

American

WHITEWATER

RUNNING
NIAGARA'S RAPIDS

The Journal of the American Whitewater Affiliation

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2nd Annual Perception Conservation Award

Across the United States and Canada, there are people who answer a great need in our natural environment, a cry for help from our rivers threatened by man and his damaging onslaught. These persons are those we would like to consider for the 1982 Perception Conservation Award.

You are invited to contribute your nomination for this honor, now in its second year. Last year's recipient was David Brown, one individual who pulled all his energy into rallying people behind an effort to save Tennessee's Ocoee River for recreational use. This year, we'd like to find another individual who exemplifies our ideals of what we *all* should be doing to save America's free flowing rivers. A person who has made obvious impact in changing a threatened river for the better, who has fought the bureaucracy with cunning and integrity, whose spirit of guts and determination has inspired others to discard their apathy and join the cause.

Your nominee need fill no requirements of age or geographic locale. They must have worked on a river conservation effort within the year between September '81 and August '82. Entry forms are available from Perception dealers or our offices. You must submit a typed, one to two page synopsis of your candidate's work, who they are and what they did to merit consideration for this award. If you are a member of a paddling club or conservation group, we urge you to make one nomination, with all members signing their endorsement to the synopsis. The ultimate decision on the winner will be made by the Perception staff, based on both the number of votes and the nature of the person's river conservation work.

Announcement of the recipient for 1982 will be made on September 3. We realize the work is more important than the award. But we believe such efforts to save our rivers deserve a pat on the back.



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COVER: With every other honor behind them, the World Champion "Garvi" brothers stroke their stuff and take their first U.S. Nationals Gold. For complete race results see page 30. (Debbie Demaree photo)

Editor's Soapbox

Kayaking's Deadly Ethos

Chuck Rollins' death in Idaho last summer has raised some troublesome issues for me about the responsibility of a whitewater boating party for its individual members. I don't accept the view that Chuck was a lovable blundering guy who got himself into a fix. I do think Chuck was the victim of the ethos of the "expert boating trip".

To explain what I mean, I will retell the story of Chuck's death. Although my account is influenced by knowing Chuck and having boated with him in the East and on several western trips, I will mainly rely on the statements in Charlie Walbridge's accident report for the ACA.

As Peter Skinner said eloquently in his eulogy, Chuck "was vibrant, very alive, and enthusiastic, and yet uniquely vulnerable and in need of help. Chuck was always late for everything, forgetting something, getting lost on the road and taking improbable routes down difficult rapids".

In July, 1981, Chuck joined an "expert" boating trip in Idaho. He was "not in exceptional physical condition." As the trip progressed, it became increasingly clear that Chuck's boating performance did not match the difficulty of the runs. "He had been having difficulty with his roll...he had swum on every river..." He had lost a boat on the Middle Fork of the Salmon.

The Upper South Fork of the Clearwater, with an extraordinary gradient of 200+ feet per mile, is one of the toughest runs in the entire state, and makes the Middle Fork of the Salmon look like a novice run. It was so obvious that it would be life-threatening for Chuck to attempt this run that (apparently) without even asking him directly about his intentions, "no one", Walbridge stated, "in the party expected him to attempt the river that day." When Chuck surprised everyone by getting into his kayak, again no one was able to tell him that he was making a serious, possibly fatal, error. ("Many in the group felt, after the incident, that someone should have said something to Chuck.") Predictably, Chuck was in trouble almost immediately. He couldn't roll, and

despite vigorous rescue attempts by capable and dedicated fellow paddlers, he was killed.

As I suggested earlier, the central safety issue in this story is attitude. Chuck's rescue had to begin and end on the ground—by convincing him not to set out on the Clearwater at all. Why didn't this happen?

I am not sure of the answer, but I do know that I would have found it tremendously difficult in that situation to tell Chuck forcefully that he should drive shuttle rather than run the river. Chuck was an exuberant, generous man. He was extremely social—he wanted to be with people, to be where the action was, and above all else that meant in his kayak.

But I also think there is a socialization process in whitewater boating that makes it extra difficult to perform the otherwise straightforward action of telling a person you really care about that he's boating poorly and may be about to kill himself. Part of the accepted ethos of kayaking is that "those participating on expert trips are expected to know their own minds". The problem with this rule is that it doesn't deal with the situation of the group member who is not exercising anything close to reasonable judgement — the individual who, like Chuck, is simply out of control. Moreover, I suspect that this ethos made Chuck's boating partners feel that it was an act of respect and friendship to remain silent.

I believe in individualism and personal autonomy and I have found wilderness kayaking to be a superb way to enjoy and test those values. But I also think that there is no such thing as a fully individual decision in such a highly charged group activity as whitewater boating. Chuck's desire to get along with people and to pull his own weight were two of his most outstanding traits, which made him vulnerable as a boater. He deserved more support than he got in reconciling these tendencies with staying alive.

—Art Block

Letters from Readers:



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

"YOU BE THE JUDGE"

Dear Editor,

When I first read your *You Be the Judge* in your August 1982 issue, I did not know it was fiction. My thoughts occurred in this order as I read:

This sounds like he's going to drown—what's the point? He's going to paddle Class II alone? I guess it's possible for Class II water to rip off a jacket. Possibly, if he were unconscious.

Would I have taken this case if I were a lawyer? Maybe, a buck's a buck. If I were the Judge: not guilty! Type III (lifevests) are Coast Guard approved, AWA and ACA required for any function, and has only one drawback I'm aware of: they require a buddy. If the wearer is unconscious in the water, his jacket might as well be on the riverbank as on him. If you have no buddy to help reasonably quickly, a Type III will probably not hold your head out of water.

There may be a fault with all Type III models by not offering a leg strap option. I had never heard of leg straps before. Sounds like a good idea. (I have been racing open boats for years, perhaps it's a closed boat option.) But no straps is a minor fault compared to paddling alone in whitewater.

Very Truly Yours,
Donald Steele
Woburn, MA

Unfortunately, the accident is **not** fiction. The event actually happened as reported. We merely disguised some of the more personal details to avoid adding any external pressure on a **case** that might soon become litigated. — Ed.

A BULGE FOR SAFETY

Dear Editor,

I would like to pass on a word of caution regarding the Harishok life decks. While practicing for a slalom I tipped and lost my paddle on a rock. Trying to exit my kayak, I found that the two grab loops on the sides of my life deck had washed under the lip of the cockpit rim. I couldn't get my fingers under the rim to get them out. I ended up grabbing a rock to get my head above the water. A simple solution to the problem was to put a small wiffle ball on each loop. Sewing a fat grab loop on the front would also help.

Sincerely,
Jim Tibensky

COSTA RICA CORRECTED

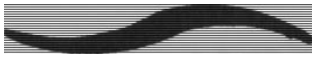
Dear Editor,

In the March-April issue, an article in the *Fluvial* News mentioned that the Rio Reventazon was "discovered" in 1978. If you refer to the Autumn 1969 issue of AWA (XV #2), you will find an article by me on running rivers in Costa Rica, describing what was almost certainly not the first trip on the Rio Reventazon. I also Scouted the Pacuare.

I'm glad more people are now running Costa Rica's beautiful rivers and visiting that beautiful, friendly country. The boating there is certainly terrific.

Sincerely,
Jerry Meral
former AWA Director
Sacramento, CA

Oops! We stand corrected. The only thing new about the Reventazon's recent reruns is that they have helped water the way for commercial tripping. — Ed.



AWA NOTES

River Mom Reflects



Six months has passed since assuming the responsibility of the presidency of AWA. Meeting many of you out there has been one of the highlights of my summer—besides getting a first taste of many new rivers. In that time also, several changes have taken place within the AWA structure. First, Claire Geselman has volunteered to hold the purse strings for us as our new treasurer. Bart will introduce her next issue. Secondly, the membership list has finally found a friendly computer to reside in, and we should be much more efficient at keeping track of all of you out there. We also hope to relieve Pete Skinner of handling the product sales in the very near future. And finally, for the first time in a long time, *AMERICAN WHITEWATER* has been arriving on time!

However, several things are still needed. First a very talented, very reliable person is still needed to handle our advertising accounts. This aspect of Journal production is most important to you, as the ad revenue does help to underwrite part of the cost of *AMERICAN WHITEWATER*. Should such a very talented, very reliable person be reading this, please drop me a note and volunteer for this very important position. Secondly, the first sparks of a national membership drive are just starting to smoulder. You should be hearing much more about AWA in the very near future, but we need your help. If each of you readers would

recruit only one new member, our roster would double. And, I believe every paddler on every river should be aware of, and abide by, the AWA guidelines.

I am looking forward to the next six months, even though paddling activities will be somewhat curtailed. Bart, I'm sure will continue to do the superb job of keeping us informed about what's going on in the boating community around the country, while the rest of the Board will continue to strive for increased membership, timely production, and communication with as many of you as possible. To close, I'd like to share a poem I found somewhere a long time ago that indicates my feelings about this organization I so much believe in:

Are you an active member, the kind that would be missed —

Or are you quite content that your name is on the list?

Do you take an active part to help the work *along*—

Or are you quite well-satisfied, to only just belong?

Do you ever take a stand for things you think are *right*—

Or leave the work for just a few, and talk instead of fight?

Think it over member, you know what's right and *wrong*—

Are you an active member, or do you "just belong"?

WANTED: COMPUTERER

As the American Whitewater Affiliation drives onward and upward, it inevitably must go the way of all modernity and move into the Oz of computers. Currently, AWA is looking for knowledgeable individual with access to or ownership of a computer. The machine we seek must be able to print out Cheshire labels in two or four column style. It must also have a storage capacity of

10,000 names and addresses and the ability to sort them by zip, activity status code, Affiliate code, and two other codes. AWA can cover expenses but cannot reimburse the individual's time. The individual must also be someone responsible enough to handle records and produce them on time. Respond to AWA, 7 Holland Lane, Cranbury, NJ 08512.

AWA'S NEW YEAR'S GIFT: EARTHWATCH

About the time your Jan.-Feb. 1983 issue of AMERICAN WHITEWATER lands on the doorstep, your club will be receiving the latest issue of *Earthwatch Magazine* compliments of AWA. Earthwatch is a nonprofit organization that recruits interested amateurs like you to join prominent scholars on fascinating scientific expeditions all over the globe. The Magazine published seasonally lists and describes dozens of expeditions from Barbados to Borneo, seeking new discoveries about everything from sea turtles to ancient Saxons. Many of these require your special talents and muscle as a paddler. This is your chance to take your self and boat to those far flung corners.

In addition, Earthwatch has developed a special lecture series for AWA Club Affiliates offering over 100 noted scientists across the country available to speak at club meetings.

All this is part of a plan for the American Whitewater Affiliation and Earthwatch work together and offer both memberships a broader number of experiences and expeditions. In future AWA issues, the Fluvial News' Expedition Exchange will be listing several Earthwatch trips of special interest to paddlers. So keep a lookout. In the meantime, go to your club president or mailbox and study the latest issue of Earthwatch. It will tell you where you can go—and how to get there.

CHUCK ROLLINS MEMORIAL FUND

Since Chuck Rollins tragically drowned on Idaho's Clearwater River this June, many who knew him, now united in sadness, have wanted a way to immortalize the great friend now lost. In response, AWA announces the establishment of the Chuck Rollins Memorial Fund. Steve Kahn and others will act as trustees for an endowment fund to help

the many who loved Chuck, remember him.

Enhancement of the sport of river running will be the Fund's general theme, with specific possible donations including sending a paddler to white-water school, buying safety equipment for an organization, or aiding educational programs. Donations may be under AWA's non-profit umbrella and are deductible. (Those having already sent checks to Steve Kahn should be aware of this advantage.) Those wishing to contribute please send checks to Chuck Rollins Memorial Fund, AWA, Box 1483, Hagerstown, MD 21740.

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EAST RACE: INDIANA'S WHITEWATER

The old man-made tributary of the St. Joseph River which ~~once~~ powered ~~all~~ the factories ~~of~~ downtown South Bend, should soon be powering midwestern kayaks down America's first artificial whitewater ~~race~~ course. This ~~past~~ June 25, the official ~~groundbreaking~~ ~~ceremony~~ took ~~place~~ for the 3.5 million dollar project which will transform the 1900-foot historic East Race channel into East Race, the whitewater, urban park.

Built ~~in~~ 1831, East Race ~~was~~ originally the power focus of South Bend, Indiana's industry. But by 1964 ~~it~~ had become an ~~area~~ of crumbling factories and the channel was filled in. ~~Now~~, under the much-battled-for revitalization plan, ~~it will~~ be transformed ~~into~~ a 52-acre linear park. A system of head gates will release controlled amounts ~~of~~ water along the 35-foot-wide, cement-sculpted canal. Overhead lights will ~~illuminate~~ the river and the 45 feet ~~of~~ landscaping and shops on either side. The work's begun ~~so~~ ~~lets~~ ~~all~~ ~~keep~~ ~~our~~ ~~ingers~~ ~~crossed~~ for a no-snap early finish. For ~~more~~ info, contact Russ Oldfather, 112 N. Second St., Elkhart, IN.

