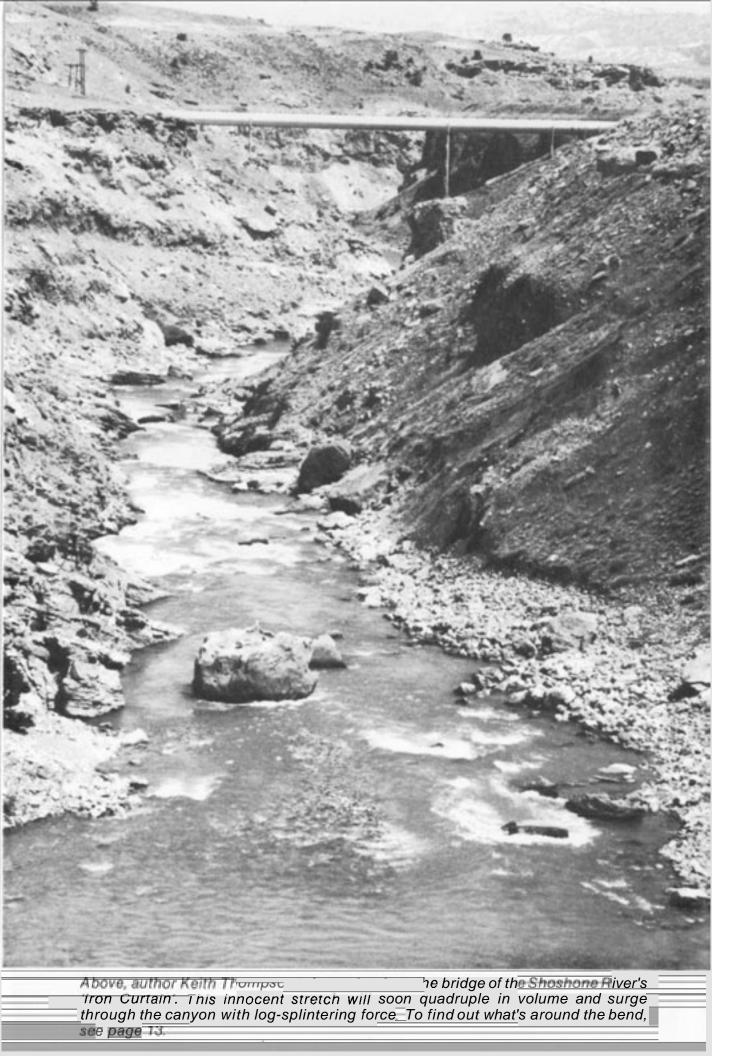


The Journal of the American Whitewater Affiliation \$1.95 JULY-AUGUST 1983



American WHITEWATER

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COVER: Ron Ladders catches his paddling partner just as he plunges into the Shoshone's Custom Rapid one of many fine streams in the Yellowstone Basin. See page 13.

The American Whitewater Affiliation

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Editor's Soapbox

Amateurism on Trial

Is amateurism a legitimate concept, that enhances whitewater racing, or an obsolete mechanism of an elitist age? Eric Evans says it's the later.

Prior to the Six Flags Regional Grand Prix race in Jackson, N.J. in late April, I had dinner with Bart Jackson. After he had both provided the gates for the race and then had stayed to help me set them up, I felt it only sporting to spot him a meal. But after witnessing the carnage he wreaked upon salad bar and three courses, I began to question my generosity. Yet to the matter at hand.

"Evans," Jackson said during a brief respite, "now that I've seen the water on this artificial course in the middle of an amusement park, I can swallow the hoopla about it being Class III. And I'll swallow that everybody here wins: Six Flags gets media coverage through this race for their raft ride which means dollars down the road; the paddlers get a fine event with a free lunch; the sport in general gets publicity undreamed of in quieter hours; you get paid, and I get a free dinner. But what I can't swallow is the fact that at the Finals in St. Louis, May 17 the winners will divide \$5000 in cash prizes. What about the amateur rules?"

Far be it for me to keep B.J. from swallowing. Hereupon my reply.

First, it's legal. Through a pre-arranged agreement with the National Slalom & Wildwater Committee (NSW-WC) of the ACA (Doug Cameron, NSWWC Chairman), amateurs may sign a waiver prior to competing in the Finals which states that any money they may earn at the event will first go directly to the ACA. Then, the NSWWC of the ACA will, upon acceptance of legitimate receipts for training/racing/travel, reimburse the paddler 90 per cent of the winnings. (10 per cent goes to the NSWWC). Enough officialese: it's above-board, it's been done before, it's legal, legit, the whole nine yards.

But what about that elusive spirit of the amateur rules? No question in my mind—it breaks the spirit of the rules. These racers are paddling for money. And hallelujah! Hasta la revolucion! Here's to the downfall of amateurism, an upper-class dilletante convention that should be buried along with 19th century sweatshops, colonialism, and monopolies.

Why?

Because every person should be able to receive material reward for doing what they do best (0.K.—leave out muggers and thieves). What greater honor is there but to receive compensation for work done with one's own hands?

Do lawyers have amateur rules? Artists? Dancers? If someone can earn money by paddling, or running or throwing a football, then fair enough.

Egalitarianism, thy name in sport is open competition — competing for a money prize if it can be drummed up. Why should a wealthy kid whose parents foot the bill for equipment, training and travel have the additional advantage of a blue-blood amateur rule over a kid who has to work 40 hours a week? Put the money on the table. Fastest man gets it. What could be fairer? The sport is too exclusive as is, getting rid of amateurism would be a small step in making it less so.

As we left dinner that evening, I noticed that B.J.'s patrician slip was showing. May it be quickly tucked in and put out of sight forever.

—Eric M. Evans

Even though my mouth is temporarily empty (a regretable situation soon to be remedied), I find swallowing Eric's argument for the death of amateurism an impossible feat, be it served up in print, or over the dinner table. Admittedly, the way ACA, the racers and Six Flags have conspired to circumvent the current amateur rules is neat, clever, and very legal. While shattering the spirit of the law, they've managed to keep the letter perfectly in tact. Congratulations.

Granted, that vignetteof the young lad from da South Bronx, training daily in the sewer system, punching meat, and going off each weekend to win enough money to save hisailing grandmother by outpaddling those nasty, wealthy punks with names like Binkey has a lovely and democratic ring to it, (might even make a good movie and a few sequels). But somehow I cannot applaud any more that would destroy the joy of racing for so many, just so a few can bring home the bacon-and rather paltry slices at that. That is not egalitarianism. It is elitism that would close races and make the sport more exclusive than Eric claims it already is.

If readers will forgive a patrician slip into Latin, 'amateur' comes from the ancient verb amo, amare-to love, and supposedly amateur whitewater racing is a sport paddled strictly for the love of it. Actually, it has really worked out that way. Each weekend, thousands of fanatical and casual paddlers rush to competitions where they string and judge gates, chat with and study the best. camp in foul weather amidst a litter of boats, and have an opportunity to browse for new boats, partners, and news of new runs. Even at the most hotly contested races, there is an air of festival here..

Would a prize change that? Probably. Several of the racers confided that the only draw of the Six Flags competitions was the money—the race they could take or leave. But there is more to professionalism than small cash prizes. It includes sponsorship and advertisement. Somehow, when the boys from Old Town beat the boys from Perception at the Norse Paddle Open Slalom, I don't think I'll join in the fun. To watch agroup of folks for whom 'to play has become as tedious as to work' holds little appeal.

Virtually everyone actively participating in whitewater receives ample compensation for the work and training done with his hands. It's merely that compensation is paid in some other currency than the almighty buck. What about the potential pros? Actually, they already have scores of races held annually around this country, particularly in the Midwest and also in southern Canada. Let our young South Bronx sewer paddler compete in these. If there is truly enough cash to sustain him, grandma will be saved. All the rest of us ask is what the rules currently state: that those paddling solely for a source of income keep away from those races where paddling is treated as a sport.

So, rather than suggesting that we march back into a colonial, birchbark past, allow me to suggest that we stick with the system that has been most progressive to paddling: the amateur boater and the amateur boat race. From these has come all the incredible progress in boating technique and design witnessed in the past few years. Boating's best and her most fanatical contributors have, thus far, been blessed with a non-cash atmosphere, an atmosphere, unlike college football, seldom corrupted under the table. Why not let this progress continue in the way that has already proved best. After all, if it ain't broke. don't fix it.

— Bart Jackson



Write the A WA Editor today at 7 Holland Lane, Cranbury, N.J. 08512. If any or all of your letter is not for publication, please specify.

REGISTERING PROTESTS

Dear Bart,

As an addition to your last Editor's Soapbox ("Boat Registration," AWA #28-3), allow me to present the latest status of the Ohio Registration Law as explained to me by the Ohio Department of Natural Resources Division of Watercraft, Columbus, Ohio. I know very few Ohio kayak or canoe owners who are in compliance with this law. My friends are mainly river runners with occasional trips to lakes out of state.

