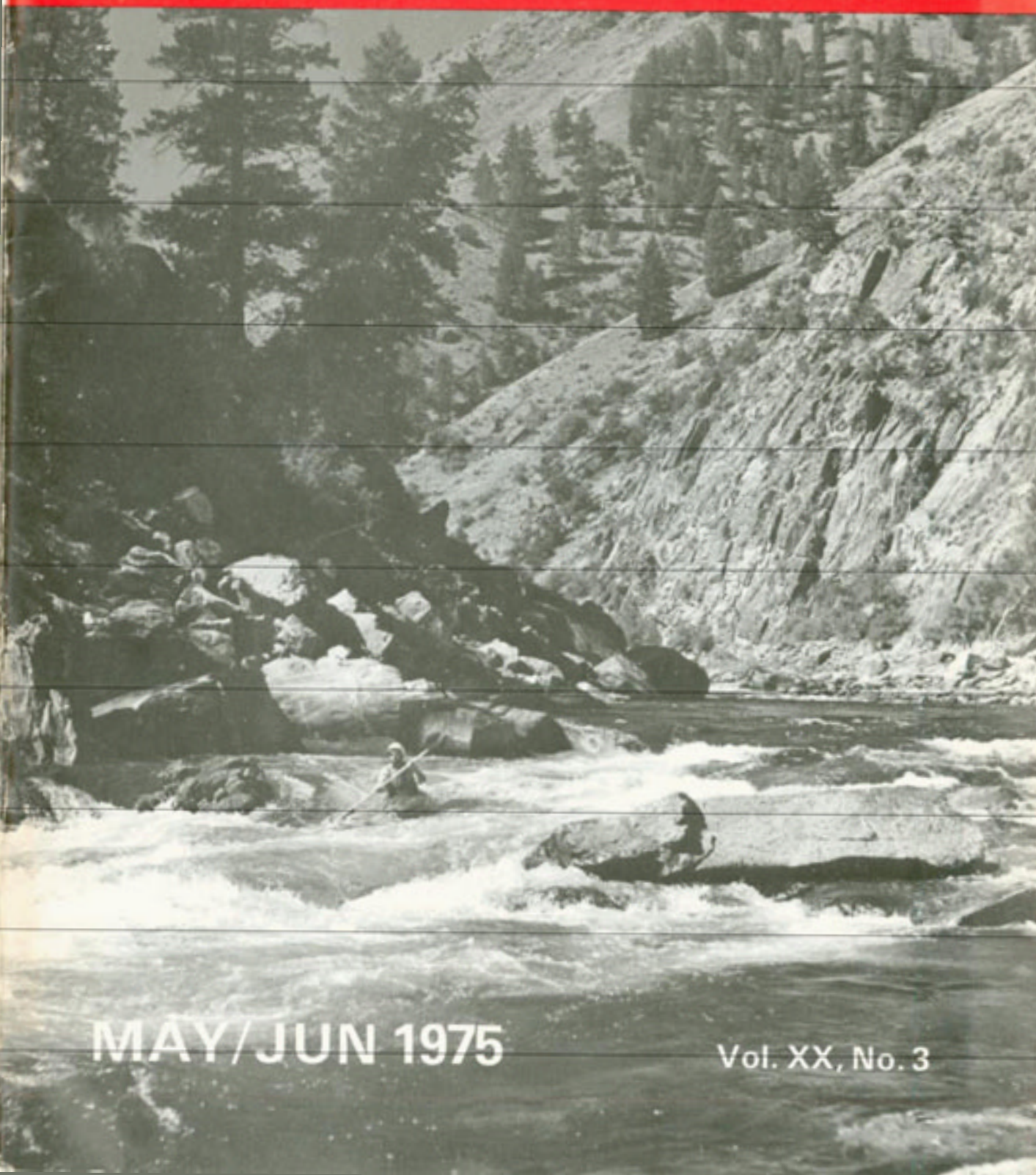


American

WHITEWATER

the Journal of the American Whitewater Affiliation



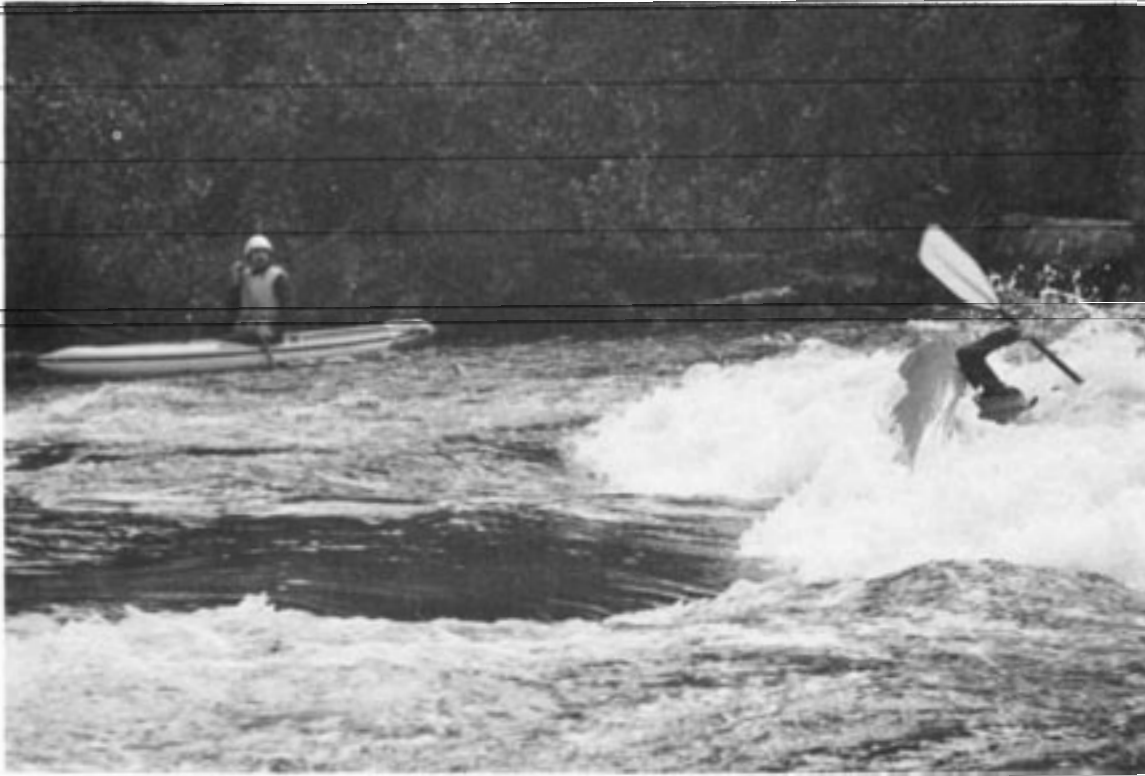
MAY/JUN 1975

Vol. XX, No. 3



Above: Bob and Helen Peterson of the Buck Ridge Canoe Club **(PA)** in the "Dimples" section of the Youghiogheny. At the successful conclusion of this 9%-mile run, they received many compliments on their homemade canoe cover from the accompanying kayakists, who at first were quite skeptical. Photo by Lou Metzger.

Below: Jim Sindelar watches unidentified boater play in a hole at The Ledge, Rapid R, Maine (Fall, **1974**). Photo by Tom Peterson





The
American
Whitewater
Affiliation

Executive Director
JAMES C. SINDELAR
264 East Side Dr.
Concord, NH 03301

Board of Directors

President
J. Calvin Giddings
1425 Perry Ave.
Salt Lake City, UT 84103

Vice President
Paul Davidson
478 Pythian St.
Morgantown, WV 26505

Secretary
Duane Woltjen
617 Marcel Dr.
Manchester, MO 63011

1972-76

David O. Cooney
21 Haggerty Rd.
Potsdam, NY 13676

Gerald H. Meral
2728 Durant Ave.
Berkeley, CA 94704

Ann Schafer
22406 DeKalb Dr.
Woodland Hills, CA
91364

1972-74

Phillip Allender
Chestnut Ridge Rd.
Morgantown, WV 26505

Don Bodley
1200 Normal Ave.
Chattanooga, TN 37405

Dean Norman
3336 W. 99th St.
Cleveland, OH 44102

Treasurer

RICHARD TREAT
1506 Rosemary
Columbia, MO 65201



Contents

Summer 75 Joint Canoe Cruise	86
Pictorial Pete Skinner and Dan Voeth	87
Rating System for Boating Difficulty Dick Schwind	88
Kayakists 3, Stillwater 2, 1 Draw Andy Westerhaus	91
Private Trips Clearing House. Preston B. Ellsworth	98
Art of Boarding a Canoe Iris Sindelar	100
Custom-Made Cartop Carrier. . . . Carl E. Trewiler	102
Paddling C-2 with a Partner Tom Southworth	108

DEPARTMENTS

Letters	84	Racing Tips	108
Classified	90	Book Reviews.	112
Dean's Voyageurs.	107	Affiliates	114

Editorial **Chairman** and Editor: Iris Sindelar. P.O. Box 321, Concord, NH 03301

Southeast Regional Editor: Margaret O. Tucker. 2618 Defoors Ferry Rd., N.W., Atlanta, GA 30318

Midwest Regional Editor: Gary E. Myers, 28 W 136 Hillview Dr., Route 1, Naperville, IL 60540

Editorial **Committee**: Margaret Tucker, Ed Alexander, O. K. Goodwin, Richard Treat. Geo. Larsen, Ray Gabler. Michael Mutek. Gary E. Myers.

