00 p.m. when Jeff, Marylu, and Bob bid me farewell. I found myself, "Alone, alone, all, all alone, alone on a wide, wide sea, and never a saint in heaven took pity on my soul in agony." Being alone in a hospital, with a broken neck, miles and hours from your home, is being very, very alone!

Then a doctor came in and began asking me the same questions that I had already answered three or more times. I became tired and cross. He wanted to do a chest x-ray and a rectal exam! I refused. He made a phone call to someone about an "uncooperative patient." He said I needed a chest x-ray in case I had inhaled some water. He didn't explain the need for a rectal exam! I knew that I had not inhaled any water at either end, but I compromised and let him do the chest x-ray to get rid of him.

The hospital staff debated the alternatives of flying in a surgeon from Nashville, to a halo and vest, to some kind of collar. The decision for treatment finally settled on a halo and vest. After this decision was made, I was placed in a nice private room; the staff kindly handed me a telephone and helped me make a long distance phone call to my daughter. It was about 1 a.m. Deneva did not have a clue as to how to get to Morgantown, WV. I was in some sort of bed that reminded me of lying in sand. The nurse told me that I was to lie there like a log and not move. Throughout the night, I was repeatedly awakened and asked if I knew where I was. I repeatedly made them happy by telling them I was in the Ruby Memorial Hospital in Morgantown, WV.

Although I had on a large, strong collar, and was out of my mind by pain and sleeping medication, apparently I flunked "not mov-

ing." The next morning one of the neurologists, who had seen me the night before, came in and exclaimed, "Your head is turned to the left!" He un-velcroed my collar and with two strong, warm hands turned my head straight and re-velcroed the collar.

Later in the day, three men and two women entered my room with the torture device—the halo. The three men—Dr. Voelker, the male nurse, and "halo technician" (I think)—stood at the foot of the bed and supervised while the two women screwed four screws into my skull. Two screws went into my forehead just above my eyebrows and two screws into the left and right side of my head just above the middle of my ears. The screws attached the halo that went around the front of my head. The halo was then attached by bars to a large, heavy, fur-lined vest. The entire device weighted five pounds or more, but felt like five hundred.

In the middle of all of this, my daughter, Deneva and her sister-in-law, Ellen, walked into the room. Ellen exclaimed, "Aren't you going to put her to sleep?" The answer was, "No, we gave her a double dose of Dilaudid." A double dose of "donkey dung"! I felt every twist of every thread of those four screws grinding up my flesh and going into my skull! Ellen screamed, "All the Dilaudid in the hospital wouldn't be enough for me to have screws cranked into my head." The visitors were so "grossed out," they left the room, fled the hospital, and went outside the building to wait until the "torture device" had been applied.

The following day, the doctor made my day by coming in and retightening the four screws. I told him I thought I had endured all the pain that I could, and now he was cranking the screws even deeper into my brains. That afternoon, my daughter and I left Morgantown in my van for the three-hour trip back to Bethesda, MD. I spent the next eleven weeks in the halo as a virtual invalid. I relied upon home health aides, and food brought by friends and members of my church.

I was unable to lie down and spent those eleven weeks sitting up in a bolster in bed all day and all night. My misery was utterly immeasurable. Before the removal of the halo,

my local doctor, Dr. John T. Stinson, has to retighten the four halo screws twice. I now know what it must feel like to have an arrow go into your skull. No friend or family member would ever remain in the room with me when those screws were being put in, tightened, or removed!

Even with good health insurance, my medical expenses have been in the thousands. When the vertebra heals completely, I face months of physical therapy. I am told by Dr. Stinson that I should have a 100% recovery. Despite my ordeal, pain and suffering, I am grateful to God first and foremost for my life and the continued use of my extremities. I am most grateful to my talented and knowledgeable river friends, particularly Jeff Davis and Bruce Berman with their outstanding skills in wilderness survival. There was no rescue squad, no paramedic, and no helicopter available, just fellow boaters well-trained in river safety and first aid skills. I am grateful to all of the caring doctors (Drs. Joseph L. Voelker, Michael Cunningham, Jeffery J. Pilney, Charles Whiteman, and Vickie L. Williams), nurses, and staff at Ruby Memorial Hospital in Morgantown, WV, and to all of the many people who helped me after I returned home.

I don't know how much of my good luck or how many of my nine lives I've used up, but this is the second time in my life that I have broken vertebrae in my back. The first time was when I was 28 years old and a bucking stallion threw me and fell on top of me. In my dreams, when I have flashbacks, I've briefly given consideration to taking up knitting and crocheting, but next season will probably find me on the river.

When my father was in his mid-eighties, he was mugged, pistol whipped, and left for dead in a puddle of blood. I later asked him, "Dad, why do you think you didn't die?" Puffing on a cigar, he stoically answered, "Hard to kill." He lived to be 92.



Survivor Episode 3

Disaster on the Rio Hollin

 **By Tiffany Manchester**

Standing at baggage claim in the Quito airport, staring sullenly at my kayak paddle, I was beginning to think that the brutal Canadian winter wasn't so bad after all. When the flight began my boat and paddle had been taped together. But there I was in the capital city of Ecuador, one kayak short of a good time. And as if communicating with airlines isn't hard enough, I had the added bonus of speaking not a word of Spanish. If I thought my frustration and helplessness was going to be soothed away by the tropical climate and exotic landscape, I couldn't have been more wrong.

The next few days were frustrating for myself and my Canadian companion, Billy. After many wasted hours of racking down my boat, I was finally reunited with it at the airport. Then it was off to the bus station to purchase tickets for the bouncy five-hour journey to Tena, the paddling Mecca of Ecuador.

We arrived in town sweaty, tired, and happy to be there. We quickly realized that the only motivation for foreigners to visit Tena was whitewater. It's a small, dirty town with few attractive hotels and only a couple of restaurants. Since paddlers' first priority isn't to go first class anyway, Billy and I were as happy as pigs in mud. Hotel Camba Huasi is the place to stay, and it is also the



base for the renowned rafting company Rios Ecuador. It was also the easiest place to organize your day. You sign up for the river of your choice, decide the ETD, and the taxi picks you up valet style. The drivers know exactly where the put-ins and take-outs are, how long the run will take, and best of all the shuttles are all set rates. So after being molested all day on the river you don't get further abused by the taxi driver!

With all of the town's simplicities, its one unpredictable element was the water. River levels fluctuate drastically in the rainforest even if it is sunny. It seemed to me that every day I paddled the water would suddenly turn brown, rise a foot and turn into a sketchy class IV. At this point in my career I had only been paddling for a year, so I wisely chose class III/IV rivers and, of course, preferred boating at a controllable speed. The Rio Hollin (pronounced Hogeem) is a two-day, class III/IV trip. It has a creekish feel with a few bigger drops. This description is of course subject to speculation as I only experienced half of the river.

We put the trip off for a few days because the weather was questionable, but after teaming up with two more Canucks and three Americans we decided to give it a shot. Bill and I packed enough food for three meals, our sleeping bags, a set of dry clothes, and a tarp we shared with Sean and Brock, the two Canadians. Andrew and Keisha brought a tent, a watermelon, and nothing else. Scott, the third American shared our tarp, though I can't remember what else he carried. Without planning completed, we were ready to embark on our journey. At 5 the next morning we loaded up a couple of taxis for the two hour drive to the put-in. It was a brilliantly clear and sunny day. Playful as cats waiting to pounce, we raced each other to the water.

The first day was a lovely experience. Monkeys hung in the trees, birds were chirping, and the water sang its song. We scouted a few things, but there was little anxiety. A few hours later, as fatigue began to set in, we

started looking forward to the campsite. The river runs through dense forest, so there is only one tiny beach to camp on. We were told we couldn't miss it, but we all had our eyes peeled anyway. Andrew finally realized how much extra weight he was pulling and decided to ditch the watermelon he was proudly lugging. None of us could understand what he was thinking in the first place.

Just before dusk we spotted our nest for the evening. We had heard tales of the river coming up overnight so we tied our boats high on the bank just to be on the safe side. We set up camp, and brought out the tuna and avocado. While savoring these great sandwiches I felt a drop on my head, then another. A lightly spitting rain quickly turned into a steady drizzle. The temperature began to fall and Billy and I took refuge under the tarp, snug in our sleeping bags. We tossed and turned all night as it rained nonstop.

We awoke to find the water three feet higher up the shore and many shades darker than the previous night. A marked change had come over our group. Billy was not his usual eager self, but instead troubled and thoughtful; I was scared half to death. We had planned to meet our shuttle at 2pm at the take-out, so even after watching the 10 foot logs float down the swollen river, we still decided to pack up and set off.

MISTAKE #1

My guts felt like they were tied into knots, but still I didn't listen to my instincts. I was totally unprepared to run a continuous Class V in my small, edgy boat and knew that this monstrosity of a river was ready to take prisoners. There were no eddies, no visible rocks, and therefore nowhere to stop. I did my best to dodge some massive holes and even felt some nausea from going up and down continuous eight-foot swells.

After about an hour my biggest fear was realized. I rose to the peak of a huge wave just in time to see that it led into a ginormous hole. Before I knew it I was upside down. I think I flushed out quite quickly, but in the terror of it

all I couldn't find the surface in order to roll. (Later I was told that I had been pushed against a rock wall). After a few roll attempts I bailed. As soon as my head popped up Bill was there, frantically yelling at me to grab his boat. I struggled to hold onto him with my paddle as we attempted to ferry back to river right. "No matter what happens, don't let go!" Bill screamed. But even as he spoke we were sucked into a hole and I was faced with a split-second decision. If he flipped and we got worked I wouldn't be able to hold on. Luckily I didn't have the chance to make that decision because my feet were quickly sucked down into the green water, pulling us free.

After a few testing minutes of narrowly escaping the snarling jaws of other nasty holes, Billy got us across and we eddied out behind a bush that the others had found. Sean and Brock had tried to catch up to my boat, but wisely gave up for self-preservation's sake. With my boat en route to the Amazon we all sat, holding onto a bush, contemplating our next move. We hummed and haad for a little while, though after the piranha jumped onto Keisha's boat we hummed and haad a little bit faster. Finally we noticed that the bush was quickly becoming submerged and that pretty much made up our minds for us.

We set up a rope system to scale the muddy cliff. About 20 feet above the river we found a flat area. Using the edges of our paddle blades (which compare surprisingly well to a machete), we cut down branches from palm trees to create a makeshift floor. It was raining again by now, so we set up the tarp and I crawled into my sleeping bag fully geared and colder than an Alaskan nudist colony. At this point accommodations were looking grim, so Sean and Brock decided to head downstream to the take-out and arrange a rescue.

MISTAKE #2

They sacrificed all of their gear, including food and dry clothing, for buoyancy.

MISTAKE #3

So there was the plan. They would return to Tena that evening and organize a raft to pick us up the next day. The five of us who remained shared a puny meal to ration our food, had a couple of shots of rum to keep warm, spooned all afternoon, and waited out the evening. As you might imagine there wasn't much sleep to be had. By mid-morning Keisha, Andrew, and Scott couldn't wait any longer even though the level hadn't dropped. They left all of their belonging in our care and set off downstream as well. And then there were two.

MISTAKE #4

Billy and I sat for two more days with nothing but two mangos and a bottle of rum. We contemplated life and many other existential topics to keep us distracted from our true predicament. By the third day we had had enough. We didn't know what had happened to the others or why no one had come for us. By this time we had pulled out Brock's video camera to record obscenities and curses for those who had ditched us. The water had dropped a little and now showed a hint of green. We sat on the bank looking upstream for any glimpse of human activity.

Finally we came to the conclusion that we would have to rescue ourselves. Bill tied a thermarest to the back of his boat for me to hang on to. We were just entering the water when Bill thought he saw something moving upstream. I told him that he was hallucinating and warned him not to get over-excited. As you can see, by this point I had lost all hope. However, moments later I was able to make out what looked like a yellow butterfly moving down the river towards us.

Yes, Adam and Jeff had come to the rescue. Sin (without) raft, they had made a different rescue plan. Four others had volunteered to hike in and they were going to meet me further down river. I held onto Billy and we paddled just a few minutes downstream. There, Adam and Jeff pulled out some food and clothes they had retrieved from our hotel room. After a brief feast I loaded all of the items ev-

eryone had abandoned into a huge dry bag. Approximately 100 pounds of gear—mostly wet—was mine for the hike. I was to wait there until the others arrived, but Billy had to continue on with the other two to reach the take-out before dark. We were both hesitant to separate, but there seemed to be no alternative.

MISTAKE #5

I watched Billy until he was out of sight and waited for about an hour. The hike was to take approximately three hours, but I allowed myself six because of the gear. It was 1 pm and I figured I could make it to the road by dark. I thought I would meet up with the others on the way, so I set off on what was supposed to be the trail. I climbed the gorge for about two hours, knowing I couldn't stop despite my exhaustion. I continued on for another hour until I emerged into a small clear-cut area. Had I just followed a trail to a dead end? There I sat on a tree stump and broke down in tears. Who knows how long I would have remained there or what I might have done if I hadn't noticed a chicken wander into the clearing. "Wait a minute," I thought to myself, "chickens don't just roam around the jungle."

With new found optimism I got up and located a new trail at the other end of the clear-cut. It lead though the forest for a few kilometers before passing a small farm. Relieved to see humans but still Spanishless, I was only able to glean from our conversation that I was on the right track. I continued on, calling out frequently in case the others were in the near vicinity. Several minutes later I heard someone reply in English. As it turns out, the rescuers had ended up too far downstream and had to back track to find me. We skipped the small talk and finally made it to the road after a total of seven hours on foot.

It was 9 pm when we returned to Tena and met the others at the hotel. As we swapped stories it seemed like everyone had been in some kind of a harrowing situation. Sean and Brock had only made it a few hundred meters downstream after leaving us that first

day. Brock got stuck in a huge hole that had exhausted him, but luckily he had enough skill to exit it in his boat. He knew that he probably would have drowned if he had swum, because the water was too fast and unpredictable for Sean to chase after him. They huddled together under their boats all night with no food or dry clothes.

Scott swam and lost his boat shortly after he and the other two left us. Andrew and Keisha decided to leave Scott to walk himself out of the jungle while they continued downstream, but they ended up walking most of the river anyway. Scott hiked for eleven hours with no shoes or water. At one point he realized he was getting disoriented and wisely decided to get back to the river rather than get lost in the jungle. Finally he found a few huts and got one of the villagers to hike him out. If you ask me, he had it the worst of anyone.

Because the expensive rescue was split between Scott, Billy and I, our funds were nearly tapped. After a few short days on the beach Billy and I headed home.

I hope others will learn from our mistakes. It is always a good idea to paddle with people you know and can rely on. And remember: in a bad situation on the river, always stick together. Several minds are better than one...especially in the jungle!

Editor's Note: Tiffany Manchester is the Canadian National Freestyle Champion. Tiffany Manchester works for Wilderness Tours in Ontario.



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Oh Yesh! It was SCHWWWEEEEET!!!

The Lyon King

By Bobby "Zonedogg" Miller

New York is a very famous state. No, it is not famous for Niagara Falls or New York City. It certainly is not famous for its pathetic Yankee baseball team, who have bought, not won, the last few World Series.

New York's true claim to fame is that on Saturday, October 14th, 2000, New York's very own Moose River got to go ONE-ON-ONE with the Great One, only to have the smack laid down on it time and time again. As you already know, the Dogg is all about equal opportunity, so no rapid or line was spared.

But, when I talk about laying the Smackdown on every drop, I really do mean it! Once I had done all the drops on the Bottom Moose, I hightailed on over to the confluence of the Black and Moose Rivers. Here, the Black River falls over a large and previously unrun cataract known as Lyons Falls.

Who else should make the first descent of this SIK drop but the DOGG! After all, you can't send a cat on a mission like this. There to witness this event was Pat Hamlin, Jim Starrett, Jeff Smith, Bob Bonnet, Gary McMichael, Bill Blauvelt, and a few floozies I picked up at the local gentleman's club the night before. This was a momentous occasion, one not to be missed.

There were two lines evident, one on each side of the river. The left line went over a 15-foot dam into a large cascade, about 70 feet. It looked runnable from the right bank, but we were far away from the drop. The left bank had a factory with a concrete wall that precluded a good scout on that side of the river.

The right line went over the same dam before funneling over a 20-foot

**Zone Dogg
launching a
SIKY off
Lyons Falls**

falls into a large roostertail. From there it was a cascade into a 35-40 foot sheer falls. We probed some logs in the top falls and they were destroyed by the roostertail. Then I probed some logs off the cascade into the bottom falls; all of these had good lines. I was unsure of the depth of the pool below the bottom falls due to the choppiness of the water and lack of boil. However, I decided a wicked boof stroke would take care of any depth concerns. The right line it would be!

I walked up the rock face to discuss strategy and then noticed a few boys in blue coming to rain on my party. The Dogg became a little worried at this point. I was afraid that they wouldn't let me run the drop, or even worse, send me to the slammer for a trip down to Cell Block D-O-Double G! However, the cops were just looking for an "injured person" that had been reported to be near one of the local dams. Seeing no injuries, the cops left the area.

At this point, my comrades were growing restless so I told them, "I'll make this easy for you. I'll just run the drop." I suited up and prepared to check Lyon Falls into the Smackdown

Hotel. The staging eddy was swirling, which had me a little worried. I knew that I needed to be confident if I was going to lay the smack down. I turned self-defense straight to offense and busted right out of the eddy and onto the cascade. I rode over a 5-foot drop and onto the lip of the falls where I proceeded to stick a SIK bitch-slap of a boof stroke (Oh Yesh! It was SCHWWWEEEEET!!!)

I launched way out and fell 35-40 feet before impact and emerged unscathed and fired up! I received many high fives and chest bumps from my comrades and some sloppy kisses from the chicas. My buddies volunteered to carry my boat for me, but I would have none of that. I climbed up the rock face back to the cars, where I dropped a People's Elbow on my Micro 230 to show my appreciation to all the MILLIONS.....and MILLIONS of the Dogg's fans.

I asked Jeff, who had videoed my SIK run, if I could watch it. He agreed but, to my chagrin, he had accidentally taped over it when the group convinced him on to video me climbing the rock face (in case I fell). I should have delivered a severe pistol whipping to the whole lot of them, but I was in too good of a mood.

Don't cry for me Argentina, this gives me an excuse to open a can of whoopass on Lyon's Falls again next year.

Besides, I had more important things on my mind. I was so hungry that I could have eaten the south end of a northbound squirrel. Everyone shared this sentiment so we headed off to stuff ourselves at a local beanery before heading over to the Moose Fest.



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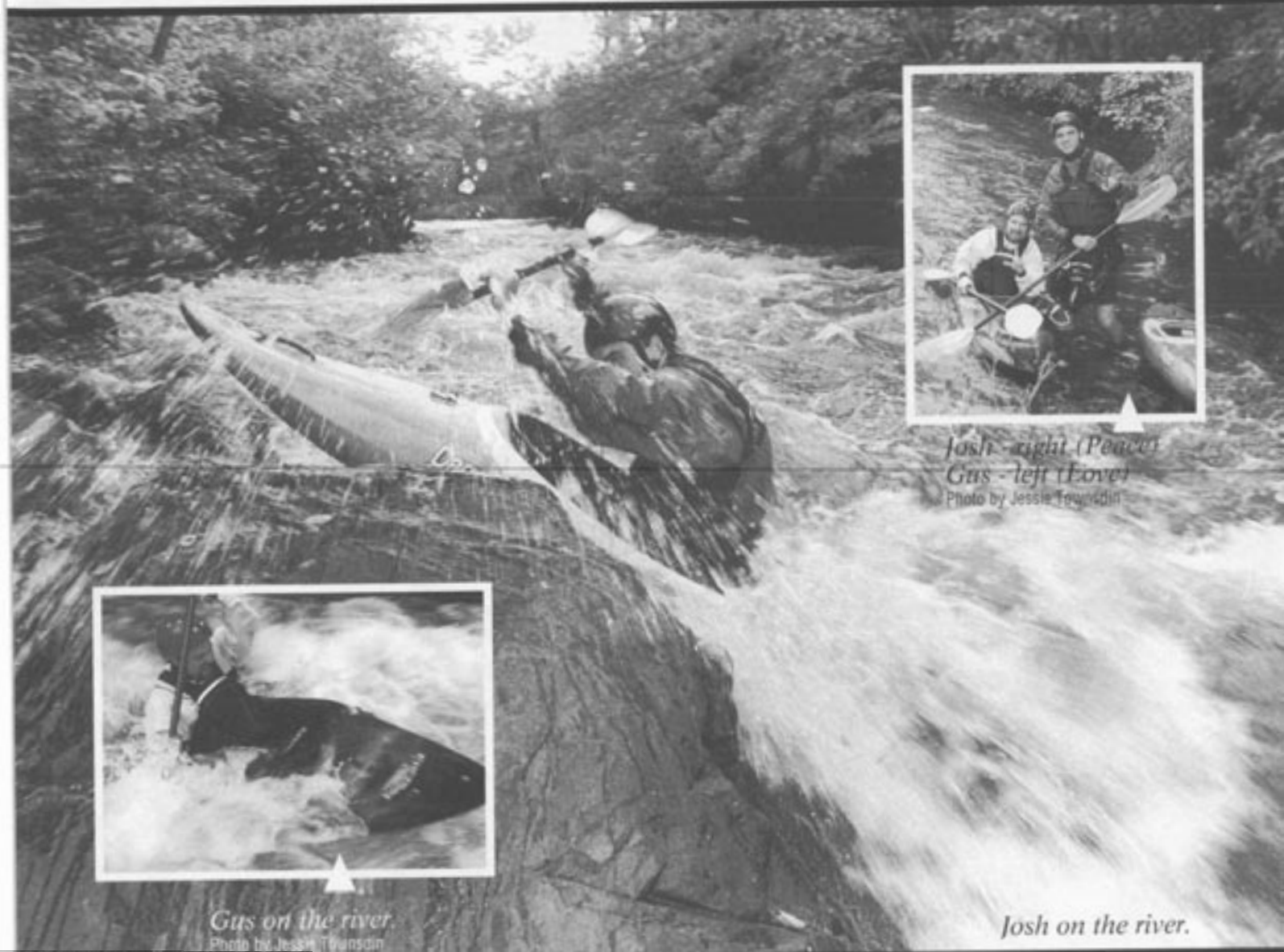
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Another Perspective

Story by Jessie Townsden

The plan for the weekend was to go sailing. But plans change—that's the best part of making them. Saturday morning Josie, Josh (Fish) and I woke up to find a perfectly silent lake on a sunny 65-degree day. So when Gus called up with kayaking on his mind, we were up for it. Josie and I have never tried whitewater kayaking. All we really knew about it was that our buddies, Gus and Fish,

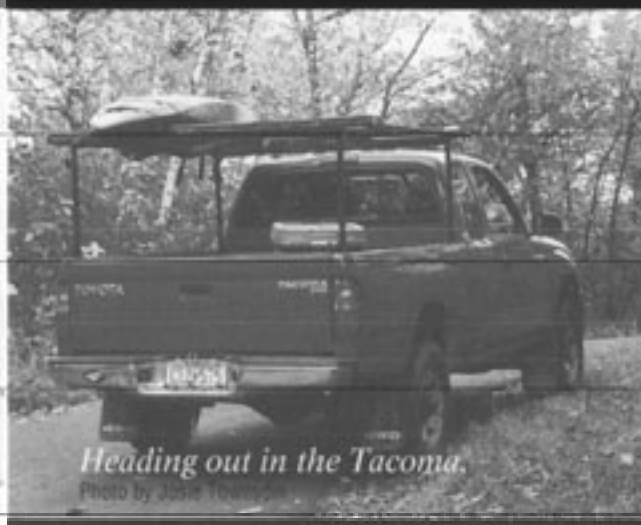
are crazy about it. Kayaking to them is like snowboarding to us. Ahh, the thrill of water—frozen, fluffy or wet.

The three of us rode to meet Gussy in downtown International Falls, Minnesota. As we pulled up to the gas station we spied Gus in his pickup, kayak on top, ready to go. Fish decided to ride shotgun with Gus, so Josie and I followed them out of the parking lot, stereo jamming.

As we turned into the lake we got another treat: our friend, Jen pulled in behind us. She arrived in good spirits, carrying spirits. We all piled into the little motorboat, totaling five people, two kayaks, and assorted gear. Five minutes into the ride we realized that the current plan wasn't working. We couldn't even get the boat to plane out. Fish decided that we needed to jettison some of

our load, so we tied the kayaks to his trusty rope and let them ride behind the motorboat. They seemed to me like they were enjoying themselves.

Thirty minutes into the trip, still gliding through calm water, I thought there was no way we would reach any whitewater. When I told Fish, he just gave me a sly smile. "Fifteen minutes," he promised. After 45 minutes on



Heading out in the Tacoma.

Photo by Josie Townsdin



Josh

Photo by Josie Townsdin



Left to right: Jen, Josh, Josie & Gus. Taking the kayaks for a ride to the river.

Photo by Jessie Townsdin



Left to right: Jen, Josh, Gus, Jessie & Josie.

Photo by Josie Townsdin

Rainy Lake, we entered a channel bordered with cattails. Sure enough, just around the corner we encountered a set of rapids.

Finally we got to see Gus and Fish play in the whitewater. Around here it is such a rare sight that those of us on shore were almost as excited as the two intrepid boaters. Fish had warned us that he goes into a different mode when he's kayaking.

As he geared up I began to see what he was talking about. How can you not switch gears when you throw yourself into swirling whitewater? I could tell Gus and Fish were in their element.

Their excitement was infectious as they carried their kayaks to the top of the rapid. It was almost the same feeling I get strapping into my board at the top of the moun-

tain. I don't have the technical terms to describe how they played in the river, but it took strength, quick thinking and experience. The more they frolicked the more awesome it was to watch. Fish drilled Gus for struggling on his first run. As Gus said, "I can't believe I'm getting spanked by this podunk river!" I know they've ridden more challenging rapids than these, but getting so close

and watching their enjoyment and excitement was a treat for me.

On the way back, kayaks in tow, we passed a boat of fishermen. We waved to them and Fish says, "They're fishin' . . . we're boatin' . . . we're all doin' cool things." That was the prime kayaking quote for the day. That night we had a warm meal, a fire, a sauna and spirits—the perfect end to a fantastic day.