Last weekend I met John Graham from Zanesville (Muskingham Valley Outfitters) on the Yough and noticed that he had registration numbers on his Mirage. I asked him about current registration and he said he knew about the three-year registration but hadn't done it.

All boats must register including inflatable~,regardless of length, etc. Canoes & kayaks are excluded from the title laws. (Titles used to be necessary before a boat could be registered.) But you must have a bill oi sale or other proof of ownership.

Registration for canoes and kayaks costs \$3.00 per year. They are now registering for three years so cost is \$9.00 plus \$100 for the registration fee. The only other canoe/kayak requirement is for wearing of an approved P.F.D.

Monies collected are used to support the Division of Watercraft of the Ohio D.N.R. Other support money comes from 0.5% gas tax on marine fuel. No money comes from general funds so the Division is self supporting. The monies are spent to staff and operate the division and to develop marine facilities. Two-thirds comes from division funding, one-third from local government funding, to provide break walls for harbor, to acquire public access sites to lakes or streams, to aid sister agencies such as — the Division of Parks & Recreations with its marine biology rivery survey, to hire seasonal rangers, etc.

The Division of Watercraft will aid in water safety programs with talks, films and instruction. They have, in conjunction with the Red Cross, A.C.A. and local clubs, set up several canoe schools where naturally safety is part of the course.

It seems that most efforts and monies are put into areas other than river running. Ohio does have it share of canoe liveries, but not much whitewater.

Sincerely, John B. Wood Cincinnati, OH

DELAWARE DIVERSIONS

Dear Editor:

As a 20+ year member of AWA, veteran Philadelphia area paddler and longtime worker for environmental and paddling causes, I cannot let Carol Ward's letter in the March-April '83 issue go unanswered since it conveys information that is far from factual. Further, like much of the hubbub created by the group opposing this project, it would appear that the No-Nukes faction is the backbone of this opposition and is creating hysteria by bringing in as many tangential issues as possible without letting the facts get in the way of their arguments.

Ms. Ward's letter starts with "Earlier this year, | learned of the diversion of 95,000,000 gallons per day...' etc., and goes on to indicate that this is a new project being "railroaded through." In fact, this project has been planned for years. | first learned of it in the 1970 annual report of the Delaware River Basin Authority and recall giving a report on it at a PhiladelphiaCanoe Club meeting in the early '70's. | also think there were public hearings held at that time, although | did not attend any of them.

Ms. Ward goes on to make a vague statement that "the saline level in the river is gradually rising..." etc., and that "extracting 95 million gallons would be disasterous,..." etc. Neither point is true. The lower Delaware's salt line ebbs and flows with the amount of fresh water coming down the watershed and the highest upstream it has been in recent years was in 1964 when 400,000,000 gallons a day were released from Lake Wallenpaupack to help keep it downstream of the critical point (the intake of the South Jersey aguifers, located below the Schuylkill-Delaware confluence). Since the proposed diversion (146.6 cfs) would take the water into the Perkiomen Creek, the Schuylkill and back into the Delaware above the critical point, it would have no effect on the salt line in the Delaware unless significant amounts were lost in the process. Since the citizens of Philadelphia get approximately half of their water from the Schuylkill, | do not believe their water supply would be affected at all.

Since space does not permit me to fully rebut other ignorant or erroneous points in this letter, let me briefly ask Ms. Ward, if this project would have such a "disasterous" effect downstream, why has it never been opposed by the Delaware River Basin Authority or the Philadelphia Water Department? A far more pressing issue for them has been why should New York City continue to take so much water from the Delaware when they could take it from Hudson?

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Letters

In closing, | agree with Ms. Ward that "this is a serious issue," but it deserves better treatment in the AWA Journal than her letter which richly deserves to be characterized with the "radical, birdsnest-building environmentalist moves" she refers to. | think it behooves all of us who are serious about preserving our rivers and environment to get at least a few of the facts straight before we go public in print.

L.J. 'Bud' Vye Philadelphia, PA

Carol Ward claimed the proposed extraction would be 95 million gallons daily. Bud Vye claims it would only be 146.6 cfs. Interestingly, 146.6 cfs figures out to 94,756,141.44 gallons extracted daily. (Just making sure of our facts, Bud.)

As AWA goes to print, the diversion project at Point Pleasant on the Delaware River is still temporarily halted, officially, yet there are still occasional bursts of construction. It seems as if the outcome of the project and the amount of water to be diverted fluctuates with every official talked to. The latest is that the construction firm is planning a suit against Bucks County, Pennsylvania for making them "work in a war zone." Just what is the proper compensation for laboring under hostile environmentalist fire?-Ed.

RECLASSIFYING RIO

AWA recently received this letter questioning the ratings given the Upper and Taos Box runs of the Rio Grande as given in Anderson & Hopkinson's **Rivers of the Southwest.** We pass their opinion along to you and welcome reader comments concerning these runs.

Dear Editor,

The New Mexico River Outfitters Association has reviewed the book Rivers of the Southwest, by Anderson & Hopkinson. We find the description



and ratings of various runs on the Rio Grande in New Mexico to be in error. The authors rate the Taos Box as "Class II (III is very high water)." We are of the opinion, along with (to our knowledge) all other published opinions, that the Taos Box run rates at usual levels up to Class IV (III at some lower levels.) The authors also seriously underrate the difficulties of the Upper Box, which could conceivably lead to boater deaths. We view the Upper Box as unrunnable. We deplore such downgrading as being a danger to both novice and skilled boaters, and call upon the authors to revise their book accordingly.

> Francisco Guevara NMROA President, Taos, NM

PRO GRAND PRIX

Dear Editor,

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In response to the questions raised by Bart Jackson in his May editorial on Grand Prix Slalom, I fail to see how the implementation of these changes will eliminate from racing the eddy turn, upstream paddling or any of the skills inherent in river running, as opponents suggest. The key factor, as it always has, would remain the placement of the gates. How, for example, would you negotiate two sequential gates directly opposite each other in eddies with a strong current jet between them without using these skills? How about a single gate placed directly behind an obstruction? It has been possible all along to construct a course which would minimize the required skill levels. Since it has not been done in the past, I assume it would not be done under the altered rules.

It seems to me the change would have three major impacts, none of which I see as bad. First, it will virtually eliminate the reverse negotiation of gates. There may be certain gate positioning which would make reverse negotiation the more efficient choice, but this will probably be rare.

Second, since any gate may be run upstream or down, it will force the racer to make more decisions on the best way to run. Since every paddler has different strengths and weaknesses, the solution will not always be the same. This will give the advantage to the person best able to formulate a strategy and implement it.

A third possible consequence may be some new innovations in technique which would maximize the advantage of the additional flexability in the rules. Although I cannot imagine what these techniques might be, how many people anticipated the development of the pivot turn 10 years ago?

> Paul Grace Jackson, Mississippi

ONE-SIDED ARGUMENT

Dear Editor,

I'd just like to add my two cents to the C-1 vs K-1 duel with this little piece pirated indirectly from the Washington Kayak Club:

In the beginning the gentle waters were well traveled; but alas, the most beautiful rivers, those with foaming rapids, with turbulent cascading currents, were little seen, were never enjoyed.

And this was not right.

Therefore, so that this dynamic beauty could be enjoyed, the decked whitewater boat was created.

And it was Good.

In order that the bountiful and moving majesty of the falling foam be enjoyed, kayaks were given unto the crowds...and crowds.

But as these were being handed out to the multitudes, there came one more impetuous, more anxious than the rest, pushing his way up through the line, shouting "ONE side, ONE side, please!"

And he was given a C-1. Don Hoffman Seattle, WA

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PERCEPTION'S CONSERVATION AWARD

Applications are still being accepted for Perception, Inc.'s Third Annual Conservation Award. Each year the boat manufacturing firm seeks to honor some dedicated individual within the United States or Canada who has fought with determination and success to protect our waterways.

There are no geographical or age restrictions for nominees. The only requirement is that she or he have worked on a river conservation effort within the past year between September 1982 and August 1983. The company advises clubs and conservation groups to make one nomination with all members signing their endorsement. Application blanks can be obtained from local Perception dealerships or by writing Joe Pulliam, Perception, Inc., Box 686, Liberty, SC 28657.

PLACATING THE GODS

What would you do if in one month you slammed your head open in a river and needed stitches while your buddy got self and boat near ripped to shreds in a hole just a little further downstream? Then the next month your girl tore her shoulder in a freak wreck, you banged your elbow so it swelled to the size of a softball, and your buddy (whose roll is normally solid) takes two bad swims? Wouldn't you start asking yourself, "Hey, what'd I do wrong?"

Well, that's what the Huntsville Canoe Club's famed and strange 'Eliot' did. With a great deal of thought (no mean trick for this man) Eliot reviewed his sorted, recent life and realized his offense to heaven all began on the Little River Canyon. There, on the return shuttle, with klutz-mustered malice, Eliot ran over an innocent, defenseless chicken.