Business Manager: Richard Treat. 1506 Rosemary, Columbia MO 65201

Membership Chairman; **Surfing** Reporter: Geo. Larsen, Box 1584, San Bruno, CA 94066

Midwest Membership **Chairman**: Fred Dietz, 1590 Sleepy Hollow, Coshocton, OH 43812

Advertising **Dept.**: Jon Arnold, 1738 Mayburn, Dearborn, MI 48218; Rist Bonnefond, 10 Pond St., Wakefield, RI 02879; Scott Price, 401 Riverside Dr., Covington, KY 41011.

AWA **Trips** Committee Chairman: David Cooney, 21 Haggerty Rd., Potsdam, NY 13676

Safety **Chairman**: O.K. Goodwin, 1240 Moyer Rd., Newport News, VA 23602

Conservation Chairman: Gerald Meral. Environmental Defense Fund. 2728 Durant Ave., Berkeley, CA 94704

Correspondence **Chairman**: Lynn Wilson. Box 109, Pluckemin, NJ 07978

Racing Editor: Ray Gabler. 151 Jensen Circle. West Springfield MA 01089

How to Write to American **Whitewater**: Deadlines for all material, including advertising, are the 25th of Dec., Feb., Apr., June, Aug., and Oct., for Nos. 1, 2, 3, 4, 5 and 6 respectively.

Send **Race Schedules** and results to the Racing Editor, Ray Gabler.

Send **membership subscription payments**, changes of address, non-receipt of copies to A&W **Whitewater**, P.O. Box 321, Concord, NH 03301.

Send **requests for advertising** information to your nearest AWA Advertising Representative.

Send advertising copy and proofs to the Editor, Iris Sindelar.

Send Payments for Advertising and **Club Affiliation** dues to the Business Manager, Richard Treat.

American **Whitewater** is mailed to all members of the American Whitewater Affiliation, an affiliation of boating clubs and individuals interested in whitewater paddle sport. Membership is open to interested individuals at \$5.00 per year and to clubs at \$10.00 per year. Club membership includes listing in the **Journal**.

Publication is planned at 6 times yearly. **Single** copies, \$1.00 each. **Surplus** back copies are available at reduced prices. Write Geo. Larsen, P.O. Box 1584, San Bruno, CA 94066.

The Staff and committee members listed above are unpaid Whitewater enthusiasts who volunteer their time and efforts to bring affiliate/member subscribers this journal. Your contribution of articles, letters, race results and schedules, photos and drawings are essential for their continued efforts and the timely publication of the American Whitewater Journal.

Vol. XX, No. 3 © 1975 American Whitewater Affiliation. All rights reserved.

Letters from Readers

March 18, 1975

April 15, 1975

Dear Editor:

As a member of the Czechoslovak team sent to the International White Water Canoe Competition at the Verdon Gorges in France last summer, I managed to get away and find political asylum in the West. Only last week I was finally granted my American immigration papers, and I at last arrived in New York.

In Czechoslovakia I was evaluated in 1972 as one of the top 25 whitewater canoeists in the country. In addition to competing in international meets, I have been designing and constructing canoes and kayaks for eight years now, the last three years for teams representing the Czech Sports Union. A canoe on which I collaborated was the one with which the Czechs won first prize in the World White Water Championship in Switzerland in 1972.

In the United States I have already found a warm reception among American friends. But I also hope soon to be able to resume my contact with canoes, both for business and for pleasure. I would be most deeply grateful for any assistance you might give me in this direction. Additional information on canoeing and canoe-making in the United States would be useful in helping me find employment in our sport.

Sincerely,

Vladimir Vanha
c/o Rosenstein
526 W. 112, #63
New York, NY 10025

MADAWASKA KANU CAMP
CANADA'S FREE WHITE WATER SCHOOL FOR KAYAKS AND CANOES
All levels, racer or
cruiser, 14 yrs. & up
• Class 1-4 wilderness
river • World famous
coaches • Chalet or
camping
2 tuna ct., don mills
ontario M3A-3L1
NKC
canada, tel.
(416) 447-8845

Dear Editor:

I am writing in response to the letter published in your MAR/APR 1975 issue by O.K. Goodwin, Chairman of Sefety of AWA.

1. I cannot believe you printed such an article and 2. I cannot believe the article was written by a safety chairman!

Though admittedly slalom kayaks can cause some danger, it certainly doesn't seem to be such a threat to the sport as O.K. Goodwin has tried to make your reader believe.

If the sport does get a bad name it will be from those who do not practice adequate safety standards and believe me—many of those are owners of down-river kayaks and canoes. It seems that a safety chairman could spend his time doing more to promote safety standards other than attacking slalom kayaks.

I am very disappointed in your journal for this article, and I hope you do not start promoting this sort of thing. It seems to me Mr. Goodwin is looking for violence and trouble with the slalom kayak. If we all practice safety in the water and good sportsmanship in general, there should be no difference in what type of boat one uses.

R. Wall
115 Delaney Dr.
Pittsburgh, PA 15235

(The "Letters from Readers" section is intended to be, as much as possible, a forum for readers' opinions on thought-provoking subjects, controversial or not. Though you did not agree with the point of view expressed, it DID make you think about it and elicited the valid observation that attitude is much more important than the type of boat used. But how about a beginner who, even with the best attitude in the world, has

yet to learn to control his or her boat? Being aware of the potential problems of a **poorly-controlled** needle-nose might prevent this person from causing damage he or she would **sincerely** regret.

It is easy to cast stones at persons whose activities one has only a superficial knowledge of: Mr. Goodwin openly acknowledged that letter as **personal opinion** by submitting it as a Letter to the Editor, and it represents an exceedingly small proportion of the time, energy and thought he continues to devote to whitewater boating safety — and the rights of paddlers as individuals in the face of increasing safety legislation. — Iris Sindelar, Ed.)

NORTHERN WATERS SUMMER WHITEWATER CENTER

On and near ANDROSCOGGIN, MAGALOWAY, CONNECTICUT & RAPID RIVERS

Class 2-4, dam controlled water CANOE AND KAYAK RENTALS • WHITEWATER SCHOOL FOR BEGINNERS • CAMPSITES & CAMPING GEAR • YOUTH CAMP • RACES • SLALOM COURSE • WHITEWATER SHOP

Saco Bound / Northern waters

1111 E. C. 1 way N.H. 03301 N.H. NED M. SHERRY

FOR FREE BROCHURE WRITE TO: P.C. FRYEBURG, ME 04037



Raft

Kayak School

Explore the Sierra Nevada while sharpening your river skills with the help of expert instructors.

contact:
River and Forest Trails, Inc.
440 North First St.
San Jose, Calif. 95112
(408) 297-3307

WHITEWATER FILM AVAILABLE

"To Kayak," by Peg Dice. 16mm., color, sound, 33 minutes. Copyright 1975.

A U.S. National Slalom Champion demonstrates the basic paddling strokes in slow motion and is filmed using them during a slalom race. Members of the Raw Strength and Courage Kayakers Club of Michigan demonstrate a fish-eye view of the Eskimo roll, kayaking equipment and safety practices, and recreational kayaking on rivers in Ontario, Michigan and West Virginia.

"To Kayak" shows whitewater slalom racing on the Gull River in Ontario and at the Savage River International Race in Maryland, where the 1972 Olympic World Champion paddler is seen in action. Downriver boats and techniques are shown at the Hillbilly Wildwater Race on the Cheat River in West Virginia.

Rental fee \$35; purchase price \$350. Contact Peg Dice, filmmaker, 2022 Day St., Ann Arbor, MI 48104.

(The AWA Journal staff is constantly deluged with inquiries about available films. If you know of any good films that are available to the public, please write to Iris Sindelar, Ed. AWA Journal, Box 321, Concord, NH 03301. Include the name of the film, a brief description if possible, how to get hold of it, rental fee, and any other pertinent information you may have (length, color? sound? 8 or 16 mm, etc.) Thanks! ILS)

MOVING? LET US KNOW!

Third class mail is NOT forwarded.

Send notice to:

American Whitewater
P.O. Box 321
Concord, N.H. 03301

SUMMER 1975 JOINT CANOE CRUISE

The A.C.A., A.W.A. and U.S.C.A. plan to hold a joint summer canoe cruise on the Suwannee River in Florida August 17 through 24. This will be a leisurely trip, taking seven days to cover the 120 miles of river. The water is primarily class I; but depending upon water level, there may be one class II or class III rapid. The shore line is white sand with a campsite on every bend. There will be opportunities to dive in the clear water at some of the 10 or so springs feeding the river along the way.

Plans for this trip are hurried because of the publication dates, but here are the details. The trip will start at the Florida state highway Route 6 bridge on Sunday morning, August 17 for car shuttle. Take-out will be at **Branford** on U.S. Route 27 on Sunday, the 24th. Suitable clothing for daytime paddling will be shorts or bathing suits: For evenings, long pants, long sleeved shirts, or maybe even a jacket, would be in order. A good rain tent is needed and a tarp is handy for sitting out the daily 4:00 P.M. rain. Bring fins and mask for diving.