COLORADO CLEANSSES KIDNEYLESS

This summer 31 rafters clambered aboard and for eight days rode the Colorado River through the Grand Canyon, arriving safely, exhilarated, and thoroughly without incident. Unimpressed? Well, how about if 11 of those rafters didn't have a functioning kidney among them and all needed daily dialysis just to keep alive? Until recently, such a trip would have been not only impressive, but impossible. Hemodialysis patients had to stay within hours reach of a hospital which could regularly hook them up to the huge machine and

artificially perform the kidney's function of cleaning waste from the blood.

However, with the advent of WAK (wearable artificial kidney) ~~and~~ the University of Utah's Dialysis Wonderland program, renal patients have broken ~~the~~ ~~old~~ hospital leash. ~~This~~ Grand Canyon trip represented the most ~~re-~~ ~~mo-~~ ~~te~~ ~~patients~~ ~~have~~ ~~ever~~ ~~been~~ ~~from~~ hospital hookup. Had trouble developed with a unit, a patient could ~~have~~ easily waited ~~as~~ ~~long~~ ~~as~~ 24 hours before helicopter ~~evacuation~~—still 100 miles ~~from~~ the nearest dialysis center.

~~But~~ ~~all~~ ~~in~~ ~~all~~ the eight pound WAK proved an infallible lifesaver for the 11 folks ~~on~~ the trip. It allowed them a perfectly normal adventure except for some ~~long~~ hours under canopies ~~in~~ 100° temperatures. There ~~were~~ ~~even~~ ~~some~~ ~~advantages~~: ~~the~~ excess river water filtered by the WAK provided by ample ~~supply~~ ~~of~~ clean showers ~~each~~ day, ~~the~~ renal rafters appeared totally unscathed by Canyon sunburn, ~~and~~ ~~john~~ ~~stops~~ ~~on~~ ~~the~~ shuttle ~~were~~ unknown. ~~And~~ ~~the~~ dialysis process? ~~The~~ ~~only~~ difference between ~~here~~ ~~and~~ a hospital," remarked ~~the~~ attending physician, "was ~~the~~ smiles ~~on~~ their faces."

ENVIRONMENTALISTS RANK HIGH

According to a recent Democratic National Committee poll, environmentalists ranked second, nationwide, of all the groups "helping to make America a better place". Farmers, just one point above, came in first with the Reagan Administration a far-lagging third. Trickle down, the remaining groups, in order, were: Senior citizens, Congressional Democrats, Nuclear arms reduction groups, Pro-ERA, Labor unions, Congressional Republicans, Conservatives, Moral Majority, Anti-abortion groups, Civil rights groups, Pro-choice

groups, Big business, Wall Street, Liberals, Govt. workers, Oil companies, Right wing groups, Welfare recipients.

In addition, the final analysis of the poll stated, "Support for strict environmental regulations extends across demographic, partisan, ideological, and regional lines... Voters perceive the Republican Party to be far from themselves in these major concerns."

—Thanks Oregon Wilderness Coalition

PENOBSCOT BATTLE

At last a broad-based coalition of environmental groups are gathering to prevent Great Northern Paper Company's proposed Big A Dam which would inundate a valuable section of Maine's West Branch of the Penobscot River. Unfortunately, the state has already granted Great Northern the preliminary permit to build the dam which would flood the oft run Ripogenus Gorge and one of the finest landlocked salmon fisheries in the Northeast. But against them now stands a united front of Eastern River Expeditions, Trout Unlimited, the Sportsmen Alliance of Maine, Maine's National Resource Council, and others. The group has hired local legal counsel and will legally contest the granting of permits by the Federal Energy Commission (FERC) and Maine's state agencies.

A GATHERING OF EPRO

On November 18-21, the Eastern Professional River Outfitters Association will be holding its annual meeting at The Read House, 827 Broad St., Chattanooga, TN, (615) 266-4121. Programs will include "River Rescue — Training for Outfitters and Guides", Working with Rescue Squads", and "Utilizing State Agencies and Trends in Outdoor Travel". EPRO is becoming an increasingly beneficial and strong lobbying voice in safety and conservation legislation throughout the East on local and federal

levels. If interested in joining this organization or receiving their newsletter, write them at EPRO, Box 238, Ocoee, TN 37361.

UPCOMING EXPEDITIONS

MID-ATLANTIC WEEKENDS. Anyone seeking paddling companions for Class III+ during late fall through early spring. in the New Jersey through Virginia area, on rivers such as the Bullpasture, Caselman, Jackson, Ana, Passage and others. Contact Mike or Debbie Stinbaugh (703) 430-4082.

SOUTH AMERICA EXPED. Interested in exploring Amazon tributaries in far off Brazil or Peru? Contact Anne Benjamin, 366 E. Cassilly, Springfield, OH 45503, (513) 323-8878. Anne is also actively seeking folks who have already explored this area by boat and might have some tips and background info for her.

MEXICO—RACE & CRUISE. The Mexican Downriver Federation annually organizes 10-15 races during that country's paddling (and rainy) season from May to October. The most popular of these is the Annual Antigua Downriver Race held in October. The race traditionally starts with a 25-mile cruise 200 miles west of Mexico City from Puente Pescados to Apazapan in 70° water of Class IV-V, with range changing flow from 200 to 2000 cfs. The race begins the next day downstream toward the Gulf through beautiful tropical country and passes a Totonac pyramid (Mayan contemporary).

The MDF seeks north of the border competitors and welcomes queries from any paddlers wanting to explore this much under-paddled area. If interested, contact Jorge Wilson, Federacion Mexicanos De Descenso De Rios, A.C., Paseo De La Reforma 195-100 Piso, Mexico 5, D.F., Tel., 592-14-77.

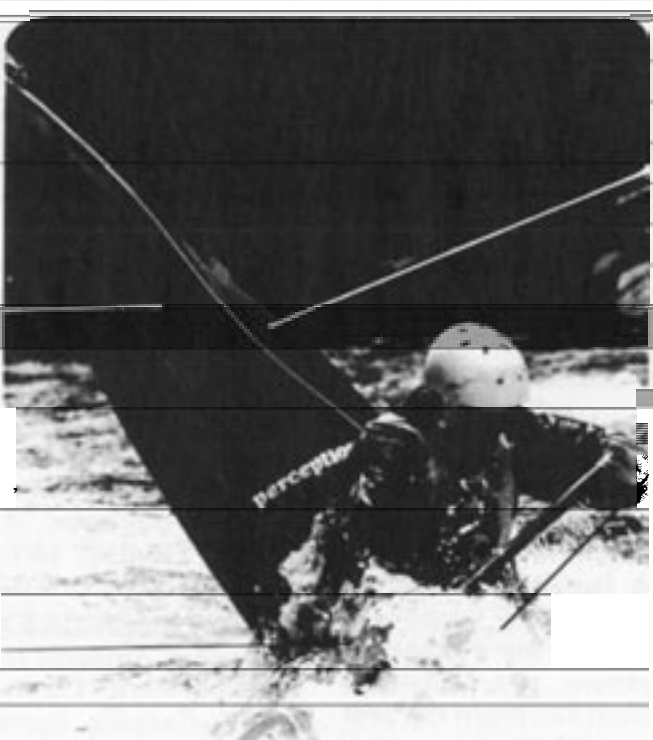
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Kathy **Biau**, **Whitewater Rodeo**, Stanley, Idaho, June 15, 1980.

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The Niagara River

THE PADDLING OF A LEGEND

by Pete Skinner

In 1861, the Niagara Tour Company was forced to liquidate assets and sold the sturdy little steamer "Maid of the Mist" to other operators on Lake Ontario. The sale was conditional on delivering the boat intact to the new owner's dock in Queenston, Ontario, seven miles downstream. It was this seemingly simple condition that sparked one of the most miraculous hotdogging feats in white-water history. The "Maid" was docked about just below Niagara Falls near a restriction in the river called Swiftdrift. Between here and Queenston rumbles the monstrous Lower Rapids—one of the most violent stretches of water in the world.

Entering the Lower Rapids, the water picks up speed to about 27 mph. Then these swift, broad and placid river is rammed through a tight constricted gorge and dashes over a barrier of great rocks. The water depth changes almost instantly from 150 to 37 feet with wave heights at least three kayak lengths high.

It was through these rapids that Captain Joel Robinson decided to pilot the "Maid of the Mist" on June 6, 1861. Manned only by Robinson, a mechanic, and a fireman, the little steamer left its dock, forged straight out into the Swift-drift current then hove to and peeled downstream into the crushing Lower Rapids.

Foam enveloped the entire craft, waves thundered and crashed on the decks from above. The wheel was wrenched from Robinson's hands and his mate was hurled through the bridge door and knocked unconscious. Below, the fireman clung desperately to the stanchion and prayed.

But at last, after minutes to onlookers

(and a lifetime for the crew), the "Maid of the Mist" emerged from the waves into the calm and proudly pulled in to the Queenston dock. The sole damage was the loss of her funnel. The "Maid" had arrived and met the conditions of sale and Captain Robinson swore he would never run Lower Rapids again.

But today, while honeymooners gape at the famed Falls, more and more paddlers eyes have been glancing downstream at the Lower Rapids thinking "If a steamboat, why not a K-1?" A few have proved it. And many more have shown that other, less violent stretches of the Niagara offer paddling fun on all levels.

Well, they say it is navigable: three fifths mile of 100 to 274 thousand cubic feet per second of Lake Erie plunging down the lower Niagara Gorge, just below the famous Falls. Here, through this furious stretch the Maid of the Mist Pool tumbles into the Whirlpool with enough racing foam to bury any craft. A few kayakers have navigated this stretch successfully. An ill-fated raft did not.

The legality of paddling this stretch is murky indeed, as is the water which receives copious quantities of toxic chemical waste and sewage from Niagara Falls' industry and Love Canal. However, a paddler's knowledge of big water, however, is not complete until he has studied the mighty Niagara and its Lower Rapids.

The Niagara River

Before construction of the Canadian and American hydro-power facilities, the Niagara River normally carried 250 thousand CFS between Lake Erie and Lake Ontario, all day, every day. And when the west wind really blew, Lake

Horseshoe Falls Attempts

Mrs. Anne Edson Taylor	Survived	Oct. 4, 1980	Wooden Barrel
Bobby Leach	Survived	July 25, 1911	Steel Drum
Charles Stephens		1930	Wooden Barrel
George Stathakis		July 5, 1930	Barrel
Jean Lanssier		July 4, 1928	Rubber Ball
Red Hill, Jr.		August, 1951	Inner Tubes
Robert Woodward	Survived	July 9, 1960	P.F.D.

Erie's waters would swell eastward, pulling in flows in excess of 274,000 CFS. (A volume exceeding most rivers in the United States.)

For 20 miles, the Niagara River rushes between Buffalo and Youngstown, New York. Rapids can be found under the Peace Bridge in Buffalo, just above and below the Falls, and just below the Whirlpool. Almost any day, you can look down from the Peace Bridge on paddlers from the Niagara Gorge Kayak Club surfing, bracing, and eddying in the fast flume between the piers. (Though the water rips through at 15 mph here, whitewater is almost non-existent.) A short portage brings the players to the Erie Canal which provides a convenient flatwater return to the put-in.

The Falls

The Rapids above the Falls are almost irresistible. Class IV and V big water drops over exfoliating bedrock, terminating in the 170-foot drop known as Niagara Falls.

The American Falls entry offers the paddler challenging hydraulics and picturesque bridges over to Goat Island. Or perhaps the more precipitous drops above the Canadian Falls are your cup of tea. The brink of each cataract offers gentle surfable reversals, just above the Big Drop.

Fortunately, however, Federal Law, U.S. Coast Guard, part 207 prohibits boating in these waters (which did not stop a woman in 1979 clad in wetsuit and swim fins who waved to horrified tourists before swimming over the edge.)

The Falls themselves are truly spectacular...mesmerizing. The thought of sweeping over the edge is the essence of

every paddler's nightmares. At the base of the Canadian (Horse Shoe) Falls lies the Maid of the Mist Pool with a vicious reversal and under cut, capable of trapping boats and barrels for days. The American Falls crashes 100 feet onto talus rocks and then downward to the Maid of the Mist Pool.

The American Falls have not tempted any human daredevils, although many people have accidentally fallen or washed over. Only one was ever known to survive—a little dog named Fido, seen in the Lower Pool minutes after witnesses saw him carried over the brink.

The Lower Rapids

Running from just below the Falls to a big eddy called the Whirlpool are the framed Lower Rapids, a marginal Class V. The rapids begin with the Swiftdrift, directly beneath the Whirlpool Rapids Bridge, at the end of the Maid of the Mist Pool. Here the incredible froth flume rumpages 27 mph at over 100 feet per mile. Robbed of flow by the power plants, the section during summer runs at 100,000 cfs from 9 am to 9 pm and 50,000 cfs at night, as per the 1950 U.S.—Canada agreement.