At once he realized his sin and sought

to make ammends. At an unknown and carefully guarded location, Eliot and the principal walking wounded gathered in solemn ceremony and ritualistically sacrificed a chicken (not the same one). Eliot then tied the object of placation to his spray skirt and paddled it down the Nantahala. Surely, such heart (and liver) felt sacrifices cannot be ignored by the river gods. After all, the same placation worked for the noble Achilles when he had polluted sweet Father Xanthus' stream with dead Trojans (sic). At any rate, we wish Eliot nothing but the best, and appreciate his sharing the latest in advanced safety techniques.

> — Thanks to Huntsville Canoe Club

CANOETREK

Now your paddle strokes have a chance to improve someone else's health besides your own. The Brooklyn Lung Association, in coordination with the ACA is sponsoring a three-day "Canoe Trek for Life and Breath." Anyone can join and come paddle the Fulton Lake Chain in New York's beautiful Adirondacks. (The fall foliage should be at its peak that Columbus Day weekend.)

To take part in this fun weekend, Trekkers are asked to raise \$200 in pledges and provide their own transport to and from the starting point. Your best bet is to hit up the neighbors or guys at work for several cents per mile you paddle. In return, the Brooklyn Lung Association will provide canoes, food, logistical support, first aid, orientation and training sessions, pledge materials, and leadership. So just put your flesh on the line and help out. For more information contact Brooklyn Lung Association, 165 Cadman Plaza East, Brooklyn, NY 11201; (212) 624-8531.

THE TEN COMMANDMENTS OF PADDLING

(With our thanks to The Arkansas Paddler who pirated these laws from somewhere and sent them on our way.) I. Paddle thou not on cold rivers without thy wetsuit for if thee doith, thy buddies will surely be buying beers for they widow or widower and giving consolation in other ways not acceptable to thee.

II. Tarry thou not amongst those who cast aside preservers of life for they are non-believers and surely not long for this world.

III. Verily I say unto thee, be wary of backrollers for being trapped within is a slothful process and thee might roll for hours before thy maker sees fit to end thy misery and drag thee into the fold.

IV. Trifle thou not without a helmet lest thy spouse be frustrated and have no further use for thee.

V. Take care thou passeth not thy trip leader for this will incur the wrath of thy seniors and bringeth the fury of the safety chariman down on thy head.

VI. Commit thou to memory the works of the prophets, which are written in the holy books and giveth the straight dope.
VII. When thy roll doth fail takecare thee float feet first. This may cause thee to be bounced in a most unseemly manner on thy hind parts but thee will paddle.

on thy hind parts but thee will paddle another day. VIII. Go ye unto the waters with a bunch

VIII. Go ye unto the waters with a bunch of other boats.

IX. When thy boat dumpeth thee, be ye upstream when it is cast asunder upon the rocks lest thee be pinned in a rude manner:

X. Thou shalt not forget thy duct tape.

PRO OCOEE BILL

It looks like many of the Ocoee River's supporters have taken summer vacations, forgetting to support House Concurrent Resolution 125 (HCR 125), which is that river'scurrent best hope for continued whitewater flow. Rep. John Duncan introduced HCR 125 last May which provided 110 days of recreational releases per year and that "user fees, if necessary, be collected to pay for recreation facilities and not for replacement power." It also calls for the Ocoee project to be operated as a "multiple purpose project."

The TVA had originally put forth an opposing plan which would demand payment for lost power. In other words, when the Ocoee hydro project no. 2 would shut down and return water to the riverbed for recreation, outfitters would be required to charge their patrons a 'users' fee.' The latest figure was \$264,000 for 82-eight hour recreation periods, but it was to escalate annually.

Fortunately, however, HCR 125 is a blow against the TVA proposal. The only problem is that it needs your support to pass. To help this bill become law write your Congressman (His Name, U.S. House of Representatives, Washington, D.C. 20515) and ask him to cosponsor HCR 125. Then write your Senator (His Name, U.S. Senate, Washington, D.C. 20510) and ask for his support.

If you need some ammunition to fire up your letters, mention a) that the Ocoee, a navigable waterway of Tennessee, attracted 93,400 visitors last year; b) this brought over \$3 million in tourist revenues, while c) the Ocoee project no. 2 would at best account for only one tenth of one per cent of the TVA's total power production.

OREGON UNDER ATTACK

Grande Ronde: Indians to the rescue As noted last issue, the Grande Ronde Power Company, a subsidiary of Boise Cascade is currently seeking study permits from the all-too-eager Federal Energy Regulatory Commission (FERC)

Fluvial News



Gert Cranks Out **31.4** RPM. Recently, kayaker Gert Barnhoorn of Holland broke into the Guinness Book of Records when, on Dutch National Television, he performed 100 consecutive hands-only rolls in a mere three minutes, 11 seconds. This record beat his old mark of three minutes, 19 seconds. (v/d Stigchel photo).

for possible dams on the Grande Ronde and Wallowa Rivers. Meanwhile, state environmentalists are pushing to get these streams under state Wild and Scenic protection.

Now the Nez Perce Indians are getting into the act. The Nez Perce nation has officially petitioned to intervene in the federal licensing process for these dams. Should the petition work, Boise Cascade will have to kiss their plans good-bye. If you want to help, write your Oregon Rep. or Northwest Rafters Assn., 10345 SW Ridgeview Lane, Portland, OR 97219.

North Umpqua. Permits for the Winchester hydro project which would backflood the North Umpqua in the Roseburg vicinity have recently been rammed through the channels of federal and state regulatory agencies. To cinch the deal, Elektra Power Corporation had somehow succeeded in ousting the Steamboaters, a flyfisher/counservation group, from the permit process as legitimate intervenors. But recently, local Umpgua boating clubs have joined in the protests and helped schedule a rehearing and restore the Steamboaters intervenor status. The fight is now on and could go either way.

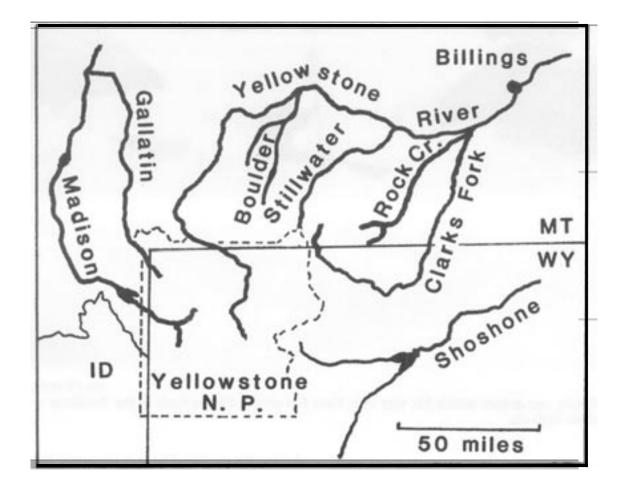
Willamette. Oregon's only good news is the recent inclusion of Waldo Lake and the North Fork of the Middle Fork of the Williamette River in the State's Scenic Waterways System. Interestingly, though Waldo Lake does not fit the "flowing stream" segment of the waterways system bill, state legislators were impressed by the fact that the lake is one of the purest large bodies of water in the world and they decided it should remain that way.

- Thanks to Oregon Natural Resources Council

Got River-Saving Skills? The American Rivers Conservation Council, 323 Pennsylvania Ave., Washington, D.C. 20023 isseeking lawyers, engineers, geologists, hydrologists, economists, and anyone else with some expertise that can be applied to a riversaving network of legal and technical assistance. If you are willing to help, write them now.

WHITEWATE

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YELLOWSTONE WHITEWATER

by Keith Thompson

As a recent Montana transplant, exploringboater Keith Thompson proves it truly is the Treasure State, with enough hidden streams in the Yellowstone Basin to keep you busy for years—and out of the fine-slapping clutches of the national park rangers.

As I prepared to move to a new job in Billings, Montana, ominous thoughts of cold turkey whitewater withdrawal nagged at me. Never had I heard of any boatable whitewater in that area other than the forbidden waters of the Yellowstone River in its namesake national park. I kept envisioning all-night drives to distant rivers on only a few glorious weekends per season.

What I found, however, was a much welcomed surprise: a bountiful supply of little known streams draining wilderness areas north and east of Yellowstone Park. There were enough to keep a boater like myself busy exploring new and progressively more difficult runs for the next few years, and there was even one dam-controlled river that could be run all year long, complete with hot springs to take the edge off those midwinter outings. All this within a few hours drive from home!

At least 10 runnable streams within



Mike Madden

Above, our author works his way into Twin Pin on the Clarks Fork of the Yellstone — 1000-1500 cfs.

50 miles of the park are current favorites of local boaters; undoubtedly several more are yet to be explored. Like most western rivers, those discussed in this article rise in response to snowmelt runoff. A typical hydrograph would show low flows continuing through April, followed by a small rise in early to mid-May, and a sharp rise sometime in late May or early June. Peak runoff arrives mid-May to late June depending on the amount of mountain snowpack, temperatures, and late spring rainfall. After the peak, streamflow usually tapers off much more gradually than it rose, affording medium to high flows usually through late June. Consequently, it's much easier to wait for the peak and then catch optimum stream levels thereafter. This will give you prime boating through mid-July when the weather's a bit more cooperative.