Food and supplies will be available along the way at about four places; but because of time, it may be best not to plan on supplies at these places. Plan a minimum of four days' supply of food and water.

To get there from the west, take 1-75 into Florida and get off at Florida state highway Route 6 going east. Follow Route 6 about 25 miles to where it crosses the Suwannee River. From the east, use 1-95 to 1-10 and go west until the U.S. Route 441 goes north at Winfield. Go north for about 21 miles; then turn west on state Route 6 for a couple of miles until the road crosses the river.

Car shuttle should start at 9:00 A.M., so please be prompt. There is not adequate time for preparing information packets, but questions can be answered by calling trip leader **Rodger Losier** at (404)451-5133. Call Rodger if you plan to attend so he will know how to get in touch with you in the event that plans change.

Bring your PFD and be prepared to wear it.

HAUTHAWAY KAYAKS

640 Boston Post Rd.
Weston, MA 02193

Slalom, Downriver, Touring and Junior Models
Surf Kayak, Lightweight Canoes
Paddles Spray Covers Life Vests Floatation

Wild River
Canoe Supplies

send name & address for

Free Catalog

Flatwater & Whitewater BOOKS, Guides, and Supplies. T-SHIRTS printed with

whitewater designs. write today to
Wild River Canoe Supplies, Dept W-2
Ludington Rd, Holmes, NY 12531

YOU WON'T GET YOUR JOURNAL

... if you move and don't send us a change of address. Third class mail is NOT forwarded and we can't afford to send it any other way.

American Whitewater
P.O. Box 321
Concord, N.H. 03301



BUILD A WHITEWATER PHOTO LIBRARY

Look for Edward Columbus Thompson photos in this issue and call or write:

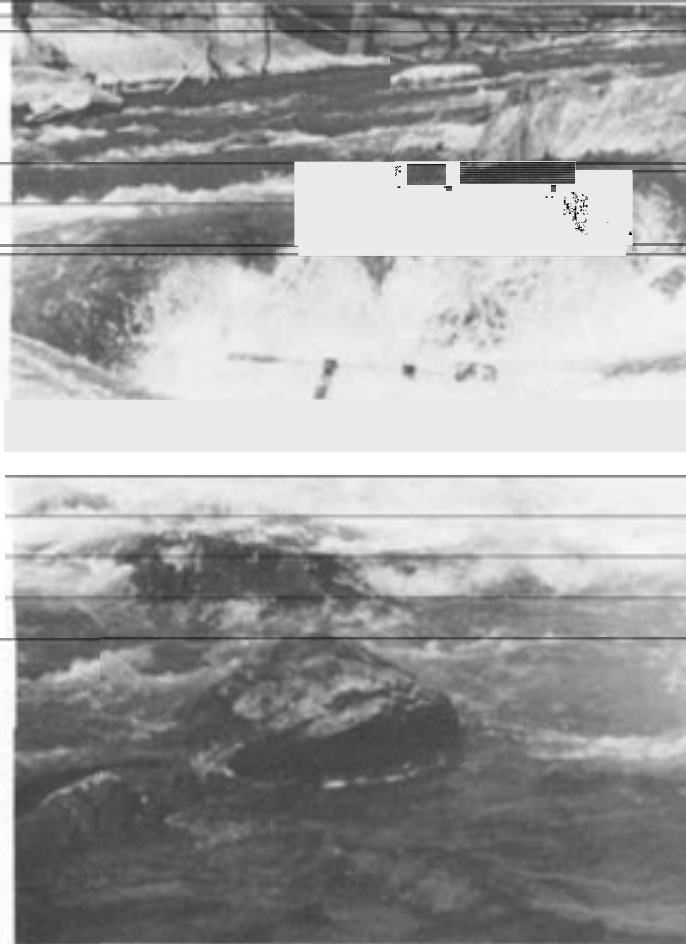
**Edward
Columbus
Thompson
Photography**

Wilderness Sports
2426 La Vista Rd.
Atlanta, GA 30329

404 634 2066



OVER...



UNDER

THROUGH?



Pete Skinner of New York demonstrates proper river-running sequence of prepositions. Photos by Dan Voeth.

Rating System for Boating Difficulty

by **Dick Schwind**

(From the book *West Coast River Touring: Rogue River Canyon and South*, by **Dick Schwind**. Available from *Touchstone Press, Beaverton, OR 97005* for \$5.95. See review. SEP/OCT 1975 AWA Journal.)

As in other wilderness sports, rating systems have been developed to classify the difficulty of river runs. There appear to be two important rating systems in the United States. Rafters on the larger rivers in the mountain states use a one-to-ten rating system. Canoeing and kayaking groups in both the Eastern states and Pacific Coast states use the International Water Classification, which rates rivers as Class I to VI. In both systems, Class I is the easiest to run.

Unfortunately, there is little standardization among boating groups using the International system, which is very vague to begin with—for example, "Class II. Easy. Rapids of medium difficulty, with passages clear and wide. . . ." Ever-changing water levels greatly complicate any efforts to standardize. Most clubs tend to rate their best boaters as Class IV talent and work down from there. No one would be so foolish as to boat Class V rapids and Class VI is often interpreted as a waterfall. The weakness in a system that classifies rivers by height of the waves, length of rapids, and maneuvering required is that it is too easy for the new boater to think he is a much better boater than he actually is, possibly not realizing his mistake until partway down a wilderness run and in real trouble.

The International system was adapted for use in this guide by dividing

each class in two—that is, 1, 1½, 2, 2½, etc.—and by listing the *skills* needed by the paddler boating rivers of a particular class to feel reasonably comfortable, but still challenged. In an established river touring group, the trip leader would consider a boater with these skills as an asset, or one without them as a liability to the safety and strength of the group. This system replaces the classic definitions based on river difficulty and omits Classes V and VI, which are almost synonymous with "unrunnable."

The skills for each class (in addition to those in the previous classes) for the paddler are listed below (not directly applicable to rowed craft).

Class 1 paddler:

Has: Knowledge of basic boating safety

At least moderate swimming ability

Can: Paddle in a straight line without excessive steering strokes

Turn the boat in a new direction and paddle around single major obstacles—for example, bridge piers in current

Class 1½ paddler:

Has: Effective sweep, pry, and draw strokes and low brace (single paddler and canoe stern)

Moderate self-rescue ability

Can: Maneuver around well-spaced rocks and avoid brush in mild current

Spot eddies and has knowledge of their effect on the boat as entering and leaving them

Class 2 paddler:

Has: Moderate ability to spot submerged rocks that should be avoided

Ability to plan route in short

rapid with several well-spaced obstacles, then boat the route planned

Effective draw stroke at canoe bow

Moderate ability to judge which rapids can be safely navigated

Can: Ferry across moderate currents facing upstream

Cross eddy lines of moderate strength with some confidence

Estimate, if in an open canoe, what waves will ship water

Remain stationary in moderate current or greatly reduce speed in fast current by back paddling

Class 2% paddler:

Has: Effective cross draw or pry stroke at canoe bow

Effective high brace (single paddler)

Ability to effect simple rescues of others that are upset

Can: Brace instinctively on either side in kayak, low brace in

canoe bow, and high brace in the stern

Confidently take straight, reasonably symmetrical vertical drops of 2% feet in white-water boats

Back ferry across moderately swift current

Catch small eddies in mild current or medium-sized eddies (2 boat lengths) from swift current or jet

Boat through short rapids with closely spaced rocks

Class 3 paddler:

Has: Good ability to evaluate difficulty of rapids and make independent judgments as to which should not be run

Ability to rescue another boat in most situations

Strong swimming ability

Good physical condition

Can: Accurately judge effects on boat of large hydraulics (4-foot-high

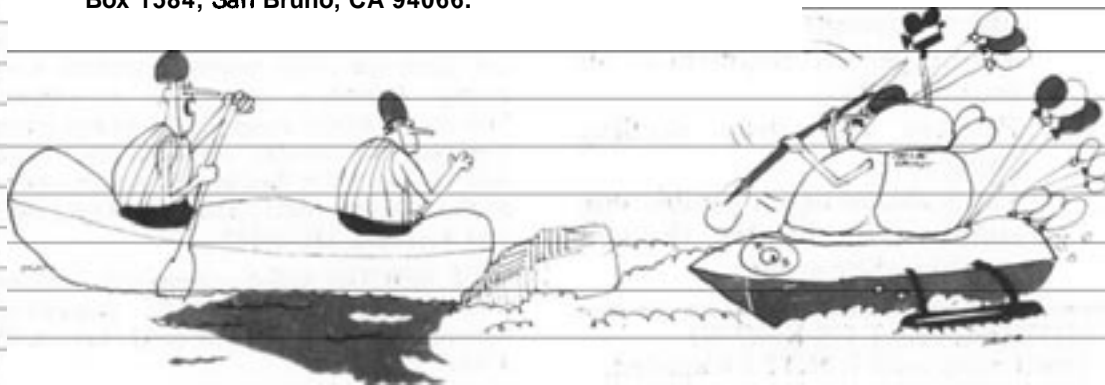
Now available!

AWA SAFETY CODES (1974 Revision)

A guide to safe river boating in canoe, kayak or raft. Prepared and published by the American Whitewater Affiliation. A must for your club, school or business.