Since the "Maid of the Mist" steamer many people have navigated this lower stretch. The first to follow Robinson was the Barrel—2M team of George Hazlett and Sadie Allen in 1886. Charles Percy "navigated" the run twice in 1887 in a special dinghy. Many have survived in everything from swimming trunks to elaborate steel torpedos. Robert Flack did not. Lashed to his craft, he ran the final section upside down.

Today, paddling this stretch of water

Continued on Page 37



River waves explode behind ubiquitous Niagara craft. (Photo—Skinner)

Unidentified paddler gets eaten in crashing river wave (Photo—Rollins)



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A revolutionary breakthrough
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AWA
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The Whole River Catalog

WHITEWATER

Due to the popularity of the Journal's Buyer's Guide yellow pages helping paddlers find quality products and services near their home or while on a trip, AWA has decided to expand and modify Business Affiliation services. The yellow pages section will now be called **THE WHOLE RIVER CATALOG** and will include The Buyers' Guide as seen in the following pages.

FOR OUR READERS, this provides a comprehensive list of firms where you can obtain information and purchase the specialties you need. To help in your quest to find the right equipment and right people, The Whole River Catalog will also include a readers' service card and regionally divided Club Affiliates list. Also for your convenience, the Buyer's Guide will be divided into the following categories:

BOATS BLADES ACCESSORIES
RETAIL SALES LIVERIES/OUTFITTERS INSTRUCTION

FOR OUR ADVERTISERS, becoming an AWA Business Affiliate gets you listed in the Whole River Catalog and gets your message to thousands of America's trend-setting paddlers at least three times a year. The layout is conveniently sized to fit business cards or larger ads. Of course, display ads are still welcome in the Journal.

Unless specifically ordered, entry will be limited to one category.

Charges for Business Affiliation and insertions in the Whole River Catalog will be prepaid for each year. The catalog will appear at least three times yearly. This plan will apply to both new and renewing Business Affiliates effective November 1, 1982. **BUSINESS AFFILIATION** for one year includes:

1. WRC insertions of Business Card \$60
2. WRC Insertions of Name, address & phone.. \$35
3. Same as 2 above with additional product/service information
(6 words/line, 2 line limit) \$8/line
4. WRC insertions of 2 column, 1 inch display ad \$90
5. AWA artwork **workup** for you..... \$10
6. Multiple category entries — add chosen insertion cost for each additional listing.

SAMPLE

#1 — BusinessCard Insertion

#2 — Basic Listing

AJAX CANOE CO.

*MAKERS OF AMERICA'S
BEST CANOES*

12 MAIN ST.
ENDERSVILLE, CA 11131 (671) **555-1212**

Ajax Canoe Co.
12 Main St.
Endersville, CA 11131
(671) 555-1212

#3—Additional Product Info:

Ajax Canoe Co.
12 Main St.
Endersville, CA 11131
(671) 555-1212
*Top quality fiberglass C-1s & C-2s
racing and cruising models*

BOAT MFGRS.

1. **The Blue Hole Canoe Co.**
Sunbright, TN 37872. (615) 628-2116
Tough, Royalex/ABS open boats with
engineered outfitting
2. **Hydra**
P.O. Box 669. Athens. TN 37303
Hydra rotomolded kavaks and whitewater
accessories
3. **Great Falls Canoe & Kayak Repair**
9328 Old Courthouse Rd.. Vienna. VA 22180
(703) 281-4380
Repairs to Royalex, Sawyerlex Polyethelene,
Aluminum boats & canoes
4. **Grumman Boats**
7 South St., Marathon. NY 13803
Grumman canoes, aluminum
5. **John R. Sweet**
118 S. Buckhout St., State College, PA 16801
(814) 238-8062
Boat building materials and supplies; custom
built boats
6. **Mad River Canoe Inc.**
P.O. Box 6102. Mad River Green.
Waitsfield, VT 05673
Quality canoes of Royalex, fiberglass & Kevlar-49
7. **Mitchell Paddles**
Canaan, NH 03741. (603) 523-7004
Paddles, Pyranha Kayaks and paddling
accessories
8. **Natural Designs**
4849 W. Marginal Way SW, Seattle. WA 98106
(206) 935-3998
Outrage and Polaris Kayaks, Dan Ruuska,
designer/builder
9. **Old Towne Canoe Co.**
58 Middle St.. Old Towne. ME 04468
(207) 827-5513
Manufacturers of the world's finest canoes and
kayaks
10. **Perception, Inc.**
P.O. box 686, Liberty, SC 29657 (803) 859-7518
Innovative designs & products for the world's
whitewater enthusiasts
11. **Whitewater Fabrications, Inc.**
Rob Quarles, Rt. #1, Box 186.
Fincastle. VA 24090
Whitewater boats/custom mfg. of fiber-
reinforced plastics
12. **Wildwater Racing Kayaks**
312 Duff Ave., Wenonah, NJ 08090
Ultralight racing Kayaks; European Prijons,
Darts; racing paddles

BLADE & ACCESSORY MFGR.

13. **California Rivers**
21001 Geyserville Ave..
Geyserville. CA 95441
Dragon Fly Designs drybags &
Res-Q-Ropes
14. **Extrasport, inc.**
5357 N.W. 35th Ct. Miami. FL 33142
1-800-327-7628
15. **Maravia Corporation**
Box 395. San Leandro. CA 94557
16. **Mitchell Paddles**
Canaan, NH 03741, (603) 523-7004
Paddles. Pvrnha Kavaks and oadding
accessories

17. **Voyager's Ltd.**
Box 409. Gardner. KS 66030
Watertight bags and accessories for canoeing
and kayaking
18. **Wildwater Design Kits Ltd.**
230 Penllyn Pike. Penllyn, PA 19422
Mfgr. of wetsuit, paddling jacket & throwbag
19. **Wildwater Racing Kayaks**
312 Duff Ave., Wenonah, NJ 08090
Ultralight racing kayaks; European Prijons,
Darts; racing paddles
20. **Yakima/The Wheels of industry**
820 N. St.. Arcata. CA 95521

RETAIL SALES

21. **Adams & Sons Spring Co.**
c/o Jim Adams. 1565 S. Wall St..
Columbus, OH 43207
22. **Alpine West**
1021 R. St.. Sacramento, CA 95814
Complete whitewater dealer
23. **Appalachian Trail Outfitters**
Main & Oakland Ave.. Doylestown. PA 18901
Supplies of quality outdoor equipment
24. **Blackadar Boating Supply**
Box 1170, Salmon, 83467 (208) 756-3958
Catalog/Retail sales of boating equipment
25. **Blue Ridge Outfitters**
Rt. 340, Charlestown, W. VA 25414
Whitewater supplies, rentals, trips, cafe, store,
put-in
26. **Boats & Paddles**
c/o Bill & Ann Sweeney
Box 441, Madison. NJ 07940
Whitewater canoes, kayaks. Accessories; sales,
rentals, trips, classes
27. **Boulder Whitewater Supply**
2510 N. 47th St., Boulder, CO 80301
Specializing in sales & instruction in
kayaks & canoes
28. **Canoe House**
520 S. Greenbay Ave.. Gillette. WI 54124
Retail sales of canoes, kayaks & outdoor
equipment
29. **Canoe inputs**
RD 2, Box 2000, Shelburne. VT 05482
Canoe rentals-sales & repair of canoes & kayaks
30. **Canoes Etc.**
630 E. Polk, Morton. IL 61550
Canoe and Kayak sales; long line accessories
31. **Force One Canoe & Kayak Co.**
14919 Stuebner-Airline. Houston, TX 77069
Canoes, kayaks, rafts-sales, rentals &
instruction
32. **Grand Canyon Youth Expeditions, Inc.**
R. #4, Box 755, Flagstaff. AZ 86001
River expeditions and kayak raft sales
33. **McLain's Paddling Supply**
A.R. McLain, 345 Bretcoe Dr.. Greenbay, WI
54302
Paddling and construction supplies
34. **Moore Outdoors**
1001 N. Arkansas. Russellville, AR 72801
Canoe & kayak rentals & sales, whitewater
accessories
35. **Paddlers' Supply House**
1597 Alexandria Dr., 4A. Lexington. KY 40504
Serving the discriminating whitewater paddler &
wilderness tripper

BUYER'S GUIDE



36. **River Horizons, Inc.**
Box 395. Bainett St.. Neapolis. OH 43547
Blue Hole. Perception. Norse, Mitchell & Boat trailers
37. **River Runners' Emporium**
1209 W. Main St., Durham, NC 27701
(919) 688-2001
Whitewater, backpacking, sales & rental. clinics & trips
38. **River Touring Equipment**
341 Visitacion Ave., Brisbane, CA 94005
(415) 467-2800
39. **Rocky Mt. Kayak Supply, Inc.**
Box 8150, Aspen. CO 81611. (303) 92K-AYAK
Finest kayak equipment in one mail-order catalog
40. **"Wet Dreams"...Canoeing, Kayaking, Riverrafting & Rowing**
Box 2229, Van Nuys, CA 91404, (213) 997-7599
- 41 **Whitewater Unlimited**
Box 1224. Flagstaff. AZ 86001
Whitewater equipment, sales, rentals, discounts to AWA members

LIVERIES & OUTFITTERS

42. **Adventure Trek**
Box 10942, Knoxville, TN 37919, (615) 690-6478
Whitewater outfitters, plus canoeing; backpacking, summer camps
43. **Alaska Rivers**
Box 827. Cooper lake, AK
44. **Alaska Travel Adventures**
c/o Don Quan. 200 N. Franklin St.. Juneau, AK 99801 (907) 586-6245
45. **Blue Ridge Outfitters**
Rt. 340. Charlestown. W. VA 25414
Whitewater supplies, rentals, trips, cafe, store, put-in
46. **Boats & Paddles**
c/o Bill & Ann Sweeney, Box 441, Madison. NJ 07940
Whitewater canoes, Kayaks, accessories, sales. rentals, trips, classes.
47. **Canoe Imports**
RD 2, Box 2000, Shelburne, VT 05482
Canoe rentals-sales & reair/canoes & kavaks
48. **Cantrell Canoe Sales/Rental**
Rt. 3 Hinton By-Pass. Hinton, W. VA 25951
49. **Class VI River Runners**
Box 78. Lansing. W. VA 25862
(304) 574-0704
Whitewater rafting on the East's best rivers
50. **Class VI Whitewater**
3994 S. 300 W. #8, Salt Lake City. UT 84107
51. **Commanche Outfitters**
1801 W. Missouri St., Midland, TX 79201
Sporting goods dealer
52. **Experiment with Travel**
281 Franklin St.. Box 281. Springfield, MA 01101
Provides outdoor recreation, educational and therapeutic programs
53. **Force One Canoe & Kayak Co.**
14919 Stuebner-Airline, Houston. TX 77069
Canoe, kayaks, rafts-sales, rentals & instruction
54. **Grand Canyon Youth Expeditions, Inc.**
R. Rt. #4. Box 755. Flagstaff. AZ 86001
River expeditions and kayak/raft sales

55. **Headwaters—Montana**
326 E. Babcock. Bozeman, MT 59715
Complete watercraft outfitting & information for Northern Rockies
56. **High Adventure Outdoor Center**
Rt. 1 — Box 38E, Highway 1335. Winnabow. NC 21479
Winnabow, NC 21479. (919) 371-9627
SE Hdq. for wilderness courses, trips & expeditions
57. **James River Basin Canoe Livery**
Rt. 4, Box 109A, Lexington, VA 24450
(703) 261-7334
Canoe trips on the James or Maury River
58. **Key Ventures**
c/o Ms. Anita Desmond. 79 Quaker Rd. Willard. Ont.. Canada 130 3G3
59. **Moore Outdoors**
1001 N. Arkansas. Russellville, AR 72801
Canoe & kayak rentals & sales, whitewater accessories
60. **Montana River Outfitters**
1401 5th Ave. So.. Great Falls. MT 59405
River equipment —fishing & whitewater float trips
61. **Mother Lode River Trips**
P. O. Box 30, Columbia, CA 95310,
(209) 532-7900
California Paddle Raft Trips
62. **Mountain Stream & Trails Outfitters**
Box 77. Ohiopyle. PA 15470 (412) 329-8810
Whitewater rafting, cross country skiing and backpacking
63. **Nantahala Outdoor Center**
Highway 19W, Box 41, Bryson City, NC 28713
Canoe & kayak instruction, adventure travel trips
64. **Natural Designs**
4849 W. Marainal Way SW, Seattle, WA 98105
(206) 935-3998
Outrage and Polaris Kayaks, Dan Ruuska, designer/builder
65. **North American River Runners, Inc.**
Box 81. Hico, WVA 25854. (304) 658-5276
Whitewater rafting: New. Gauley, Cheat & camping
66. **Northern Whitewater Exped.**
Box 100, The Forks, ME 04985 (207) 663-2271
Whitewater rafting: N.Y.-Hudson. Moose. Maine-Kennebec, Penobscot
67. **Northwest River Supplies**
Box 9186, Moscow, ID 83843, (208) 882-2383
68. **Outdoor Outfitters**
Dan Hammock. 3203 Richmond Rd., Texarkana TX 75503
69. **Pack Rat Outdoor Center**
46 East Township, Fayetteville, AR 72701
70. **P-A-R Canoe Outfitters**
9504 Truscon Dr.. Houston. TX 77080
(713) 465-4116
71. **River Runners' Emporium**
1209 W. Main St.. Durham, NC 27701
(919) 688-2001
Whitewater, backpacking, sales & rentals, clinics & trips
72. **SACO Bound**
Rt. 302, Box 113, Ctr. Conway, NH 03813
Whitewater school, raft trips, shop, canoe trips
73. **Sandpiper Whitewater Guides**
Box 11752, Zephyr Cove. Nevada 89448
(702) 588-4074