Shoshone River

Originally named the Stinking Water River by mountain man John Colter, this dam-controlled stream with the hot springs has made year-round whitewater boating possible in an area where most streams either disappear or freeze during the winter. Though renamed the Shoshone, a light aroma of hydrogen sulfide still emanates from the riverside hot springs. Besides having a canyon that provides a winter haven for a small group of die-hard whitewater enthusiasts, the Shoshone also has two reaches that masses of Yellowstonebound tourists float with local rafting companies.

The North and South Forks of the Shoshone flow into a reservoir impounded behind Buffalo Bill Dam just west of Cody, Wyoming. During spring runoff, the North Fork sports about 20 miles of Class II-III whitewater above the reservoir, parts of which are rafted commercially, and all of which can be boated with kayak or canoe. Many campgrounds and turnouts along U.S. Highway 14/16/20 can be used for put-ins and takeouts.

Below the reservoir lies Shoshone Canyon, cut through the Precambrian granites and the steeply dipping younger sedimentary rocks of Rattlesnake Mountain. While this picturesque canyon annually delights geologists, rock climbers, and fishermen, relatively few boaters ever make use of it. Here, how-



Above: The first drop of the Lower Stillwell, which cruises gently downstream at 100 feet per mile.

ever flows winter boating at its warmest —at least in this part of the country. Access to the put-in is via a river-level service road off Highway 14/16/20 to the base of the dam. The takeout at DeMaris Hot Spring can be found by turning off Highway 14/16/20 at the Shoshone National Forest Headquarters building near the west end of Cody and bearing left along a gravel road about a mile to the springs. (Nice way to end a trip.)

The Reservoir Regulation Division of the Bureau of Reclamation in Billings, (406) 657-6516, gladly provides flow information on releases from the dam and the Heart Mountain power plant three miles downstream. The dam's fall releases of 700 to 1000 cfs are cut back to 200 to 400 cfs from December through mid-April, then increased again with the onset of the irrigation season. The power plant contributes another 350 cfs, which is a welcome addition to the winter's low flows. All this, plus the spring runoff's topping of the dam spillway brings flows of 3000 to 6000 addtional cfs.

At low flows, a Class III-IV rock dodge through a natural slalom course starts a few hundred yards below the dam and

continues for the first mile and a half. Pop-up spots can be found behind some pour-overs and boulders, but most of the better play spots seem to have one or more rocks viciously located a few feet below, waiting to claim the boats of the unwary. The ensuing flatter stretch below the service road bridge gently lulls and leads you to the tightly packed, Class IV-VI drops of Entrance, Customs, and Iron Curtain. This section deserves thorough scouting. The first two drops would be pure fun if not followed so closely by the intimidating, extremely tight S-turn and limestone wall of Iron Curtain. At flows below about 500 cfs, one critical move must be made to get past a midstream rock and miss the wall, but at higher flows I doubt that any saving move other than a portage would be possible. At high flow (4000 cfs), I've sat and watched big logs shoot through and come up 24 yards downstream as little logs after splintering on the wall.

A nice playable stretch follows Iron Curtain, then three-quarters mile down you hit two more sets of rapids, bringing you to just a mile above the takeout. A maze of house-size boulders forms the first and the second is a real pounder. WHITEWATER

Scouting is usually enlivened by the abundance of rattlesnakes inhabiting these desert environs.

When high water is splintering logs to toothpicks up at Iron Curtain, play spots on this upper run have washed out and better boating is found in the four miles from DeMaris Springs to the Wyoming Highway 120 bridge.

This Class III run is a favorite of Cody 'commercial raft outfitters who ocasionally can be cajoled into providing a shuttle back to the DeMaris put-in. The river itself flows over boulder-bed and rock-shelf rapids in a redrock canyon, and offers an abundance of river-wide surfing waves and even some ender spots to delight the few kayakers who find their way to this neglected stream.

Busloads of tourists do ply the water of the North Fork and the lower canyon in guided rafts, but the canoers and kayakers passing through the area must wear blindfolds on their way to more popular rivers. In the four years I've boated the Shoshone, I've seen but one other group of kayakers there, and they were only looking! Despite this lack of renown, it is a scenic canyon well worth paddling.

Clarks Fork of the Yellowstone

Just thirty miles north of the Shoshone River runs the Yellostone's Clarks Fork. Rising in the snowfields of the Beartooth Plateau at 11,000 feet, she flows across this high table for 20 miles, then drops into an awesome 20-mile canyon up to 2000 feet deep. In 1977, Kay Swanson told *American Whitewater* readers of his eventful exploratory trip through the canyon. His verbal descriptions conjure up visions of a torrential series of waterfalls that have carved a narrow defile through the granite rock.

Not all of the Clarks Fork, however, is such gut-wrenching, quasi-suicidal froth. Below the eight miles of unboatable and nearly impenetrable box canyon lie five miles more of eminently boatable Class IV-V water. Wyoming Highway 292 will take you to the mouth of the canyon, but there it turns into a rocky two-track 'road' that can be pretty tough on low-riding autos. You can put in or take out nearly anywhere along that stretch since the road follows the river and crosses only BLM and National Forest land. We usually put in as far up the road as possible, and take out at the canyon mouth where the paved highway is closest to the river. Scouting can be doneduring the drive to the put in, and is enlivened by the abundance of rattlesnakes that inhabit this desert environs.

A series of boulder-bed rapids accounts for most of the400-foot elevation loss in this last bit of canyon. At high flows (4000-8000 cfs), the big water roars down the channel like a freight train. The rapids are almost continuous, and it's all too easy to loose your way and wind up in some blind, bouldery channel. A third of the way through the run, a very large midstream boulder signals a drop called Mike's Motel, which must be run on the extreme river right. The channel just left of the boulder looks inviting from river level, but ends on a rock reminiscent of a cleaver. The other heart-stopping rapid, Twin Pin, lies two miles above the takeout, and can hardly be missed on the drive up the canyon. At flows less than 1500 cfs the boulders begin to emerge occupying more and more of the channel and this upper canyon run grows quite technical.

The canyon of the Clarks Fork of the Yellowstone, boatable through late August, has been on the hit list of the dam builders for over a decade, since the Bureau of Reclamation did a feasibility study for the Shoshone-Heart Mountain Irrigation District (which already siphons off much of the Shoshone River's water). Nothing much came of the first study, but with money derived from Wyoming's coal severance tax, the Wyoming Water Development Commission now is taking a deeper look into damming the lower canyon. The current study will be completed this fall so we are monitoring this rejuvenated interest and marshalling support against any development.

A bill recommending that the Clarks Fork be included in the Wild and Scenic River system now sits in the U.S. Senate. No companion bill, however, is in the House and Wyoming's Senators, favoring low-head power generation, refuse to sign the Senate bill. So now is the prime time to write to your representatives in Washington and extoll the wondrous scenic, cultural and recreational resources of the Clarks Fork Canyon, before the hydropower ball gets rolling.

Rock Creek

The largest tributary pouring into the Clarks Fork of the Yellowstone, Rock Creek, flows northeast out of the Beartooth Plateau cutting a classic U-shaped canyon through the metamorphic rocks. A 10 mile float begins southwest of Red Lodge, Montana where Lake Fork and Rock Creek coalesce to produce a stream large enough to carry a kayak. U.S. Highway 212 followsthecreek, with several side roads providing access. Two Forest Service campgrounds in the valley can also be used for put-ins.

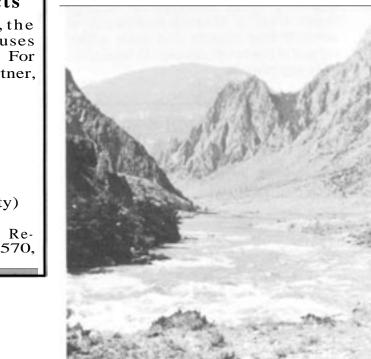
For about one month at the peak ot spring runoff, the creek flows between 400 and 1200 cfs at Red Lodge and is ideal for boating. Too scratchy below 400, the flow above 1200 brings a significant chance of sudden encounters with newly fallen trees—the greatest hazard on this wooded run.

The entire 10 miles from Lake Fork to Red Lodge is pretty evenly sprinkled with Class III and a little Class IV whitewater attributable to glacier-dropped boulders. These obstacles aren't always easily avoided, but they do create an abundance of eddies from which to scout ahead.

Putting in at Lake Fork leaves about a half mile of Class III water as a warm up for the Class IV stretch at the U.S. 212 bridge. The difficulty continues until Ratine Campground, where the creek flows across a wider, more open portion of the valley. Shortly past Sheridan Campground, the tempo picks up again and runsasasteady Class III-IV into Red Lodge.

Midway down this run, a low-hanging suspension foot bridge just below an irrigation ditch headgate and a log bridge may require a portage. Easily seen from 50 yards upstream, there is plenty of time and slack water in which to pull out. This is private land, though, so be courteous to anyone you meet while portaging.