100 for \$10.00, 50 for \$5.50*

Send self-addressed, stamped envelope for single copy. AWA SAFETY CODE, Box 1584, San Bruno, CA 94066.



HERE COMES BURT REYNOLDS AGAIN!

*Covers cost of printing and mailing

waves, reversals, fast jets)
Maneuver and brace well in
big water (4-foot waves that are
well spaced)
Confidently enter very swift cur-
rent from an eddy
Catch small eddies (behind 3-
foot-wide rock) in swift current

Class 3% paddler:

- Has: Strong paddling abilities
Ability to surf fairly large stand-
ing waves
Knowledge for handling un-
usual circumstances: reversals,
side currents, turning drops
Finesse in boat placement,
using current to maximum ad-
vantage
Can: Perform adequate Eskimo roll
in unplanned tip-over

Class 4 paddler:

- Has: Very strong swimming ability
Excellent physical condition
Good rolling ability
Can: Back ferry across very swift cur-
rents
Scull out of small reversals

Class 4% paddler:

- Has: Very reliable rolling ability on
either side
Ability to stay in boat in very
turbulent water for third and
fourth attempts at roll
Very expert development of all
boating skills
Can: Perform very deep skulling
strokes
Catch almost imperceptible side
eddies while boating through
very big white water

MOVING? LET US KNOW!

Third class mail is NOT forwarded.

Send notice to:

American Whitewater
P.O. Box 321
Concord, N.H. 03301

CLASSIFIED

CLASSIFIED AD RATES: 30c per word. Send to
AWA Editor, Iris Sindelar, 264 East Side Dr.,
Concord, NH 03301.

WHITEWATER COACHING MANUAL — by
Jay Evans, U.S. Olympic Coach. \$5.50 Sanborn
Rd., Hanover, N.H. 03755.

CANOEING INSTRUCTORS — (Kayak in
Britain, Canadian in France) required for
season or short or long periods **Feb.-Sept.**
Details and application form from Trevor
Westwood. PGL Adventure Centres, 510
Station St., Ross-on-Wye HR9 7AH England.
(0989-4211)

RIVER SUPPLIES — Kayaks, foot braces, life
jackets, waterproof bags, wetsuits, neoprene,
paddles, racks, rafts, etc. Free catalog Box
3195(C), Moscow, ID 83843.

WILDWATER TOURING (see review in **Amer-**
ican Whitewater JUL/AUG 1974) — \$8.95
postpaid. Covers both HOW and WHERE to
tour on whitewater. Make checks payable to:
Wildwater Associates. Send to: 16624 S Copley
Rd., Oregon City, OR 97045.

WANTED — Teaching post for qualified Scottish
kayak Instructor (B.C.U. Inland) summer/
longer. Graduate, 24. Driver. Contact Elsi
Duncan, 39 Congress St., Portland, Maine
04111.

ADVANCED DESIGN KAYAK — The high
performance "Pintail" is custom-made with
your name bonded into deck. For full informa-
tion write The Great Outdoors Trading
Company, 109 Second St., Dept. P-4, Sausalito,
CA 94965.

WANTED — Slalom kayak mould, plus building
materials. Describe. Gary Zearott, 622 Grand
View St., **Wheeling**, WV 26003.

KAYAK INSTRUCTIONAL CAMP — For boys
and girls, age 14-19, beginner oriented, some
racing. Overnight river trip, experienced
instructors, Androscoggin River, all equipment
supplied, two ten-day sessions, June 19-28,
July 25-Aug. 2. For further information contact
SACO BOUND/NORTHERN WATERS INC.,
P.O. Fryeburg, ME 04037.

CANOE ROUTES U.S.A. — America's foremost
float guide! All states! \$3.95, guaranteed.
Information free. P.O. Box 53A1, Linton, IN
47441.

SLALOM KAYAK MOLD — Professionally
made, high volume, excellent condition. \$150.
2 Llewellyn Wood, Johnson City TN 37601.
(615)926-8443.



The Lower Stillwater

KAYAKISTS 3, STILLWATER 2, 1 DRAW

by Andy Westerhaus, 1905 River Hills Dr., Burnsville, MN 55337

Photos by Joanne Westerhaus

Boaters beware! The Stillwater River sounds like a pushover. Before leaving Montana's beautiful Beartooth Mountains the Stillwater is a picture of contentment as it meanders through a mountain meadow. Abruptly this scene changes into a boiling, cascading, unrunnable madhouse as it enters a narrow gorge and drops about 200 feet in $\frac{1}{2}$ mile. Woodbine camp lies below this gorge, tucked between the river and the sharply rising Beartooths. This campsite ranks with Elk Bar on the Middle Fork of the Salmon and Marble Canyon in Kootenay National Park as my favorite mountain campsites.

We were in Woodbine camp, relaxing, having some lunch and recounting the highlights of our morning run on the lower Stillwater River. I was playing chess with Dr. Marte. It was an explosive game—wide open, with many mate threats on both sides. But my mind was on the upcoming second run on the upper Stillwater, which was making a muffled rumble in the background. Ralph Beer and Joerg Steinbach didn't seem too concerned, but then their first run on the previous day had been letter perfect. In my mind I was recalling the mistakes I'd made on that run . . .



The Gorge above Woodbine Camp. The hiking trail leads to the Beartooth Primitive Area.

We had put in half a mile above our chess game. It was early in the day, the sun was coming down on the river, and the snow melt water was cold. The river was steep, leaving only small eddies to launch a boat. I should have warmed up on some easier water, but it was too late for that now. At the camp we had to ferry to the left side of the river in order to run a sloping drop which in turn would give good position on a series of haystacks. I nearly missed the leftside eddy after a rather pusillanimous ferry.

The queens, rooks, and minor pieces were removed from the board in a series of quick exchanges. Nothing but the monarch and pawns left. After the excitement of the middle game I tend to

lose interest and play sloppy—very much like yesterday's run . . .

The haystacks, a series of large standing waves, were our major concern. In themselves, they would be pure delight to run in a decked boat, but in this case they continued up to the lip of a small falls followed by a nasty rapid. These haystacks were flanked by eddies on both sides. The left eddy was our target.

Just above the haystacks I slipped into the shade, causing my glasses to fog over badly—another mistake—I should have covered the lenses with a film of anti-fog solution. The end of the line was near; Joerg was yelling at me to get out. Another face wash gave me a quick glimpse. I was right of center; the right eddy was reached with little to spare. The right bank portage would be very difficult, so I took the ferry option, caught the bottom of the wave just right, and shot into the left eddy. My confidence went up.

If everything went as planned, a series of pawn moves would yield a passed pawn and a won game. I began the moves. Egon grunted, and my mind wandered back to the river . . .

Judging from the unbroken dead pine limbs near the untrodden ground, our portage was probably the first. The rapid below the fall was full of large boulders and very tricky. I put in at the base of the rapid; Joerg and Ralph 25 yards upstream. I watched them come past me, cheered their success, and pulled in behind them. The river made an easy turn to the left and then boiled downhill as far as I could see.

Western boaters relish this type of heavy water. Anything other than big water is just ripples to them. You must understand that all western boaters stand 6' 6" erect, weigh 250 pounds, walk on all fours, and live on a diet of fiberglass waffles and bronze wieners. The males are even tougher. On frosty,



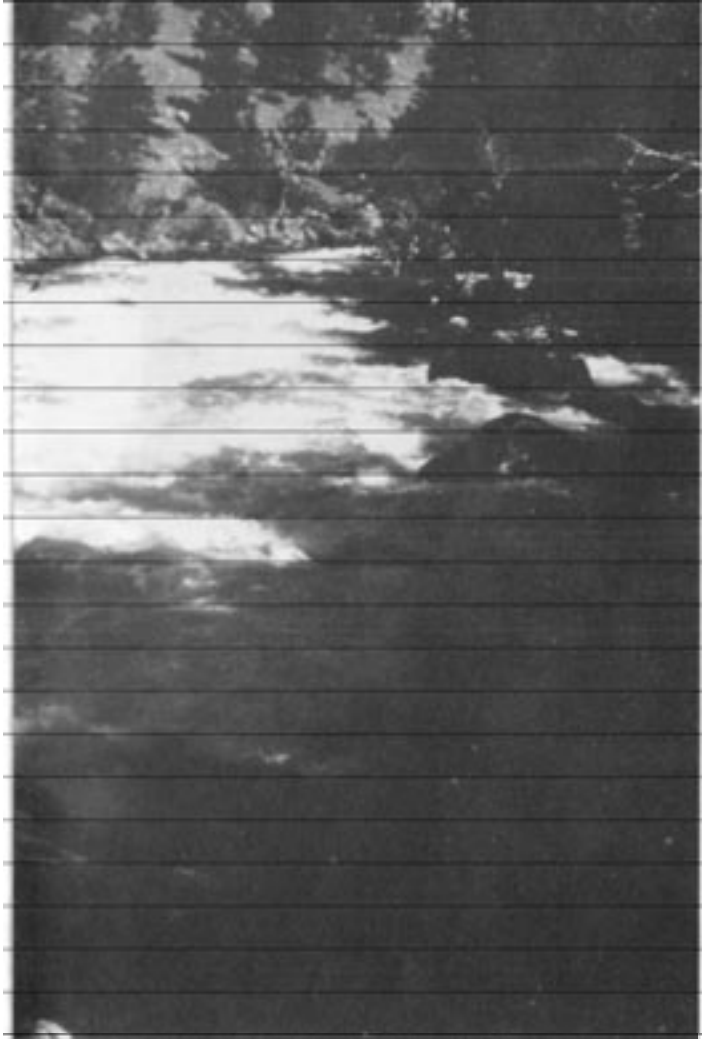
The falls at Woodbine Camp, which we portaged. Kay Swanson of Columbus, Mont. ran this in 1974 at somewhat higher water.

quiet mountain nights their hot air can warm an entire campsite. The air gets so dense the campfire tends to suffocate.