- 74. Santiam Outfitters**
c/o Hande Hus, 1595 Cottage St. N E
Salem. OR 97303
Whitewater kayaks, rafts, sales, rentals, lessons
& accessories
- 75. Sobek Expeditions**
Box 761. Angels' Camp. CA 95222.
(209) 736-4524
- 76. Steamboat Canoe Outfitters**
P.O. Box 28. Branford. FL 32008 (904) 935-1471
Canoe rentals, outfitting shuttles. Daily-weekly.
4 rivers
- 77. Susquehanna Canoe Shoppe**
RD #5, Box 200. Red Lion. PA 17356
(717) 244-6907
One of the largest inventories anywhere
- 78. Swiftwater Rental Service**
6569 4th N.E.. Seattle. WA 98115
Rents rafts, inflatable kayaks, accessories.
Sells related literature
- 79. U.S.A. Whitewater Tours**
771 Bonnie Brae SE.. Warren. OH 44484
- 80. W3 Adventure, Inc.**
P.O. Box 553, Westmount, Que., Canada
H3Z 2T6
- 81. Wayfarer of the Ozarks, Inc.**
Star Rt. 1, Ozark. AR 72949 (501) 667-4998
Complete outfitting/Mulberry River, rentals,
shuttles
- 82. Western Mountaineering**
550 S. First St.. San Jose. CA 95113
- 83. West Hills Outfitters, Ltd.**
8120 SW 68th Pl.. Tigard. OR 97223
- 84. West Virginia River Adventures**
Box 95, Hico, WVA 25854, (304) 658-5277
Paddle powered rafting on W. Va.'s New River
- 85. Whitewater Sports**
307 NE 71st St.. Seattle. WA 98115
- 86. Whole Earth Rafting**
P.O. Box 4, Terry. WVA 25934
Two to six day trips: New-Gauley rivers
- 87. Wilderness Tours**
Box 89. Beachburg. Ont.. Canada K0J 160
- 88. Wildwater Expeditions Unlimited, Inc.**
P.O. Box 55, 1 Riverfront St.. Thurmond. WVA
25936. (304) 469-2551
The rapid transit system for the New River
- 89. Wildwater River Tours**
419 So. 4th. Tumwater. WA 98502.
(206) 357-5214
Whitewater rafting, canoeing & rentals,
instruction
- 90. World of Whitewater**
Box 708. Big Bar. CA 96010 (916) 623-6588
Exciting whitewater raft trios on upper
California rivers

GEN'L CAMPING SUPPLIES

- 91. L.L. Bean, Inc.**
Casco St.. Freeport, ME 04033 (207) 865-4761
Outdoor sporting goods
- 92. Commanche Outfitters**
1801 W. Missouri St.. Midland. TX 79201
Sporting goods dealer
- 93. Dahia Motor Co.**
c/o Jack Akers. 4800 E. Colfax Ave.,
Denver, CO 80220
New deal used cars

- 94. Outdoors, Inc.**
5245 Poplar Ave., Memphis. TN 38119
Kayaking, canoeing, backpacking, skiing,
climbing, clothing
- 95. Robbins, Inc.**
Box 4536. Modesto, CA 95352 (209) 529-6913
Mountain paraphernalia
- 96. Tomot Distributing**
912 Paul St., Ohawa. IL 61350
"Paddling Beef Jerkey" 1.5 oz. \$1.50: 500 with
order
- 97. Wiggers Canoe & Kayak Sales**
RD #4, Rt. 426 North. Corry, PA 16407
Canoes, kayaks, tents, backpacking and quality
accessories
- 98. Wilderness Travel Outfitters**
2530 MacArthur Rd.. Whitehall. PA 18052
Fine equipment & clothing for the traveler
- 99. Wild River Outfitters**
5921 Churchland Blvd.. Portsmouth. VA 23703
Virginia's canoeing/backpacking specialist
staffed by knowledgeable folks

PUBLICATIONS & INSTRUCTION

- 100. Adventure Travel Mag.**
c/o Pam Miller, 1 Park Ave., NY. NY 10016
Glossy coverage of worldwide adventure
activities; outfitters listed
- 101. Canoe Magazine**
Box 597. Camden, ME 04873
The magazine of self-propelled water travel
- 102. Class VII River Maps**
c/o W. Nealy. 210 Purefoy Rd.,
Chapel Hill, NC 27514
Hand drawn river maps-Eastern & Western
rivers
- 103. Force One Canoe & Kayak Co.**
14919 Stuebner - Airline. Houston, TX 77069
Canoes, kayaks, rafts-sales, rentals &
instruction
- 104. Leisure Enterprises**
8 Pleasant St.. Millers Falls. MA 01349
(413) 659-3926
Revised 1981 instructional guide—
"Recreational Whitewater Canoeing"
- 105. Roy L. Mahnesmith**
215 S. Chestnut, Kewanee. IL 61443
ACA—open canoe & kayak instructor
- 106. Nantahala Outdoor Center**
Highway 19W, Box 41, Bryson City, NC 28713
Canoe & kayak instruction, adventure travel
trips
- 107. River Runners Magazine**
Rt. 1, Box 273. Powell Butte. OR 97753
~~(503) 447-6528~~
The magazine for kayaking, rafting, and
canoeing enthusiasts
- 108. SACO Bound**
Rt. 302, Box 113. Ctr. Conway, NH 03813
Whitewater school, raft trips, shop, canoe trips
- 109. Sierra Kayak School**
P.O. Box 682, Lotus, CA 95651 (916) 626-3461
Instruction of whitewater kayak and rafting
- 110. Tennessee Valley Authority**
Forest Library, Norris, TN 37828,
U.S. Govt. Corp.



.....AND GETS SPIT BACK.

SHIEBLER



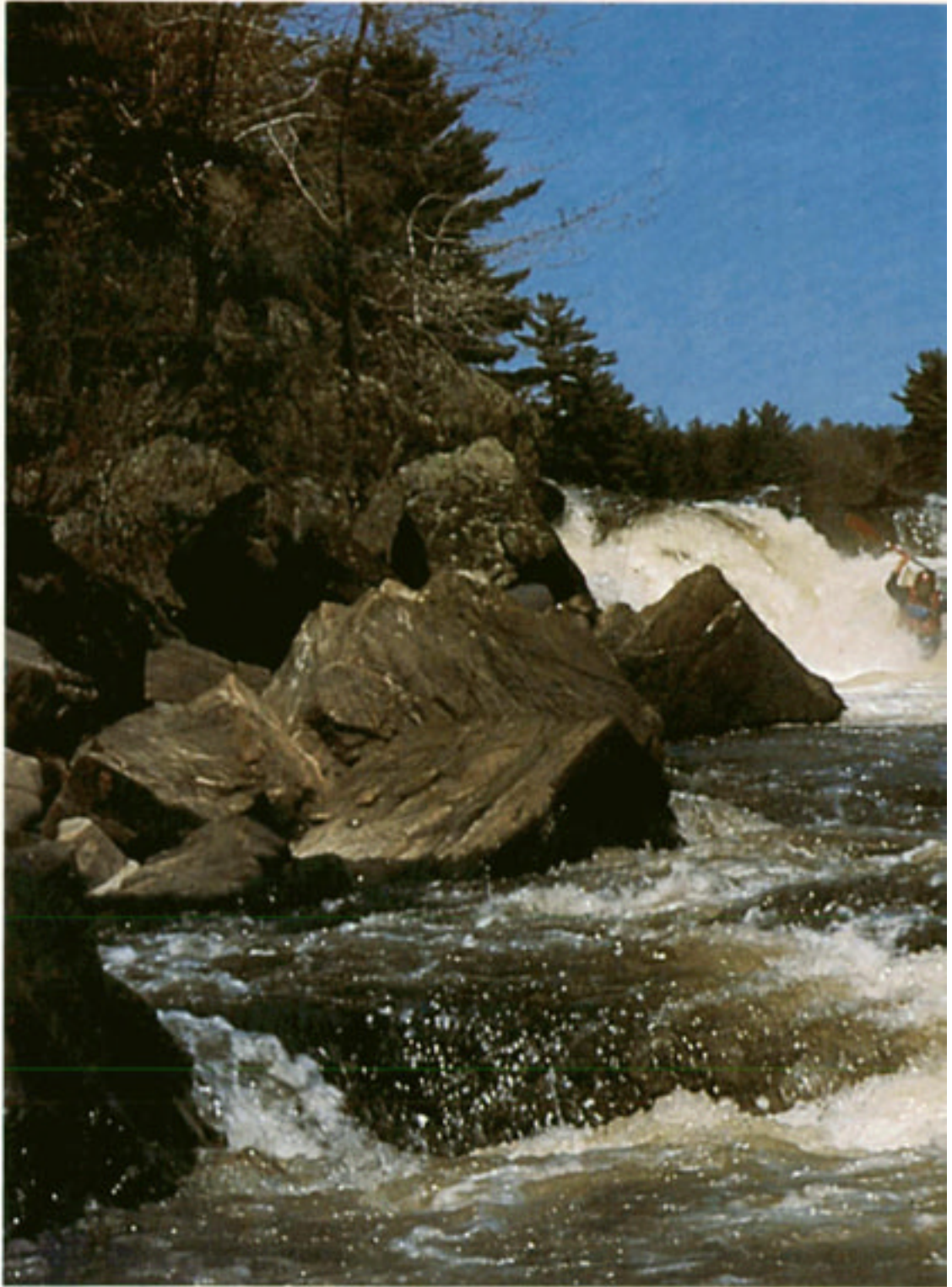
MASKASCKY

CRAZY CARL DEMONSTRATES STEEP REENTRY AT 12 FOOT FALLS....



MIND YOUR MANNERS, MUELHAHN, THE DOUBLE DAM IS NEXT

LUNDGREN



RAZOR-SHARPRUN ON KNIFE-EDGE, LOWER MOOSE RIVER, LYONS FALLS, NEW YORK.

THE CALL OF THE MOOSE

When Paddlers Find a Pristine Spot Can Hydromaniacs be Far Behind?

Some 40 miles due north of Utica, New York, the Moose River churns its way south and west out of the Western Adirondack Mountains and the Fulton Lake chain near Old Forge, New York. Three separate runs are possible on this stream, each flows in the same ledge/drop—pool pattern, but the difference in difficulty runs from mild to gut-busting.

The upper stretch of the Middle Branch starting from Old Forge is a popular open boat run and a standard race site. Running from here down to McKeever (where the North and South Branches join) is a nice novice stretch. At McKeever's Route 28 bridge the river picks up and the Lower Moose begins. From here down to Fowlersville is an eastern closed boaters' favorite. Unlike most northeastern rivers which empty out by summer, boaters can flock to the Moose every season except winter. At three feet on the McKeever gage, the Lower Moose offers an exciting run which quickly diminishes with dropping levels.

But from the Fowlersville bridge down to the confluence with the Black River at Lyons Falls comes the 3.6 mile long Bottom Moose—a stretch only recently conquered by adventuresome paddlers. This is a drop-pool run with substantial flatwater sections separating rapids. The rapids themselves are spectacular. Formed by clefts in the jagged igneous rock, the steep drops form sheer waterfalls or smooth slides—one dropping over 40 feet.

15 runnable drops are packed into this short piece of river. Scouting is demanded every step of the way since snags, underfalls, and recirculators lurk in many of the rapids. The fun begins just 400 yards below the Fowlersville bridge put-in with a two stage falls dropping at a 45° angle. Following hard upon comes the Knifeedge rapids where the yard-wide channel drops quickly 12 feet. Then the dual drops of Upper Lyonsdale Falls; the multistage, very

tricky Lower Lyonsdale which descends 40 feet below a dam impoundment; the almost sheer "12-Foot" Falls; and several others thick and fast and equally difficult. By the time you've made the 300-foot descent of this short run, you feel you've fallen a mile.

Unfortunately, all this liquid power makes the Bottom Moose of interest not only to paddlers, but to low head hydro-maniacs. Right now the power beavers have received FERC permit #4346 to begin final plans to dry up the river from "12 foot" falls to the Black River.