Below Red Lodge, Rock Creek flattens out and is crossed by many barbed wire fences, so we generally take out at a



Yellowstone Contacts

Besides excellent rivers, the Yellowstone Basin also houses a host of boating fanatics. For more info or a paddling partner, contact:

Keith Thompson (406) 628-7474 Jack Nichol (406) 248-6987 Pete Rechfertig (406) 252-7421 (Beartooth Paddlers Society) or write Eastern Montana College, Re-

creational Activities, Box 570, Billings, MT 581 01. small park along U.S. 212 nearthesouth end of town. The run from Lake Fork to Red Lodge is prime whitewater boating in an easily accessible spot and shouldn't be missed by anyone passing through the area.

Stillwater River

Ah, the Stillwater. Thirty miles west of Rock Creek she flows out of the Beartooth-Absaroka Wilderness Area in a beautiful glacially carved canyon, and empties into the Yellowstone River at Columbus, Montana, 40 miles from the mountain front. Various parts are floatable for much of the year, but May through July sees the river with more than the typical, scratchy 700 cfs at its mouth: a roaring 6000 surges through at peak runoff, with an average above3000 all through June.

The Stillwater headwaters were explored last July by the intrepid Todd Wicklund and the adventuresome but less experienced Dean Hill. Dragging their boating equipment, they hiked over snow-covered Daisy Pass and down into the meadow below, where a few creeks join to form the Stillwater River. There they committed themselves to an unscouted 30-mile run, carrying no camping gear and only aone-day supply of food. As legend tells it, great boating alternated with long arduous portages around several unrunnable gorges, until finally darkness finally forced the pair to abandon the river. They hiked most of the night to stay warm, and emerged the following noon blistered in strange areas from a 10-mile bushwack in wetsuits and booties and more wisely versed in the shortcomings of taking too little equipment.

Not many can boast of running that stretch without incident.

Below the wilderness area boundary, the river offers 40 miles of boatable water, starting at Woodbine Campground with the Class V section described in "Kayakists 3, Stillwater 2, 1 Draw" in American Whitewater (Vol. XX, No. 2). There the river drops at about 100 feet per mile over boulder-choked, bedrock rapids designed to give boaters and boats a good thrashing. Not many can boast of running that four-mile stretch without incident.

The Stillwater is most heavily used between the towns of Nye and Columbus. State maintained fishing access sites off Montana Highway 78 and the Stillwater road west of Absarokee provide camping spots as well as put-ins and takeouts. Between Buffalo Jump access at Nye and Moraine access lie a few miles of Class II water, making an excellent learners' run. Below Moraine the stream builds to 10 miles of boulder-strewn Class III with several notable rapids. The takeout for that stretch is Cliff Swallow fishing access, which is also the site of the annual Stillwater Slalom and Wildwater Kayak and Canoe Races hosted by the Beartooth Paddlers Society.

A short, fun run can be found between Whitebird and Fireman's Point with fishing accesses on the lower Stillwater. At high water, outcrops of sandstone ledge create four fairly large drops, each with great surfing waves and definite popup and ender possibilities. You can spend half a day playing on this section, and, as opposed to the other frigid runs in the area, the water on the lower Stillwater is actually comfortable.

Boulder River

Just west of the Stillwater flows the aptly named Boulder River. It ranks right up with the Clarks Fork on the list of seldom run streams, but contains a lot of impressive whitewater and spectacular scenery. If you're looking for hair, go about 50 miles south of Big Timber, put in at the bridge on Four Mile Creek, and run Hell's Canyon. It's some stuff. If you're more sane, try the 10 miles of Class III-IV water just below Hell's from Mimanagish Church Camp to Falls Creek Campground; the Class III run between McLeod and Eight Mile Bridge; or the West Boulder from Boulder School Bridge to McLeod.

Continued on page 35.

SURVIVAL QUIZ

s, whitewate

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- 1. What percentage of healthy animals, birds, insects, and reptiles, are edible, worldwide?
- 2. What type of wood burns best when wet?

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- 3. What plants could you risk eating, if you are desperately hungry?
- 4. How would a rescue plane signal that he understands your message?
- 5. Why is the raw flesh of sea turtles more nutritious than sea fish?
- 6. What diseases are carried by arctic insects?
- 7. Sinew is from what part of the animal?
- **8.** How do you take a compass reading in polar and other regions where the magnetic field is erratic?
- 9. What is the most undesirable limitation of twitch-up snares?
- 10. What is the surest sign of tuleramia (rabbit fever) in mammals?
- 11. How many types of grass are edible, worldwide?
- 12. What is the first thing you should do when lost or stranded?
- **13.** Why is it important to wash your body and clothes thoroughly after being immersed in tropical waters?
- 14. What is the least desirable shape for an improvised raft?
- 15. Why don't flesh-eating natives get scurvy?
- 16. How do you form branches and twigs for making snowshoes and implements?
- **17.** Why are toads not edible although frogs are edible?
- 18. What two rock formations are the best locations to scout for water?
- 19. On which side should you lay a person with a lung injury?
- 20. What is the best location for building a solar still in the desert?
- **21.** How much of which solid foods should you eat if you are completely out of water?
- 22. Why should snow be premelted rather than eaten raw?
- 23. What kind of dry tinder do you always have with you?
- 24. Why is it usually best to camp above valley bottoms in winter weather?
- 25. How far south is the North Star visible?

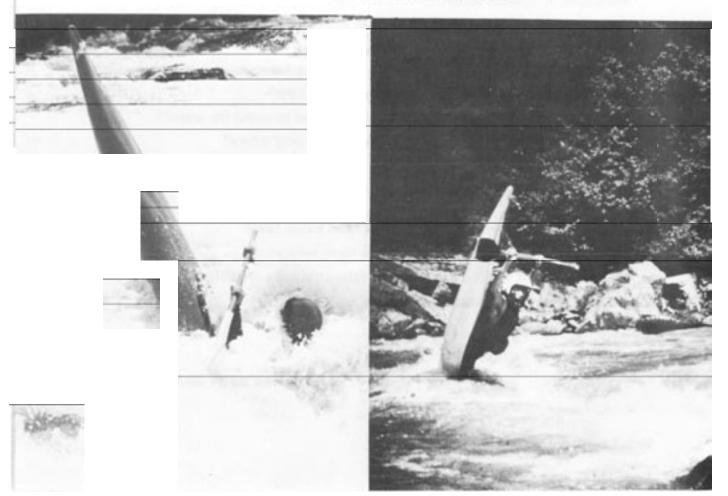
See page 36 for Answers



PLAYIN' AROUND

Slouching in an eddy while some hole-hog strutts his stuff

The Climb Up - from Survived to Skill from Terror to Thrill





The lift off of that first ender

Surfing sans Blade

All the happy hotdog stuff that shows you have arrived



Motorcycle Boat Trailer

How does the city-bound paddling cyclist manage his weekend escape? Inventive Chuck Paulson has the answer

Does your wife give you a hostile reception when you return from a paddling trip because you had the car all weekend? Do you miss some of the best paddling opportunities because you couldn't quite hook up with the ride you needed? Do you have to choose between riding your motorcycle or going paddling on the weekend? If the answer to any of these questions is 'yes,' you may find that hooking up a trailer to a motorcycle is a satisfactory solution to your problems.

I know, I know, the idea of making a basement-built rig to hitch on to the tail of your cycle and toting your precious boat to the river sounds expensive, impossible, dangerous, incredibly difficult, and tiring beyond any conceiveable benefit. But hold your scorn. In truth, I have built such a rig and it is none of these. I have happily endured 300-mile trips, hitting speeds of up to 80 mph in the worst weather, and never had any great trouble or fatigue. Invariably, I arrive back home to a smiling and satisfied wife who is no longer unhappy with my weekend absences, because she has been amply bribed with the use of our car.

Dangerous as it may seem, the trailer does not change the handling characteristics of the bike, either on turns or in side winds. I have so far experienced 50mph cross winds with no appreciable difference in handling, even when hauling two boats, which the trailer can easily accommodate.

The cycle trailer is remarkably stable for four reasons. First, the trailer itself is light (even though I made it with heavy materials). Gross weight is 160 pounds. Second, the weight at the tongue, fully loaded, is only 20 pounds. Third, the trailer is connected to the bike at axle level, making extra weight insignificant in terms of lateral movement on the bike. Fourth, and perhaps most imporatnt, the distance between the trailer ball and the trailer wheels, a considerable eight and one half feet, exerts plenty of leverage on any tendency to throw the bike off course.