One-half mile of heavy, continuous Class 4-5 water lay ahead. The two boats ahead of me would help me in selecting the best route. This advantage quickly disappeared since I caught only momentary glances of a bow or stern. A weird feeling overcame me. Instead of going down a river I felt as if I were stationary while the waves and water were moving towards me. Large waves would roll in, sometimes dissipating into a hissing bubble soup, others tossing my kayak around, others breaking on top of me. This illusion was probably the result of concentrating so much on the water in front of me that I lost sight of the banks. With no boulders in the mainstream there was nothing to break this illusion.

Some large boulders appeared ahead of me. They would provide a nice eddy. This eddy I didn't want to miss, I needed a rest. I nearly ran over both Joerg and Ralph, already in the eddy. The eddy celebration was a rare experience. We were on a Rocky Mountain high, sharing the experience of doing a difficult thing well. I listened. "Good ride cowboys," "Used every trick in the book," "Quality up there," "Didn't see much of you out there," "Just missed a hole that woulda flattened a boxcar," "Yaah-hoo," "Anybody bring the champagne!" The sweetness of success was soon to be shattered by a discouraging defeat.

The series of moves resulted in the passed pawn. With careful play, promotion to a queen was assured, and soon the win. My mind wouldn't stay off the river. . .



Start of the heavy section below the falls at Woodbine Camp.

The river below us was not as fierce; the worst was over. On the way out to the mainstream I broadsided through a hole, upset, went into more turbulence before I could start to roll, went broadside on a large boulder, and then bailed out. The boat and I parted ways around the boulder and rejoined below. We both went off to a long swim. I hung on to the back grab loop, but each time we hit a hole I would wind up downstream of the boat, not the best place to be. About the time I worked myself to the other end we would hit another hole and the process would repeat. After nearly half a mile of this, the rapids abated and I was able to haul myself and boat to shore. The river said, "Checkmate."

I relaxed too soon, made a bad move, and my worthy opponent crushed me.

Good rivers are worthy opponents. You may win, but you always hold them in high regard.

I pushed the passed pawn. Had I, in a moment of overconfidence, overlooked some obvious move, and would I get racked up? I didn't find out for sure. since Egon resigned. My previous match resulted in a solid win-for Egon. Maybe this second game was a good omen.

Basic rules for running big water, like guidelines for winning at chess, are not easy to devise. To get mentally prepared for our second run I tried to summarize what to do while in the heavy water. "Maintaining a great deal of downstream momentum is tiring and it reduces your chances of avoiding large holes. Stay loose, enjoy the ride, but be ready to work your tail off when a large hole comes boring down on you."

Tear-away painter lines were taped to the kayak decks. Two life jackets apiece were strapped on. We were ready for our second run. The previous experience made for an easy run to the portage.

Ralph and Joerg shortened the portage by putting in further upstream than the previous day. I carried to the base of the rapid and waited. This rapid was particularly tough to enter, since it was full of large boulders and the current was fierce. Joerg broadsided a boulder before he reached the mainstream. The river claimed another swim.

Joerg and his boat came tumbling past me. He made a smart move by forgetting his boat and swimming quickly to shore. The long, heavy rapid below is no place for a swim. I took turns watching Joerg swimming and Ralph coming down above me. Ralph entered the mainstream nicely and came down through the maze of boulders expertly. Joerg made it to



The Lower Stillwater

shore with little to spare.

Ralph and I trailed Joerg's boat at a comfortable distance. In heavy water like that, not much can be done to help a swamped boat to shore. In the meantime, it was a good idea to keep it in sight but not get too close, since a water-filled boat does funny things in big waves and holes. After a few hundred yards the front air bag popped out of the boat. The boat was doomed! It started to flip end-for-end and gyrate on its nose. Before we could get near, the boat wrapped around a large rock. As I went rushing past the stranded boat, a quick glance was enough to tell me it was totaled. The deck was flattened against the hull, the boat was bent almost to a right angle and two large rips were visible. The river said, "Checkmate."

The long heavy water lay just ahead. A number of large holes appeared and went past on both sides of my boat;

another large monster lay 20 yards ahead. Its center was slightly to my right, but my kayak was angled to the right, looking right down its throat. Two or three backpaddling strokes were all I had. They weren't quite enough. The bow caught the hole, spun me around backwards and left me on the eddy line. I backpaddled hard and breathed a sigh of relief as I cleared the soup. A quick look over my right shoulder told me I'd been had. All I saw was a vertical wall of brilliantly aerated water. I was into a large hole backwards with little downstream momentum. The river said. "Discovered check."

I felt tricked. This beast should be making a big noise, warning uninitiated flatland kayakers of its presence. A river called the Stillwater shouldn't work me over like this. Once before I had felt this sort of near panic. As a youngster I was riding home on my bike

in front of an ominous black storm. I glanced over my shoulder that time to see an approaching tornado funnel.

One hard backstroke, a gulp of air, and I hit the wall. I threw myself and paddle back through the wall as far as I could and leaned on the paddle. The boat stood vertically on its stern and slowly rotated clockwise about my paddle. I realized I was still bracing on my paddle when I was far clear of that beast. I spotted a nice eddy on the left bank, took a shot at it, and wound up in a smaller one just downstream. As I crawled onto the bank I realized I was breathing quite hard—a combination of exercise and altitude, but probably just as much from excitement.

As I was resting on the bank, another drama was unfolding. Ralph's boat was coming down between large boulders near the opposite bank. Ralph was hanging onto its stern, bulldogging it toward the bank whenever he could. I felt like I was watching a slow motion movie from a very detached vantage point. I finally realized he might need help, so I scrambled down the rocky bank to get into my boat, slipped on a wet rock and broke my fall with my thumb. I stuffed my hand into the cold river to ease the pain. When I looked up I was thankful to see Ralph waving to me—both he and his boat were secure.

Ralph and I walked up to see what could be done for Joerg's boat. Ironically, the front air bag was floating in a small eddy near the bank, less than 50 yards from the beastly hole that had tried to devour me. I was able to pick up the air bag without getting wet!

Ralph hiked back to camp to get some rope and hooks to free the boat. Before he could return, it worked free and continued its self-destruction as it bounced and tumbled downstream. Joerg took over my boat to see if anything could be salvaged. I'd had my fill

of paddling for awhile and offered the river a draw.

When Ralph returned I gathered up the excess gear and started hiking to a nearby dude ranch. Ralph went downstream to swim across the river to his boat and continue his paddle. When I got to the ranch, the guests were sitting in the shade of a large tree, enjoying cocktails after their day's trail ride. I must have been a real sight, emerging from the woods in the 90-degree heat with a full wet suit, helmet, two life jackets, rope, spray skirt and air bag.

In the win-loss column I would score as follows: Kayakers 3, Stillwater 2, 1 draw. A worthy opponent indeed.

Amy and Rita Westerhaus survey ruins of Joerg's boat.



In Gaylord Staveley's book, *Broken Waters Sing*, dealing with his conquest of the Green and Colorado Rivers in a small decked rowboat, he wrote:

"Broken waters don't sing for everyone. But the solitary man or woman has been forgotten in the mushrooming madness for mass recreation. Running a river is one of the few remaining ways to compete against Nature rather than against others, or against society. It's a wonderful change, a wonderful struggle, because the river lets you know immediately whether you've won or lost. In the battles of day-to-day life, one can't always recognize one's wins and losses. But the successful run of each rapid is a clear-cut victory all in itself, and the run of a whole river reiterates all of the victories along the way."



Easy Rider

DIDN'T JUST HAPPEN...

- Easy Rider kayaks and canoes were designed by our own experienced design team and by Paul Hahn of West Germany, one of the world's top designers of slalom boats
- We are celebrating the opening of our new plant specifically designed for our manufacturing needs
- All models now available in KEVLAR 498 construction
Increased strength — flexibility — light weight
As a result of Easy Rider's extensive experimental work in close communication with technical advisers of DUPONT we developed superior laminates with both polyester and epoxy resins. — Polyester boats with Kevlar 490 sandwich in total hull area: Add 20% to basic price. All Kevlar 498 — epoxy boats: Add 100% to basic price.
- New first class touring kayaks developed by Easy Rider design team:
DO-PHIN — Single-place touring kayak
BELUGA — Double-place touring kayak
Designed for comfort, stability, superior handling, beautiful lines
- Other models in production:
Augsburg I — Slalom K-1. Silver Medal at 1972 Olympics. Hahn design
Augsburg II — Slalom K-1, big man's version of Augsburg I, for persons from 170 to 250 lbs.
Winner — Slalom C-1, low bow and stern profiles, Hahn design
Munich — Slalom C-1, Silver and Bronze at Olympics. Hahn design
Swing — Slalom C-2, high volume. Hahn design
The Shoe — Surf kayak, Mike Johnson design
Scout 13 — 13' open touring canoe
Scout 15 — 15 1/2' open touring canoe
TSL I — 16' decked touring canoe
TSL II — 16 1/2' open touring canoe

COMPLETE LINE OF ACCESSORIES (KOBBER paddles, HARISHOK life vests, ROEMER helmets etc.)
DEALER INQUIRIES INVITED

Write for free brochure or information to our main office: Easy Rider Fiberglass Boat Co., 10013 — 51st Ave., S.W.,
Seattle, Washington, 98146

(206) 228-3633

PRIVATE TRIPS CLEARING HOUSE

by *Preston B. Ellsworth*

The sport of river running has experienced such growth that it has gone beyond the garage boat builder and army surplus rafts, where it all started. On some rivers, private and commercial use has grown to the point that governmental agencies must ration user days. Health, safety and equipment standards have been necessarily enforced on the most popular rivers. In several instances, private, non-commercial and guided commercial interests have been in conflict over the limited use days allocated. Rules, restrictions, quotas, equipment standards! It's enough to make an old hand quit in disgust and look elsewhere for recreation.