As stated, the Bottom Moose is a recent addition to the repertoire of runnable eastern hair. As late as 1977 Jim Mulhan, Carl Lungren, Joe Maskasky, and Tom Clemow made the initial exploratory run of this incredible piece of water. Two weekends later, the crew returned and finished the entire run, taking over 300 pictures. Carl Lungren's report of that trip, *Moose-Back Riding* appeared in AWA's Spring, 1978 issue (Vol. XXIII, No. 2). Just to give you an example of what the top end was back in '77, we suggest you turn to the center of the Whole River Catalog and view this first running of the Moose in its full color glory. (With this centerfold begins a new effort of AWA to publish color in The Journal. Look for more beginning in 1983.)

One Final Note on the Bottom Moose. It can be dangerous. Paddling the first time on this stretch with experienced Moose-riders is obligatory as several of the drops are potential deathtraps. And every trip thereafter must be treated with the same caution as an exploratory.

Color Reprints

Reprints of Carl Lungren's original article plus the color photos are available for \$1.50 from AWA Products, Pete Skinner, Box 272, Snyder Rd., West Sand Lake, NY 12196.

AWA Readership Survey — 1982

To keep serving you of the paddling community in the best possible ways, it is important that we get to know you and what you want out of a national organization like AWA. To help us keep helping you, we ask that you fill out the following survey, stick it in the envelope provided in this issue, and mail it back to us at your earliest convenience. Also, don't forget to add your \$1 DISCOUNT COUPON on page 39 as our thanks for your taking the time.

1. I am _____ male _____ female (please check only one)
2. Age: _____ under 20 _____ 21-35 _____ 36-45 _____ over 45
3. Income: _____ under \$15,000 a year _____ \$16-25 _____ \$26-32
 _____ \$33-40 _____ over \$40,000
4. I _____ own my hown home _____ rent _____ other
5. I live in _____ (name state). The setting is _____ city
 _____ suburb _____ small town _____ rural
6. Education: _____ attended high school _____ graduated high school
 _____ attended college _____ graduated college _____ taken graduate
 studies _____ graduate degree
7. I am _____ married _____ single _____ other
8. There are _____ people in my household. They paddle with me _____ never
 _____ occasionally _____ most always
9. I support _____ (#) members of my household and family
10. Approximately how many *days per year* did you take part in the following activities:

	0	1-10	11-20	20 or more
whitewater paddling	_____	_____	_____	_____
flatwater paddling	_____	_____	_____	_____
ocean paddling	_____	_____	_____	_____
slalom racing	_____	_____	_____	_____
downriver racing	_____	_____	_____	_____
helped with race organization	_____	_____	_____	_____
instructing other paddlers	_____	_____	_____	_____
river conservation efforts	_____	_____	_____	_____
building boats	_____	_____	_____	_____
making other paddling gear	_____	_____	_____	_____
private rafting	_____	_____	_____	_____
commercial rafting	_____	_____	_____	_____

Other Activities: _____

backpacking	_____	_____	_____	_____
skiing (downhill)	_____	_____	_____	_____
skiing (x-country)	_____	_____	_____	_____
biking	_____	_____	_____	_____
mountaineering	_____	_____	_____	_____
sailing	_____	_____	_____	_____
scuba diving	_____	_____	_____	_____
tent camping	_____	_____	_____	_____
RV camping	_____	_____	_____	_____

11. I usually paddle _____ flatwater (Q-I) _____ Whitewater (II-IV)
 _____ "Hair" (V-VI)

23. I rate myself as a _____ novice _____ intermediate _____ expert
 _____ inactive paddler.
24. Number of times you have run a river with a commercial outfitter: _____ ever
 _____ past 5 years
25. I have organized trips for paddlers _____ never _____ more than 5 times
 _____ frequently _____ for longer than 5 days _____ out of the country
 _____ more than 1000 miles away
26. I subscribe to _____ paddling and outdoor type magazines. Please list them:

27. I receive this copy of the AWA Journal _____ as an AWA member
 _____ bought it from a magazine rack _____ borrowed it from a friend
 _____ got it through my club's affiliation
28. Do you save copies of the Journal for future reference? _____ **yes** _____ no
29. How many people besides yourself normally read your copy of the AWA Journal
 (be sure to include household and club members)? _____
30. Please number in order of preference these departments in the AWA Journal:
 _____ Editorial Soapbox
 _____ Letters from Readers
 _____ Cartoons
 _____ The Fluvial News
 _____ Book Reviews
 _____ Feature Articles
 _____ The Inside Touch, Race Results, Race Calendar
 _____ The Boat Shop
 _____ Buyer's Guide and Club Affiliate List
31. I would like to see more, less, the same coverage of the following topics:

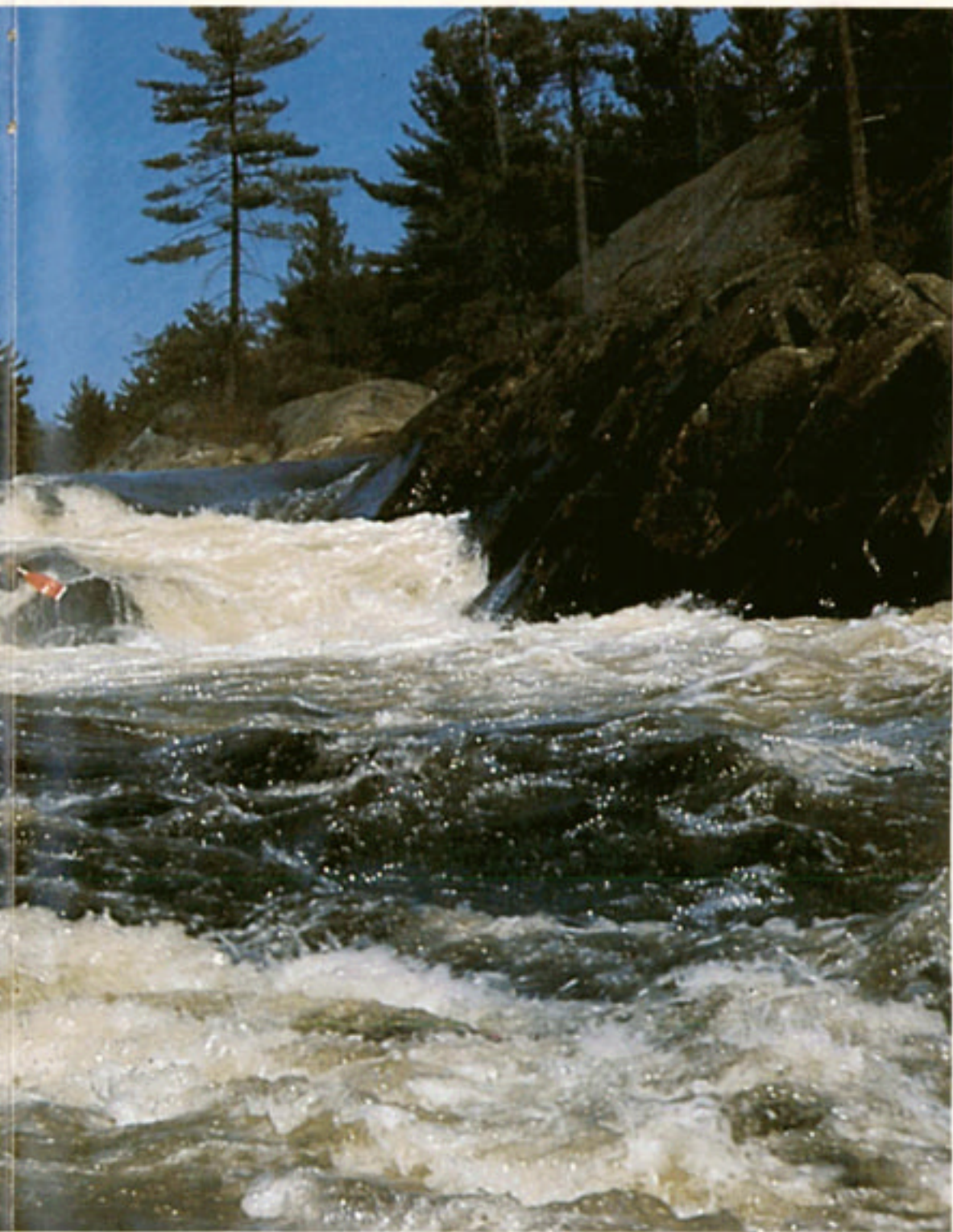
MORE	LESS	SAME		MORE	LESS	SAME	
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___	___	___	River running reports	___	___	___	Local & club news
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___	___	___	Safety & rescue articles	___	___	___	Historical articles
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Other topics you would like to see more of _____

32. What do you find most helpful in the AWA Journal? _____

33. Any other comments? _____

Find the pre-addressed envelope in this issue and return to AWA, c/o Marge Cline, 1343 N. Portage, Palatine, IL 60067.





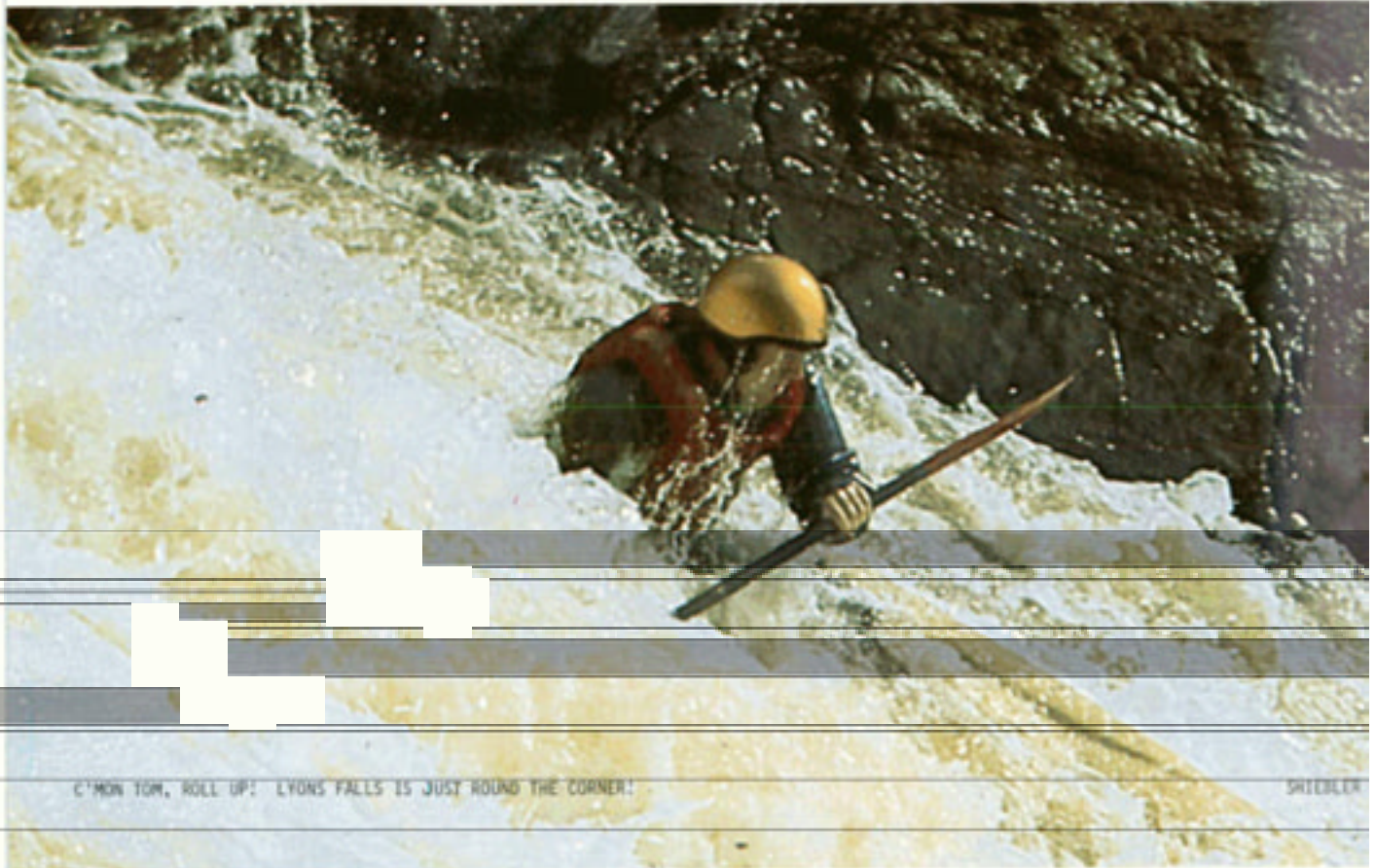
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Roanoke, VA 24018

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c/o Ted Weyman
4 Acacia Grove Ct.
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E3B 1YZ

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4635 Wascana Pkwy.
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Box 1180
Middleton, N.S., Canada
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AWA FORUM

Should the International Scale (Class I-VI) of River Difficulty be Updated? If so, How?