Whitewater Accident on the La Grande Canyon of the Nisqually River, WA

A tragic kayaking accident occurred on the La Grande Canyon of the Nisqually on December 2, 2000. Chris Ringsven became pinned in his boat in a rapid referred to as Hammer Slammer. Detailed accounts of the accident and rescue are circulating on-line at Boater talk <http://boatertalk.com/HyperNews/get/BT/22254.html>. Charlie Walbridge, Safety Editor for American Whitewater, conducted an investigation of the accident that led to Chris Ringsven's tragic death on the Nisqually (see accident report in this issue). Charlie has been conducting whitewater accident reports since 1974.

For many of the 22 boaters present on the Nisqually that day, the accident had a dramatic impact. We all regret that this accident occurred. Although Charlie or myself did not know Chris personally, our contacts in the aftermath with friends and family indicate that he was truly a remarkable person.

The Nisqually has been a highly publicized whitewater restoration success story. In the relicensing phase there was considerable resistance to whitewater releases into the La Grande Canyon of the Nisqually due to access difficulties, perceived risks, and liability concerns. American Whitewater felt the access and whitewater difficulties were no different than those encountered by paddlers on free-flowing rivers. American Whitewater felt that, ultimately, the decision to paddle the La Grande Canyon should be made by individual boaters not a utility or a federal agency. In the new license, the Federal Energy Regulatory Commission (FERC) required Tacoma Public Utilities to conduct a three-year evaluation of whitewater releases. FERC required the utility to provide four weekend days scheduled between November 15th and December 15th annually.

Many boaters, concerned that the recent accident will terminate whitewater releases, have indicated their desire to provide input on the future of whitewater releases on the Nisqually River. American Whitewater welcomes this input. We feel it's important in the aftermath of this incident to obtain all the information we can about this specific incident and the future of whitewater releases into the La



Boater running Hammer Slammer rapid on La Grande Canyon of the Nisqually. Photo Justin States.



November 18, 2000 whitewater release from Tacoma's facility into the La Grande Canyon of the Nisqually. Photo Justin States.

Grande Canyon of the Nisqually as well as future efforts by American Whitewater to restore flows to Class IV-V rivers dewatered by hydro-power projects. A thorough report can help the boating community be better informed about the hazards on the Nisqually, Hammer Slammer rapid in particular, a review of risks associated with boating Class IV-V whitewater, and a review of rescue techniques for all of us placed in a similar situation. It's only logical that the whitewater releases on the Nisqually will be heavily scrutinized. American Whitewater feels this scrutiny is warranted. However, we do not feel the accident should result in an immediate decision to terminate future whitewater releases on the Nisqually prior to results from the accident report.

For the past three years boaters participating in the scheduled releases have completed surveys evaluating the quality of the Nisqually. These responses along with other information have been filed in annual reports to the Federal Energy Regulatory Commission. This marks the third and final year of reporting to FERC. American Whitewater, Tacoma Public Utilities, and FERC will make a determi-

C O N S E R V E

nation on the future of whitewater releases on the Nisqually. This accident will factor into that decision.

For those of you that have paddled the La Grande Canyon of the Nisqually during one of the scheduled releases in the past three years please take the time to respond to the questions below. Your statements can provide valuable input for this third year of the report. Your statements will also provide valuable input regarding the risks associated with whitewater paddling as we continue working to obtain releases on other rivers where dams regulate flows for whitewater recreation.

- How many times have you boated the La Grande Canyon of the Nisqually?
- Please rate the difficulty of the La Grande Canyon of the Nisqually using the international scale of whitewater difficulty.
- Do you think whitewater releases should continue on the La Grande Canyon of the Nisqually?
- Do you have a preference for when whitewater releases should occur on the La Grande Canyon of the Nisqually? (please indicate by calendar month)
- Would you boat/return to boat the La Grande Canyon of the Nisqually?
- What steps do you think could be taken to avoid accidents in the future?
- Should American Whitewater continue to work on releases on rivers rated Class IV? Class V?
- Your comments on risks associated with the whitewater boating.

Please forward your response to John Gangemi

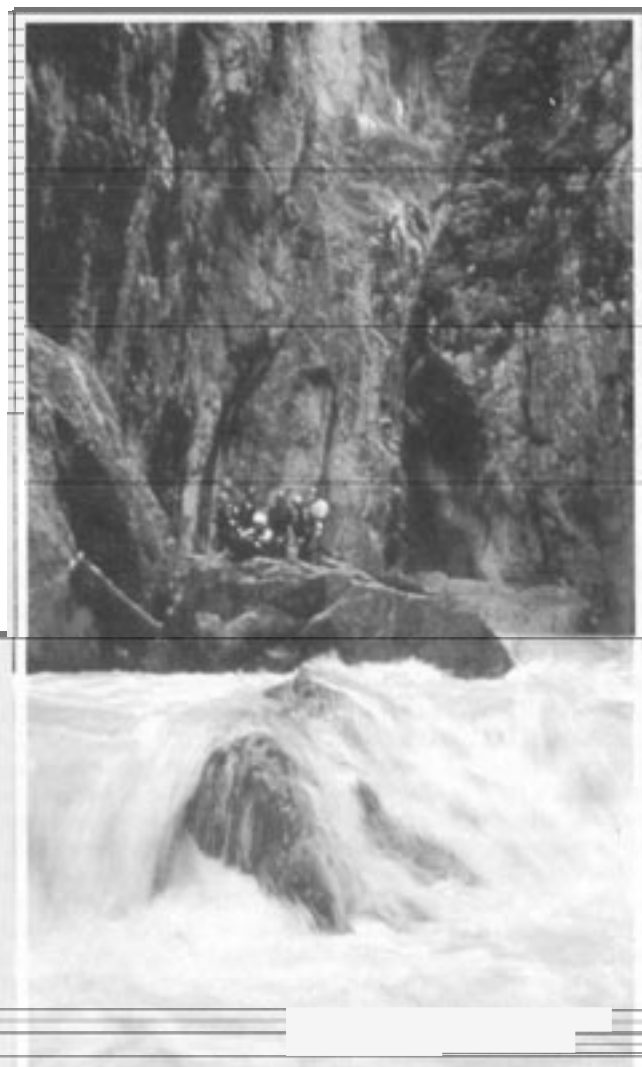
Postal address:
John Gangemi
482 Electric Avenue
Bigfork, MT 59911
Email: <cminer@digisys.net>

Thank you for your response.
Your input is very much appreciated.

Background on the Nisqually Whitewater Releases:

The releases are the outcome of a six year hydropower relicensing effort by American Whitewater to get an annual schedule of whitewater releases in the bypass channel for Washington's La Grande Canyon, a 1.7 mile spectacular Class IV and V river with its headwaters located on Mount Rainier. Prior to this license condition, and except for dam maintenance and flood conditions, the LaGrande Canyon had been dewatered since 1912, the year the dam was built.

As a result of the relicensing proceeding, the Federal Energy Regulatory Commission (FERC) ordered Tacoma Public Utilities (TPU) to release whitewater flows of 800 and 1,000 cfs on four consecutive weekend days between November 15th and December 15th annually. TPU has worked with American Whitewater each year since 1998 to schedule the weekends for these releases. Due to concerns over access and a preconceived lack of demand for this whitewater resource, the FERC required an initial three year monitoring study



A Tribute to Chris Ringsven

by Hal Crimmel

Chris Ringsven drowned on the Nisqually River on December 2, 2000, while running Hammer Slammer, during one of Tacoma Power's scheduled releases from LaGrande Dam. Chris's boat pinned on a rock. His companions were able to attach a line to the boat and pull it free, but Chris did not surface. He was found floating downstream without his lifejacket, just above the next drop. He washed through this and several other drops before he was pulled onto a rock. CPR was administered without success.

Those who paddled with Chris Ringsven knew him as an enthusiastic and talented, yet cautious paddler. Perhaps for this reason, hearing the news of his death was at once shocking and sobering.

Chris grew up in Minnesota, where he excelled in nordic skiing, cross-country, and music. He went on to attend Williams College, one of the top liberal arts colleges in the country. After graduation he began coaching skiing, and took up pad-

continued ►

C O N S C R V C

in this 30 year license. This year marks the third year of that study. After each release boaters are asked to complete a short evaluation form to document their experience on the run. Results of the evaluation form are the basis for reports submitted to FERC. Based on the recommendations in the final report, FERC will issue a decision regarding whitewater releases for the remaining 27 years in the project license.

Whitewater boating in the La Grande Canyon has been highly regulated by TPU. Boaters must sign a waiver prior to entering the canyon. During the first year of the releases, boaters were required to watch a video of paddlers running each rapid in the canyon. This was not required in years two and three because some of the rapids had changed dramatically during a flood in the winter of 1997.

In 1998, seventy-seven boaters paddled the canyon. In 1999, use dropped to nine paddlers. This year the combination of a phone reservation system and lack of paddling opportunities elsewhere lead to an increase in use with sixty-four paddlers entering the canyon.

For more background about the La Grande Canyon of the Nisqually and American Whitewater's efforts in the relicensing process visit <http://www.americanwhitewater.org/archive/article/> and <http://www.americanwhitewater.org/archive/article/96/>.

Big Picture:

American Whitewater's conservation program has successfully opened numerous Class I through Class V river sections dewatered by hydropower operations. Utilities are typically reluctant to open Class IV and Class V reaches for whitewater recreation due to perceptions of risk and exposure to liability. Most states have recreational use statutes that protect private landholders such as utilities from liability. American Whitewater works closely with utilities pointing out the difference between perceived risk versus actual. American Whitewater also works with utilities developing release waivers and educating the boating public about the difficulty of a particular run so paddlers can make an informed decision prior to electing to boat a run.

Unfortunately, some entities may attempt to use this tragic accident to further their own personal agenda; i.e., monopolize water resources solely for power generation and profit. These entities will likely portray the Nisqually accident as the norm for whitewater boating. Interestingly, the Federal Energy Regulatory Commission's accident database does not support this claim. FERC's database reveals that the greatest number of deaths at hydropower facilities occur on project reservoirs but few, if any, utility operators propose to drain the reservoirs to eliminate this risk. Likewise, the accident on the Nisqually should not trigger a universal cessation of whitewater flows at all hydropower projects with Class IV-V whitewater nor should American Whitewater cease their efforts to open new runs in this difficulty range. Risk and liability on rivers where flow is regulated by hydropower projects should not be treated any differently than adjacent free flowing rivers. The tragic accident certainly warrants introspection and careful thought regarding which rivers to focus American Whitewater's conservation efforts. In the long run this will ultimately make our conservation program stronger.

American Whitewater just completed a five-year study to determine the risk of drowning from whitewater boating (available on-line at <http://www.americanwhitewater.org/archive/article/29/>). We collected use data from 30 whitewater rivers of various difficulties from across the country. The result: less than 1 fatality per 100,000 whitewater user days. While whitewater boating does have risks it is far less dangerous than many other activities. In fact, the study finds that the fatality rate for whitewater recreation is 15 times lower than driving and twice as safe as bicycling. It is also much safer than recreational boating as a whole.

A Tribute continued from page 49

dling in earnest. With his sights set on a teaching career, he earned a teaching certificate in music at the University of Minnesota.

Chris was a terrific athlete, and seemed to thrive on the challenges kayaking offered, whether seal launching off snowdrifts to drop twenty feet into a pool on the Stewart River, or surfing cold April snowmelt on the Kettle. But above all, he was a safe paddler, one you could count on to help scout a rapid or pull you out of the river. He was the type of companion on and off the river we all want. And those of you who knew him know that he was the type of person and paddler who brought out the best in people. As a friend, Chris could be honest and blunt, capable of confessing his own desire to be the best on the river, but also unafraid to tell me to loosen up and enjoy myself so that he might see me at my best. He asked no more of others than he did of himself.

His competitive nature and keen insights were complemented by a goofy sense of humor that made him a lot of fun. Whether directing the school choir or running shuttle while wearing Billy Bob teeth, or giggling hysterically while backsurfing a wave, and trying to plant kisses on the cheeks of other paddlers surfing with him, Chris sure made us laugh.

He frequently spoke of his desire to secure a teaching job that would allow him to work with young people—and to spend time in the outdoors doing the things he loved. Though we were all sad to see Chris set out for Washington State, we knew he was making a new life for himself in the mountains. The reports trickled back—Chris skiing, paddling dozens of new rivers, settling in to his new school, where the students had taken to calling him "Sven." He was an optimist who had realized his dreams. May we all be so fortunate.

As the bad news spread through the Washington and Minnesota paddling communities, many of us felt disbelief, because he was such a capable and cautious paddler. A mistake, poor judgment, fatigue, carelessness, the wrong boat, lack of safety gear, insanely high water—any one of these might have made his death a little easier to understand, and perhaps a little easier to accept. But instead, we are left shocked by the loss of a friend, and sobered by an awareness of our own vulnerability and the knowledge that moving water can be so merciless. His companions were well-equipped for rescue and selfless in their attempts to save him, and we can ask for no more than that. Chris's death reminds us that paddling difficult rivers is inherently risky. It reminds us that a few inches or a few minutes are all that separate us from a lungful of air or a lungful of water, a lifetime or an eternity.

His death will cast a shadow across our lives. But perhaps it can reflect some of his light as well, by helping us all to revisit the risks found on difficult rivers, and ensuring that each of us is capable of providing the very best in safety to others on the river, every day. Chris would have wanted no less. Let us hope his memory can continue to brighten our lives, as we try to make the best of the gift of each day on the water and off.

The Minnesota and Washington paddling communities will greatly miss Chris.

How Much Wood Does a Paddler Chuck?

By Kevin Colburn

Strainers, filters, sweepers, wood, log sieves, log jams, timber, do you have a chill running down your spine yet? At every blind corner or blind drop we shutter a little and worry about a hiding log. Logs give us nightmares. Logs are the predators of paddlers and we treat them how our ancestors in this country treated wolves and mountain lions. They are generally disliked, their importance to the ecosystem is completely misunderstood, they are removed whenever possible, and if one is ever implicated in the injury or death of a human it is ceremoniously destroyed.



Stream adjacent to older clearcut. The sawed logs are part of former road crossing. Photo John Gangemi.

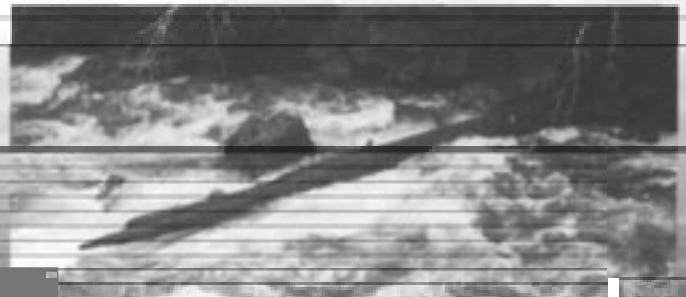
We are not the first to pull logs from rivers. If you had been a paddler 300 years ago it would have been a very different experience. There would have been more beaver dams than you can imagine, and large numbers of logs scattered all throughout the creeks and rivers. It would have been a royal pain in the butt. Then the trappers came and killed all the beaver and on the heels of the trappers were loggers. Loggers cut all the trees that would have one day fallen into the river and built splash dams in steep creeks. These dams would hold back floating logs and then would be dynamited to flush the logs downstream. Logs were removed from large rivers to aid in passage of steamboats, which were fueled with wood cut from the banks of the rivers. Later the army corps of engineers stepped in to do a really adept job of log removal in our large rivers to maintain their navigability. Farms, roads, railroads, and towns were built in the floodplains and along rivers. These structures required stable rivers that were free of logs and high flows. Many rivers were jammed, dredged, ditched, diked, diverted, and dewatered to create straight channels and waterways. The practice of removing logs from

streams persisted into the 1980s when it was still mandated that loggers remove all the logs from streams as part of cleaning up their mess.

Three hundred years ago most US rivers would have been rich with fish and salamanders and other critters of astounding diversity and numbers. The banks would have been densely vegetated in almost every part of the country, and where there were trees, there would be trees in streams. The rivers and streams would flood, but the stream and floodplain ecosystems were adapted to flooding. Salmon and other fish would ride the floods to the ocean, nutrient rich sediments would be deposited on the floodplains, and the vegetation would flourish. There would be a constant cycle of natural disturbance that would create a river system that offered a large diversity of habitats for all kinds of species of plants and animals.

The European fear and hatred of things wild put an end to this amazingly rich and strong balance of natural forces and many river systems fell apart. Of the many damaging things our ancestors did to rivers, the worst was probably the removal of riparian (stream-side) vegetation through logging, grazing, and development. A related impact that may be equally important was the removal of wood from streams.

It turns out that logs have incredible ecological importance in many river systems. Logs trap sediment that would otherwise be washed downstream. They are a food source to aquatic insects and trap leaves and other important nutrient sources like salmon carcasses. Logs create pools and overhead cover that act as critical fish habitat. Logs dissipate stream energy that would otherwise potentially cause erosion to the bed and banks of the stream. Logs can create and maintain islands and gravel bars that increase habitat complexity. When logs are removed streams tend to become



Typical wood hazard perpendicular to current. East Fork of the Lewis River, Washington. Photo John Gangemi.

Bull trout utilizing wood for cover adjacent to spawning bed on small mountain stream. Wood actually helps create favorable spawning sites for bull trout. Photo John Gangemi.



simpler. They will cut off meanders, have long uniform riffles, begin to down-cut and erode laterally, and will lose much of their biodiversity.

Obviously in most whitewater rivers complexity and erosion are not big issues because of the large boulders and bedrock that form the relatively stable bed, banks, and opportunities for fun. This is because whitewater rivers are typically steep and therefore have what ecologists call a high transport capacity. This simply means that they efficiently carry sediment and logs and anything else (us) through the area. When our rivers flatten out, the water slows and sediment drops out of the water. Logs too are deposited on these floodplains. Logs typically enter whitewater rivers through random events like windthrow, mortality and decay, landslides, and avalanches. They will typically be removed by random events like floods, but may actually stay in the stream reach for long periods of time.

The dynamics of logs in slightly flatter streams are very different and less random. Floodplains are fairly flat areas adjacent to a stream or river. These areas can be tiny little groves in mountain streams or massive expanses along big rivers. If you are on a stream and see that the banks are made of fine materials like sand, gravel, or cobbles, and the land next to the channel is flat you are probably looking at a floodplain. Floodplain rivers often meander and have a fairly large amount of natural erosion and deposition. Logs most often enter these systems when the river undercuts the banks and causes trees to fall. Logs also can wash down from upstream reaches during high water. Logs in these areas are incredibly important to the stream and its inhabitants.

There is also a big difference in the role of logs in big rivers compared to small creeks. Logs generally stay where they fall in very small streams that are unable to move big logs. In medium-sized streams logs are generally found individually and in jams that can be full spanning. In large rivers, logs are generally found in large


accumulations on islands and on the inside of meanders. In small streams one log can be very important, but in bigger rivers it is usually the accumulations that are critical.

So what does all this scientific knowledge tell us paddlers?

Hopefully it will influence our actions on the streams where we paddle. As regular users of these creeks and rivers we have an important stewardship role. The science tells us that our sport may have evolved under unnaturally safe and easy conditions. It tells us that as our rivers recover from past abuse we are likely to see an increasing number of logs in our rivers. River restoration efforts are likely to become more common. These programs will likely include the artificial placement of wood in rivers. It tells us, perhaps most importantly, that we should seriously consider the negative ecological impacts of removing wood. If you are considering removing a strainer from a floodplain stream you will likely damage the stream. Removal of logs from steeper rivers with bedrock or boulder channels will have much less of a negative effect, but that log may have one day washed downstream where it is needed or be serving an important ecological function in that mountain stream.

If we as boaters cherish and respect these rivers then we have an ethical obligation to consider and lessen our impacts on them. When we are looking at strainers with pragmatism and disdain we should weigh the advantages that that log provides the stream with our own situation. In short, the stream's health should be considered before our whimsical urge to spend a few seconds paddling a few feet of river. Surely there is a set of continuums of ecological importance and another set that defines the log relative to paddlers. Some combinations of factors tell us we should not remove the log, others tell us it is more okay. Here is a shot at outlining these continuums in a sort of key. Think about these things if you are considering removing a strainer.

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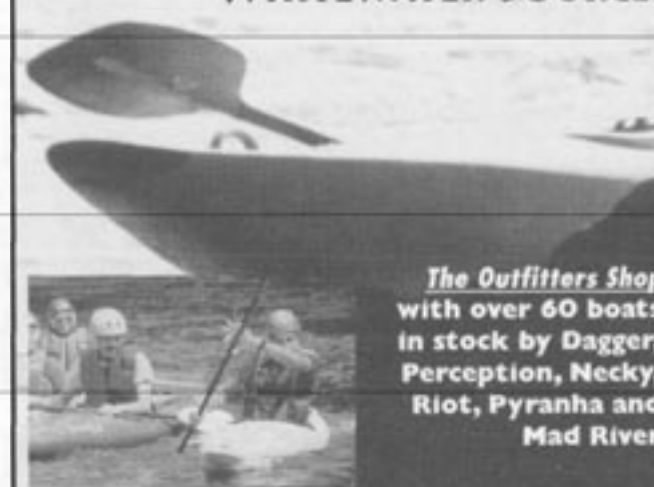
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Do Not Remove Log I, More OK to Remove Log

Ecological Considerations

Sand, Gravel, Cobble Banks	Bedrock Banks
Floodplain Adjacent to Channel Cliffs	Adjacent to Channel
Log Trapping Sediment	➡	Log Above Water Level
Log is Large and Long	I,	Log is Small and Short
Stream has Endangered Species	I,	No Endangered Species
No Riparian Vegetation	I,	Dense Riparian Vegetation
Heavily Impacted Watershed	➡	Intact Forested Watershed

Paddling Considerations

Log is Obvious	I,	Log is Hidden
Log is Avoidable While Paddling	➡	Log is Unavoidable
Log is Easily Portaged	Log is Impossible to Portage
Log Unlikely to Entrap Paddler	I,	Log Likely to Entrap Paddler
Log in Seldom Paddled Reach	I,	Log in Popular Reach
Class V	➡	Class II/III
Wilderness	➡	Urban

Most paddlers have a strong environmental ethic and respect and even love rivers. We pride ourselves on approaching Nature on Nature's terms, not Man's. If we wish to paddle on Man's terms perhaps we can negotiate with Disney World, Dollywood, and Six Flags to open their whitewater canyons to paddlers. However, if we wish to paddle on Nature's terms we will have to negotiate with Nature, in our hearts and in Nature's whitewater canyons. Lets come to that table well informed with ethics and caring and consideration. Lets leave the audacity so inherent in humans behind and work out an agreement that leads to rivers functioning up to their potential and paddlers safely exploring theirs.

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Strip mine/power plant threatens West Virginia's Middle Fork River and Otter Creek

Wilderness waterways could be hit by more acid precipitation

By Nathan Fetty

A proposal for a strip mine, combined with a 225-megawatt power plant, could adversely impact the Middle Fork River in north-central West Virginia, a popular whitewater boating run. In addition, particulates from the power plant could create problems for streams in the Dolly Sods and Otter Creek wilderness areas of the Monongahela National Forest.

The project would be at Anker Energy's Upshur Property site in Upshur County, West Virginia, where Island Creek Coal mined in the 1980s with devastating acid mine drainage (AMD) as a result. Strip mines in this area have killed both the Middle Fork and Buckhannon River with AMD.

Anker's plan would allow the company to burn coal and acid-producing shale on-site for the power plant with crushed limestone to neutralize the acid. The resulting by-product, a highly alkaline flyash, would be used as backfill to reclaim the stripped land to its approximate original contour. Also, Anker claims that it can burn a large pile of acid-producing waste material left behind by previous mining operations.

In addition, the power plant would be a "cogeneration" facility, where the excess steam would be used to power an adjacent manufacturing facility. However, the plan could still go forward even if no manufacturing plant opens on the site. Otherwise, the steam may simply be released into the atmosphere, like that of a conventional power plant.

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In Fall of 1999, Anker approached several environmental groups to share the company's plan and solicit feedback. While Anker's openness about the proposal was refreshing, West Virginia Rivers Coalition, along with W.Va. Highlands Conservancy, Mountaineer Chapter-Trout Unlimited and local citizens spoke in opposition to the strip mine permit at a public hearing in Buckhannon, W.Va. last March.

Among our questions and concerns:

Although the mining and power generation plans are said to be new technology, this is more experimentation on a site that is highly susceptible to AMD problems. This is unacceptable, especially when trout streams and boating runs like Tenmile Creek of Buckhannon, Right Fork of the Middle Fork and Otter Creek are likely to be impacted.

Although the flyash used to negate AMD would be highly alkaline, that doesn't mean it is without problems. Precise calculations for flyash application are difficult. If the flyash leaks or is over-applied, that could spell trouble for downstream drinking water supplies. We don't know the public's cost to pay for treating increased iron, manganese, and hardness in drinking water supplies. The City of Buckhannon is already paying additionally to treat water for problems stemming from Upshur Property.

EPA recently considered regulating flyash and other coal combustion wastes as hazardous. These wastes can cause fish kills and amphibian deformities. Also, such waste materials contain concentrated levels of heavy metals like arsenic, lead and cadmium, radioactive elements, cancer causing organic compounds and other contaminants. The Hoosier Environmental Council (Indiana) has found 63 cases of power plant wastes contaminating ground and surface water supplies beyond any use. Over 38 research studies have documented deformities, hormonal problems, genetic damage, and death in plants, fish, amphibians, reptiles and/or mammals from power plant wastes.

There are special concerns with mercury emissions from coal-fired power plants. Mercury is a potent neurotoxin that contaminates food supplies, especially fish. Such a poisonous substance will likely become a bigger issue with coal-fired power plants as regulators begin to recognize problems beyond acid precipitation. Coal-fired power plants are the largest source of mercury pollution.

The power plant would require 2-1/2 tons of limestone for every ton of fuel. That limestone will likely come from quarries in eastern West Virginia, where such extraction can be intensely damaging to land, groundwater supplies, and surface water. This encourages extraction of one nonrenewable resource to enable extraction of another nonrenewable resource. Additionally, an upgraded highway has been proposed along the Middle Fork to truck in the limestone.