Most newcomers to the big rivers find the quota system and regulations a bit complicated, but the enduring values of river travel keep us all coming back for another big trip, in yet another wilderness watershed. The long trips on the big and rough scenic rivers are the toughest nut to crack. Most boaters hope someday to do the Colorado, Salmon, Snake, or the many smaller rivers that are available for raft or kayak trips for only a few weeks in the spring. Where to find suitable companions for such a trip, how to train and equip, where and how to find support boats and provide logistics are not covered in some of the fine river guides now available. How to put it all together—"Aye, there's the rub!"

To date, river running and canoe clubs have done the job, and well, of preparing members with training and experience. The sheer numbers of new boaters attracted to the sport have activated many new clubs. Such clubs must direct their energies to beginning and intermediate weekend trips, pool

training, etc. Unless the club is blessed with a membership of exceptional ability and drive, the problems of a "big trip" are enough to discourage most groups, let alone the self-propelled individual in search of companions of equal or superior ability.

Here is an idea: perhaps time has come to create a clearing house to get major private trips together. Where individual boatmen, their friends and families either hire the logistics done or do it all themselves, the cooperative approach spreads the cost to each participant, yet allows each to operate his own boat. There could be mixed kayak and raft parties to solve the problem of over-loaded kayaks and allow the wife, girlfriend and kids to come. Raft or kayak only parties with a large kitchen boat would be possible. The concept of such a clearing house, would help in these problem areas:

1. On a rationed river, a holder of a private permit could fill his allotment in case some one drops out, with a standby list of qualified boaters. Fewer allocated user days would then be wasted.
2. Help in solving some of the logistic and support problems, such as two unrelated parties getting together on food, transportation etc. How to write an acceptable permit application, what are the unwritten ground rules, timing of application to agency etc.
3. Serve as a river classroom to train future private party leaders.
4. In cases where a private permit is difficult or impossible to obtain, enough boaters to interest an outfitter to support them (independ-

ent boaters) at a discount rate.

5. The ability to get boaters together to do a rarely run river when the water's right.
6. Uniting qualified trip leaders willing to lead, and who have obtained a permit with boaters who want the experience of a big water trip or one in a remote area, such as Mexico.
7. Allowing the isolated boater a chance to participate in his sport.

In short, the association would bring the economics of scale to the big rivers of the West. Trips would be self supporting, but done on a non-profit format. Interested boaters should address their interest, comments, trip proposals and other ideas to: Rivers, P.O. Box **1386**, Durango, Colorado **81301**. We hope to coordinate a couple of trips for this summer and fall and several operations for '76.

WILDWATER DESIGNS

Box A-75
Penllyn, Pa 19422

NEOPRENE SPRAYSKIRT KIT:

For K-1 or C-1 \$15.50

WET SUIT VEST KIT:

Front Zip. Incl. \$17.00

GLOVE AND BOOTIE KIT:

Both for \$10.50

HI-FLOAT LIFE VEST KIT:

W/ PVC Foam, Front Zip.

Red Color \$18.00

OTHER ITEMS AVAILABLE

All fully guaranteed.

Add **\$1** postage to orders

CATALOGUE FREE



- Sensuous T-Grip, comfortably shaped from High Impact Plastic
- Strong Shaft, 6061 - T6 Aluminium with Long-Wearing, Insulated, Neoprene Covering
- Durable ABS Blade, UV Protected, Rock Gripping, Shock Absorbing, 8' x 25"

From Canoeists Who Make DURABLE WHITEWATER PRODUCTS

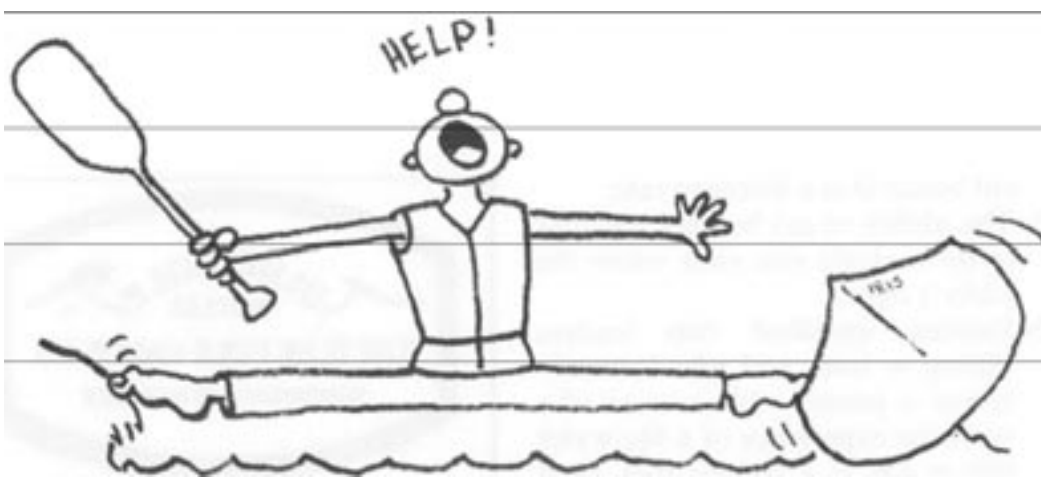
Ordering:

Lengths: 54" to 66" (2" Increments)

Color: Red Blade and Grip, Black Shaft

Price: **\$38.** (plus **\$2.** shipping)

THE BLUE HOLE CANOE CO.
Dept. A, Sunbright, Tenn. **37872**



THE ART OF BOARDING A CANOE

by Iris Sindelar

EVERYONE knows how to get into a canoe, right? You just step right in and make yourself comfortable. Here are some variations of this maneuver that I have observed among canoeists:

THE BIG TOE STRADDLE—Canoe is pulled up to the bank but is still floating free so it won't become grounded when occupant has boarded. Canoeist firmly places one foot in the center of the canoe, leaving the other foot on the bank. Canoe drifts away from the bank until canoeist is clinging to the bank with one big toe and clutching a gunwale with the other. At this point, either canoeist loses grip and falls into the water, or canoe tips

over and dumps canoeist into the water.

FLYING RESCUE TAKEOFF—Canoeist standing on shore sees another boater in trouble and leaps to the rescue. He aims for the cockpit of his C-1 with paddle poised for a brisk take-off stroke. Boat in the meantime drifts six inches to the left. Boater lands six inches to the right of center. Boat turns turtle; boater surfaces to see companion being swept on downstream.

SUDDEN SOMERSAULT—Actually a variant of the above maneuver. Boater sees trouble in midstream, shoves canoe into water and initiates flying leap. Boat strikes sandbar. Boater somersaults over the gunwales and lands ignominiously in two inches of water.

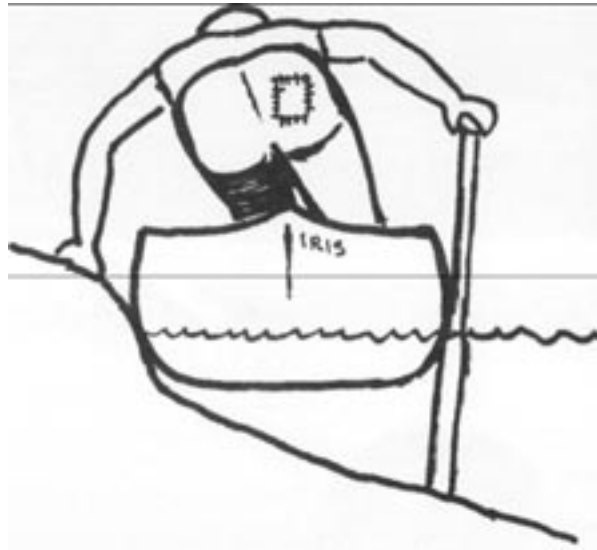
FIRST-TIME FLIPSTEP—SO named because it is rarely used except by first-time canoeists. Would-be occupant confidently places one foot several inches to the right or left of the keel-line. When weight is shifted to this foot, canoe flips and boater is bucked out, either face-down into the mud of the bank or swan-like into the water. Picturesque quality of this maneuver is best appreciated when practiced with fully-loaded canoe (provided gear is not tied down or waterproofed).