YES — and here's how

by Charlie Walbridge

This summer during a recent trip to Idaho I became aware of the great advances made by Western paddlers in the last few years. The limits of white-water sport have certainly been extended! Unfortunately, while I was out there I felt that river classification was a grade or more lower than the International Scale as interpreted by Europeans and Eastern paddlers. Discussions with Eastern and Western boaters whom I respect has reinforced this feeling, and I am investigating further by mailing 100 of the best paddlers I know my own attempt at a regional river comparison list.

I have asked each of these 100 to make his own East-West comparison using as many well known runs as possible, and to comment on the current classification system and possible restructuring.*

My concern is simple. The classification system was devised as a communications tool, and I feel that it is in danger of breaking down through regional interpretations. In particular, advances in Idaho and Northern California have brought previously unrunnable "VI"s down to "V"s with the result that the former "V" and "IV" runs are also being devalued. My hope is to ascertain the extent of the difference, to get an accurate comparison of Eastern and Western rivers, and, if necessary, to modify the International Scale somewhat to accommodate the needs of the outstand-

*Charlie Walbridge will be compiling the results of this regional comparison list, which will be published in an upcoming issue of AWA. It may serve as a basis to modify the current safety code, but the author assures us, it is not an attempt to force any iron-clad system on the paddling public. Rather it is an attempt to sharpen the vocabulary in boating communications.

ing modern experts while not compromising the needs of the novice.

Updating Options

I feel there are several criteria for any rating modification plan:

1. To remain as close as possible to standards now in use in the U.S. and Europe.
2. To provide useful gradations at both ends of the difficulty scale.
3. To be open-ended at the top to prevent future downgrading of streams as more difficult water is run.
4. To be internally consistent throughout the U.S.
5. To be sufficiently inexact so that the user will know to make allowance for weather, water temperature, water level variations, and isolation.

My basic idea is to leave Grade I-IV, as used in the East, untouched. It gives an excellent gradation for lower level difficulty rivers and it closely follows the ICF Scale. From this point there are several options:

I. Consider Class VI to mean "unrunnable but possible". Divide Grade V decimally as the climbers do: e.g.: 5.0-5.9 and beyond. This would allow "low-level" grade V, such as the Gauley River's Pillow Rock, to be a 5.0, with the more difficult Western V (North Fork of the Payette) to be 5.5, and the superhair (Devil's Canyon of the Susitna) to be a 5.9. The decimals can be increased to 5.10, 5.11, etc. as more difficult runs are attempted.

II. Open up Class VI as a technical classification for extreme whitewater difficulty. The old "risk of life" criterion doesn't really hold anymore, since most river deaths are occurring on relatively easy water. This class would indicate

Continued on Page 29

NO CHANGE

by O.K. Goodwin

Experienced paddlers have long recognized that there are no river rating systems that define totally and accurately the difficulty of a particular rapid or river. There are so many factors involved that such a system is not likely to emerge.

The INTERNATIONAL SCALE OF RIVER DIFFICULTY system, defined in the Safety Code of the American Whitewater Affiliation has been, and is, the most widely accepted system. It defines, on a scale of I to VI, the difficulties of rivers from flat, moving water to that which is nearly impossible (very dangerous). There have been many attempts to devise an improvement over this system and some that have emerged (to be accepted locally) have succeeded in incorporating more of the variables. The major problems that have become apparent in each of these revisions have been that:

1. They were unavoidably more complicated.

2. Those which used a different scale (1-10, 1-16) were in conflict with an already accepted scale of I-VI. This has resulted in considerable confusion.

Those of us who have been involved in the development of the AWA Safety Code recognize that the International Scale is less than perfect. We have attempted to improve it on several occasions but have ultimately decided that its simplicity and its wide acceptance are not to be tampered with lightly.

I personally feel that the International Scale could be improved, but I would not attempt to do so without doing it on an international basis, through the International Canoe Federation, and then only with the requested input from all member countries.

On the other hand, I must agree with the opinions from many sources that there seems to be a tendency to misread the scale, misinterpret classes, and misapply them when labeling a river. These are the result of human frailties and the ever-changing character of the

river.

As we all know, a river cannot be totally classified. Even the attempts to label a single rapid are suspect. A "Class III" rapid is supposed to define a rapid which "has high, irregular waves, often capable of swamping an open canoe. Narrow passages that often require complex maneuvering. May require scouting from shore." But most of us know that this rapid is subject to change with increased or decreased volume of water making it more or less difficult. Most of us know that water temperature, air temperature, weather, remoteness of the rapid, personal preparedness, boat and equipment preparedness, overall strength of the paddling group, and the presence or absence of further hazards downstream are all factors to be considered when viewing a rapid and trying to label it.

Also, each faction of the whitewater sport looks at a rapid differently. As a result, it depends upon with whom you are talking or whose article you are reading as to what class of difficulty is applied to the rapid. We don't all speak the same language and probably never will. As used in the United States (East and West), the International Scale is probably most accurately applied by intermediate ability, open canoeists and low-intermediate kayakers.

Expert kayakists tend to downplay lesser rapids since they generally have more knowledge and ability to overcome hazards.

Rowing rafters generally rate rapids lower than paddling rafters.

Open canoeists (intermediate level or better—with a boat that is filled with flotation) tend to rate a rapid lower than open canoeists who have lesser skill or flotation.

Swimmers, tubers, air mattress floaters apparently don't even know the classification and don't seem to care to know.

Tell me this isn't complex!

I believe the best effort we can make is

YES

Walbridge

extreme rescue difficulty, i.e.: not only places where a misstep may get you pinned or thrown into a hole, but a situation where you could go for miles with your group not being able to help you any more than by keeping you in sight. A great deal of Western "V" is in this category.

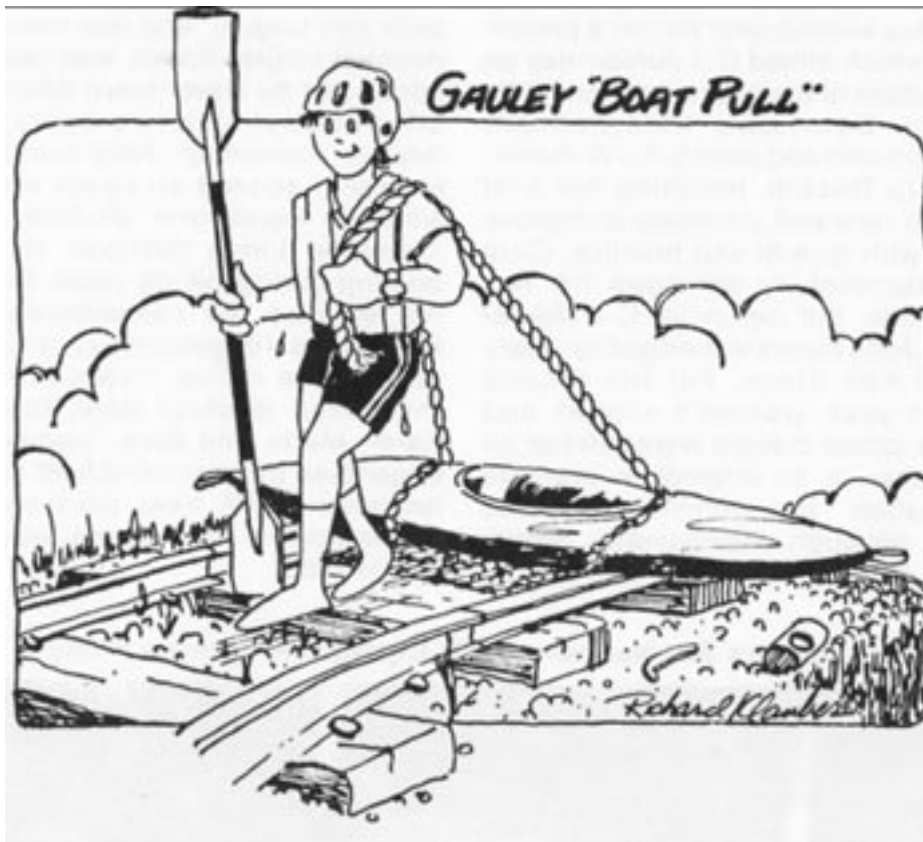
III. Permit classification numbers to extend beyond Grade VI as difficulty requires; i.e.: grade VII or even VIII. It can be defended on the grounds that other countries simply do not have access to rivers of this difficulty (except in underdeveloped areas) and Americans need the differentiation.

NO

Goodwin

to try for a standardized application of classification for a given river, river run or rapid for the average period in which it is generally run. I believe this classification is most correctly applied by intermediate canoeists or low intermediate kayakists. Guide books and maps which might further describe the characteristics would be a great help. We are approaching the point at which every river in the United States will be described in a publication. Greater dispersal and usage of this information would probably do more good than playing around with the classification system.

INVENTION of the YEAR



THE GAULEY ROPE PULL. For all those wondering how to make easy shuttle from a river where pavement is distant and rails run right alongside, may we suggest the latest and simplest invention to hit paddling this year. The Gauley rope pull (named for its river of origin) consists of merely two lines wound round your boat at either end of the cockpit. To get where you want to go, merely put your craft broadside to the rails, take the end of each rope over your shoulder, and trudge on. It's an idea whose time has long come and use is spreading quickly. And no, it does not damage your boat, at all.


The Inside Touch

1982

NATIONAL CHAMPIONS

Ocoee, Tennessee — August 16-18 & Salida, Colorado — July 16-17

The 1982 Senior Open and Junior-Master National Slalom Championships were held on the first rapid of the Ocoee River below Ocoee #3 last August. This is an oft-used gem of a slalom site and the organizers from Dixie set two challenging courses for the three day event.

The Junior-Master race, featuring a slightly easier course, was contested the first day. 1981 C-1 Junior champion, Jed Prentice and 1981 runner-up, Bill McKinney continued their intense rivalry by exchanging finish places this year. Both have two more years as juniors. In addition, bronze medalist Chris Vamos, in only his second race put on a performance which hinted  Junior may be the hot class of the future. In winning K-1 Junior, Bob Fisher from Vermont looked smooth and strong. K-1W Junior, tiny Kara Ruppel, handling her first big water race well, promises to improve rapidly with growth and practice. Clive Lister successfully defended his K-1 Master title, but perennial C-1 Master champ, John Sweet was edged by newly eligible Ken Stone. For the second straight year, women's singles and doubles canoe classes were offered on this course in an attempt to promote participation by women in canoe classes. Although championship classes did not form this year due to a lack of

required entrants in C-2W and C-1W, Carrie Ashton performed beautifully in besting the C-1W class.

In the Senior Open Championships, 1982 was a year for veterans in two classes to finally win national titles which, surprisingly, had heretofore eluded them. Chris McCormack won his first national title in men's kayak. Top American C-2 team, world and Europa cup champions, Steve and Mike Garvis, finally added a national championship to their long list of accomplishments. However, in C-1, two-time world champion Jon Luggbill, who has never won a national singles crown, was once again edged out by Dave Hearn who won his 5th national slalom singles title. A relative newcomer, hard-working Sue Norman, scored an upset victory in women's kayak over six-time national champion Linda Harrison. In decked boating during recent years, C-2M has not enjoyed the competitiveness nor level of participation experienced in open canoe racing. However, this year the mixed doubles field, topped by Karen Marte and Brett Sorensen, was larger than the men's C-2 field. Efforts to revitalize C-2M have produced more teams hoping to compete internationally in 1983.