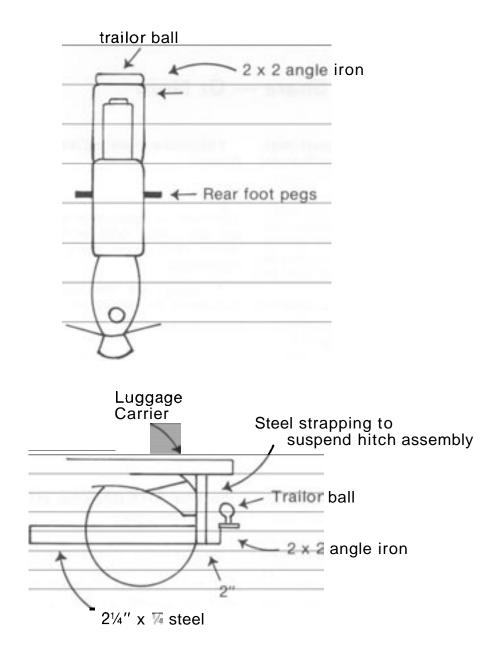
Building Notes

To get a general idea of what a good trailer looks like and how to build it, go to any place that sells simple utility trailers and study the basic design. Take along a pencil and tape measure to record proportions. Some places sell knock-up type rigs (like Rickel Home Centers or Sears). These offer the best examples because no welding is involved and the design is very simple.

In constructing my own cycle trailer rig, I scrounged an angle iron from a Harvard bed frame for the main frame holding the springs and wheels. The main strut that holds the boat should be rigid enough. For the main strut, fortune kindly provided me with a discarded New York City parking sign pole, though most trailers prefer the more conventional two-by-two-inch piece of hollow steel. The most important thing to remember in selecting a main strut is that it holds the boat and thus must be rigid enough to prevent any horizontal sway when the craft is attached. If the strut isn't securely fastened, you might repeat my experience and watch your trailer traveling down a separate lane from your bike.

Springs are easily purchased and a 400-500-pound capacity is plenty. For optimum balance, place the axle assembly on the main strut in such a way that only 15 to 20 percent of the gross weight is on the ball. (I prefer 15 percent.)

I bought my hitch from Cyclecamp of Anaheim, California because I couldn't



HITEWATER

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find a model in my part of the country, (Greater New York). It is a good rig and most importantly it is the type with the ball at axle level. You can, however, make your hitch using a very simple principle. See the drawing above.

The axle and wheels are standard trailer equipment available in any boat or auto shop or store carrying trailer parts. Whatever you do get, however, should really be fixed with a 'bearing buddy' that keeps the bearings jammed with grease while these small wheels are heating up intensely at even ordinary speeds.

All this may sound like a complex, unwieldly gadget. It's really not. I've even fixed mine with carrying wheels and can roll it out of my apartment to the sidewalk. There I can load one or two boats and even a passenger, scoot on up to the Hudson Gorge and spend a great weekend. City life may cramp yourspace, but there is no need to let it cramp your style.

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Our Share — Or More

Boating is booming. This past year, more folks ran whitewater rivers than ski slopes. But boating is also dangerous, and inevitably, unfortunately, with this popularity has come a lot of death, drowning and some damn scary near misses. The question is, are we getting only our fair share of fatalities, or are we doing something wrong that can be corrected?

? Is the boating community offering enough instruction for all new boaters hard and soft—entering the sport?

? How good is this instruction nationwide? Is there too much technique and too little preventative safety taught?

? Are commercial outfitters encouraging dangerous experiences with a 'rentto-anyone' approach? ? Should we rate and restrict boaters? Rivers?

? Would any government agency or legislation be of aid, or should we just continue our education efforts as they are and place faith in human judgement? After all you can't make boating hazardless.

? Finally, are their trends, specific accidents or situations that can be guarded against?

?

We ask AWA readers for their answers to these questions and to help them, we provide below an unfortunately small sample of this season's boating accidents.

I. The Drowning of RAY OTT on the ARKANSAS RIVER submitted by Keith Thompson

Just this past June, the Arkansas River took the life of a dear friend of mine, Ray Ott with whom I spent many weekends paddling the Gallatin, Yellowstone and stillwater rivers in the Montana/ Wyoming area.

Ray and some friends were attempting to run the Arkansas' Pine Creek Canyon in southern Colorado. This is a narrow, hole-and-rock-laden run that shoots a very fast, totally non-stop jet of current through a series of tight slots. Very changeable with water level, it's generally rated from Class IV+ to V+ depending on the immediate amount of flow. But at any level, it's darn tough water.

Ray had recently purchased a brand new Eclipse kayak and this was his first shot at trying out the unfamiliar boat. In addition, he had never before seen this stream. Partway down, Ray got stuck in a large keeper hole and dumped. He tried to roll up, but couldn't and did a wet exit. After abandoning boat, paddle and all, he came up far below and communicated to his paddling partner that he was still O.K. Then he started heading for shore.

Ray never made it to shore. His paddling partner followed him a long ways downstream, but the unbroken speed and difficulty of Pine Creek made a boat-based rescue infeasible. Eventually, the partner got out of his own boat, latched onto Ray, dragged him to shore and tried to resuscitate him. All attempts failed and Ray died thereon the riverside.

Ray Ott was originally from Sheridan Wyoming, but was living in Gardiner, Montana. All of us in the area will miss Ray. He was a good boater and one hell of a nice guy. After talking it over with

those who were present and those who knew him, most of us agree that his death was at least partly due to the use of unfamiliar equipment in extremely difficult water in an unfamiliar river.

II. The Drowning of BOB O'CONNOR on the GAULEY RIVER

reported by Charlie Walbridge

Just last fall, a group of Georgia Tech Outdoor Program students entered Initiation Rapid, the Gauley's first major drop below Summersville dam. One of the group took an obscure route to the far river right and through an unfortunate combination of rocks and current wedged his stern between two boulders, with the bow facing upstream. A rescue ensued, but after a great struggle, Bob disappeared from view. His body was recovered some hours later, some distance below the site of the struggle.

The Gauley River below the dam is considered one of the most challenging big water drops in the East with numerable numerous Class IV - V drops along its course. The 2500 cfs normal during 'fall drawdown' season is considered optimal for safety and enjoyment. The major rapids are powerful, occasionally intricate with big drops separated by long pools. Invisible undercutting of several of the huge boulders adds to the run's risk.

After warming up below the dam and downstream through minor rapids, the group headed off into Initiation. Bob, recently appointed Director of Outdoor Programs at Georgia Tech, had numerous runs of the Gauley to his credit and was fully prepared for the trip. Initiation's top half is fairly easy, her bottom half is a sliding ledge dropping eight feet in about 30 yards. Most paddlers that day ran the center route without incident.

Bob O'Connor was traveling midgroup. Whether he voluntarily chose to run right or was pushed by an unexpected current is unknown. In any case, as he neared a big, sloping boulder on the right, Bob washed up against its shallow pillow of water, expecting to bank off it and slide into the pool below. Instead, his stern was sucked down into a crack between the dry rock on the right and the wet rock which made up part of the ledge. The crack narrowed on the downstream end where a basketball-sized rock had become wedged. The kayak pinned on this rock with the stern below the current and the bow pointing skyward at 50 degrees. It was a horrifying sight!

THE RESCUE

The group saw O'Connor's predicament and responded. Henry DeGrazia reached the rock next to the pinned boat first. (Others had considerable difficulty crossing the tricky currents between rock and shore.) DeGrazia talked to O'Connor who was trapped inside the kayak with his head above water. They decided that DeGrazia would give O'Connor one end of a rescue line and belay the other end on the rock. Both men pulled, attempting to give O'Connor the needed leverage to work free. Initially this worked, but at the last moment, the kayak pivoted 90 degrees and spilled the nearly-free O'Connor into the onrushing current, where he was pinned. (Later observation suggested that the boat's stern initially came to rest on a small ledge within the crack, then fell off as the craft spun and plunged deeper into the crack below.

Meanwhile, others tried but were unable to cross the current to the rock and reach the accident site. The victim's plight worsened and DeGrazia called for help. Two of the group walked upstream and attempted to swim across to the site. Only Dave Montanye made it to the rock.

With two rescuers, Dave got one end of the rope and, belayed by Henry, was able to reach O'Connor. By now the victim was pinned under a sheet of water, his head diverting the current to form an air pocket. He could talk, but not move. He seemed gradually to be slipping towards the crack.

This rescue attempt was more than competent — it was courageous

Dave grabbed O'Connor's lifevest; then later, O'Connor's arms. The jacket appeared to be caught on the rock and rode higher as the victim slipped down. The air pocket, moreover, was shrinking fast. Dave pulled on O'Connor's arms with all his strength (one arm tugging O'Connor, the other holding the belay line), but nothing could break him from the grip of the current.

Montanye was becoming exhausted, so the two rescuers changed places. At this point kayakist Frannie Stickland arrived on the scene. She told the men of a similar incident on this spot several years earlier and that there was a tunnel under the rocks right here. The previous victim had passed down the tunnel and come out downstream.

Since the situation was becoming desperate, DeGrazia took the risky step of reaching out over the victim and moving his boat so that O'Connor could wiggle free and go through the tunnel. The boat shifted and both victim and rescuer plunged underwater. O'Connor's life jacket and DeGrazia surfaced downstream. There was no sign of Bob. Concerned that the boat might still be blocking O'Connor's passage, Montayne worked his way out to the kayak, tried to move, lost his footing, and also went safely through the tunnel.