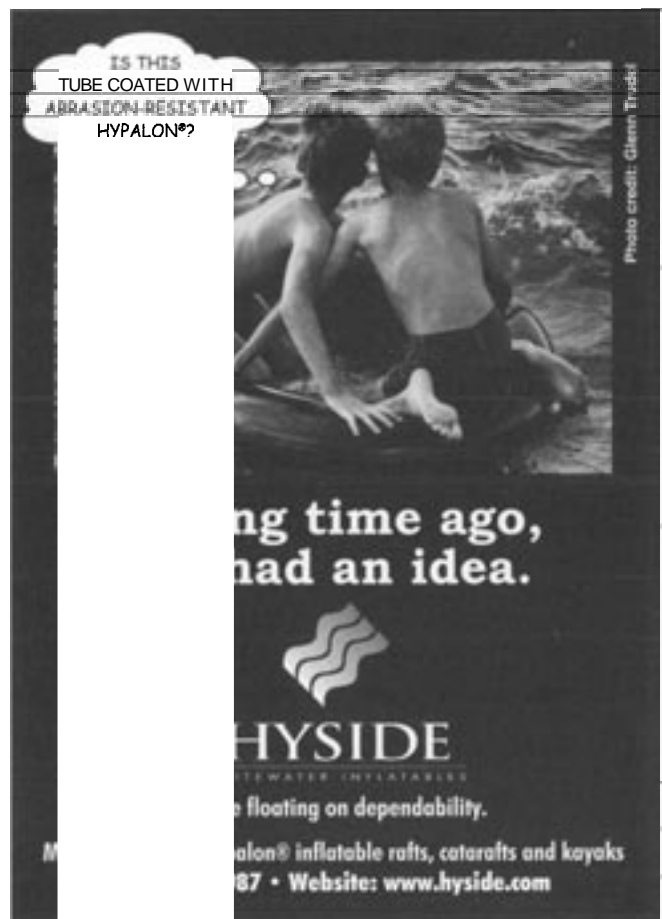
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The Dolly Sods and Otter Creek wilderness areas in the Monongahela National Forest are already at acid precipitation thresholds. The Uphur County plant, which is in the wind path of these sensitive areas, could push the health of these streams over the edge.

Anker officials have noted that the manufacturing facility could provide upwards of 500 jobs, which is a key factor in local officials' support of the plan. The company has noted that the jobs would, ideally, be high-paying, high-skilled, and that the manufacturing facility would be environmentally friendly. But there is no guarantee that any of these goals will be realized.

Currently, Anker has hired an independent consultant selected by the environmental community to evaluate the strip mining proposal, before the strip mine permit is granted or denied. Similar studies of the air pollution permit and the economic feasibility of Anker's plan to sell electricity to the power grid are being looked into. We'll be tracking developments in the coming months and calling on boaters to speak up for these wonderful rivers and streams, and the communities and recreation they support.

Nathan Fetty is a program associate with West Virginia Rivers Coalition, a statewide river conservation organization. For more information, visit their Web site at www.wvivers.org or call (304) 637-7201.

Hydropower Relicensing in western North Carolina

In January, Duke Power (formerly Nantahala Power and Light) invited input on proposed studies for hydropower projects on the East Branch, West Branch and mainstem of the Tuckaseegee River as well as the Nantahala River in western North Carolina. American Whitewater along with local paddling groups filed comments on the proposed studies most notably the location, design and execution of whitewater controlled flow studies. These projects dewater or regulate flow on ten whitewater reaches some of which have never or rarely been paddled due to project operations. The study phase allows us to identify optimum flows for whitewater recreation. These flows can then be plugged into future project operations for the next 30 to 50 years. All of this is contingent on you, the future user of this resource lending a hand in the relicense efforts. We need boaters with local knowledge to attend meetings and file comments. Contact John Gangemi to see how you can assist with this effort, 406-837-3155; email: jgangemi@digisvs.net.

Roadless Victory!

Congratulations! President Clinton signed the Record of Decision for the Roadless Policy, protecting nearly 60 million acres of our National Forests—that is bigger than all of our national parks combined! American Whitewater supported this effort in large part because we viewed this as a river protection and recreation initiative. The headwaters of many of our nation's premiere whitewater runs are situated in roadless areas which up until now lacked formal protection from road building and timber harvest.

This huge and historic victory would not have been possible without all the hard work and dedication of activists throughout the United States. Secretary of Agriculture, Dan Glickman said, "Never before have the American people so actively participated in helping to decide how their public lands should be managed. The fact that more than 1.5 million comments were received from Americans show that these truly are all of the people's lands, not just a few, and they care deeply about how they are cared for." In fact, nearly 1,000 American Whitewater members submitted comments supporting the roadless plan, which Executive Director Rich Bowers and Access Director Jason Robertson presented to Forest Chief Dombeck in a private ceremony last summer.

Inventoried Roadless Areas will be protected not only from new roads, but also commercial logging will be prohibited! This is a massive improvement over the first draft of the proposal, and Chief Dombeck specifically said the Forest Service had responded to the tremendous number of public comments. In total, 58.5 million acres of our National Forests will be protected. This protection directly benefits our rivers and streams and the quality of your paddling experience. This translates into clean water, aesthetics, and wilderness adventures.

President Bush has threatened to overturn this decision or find ways to weaken it; however it is apparent that such a decision would require extensive public input and lead to a protracted legal battle. The fact that 1 in 250 people in America commented on this plan is really impressive and creates a strong legal argument that the decision is NEPA compliant.

Boaters Beat Mountain States Legal Foundation!

By Jason Robertson & R. Ladders

“It is abundantly clear that the plaintiffs cannot show that the stream access law has no public purpose and, in point of fact, plaintiffs have not made any real effort to do so.”
Judge Lovell

On January 4th, 2001 U.S. District Judge Charles C. Lovell dismissed a case challenging public recreational rights on Montana's rivers and streams. This is a huge win for boaters and fishermen!

The case was brought by the Mountain States Legal Foundation, and challenged a 1985 law allowing recreational access below the high water mark on all rivers and streams.

The Mountain States Legal Foundation was established in 1977 with initial funding provided by beer baron Joseph Coors. The organization's first president was James Watt, the highly controversial Interior Secretary under Ronald Reagan. James Watt has been in the news lately because of his close ties to the Bush nominee for Interior Secretary, Colorado Attorney General Gale Norton. MSLF receives significant funding from nearly 200 corporate and right-wing foundations, including the Coors-run Castle Rock Foundation. Interestingly, Judge Lovell was also a Reagan appointee.

The suit focused on the part of the law allowing public use of nonnavigable rivers. In order to win, the plaintiffs had to prove that the state acted irrationally and arbitrarily, and beyond the public interest. However, in his decision, Lovell stated, "It is abundantly clear that the plaintiffs cannot show that the stream access law has no public purpose and, in point of fact, plaintiffs have not made any real effort to do so."

Judge Lovell said the state provided plenty of obvious, rational reasons for the law, including sewing the public's desire to use waterways for recreation, promoting tourism and the economy, and managing Montana's natural resources and wildlife.

The day after the decision, *The Missoulian* newspaper reported that attorney's for the plaintiffs would likely appeal the case to the 9th Circuit Court of Appeals. However, Lovell issued such a resounding defeat to the MSLF that we anticipate plaintiffs will decide not to risk the significant cost of appeal. American Whitewater will continue to follow this and post updates if the appeal moves forward.

History of the Decision

A short rendition of the legal history of the Stream Access Law may be helpful in understanding Judge Lovell's decision. This remarkable piece of legislation was conceived by Article IX Section 3(3) of Montana's 1972 Constitution, which provided that all surface waters within the State are the property of the people and subject to their beneficial uses.

The specific substance of the Stream Access Law was outlined by the Montana Supreme Court in two decisions rendered in 1984 when the Montana Coalition for Stream Access sued two private property owners that had attempted to close stretches of the Dearborn and Beaverhead Rivers. Those decisions, *Curran* and *Hildreth*, declared that any surface waters capable of recreational use may be so used by the public without regard to streambed ownership, and that the public enjoyed a dominant easement up the highwater marks of the river in order to facilitate such recreational uses.

In 1985, the Montana Legislature codified much of the law announced by the Supreme Court when it enacted the Stream Access Law as sections 23-2-301, et seq. of the Montana Code Annotated.

Several property owners, including Harrison Saunders (one of the named plaintiffs in the federal case pending before Judge Lovell), immediately challenged the constitutionality of the recently enacted statute in *Galt v. State of Montana*. Although the Montana Supreme Court struck certain minor provisions of the law, it upheld the most important provisions of the Stream Access Law as constitutional under both the Montana and federal Constitutions. Most importantly, the plaintiffs failed to appeal this decision to the U. S. Supreme Court.

In the case filed before Judge Lovell in the United States District Court (*Madison v. Montana*), the plaintiffs are private landowners with property on the Stillwater River, the Ruby River, and O'Dell Creek. They alleged that the Stream Access Law violates substantive due process rights under the 14th Amendment of the U.S. Constitution and similar rights protected under 42 USC 1983 because it constitutes a taking of private property or liberty rights by permitting public use of their private property. They also alleged that the Act is unconstitutionally vague because it neither prohibits nor permits portage rights around natural obstacles on their property.

Judge Lovell dismissed plaintiffs' cause of action in a decision that sets forth no less than four independent grounds for rejecting the landowner's challenge to Montana's Stream Access Law. Judge Lovell accepted both the substantive arguments advanced by the State of Montana and the technical grounds for dismissal asserted by intervenors like the Montana Coalition for Stream Access. If any one of the four holdings in Judge Lovell's decision is affirmed on appeal, Montana's model legislation protecting recreational access to rivers and streams will have the approval of both state and federal courts.

On the substantive arguments, Judge Lovell first reconfigured the landowner's claims, properly identifying them as claims under the Takings Clause of the Fifth Amendment, which is applicable to the States under the 14th Amendment. The Court held that the landowners could not meet the standards for showing a violation of the Takings Clause and specifically held that: "It is abundantly clear that Plaintiffs cannot show that the Stream Access Law has no public purpose, and in point of fact Plaintiffs have not made any real effort so to do.... It is even doubtful whether the Stream Access Law results in a taking in the first place, given that it relates primarily to public activities on a public way, i.e., the recreational use of Montana's surface waters."

Judge Lovell also rejected the arguments on vagueness by correctly characterizing them as claim for relief based on the fact that *Montana* was enacted about portaging around natural obstacles, and the landowners had failed to plead that such obstacles even existed on the sections of rivers over which they claimed ownership.

Judge Lovell then reinforced his decision on the substantive merits by articulating no less than three independent technical reasons why the landowners' lawsuit (and any future similar challenges) must be dismissed.

First, the Court held that any such suits were now barred by the Statute of Limitations since the landowners had been on notice of any alleged "taking" since at least 1985, the year in which the legislation was enacted by the Montana Legislature.

Secondly, Judge Lovell held that since the Montana Supreme Court had already ruled on the issue of constitutionality in *Galt*, Harrison Saunders (and all similarly situated landowners) were barred from relitigating the issue by *res judicata*.

Finally, the Court held that the landowners could not seek redress in federal district court after the Montana Supreme Court had decided the issue because federalism doctrines precluded review of state judicial decisions.

Judge Lovell's decision is strongly worded, well supported and based on several independent grounds which would permit the Ninth Circuit to affirm dismissal of the landowners' attempt to dismantle this important piece of legislation. We are optimistic that Montana's Stream Access Law will remain a viable model for important legislation in other states protecting the rights of paddlers and other recreational users of the priceless rivers and streams of America.

Trouble on the Waters

If you had trouble getting to the river, let us know. Use this form to report access problems so that AW can convince legislators and government authorities where and when river access is a problem. If you have met an irate landowner, noticed signs forbidding access, or were stopped by a landowner, barbed wire fence or a locked gate, tell us about it on this form. If several boaters are arrested or involved, only 1 form should be filled out per incident naming a boater available for future contact.

River _____ State _____

Date of incident _____

Access code categories: List below or circle the categories, multiple categories are ok.

Brief description of incident: _____

Boater contact _____
Address _____
City etc. _____
Phone _____
e-mail _____

Landowner/Agency/Sheriff contact (if known)
Name _____
Address _____
City etc. _____
Phone _____
e-mail _____

1. Trespass. Ticket, warning or arrest for:
 - 1.1.0 Trespass on private property
 - 1.2.0 Trespass on public property
 - 1.3.0 Criminal trespass arrest
 - 1.4.0 Civil trespass lawsuit
2. Public Access Closure
 - 2.1.0 Denied by federal law
 - 2.1.1 Denied by BLM
 - 2.1.2 Denied by Forest Service
 - 2.1.3 Denied by Nat'l Park Service
 - 2.2.0 Denied by state
 - 2.3.0 Denied by local authority
3. Injury from man-made obstacles
 - 3.1.0 Barbed wire or fence
 - 3.2.0 Low head dam
4. Obstacles running river, scouting or portaging
 - 4.1.0 Fence or chain on land blocking access
 - 4.2.0 Fence, wire, or tree on river blocking access
 - 4.3.0 Warning of no trespassing or posted sign
 - 4.4.0 Vehicle towed, ticketed, or vandalized
 - 4.5.0 Threats or acts of violence

5. Closures: Rivers closed that were once open

- 5.1.0 Closed by private landowner
- 5.2.0 Closed by government agency
- 5.2.1 Federal
- 5.2.2 State
- 5.2.3 Local
- 5.3.0 High water closure

6. New access fees

- 6.1.0 Charged by private landowner
- 6.2.0 Charged by government agency
- 6.2.1 Federal
- 6.2.2 State
- 6.2.3 Local

7. Dam controlled rivers

- 7.1.0 Water turned off
- 7.2.0 Inconsistent flow: too much or too little
- 7.3.0 No notice of releases

8. Lawsuits and legislation

- 8.1.1 New legislation to block river access.
- 8.1.2 Lawsuits to block access.
- 8.2.1 New legislation to enable river access.
- 8.2.2 Lawsuits to enable access.

Send to Ken Ransford, 475 Sierra Vista, Carbondale, CO 81623, 970-963-6800, FAX 970-963-6700. ransford@csn.net

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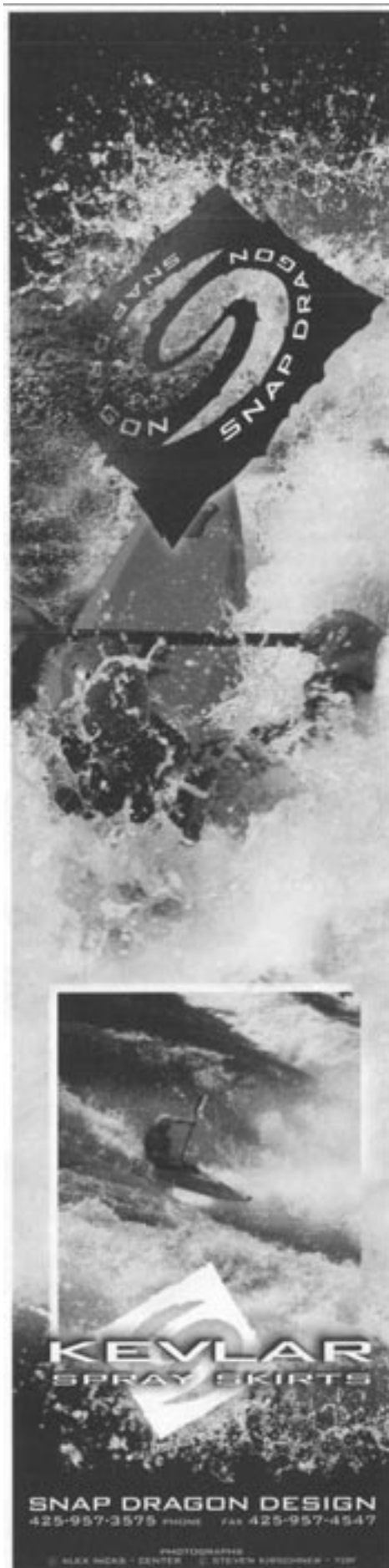
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Cautious Optimism for Gail Norton

By Jason Robertson

With the new Bush administration settling in, we are beginning to learn more about Gale Norton, his nominee for the Director's position in the Department of the Interior (DOI). The Interior Department oversees the National Park Service (NPS), fish and Wildlife Service, Bureau of Indian Affairs (BIA), Bureau of Land Management (BLM), Office of Surface Mining Reclamation and Enforcement, Minerals Management Service, US Geological Survey (USGS), Bureau of Reclamation, and Rivers Trails and Conservation Assistance program (RTCA). We are cautiously optimistic about working with Norton; however we do have some real concerns about how her leadership may effect river conservation and access over the next several years.

In general we know that Norton has a strongly conservative ideological bent, sharp intellect, and personable working style. Norton is very familiar with water law and was appointed by the Senior President Bush to the Western Water Policy Commission and also served as Associate Solicitor for Conservation and Wildlife of the U.S. Department of the Interior.

Norton is a strong proponent of state and private property rights, and will likely encourage greater participation by state and local governments in management decisions. This means that American Whitewater regional volunteers will probably have a great opportunity

to play a larger role in the decision-making process in their backyards.


Norton worked at the anti-environmental Mountain States Legal Foundation where she spent four years before being elected to two terms as Colorado's attorney general. The Mountain States Legal Foundation is the same group that recently lost the Montana case described earlier in this issue of the *American Whitewater Journal* challenging the state's Stream Access Law. Norton's close affiliation with the Mountain State Legal Foundation was mirrored by her affiliation with such other extreme "property rights" groups as the

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Legal Advisory Council for Defenders of Property Rights. It is this connection to strict private property rights advocates that most concerns American Whitewater because these are the same groups that regularly challenge the public's ability to float, portage, and recreate on the nation's rivers.

As senior counsel for the law firm of Brownstein, Hyatt & Farber, Norton was a paid lobbyist and professed expertise in a wide range of issues including: Civil Justice Reform, Environmental Law, Federalism, Government Agencies, Mass Torts, Product Liability, Property Rights, Regulation of Business, State/Federal Relations, Takings of Private Property for Public Use, Telecommunications, Tort Reform, and Water Law.

As the Colorado Attorney General, Norton was a strong advocate for the state's "self-audit" law. This law allows companies to conduct voluntary audits to determine whether they are complying with environmental requirements and gives businesses immunity from litigation and fines if they report the violations and correct them. The federal EPA does not support these self-audit laws.

One of the first issues Norton faced as Colorado Attorney General was cleaning up the Superfund site at Rocky Mountain Arsenal. From her work on this project Norton concluded, "First, the states are the only viable entities to police Federal facilities for environmental violations, because the EPA cannot enforce effectively against its sister Federal agencies. And second, private parties should insist on environmental compliance at Federal facilities, because cleanup standards should be the same for everyone."

In 1997 Norton submitted testimony to Congress supporting the Animas-La Plata Project in Colorado. Many river conservation groups opposed this plan to dam the Animas River, which was passed in

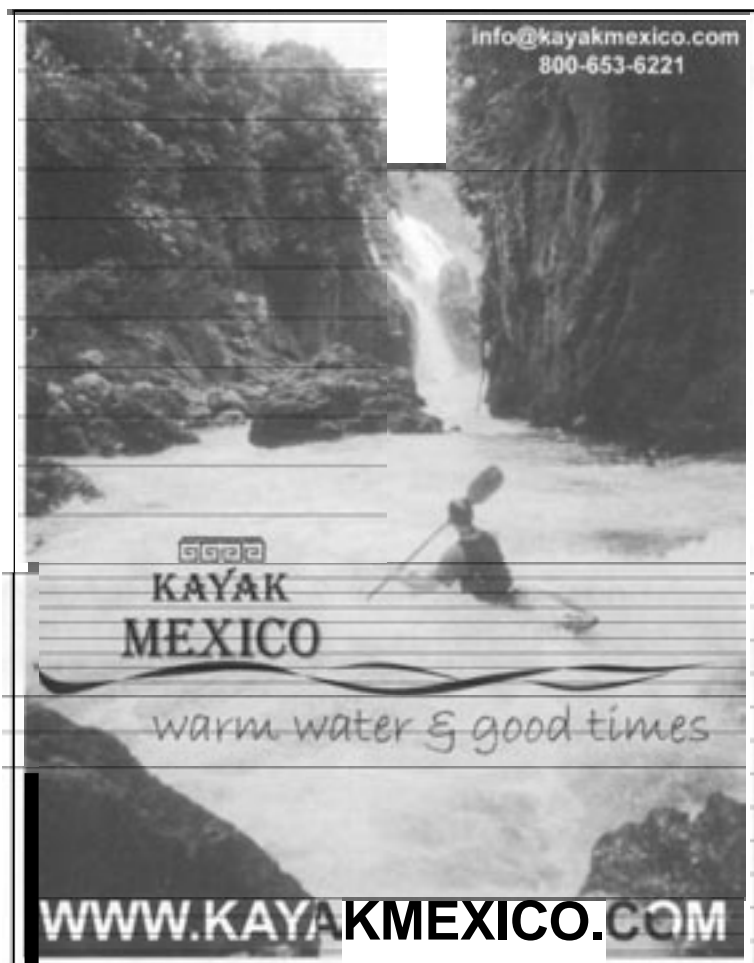
October 2000 as a rider on the appropriations bill. Norton advocated that the state has a treaty obligation with the Ute tribes to build the dam and provide reserved water rights, thereby protecting the existing water distribution network for ranchers in the basin. Norton dismissed proposed alternatives and environmental concerns on legal grounds.

A year later in 1998, Norton helped found and chair the Coalition of Republican Environmental Activists (CREA) stating, "We support market-oriented, property rights-based, locally controlled solutions." CREA had many conservative luminaries on its board including Senators Craig, Murkowski, and Representative Chenoweth. A grassroots group called Republicans for Environmental Protection (REP) quickly dismissed this new thinktank as a "greenscam organization."

In January 2001, Congress held hearings on Norton's nomination. While the Sierra Club and Wilderness Society protested Norton's nomination, she received the support of the National Parks Conservation Association (NPCA).

Based on our conversations with the incoming Bush administration and Congress, we expect Norton will seek greater funding for the National Parks and will support protecting these national treasures. However, we are concerned about the possibility that the National Monuments Clinton established may not receive the protection they too deserve. We are also very interested in learning whether Norton will support our funding goals for the USGS streamgaging network.

In summary, we approach Norton with cautious optimism. A lot hinges on the people she selects to help her lead the different agencies within the Department of Interior, and their commitment to protecting America's rivers from development.

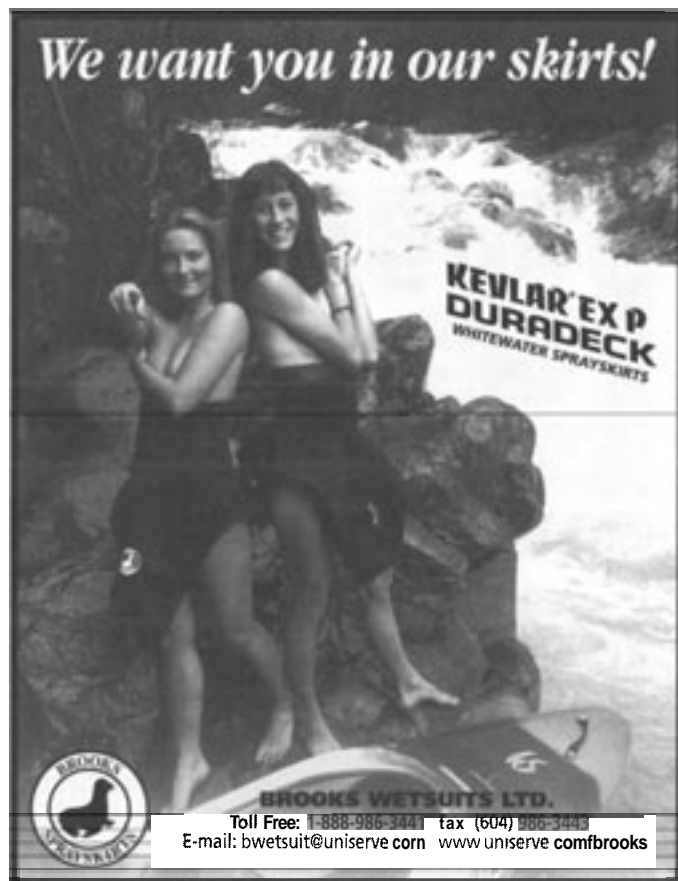


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Level


Legend: Running Recommended Flow

Below Minimum

Above Maximum

State	River Name	Section	Class	Level	Units	Updated
WV	Cheat	Albright to Jenkinsburg Bridge	III-IV	4.51	ft	05/31 8:00am
WV	Gauley River	Summersville Dam to Mason Branch	IV-V	2500	cfs	05/31 5:00am
WV	Gauley River	Bucklick Branch to swiss	III-IV(V)	48-90	cfs	05/31 5:00am
WV	Gauley River	Mason Branch to Bucklick Branch	III+(IV)	4721	cfs	05/31 5:00am
WV	New	Thurmond to Fayette Station	III-V	5.72	ft	05/31 7:00am

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News

Report on Dimple Rock Rapid, Lower Yough, PA

American Whitewater board member and safety expert Charlie Walbridge reports on safety meetings with park officials at Ohiopyle Falls State Park to address safety issues at Dimple Rock Rapid on the Lower Yough.

[Read More](#)

Posted: May 29, 2001

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Partly Cloudy

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Winds: Calm

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Safety

River Accidents



The Second Half of the 2000 Season June 29, - December 31, 2000

By Charlie Walbridge
AW Safety Editor

The second half of the 2000 paddling season was a busy one for tracking whitewater accidents. During the last six months there were 13 kayak, 4 canoe, and 14 rafting fatalities reported to American Whitewater. This brings the U.S. totals this year to 17 kayak, 11 canoe, and 21 rafting deaths. The kayak number is high, reflecting the growth of the sport in the last five years. Seven of these deaths were in Class V whitewater. The number of reported accidents also reflects increased use of the Internet, which had improved communication between paddlers nationwide. Information comes to us from posts to rec.boats.paddle.com or boatertalk.com, as well as through e-mails sent to the safety editor. I'd like to thank our most dedicated correspondents, Kevin Sulewski, Kathy Streletzky, Aida Parkinson, Paul Shelp, Slim Ray, Lee Belknap, Jason Robertson, Tim Kelly, and Bob Gedekoh. These folks scan these sites and forward relevant material. AW members also mail us press clippings that report deaths occurring outside the paddling community. These "low tech," but valuable efforts are often accompanied by descriptions of the accident sites, often on rivers seldom paddled by experienced whitewater enthusiasts.