Colorado's Sue Norman—K-1 W Champ (*Will Summers photo*)





Dave Hearn pivots into and under a gate on his way to his fifth National C-1 Championship (Debbie Demaree photo)

SLALOM

K-1 (58 entries)		Pen.	Time	Score
1st	Chris McCormick	0	193.6	193.6
2nd	Doug Gordon	5	198.8	203.8
3rd	Norm Bellingham	0	207.0	207.0

K-1W (14 entries)		Pen.	Time	Score
1st	Sue Norman	5	242.5	247.5
2nd	Linda Harrison	10	254.3	264.3
3rd	Carrie Ashton	5	268.0	273.0

K-1 Master (6 entries)		Pen.	Time	Score
1st	Clive Lister	55	201.0	256.0
2nd	Dave Kurtz	10	261.9	271.9
3rd	Tom Jones	55	233.4	288.4

K-1 Jr. (5 entries)		Pen.	Time	Score
1st	Bob Fisher	10	176.5	186.5
2nd	Kelly Strickland	10	182.9	192.9
3rd	Scott McCauley	10	185.9	195.9

K-1W Jr.		Pen.	Time	Score
1st	Kara Ruppel	230	385.4	515.4

C-1 (29 entries)		Pen.	Time	Score
1st	Dave Hearn	0	204.6	204.6
2nd	Jon Lugbill	0	210.9	210.9
3rd	Mark Wiggins	10	236.6	246.6

C-1W		Pen.	Time	Score
1st	Carrie Ashton	75	261.6	336.6
2nd	Barb McKee	170	296.2	464.2

C-1 Masters (4 entries)		Pen.	Time	Score
1st	Ken Stone	0	210.9	210.9
2nd	John Sweet	0	218.7	218.7
3rd	Ray McLain	30	266.3	296.3

C-1 Jr. (8 entries)		Pen.	Time	Score
1st	Bill McKinney	10	198.0	208.0
2nd	Jed Prentice	10	208.9	218.9
3rd	Chris Vamos	20	218.5	238.5

C-2 (6 entries)		Pen.	Time	Score
1st	Garvis, Garvis	0	237.9	237.9
2nd	Lugbill, Robison	10	235.2	245.2
3rd	Haller, Haller	5	244.4	249.4

C-2M (8 entries)		Pen.	Time	Score
1st	Sorensen, Marle	110	288.9	398.9
2nd	Sweet, McKee	110	329.2	439.2
3rd	Westphal, Barr	70	400.6	470.6

DOWNRIVER

K-1 (17 entries)		Time
1st	John Fishburn	24:13.55
2nd	Bill Nutt	24:18.62
3rd	Scott Randolph	24:54.0

K-1W		Time
1st	Carol Fisher	26:13.35

K-1 Masters (3 entries)		Time
1st	Bruce Fishburn	21:31.22
2nd	Clive Lister	22:08.11
3rd	Ray DeMoss	24:18.02

C-1 (10 entries)		Time
1st	Jim Underwood	27:40.67
2nd	Mike Hipsher	27:46.18
3rd	Willy Cynch	28:43.39

C-2		Time
1st	Mike Hipsher, Dave Jones	25:43.17

Long acknowledged as one of the top, this year K-1 Chris McCormick proved himself unquestionably the best in the U.S. (Debbie Demaree photo)



1982

OPEN CANOE NATIONALS

Lower Dead River, Maine — July 28-31

WHITEWATER

Twelve years ago a separate national championships for open canoe was introduced on the Dead River in Maine. The championships were contested there four times early in that twelve year period and in July '82, returned to that site for the fifth time. During the seven years since the race was last contested on the Dead River 1975, Whitewater Open Canoe sport has seen marked advances in equipment, training and skill. This development was evidenced by the significantly faster downriver finish times, by the much greater depth and sophistication of technique demonstrated in slalom, by the greater number of both downriver and slalom classes which were contested and by the total number of boats which started.

Of the 135 downriver boats to start (compared to 88 in '75), only four failed to finish. The winners were all at least 10 minutes faster than their 1975 counterparts. In winning OC-1, Ralph Vincent was 11 minutes faster than 1975 champion, Olympian Roland Muhlen. 1981 champs Nancy Shelhorse and Lillie Gilbert successfully defended their title on OC-2W, but several other 1981 winners settled for second as new champions were named in OC-1 master, OC-1, OC-2 short and OC-2 medium.

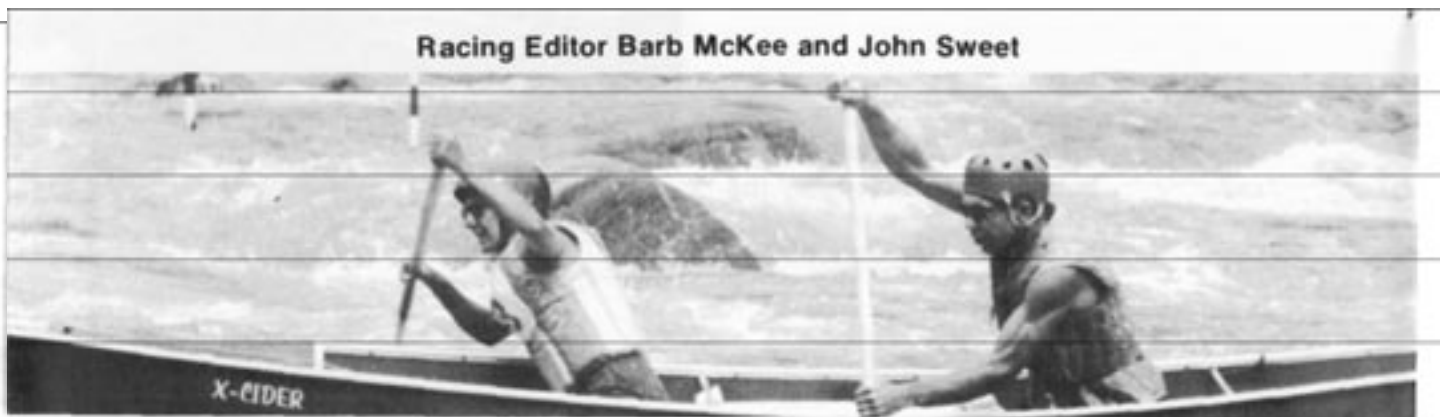
However, I noticed the greatest advance in slalom, a discipline which has lagged behind downriver in development. In 1975, I won my first doubles title in a Blue Hole. Most of the competitors appeared to be "weekenders". A mere handful of singles paddlers had specially designed slalom boats. This year, the slalom racers consisted of serious athletes who had trained for the race and who competed in several superior sla-

lom racing designs recognized as ideal whitewater craft because of their maneuverability and light weight. Of the 105 boats which started (compared to 67 in '75), there were no DNF's.

To challenge today's skilled competitors, attempts were made to move the slalom site upriver to utilize the Class III Poplar Hill Falls rather than the Class 1-11 1975 site in the run-out of that rapid. Unfortunately, a washed-out bridge made the existing road up river inaccessible. Organizers, hampered by a long carry, steep banks, and thick underbrush managed to locate the start only part way up the rapid. A typically tricky John Berry-designed course attempted to make up for the lack of big whitewater, but in the final analysis, the 1982 course was easier than nationals slalom courses have typically been in the last four years. Hence speed and precision were emphasized with many titles awarded on the basis of a clean run.

As usual, with 13 entries, mixed doubles was the second largest and probably the most competitive event with the 1982 champions posting a clean run and the fastest score (289.9) of any boat in the slalom event. The largest class, OC-1 short, was won by John Sweet's 294.6, in the second fastest score of the race. A hard-working newcomer, Spark Shuman from Mt. Wolf, Pennsylvania missed the winning OC-1 time by a mere .6 second. John Zubizarreta and Robert Harkness successfully defended their men's doubles title posting a clean run score of 319.8. George McLane, John Berry and Anne and Keech LeClair retained their titles in OC-1 Jr., OC-1 Masters Medium, and OC-2 Masters respectively.

Racing Editor Barb McKee and John Sweet



RESULTS

SLALOM

OC - 1 short (19 entries)

- 1st John Sweet
2nd Spark Shuman
3rd Harold Deal

OC - 1 medium (15 entries)

- 1st Tim Kelly
2nd Steve Scarborough
3rd Robert Friedman

OC - 1W short (6 entries)

- 1st Barbara McKee
2nd Judy Browne
3rd Holly Carr

OC - 1 Masters medium (8 entries)

- 1st John Berry Sr.
2nd Keech LeClair
3rd Bill Zeller

OC - 1 Jr. short (5 entries)

- 1st George McLane
2nd Randy Braley
3rd Kevin LeClair

OC-2 (12 entries)

- 1st John Zubizarreta,
Robert Harkness
2nd Joe Stahl, Dave Jackson
3rd Steve Scarborough, Fritz Orr

OC - 2W (5 entries)

- 1st Bunny Johns,
Margie Zubizarreta
2nd Lee Prouty, Holly Carr
3rd Ann LeClair, Barbra McKee

OC - 2M (14 entries)

- 1st John Sweet, Barbra McKee
2nd Linda & Dave Davidson
3rd Lee Prouty, Andrew Smith

OC - 2 Jr/Sr (7 entries)

- 1st Kevin & Keech LeClair
2nd George & Dennis McLane
3rd Randy Braley, Mike Malone

DOWNRIVER

OC - 2M (14 entries)

- 1st Nancy Shelhorse,
Randy Drake
2nd Lilly Gilbert, Norm Hecker
3rd Nathaniel Lucy,
Narianne Bean

OC - 2 (21 entries)

- 1st Schuyler Thompson
W.R. Tingley
2nd Norm Hecker, Randy Drake
3rd Bill Young, Ben Pearson

Score	OC - 1 (28 entries)	
294.6	1st Ralph Vincent	2:52:10.3
295.2	2nd Jeff Lathrop	2:54:14.4
325.6	3rd Dean Crocker	2:54:27.6

Score	OC - 2 Jr/Sr (11 entries)	
347.0	1st Don & Dan Littlefield	2:53:09.1
351.5	2nd Bill Soule, Same Tome	2:54:31.0
440.1	3rd Charles Haines & Charles Haines Jr.	2:56:26.4

Score	OC - 2 short (13 entries)	
464.8	1st John McDonald, Jeff Wren	2:51:31.9
624.2	2nd George Walsh, Ed Mendes	2:51:36.3
698.1	3rd Don Patneau, Fletcher Brightman	2:55:33.6

Score	OC - 2W (5 entries)	
457.7	1st Nancy Shelhorse, Lilly Gilbert	2:57:09.4
473.2	2nd Sandy Roberts, Poppy Thacher	3:03:06.2
500.6	3rd Cynthia Lynch Rae Fournier Wren	3:05:29.9

Score	OC - 2 Masters (8 entries)	
358.0	1st Bob Shelton, Neil Phillips	2:49:40.8
402.2	2nd John Rowe, Frank Stasz	2:50:50.8
427.7	3rd Tim Carter, Robert Hastings	2:56:39.3

Score	OC - 2 (12 entries)	
319.8	1st John Zubizarreta, Robert Harkness	2:49:40.8
336.1	2nd John Rowe, Frank Stasz	2:50:50.8
346.9	3rd Tim Carter, Robert Hastings	2:56:39.3

Score	OC - 2W (5 entries)	
351.5	1st Bunny Johns, Margie Zubizarreta	2:49:40.8
412.0	2nd John Rowe, Frank Stasz	2:50:50.8
444.0	3rd Tim Carter, Robert Hastings	2:56:39.3

Score	OC - 2M (14 entries)	
289.9	1st John Sweet, Barbra McKee	2:49:40.8
337.1	2nd Linda & Dave Davidson	2:50:50.8
347.0	3rd Lee Prouty, Andrew Smith	2:56:39.3

Score	OC - 2 Jr/Sr (7 entries)	
349.8	1st Kevin & Keech LeClair	2:49:40.8
374.1	2nd George & Dennis McLane	2:50:50.8
417.5	3rd Randy Braley, Mike Malone	2:56:39.3

COMBINED CLASSES FINAL SCORE

(Each race score represents a standardized (0-10) difference from an average of 50.)

OC - 1 com.	DR Slalom	Total	
1st Robert Harrison	39.9	37.7	77.6
2nd Ken Kilareski	41.0	46.2	87.2
3rd Robert Huffman	55.3	50.9	106.2

OC - 2 com.	DR Slalom	Total	
1st John Zubizarreta, Robert Harkness	41.5	35.5	77.0
2nd Ed Weatherby, Fritz Orr	41.8	41.8	83.6
3rd Ray Faulkner, Sonny Hunt	53.0	40.8	93.8

OC - 2M com.	DR Slalom	Total	
1st Bunny Johns Payson Kennedy	45.1	35.5	80.6
2nd John & Margie Zubizarreta	47.0	35.1	82.1
3rd Brad Hefler Lorrie Drake	38.5	48.4	86.9

Tale of the Tellico

A lesson in judgement

by Chuck Hines

To run or not to run is in the decision facing every Whitewater boater, each time he comes to a new put-in or a challenging rapid. It is a simple point and oft ignored that paddling whitewater holds danger—dangers which are never totally negated by skill, guts, and the "right stuff": Chuck Hines, leader of the Asheville YMCA Kayak Club in North Carolina, shows *from* his own experience that the choice of running or not running depends on an awful lot more than the water level.

"Wha'dya think?" I asked my bearded friend, Will Pruett.

"I think we'd better find a shorter, safer stretch further on downriver," he replied.

"Okay."

We sat together in his van, listening to the steady pounding of the rain on the roof, looking out the water-streaked windows at the upper section of the Tellico River, its usually clear surface now an angry, rushing brown, pouring over large boulders and cascading down sharp chutes.

It was early spring, and we had come to the Tellico in the remote mountains of east Tennessee after spending the previous day warming up on the easier Oconaluftee River in western North Carolina. The Oconaluftee had been a scheduled club trip, with Will as the leader, and seven of us had thoroughly enjoyed kayaking its Class II and III rapids.