NO-NONSENSE VISE GRIP—For those who prefer a less colorful start to their canoe trip, there is of course an alternative to the above: position boat next to bank, jam paddle down firmly into the river bottom on the far side of the boat and hold snug against the canoe (see illustration). Using paddle for support, swing quickly and gracefully into the canoe. Take care to keep center of gravity over the keel line as much as possible. Paddlers opting for this mode of entry should be aware, however, that blood-thirsty spectators will probably be disappointed and may retaliate.

The Straddle, Flipstep, and Vise Grip are just as effective for taking out as for putting in.

All of the above assumes boater ~~couldn't find~~ anybody to hold his/her canoe while embarking.



No-Nonsense Vise Grip: swing gracefully into the canoe.

Wolf River Slalom, May 1974. Langlade. Wis. Photo by Walker Townsend, Indianapolis. IN.



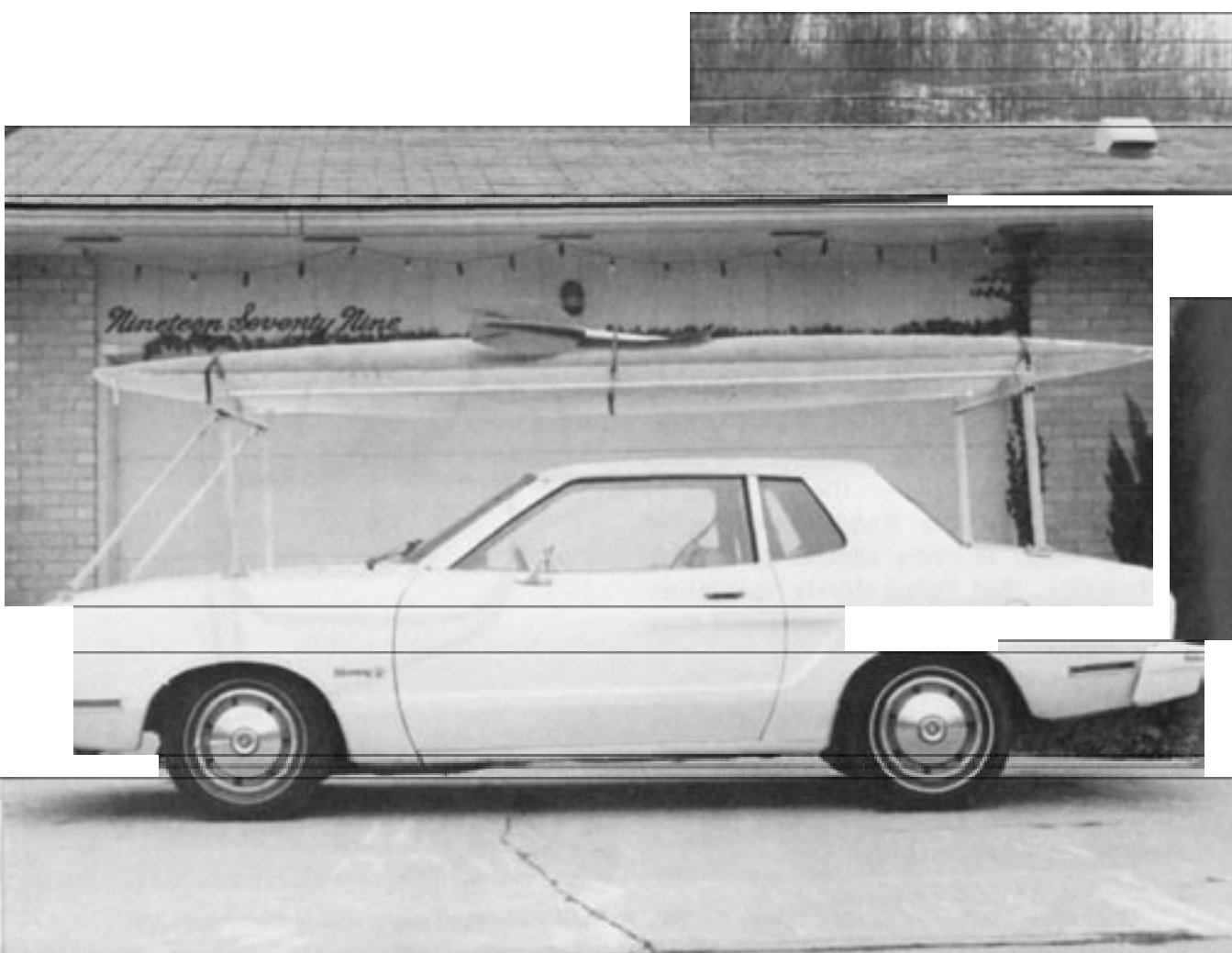


Figure 1. Car with rack and kayak

"A Custom-Made Cartop Carrier"

by Carl E. Trewiler, 1979 Walnut St., Coshocton, OH 43812

One day in the fall of 1973 during the gasoline shortage I decided to do my bit and retire my gas hungry 1962 V8 model for one which was a bit more stingy with fuel. After looking over the complete offering of the various automobile companies and closely examining three specific models I made my choice. A nice blue Pinto station wagon seemed to fit my desires for gas economy, reasonable carrying capacity, low cost (?) and a relatively sturdy rain gutter. However, I failed to reckon with the wishes of my family for I could not get them past the sporty looking Mustang II on the showroom floor. Not too much later that rain gutterless,

plastic grilled, rubber bumpered auto was housed in my garage. I had ended up with a small economical car but not only was there no place to clamp a roof rack, there was not even a good place to tie down the ends of my boats!

At first I chose to ignore my problem by free-loading with various friends and other members of the Coshocton County Golden Age Kayak and Canoe Club (total membership of 3). After missing a couple choice weekends and after a particularly memorable trip back from the Cheat river I decided that I had to do something. Did you ever ride in a car, have a kayak on top of that car turn 180 degrees on its long axis and then endure

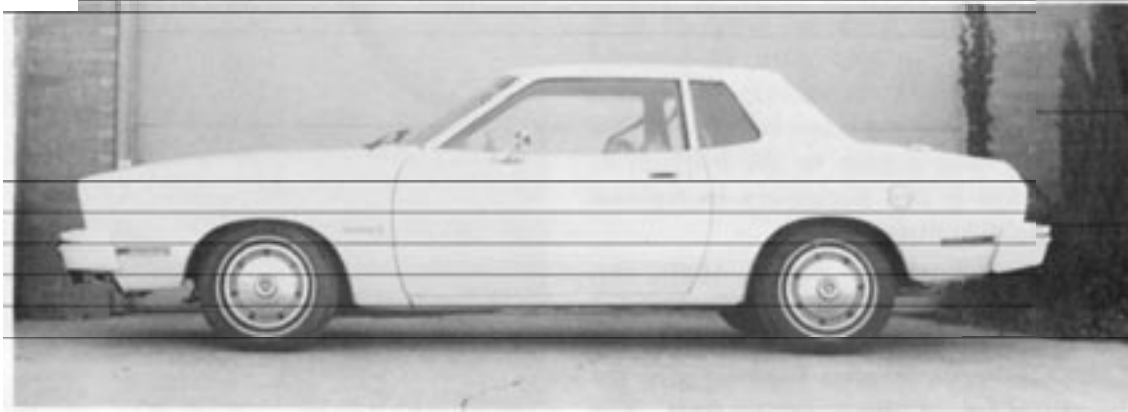


Figure 2. Car with brackets and no rack.

the comments of the owner amid the clatter and banging as the car slowed from 70 mph? Ignoring my problem just would not do!

From the first, it was obvious that I had to add something to gain points of attachment. In the beginning I thought in terms of some sort of roof rack and devised all kinds of custom made clips, brackets and clamps. Alas, they were equally impractical or impossible to fabricate. In addition, any sort of roof rack on that short roof would still require substantial front and rear tie down points for the ends of the boats. After much agonizing I realized that the attachment points had to somehow arise from quarter inch gaps between the hood and trunk lids and their respective fenders.

The rack that was finally constructed is shown in Figure 1 with a kayak. The superstructure is made from inert-gas arc-welded 6061-T6 aluminum and two pieces of white pine. The car without the rack but with the mounting brackets is shown in Figure 2 for comparison.

The brackets used to attach the rack to the car, Figures 3 and 4, were fabricated from single pieces of stainless steel. Stainless steel was used because it is considerably stronger than aluminum and still does not need to be painted. Most any kind of stainless

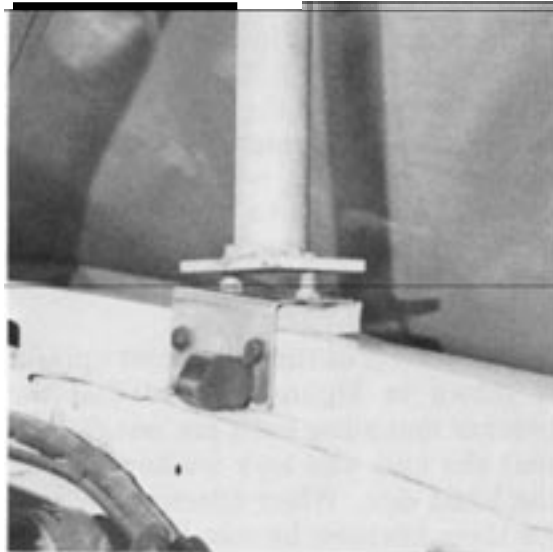


Figure 3. Right front support bracket and unbolted upright.