Kayak Accidents

Of the thirteen most recent kayaking deaths, six of the victims were rather inexperienced, and six were experts who died running Class V whitewater. The risks for whitewater kayakers seem to be greatest for those at the highest and lowest extremes of skill. Lets look at the Class V deaths first:

On July 10th Mike Barker, 35, a strong Class V boater who had recently moved to Seattle from Tennessee, drowned on the Cascade River in Washington State. This Class V run starts off fast. Barker became caught in a hole at the bottom of the first rapid and recirculated for a long time. Then, debilitated from his battles with the hole, he was carried by a fast-moving wave train into Bridge Wreck Rapid. There he washed into a nasty collection of rusting I-beams and rebar at midstream and disappeared. This is the same spot that claimed another paddler last year. Clay Wright commented that it looks like there's a safe run-out here when scouting from the top, but that the river is much more continuous here than you'd anticipate. As the water level dropped over the next few days, rescuers could see Barker's body. Eventually they were able to make the recovery.

Gore Canyon, a popular Class V run on the Upper Colorado, had not seen a fatality until this year. But in early August there were two deaths in two days! On August 1st, the river was running at a moderate 1,120 cfs. Mark Gober, who was with the victim's party but had decided to walk out, watched his group from the railroad bed as they attempted Kirschbaum Rapid. His description follows: A kayaker, running third in a group of four, ran a different chute and slammed into an underwater rope that had strung itself across the chute. He was violently peeled from his boat and forced to swim. The two paddlers below chased him and his gear. Matt Classon, 27, ran next. He, too, hit the rope hard. His boat floated free, but his body did not.

Gober's group made an extensive search of the entire area, checking eddies and probing the upstream faces of rock. In the process they found a pinned kayak, (not belonging to their party). Thinking that their friend could be pinned underneath it, they pulled it free using a Z-drag. They found nothing. Eventually they paddled out and notified authorities. Rescuers began a search early the next morning, and Classon's body was found miles downstream, near the take-

out. His helmet had been torn off and he had a serious head wound.

This is not the first death resulting from an abandoned throw rope in a river. There was much speculation on Mountainbuzz.com about the source of the rope. Apparently it had nothing to do with the pinned kayak. Fortunately, a group of boaters who ran the river later were able to remove this hazardous rope. If your rope becomes snagged, spare no efforts to remove it. The rope can be cut very close to the point of entanglement and left in place as a last resort.

The next day Christopher Delaney, 34, a strong Class V paddler who had run Gore Canyon over 30 times, died running Gore Rapid. Gore Rapid is a continuous Class V with a long run out, closely followed by a Class IV called Pyrite. Postings on Mountainbuzz.com by John Kacik and Tom Boyd's article in the Daily Trail described Delaney's accident.

On Wednesday, August 2, Kacik's group met up with Delaney and Brad White at the put-in to Gore. The flow was 1,250 cfs. Kacik's group of three had spent the morning talking to the Grand County Sheriffs Department, Grand County Search and Rescue, and the BLM about the death on Tuesday, August 1. They decided to paddle Gore Canyon with Delaney and White to try and remove any throw bags they could find. In addition to the throw bag in Kirschbaum, Kacik had spotted one in Pyrite the day before.

Kacik and another paddler entered Gore rapid and eddied out on river left below Decision Rock, the usual place to wait for the rest of the group. Delaney was next, he ran the right-side pencil drop, the "sneak line" through Gore Rapid. He flipped as he paddled back into the main flow of the current and went over Decision Rock. He did not attempt a roll, and his paddle surfaced away from his boat below Decision Rock.

Kacik realized Delaney was still in his boat upside down and they attempted to rescue Delaney through the rest of Gore Rapid, into Scissors, and Pyrite. They were in contact with his boat through portions of the chase, but were unable to right the boat. After Pyrite, they managed to stop Delaney's boat, drag him out of the boat onto the rocky shore, and began CPR immediately. Delaney was unresponsive. They sent for help, and all lent a hand with CPR until the paramedics and search and rescue arrived.

The Grand County Sheriffs Department listed the cause of death as drowning. Delaney

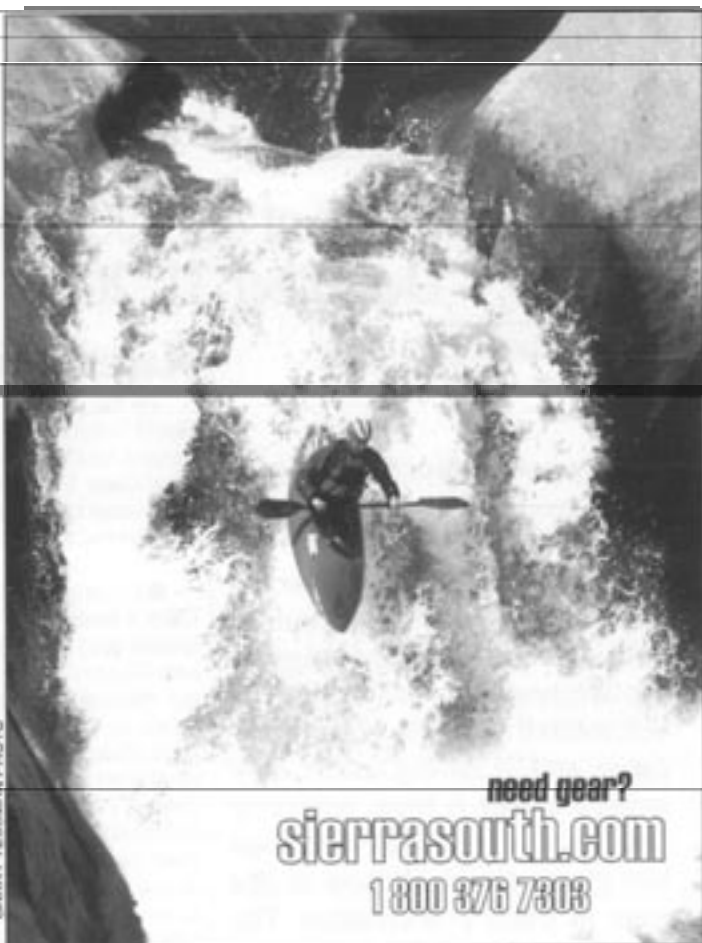
has only minor head injuries, and Brad White didn't notice any damage to helmet or head that would appear fatal. White did, however, mention that Delaney had cracked his mountain bike helmet in a crash two weeks before the kayaking accident. If Delaney had suffered a concussion, it might have made him susceptible to a second head injury.

The Green River Gorge near Hendersonville, North Carolina is one of the East's classic Class V runs. Like Gore Canyon, there had never been a death here until this year. An excellent report written by Bryan Jennings and Rob Barnham tells what happened: Witt Mills, 29, was a strong paddler from Oregon who had family and friends in North Carolina. On August 8th he attempted to run the Green with a strong, experienced group. At "Chiefs" the group elected to run a popular right-hand sneak. The move consists of a left-to-right boof off a rock. Mills missed the move and was thrown into the left channel. Here a strong jet of water drove him into an undercut rock. Mills pinned vertically, his high volume creek boat completely submerged. This happened at about 1:30 PM.

This spot was not easy for rescuers to reach. Several boaters tried to approach from downstream by paddling into a hole and reaching out with their paddles. Another boater, who was setting safety from shore, began throwing his rope within seconds of the pin. Mills' hand reached up several times in the first few minutes. He was unable to catch the rope, and his hand soon went under for the last time. Minutes later his life vest was pulled from his body, followed by the sprayskirt, float bags, and some foam outfitting from his kayak.

One of the paddlers went to get help. He reached the take-out and called 911 from a cell phone. Afterwards, he led a

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group of paddlers into the gorge via a hiking trail, then upstream to the accident site. While he was gone, the rest of the group continued their extrication attempts. Mills' body and boat were not visible, but the group knew where he was. Much later, at 3:00 PM, they managed to snag Mills' arm with a rope. They pulled, but were unable to hold it above the surface for more than a few seconds. This continued without success until the rescue squad arrived at 4:00 PM. One paddler, in training to be a paramedic, had set up a CPR station on some flat rocks on river right. Another acted as downstream safety.

Now the release passed and the river dropped. Mills and his boat were clearly visible. After an intense discussion, the group convinced the rescue squad that they knew what they were doing and should be allowed to continue their efforts. They first tried setting a rope under Mills' torso and pulling. That didn't work. Then they belayed a paddler into an eddy near the boat. This "eddy" had been a hole during the full release. Next, they attached a line to the kayak's security loop. Now, using a z-drag, 10-12 people quickly pulled the boat free. Mill's body floated free, and they quickly grabbed him and pulled ashore. It took a team of 36 rescuers from several units several hours to carry the body up a steep trail leading out of the gorge to the road. People who examined the boat later are pretty sure it folded, trapping Mills inside.

On November 5th Dan Dunlap, author of "World Whitewater," died during a rescue attempt on Ecuador's Pilaton River. Details are still sketchy. The accident reportedly occurred at a 15 foot, Class VI drop. Dunlap was found in waist-deep water in a cave on river left downstream. A rope was lowered to him, and he tied himself in at the waist. He died during the haul-up that followed. An autopsy reported the cause of death as head injuries sustained during the swim.

Some people suggested that the haul-up itself might have caused the death. While this was clearly not true, suspending someone from a rope tied off at the waist can cause serious damage. The rope typically rides up under the victim's armpits, resulting in breathing difficulties and internal injuries. A young paddler was injured this way during a haul-up in Ernie's Canyon a year ago. At best it is a very uncomfortable way to go. Vertical rescue skills are not often taught in the standard two-day river rescue class, but here is one idea worth remembering: use a sit harness to support people when raising or lowering them. When a rope is lowered to you, know how to tie yourself in correctly! You can construct a sit harness from rope or webbing pretty easily. Many of us wear a waist-loop which could be modified for this purpose, or you can cut up a throw line. Alternatively, you can buy a PFD with a built-in climbing harness, or take a lightweight

climber's sit harness along.

American Whitewater has worked hard over the past decade to open up stretches of river closed because of dams and diversions. One of these, La Grande Canyon of the Nisqually in eastern Washington State, is an outstanding Class V run through a scenic sheer-walled gorge. Unfortunately, there was a fatality during a scheduled release on December 2nd. Darren Albright, a member of the party who played a key role in the rescue attempt, wrote a detailed account of the day's events. He was paddling with Chris Ringsven, 27, a strong Class V paddler, and four other people that day. They got out to scout "Hammer Slammer," the first major drop. Everyone decided to take the most conservative right-hand line. Albright and another paddler set up safety while Ringsven made his run. His line appeared good until he hit a hidden rock towards the bottom of the drop. He stopped dead, then disappeared under water.

Albright, who was wearing a rescue vest, clipped into a throw line held by his buddies and leapt from shore to where Ringsven's boat was pinned. He was able to brush Ringsven's body and grab the boat before being carried away. He swung in to shore, got out of the water, and made a second jump. The boat shifted on impact, pushing the bow out of the water, and Albright was again washed downstream immediately. Swinging to shore, he took a second throw line from his friends and made his third jump. He brushed past Ringsven's body again, then somehow found a shallow rock with his feet. He clipped the second line into the bow grab loop, then lifted the bow up while his friends pulled from shore. The boat came loose. They had freed Ringsven in about two minutes, an outstanding piece of rescue work.

As the boat surfaced, Albright released his rescue harness and floated in the current, searching for Ringsven. He brushed the cockpit, but it was empty. He saw a life jacket near the cockpit and grabbed it. There was no one inside. Swimming into the eddy, he struck Ringsven's body. He grabbed Ringsven's arm, but could not hold on. Then he saw Ringsven disappear over the horizon line into the next rapid. Running alongside the river, Albright headed downstream. Forced into the water by a cliff, he swam the bottom part of the next rapid, straining to maintain visual contact. By this time Ringsven's body was being carried into yet another drop. Albright swam to shore as one of his group charged past in a kayak. Albright worked along the shore, but was once again forced into the water by cliff walls. At about this time a second paddler hustled past him. Everyone walked around Class V Triple Falls, just below here. As Albright rounded a corner he could see his two friends performing CPR on a midstream rock.

After assisting with CPR for about 20

minutes, Albright began a steep climb to the canyon rim to get help. He reached the highway, flagged a car, and reached a phone where he called 911. Dam officials shut off the water, and rescue squads were called to the scene. Meanwhile, a paramedic who was boating with another party arrived and pronounced Ringsven dead. Soon after his body was removed from the river by a military helicopter.

Although the rock was not visible, boaters who had run the canyon previously reported hitting it hard and even sticking to it momentarily. Albright examined the rock with the flow shut off and says it was definitely undercut. He also looked at Ringsven's boat, which had a soccer-ball sized dent on one side. He believes that the pressure of the water probably collapsed the hull, making a wet exit impossible. Everyone who has read the account has been impressed by the group's aggressive attempts at rescue. They came close to succeeding.

Here are the fatalities involving inexperienced paddlers:

On 4th of July weekend the Macomb, Michigan **Daily** reported three kayak accidents occurring on the nearby Clinton River, which was running high due to recent rains. All involved inexperienced people in rented boats. On July 2nd Frank Vanluven, 40, was horsing around with friends on a flatwater stretch of the river near Pontiac when his kayak capsized. He was not wearing a life vest, and did not resurface. On July 3rd James Gentz, 56, drowned after attempting to run a low head dam at the Yates Cider Mill near Oakland, Michigan. There was a fatality at this spot in 1999, but despite this tragedy no portage paths or new warning signs were constructed. On July 4th a woman in her 20s drowned after her kayak was pushed against a downed tree by fast current and capsized. Her boyfriend was able to swim to shore, but she was pinned under water.

According to local paddlers posting to rec.boats.paddle, all of these fatalities involved sit-on top kayaks. The river itself is Class I at best during normal summer flows, and is often too shallow to float a canoe. The Oakland, Michigan **Free Press** reports that the popularity of kayaking on the Clinton River has grown during the past few years. Many stores near the river rent kayaks for \$10 per hour. Because of changing water levels, these operations may need to develop policies to cut off rentals when the river becomes too high. Renters also need to become more aware of the dangers they'll encounter when paddling on rivers.

Inexperience also claimed a life in New England. On July 18th two Hartford, Con-

necticut firefighters were paddling a two-person kayak on the Tarrifville Gorge section of the Farmington River, a short drive from the city. This section, which has Class III+ rapids, was running at 1,690 cfs, an unusually high flow for July. Suddenly, their K-2 flipped in "heavy current." One man made it to shore, but Fernando Garcia, 37, disappeared from view. Both men had pfd's with them, but the survivor was unsure if Garcia had been wearing his. The Hartford *Courant* described the massive search that followed, involving 100 people, a helicopter, dive teams, and a hovercraft. Evening arrived and the body had not been found.

■ In the middle of August, north central New Jersey was hit by a "one in a lifetime" thunderstorm that dropped 14" of rain in a single day. The area suffered the highest water in decades. Homes flooded, power was lost, dams broke, hills slid into highways, and bridges washed out. According to the Newark, NJ *Star-Ledger*, as the skies cleared on August 15th Charles Weaver, 58, decided to paddle the swollen Muscanetcong River near Hackettstown, NJ. Weaver, who had been an outstanding high school football player and worked as a guidance counselor at a local school. Anxious for a high water run, he ignored his wife's pleas for caution and launched at Warren Glen. Four miles later he washed over an 8' high dam at Finesville and was caught in the hydraulic below. Construction workers heard him calling for help and threw him a rope, but he was being wildly thrashed and could not grab hold. Witnesses saw Weaver's life vest pulled off before he disappeared for the last time. Flooding downstream hampered efforts to find him. Four days later his body was found at Milford, on the Delaware River, roughly eight miles downstream. His boat was found in the brush a short distance below the dam.

Ed Gertler's "Garden State Canoeing" calls the "Musky" a Class II+, suitable for someone like Mr. Weaver, who had been boating about a year. But a local paddler reported that the level that day was seven feet about optimum. The river was extremely powerful and pushy, with very few eddies. Our correspondent had no desire to paddle it. Even if Weaver had seen the dam or known it was there, he would have had no trouble getting to shore. And although boating solo is not a good idea, I'm not sure another paddler would have helped much. Once a person went over the dam, they were on their own.

■ On this same day, August 15th, Doug Wivell, 25, a local teacher and wrestling coach, took his brand-new kayak to a tidal section of the Rappahanock River near Tappahannock, Virginia. Witnesses saw him working near shore, making several successful rolls. Later they found him floating upside down in four feet of water. The Richmond *Times-Dispatch* reported that his feet had become caught in the boat, preventing a successful wet exit. While not strictly speaking a whitewater accident, this tragedy is of interest to most river

kayakers. Most of us, at some time or another, practice rolls in local flatwater. Novices and those testing new equipment should not do this alone. Someone should stand in the water nearby, ready to assist. A wet exit should be tried before attempting to roll with a new boat or sprayskirt.

We also received more information on several accidents which happened earlier this year:

■ Joe Okoniewski reported that Michael Brown, 26, a kayak instructor for Alpena, Michigan, died in a Class IV+ rapid on Ontario's Upper Goulais River on April 29th. The incident occurred at an 8' high river-wide ledge which he ran after a brief scout. At low levels the hole it creates is backed up by rocks and becomes extremely nasty. It stopped him cold and surfed him violently. Brown was a big man, six feet tall and weighing over 200 pounds. He had some difficulty exiting his small, low-volume playboat. His friends, who were still scouting the drop, tried to reach him with throw ropes. After 15 minutes they succeeded in snagging him and pulling him to shore, unconscious. CPR, directed by a doctor who was in the party, was not successful.

■ We also received more details on the unfortunate drowning death of Billy Danforth that occurred on June 17th. He was paddling Idaho's Class IV-V Teton River at low water with his girlfriend and another paddler when he pinned badly end-to-end in a narrow chute. Water washed over him and he lost consciousness. The violent current quickly tore all the gear off his upper body. His companions, after attempting to reach him with throw ropes, waded out and tried to get to his boat by leaping onto it. The current was too strong, and neither one could hold on.

After several attempts, Danforth's time had clearly run out. His girlfriend stayed at the scene while the other paddler hiked out to get help. During his hike out, Danforth's boat broke loose and floated downstream. Rescue squads spotted his body in a logjam nine hours later, but it got away from them as they attempted to recover it. He was finally recovered a week later.

Canoe Accidents

We also received information on four fatal canoeing accidents in the last six months, giving us a total of eleven for the year. As usual, most involved inexperienced people. While this is nowhere near a complete accounting of river fatalities among canoeists nationwide, it does give us a sample of what's happening.

Late in the afternoon of July 2nd Alex Kitchen, 28, and his canoeing partner

swamped and capsized their canoe in Hollywood Rapids on the James River in Richmond, Virginia. Charles Ware, a long time member of the Coastal Canoeists, who sent press clippings from the Richmond *Times-Dispatch*, said the pair's boat pinned on "Bradshaw's Rock." As they surveyed their predicament, a young man called for help. He apparently could not swim, and was swept off his feet while wading. The two canoeists swam out and pulled him to safety.

A few hours later they attempted to wade out to the canoe to recover their car keys, which were in a backpack tied to the boat. During this effort, Kitchen's foot became caught on the river bottom. His friend tried to help him, but Kitchen slowly lost his balance and was pushed under water. His friend grabbed hold of Kitchen's lifevest, but it came off in his hands. Seconds later his friend was swept away by the current. The body was recovered by firefighters from the Richmond Fire Department's River Rescue Team an hour or so later.

■ On July 9th kayakers found the body of a 43 year-old man who had disappeared after his canoe flipped on the Colorado River the previous day. His partner made it to shore and reported him missing. Neither man was wearing a life vest.

Local newspapers reported that the family of 37 year-old Chris Kulcheski became concerned when his square-stern motorized canoe was found floating upright on the Lower Delaware River near Easton, Pennsylvania without him. He was taking a long solo trip down a section he had done many times. He had called his family on July 30th, hours before the empty boat was spotted. His dog, a shepherd mix, was still riding inside the canoe when it ran up against the Pennsylvania shore. A massive search ensued, covering the river for miles downstream. State Troopers told Gene Berliner, a local paddler, that there were a number of empty beer bottles in the bottom of the boat. They suspect that alcohol might have contributed to this tragedy.

■ Phillip Gibbs, 67, a retired Lynchburg doctor, was duck hunting on December 17th with a lifelong friend. As reported in the Roanoke, Virginia *Times*, they launched their canoe on Virginia's Maury River. The boat suddenly capsized in fast current, putting both men in the water. His partner attempted a rescue, then swam for shore. Gibbs was wearing an approved "float coat" but no cold weather gear. He was pulled from the river by the local rescue squad after floating downstream for 45 minutes. The cause of death: hypothermia.

Rafting Accidents

The year 2000 was a tough year for professional outfitters. Of the 25 U.S. rafting accidents that were reported to us, 9 were guided and 2 were rental guests. Five of the victims were under the age of 18. The two

rental fatalities occurred at Dimple Rapid on the Lower Youghiogheny in Pennsylvania, where a huge controversy erupted. There were two more commercial rafting deaths in Costa Rica, for a total of four reported from that country this year. Commercial rafting tours are normally quite safe, and I suspect this was probably an unexplained statistical "spike." Nonetheless, it clearly points out the risks of whitewater, even in a well managed, supervised setting.

Three of the commercial deaths involving young people occurred on western rivers.

■ On July 8th Taylor Vetch, 10, drowned after he was thrown from a raft on the South Fork of the American River near Lotus, California. It was the first commercial fatality on this section in fifteen years. The "Newswatch" web site reported that the accident occurred in Class III Meatgrinder Rapid, which a local paddler noted was quite bony due to low releases from the dam. The raft hit a rock, throwing Vetch and several others into the river. The others surfaced quickly, but Taylor did not. Guides saw him go into the river. The others surfaced quickly, but Taylor did not. Guides saw him go into the water, but were unable to find him. He was located a few hours later by rescue squads, after the water was turned off. His life vest had been torn off, and a foot was caught between two rocks. It was a clear case of foot entrapment.

■ On July 26th a 12 year old boy slipped away after his raft flipped after striking a rock on the Class III "Frog Rock" section of Colorado's Arkansas River. The flow was a modest 700-cfs. Few details were supplied by the Arkansas Headwaters Recreation Area press release. The body was recovered the following day after an upstream dam reduced the flow to 200 cfs.

On July 28th Bobby Cheung, 13, drowned on Washington's Nooksack River. He was part of a Chinese youth group from the Seattle area. The Associated Press reported that he fell out of the raft when it hit a rock and washed under the boat. This suggests to me that the raft might have been pinned. The guide's efforts at CPR failed.

The Chafee County Times reported that Larry Weber, 49, drowned after a large wave threw four guided rafters into the water on the Arkansas River's Pine Creek Canyon. The flow was a low 876-cfs through this Class V rapid, which does not receive much commercial traffic. Guides and safety kayakers rescued three of the swimmers, but Weber caught his leg and was held under water for 4-5 minutes. Guides picked him up quickly and began CPR, which was, unfortunately, ineffective.

■ We have sketchy reports of two non-commercial deaths. On July 17th Shane Dunning, 26 died after his small raft flipped on a Class II section of Montana's Flathead River. According to an AW member who saw TV news reports, the pair were not wearing life vests.

On July 23rd John Cronk, 68, drowned on Washington's Nisqually River while taking part in a tour organized by a local land trust. The Associated Press reported that he fell out when his raft hit a log, and became pinned on the logjam. The force of the current pulled off his life vest.

■ Phil Meyer, a paddler working for the Rainforest Outward Bound School in Costa Rica, sent word that there were two more commercial rafting deaths during the summer. On July 26th three rafts flipped while running the Penas Blancas River. The correct line in the rapid had changed due to recent earthquakes, and water levels were high. All but one client swam the rapid successfully, but one man, Jerry Probst, 50, suffered a severe blow to the front of his head which may have left him helpless in the water. On September 28th B.K. Basran, a 30-year-old Canadian woman, fell out of her raft on the Rio Naranjo. When she was pulled back in the boat, she was dead. She was no longer wearing her helmet and had suffered a severe head injury. Helmets with good fit and function are vital for any type of serious whitewater, and hopefully local outfitters will be checking their gear and implementing any changes which could reduce the chance of future tragedies.

Dimple Rapid, on the Youghiogheny River in Western Pennsylvania, was the scene of three deaths during the 2000 season, making it the worst year on record for this popular river. On September 7th Stewart Hill, 63, fell out of a raft at Class III+ Dimple Rapid, one of thousands to swim here each year. He floated the rest of the rapid, but was unresponsive to rescue efforts by guides. When they got him to shore, he was dead. Guides were baffled because this relatively mild swim had such a tragic result. Less than ten days later, on September 16th a church group from Central Pennsylvania rented rafts and duckies for a trip down the river. At Dimple Rapid, Andrea Yealy, 16, rammed Dimple Rock and flipped her rented double duck. Her partner washed free, but she disappeared. Her life vest bobbed to the surface shortly after. Guides made an extensive search of the area, then radioed for help. Search dogs alerted in the vicinity of Dimple Rock, suggesting that she was trapped there. The river level was lowered overnight by the U.S. Corps of Engineers in Confluence, PA to aid in the search. The next morning her body was pulled from under the left side of Dimple Rock by veteran river guide Scott Downs.

With two deaths occurring at Dimple in so short a time and a third happening earlier in the summer, there was great public concern. Extensive coverage of these deaths in the Pittsburgh Post *Gazette* by Larry Walsh, a reporter very familiar with boating on the Yough, brought this issue before a wide audience.

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Relatives of the deceased said that they wanted Dimple Rock blown up before it killed someone else. Dr. Philip Reilly, the Fayette County Coroner who had decided to hold an inquest on all three deaths, initially voiced public support for this drastic step.

The idea appalled the paddling community. Local outfitters and AW Safety Committee reps felt that this action, aside from being contrary to the preservation goals of the Park, could make this rapid even more dangerous. Currently the pillow on Dimple Rock pushes paddlers away from a number of other big rocks on river left. Some of these are undercut. If the rock were removed, river runners would be carried towards these hazards. Many felt that filling in the undercut upstream face of the rock with concrete made better sense, but legal experts warned any modifications could also expose the State of Pennsylvania to legal liability where none had existed before.