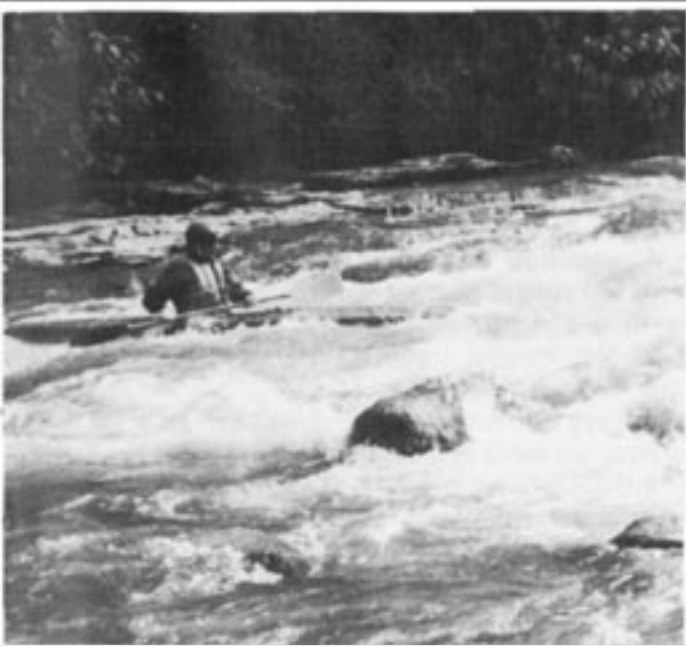
Such scheduled trips include a built-in element of safety. The group gathers at a pre-determined spot. The river to be run is known in advance, the water level carefully checked. Several cars are available, making the shuttle relatively simple, and occasionally a non-paddler comes along just to handle the driving.

There is a designated trip leader who is familiar with the river and with the capabilities of the participants. The leader conducts an equipment check, then appoints one or two sweep paddlers. These are competent people who bring up the rear while running the river; if anyone encounters trouble, they perform the rescue. Fortunately on a well-run club trip, such rescue is seldom needed. Everything falls into its proper place, like a musical performance that has been rehearsed. So it was on the Oconaluftee, even though we found it running higher than expected and the rapids a bit more challenging. The weather was cloudy, cool, and the water temperature was icy, as we picked our way down this narrow stream which flows through the Cherokee Indian Reservation and can be paddled only in the early spring, before the start of the fishing season.

After the run most of our group headed back home, but Will and I drove in his van to the Nantahala Outdoor Center (NOC) where we planned to spend the night before tackling the Tellico.

At NOC, we chatted with Dave, the young, energetic commodore of the Dixie division of the ACA. We waved at Bunny, the defending world champion in C-2M racing. We met Judy, a beginning paddler from Georgia, and John, an AWA member from Ohio, now a whitewater kayaking enthusiast after years of marathon canoeing. We discovered that our waitress at the NOC restaurant was Kathy, from Indiana, with whom I had paddled the Conasauga and Nantahala two years previously. We ran into Ray, an old friend from Wisconsin who is one of the finest all-around paddlers in the country. We looked at license plates from Mississippi to Minnesota, from Florida to Connecticut to Colorado.

"Where y'all paddling tomorrow?"



Author Chuck Hines faces Tellico Foam

drove up the road alongside the river. The water was pulsating. Dangerous. Especially in the upper section. Lantz and Sehlinger, in their *A Canoeing and Kayaking Guide to the Streams of Tennessee*, rate this section as Class III and IV—at normal level, giving it 24 points on the numerical scale. They state, "This is not a trip for beginners, nor is it for those who overrate their abilities or have to depend on luck." At the surging level we found it, this was a definite understatement.

A car pulled up beside us with kayaks on top. The driver lowered his window but didn't say a word. He just stared at river in astonishment. Will said, "What's it running?"

"Over 500 and rising...maybe 600 by now...too much for me to handle today..." He drove away.

Will and I looked at each other. "Wha'dya think?" I asked him.

"I think we'd better find a shorter, safer stretch farther on downriver."

"Okay."

Unlike the Oconaluftee, this was not a scheduled club trip. There were just two of us in a single vehicle. Conditions were questionable, at best. We weren't about to do anything foolish. As Will put it, "If being cautious makes me a whitewater wimp, so be it." We headed back down the river road, looking for an easier stretch to run. Finding it, we dumped our boats and paddles at riverside and drove

someone asked.

"The Tellico," we responded.

"The races scheduled to be held there have been moved, y'know."

"How come?"

"High water."

"What's it running?"

"Over 400 cfs."

"Well, we weren't planning to race, anyway."

We went to sleep early at the NOC motel. It was still dark the next morning when I was awakened by thunder, and huge flashes of lightning. Then came the rain. Continuing rain. A downpour. I smiled. When a storm hits the Nantahala Gorge, it really lets loose. More than once in the past I have been plastered and pelted by a Nantahala deluge. I drifted back to sleep, and was rudely wakened two hours by Will's morning clatter. The rain was still falling, and I could hear the rumbling of the creek adjacent to the NOC motel. "Whazit?" I mumbled.

"Seven o'clock," Will said.

Two hours later, after a big breakfast, the van windshield wipers were slapping furiously back and forth as we headed toward Tennessee and the Tellico. The Tellico is a run-off river that can be paddled only in the spring, when it becomes fierce and fun. (Sometimes very fierce and not much fun.) When we arrived, we found that we had the river to ourselves. We learned why when we

Will Pruett cuts his slick white craft through dark waters



the van down to the Ranger Station Bridge, our takeout spot.

As if approving of our decision, the rain stopped as we changed into our paddling apparel. Our good luck continued as another car approached; I flagged it down, and we hitched a ride upriver to our kayaks and the put-in we had selected.


I was the first one in. The water temperature wasn't cold as I expected, but the river was flowing extremely fast. It was a solid brown: unappetizing but exciting. I surfed and ferried for 10 minutes at the put-in rapid, as Will joined me. Wordlessly we turned and headed downriver, rounding a bend, keeping to the inside of a Class II+, bouncing through two-foot waves. Alone on the river, we were carried swiftly through more II and III rapids. Some quick, decisive maneuvering was demanded, but mostly it was a matter of reading each rapid in advance, catching the tongue or chute at the top, and then being propelled through long sets of two-and three-foot waves. Almost before we realized it, we had reached the takeout bridge.

"That's the fastest ride I've had in a long time!" Will laughed as he hopped out.

I remained in a while longer, surfing and ferrying at the last rapid, concluding with a couple of practice rolls. Exhausted, finally, I clambered ashore as the rain resumed.

Thirty minutes later, dressed and warm, we were driving homeward, passing through the village of Tellico Plains, where the water was running well above the foot bridge. "It's gotta be 600 cfs or more," Will decided. "Perhaps a lot more." I looked over at my boating buddy, who doesn't mind calling himself a whitewater wimp when it comes to using common sense, displaying good judgment, and exhibiting caution when conditions require it. I started thinking how glad I was I hadn't been lured into something over my head. Mulling this over, I waxed more and more thankful that I was lucky enough to paddle with a friend who had the courage not to run and the sense not to pressure me.

Every boater should be so lucky. Are you?




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is no less hazardous and may be illegal as well. Putting in on the Canadian side violates Niagara Parks Act regulations, RSO 1970, Chapter 298 and 97. The most recent regs, 1974, R.R.O. 1970 #619 prohibit a person placing "...canoe ...or watercraft of any kind...upon the talus or foreshore of the Niagara River that is under the jurisdiction of the (Niagara Parks) Commission." (Ontario Regulation 486 169, Section 4). This regulation essentially prohibits launching and landing on the Canadian side without a permit (which upon application would probably be denied). Other regulations (such as traffic rules) might be applied to paddlers as well—each punishable by a \$100 fine. Also, Canadian Customs requires notification of any boat's entry into Canadian waters.

Boat launching on the American side is not specifically prohibited. New York State regulations applicable to Parks land, such as the shores of the Niagara River, are contained in Chapter 1, Subchapter A, NYCRR and in regional rules as well.

The closest (very marginally) applicable rule is Section 375.1 (f)—Disorderly Conduct which allows one to "Commit an act which may...create a hazardous or offensive condition by any act which serves no legitimate purpose." Section 27.11, Parks Land Recreation Law allows fines up to \$100 for violations. In other words, though boat launching may not be specifically prohibited, Parks Police may charge paddlers with some offense to discourage paddling this awesome stretch. More important, Park Police will physically prevent anyone they see putting in on any moving water stretch of the river.

The run itself requires a bomb-proof roll and extensive big water experience.

Ten-foot cross-curlers, fifteen-foot exploding waves and vicious boils and eddies would almost surely flip any craft during the one minute, 3000 foot long zoom flume. The action is constant and savage from below the Swiftdrift all the way to the Whirlpool.

In 1981, after several years of trying, ABC-TV finally pulled the right strings and convinced the NYS Parks Dept. to let four kayakists legally run the rapids. For reknown racer Carrier Ashton it was the top end. "These were the biggest rapids I have ever seen!" remarked Carrie. The run was made and filmed on October 14, 1981. It was successful if harrowing for all paddlers and was shown on the "American Sportsmen" Series. If safe, the run was not exactly pristine. "It's filthy". Carrie stated, "We were practicing rolls in the water and I found my nose was stuffed up after the first one!"

Clearly whitewater and police are not the only dangers of this run. Toxic chemicals, from hard pesticides to solvents, pour into the river out of the ground and sewers around Love Canal and several other Hooker Chemical Co. dumps above the Falls. Below the Falls, millions of gallons of minimally treated, chemically contaminated sewage from Niagara Fall's new, but already chemically hobbled waste water treatment plant leaves a foul smelling sheen on the water. If the rapids don't wreck boat and paddler instantaneously, the chemicals waste him in the long run!

The Whirlpool

At the end of the 3000 feet Lower Rapids awaits the treacherous Whirlpool. From the rapids, water shoots smoothly down the steep ramped throat, into a 100-foot, deep circular maelstrom.

According to a 1973 report by Bob MacMullin, P.E., the Whirlpool rotates clockwise at river flows below 62,000 cfs. and counter-clockwise above that. due to the momentum and direction of the entrance jet.

At 100,000 cfs the Whirlpool's surface elevation measures 277 feet m.s.l. and at 268 feet m.s.l. at 50,000 cfs. This nine foot elevation change is not matched by a similar differential in the jet charging into this circulating pool. Consequently, the entry into the Whirlpool at 50,000 cfs is blocked by a gigantic river wide cross curler and a very regular 14 foot crashing wave. The smoother entry at 100,000 however, is matched with very vicious boils and spinning whirlpools, capable of easily swallowing kayaks or swimmers.

The origin of the Whirlpool dates back to the last Ice Age when the Wisconsin ice sheet blocked the prehistoric Niagara Gorge exiting near St. David, Ontario, three miles west of Lewiston, New York, its present escape route. After the ice sheet receded, the river found a new course, and cut the gorge upriver from Lewiston instead. When the river cut into its old gorge, filled with glacial debris, it blew the present whirlpool clean and continued its cutting action in a more southeasterly direction. Today, some 4700 years later, it continues to chew its way toward Buffalo at the Canadian Falls at the rate of several feet each year.

Below the Whirlpool

The Niagara River, now dizzy from its spins, spews out of the Whirlpool and off to Niagara Glen and Devils Hole Rapids. Class IV big water rapids abound as do boils and cross curlers. Kayakers have paddled up river here to play among the rapids, though Park police prevent entry down the Park's 1000 steps leading down to the Devils Hole.

Just below these rapids stand two modern day engineering wonders. The N.Y.S. Power Authority pumped storage generating station and Canada's Sir Adam Beck Station. Facing each other in a gigantic concrete walled gorge, these stations pour out 65,000 and 90,000 cfs respectively. Traditionally, big water boaters struggle upriver and play in the intense eddy lines, boils, and

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whirlpools thus created, while power station personnel watch these antics dumbfounded.

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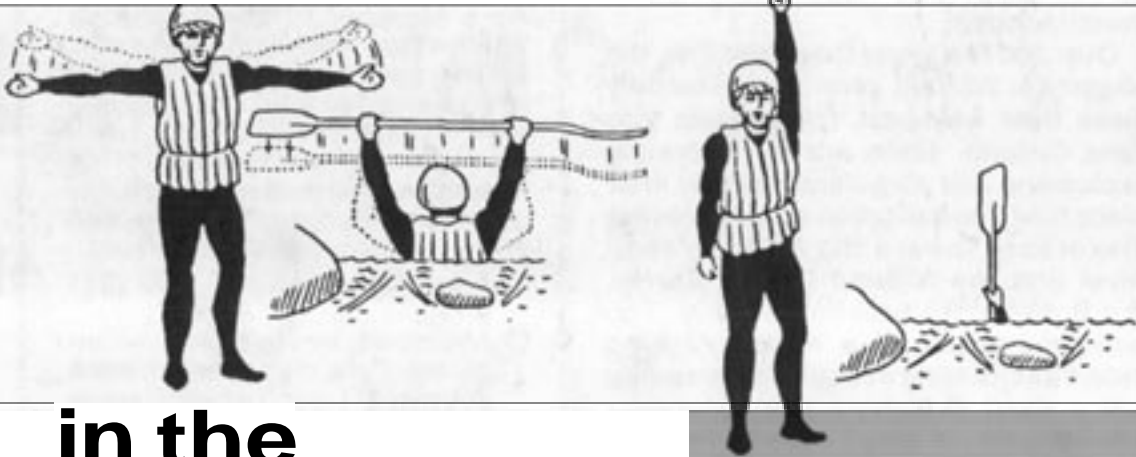
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