Then others, including Wick Walker and Dean Tomko mounted the rock. Walker, a mountaineer donned a German water rescue harness and clipped onto Tomko's rescue line. After probing the crack, he clipped a second line to the bow of O'Connor's boat and tried to pull it free. The boat shifted and sank. When they cut it loose and recovered it, there was still no Bob O'Connor.

Earlier on, a runner had been sent to the dam, a mile upstream over rugged terrain. The level soon began to drop after Walker's arrival. Walker again lowered himself down the crack. The walls widened into an underwater cavern that contained no snags or sign of O'Connor. Finally a search party was formed which found the victim's body at the base of the drop. Many other boaters, trapped by the falling water level, spent the night in the canyon.

ANALYSIS

Equipment Failure was a minimal factor here for the reasons given below.

The Boat. Polyethelene kayaks, which bend rather than break are considered more entrapment-prone than fiberglass. But in this case, the boat did not fold until after the victim escaped. (It was bent as it was forced through the underwater cave.) Water pressure pinned the victim in his boat. The front deck and his legs were actually out of the water, but the Gauley's current held him in.

The Life Vest, top quality and full length, remained on until the final stages of the rescue attempt. It appears that the victim was literally sucked out of the device (which was found later undamaged) as he was pulled over a rock and it snagged. No PFD could have stayled on in this case unless it had a crotch strap (as yet unmanufactured). Even the crotch strap has the trade off of security for quick release ability.

Paddler Response. The Georgia Tech group did everything possible to mobilize an efficient rescue. They were simply limited to access to the site. It is clear, however, that several boaters outside the group merely watched the rescue unfold. People need to cultivate a habit of prompt response to any trouble in any group. A few more bodies on the rock might have meant success.

Rescue Strategy. This rescue attempt was more than competent; it was courageous. DeGrazia and Montanye

put their lives on the line for O'Connor. Both risked death in swimming through the crack which claimed Bob O'Connor's life. In this light, hindsight seems a disservice to their efforts, but it may help to check the options for similar situations.

A) When the victim is pinned in a head-up, stable position, his condition will probably not deteriorate until rescue begins. A brief delay to gather the optimum manpower is often advisable here. Shortage of manpower was the biggest problem in the O'Connor rescue.

Note, however, that the victim's position may deteriorate without help also. Decisions must be made in consultation with the victim.

B) Once the victim failed to extricate himself and became pinned, the situation became desperate. One thing not tried was tying a rope to the victim, affording a pull from solid footing. This might have bought time to find if Bob's foot was trapped in the cockpit. A swim harness, as worn by Walker, might have made a difference here. These devices are neither manufactured nor known in this country.

C) This group should be commended for having ample ropes, ready, in the

right place. Without them, any rescue is impossible.

Suckhole Roulette. This incident occurred in a 'suckhole,' where the current pushes between two rocks. Though Fannie Strickland stated correctly that several people have survived swims through this place, it is still a perilous option. Debris frequently blocks a formerly clear passage. In this case, it was a reasonable choice, however. The victim's outlook (so important to the outcome) was good. Had Bob O'Connor not lost his PFD, and thus all chance at recovery, he might have survived the suckhole swim and been revived with CPR.

In Conclusion: this incident shows the importance of having a well thought out plan before disturbing a pinned, stable paddler. Yet even the best strategy is tentative and must be modified to circumstances. These rescuers followed the victim's wishes. We can ask no more.

Here was a desperate situation with a tragic outcome. Several pinnings have occured on this site, but this was the first fatality. This death shows that the most competent and best equipped people can never assure rescue. Prevention is the only way to avoid fatalities.

NOMINATIONS FOR AWA's Board of Directors are now open

At the close of 1983, five members of the nine-person Board of Directors of the American Whitewater Affiliation will retirefrom their terms. In keeping with our constitution, AWA's membership must be presented a slate of nominees from which they will elect the five new board members.

So if you or anyone you know is qualified and would like to become an AWA Board Member, submit her or his name BEFORE NOVEMBER 1st to Marge Cline, Board of Directors Nomination, 1343 N. Portage, Palatine, IL 60067.

AWA Classified — only 30C a word



LEARNING THE HARD WAY

by Fred Hanselmann

All of us, no matter how expert today, once sprang from the humble turkey. We forgot equipment, leaned upstream, ran too-tough rivers and usually paid for it with a goodly share of icy swims. So did paddler Fred Hanselmann of Corrales, New Mexico. The big difference is, he is not ashamed to admit it, and even offers us his novice saga for our entertainment and perhaps a few good lessons.

Most river runners begin their careers in a fairly sensible manner: they usually take a few lessons or begin under the guidance of an experienced boater. However, there are others who just have to learn the hard way. I have to admit to being in the latter category.

I had my first experience with river running in the early sixties in Wyoming. At the time, I was working summers as a fishing guide in Jackson Hole-a wonderful place which, in late afternoons, literally lies in the shadow of the Teton mountains. One evening after work, my boss Tiny (who weighed in at 350 chubby pounds) told me that paddling really was not his sport after all and would I like to buy his canoe - cheap. Being a somewhat prodigal sort at the time, I immediately bought it, sight unseen. It turned out to be a rather flimsy fiberglass affair but I was sure it was destined to carry me through the wildest whitewater in the West.

I was off. My first attempts at operating the canoe were on the flat water of Jackson Lake where friend Henry and I were soon paddling in almost perfect circles. Our correction for this obvious error was simple: switch the paddle from one side of the canoe to the other. Before long, we were paddling serpentine courses up and down the lake to the vast amusement of our fellow guides. After a mercifully short span, one of them mentioned that there did exist a refinement in the art of canoeing called the Jstroke. What a difference! In no time we were miraculously forging ahead in something resembling a straight line. At this point, Henry and I decided we were experienced canoeists and ready for the big time: the Snake River.

There are two parts to the Snake in Jackson Hole, the Upper (known as the scenic Snake) and the Lower, a relatively technical piece of water with many Class II and III rapids and one Class V hole. I suppose that it is some testament to our sanity that Henry and I decided to test our newly found skills on the easier upper portion. This part of the Snake, running from Jackson Lake Dam to the bridge at Moose 30 miles downstream, is a big river as rivers in the arid West go. Typically, it is a hundred feet across, seven or eight feet deep and flowing fast. There are no rapids of any real consequence here. The biggest water on it are two or three foot standing waves that can be easily avoided.

The speed of the current and the snags, however, are another matter. As the current sweeps along the high banks of the river it gradually undercuts them and the pine, fir and narrow leaf cottonwood lining the banks lean more and more over the river and eventually topple into the water. These trees inevitably end up lying on the water or floating half submerged at right angles to the flow. The Snake's strong current plunges right through these snaggly snarled strainers. I have since seen single strainers on this river that have gobbled up whole rafts and several canoes. But at this point, Henry and I were blissfully unaware. The whole concept of the boat slamming broadside, becoming emeshed in a million hooks, roots, and branches, getting pinned and sucked under the tree, loosing gear, boat and perhaps life was for us a process unknown.

Thus, with more energy than knowledge, Henry and I decided to make our first voyage on the Snake. One evening, after work, we put in at a flat, calm spot on the river known as the Oxbow where we planned to practice some of our newly discovered strokes in slightly moving water. It wasn't long, however, before the slightly moving water began moving rapidly as the Oxbow rejoined the main river. When, after a few hundred cautious yards of paddling, we seemed to be still alive and in one piece, we decided that it wouldn't hurt to just paddle around the next corner or so. Here we discovered our first rapid, a small riffle where rocks deep under the surface caused the river to break into a series of small waves. Sliding into it with great trepidation, we bounced around a bit and came out the far side convinced that we must be whitewater veterans and that the river held no dangers for us.

No stopping us now. Down the river we went, bend after bend. Unfortunately, after we had paddled down about seven or eight miles, we realized that night was coming and that there was no way we were going to get to the takeout before complete darkness. Upstream was impossible, there was nothing to do but press on. Small riffles, easy chutes, snags, strainers, sandbars, sweepers and mazes of side channels all followed in rapid succession as the light grew dimmer and dimmer. Soon it became difficult to make out any kind of detail on the surface ahead of us. Was that a snag or just a reflection up there? Then it was completely dark. Since we had absolutely no idea of backpaddling or ferrying, our basic strategy was to paddle as fast as possible in order to go faster than the current and thus get steerage way.

Soon our situation became definitely unhealthy. We were racing down the middle of an unknown, swift, snag-filled river in the middle of the night with no real idea of where the takeout was. It didn't take long for disaster to catch up. First, we hit a solid stump dead on at what seemed like 30 miles per hour. Instant capsize followed; then a forever of floundering in the dark water until we finally hauled ourselves onto a sandbar shivering and chattering a quarter mile downriver.