To gain a better understanding of options available to him, Park Manager Doug Hoehn created a safety focus group made up of park managers, outfitters, and paddlers. Personnel from the New River Gorge, the U.S. Corps of Engineers, the PA Fish and Boat Commission, and DCNR management from Harrisburg were also invited to attend. In mid-November he arranged to have the Corps of Engineers drop the river level as far as possible. With the river running at 0.7 feet and the water crystal clear, I joined a group of rangers and guides one clear, sunny morning to have a close look. You could see the sunlight reflecting out from under the left corner of Dimple Rock. From the river left shore we were able to wade out and probe under the rock with a long pole. We then swam out and looked underneath the rock with a diver's mask.

We got an eyeful! Dimple Rock sits on the edge of a rock outcropping. It overhangs the current by four to six feet over much of its width, topping out an irregular "room" roughly four feet high. Even at 0.7 feet, the roof of the "room" is a foot below the surface of the river. At 3.5 feet, when the water starts to wash onto the top of Dimple Rock, the "room" is under roughly 7 feet of water. The space is so large that the trees removed after a 1996 drowning almost certainly did not fill it. The water was murky at that time, which is why no one got a clear view of this area. I believe that most rafters who flip above the rock stay in the pillow and are washed to the right and safety. An unfortunate few get washed deep, and end up under the rock. They are unable to work their way out the sides and back to the surface before running out of air but are later washed free.

At the focus group meeting a few weeks later the group discussed all aspects of river safety for commercial and private paddlers on the Lower Yough. We looked at the accident rates for guided, rental, and private paddlers. We determined accidents have occurred over the past two decades. Prior to the 2000 season, Dimple was considered just one of several dangerous places on the river. The three recent fatalities, which made this the worst year for

drowning in the history of the Yough, increased the total number of people killed in Dimple Rapid by 50%.

We also learned that Dimple may not be the only rock in this area that's undercut. Scott Downs, who has been guiding on the river for many years, said that Washover Rock, to the right of Dimple, is badly undercut, as are several other rocks just downstream. It is possible that some, or all of the victims were held under by other rocks, so "fixing" Dimple might not solve the problem. Modifications have been tried at other rivers, with varying success. Paddlers emphasized to park personnel the difficulty of doing something that works, the possibility of creating an unexpected additional hazard, and the need to do the job right.

After these discussions, a consensus was reached:

First, an improved education program should be initiated, including: 1) Stronger wording of the risks of river running in the park safety video, 2) Signs warning of danger at Dimple Rock at the put-in and at the top of the rapid. These should describe the danger, indicate that people have died at this location, and recommend scouting and portaging when in doubt. 3) Handouts for rental rafters on the dangers of Dimple Rapid, and 4) Improved guide safety training, including an evaluation of whether gear can be pre-positioned at known hazardous sites.

Second, that there should be steps taken to facilitate portaging. The group supported creation of a portage trail at the top of the rapid on river right. Mr. Hoehn reported that there are issues of land ownership and endangered species at this site, but that these problems should not be insurmountable.

Third, we agreed that the rock should not be removed, both for esthetic reasons and because it might cause people to wash into other dangerous rocks downstream of Dimple. We also felt that the Park should study the feasibility of filling the undercut section of Dimple Rock, using contracts with the Corps of Engineers and the State Highway Department. It should be noted that even if a solution is found, water levels would not allow anything to be done until the fall of 2001. In the meantime, the rest of the safety program should go forward.

This meeting was good preparation for the coroner's inquest, held on November 28th in the Uniontown, PA courthouse. Dr. Philip Reilly has examined other Yough River deaths with an eye towards improving safety. Most of the day was devoted to gathering testimony from people who were there. Family members of all three victims were represented, and the Ohio State Park ranger staff was there in force. I was asked by the Coroner to testify as an outside expert, and was able to answer some questions on PFD testing, river modification, and other issues. Afterwards, Doug Hoehn presented the recommendations of the focus group. In the end, the coroner's jury adopted his recommendations in their findings, commending the focus group for their efforts in

planning improved safety measures for the 2001 season.

Although removing Dimple Rock never seemed like a good idea, the issue of filling the undercut aroused strong passions in the paddling community. After requesting comments on several Internet forums, my e-mails were sharply divided on the issue. In what has to be the most appalling example of insensitivity I have ever encountered, some paddlers sent what amounted to hate e-mails to the grieving Yealy family members who joined on-line discussions. I have often been shocked at what is said on-line after accidents by people on these forums. Remember that e-mails are a very public form of expression, so be careful what you say. I hope to see more responsible communication in the future.

On October 15th a man drowned after falling out of a raft on West Virginia's Gauley River. It was the last trip of the last day of the season. He and his crew had been surfing a hole near the take-out with one of the company's most experienced guides. Although pulled back aboard almost instantly, he was gagging and trying to reach an inhaler that he carried. The crew rushed him to shore, but resuscitation efforts were not effective. This man reportedly had a history of asthma, a fact which was not shared with his guide. This is the second death on the Gauley to involve asthmatics in the past few years, and in both cases they were rescued after short swims only to succumb to breathing problems. Clearly something about asthma that makes swimming in whitewater treacherous, and those suffering from it should think twice before running whitewater. As a minimum, guests should notify their guide of this and any other medical condition which might affect their ability to participate.

I'd like to thank everyone who sent the e-mails, news clippings, and Internet postings that form the basis of this report. This summary would not be possible without you! Readers are encouraged to send us this material in the future. Don't worry, we don't mind getting duplicate submissions. Be sure to let us know if your name or any other information contained in a report should be kept confidential. Please send it to Charlie Walbridge, AW Safety Editor, Rt. 1, Box A43B, Bruceton Mills, WV 26525; Phone 304-379-9002; E-mail: ccwalbridge@cs.com.

American Whitewater Boating Non-Motorized Human Powered Boating Safety Report 1995-1998

By Jennifer L. Plyler, Ph.D.¹

Prologue

It's a bright sunny day. Two friends load an old aluminum canoe and head for the pastoral retreat of a local pond. The fishing poles are along for the ride. The faded orange horse-collar lifejackets will make great backrests as they bask in the sun.

In another part of the country, a group of kayakers set shuttle. They've paddled this Class II-III section of the river successfully many times. They'll end their day by having dinner at the local eatery and discussing paddling plans for the following weekend.

Five expert paddlers are scouting one of the many Class V+ drops that they'll encounter today. They'll be comforted by the close teamwork as they eddy hop down this remote river.

Big water, big river, that's how these friends spend their time together. They load up the rafts and head out for a weekend of fun. They'll camp, tell stories by a warm, glowing fire, and share lots of laughs about the day's events.

These are four very different groups, but in the past few years all of them have ended a day on the water with a tragic, unexpected drowning.

Introduction

The goals of this study were to gain a better understanding of why drownings happen, what preventive measures could be taken to decrease them, and develop a greater understanding of where our boating safety efforts should be focused. Specifically, this study examines comparative risk factors for non-motorized boating human powered accidents for kayakers, canoeists, and rafters. To answer these questions, American Whitewater² studied hundreds of accident reports from American Whitewater Journal (Journal) articles³ and the United States Coast Guard's (USCG) Boater Accident Reports (BAR's) dating from 1995-1998.

American Whitewater requested the accident reports from Bruce Schmidt, Statistician with the USCG Office of Recreational Boating Safety, in the spring of 1999. When we received the electronic files, we understood why it took more than six months to collect and send this data. To ensure the confidentiality of the victims and their families, Mr. Schmidt had to meticulously review all records so that references to names or other identifying information could be removed. American Whitewater commends Mr. Schmidt and the USCG for working to provide us with this information.

The data American Whitewater received was actually based on BAR's submitted to the Coast Guard. Under the Boater Safety Act of 1971, state Boating Law Administrators are required to complete a BAR on all boating accidents and submit the form to the USCG. This information is then entered into a Coast Guard database. Each accident is assigned a record number and contains the date of the accident, cause of the accident, location, water conditions, personal flotation device (PFD) use, alcohol use, vessel type (kayak/canoe or inflatables), and a narrative of the accident.

Reporting of Non-Motorized Human Pow-

ered Boating Accidents

Although all state Boating Law Administrators are required by Law to complete a BAR on all water-related accidents, this isn't always done. Figure 1 indicates that from 1995 to 1998, an average of 14% (18%) of whitewater water-related fatalities were reported in the Journal but not to the USCG via BAR forms. Some were high profile accidents involving top paddlers in the whitewater sport whose deaths were widely reported in the mainstream press. Although the Journal includes only whitewater accident reports and a small percent of the total number of boating accidents compiled by the USCG, it still has the most detailed and accurate reports.

Although the Coast Guard has the most comprehensive database of water-related accidents, their accuracy varies widely. Their information was often incomplete, contradictory, and inaccurate when cross-referenced with detailed whitewater reports submitted by Charlie Walbridge, American Whitewater's Safety Editor.

In many cases, the USCG's records failed to provide a clear description in the narrative for the accident! For example, many narratives read that the "boat capsized" but never explained why.

Many accidents occurred in cold water (below 50 degrees Fahrenheit) but this was not listed as a "cause" per se. Consequently, it was difficult to conclude the role cold water played in accidents for all boat types. Lack of PFDs was not specifically listed as a cause in the narrative. However, on average between 1995 and 1998 over 50% (86) of all accident victims were not wearing PFDs. Although the lack of PFD use was not apparently an issue for kayakers (whitewater, recreational, or sea), it was a major cause of canoe accidents on flatwater. The role of lack of PFD played for rafters was unknown due to lack of information available.

Determining boat types from the BAR's was often difficult. Under vessel type, canoes and kayaks were lumped together, and "inflatable" was a catchall category. There were even instances where the accident appeared to involve a motorboat instead of a non-motorized human powered boat as reported. American Whitewater had to search the narratives closely to determine the exact vessel type, and was not always able to do so. In these cases, the vessel types were coded as "unknown."

Another area of concern was the descriptive terms for water conditions. The USCG defines water types as:

- Calm (waves less than 6")
- Choppy (waves 6"-2')
- Rough (waves 2'-6')
- Very rough (waves ■ than 6')

These categories are more adequate and are more applicable to ocean or lake conditions than to moving water or rivers.

The narratives did not always match water conditions listed or conditions were not reported. For example, the name of the body of water may be listed a lake, but under "water condition" it was defined as choppy, and in the

narrative, the water conditions were described as a "calm lake." In these cases, American Whitewater extrapolated the water conditions from the narratives based on the author's knowledge of certain rivers and lakes.

For whitewater, the USCG could adopt accepted and applicable class ratings used by American Whitewater. Recognized under the American Whitewater "Whitewater Safety Code" (See Appendix), the organization has been instrumental in developing and maintaining an International Scale of Whitewater Difficulty (See Appendix). The scale is the International benchmark for evaluating whitewater difficulty. It ranges from Class I, described as occasional riffles, consisting of low, regular wave patterns to Class VI, a river at the upper end of navigability for expert boaters containing obstacles that significantly increase risks.

It would be ideal if the Boating Safety Administrators used the American Whitewater Class I-VI rating systems to classify accidents on whitewater rivers when some of the USCG data is specific to whitewater vessels (i.e., kayaks, canoes, and inflatables). According to Rich Bowlers, Executive Director, "American Whitewater is committed to working with the USCG and Boating Safety Administrators to ensure that more descriptive and accurate set of categories are included in the BAR's."

Despite the pitfalls within the USCG data, it is the single most comprehensive database of boating accidents. Thus, the USCG database for 1995-1998 supplemented by water-related accidents reported in the Journal, and a similar study by Joan Maybe described in River Safety Report 1989-1991,⁴ forms the basis for this report and the analysis that follows. American Whitewater's intent is to provide general information on boating fatalities, boater profiles, and recommendations for safety programming.

Non-motorized Human Powered Paddlesport Trends⁶

Non-motorized human powered boating trends provide a context for analyzing the safety record of paddlesport participants. We can use this information to help us understand why some boating accidents occur, who is likely to be involved, and what can be done to prevent them. If we know how many people participate in canoeing, kayaking, and rafting, then we can have a better understanding of what the number of deaths tells us.

Through anecdotal information and observations, we know that paddle sports are increasing in popularity. Just ask boaters who have been around a while and they will confirm that rivers are more crowded than ever.

For this report it's important to note is that the total number of participants for kayaks, canoes, and rafters has remained relatively stable since 1995 but for some segments, the number of enthusiasts has changed (Table 1). There are more kayak enthusiasts than ever before and the number of rafting enthusiasts⁵ has increased since 1998 after a significant decline between

1994-1998. Although canoeists make up the largest percent of all enthusiasts, their numbers are decreasing. Boating demographics are also changing. More women are participating in canoeing and kayaking and more men are getting into rafting. Kayak sales (recreational, whitewater, sea/touring) exceed canoe sales even though canoeists outnumber kayakers six to one.

Canoeists had 17.5 million participants and 2.1 million enthusiasts in 1999 (ORCA, 1999). Overall manufacturer and retail sales reflect the large number of participants in this segment given that recreational canoes fall within the top two bestselling boat categories (Table 2). However, boat makers, retailers and the ORCA (1999) report confirm that recreational canoes are not rated as a hot market segment in the future (Table 3).

In 1999, rafters had 8.8 million and 1.7 million participants and enthusiasts respectively. However, the number of enthusiasts represents an over 50% decline from 1995-1998 (3.8 million to 1.7 million-Table 1) (ORCA, 1999).

Of the total number of boaters in 1999, roughly 4.2 million were considered enthusiasts (ORCA, 1999). Of the 4.2 million, the number of kayaking enthusiasts was estimated at 600,000; canoe, 2.1 million; and raft, 1.7 million. According to Jason Robertson, American Whitewater Access Director, of the roughly 2.7 million canoe and kayak enthusiasts (600,000 + 2.1 million), approximately 720,000 are whitewater paddlers.

Overall Non-Motorized Human Powered Boating Related Fatality Trends

Figure 2 indicates that prior to 1995, the frequency of drownings tended to spike every two to three years but remained relatively stable over the years. However, since 1996, non-motorized human powered boating deaths have been increasing annually. This rise could reflect an increase in popularity and corresponding increase in the number of enthusiasts in the sport in the mid-1990s. Or, it might simply represent an increase in reporting as evidenced by the number of reports received on popular Internet newsgroups such as rec.boats.paddle.

The problem is that the data supplied does not breakout fatalities for participants and enthusiasts. But we can make some statements about fatality trends using the total number of fatalities for both of these groups.

Is the recent increase in fatalities significant? Yes and no. Any drowning is one too many. However, the total number of deaths related to non-motorized human powered vessels was 168 out of 32 million participants in 1998, a less than one-tenth of one percent death rate.

Is the recent increase in fatalities significant among enthusiasts? Again, yes and no. The total number of enthusiasts has decreased from 7.8 million in 1995 to 4.2 million in 1999 and the total number of fatalities has increased slightly in recent years.

The number of kayak enthusiasts has increased almost 50% from 2.6 million in 1995 to 5.1 million participants in 1999 while their death rates have remained stable. The number of canoe enthusiasts has decreased from 3.6 million in 1995 to 2.1 in 1999 but the number of fatalities has increased. Finally, the number of rafting enthusiasts has decreased from 3.8 million to 1.7 million in 1999 and their fatality numbers are decreasing (ORCA, 1999 and SGMA and the USFS, 1995). The trends demonstrate that the safety record for kayakers and rafters are good but canoeists are facing some challenges. However, the numbers (total number of enthusiasts versus the number of deaths for each vessel type) show that death rates for enthusiasts for all boat types is negligible. Even when the total number of whitewater enthusiasts (720,000) is compared to the total number of deaths (for enthusiasts and participants), the death rate is still miniscule.

Nevertheless, this recent growth in fatalities should be a wake-up call for all paddlers given that many of these deaths were preventable by wearing PFDs, assessing water conditions more closely, or by using proper clothing.

Where and When Fatalities Occur

Most water-related accidents occur in the spring or summer for all vessel types (Table 4). This fact has remained unchanged since the 1970s.

California, Colorado, and Washington State had the greatest number of accidents from 1995 to 1998 (Table 5). These states have a higher number of whitewater rivers, have extended runoff seasons due to snowmelt, and have longer paddling seasons. Although a connection

to cold water was not substantiated by the data, it is worth noting that rivers in these states are also fed by snowmelt throughout the year.

Causes and Contributing Factors of Non-Motorized Human Powered Boating Fatalities-Introduction

It is important to make the distinction between contributing factors and causes throughout this report. Cold water, improper PFD use, and whitewater are contributing factors but they are not a primary cause of accidents based on the data. They do, however, make a situation worse. In whitewater accidents, failure or improper use of a PFD and exposure to cold water are most often listed as contributing factors not primary causes. For example, a paddler may drown in cold water but the primary cause of the accident could be a strainer or a violent storm. The cold water may have hampered rescue attempts or limited the paddler's ability to save himself but the cold water did not cause the accident.

Causes of Non-Motorized Human Powered Boating Accidents

According to the narratives, the primary causes of all non-motorized human powered boating fatalities from 1995-1998 were (Table 5):

- *Strainers or obstacle in a river that allows water to pass through but is too small to allow people or boats to pass through. Examples include fallen trees, debris, jumbles of boulders.
- *Flooded rivers or creeks that result from heavy rains or increased snowmelt for example.
- *Being caught and held in a large hydraulic. A hydraulic is created when water flows over an object and creating a recirculating upstream flow beneath the water's surface.

In addition to these causes, many boats were described as "capsized" but it was unclear as to what caused the boat to turn over. Thus, many accident causes are really "unknown." But based on the narratives, drownings from capsizing could have been caused by health problems, alcohol, and lack of PFD use.

Some people believe that water-related fatalities in non-motorized human-powered boats

Table 1. Number of Kayak, Canoe, and Rafting Participants and Enthusiasts for 1994-1995, 1998, and 1999

Vessel Type	1994-1995		1998		1999	
	Participants	Enthusiasts	Participants	Enthusiasts	Participants	Enthusiasts
Kayak	2.6 million	400,000	4.2 million	400,000	5.1 million	600,000
Canoe	14.1 million	3.6 million	18.1 million	2.9 million	17.5 million	2.1 million
Raft	15.2 million	3.8 million	9.7 million	1.1 million	8.8 million	1.7 million
Total	31.8 million	7.8 million	32 million	4.4 million	31.4 million	4.2 million

Table 2. Best-selling boat categories in 1999 according to manufacturers and retailers

Boat Category	Retail	Manufacturer
Recreational kayaks	39%	11.5%
Recreational canoes	29.2%	18.9%
Sea/touring kayaks	10.4%	12.9%
Whitewater kayaks	10.4%	4.9%
Inflatables	3.2%	8.2%

Table 3. Hottest segments of the market for 1998-1999 according to manufacturers and retailers ratings

Segments	Retailer Rating		Manufacturer Rating	
	1998	1999	1998	1999
Recreational kayaks	30.6%	25%	10.5%	15.5%
Whitewater kayaks	22.4%	17.6%	13.1%	7.0%
Sea/touring kayaks	18.4%	29.4%	14.5%	18.3%
Recreational canoes	8.2%	7.4%	38.1%	32.4%

are most often associated with whitewater⁸. However, the data tells us a very different story. From 1995 to 1998, the percent of drownings on whitewater versus flatwater were nearly equal (Figure 4). Accidents are just as likely to occur on flatwater as whitewater.

In contrast, boating-related deaths in the ocean were significantly lower than other water conditions despite the increased popularity in sea kayaking. When accidents did occur on saltwater, the majority of fatalities were caused by severe and often unexpected changes in weather conditions such as high winds, waves, or lightning.

Contributing Factors to Non-Motorized Human Powered Boating Accidents

In general, PFD misuse or no use appears to be a major contributing factor in water related fatalities. On the average, 50% (86) of all victims from 1995 to 1998 failed to wear a PFD, or used it improperly (Figure 3). Although the lack of PFD use was not apparently an issue for kayakers (whitewater, recreational, or sea), it was a major cause of canoe accidents on flatwater. The role of lack of PFD played for rafters was unknown due to lack of information available.

Fatalities involving PFD misuse, the victims fell into one of three categories of groups:

- PFDs were not found on the victim or in the vessel,
- PFDs were in the vessel but not worn, or
- PFDs were in such poor condition that they were useless.

Deaths resulting from PFD misuse or non-use are preventable. In fact, deaths related to PFD nonuse continue to rise! According to Rich Bowers, American Whitewater Executive Director, this increase "could be attributed to better reporting of accidents, but whatever the case, no one should ever boat in any water conditions without a PFD."

With the advancements in cold water paddling equipment and clothing, one would expect a decline in the frequency of boating accidents in cold water (<50 degrees Fahrenheit). However, the number of fatalities in cold water has

remained unchanged since 1970s. Figure 5 indicates that cold water conditions could have been a contributing factor in roughly one-third of all water-related accidents from 1995 to 1998. It is disturbing that this figure is essentially unchanged compared to Maybe's (1992) earlier findings for specific boat types (i.e., kayak, canoe, and noncommercial rafts) given the advancements in cold water boating equipment.

For more information on how to avoid factors contributing to and causes of non-motorized human powered boating accidents, please see the Appendix.

Impact of Reporting on Determining Causes and Contributing Factors

Sketchy reporting of the causes and contributing factors was evident in my general analysis of boating accidents. Further compounding the analysis was that many of the causes and factors could be interconnected. For example, PFD use was associated with vessel type as demonstrated with the canoe accident victim profile that follows. In other words, canoe-drowning victims in general failed to wear lifejackets. Of the victims paddling unknown vessel types from 1995 to 1998, an average of 80% (31) did not wear a PFD! Accurate reporting of vessel type could have further substantiated or refuted my analysis of the following boater profiles.

The general data presents a broad picture of boating fatalities, but as we explore further, a clearer image of accident victims emerges.

Non-Motorized Human Powered Boater Profiles

Perhaps the most compelling information that the Journal, USCG data and Maybe's (1992) report gives us is a clear description of who is involved in boating related fatalities, which in turn points to several areas to focus future safety program efforts.

The four scenarios described in the prologue represent the unique demographics of those perishing on our waterways.

Canoeists

Clearly, canoe fatalities occur more frequently than accidents involving kayaks (Figure 6). Although deaths among canoe victims have not returned to the high point observed in 1977, they have been on the rise since 1995. Given that there were 17.5 million canoe participants in 1999 and that recreational canoes were the top-selling boats in 1999, we can probably expect to see an increase in canoe accidents in the next several years (ORCA, 1999 and Paddle sports Business, 1999).

The inexperience of canoe victims is clear when you realize that the primary cause of canoe-related accidents was failure to wear a lifejacket (Figure 7). The typical USCG narrative reads, "Vessel capsized on small pond. Victim was not wearing a PFD." An average of 50% (38) of the victims paddling canoes during 1995 to 1998, and nearly 90% (57) in 1997 and 1998 failed to wear a PFD. The narratives supported that PFD nonuse was the actual cause of most drownings involving canoes, rather than just a contributing factor.

Canoe accidents usually occur on flatwater (Figures 8 and 9). The typical accident scenario involved a fishing trip; a family outing; or a day of swimming on a pond, lake, or placid river. Whitewater was essentially a non-issue among victims of canoe accidents. In fact, only a small number (11) of canoe accidents occurred in whitewater.

Exposure to cold water is often a contributing factor in canoeing fatalities. From 1995 to 1998, cold water conditions were associated with roughly 30% (13) of canoe accidents (Figure 10). Inexperienced boaters rarely invest in cold water paddling gear or may be unaware that it is available.

Kayakers The Missing Link

It is important to note that there is a major gap in the accident reports for kayakers. We do not have information on drownings involving recreational kayakers (i.e., Keowees, Swiftly, Cross-over, and other flatwater kayaks) since the BAR report does not break down kayakers by type. Yet,

Table 4. Deaths for time of year and vessel type

Vessel Type	1995	1996	1997	1998
Kayak	Summer	Spring	Spring	Summer
Canoe	Summer	Spring	Summer	Summer
Noncommercial	Summer	Summer	Summer	Summer
Commercial	Spring	Summer	Summer	Summer
Unknown	Summer	Summer	Spring	Spring

Table 5. Most frequently reported accident locations (state) by vessel type

	1995	1996	1997	1998
Kayak	California Montana Wyoming	New Jersey Tennessee Washington	Colorado California	Georgia
Canoe	Wisconsin California	Massachusetts Washington	New York Oregon Missouri	Alaska
Noncommercial	Multiple states ¹	North Carolina	Multiple states	California Oregon New Mexico
Commercial	California	Multiple states	Multiple states	California
Unknown	Minnesota Washington	Colorado Maryland	Maine Virginia	Florida Vermont

¹ Multiple states indicate that five or more states had the same number of accidents

this is an important market segment comprising the first and third best selling boat categories according to retailers and manufacturers respectively in 1999.

Charlie Walbridge, American Whitewater Safety Editor concludes that there are one or two recreational flatwater kayak deaths per year but points out that this is a fairly safe group given the estimated total number of flatwater kayakers. Thus, they are not addressed in detail but mentioned as a "missing link."

Kayakers can be divided into three categories: sea kayakers, recreational whitewater boaters, and expert whitewater paddlers.

Sea Kayakers

Sea kayaking accidents accounted for less than 5% (7) of the boating accidents from 1995-1998 and the accident rate has remained relatively stable. When sea kayakers were involved in a boating accident, the cause was usually attributed to bad weather or sudden, unexpected changes in weather conditions. Although adverse weather conditions can cause wave swells, ocean conditions *per se* were not a contributing factor or the cause of sea kayaking accidents. In other words, paddling on the ocean is relatively safe if one can avoid unsafe weather conditions.

While sea kayaking has increased in popularity, the accident rates have remained relatively flat. According to Paddle sports Business (1999), sea kayak purchases comprised roughly one-third of all kayak dollar sales in 1999 and 1998. However, the rise in number of participants has not resulted in an increase in sea kayaking accidents. The same cannot be said for recreational kayakers and expert kayakers.

Lee Moyer, President of Pacific Water Sports, Seattle, WA, offered his explanation of the exemplary safety record of sea kayakers. He explained that based on his experience, "Sea kayakers are people who want to know how to avoid dangerous situations not overcome them."

Recreational Whitewater Kayakers

Recreational whitewater kayakers are best described as people who have likely taken a paddling and/or safety class, belong to a whitewater organization, and have paddled for 1-5 years.

Recreational kayakers are considered enthusiasts if they have paddled ten plus times a year according to ORCA (1999). I would qualify this definition and say that recreational whitewater kayakers easily exceed the ORCA's minimum paddle days and typically paddle Class II-IV rivers year-round. For American Whitewater members, more than 33% paddle between 25 and 50 days annually, with more than 25% paddling over 50 days a year explains Rich Bowers, Executive Director (Table 7).

Accidents involving kayakers are on the rise and have been since 1995 (Figure 11). This is not surprising since there was a 50% (2.6 million to 5.1 million and 400,000 to 600,000 respectively) increase in kayaking participants and enthusiasts from 1995-1999 (Table 11), and that retailers and manufacturers rated whitewater boats as one of the hottest market segment (Table 3). Based on market trends, sales of whitewater boats will remain strong even though this segment of the market is growing at a slower rate than recreational and sea/touring kayaks.

The major causes of recreational whitewater kayaking deaths from 1995-1998 were strainers, sieves (a special type of strainer where a congregation of boulders allows water to pass through but larger objects such as people and boats cannot pass), and being caught and held in large hydraulics. Getting into these dangerous situations may have been the result of inexperience or poor judgment, but the data only absolutely confirms a few instances where this was the case.

Unlike sea kayakers and canoeists, whitewater was involved in most accidents among recreational kayakers. For example, from 1995-1998, on the average, 60% (17) of the accidents involving all kayakers, the majority of which are recreational boaters, occurred in whitewater (Figure 9). For kayakers, paddling whitewater increases the likelihood of being involved in a boating fatality but poor physical shape and the strenuous activity associated with paddling whitewater may also be a deadly combination, not the whitewater itself, according to Charlie Walbridge.

A high percentage of whitewater kayakers wear PFDs (Figure 7). On the average between 1995-1998, only 20% (7) of the accidents in-

volved kayakers who were not wearing a PFD. In these cases, PFD nonuse was not a cause, only a contributing factor. If the paddlers had been wearing PFD's, their proper use might have saved their lives.

Another contributing factor to recreational whitewater kayak accidents was exposure to cold water. From 1995-1998, 25% (8) of all kayaking accidents occurred in cold water (Figure 11). Despite the availability of and vast improvements in cold water paddling equipment, frigid waters still present a challenge and a danger for recreational whitewater kayakers.

Expert Whitewater Kayakers: A Class Unto Themselves

All expert boating victims were very experienced by virtue of being regarded as paddlers who had reached the upper echelon of the sport. Many paddle 100 days or more per year. Almost all expert boating accidents occurred in Class V whitewater. As indicated in the American Whitewater river rating system, Class V rivers are more complex and dangerous than the Class III and IV rivers where most recreational boating accidents occurred. In many cases, the dangers of Class V boating are known but the margin for error is much smaller when compared to a Class III river. Even small mistakes can cost an expert paddler his life.

The 1990s were plagued by a number of widely publicized deaths of expert kayakers on Class V rivers. Concerns about extreme kayaking have been expressed. But is this just media hype, or is there really some substance behind it?

In reality, deaths among expert kayakers comprised an average of 4% (8) of the total number of non-motorized human powered boating fatalities from 1995 to 1998 (Figure 11). However, when compared to the total number of deaths among kayakers across all water conditions (whitewater, flatwater, and ocean), the percentage jumps to 25%. Further analysis reveals that among whitewater kayakers, experts comprised 33%, or one-third of all fatalities. This is true of no other boat type.

In examining the narratives of these accidents, undercut rocks and sieves appeared to be the major cause. These causes appear to differ from canoeists and sea kayakers. But are some of the same causes associated with accidents in-

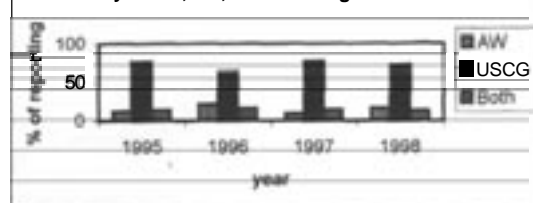
Table 6. Most frequently reported primary causes of accidents by vessel type

Vessel Type	1995	1996	1997	1998
Kayak	Strainer/sieve	Low head dam/undercut	Unknown/inexperience/pinned in water	Strained unknown
Canoe	Unknown/hyperthermia/Large hole	Unknown/strainer/flood	Alcohol/no PFD	Unknown/no PFD
Noncommercial	Flood/pinned in water	Floodfoot entrapment	Unknown/strainer/capsizing	Flood
Commercial	Flood	Undercut/flood/health problems	Unknown/strainer/undercut	Strainer/flood
Unknown	Unknown/Capsizing	Unknown/health problems/capsizing	Unknown/capsizing! bad weather	Unknown/low head dam

Table 7. Frequency (%) of paddling days reported annually by American Whitewater membership

How many days a Year do you paddle (days)?	Percentage
less than 5	1.40%
6-10	7.80%
11-25	24.80%
25-50	37.40%
Over 50	28.70%

Figure 1. Frequency (%) of Accident Reporting by USCG, AW, and Both Organizations



volving recreational whitewater kayakers? If not, how are these elite boaters different from their recreational counterparts?

In the Class V boating accidents, small judgment errors are often fatal. All it takes is a momentary lapse of attention or a missed stroke for disaster to strike! The irony is that disaster may strike an experienced boater who has paddled the same river a hundred times.

Media hype? The numbers tell us otherwise. Expert paddlers are drowning more frequently when compared to whitewater kayakers in general but in the context of 720,000 whitewater boaters, their numbers are negligible.

Inflatables (noncommercial and commercial)⁹

Commercial and noncommercial inflatable fatalities comprise a small percentage of the overall water-related deaths (Figure 11). But some interesting points related rafters are worth noting.¹⁰ For example, noncommercial and commercial inflatable deaths accounted for less than 10% (8) of the total number of non-motorized human powered fatalities in 1995 and 1996 (Figure 12). This percentage decreased to less than 10% (7) in 1997 and 1998. From 1995 to 1998, the combined number of commercial and non-commercial rafting fatalities was less than half (38) the number of inflatable fatalities (noncommercial) reported in 1985 and 1986 (Maybe, 1992)¹¹. These numbers are encouraging.

Rafting fatalities, commercial and noncommercial alike, almost always occur in whitewater (Figure 13). In fact, six of the reported drownings on commercial rafting trips during the time period 1995-1998 were on whitewater. This figure dropped from 100% (6) to approximately 80% (8) for noncommercial raft trips during the same time period.

Several factors contributed to rafting fatalities. On noncommercial rafting trips, PFD use hit a low point in 1985 with half (40) of the victims failing to wear a life preserver. This number fell to 2 in 1995 but rose slightly to 4 again in 1998 (Figure 14).

In contrast, PFD use among victims on commercial raft trips is astounding. In 1996 and 1998, all eleven victims were properly outfitted with a lifejacket. In 1997, only one of the victims failed to wear a PFD.

Deaths in cold water may be on the rise among commercial rafters (Figure 15). In 1995, three of the commercial raft victims drowned in cold water. This number decreased to one in 1998. In contrast, noncommercial raft victims succumbing in cold water averaged less than five in 1995 to 1996, decreased to one in 1996, and increased to five in 1998. Again, cold water may be a contributing factor or may compound the danger of long swims (especially for older people) on commercial and noncommercial inflatable accidents but is not necessarily the cause. However, due to the low numbers, it is difficult to establish trends.

But rafters' diligence seems to be compromised in other areas of river safety. For example, based on the narratives in the USCG database, deaths of commercial rafters were often caused by running rivers during high water or flood stage. The same can be said for victims on non-commercial raft trips. In addition, rafting in flood conditions increases the likelihood of taking a long swim in cold water where rescue may be difficult.

With the number of rafting participants rising over 8.8 million in 1999 (ORCA, 1999), we can expect to see an increase in commercial rafting fatalities, reflecting the growing popularity of the sport. Outfitters are now providing a wider choice of river trips to accommodate the increased demand instead of simply providing traditional seasonal runs. In summary, the close supervision of experienced guides and their constant emphasis on safety makes commercial river runners the most diligent in proper PFD use based on the accident reports studied.

Wrap-up and Summary

The most significant information yielded from this study was that there are groups of accident victims with distinct and contrasting characteristics. On the one hand, we have sea kayakers who, despite the increase in popularity of the sport, are infrequent victims of accidents. Their accident numbers have remained relatively stable from 1995-1998. When accidents do occur, they can be directly attributed to poor weather conditions.

Canoe accidents have been rising since 1995 despite the drop in the number of participants. However, with canoeists comprising over 55%

(17.5 million) of the number of paddling participants in 1999 (ORCA, 1999), we would expect to see more boating accidents among this group than any other. Inexperience plays a major role in the drownings of these boaters given that the primary cause of death is PFD nonuse or misuse.

Recreational whitewater kayakers and expert whitewater kayakers are experiencing an increase in accidents but for slightly different reasons. Further, the number of participants and enthusiasts is increasing in both segments.

For inflatables, commercial and noncommercial alike, we have seen an explosion in the rafting industry but accident rates are steady and relatively low compared to canoeists and kayakers.

What makes the difference? Several factors seem clear. Let's compare apples and apples. Sea kayaking is similar to rafting and whitewater kayaking in that there's been a steady increase in the number of participants over the past five years.

Why are whitewater kayakers and inflatables more prone to accidents than sea kayakers? The answer is whitewater and its built-in dangers. But inflatables are paddled in whitewater, and both inflatables and whitewater kayakers are used in Class II-V rivers.

What makes inflatable and sea kayak accident rates lower than whitewater kayakers? Although commercial outfitters have expanded the number of rivers viable for commercial trips, kayakers still have access to more difficult and dangerous rivers year round. In other words, the number of more difficult rivers kayakers paddle may account for the difference in their safety records from rafters.

In general, the trends show that the number of participants is remaining the same but fatalities have increased in recent years. For enthusiasts, their numbers have decreased and the total number of fatalities (enthusiasts numbers are not recorded separately so based on total number of deaths) has increased. The safety records of kayakers and rafters are positive while canoeists are faced with some challenges. When the number of fatalities is compared to the number of participants, enthusiasts, and whitewater boaters, across ALL boat types, the death rates are negligible.

Figure 2. Total # Fatalities

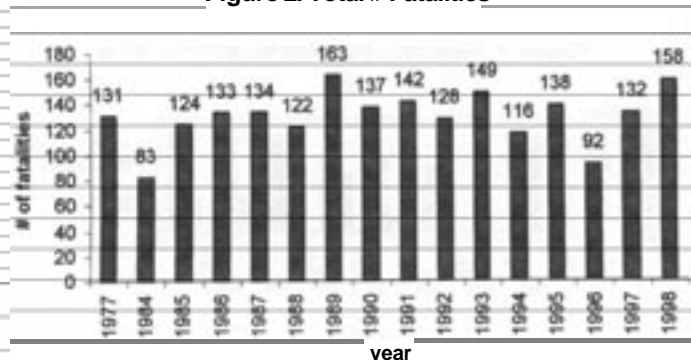
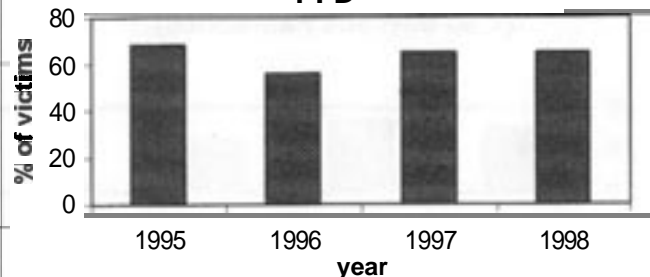


Figure 3. Fatalities (%) Involving No PFD



Proposed Solutions

Many canoeists, kayakers, and rafters could benefit from a "Paddling 101" course where the importance of wearing a PFD and proper clothing, and evaluating water conditions and river levels with one's skills would be emphasized. This is already covered in the American Whitewater Safety Code, a copy of which is included with this safety report (See Appendix).

Boaters can also take precautions to avoid the causes and contributing factors listed in this report:

The good news is that we have a good way to reach the whitewater paddler community. For example, based on the 1999 American Whitewater membership survey¹², American Whitewater has access to more than 80,000 boaters through an established network of affiliations. In addition, about one in six boaters belong to a single whitewater club, and many others are members of multiple clubs. These local paddling clubs already provide safety courses and publish newsletters with this information for their members.

The segment of the population that doesn't belong to a paddling club or organization presents a greater challenge. How do we reach casual boaters launching old aluminum canoes or store bought inflatables with basic safety information? And is it a reasonable goal for a "whitewater" organization to educate them?

Absolutely! American Whitewater's safety mission clearly states, "... American Whitewater provides information and education about whitewater rivers, boating safety... American

Whitewater promotes paddling safety..." American Whitewater is in an ideal position to be a leader in non-motorized human-powered boating safety.

And what about the expert paddlers, the people we expect to know and practice basic and advanced safety procedures? Unfortunately, the numbers tell us that even if they have this information, one-third of the whitewater kayaking accident victims may be expert boaters.

Next Steps for American Whitewater

This report suggests four steps that American Whitewater can complete in order to continue its leadership role in boating safety:

1. Persuade the Coast Guard to change the BAR form to list vessel types as follows: commercial and noncommercial inflatables, canoes, and kayaks. Moving water conditions should be based on the American Whitewater Class ratings system, or simply listed as "no current," "fast current," and "whitewater rapids."
2. Improve detailed reporting of all water-related accidents to American Whitewater and the USCG and improve training for investigating officers so that these accidents can be reported more accurately and with more detail.
3. Strengthen American Whitewater's partnership with the America Canoe Association, USCG, local paddling clubs, paddling equipment manufacturers, and others who are interested in elevating the issue of paddling safety.

4. Develop safety programs to reach three very distinct audiences with slightly different messages (expert kayakers, recreational kayakers and rafters, and casual canoeists).

Questions or Comments?

If you have questions about this report, please contact Jennifer Plyler at jpls98@erols.com/301.349.5101 or Charlie Walbridge at ccwalbridge@cs.com/304.379.9002.

I wish to thank the USCG, especially Bruce Schmidt, Statistician; Charlie Walbridge, American Whitewater Safety Editor; Lee Belknap, American Whitewater Safety Chair; Rich Bowers, American Whitewater Executive Director; Jason Robertson, American Whitewater Access Director; Phyllis Horowitz, American Whitewater Administrative Director; Brian Chitwood, Confluence; Lee Moyer, Pacific Water Sports; and Holly Decker and Lee Ann Carol, Perception for their support and cooperation in working on this safety report.

Literature Cited

Maybe, Joan (1992) *River Safety Report 1989-1991* and *Boating Safety Report 1995-1998*. American Whitewater. 301.589.9453 or <http://www.awa.org>
Outdoor Recreation Council of America (ORCA). 1999. Outdoor Recreation

Figure 4. Fatalities (%) and Water Conditions

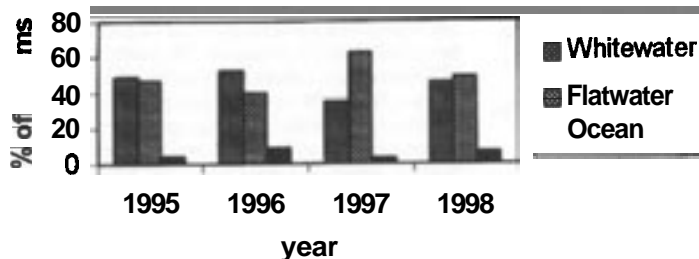


Figure 6. Fatalities (#) for K1 & OC1

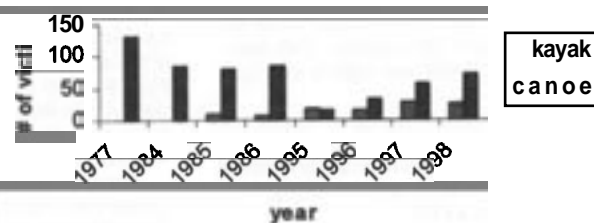


Figure 5. Fatalities (%) in Cold Water (< 50 degrees Fahrenheit)

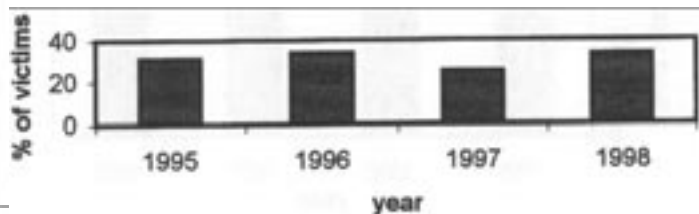
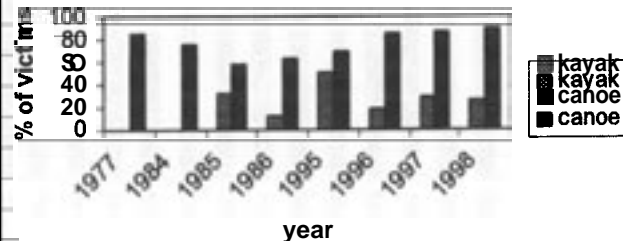


Figure 7. Fatalities (%) With No PFD for K1 & OC1



Safety Supplement

Participation Study for the United States, Second Edition. Highlighting the Enthusiast. Prepared by Leisure Trends Group/Gallup. Boulder, CO. 303.786.7900.

Outdoor Recreation Council of America (ORCA). 1997. Outdoor Recreation Participation Study for the United States, Second Edition. Highlighting the Enthusiast. Prepared by Leisure Trends Group/Gallup. Boulder, CO. 303.786.7900.

Paddle sports Business. 1999. 1999 State of the Paddle sports Industry Report. Sponsored by Paddle sports Business and Canoe and Kayak Magazine.

Sporting Good Manufacturers Association and the USFS. Principle authors: Cordell, Ken, McDonald, Barbara, and Briggs, J. Alden. 1995. Emerging Markets for Outdoor Recreation in

the United States based on the National Survey on Recreation and Environment. <http://www.outdoorlink.com/infosource/nsre>.

Biography on author and American Whitewater Safety Personnel listed in Appendix
For more information on American Whitewater, see the Appendix

See Appendix for example of a river accident report from American Whitewater Journal
Numbers in parenthesis after percentages indicate the number of people.

Maybe, Joan (1992) River Safety Report 1989-1991 and Boating Safety Report 1995-1998.

For more detailed information on non-motorized human powered boating trends, including boat market data, please see the Appendix.

According to ORCA, an enthusiast is defined as someone who paddles at least 9-10 times annually.

Whitewater is defined as any body of water with current (Class I) to Class VI while flatwater is defined as having no current.

Inflatables are defined as either commercial raft trips where a guide from an outfitter is paid to captain the boat or a noncommercial inflatable, which is a raft guided by a private individual without the services of an outfitter.

Due to the low number of inflatable fatalities, it is difficult to establish "trends" per se.

Commercial rafting fatalities were unavailable for 1977 and 1984-1986 and non commercial rafting fatalities were unavailable for 1977 and 1984.

American Whitewater Membership Survey, September, 1999. Random mailing to more than 2300 members with a return rate of approximately 25%.

Figure 10. Fatalities (%) for K1 & OC1 in Cold Water (< 50 degrees Fahrenheit)

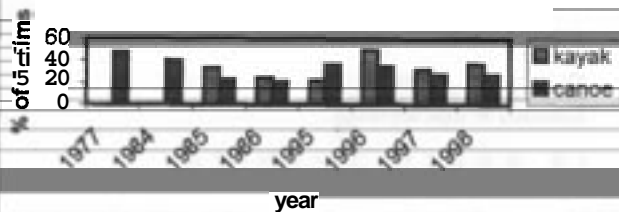


Figure 13. Fatalities (%) Occurring in Whitewater for Rafts

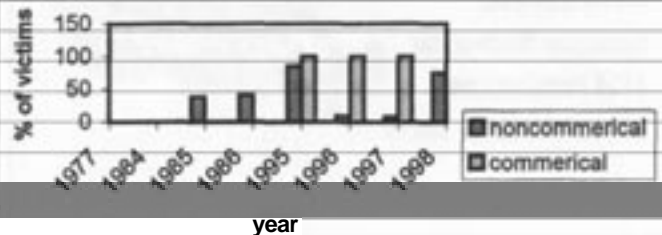


Figure 11. Fatalities (%) of Expert Paddlers (Class V) Among All Boaters, K1, & K1 Whitewater

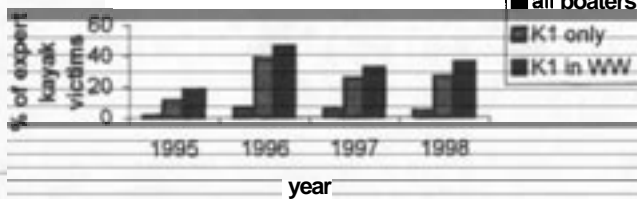


Figure 14. Fatalities (%) With No PFD for Rafts

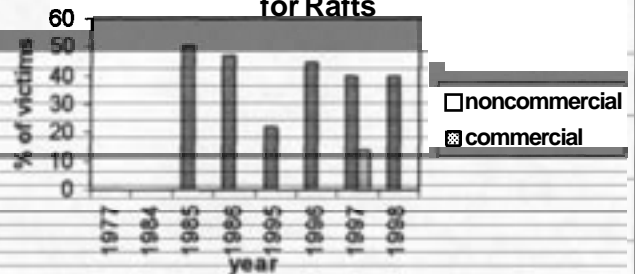


Figure 12. Fatalities (#) for Rafts

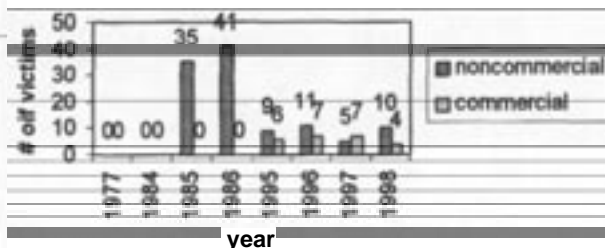
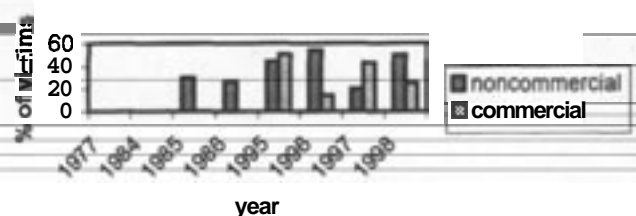


Figure 15. Fatalities (%) in Cold Water (< 50 degrees Fahrenheit) for Rafts



AMERICAN WHITEWATER SEEKS MARKETING CONSULTANT

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The Friend from Hell

By Duke Wavewalker

Part 1

It's a stormy Friday afternoon, damp and chilly with stiff wind that invades your clothes and makes you shudder. The late sky is dimming as the sun, well hidden by storm clouds, marches west. The workweek is done. There's cash in your wallet. Friday night is fast approaching.

You sit on the couch and click the remote control. "Oprah" invades your home. For grins, you turn the CD player on and Frank Zappa's "Apostrophe" comes to life. Frank and Oprah, what a couple.

Crack a cold beer and the phone rings. It's the girlfriend. Uh-oh. She's had a bad day and insists on coming over to expound on every detail from start to finish, about...something. You're already doing it. Practicing. Nodding and saying, "Yes, dear, that's terrible...etc., etc." Like you want to hear it. You tell her to pick up a pizza on the way and she hangs up. Looks like one of those nights is about to begin.

The News comes on and along with it, the weather forecast. You marvel about the career of being a TV weatherman. Stand in front of a screen that doesn't really exist and make various sweeping arm motions. You find yourself standing on the couch, practicing. The info provided in the marine forecast shows that the surf has built. The gear, in its ever-ready status of fully packed, waits in the garage. Early AM rise and shine is the plan. A possible Coyote escape may be required.

She arrives. No pizza. No videos. No beer. What the hell is this? She has not had a good day. And by the look on her face, a distinct air of disgust, and curt manner you know this is not going to be a fun evening on the couch—or anywhere else under your roof.

And she has cramps. Fangs, claws, and string warts are on the way.

You are now a prisoner in your own home, a hostage held by a bad tempered creature with 2 X chromosomes. You can just imagine how good the Tehran Embassy hostages had it. They only had to listen to Radical Islamic Fundamentalists for 400 some-odd days. Like those famous hostages, you hope for a rescue. The situation is getting desperate. You look about the room for a way, an implement to use

in either an escape or suicide attempt. Chew through the plaster and bolt? Club yourself to death with a back issue of Rolling Stone?

"Did you hear what I said? What did I just say?"

A white van roars up to the front of the house, its stereo blasting the Sex Pistols and its pilot jumps out, slamming the door behind him. Bounding up the front steps, he's inside in a flash, like there was no door at all. Amazing!

He flops on the couch near your girlfriend and tosses a can of Bud across the room to you. He pops his beer open and puts his feet up on the lobster pot coffee table. Not a word has come from him yet. The room is silent. If the now seething anger pent up inside your girlfriend were suddenly converted to atomic radiation, it would be "Welcome to Chernobyl."

He looks at her and slowly breaks into a grin, sensing that his timing was, as usual, a surgical strike, a smart bomb that found its mark. She bristles. You are now biting your lip to suppress a maniacal laugh that is barely confinable.

"Hi, Babe, did I interrupt something, a private party perhaps?" He then turns to you and grins again. He takes a sip of his beer and gives the thumbs up. One word is spoken, quietly and evenly toned; a key word that finalizes this daring and dangerous hostage rescue.

"Bonnet."

The incredible surf of Bonnet Point is going off. Right now. You stare back at him and slowly allow a smile to creep onto your face. Mission accomplished. You hear the sound of the bathroom door slam and What's Her Name is gone for the moment. You run for it out the back door.

In about three minutes flat you both have the boats and gear loaded on the van. Pit crew precision and accuracy, nothing has been forgotten. Both empty Bud cans now empty and flattened under the heels, have been strategically placed under her windshield wipers.

It's totally dark now as you roar off to surf Bonnet Point. You know all things at this

moment, as if thoughts are puzzle pieces and they fall into place. Big waves, a clearing sky with a bright moon, cold ones at the Willows later. Perfection is in your grasp.

A quirk in the thought process kicks up "Girlfriend." You know you won't see her for some time after this night, maybe not ever again. After suiting up and paddling out to the green water beyond the break, you raft up for a moment. You then thank your friend for the rescue and admire his keen sense of timing.

"Hey, no problem, Dude. I'm the Friend From Hell!"