Naturally, being such veteran river people, we had failed to provide ourselves with any equipment. We had no dry clothes, no dry jackets, no food, no matches, no flashlight, no drinking water, no extra rope, and most signifcantly, no life jackets. To make a long, cold story short, we finally did make it to the takeout three or four scary hours later by hugging the shore and by minutely inspecting any suspicious ripples in the dark water ahead. At last, dragging ourselves downriver to the bridge at Moose, we discovered that we had neglected another of the basics of river running. We had not left a car at the bottom of the run. After boating the Snake in total darkness, however, hitchhiking home soaking wet at midnight didn't seem too bad. I think we finally made it to bed around four am. Thus ran my first exploit on a real river.

.

After (or despite) this run, the second, third and fourth trips followed in rapid succession. On each trip we learned a bit more until we were running the upper Snake with something approaching confidence if not competence. It wasn't long before Henry and I became bored with the same old run and decided to challenge something more exciting.

The next run on the Snake River, still in the upper scenic section, begins at Moose (our previous takeout) and runs 25 miles to the main Jackson-Wilson highway. This section was similar to our old familiar run except that the channel is appreciably more braided, that is, split into numerous small rills. The other major difference is a narrow chute where the river tightens then abruptly falls five or six feet in the space of a few yards. The runout consists of a set of what looked at the time like absolutely mammoth standing waves.

There exists a perfectly good sneak channel for canoes, but we decided to have none of that. Surely we were veterans by now-surely we could run anything the Snake had to offer. So off we went, down the tongue. I had planned to holler something adventuresome like 'Geronimo' as we went over the brink but when the time came I was so awestruck by the rushing, tumbling, roaring water below that I didn't utter a sound. We made it through the first 20 feet of the rapid but the standing waves at the base proved to be too much for us. The first wave filled the boat half full of water, the second finished the job and our noble craft gracefully sank beneath us. Suddenly the phrase 'open canoe' took on a lot more meaning than it had previously. We finished the rest of the rapid and the next several miles of river in the water trying to get thecanoe, which now weighed several tons, to shore.

When at last we floundered onto land. we discovered that the bottom of the canoe had a split down the center some five feet long. Again, we had no choice but to push on. We had remembered flashlights and sweaters this time (we even had life jackets - a last minute thought), but we had not reached the point where we realized that boats could be damaged in rapids and that some sort of repair material was in order. A simple roll of duct tape would have done the job, but having none we were forced to run the remainder of the river with a very leaky boat. Our basic technique was to run a mile or so and then stop and dump the three or four inches of waterthat had accumulated. The problem was that those three or four inches of water made things pretty nasty. When the canoe tipped to one side all three hundred liquid pounds would slop to that side and over we would go.

It wasn't long before we dumped on a fairly rough stretch.of water directly in front of a large cottonwood tree which had toppled into the river. Having never heard of strainers, the most logical plan seemed to maneuver the sunken canoe over to the tree and climb out. As soon as we got the tree, the canoe wrapped itself around the nearest limb, open side upstream. It didn't take more than several seconds for the tons of water rushing into the open cavity of the canoe to rip the canoe into three separate pieces, all of which went floating off downstream without us. Meanwhile, Henry got his foot caught in the crotch of a limb. Instantly, the current pushed him underwater and held him there. The current was so swift that he couldn't get back upstream to free his foot and he couldn't get his head above the surface as the current had him pinned flat against the trunk of the tree. Luckily, he somehow managed to kick his foot loose or the branch broke or something. At any rate, he freed himself and got out on top of the snag.

.

In just a few seconds, the two of us had gone from merrily floating down the river to being stuck in the middle of nowhere, without a boat, soaking wet, scared and freezing cold. As usual, it was getting dark again. This time we had brought a waterproof flashlight (we did learn a little from our previous experience), but we had carefully tied it to the canoe so as not to lose it. Naturally, when the pieces of canoe went floating off down the river the flashlight went with them. To make matters worse, we were right on the far edge of what must have been the world's biggest beaver pond. Getting to solid ground meant wading armpit deep and even swimming hundreds of feet through water that felt like it was about to freeze us solid.

We finally made it to shore, teeth chattering uncontrollably and hands too cold to undo buttons. We knew nothing Continued on page 36.

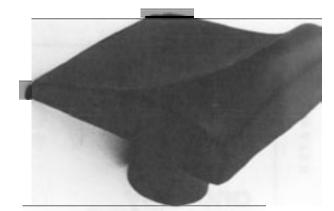
THE BOAT SHOP



Tube-N-It

You may not like it, but tubes and tubers are going to continue floating down whitewater streams for a long time. You can recite the litany of foottrapping and no-control hazards until your paddle shaft wilts and probably make a very small dent. If you're really interested in a tuber's safety (rather than just annoyed at his existence) tell him to look into Tube-N-It as a safer piece of equipment. Made of 30 gage PVC materials, this tube is divided into separate airchambers, has grip handles, and loops where a rope ring can be tied around. Also, there is no protruding valve to cause injury. A special sloped design (made for hydroplanning when towed behind boats or snowmobiles) appears to give it a shape less apt to fold in a hydraulic than the old black truck inner tube.

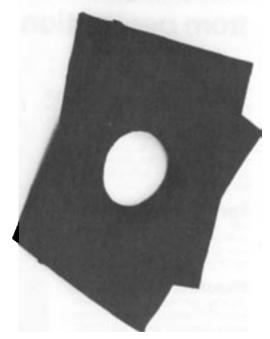
Jim Eggelbrecht, Vice President of West Way, Inc. which sells Tube-N-it for \$59.95 states that the company is trying to initiate tubing clubs. Perhaps it is from here an infustion of safety will at last come to this activity. Contact: West Way, *Inc.*, East Hwy. 212, Watertown, SD 57201.



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erception

YELLOWSTONE

Continued from page 18

Boulder River carries about the same volume as the Stillwater, and runs through a similar setting. The Boulder Valley, however, has a Forest Service road that goes about 25 miles upstream from the mountain front, making a lot of good whitewater easily accessible. The West Boulder is very comparable to Rock Creek, having a similar gradient and geologic setting, but carries about half again as much water. The reach mentioned above goes through private land, so courtesy is required.

Gallatin and Madison Rivers

Two rivers not in the Yellowstone drainage basin but which shouldn't escape mention are the Gallatin and Madison. Great Class III-IV boating is prolific on the Gallatin, especially in high water, and access is about as easy as can be found anywhere (U.S. 191 follows the river). The most popular section is the eight miles or so below Portal Creek and Moose Flats, where the Gallatin Get-Together, a giant slalom race and hole riding contest is held by the Bozeman Canoe and Kayak Club each Memorial Day weekend. In July, they also hold a sanctioned slalom and wildwater race on that same section of river (contact Mike Garcia at (406) 586-2225 for details).

On the Madison, you can put in below the dam on Ennis Lake and enjoy a 10mile float through **Beartrap** Canyon, which contains several Class III to V rapids. This is one to beware of in high water: the canyon is isolated and the rapids become very difficult. The dirt road that goes up the river from the Montana Highway 289 bridge, provides the takeout.

I could ramble on and on with tales of rivers in the area, but maybe this bit will serve to whet the appetites of a few boating addicts. We'd like to see some strange faces other than our own around these parts. If you're in the area, get in touch with Jack Nichol or Pete **Recht**fertig of the Beartooth Paddlers Society, (406) 248-6987 or (406) 252-7421, or me at (406) 628-7474. We'd be glad to provide information or paddling company.

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LEARNING

Continued from page 31

about hypothermia at the time but we must have been well into it. Luckily, as Henry and I came stumbling and shivering out of the willows on a cold Wyoming, June evening that could easily have been our last, a rancher who had been down to check on his cattle discovered us. He didn't know anything about hypothermia either, but he did know that we were in trouble. He hustled us into a battered Ford pickupand drove us several miles to his home where he had the most wonderfully warm potbelly stove I can ever remember standing around. I think it must havetaken at least two hours of standing around that stove in borrowed long johns before we thawed out.

As I had no more canoe, this adventure marked the end of my whitewater career for several years. Probably this was just as well. I surely wouldn't have survived many more trips like the first few.

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ANSWERS TO SURVIVAL QUIZ - page 19

- **1.** 100%.
- 2. High resin content; pitch knots.
- 3. Anything without a pronounced disagreeable taste.
- 4. Rocking wings, or flashes from green signal lamp.
- 5. Higher fat content.
- 6. None.
- 7. Long back and leg tendons.
- 8. Average many readings from halfway between needle swing.
- 9. Sapling will stiffen and not spring up in cold temperatures.
- **10.** Liver spotting or discoloration.
- 11. No known grass in the world is toxic.
- 12. Relax.
- 13. Microscopic fluke worms.
- 14. A square raft will spin.
- **15.** They do not bleed meat.
- **16.** Heat, bend, and hold until cool.
- 17. Toads have toxic skin.
- 18. Limestone and lava.
- **19.** With the injured lung down, so it will not drain into the good lung.
- 20. In a low place in the outside bend of a dry stream, where water last evaporated.
- **21.** None. Digestion will use up body water and promote dehydration.
- **22.** The body expends more energy melting the snow than energy derived from it, promoting dehydration.
- 23. Hair.
- 24. To avoid drafts of cold air.
- 25. At the Equator it is almost on the horizon.

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