Part 2

Somewhere else, a brief time later, a couple is reaching critical mass. He looks forward to a weekend together, reading the paper over coffee in her East Side townhouse. She, a budding creek boater armed with a roll and a positive attitude, dreams of the Monroe Bridge section of the Deerfield. Sunny weather, water and her new RICA acquaintances. A fun gang. Get out of the city. Away from another smothering weekend, the inner city heat, and a boyfriend that tries to overwhelm and possess.

They dine on Friday night at a swanky place. He's forgotten his wallet. Again. Her cash is going. That was for the Deerfield. She mentions this. He turns on her.

"Waddya mean you're going kayaking again? Is this gonna' be a habit? I don't like this."

She's starting to notice how his diction is getting worse, his possessiveness growing and his shredding of her friends and activities gets more and more out of line everyday.

"I'm not spending another weekend in this city. I want to get out to the country. Come along or stay behind."

"This sport of yours is stupid. What's the purpose? Spend money on this junk and do crazy things that can get you killed. Who are those losers, anyway?"

"They're my friends. Don't you dare call them losers!"

They storm out of the restaurant and head to her place. She wishes he would just leave. Now he's being nice again. The subject of kayaking is lurking in the shadows, unmentioned, not forgotten. Her gear, already packed waits by the door, her boat and paddle standing in the stairwell outside like silent sentries. When she walked past, the paddle seemed to stand a bit straighter and almost salute her. When he walked past, the boat slid along the wall, almost knocking him back down the stairs.

Five past six, the alarm doesn't go off. While she enjoyed her solitude of sleep, he switched it off, an effort to control her time, her life, and her boating.

She dreams on—of someone else. Not the



jerk who's residing here on borrowed time, but a prince on a white horse. At six fifteen the door, though locked, opens. She awakes with a start. Peering out the bedroom doorway, she sees a shadowy figure. Out in the hall, her boat is gone. Thieves! Burglars! She moves to wake her lover (?) and suddenly stops. Her gear bags are gone.

Turning slowly so as not to wake S***head, she draws the shade. A white van, festooned with kayaks, is parked on the sidewalk.

She notices her boat is there, her paddle, too. Getting up, slowly and quietly, she pulls on jeans and a sweatshirt. By the door she steps into her sandals. She eases the door shut and treads down the stairs. Opening the passenger door to this white van, she jumps in. The driver hands her a coffee.

"Thanks. Where did you learn to pick locks like that?"

"No questions, no lies, I'm your Friend From Hell!"

Part 3

The archtypical Friday night had come and passed in the usual fashion. Home from work, shower, send out for a pizza and have a couple of beers. Out to the garage and load up the boats, pack the gear and do the mental checklist one more time. Give it the once over again.

At one from the next room means a call is incoming. Grabbing the cordless and sitting back at the desk, feet up he addresses the caller.

Bad news. Can't go tomorrow. Girlfriend dumped him.

"Just be at McDonald's at 6:30."

"Gotta settle up on things with her."

"Did she take your boat?"

"No."

"Then be there."

Jump to the morning. The rendezvous is complete, the additional gear stowed and the van heads north to this guy's first Class IV. He's shaken in the confidence department. Big water, big change at home.

"She even took the cat."

"You didn't like it anyway."

The passenger is rattling away. Subjects are narrow: the river and what to do about the girlfriend.

"Hey, she's an ex-girlfriend now. Not to worry."

Three hour ride. Seems like three days with a radio that only plays Rush Limbaugh. Pretend to drift out of range. That works and it fades.

It is a beautiful sunny day in late summer. It is adequate water and a nice comfy Class IV—for you. For your buddy it's sheer terror, but he runs clean lines through the big stuff like a pro. Cool. At one point you're both in the same eddy. He starts about his girlfriend. You point to a raft laden with cute female passengers. He isn't encouraged.

The take-out approaches as the water starts to drop, a sure sign that the power company is sticking to their agreements to the letter. You change clothes, tie down the boats, crack a cold one and head to camp. A stop in the

village produces grub and some scotch.

The tents are up, the fire is going and the driver prepares the food. Looks like a lot of just the two of us. Feel like cooking. Save some extra for a quick breakfast. Get on early tomorrow.

Just as dinner is about ready, a Jeep festooned with female raft customers pulls in. Amidst a sea of smiling faces you notice they brought a cooler of their own. Cool.

The night goes on and the Earth turns.

Early AM. The Jeep returns to retrieve a straggler. A honk of the horn is all it takes as a scantily clad blond raft bunny dashes from tent to vehicle is no time flat. No words are spoken as breakfast is reheated on the stove and the coffee starts perking away.

Later at the put-in, two boaters slide into the water, warm up and head down to the first playwave.

"I'm Psyched to boat today."

"Sleep well?"

"Yeah, you?"

A grin shoots from ear to ear. Agrin that transcribes a million words. Agrin that every guy knows the meaning of. Yet not a word out of him. He peals out of the eddy and grabs a wave, carving the face in fine form. Still grinning. Then he hears the words, one in particular lurches out.

"Still thinking about your girlfriend?"

"What girlfriend?"

That's what Friends From Hell are for!

Riding the Bull

By April Lewandowski

"Hey, babe, will you throw me my skirt?" Marcy took hold of the thick neoprene with her mouth and slid the sprayskirt off the line. Andy grabbed the paddling gear from her arms and threw it into the back of the silver-grey Toyota; the thick plastic made a clunking noise.

"Woohoo, it sure did rain a lot last night," Andy said with a little too much excitement for six in the morning. The air outside was crisp. "Bet the ol' Chattooga's running at least 3.6 feet. What do you think?" Marcy cradled her mug of warm coffee and nodded sleepily.

"I'm sure it's at least running 2.6. Think that'll be high enough for Kip?" she replied as she placed the dry bag and the sandwiches in the back.

It was the first of the winter paddling days. October had gone by slowly and warmly for that matter. The coldest day had been in the

high 50s. But sometime around Thursday, a cold front had moved in bringing highs in the 30s, rain, and high water. Marcy didn't particularly like the cold weather paddling—five layers of clothes restricted her from fine, precise movements and turns, and she felt all the layers made her look fat. She much preferred sunny, warm days of skinny dipping paddling, the days when she would only wearing the necessities—a lifejacket, sprayskirt and helmet. Andy liked those days, too.

She and Andy met on a beginner's kayak clinic she taught the year before. Andy was hardly a beginner; he been running the Nantahala and playing at the Falls, but his roll wasn't all that reliable. Andy showed up at the clinic on Saturday, a day later than the other folks, and he had "punk" written all over him. He loaded his boat onto the trailer without asking, stripping off his shirt to flash his cata-

log of trendy tattoos: Greek letters and Ying-yang symbols. She covered Andy with a thick blanket of expectations: he would be a smart-ass, wanting to play in holes and surf waves, skills they weren't teaching the others yet, and he would challenge the leadership of women paddlers.

But he proved her all wrong. True, his tattoos were trendy, and his pierced nipple surely reflected some whimsical decision after one too many beers. But Andy proved himself to be nothing that Marcy had expected. He coached unintrusively, helping some of the more able paddlers with their eddy turns and peel outs. In fact, she had been embarrassed to feel the slight fluttering in her chest every time she heard his boisterous laugh.

"Alright, we're good to go." Andy slammed his door tight. "How ya feeling?" Marcy noticed his enthusiasm shook the little truck;

his smile and voice held the excitement of a kid with a new Happy Meal toy. His eyes brightened as he bellowed out a hardy laugh.

"Good, good. Not too bad," Marcy said, hoping her grogginess would disguise her tension as she leaned over to change the radio station. Andy placed his hand on her back, running his fingers gently to the nape of her neck, caressing the soft skin that was hidden by her brown hair.

"How's this?" Marcy asked, settling on the local NPR station and sitting upright, guiding Andy's hand down to her side.

"Great. You'll probably have to change it when we pickup Kip. He hates the news," Andy replied.

Andy learned his roll in five minutes, maybe ten. But it took Marcy six months to get a roll as good as the one Andy picked up instantly. "It must be your boat," Marcy said, hoping he wouldn't get too cocky from his newly accomplished skill. "I just have a good teacher," Andy flashed a wide smile. Marcy nodded with agreement as she shoved him over. He rolled again. "Yep, a great teacher," he said blowing water from his mouth and cracking a wide smile.

"Wanna try a hand roll?" Marcy asked not thinking Andy would live up to the task, or at least not try it so fast. He tossed his paddle toward the shore and leaned over. He almost made it up on the first go except his head came up too soon, pulling him down quickly toward her. Marcy grabbed him under the arms to right him, only she didn't let go when he regained his balance. "You held on too long," she muttered to herself as she moved over to work with Dean on his roll.

The truck rumbled into the driveway, the gravel pelting it sounded like a machine gun opening fire. "I'll go get Kip. Can you move the stuff to make room?" Kip, all six feet four inches of him, stumbled out of the door carrying his paddling bag. Marcy tossed Andy's clothes to the back bed and slid over toward the middle, the gearshift making it impossible to stretch out her legs.

"Hey, baby," Kip kissed her on the cheek. His breath reeked of reefers and beer. Marcy's eyes rolled over toward Andy as he gave her a yeah-I-know-shrug.

"You doing alright today, Kip?"

"Babe, I'll be doing a hell-of-a lot better once we get on that badass water. You hear me Andy?" Kip said spitting into his Gatorade bottle.

Andy nodded and pressed his body against hers, "Yeah, I hear ya man. We should have some big water today."

"Yeah, and ol' Marcy gonna get some big water today. You gonna run the Bull aren't you?" Kip reached down to change the radio station.

Marcy pretended to sip her hazelnut Java, "I don't know, Kip. The Bull really freaked me last time." She hated to admit it—Bull Sluice, the Class V rapid, the rapid she had run 100 times, ripped her up. She took the upper ledge

a little too far river left and the drop spun her out in the top of the hole upside down. The Bull bucked her and left her no chance but to spend a few seconds of eternity in the thrashing, churning ride of the wave upside down. Somehow her paddle had gotten away from her when she flipped. Then the hydraulics ripped her body away from the front her boat slamming her against the back deck each time she tried to pop the grab loop of her skirt.

She rubbed her right cheek thinking back to the nasty bruise she got from the bull-ride. There were times when the Bull got down right spiteful—the Bull had drowned seven others before. She had been lucky; it had merely kicked her in the jaw and given her a good scare. Today with the high water she suspected the Bull might trample her. She just didn't know.

"Heck, you can run it Marce. You've done it before," Andy assured her as he pushed up his sleeve; the Toyota hiccuped as he shifted into fourth.

He was right. In fact, they ran the Bull together on one of their first paddling dates. Marcy stockpiled the nerve to actually call him, to ask him casually if he wanted to paddle. Just paddle, she thought. There's nothing wrong with just paddling. She paddled with guys all the time. "So you want to go?" she asked as if he would really lie to her. Perhaps there was really nothing to it. Andy had wanted to paddle some bigger water and she offered to take him down the Chattooga, where she worked all summer as a raft guide. He went. They went. And she thought of how guys measure the worth of relationships on the "hangout scale." Good relationships mean doing stuff together rather than spending time in good conversation. They would just paddle.

They paddled hard. The afternoon was spent surfing holes, toppling over waves, splashing around in the warm August water. But in between runs, in the quiet stillness and slow of the smooth stretches of river, they talked. The usual—parents and friends, what brought them to Western, boats and paddles, and future goals. Then they talked of God and religion, and of dreams and fantasies. They talked of running class fives only to make wild, passionate love on shore after each rapid. Talk came unusually easy for Marcy. She found herself disclosing more to Andy than she wanted. But he asked questions and listened; he made her feel safe.

"Hey Marcy you're so fine you're so fine you blow my mind. Hey Marcy. Hey, hey, hey Marcy," Kip belted out his version of the 80s tune as he danced around in his seat, inching his way into Marcy's personal space.

"What are you on?" she asked as he hugged her. She felt the sandpaper scratchiness of his unshaven neck and smelt the pine scent of his deodorant.

"We're going to the river! Yehaw!" Kip rolled down the window and shouted at the cattle. They didn't seem to care too much and

continued to graze. She pushed Kip back to his side of the seat. Luckily the drive from Cullowhee to Clayton, GA, was only about an hour. It had been at least 20 minutes.

"Only forty more minutes and we'll get this boy to the water," Andy seemed to sing out.

"Thank God," Marcy sighed as she looked for something to read. Finding an old *Sylvia Herald* and the *Toyota's Owner's Manual*, she decided to read up on "Fluid replacement."

Paddling was an addiction. Alcohol. Cocaine. Ecstasy. All good stuff, but nothing could beat good, old-fashioned adrenaline. It was a natural rush, a chemical made by your own body and thrill-induced. It was cheaper and, best of all, it was not illegal to get it or have too much of it, and you didn't get hangovers or flashbacks either. Marcy and Andy had it bad. And Kip had it worst of all. They would run almost any river or creek at any level just for the thrill and just because they could.

"Marce, did you get my skirt?" Andy asked. Kip had his Leatherman out trying to fix the clasp on his noseplugs.

"Yeah. Remember, I handed it to you before we left."

"You sure?"

"Yeah. You threw it in the truck yourself."

"Hey, now," Kip interjected, "I don't want to see you two lovebirds fighting," he said ending in smacking kissing noises.

Andy pulled over to the side of the road and ran around back. "I guess you were right." Marcy stationed herself to the middle of the seat careful not to brush either of the two men next to her and flipped through the rest of the manual.

"Hey, Andy, give a stop at the BP down here," Kip said.

"Sure, man."

The old truck clicked down a gear and halted to a stop.

"I'll be back." Kip's old jeans clung to his tight butt and his broad shoulders sat stacked like a cross above his torso.

"Did you really have to check for your skirt?" she asked somewhat hesitantly, swatting at the imaginary fly inside the cab.

"Yeah. I didn't remember putting it in. Did you get our d y bag, too?" Andy asked casually turning the engine off as they waited for Kip.

"Yeah. It's there. I got it from the basement this morning," Marcy said in a monotone voice looking at the section on brake repair.

"Hey there little campers, how 'bout some Sam Adams? Two-fifty." Said she had an overstock or something," Kip interjected. His presence was as uncomfortable as if he had laid his long body down across the top of Marcy and Andy's, hogging all the space and squishing their legs.

"Thanks." Marcy dumped her cold coffee out the door and grabbed a bottle of Sam

Adams. Andy glanced at the bottle and rapped his hands on the steering wheel to a song he must have been playing in his head.

Kip kept going off about the good deal he had scored at the BP, two packs of Sam Adams, a pack of Pale Ale, and two of the last bottles of Newcastle all for twelve bucks. Even so, a silence hung stale inside the truck until they pulled in to the put-in just above the 76 Bridge.

"Hey, Andy," she said grabbing the loop of his jeans before he got out, "I might just run shuttle today."

Andy sat down, putting his hand on her knee and grasping the lobe of her ear between his thumb and forefinger. A tremor of electricity pulsed through her body and she bowed her head as if in prayer.

"You know," he said, walking his hands down the sides of her face, eventually finding a resting spot on the zipper pull of her blue fleece. The crackling of the plastic zipper coming undone caused her heart to pound harder. "I was thinking we might let Kip paddle out a head of us and scout the rapids." He grabbed her leg and slid it over his.

"I was hoping so, too," she said letting his cold fingertips find sanctuary in the warmth of her stomach. She clasped her hands on his, squeezed them and gently pushed him away.

"Me, too," she whispered to herself again as she left the truck to unload her gear.

"Buckaroos, are you ready for some big, crazy water? We got some big water. Yessirree, the ol' Kipper's gonna paddle some big ol' water today." Kip's voice echoed in the parking lot and seemed to dance on the treetops.

Andy grabbed his Mr. Clean. "You ready, Marce?" he asked as he headed toward the trail.

"Yeah, I'll be there in a minute," she told him. She also told herself she'd at least get all the gear out and if she didn't feel ready by then, she just wouldn't go. Kip was running laps around the parking lot; he looked like an Olympic runner taking a victory lap after the race. His shaggy blond hair fell rhythmically in his chiseled, surfer-like face.

"Hey Marce, you coming?"

She almost said "No," but was forced to follow Kip as he carried her kayak down the trail to meet up with Andy.

"We got the Bull first thing. You ready?"

She hadn't forgotten and she wished they would stop asking her if she was ready. The Bull was the first thing indeed. She imagined herself running it, putting it just above, stretched out and loose, hitting her line just right. She saw herself landing from the first ledge to ride the froth and to miss Decapitation rock. All she had to do was hit the line. If she hit the line she would stay on the river and hang through the next Class IV-V rapids, Corkscrew, Jaw Bone, and Sock 'em Dog. If she missed, she would eddy out and know better than to violate her intuition next time.

Andy popped his skirt right on his boat, the rubber rand sealed like a plastic Tupperware container. She could see the silhouette of his

muscular shoulders even through the covering of his red spray jacket. His body moved gracefully as he slid into the water catching the eddy just above the Bull.

She thought of their first time at the Chattooga. They ran Section Four, all the rapids, and had paddled the two-mile stretch of Tugaloo Lake to make it to their shuttle. "One more time," Andy seemed to suggest, tying the boats with a quick, agile enthusiasm. Marce had just shook her head "yes," thinking to herself how she would run it with him as many times as he wanted. It was the edge of dusk: the forest horizon slowly swallowed the sun as they walked their boats down the path to run the Bull for the second time that day. Andy encouraged her to run it first. She did and Andy followed her to shore with gliding smoothly through the roaring rapid.

"You got it, Andy," she cheered loudly and he turned around and winked at her. The mist of water rose between them, blurring her vision of him. She could smell the mustiness of her river clothes. Kip placed a dry bag in the back of his Necky.

After that second run on their first day, Andy pulled his boat quickly to shore. He yanked Marce's boat by the grab loops and saddled himself on the deck of her boat cradling her torso with his wet legs. "Thanks," she said like he was doing her a favor, and she reached out her hand to grab his thigh. He moved forward, his knees digging into the dirt as he straddled the boat. He stretched out his hands to undo her helmet. Her long wet tresses fell around her neck as he flung the round plastic helmet into the trees. "I'll get it later," he said breathing through his nose as he nudged his chin towards hers. "Right now," his lips pressed against the pulse of her neck, "we don't" she pulled him closer, "need," he looked her in the eyes, "helmets." Marce nodded in agreement seeming to suggest that they didn't need any of their gear for that matter. She unbuckled Andy's helmet and tossed it into the woods.

Andy looked back and gave a good-luck wave and the fast water gnawed at the edge of his bow, turning it little too far right into the current. Marce yanked her waving hand down and attempted to snap on her spray skirt. It popped off. Andy's boat rolled as he came off the ledge. "Shit! Come on," the rubber rand was refusing to seal. She yelled at Kip, who was sitting off the trail taking a smoke, "Andy's down!" She watched the red boat churning in the top hole and she hoped Andy had enough guts to hang with it till the water would push him out so he could roll. "Come on," she tried to coerce her spray skirt into stretching just a little further. As she glanced up she could see the fist of water holding the bright red boat against the rock; Kip was booking it down the trail.

If Andy had stayed in his boat he would be pinned against the rock. If he had bailed at the

top he still might still be recirculating. Marce didn't know and she didn't have time to wait around to see. Because her boat was already in the top eddy, she would have to run the Bull. She hoped that Andy had gotten pushed out of the hydraulic or managed to escape from his boat just before it pinned.

She scraped the grainy beach as she slid into the eddy. Her boat seemed to peel out without her having to think too hard and she set her line effortlessly. The fury of the water crashed beside her as she dropped into the first hole. The Bull was kicking and snarling. She focused on the red boat down below. Punching with every inch of force inside her, she rode the bucking Bull for what seemed like the full eight seconds. It's rage maddening with every forward stroke. She saw the red boat, still upside down and held in place by the fist of water.

"He's down there," Kip hollered and pointed toward the bobbing blue lifejacket in the eddy behind the rock. Marce paddled furiously to the body. The crisp wind slapped against her face causing her eyes to tear. She flipped from her boat; the chill of the water seized her breath. She grabbed him under his arms, flipped him right side up and swam for shore. His body seemed heavy as she lugged him onto the sand. Kip paddled over and grabbed her paddle and boat.

She unfastened his lifejacket. Her tan hands tilted his head as she leaned forward hoping to hear him breathe. She repositioned the head. Andy's body convulsed, shaking violently as he began to wheeze spew vomit. It was as if all the water he had swallowed was erupting from within him. Rolling him over on his side, Marce cleared his airway, trying not to notice that her abdomen felt like someone was piercing it with shards of hot iron. Andy's chest rose on its own, Marce's fell as she breathed out.

Kip sat in the eddy, ready to ferry across the river to get help need be. The morning sun ran its fingers across the waves. The sloshing water hummed in the background as the red boat rocked in the unsteady motion of the eddy. Marce cradled Andy's head in her arms and followed trickles of water down his face with her fingertips. He nudged his head against her thigh. "Thanks for getting my skirt, Marce?" His breathing was still shallow. Marce noticed that his smile seemed weak and tired. She glanced toward the clear sky and then leaned forward as if she would kiss him. Her wet hair dangled over his closed eyes as she stroked the soft parts of his face with backs of her fingers. "No problem," she whispered as the hands of the sun pressed gently on her shoulders.

Editor's note: April Lewandowski teaches English at Western Carolina University and has paddled in that area for five years.

Old Guys Acting Young

A Poem by Ronald E. Duncan Jr.

The Last Day He was 39

The last day he was 39
We set out to have some fun
Kayak down the river
An awesome whitewater run

We went to the Ocoee
The Olympic course to run
Then we'd run the lower
It sounds like lots of fun

The hour drive to get there
Was even not that bad
We had good friends and music
What more could we have had?

The water moved quite rapid
The action was fast paced
Until the old man missed a roll
And a rock impaled his face

We laughed that he was swimming
We thought that he was fine
It's not his first time out of boat
He's been there many times

We pulled into an eddy
To see what help he'd need
Then we saw his eyebrow
Man, he sure can bleed


The three of us did ponder
Just what do we do now

We have to stop the bleeding
But we didn't know just how

Without too much discussion
The decision now was made
He needs to see a doctor
But who takes him and who stays

He's 40 now much older
And wiser he should be
But I think he'll make another run
Just as soon as he can see

Editor's note: I hear that Dubya Bush will soon be naming a new Poet Laureate for the United States. Could Ronald E. Duncan, Jr. possibly be the man?



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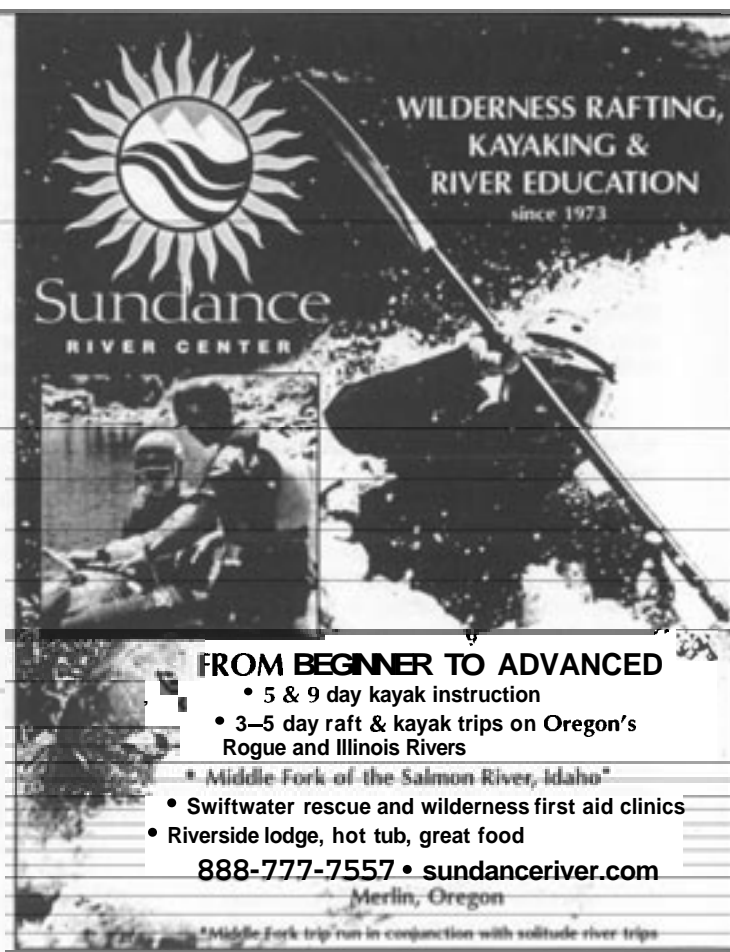
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Norm Branch Potomac Releases - 2001

Submitted by Ed Gertler

The following weekends have been tentatively set for releases from Jennings Randolph Dam (aka Bloomington Dam) on the North Branch Potomac:

April 14, 15
April 28, 29
May 12, 13
May 26, 27
Sept. 1, 2
Oct. 6, 7

Expect releases of 850-1000 cfs each day from 9 am to 4 pm. Keep in mind that a dry spring could result in cutbacks or cancellation. Always call beforehand at 410-962-7687 or check the Corps website at <http://www.nab-wc.usace.army.mil/wc/index.html>.

There is now an official public take-out at Bloomington at the wastewater treatment plan, upstream left, just above the arch railroad bridge. Get there by driving west and uphill from the Savage River on Rte. 135, over the railroad to the first left. Across from the school, take the next left downhill to the access. Once again, we encourage model

behavior (slow driving, no public nudity), as we will be creating traffic in a residential neighborhood.

We can make some friends by patronizing the little restaurant in town (and don't forget the teensy snack and bait shop in Barnum too).

As for the traditional take-out at the mouth of the Savage, that is still OK, too. Just remember, **the popular parking lot at the take-out, in front of the two-story brick building, is on private property. Please take care not to block the driveway (even just to unload for a minute), change clothes in the open, or do anything else to offend the tolerant owner. Poor behavior by some in 1997 almost cost us the use of the lot. Be on your best behavior and watch over the other guy too.**

New Video Depicts Chatooga Serpent Menace Deliver Me From the Paddlesnake; by Milt Aiken

Available at www.paddlesnake.com or www.whitewatervideo.com

Reviewed by Bob Gedekoh

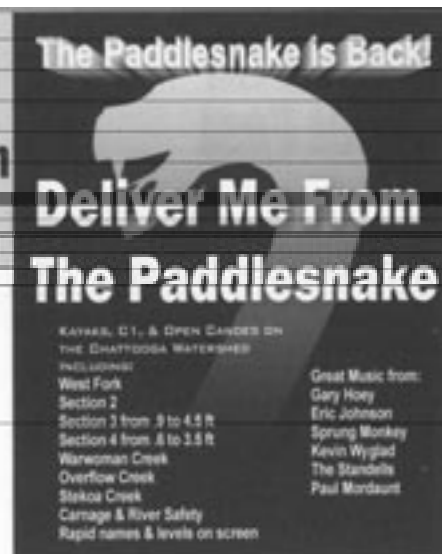
This sequel to Milt Aiken's award winning video, Tales of the Paddlesnake, will please those whitewater video fans who have grown weary of many recently released productions that emphasize frantic, choppy edited action and hype whitewater "celebrities," without providing much useful information to river runners. Which is not to say that Aiken's video lacks dramatic excitement, or that there are no "big name" boaters included in his footage.

Aiken's new video features plenty of Class IV and V action and carnage, and river groupies who stick around for the credits will spot the names of many of the southeast's "star" boaters. But the emphasis here is clearly on the river, or rather, the watershed... since this video also provides a detailed exploration of the entire Chatooga basin. Aiken wants to educate boaters as well as entertain them, to assist them in safely exploring the many options that the Chatooga watershed offers. Happily, he succeeds.

The production includes distinct sections on a number of well known whitewater runs in the Chatooga basin including the West Fork/Section II, War Woman Creek, Section III, Section IV, Stekoah Creek and Overflow Creek. In each of these segments individual rapids are logically sequenced and clearly labeled... gage levels are even flashed on the screen.

In his coverage of rapids like Bull Sluice on Section III and Woodall Shoals on Section IV, Aiken includes footage shot at different levels... vividly depicting the power of high water. Aiken then discusses and demonstrates alternative lines and level dependent safety concerns. At Section IV's Crack in the Rock, Aiken includes sobering low water footage which clearly documents the risk of entrapment... over the years, no fewer than five river runners have perished at this spot. He even suggests appropriate safety rope placement for this and several other Section IV rapids. He doesn't just tell viewers that they should set a safety rope at Hydroelectric Rock, he shows them why.

This emphasis on safety is responsible and refreshing. Statistically, the Chatooga ranks as one of the most deadly rivers in the United States. To some degree this is a function of the sheer popularity of Section III



and IV; but history suggests that the unique rock formations that form the riverbed of the Chatoogamake it more dangerous than many other rivers of comparable difficulty.

All this talk about safety might suggest that Aiken's video is tiresomely Old School. But this is not the case. There is plenty of exciting footage from Section IV and hair boaters will enjoy the action from Stekoah Creek and Overflow Creek. Open boaters will love this video, since it includes plenty of open boat action and carnage. But would-be video stars with big egos should steer clear of Aiken's merciless video camera... he keeps it rolling when the carnage starts and he doesn't turn it off when his subjects are forced to swim.

Deliver Me From the Paddlesnake should make a welcome addition to the collection of thoughtful and serious river runners, particularly those planning a trip to the Chatooga.

Kent Ford's New Video Reviewed, Breakthru

reviewed by Greg Akins

Perhaps the best way to perfect one's on-the-river performance is to watch a genuine expert. But often the people we kayak with,

while solid, don't possess the refined skills of true experts. Unfortunately, many of our "local mentors" have poor paddling techniques and a plethora of bad habits. As a consequence, mimicking them often yields less than perfect results.

In *Breakthru*, Kent Ford comes to the rescue. Here Kent reveals techniques for intermediate to advanced paddlers intent on developing solid downriver paddling techniques. While there is some instruction in the art of play, the video focuses on river running and proper stroke.

For anyone who wants help from a acknowledged master in improving his or her

technique, this video is a must-have. Teaming with three-time Olympian, Scott Shipley, Kent has produced a series of demonstrations and practice tips that should help any paddler achieve a paddling breakthrough.

If you're planning on moving your kayaking experience to the next level this season, this is a worthwhile addition to your video library.

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Cheat Race

Friday, May 4 to Kick Off Cheat Fest

The annual Cheat River Downriver Race has been scheduled for late afternoon on Friday, May 4th. The eleven mile race through West Virginia's Class IV Cheat Canyon kicks off the Friends of the Cheat's Annual Cheat River Festival, which will be held the following day in Albright, West Virginia. Organizers of the race are also planning races on the Class III Cheat Narrows and Class V Big Sandy on Saturday.

Raft Teams as well as individual open boaters and kayakers are welcome to participate in the Cheat Canyon Race Friday evening. The raft team from Mountain Streams and Trails, who trounced their competition last year, has renewed their challenge to the other local raft companies. And the Bob Gedekoh Old School/New School Kayak Challenge will be featured once again during this year's competition.

The Cheat Canyon Race will be held one half hour later this year so that participants will have plenty of time to drive to Albright after running the Upper Yough that morning.

For additional details about the Races and the Cheat Festival visit <http://www.cheat.org>

Extreme Whitewater Film Festival to Benefit Snake's Alpine Canyon

An Extreme Whitewater Film Festival will be held on Friday, April 13th in the University of Utah's Reed Auditorium at 6:30 pm. The Festival is sponsored by the Utah Whitewater Club. Tickets will be available at the door, or may be purchased at a discount online at <http://www.UtahOutdoors.com>

All revenues from the festival will go directly to the Snake River Fund, a community driven program that orchestrates improvements to access facilities at the Alpine Canyon section of the Snake River.

Kananaskis Whitewater Festival

"The eighth annual Kananaskis Whitewater Festival will be held on the Kananaskis River, near Calgary Alberta, on May 26th and 27th. It is an opportunity for whitewater paddlers of all abilities to get together for fun and competition."

Scheduled events include the traditional Down River Race, Hole Riding and Wave Surfing. Some of the favorite and most unique events of the festival include the On-water Obstacle Course, the Throw Bag Toss and the Inflatable Toy Race.

Camping is available for a small fee at the Canoe Meadows group site off Hwy #40, 5 km south of Hwy #1 on both Friday and Saturday nights.

The entry fee includes a event T-shirt, a ticket to the Saturday night Barbeque and lots of other goodies. Spectators are welcome, and it's free.

For more information, contact Undercurrents at 403-262-4327 or tony@undercurrentsONLINE.com.

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Thanks!

American
Whitewater

The Doctor is In

Having a tough time reconciling your love of whitewater with your affairs of the heart? Share your misery with Dr. Juste Kantgettenuff, AW's exclusive whitewater love expert. Even if he can't solve your problems, Dr. Kantgettenuff will do his best to put them in perspective by making you feel exceedingly foolish in front of the entire whitewater community. Send your letters to Dr. Kantgettenuff care of the AW Editor.

Sorry, we can not guarantee the return of any pictures that you might include. (Message from Dr. K. to Veronica in Detroit: NO, I HAVENT ever seen anything quite like THAT before! And I hope never to again!)

WHERE DID OUR LOVE GO?

Dear Dr. Kantgettenuff,

I've got a terrible problem and I don't know what to do. If you can't help I'm afraid my marriage is over. Dick, my husband of seven years, has lost interest in me. And I don't just mean... well: you KNOW what I don't just mean! Dick and I used to kayak together every weekend, now I can't him get to paddle at all. And when I come back from aday on the river, Dick doesn't even ask how things went. These days all Dick seems to care about is cheap beer and televised football! Dick acts like I don't even exist! What can I do to bring back that lovin' feeling?

Desperate and despondent,
Mrs. Gloria Horneigh
Buffalo, New York

My Dearest Mrs. Horneigh,

What has happened to your marriage is all too common. Dick is taking you for granted and treating you like an old toy because your relationship has become boring and predictable. If you truly want to sustain a romance there must be an element of mystery and intrigue. There must be excitement and uncertainty. There must be fear and pain! Gloria, the time has come for you to give Dick a real surprise. Something that will indubitably rekindle his desire for you.

The next time Dick allows you to go to the river alone, you must return with an enormous tattoo. A magnificent tattoo... right smack on your lovely fanny!

And not just any tattoo. Gloria. A customized tattoo, one that depicts a buff stud wavewheeling over a truly gnarly waterfall. Tell the tattoo artist to make sure that this kayaker has bulging muscles and a cocksure grin. And at the base of the falls ask the artist to inscribe some initials... any initials will do, just not Dick's. On second thought, for the safety of all concerned, you had better avoid the initials of any male boater of your acquaintance. Pick some uncommon initials for your fanny. Initials that no one could possibly really have. J.B., for instance.

When you return home do nothing out of the ordinary to call attention to your new "friend." Allow Dick to discover J.B. all by himself. Then, if Dick is a man worth having, the fireworks will start. But no matter how crazy things might get, you must say nothing! No matter how hard Dick tries to make you talk, you must never reveal J.B.'s identity, or how he came to be on your derriere. That will be your little secret, Gloria.

After the dust settles the Good Doctor promises that Dick will be infinitely more attentive. The next time you start to load your kayak onto the roof of the family car. I can almost guarantee that Dick will be loading his on the other side.

And as the years go by, your trusty friend J.B. will always be there to remind Dick's sorry ass that he had better nevertake your sweet love for granted again. And that he damned sure better quit fretting and fussing about football, and keep his eyes on you!

HIGHER MATHEMATICS

Kantgettenuff. Me Man,

I got me a situation here and I need some words of wisdom from a righteous Dude. Since I dropped out of school I've been runnin' the gnarl, cruisin' the rodeo scene, and coppin' a few green ones now and again pushin' rubber on the New and Gauley. I ain't one to sweat tomorrow. Dude, so long as I got a burger in my belly today. Ya' know what I mean?

But the sweet bird of opportunity done come peckin' on this po' boy's door, and I'm thinking maybe I better pluck that chicken while the pluckin's good.

See there was a mamma on a raft trip I was guidin' and she done taken a shine to this bad boy. Says I'm her one and only Muffin Man and she's fixin' to check me into her Schmackdown Hotel. Yesh, this schweet thang wants to tie the knot. Put a ring on my finger to match the ones in my nipples!

Now this mamma ain't much to look at she's older than sin and can't paddle a lick, but she got something every po' boy needs. I'm talking serious MONEY, Dude! Buckets and buckets chock full of it. There ain't no bottom to her deep green well! She's like some kind of whiz bangelectronic computer engineer and she's got some schweet patents on chips... and I don't mean the little brown ones you find in cookies. No sir! I'm talkin' 'bout the kind Gateway and Compaq use by the truckload!

The more I think about those schweet little chips, the more I think I could grow to love that schweet, schweet mamma. She could make me the New River Burger King!

So what ya' think, Dude? Time for this po' boy to go for the gold, huh?

Ever so righteous,
Bub L. Light
Fayetteville, West Virginia

Dear Mr. Light,

You certainly sound like an enterprising young man and I can see why this woman's offer of matrimony must seem attractive. As a matter of principle, the Good Doctor has no problem with the concept of marrying for money. I've done so several times myself. There certainly is a lot to be said for being a wealthy woman's boy toy.

But I must advise you to break off your relationship with this particular rich woman immediately. My boy, you are in grave danger! Very grave danger, indeed. The problem is not this woman's wealth, but rather how she came by it.

You mention in passing that this woman is some kind of engineer. That can only mean one thing. If this woman is an engineer, this is a woman who has mastered Calculus! This is a woman who can solve complex differential equations. This is a woman who can manipulate quadrinomials. A woman who is capable of that is capable of almost anything! Believe me, I know.

It is the Good Doctor's melancholy experience that there is nothing more treacherous on this earth than a woman who can do Calculus! My second, fourth and fifth wives could all do Calculus... and they used it to make my life a living hell. I shudder to recall the mathematical tortures I endured at their merciless hands!

It is clear from the text of your letter that while you may be a talented whitewater boater and a quite the studmuffin, you will never be a rocket scientist or a nuclear physicist. The honest truth is that you will never be the brightest Light in the string. Now consider this. If a woman wielding Calculus reduced me, a worldly and wise, highly intelligent psychopathopsychologist to a blubbering mound of jelly, imagine what one might do to a vulnerable innocent like you? Be afraid, Bub L. Light. Be very afraid!

If you marry this horrid Calculus harpy she will surely use her mathematical wiles to torment your sorry ass. And all the burgers in the world couldn't be worth that. Get back to the river and away from her at once!

By the way, just how much money do you think this dreadful woman has? And perhaps you had better send me her name and phone number... so I can call her and give her a good piece of my mind!

THE BOYS IN BOISE

Dear Dr. Kantgettenuff,

Just wanted to let you know that I took your advice and decided to head west to look for the perfect whitewater river and the perfect whitewater man. Well, I've been in Boise for two weeks and I'm convinced that the North Fork of the Payette is the perfect river. So now all I have to do is find the perfect whitewater man.

And I think that should be easy. This city is chock full of buff, good looking guys and every one of them seems to have a kayak on the roof of his car! I just don't know where to start... I feel like a kid in a candy store!

I'll keep you posted!

Your friend,
Goldie Degere
Boise, Idaho

Dearest Goldie,

I certainly agree that the North Fork of the Payette is an exquisite piece of whitewater. It is, of course, also a dangerous river; but knowing your abilities, I'm certain that you can handle it. However, Goldie, I feel I must caution you about the male kayakers of Idaho. While there might be, perhaps, one or two who are decent fellows, there are many others of my acquaintance that will surely

try to take advantage of your sweet innocence.

Please don't be deceived by the appearance of these handsome devils. My Grandmama Konnie Kantgettenuff always used to say, "A good looking puhlemumkin is still a puhlemumkin!" Don't fall victim to the superficial charms of one of these worthless river cowboys. Keep your guard up, Goldie!

MESSAGE TO THE BOYS IN BOISE

If Dr. Kantgettenuff finds out that you louts are taking advantage of the lovely Goldie, he is going to send his goon squad out there to kick your sorry asses!

Dr. Kantgettenuff Offered Misfit Position

Dear Doctor Kantgettenuff,

Aman of your immense ability and exceptional talent deserves to be affiliated with a world class institution. Let's get serious here. The University of Cairo is as old school as it gets. I have it on good authority that Egyptian paddlers not only wear noseplugs, they also tape goofy rubber sphinxes to their helmets. My friends at the Pyramid Paddlers, which as you know is Cairo's elite paddling club, tell me that this year's Lower Nile Whitewater Festival was a total bust. To be honest, you can get better whitewater at the average American sewage treatment plant.

I represent the finest Paddling related program in the world, and we would like to offer you a position on the faculty. Our school is none other than the legendary Montana Institute for Serious Fluid Interaction, Training, and Study. Located in Billings, MT, it is known world wide as MISFITS. We think you will be an excellent fit with our current faculty.

You probably don't know it, but Montana is the world leader in personalized licensed plates. We have more per capita than anywhere. As part of your total package, we are pleased to offer you your own personal plate. Due to the letter limit, we couldn't get your exact name, but we did the best we could: Kantgetany. I hope you approve.

Our pay and benefits are excellent. I can assure you we are an equal opportunity offender. In order to help you with your decision, we have attached some information about the institute.

This may be the first time you have ever heard about the Montana Institute for Serious Fluid Interaction, Training, and Study, commonly known as MISFITS. Like everyone else, you want to know more about this legendary center of paddling knowledge. This little known institute of higher learning offers both undergraduate and advanced programs in Paddleology, leading to the elite doctorate of Paddleology, which unfortunately only qualifies you for an unpaid position on the institute staff. For now, just remember our motto: We are what we say we are: MISFITS.

While few know of the distinguished programs, many have heard of the world famous award, the Noble paddling prize, which is awarded annually to the paddler who best exemplifies the principles

of the institute. You can imagine our shock here at MISFITS to find out there is a sound alike Swedish outfit handing out prizes that could be confused with ours. Apparently this Swedish group thought giving annual prizes was a dynamite idea, so they copied us. Luckily, they confine their awards to the lesser areas of human endeavor, like medicine, physics, world peace, etc. Imitation is the sincerest form of flattery, so I guess we will allow them to continue. Besides, they don't spell it right anyway.

Of course you have numerous questions about the faculty and program here at MISFITS. Let me assure you this is a fully accredited institution, with a full academic program. Not only do we have a program in paddleology, but over the years, we have become world leaders in the study of another form of fluid interaction that we have noted paddlers have an unusual aptitude for, namely the consumption of adult beverages. Of course we are proponents of responsible boating, with our designated boater program, which allows all members of the party to take credit for a run, as long as one member actually negotiates it.

But enough about our programs. The way any institution builds its reputation is through the quality of its faculty. We feel our faculty is the best in the world, all leaders in their fields, and we would like to take this opportunity to introduce them here.

Dr Ben Boatin: Dr Boatin is the dean of our institute, a past recipient of the Noble paddling prize, and one of the foremost boaters in the world. He is a strong believer in the Darwinian technique for teaching paddling skills, and always tries to instill this in his students. His roll or die seminars are world famous. He firmly follows the trial and error method, with special emphasis on the latter, ■ he has found that this works well with our unique students.

Dr I.M. Wet: Dr Wet is a brilliant theoretical chemist, and a world renowned environmental expert. He is currently working on cutting edge research which after years of exhaustive study has allowed him to prove conclusively that every boat-

able river in Montana contains at least trace amounts of Dihydrogen Monoxide. This little known chemical plays a key role in our sport, but has never been fully studied in the detail that Dr Wet is currently involved. While Dihydrogen Monoxide does occur in nature, it is also an industrial byproduct, which when administered to boaters in excessive doses, can cause a variety of injuries, up to and including death. Research with MISFITS graduates indicates extreme chromosomal damage, may be linked to Dihydrogen Monoxide exposure.

Dr Al Cohol: Dr Cohol is the worlds foremost expert in the study of paddlers and their interaction with adult beverages. His classes are extremely well received at the institute, students are always high in their praise of his material and technique, even though they don't always remember all the details the next day. Dr Cohol and his able assistant Ralph are always on the lookout for new forms of fluid interaction, and continue to expand the body of knowledge in their area of expertise.

Dr I B Floatin. Dr Floatin is an expert on statistics and higher mathematics. He has postulated that meaning of any paddling theory can be proved with a 98% confidence factor, if it is tested on three standard deviants from the MISFITS student body. This is known as Floatins theory of standard deviation from the mean. Dr Floatin will be working jointly with Dr Wet on the statistical correlations needed to prove the environmental impacts of Dihydrogen Monoxide. As a world expert on risk analysis, he will no doubt be appointed to the presidential commission to regulate paddler exposure to this dangerous chemical.

Dr Buster DeDamme: Our students get a real bang out of his courses. The worlds leading expert on rapid dam removal technology, Dr DeDamme has recently acquired some Soviet era dam removal devices, strictly for research purposes. These allow complete removal of any dam structure in a matter of seconds. Once he solves that pesky radiation problem, he will be ready to start field trials.

Dr P Cee: Originally appointed to the institute as part of our affirmative action program, and still our only female faculty member, Dr Cee has proved to be much more than a mere token. She has taken up the fight to promote diversity in the paddling community. This is something we at the institute strongly support, as we believe that all paddlers should be allowed to sink to their level of incompetence, regardless of lack of natural ability, or sexual disorientation, as long as they can come up

Dr. Kanteettenuff Offered Misfit Position continued

with the tuition. (We have to draw the line somewhere)

Right now, Dr Cee is working on one of the most serious issues to confront the boating community in many years. She is working to eliminate the discriminatory term Whitewater from the boaters vocabulary. This term clearly indicates the ethnocentric thinking of

Caucasian males and downplays the important contributions of indigenous peoples to the development of the sport. Native peoples invented the kayak and canoe, which they constructed of all natural materials. They lived in harmony with nature, building only the boats they needed. Modern western man took the design, and began to make it from synthetic hydrocarbon compounds, contributing to destruction of the ozone, and global warming. People began to accumulate specialized boats for specific functions. They used them in competition, for the glorification of their own egos.

Dr Cee believes that if we continue down this path, eventually we will come to the destruction of civilization itself. And it all started with the word Whitewater. We need a term which respects the diversity of all paddlers. After an exhaustive search, Dr Cee has come up with that term. Henceforth, here at the institute, Whitewater will be known as Substantially Aerated Water, or SAW. This term is both unbiased and descriptive. When you pull into an eddy at the bottom of a rapid, you can say, "That was one tough stretch of SAW! It nearly cut me to pieces." Of course American Whitewater will have to change its name, but as they say, you can't make an omelet without breaking a few eggs.

Of course, you want to know how this great Institute got its start. For years the rumors came out of Montana about a strange and secretive group of super paddlers, never really seen, rarely even talked about, and then only in hushed voices, perhaps when a small group of local paddlers gathered around a campfire after a hard day on the river. Almost no one knew the real truth behind the stories that circulated, and those that knew were sworn not to tell. Only now, in the aftermath of the cold war, can the true story be told. It is an extraordinary tale of skill and courage, of great deeds done to preserve the American way of life.

Even today the origins of the story are shrouded in secrecy. Some claim it was the Johnson administration, some claim Nixon. Whatever year it was, at the time there was great concern in the Military Intelligence community with the paddling gap that was developing between the East and West. Our skills and technology had fallen far behind. Something had to be done. As a result, the CLAndestine Paddling Training Center was born. With legendary American military brilliance for developing acronyms, it was code named the CLAP. Because of superb rivers and low population, Montana was chosen as the training site.

Over the years, many of our greatest intelligence operatives trained at the center. It was the ultimate training, more elite than Rangers, Seals, or even Special Forces. No greater compliment could be paid an agent than to say: He's had the CLAP. Those agents trained at the center were known as Covert Operatives with Paddling Skill, or

COPS. On rivers all over the globe, our COPS fought their forgotten battles to preserve the American way of life. Many of these legendary stories are still told around the water coolers at Langley.

As testimony to their success, today the evil empire lays in tatters, and the skills once taught on the great rivers draining the Beartooths can be used for less serious purposes. For several years after the end of the cold war no one really knew what to do with the training program, but with budget cuts, something had to be done, and the brass decided it had to be privatized. In 1993, the National Security Advisor was reviewing all the classified budget items with the recently elected President Clinton. They worked their way through the lesser items, like Star Wars, Stealth Bombers, etc, and finally, the head of CIA said Mr President, we need to talk about the CLAP. The president's face grew red, he looked flustered. He said, I've never had the clap, I didn't know how to catch it. Were you guys spying on me when I was in Arkansas? Once he actually understood the program, he signed the executive order to declassify the it over a 5 year transition period.

Fast forward to 1998. The training center was transferred to a private foundation. The curriculum was expanded to meet the demands of the civilian paddling community. Now the full program can be made known to the American people. After an exhaustive search, a new name was chosen: This was a difficult decision, the new name had to convey the important traits of the institution, and everything it had to offer paddlers. In addition, it needed to exemplify how the rest of the country viewed Montana. After long and careful deliberation, only one name seemed to fit. And so, the Montana Institute for Serious Fluid Interaction, Training, and Study, or MISFITS, was born.

So, If you see any COPS on the river, I am sure they will tell you, we wouldn't be MISFITS today, if it hadn't been for the CLAP.

Sincerely, Your friend and hopefully
future boss,
Dr Ben Boatin

PS: I think Dr Cee has the hots for you.

Dr Kantgettenuff Responds

Dear Dr Boatin,

I spoke with AW's Conservation John Gangemi regarding your institution. John, who lives in Big Fork, Montana, says he is quite familiar with the MISFITS and he holds them in the highest regard. John went on to say that he has absolutely no firsthand knowledge of the CLAP.

At any rate, I am giving your offer of employment serious consideration and look forward to visiting your facility in Montana soon. In the meantime, can you mail me a picture of Dr P. Cee ASAP (She doesn't have any firsthand knowledge of the CLAP, does she?)

Sincerely,
Dr. Juste Kantgettenuff

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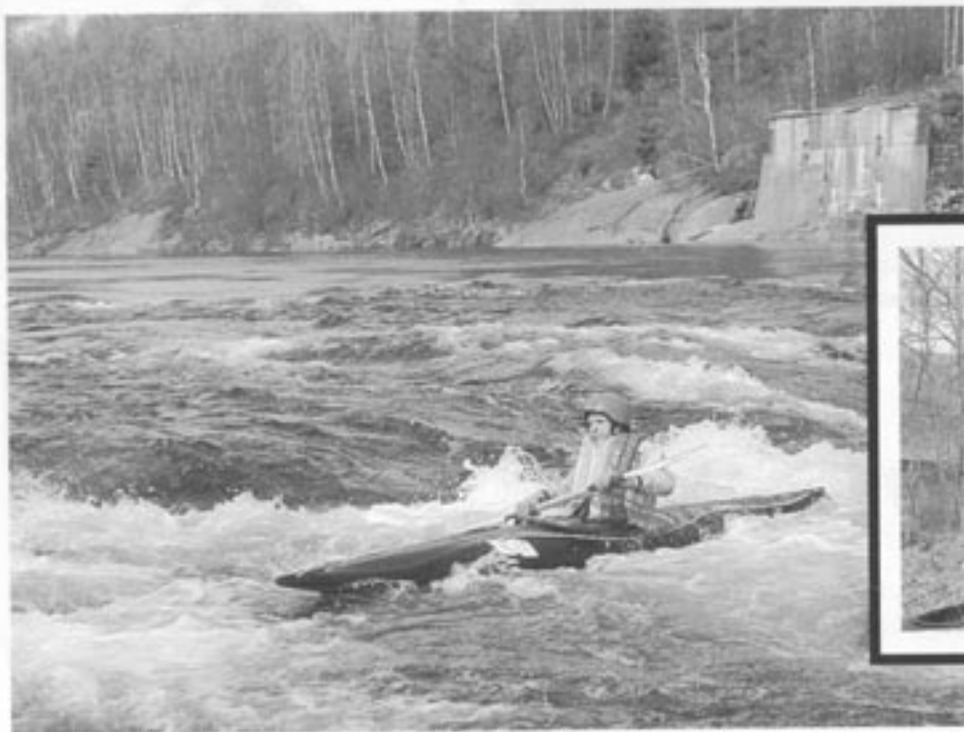


There's Old
School...
there's New
School...
and then there
is too young for
school.!

Mike Mahers daughter, Sierra
enjoys some quite time.

86th Birthday on the River

American Whitewater stalwart
Ted Acton celebrated his 86th
birthday last year paddling New
Hampshire's Pemigewasset River
with friends Bob Pugh and
former AW President Jim
Sindelar. Look for Ted this
winter on the slopes at the
Waterville Valley Ski area.
Come spring, he plans to be
back surfing the Pemi.



Photos by Heidi McNamara.



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