Figure 4. Right front sloping brace bracket with diagonal brace end.

would probably work as long as it is bent with the proper care to prevent breaking or stress cracking. Note that the holes for the carriage bolts are filed square so that access to the bottom of the bracket is not necessary to tighten the respective nuts.

Figure 5 shows the details of the top of the right front support. The hole at the top end of the one-inch-diameter diagonal brace is also filed square for the shoulder of the carriage bolt. The aluminum cross member was selected so that the inch-and-a-half-diameter uprights fit snugly inside the channel. The wood cross piece is bolted outboard of the upright by the longitudinal tie bar to insure complete rigidity of the welded joint. Flat washers are used beneath every nut to reduce the tendency of the aluminum to compress into the bolt threads when the respective nut is tightened.

The bottom of the right front upright is shown in Figure 3. Note that the bracket mounting bolts are installed so that the nuts and lock washers are on the blind side. When selecting an area for these brackets be sure there is room to work on the blind side of the fender. I was not so careful one time and have an extra hole to prove it. Not particularly visible is a layer of neoprene-covered nylon between the bracket and fender to prevent scratching the finish of the car. The ethafoam pad beneath the bracket is to help hold the carriage bolts in place and to prevent things from snagging on the sharp corners.

The bottom of the right front diagonal brace is shown in Figure 4 with the diagonal tie bar end. The bracket was bent as shown and the diagonal tube bolted outboard to provide clearance for the opening and closing of the hood. The lower bracket bolt is one of the original fender bolts and is threaded into the unibody frame,



Figure 5. Detail of right front upright junction with cross member.

making this bracket extremely sturdy.

The brackets for the left front are the mirror images of those for the right front. The brackets for the rear are the same as for the bottom of the front uprights except they have a shorter rise because of a narrower fender lip.

The rack costs about fifty dollars broken down as follows. The aluminum, purchased from Williams and Company, was about thirty dollars. The welding done locally by a personal friend cost fifteen dollars. The miscellaneous hardware, bolts, nuts, eyebolts, washers, etc. was purchased in a hardware store for about five dollars. This is a bit more than roof racks but then I was in an impossible situation.

The six-piece rig can be installed or removed in less than ten minutes by one person. A simple open end or box end wrench is used to snug the twelve hex head nuts, and fingers are used to tighten the wing nuts. These wing nuts, see Figure 5, are prevented from loosening by lock washers between the wing nuts and the flat washers. The cross members are hung for storage, Figure 6, and the other pieces are simply stacked on end in a corner.

For short trips I usually do not bother with the diagonal front braces and tie

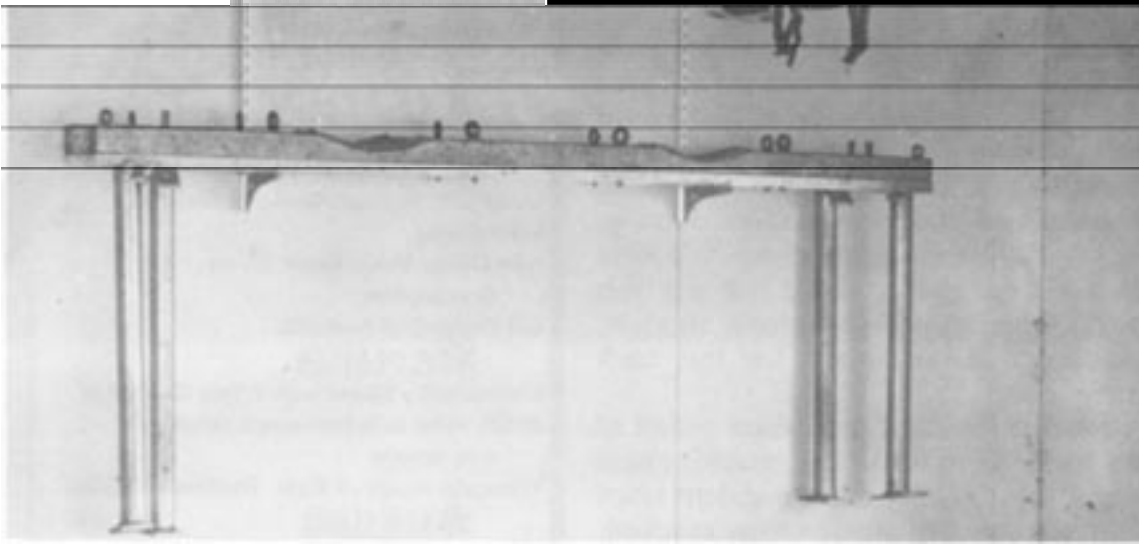


Figure 6. Cross members hung on bookshelf rack.

the boats down with rubber cords as shown in Figures 1 and 5. On longer trips or any high speed trip I still use the rubber cords but back them up with quarter inch nylon cord. The cord is tied to one eyebolt, Figure 5, run over the boat through an eyebolt on the other side, then through the grab loop of the boat, back through the first eyebolt, back over the boat again and tied to the second eyebolt. When tied in this manner on both ends the boats simply do not move relative to the rig. The center tie, Figure 1, is used to prevent boat rotation.

Since the car can seat only two paddlers comfortably, I usually carry only two boats. However, on occasions, particularly on shuttles, I have carried four paddlers, their boats and all their gear. Because of the low height of the boats and the limited trunk space, wet gear is usually and conveniently stowed in the boats. Paddles are either jammed into a boat, Figure 1, or tied to one of the lengthwise braces. One of the nicest features is the ease and speed with which the boats can be loaded and tied down.

After driving several thousand miles my first problem was encountered.

Aluminum, as some of you know, has a nasty habit of stress cracking. The weld on the back cross member at the in-board juncture with one of the uprights has stress cracked and for this reason this particular design for the superstructure is probably not trustworthy. I have attempted to solve the problem by welding small diagonal braces on the side of the upright and bottom of the cross member.

A probably better and certainly simpler design would use **inch-and-a-quarter** aluminum pipe for the uprights with $3\frac{1}{2}'' \times 3\frac{1}{2}''$ plates of $\frac{1}{4}$ inch aluminum welded on the top. A solid $2'' \times 4''$ would then be bolted to the respective uprights to make cross bars. The extra metal would allow sounder welds and the wooden cross brace should eliminate the stress cracking. If the reader tries this please let me know how it turns out.

Except for a few sizes I have intentionally not given any dimensions for several reasons. First, the rack was custom designed for a Mustang II and unless you have an identically dimensioned Mustang II it would need to be modified for your car. Second, the real problem with this rack was not **deter-**

mining the proper dimensions but rather setting up the jigs to allow welding at the proper angles. Anyone who is competent with this type of metal working should be easily able to construct a similar rack from the descriptions and photographs. Finally, as I have already pointed out, if I were to make another I would not use this particular super-structure design, making the dimensions for this rack useless.

Needless to say I am rather proud of my rack. In spite of my trouble there was no real danger of an accident since only the inboard welds stress cracked. The outboard welds are still sound and perfectly capable of carrying the normal load. A real side benefit is its bait value. Whenever I arrive at a put-in some other boater will invariably wander over to examine my rack and if I am in need of a shuttle - - -. Thus the rack is not only great for getting to and from the river but also invaluable for getting *on* the river.

***Dealer Inquiries Invited !**

WE HAVE IT !

DAUBER

*** NEOPRENE SKIRT**

Lined 1/8" Nitrogen Domestic Material
Sewn Seams

New Design Makes Easier Fit on Cockpit Rim
Old Design Still Available

FLOTATION

Electronically Sealed with 1-Year Guarantee
20 Mil Vinyl with convenient valves and tube lengths
Triangular Shape - 5 Sizes Rectangle - 2 Sizes

***NEW ITEMS**

Ensolite Flotation Buoyancy Jacket with Nylon Shell
Wind Jacket with Nylon Shell, Adjustable Cuffs and Neck Wet Suit Garments

DAUBER CANOE AND KAYAK
P.O. Box 59 W
Washington Crossing, Pa. 18977
TELEPHONE 12151 493-5959

WRITE OR CALL FOR MORE INFORMATION

American Whitewater (AWA) Offers You . . .

AWA Shoulder Patches	\$1.20 each
AWA Decals	3 for \$1.00
Vol. 18, 4 issues of 1973	\$3.00
Vol. 19, 6 issues of 1974	\$4.00


AWA Tells You How . . .

Touring Western Whitewater, by Margie Arighi	
(reprint from Vol. 15, #3)	75° ea.
Make a watertight kayak spray cover	
(reprint from Vol. 15, #4)	50° ea.
Escape from dangerous reversals, souse or suck holes	Vol. 16, #1
Ride ocean surf in a slalom kayak	Vol. 16, #2
Build a fibreglass kayak paddle	Vol. 16, #3
Built-in flotation for open canoes	Vol. 18 #1
A wetsuit glove pattern	Vol. 18, #1
Wetsuit spray cover for C-1 or C-2 whitewater canoes .	Vol. 18, #1
Individual issues, \$1.00, specify Volume and issue Number	
OR get this complete AWA HOW-TO-DO-IT #2, LIBRARY for \$4.00	

Please mail your check to:

American Whitewater • Box 1584, San Bruno, CA 94066

Free
CATALOG



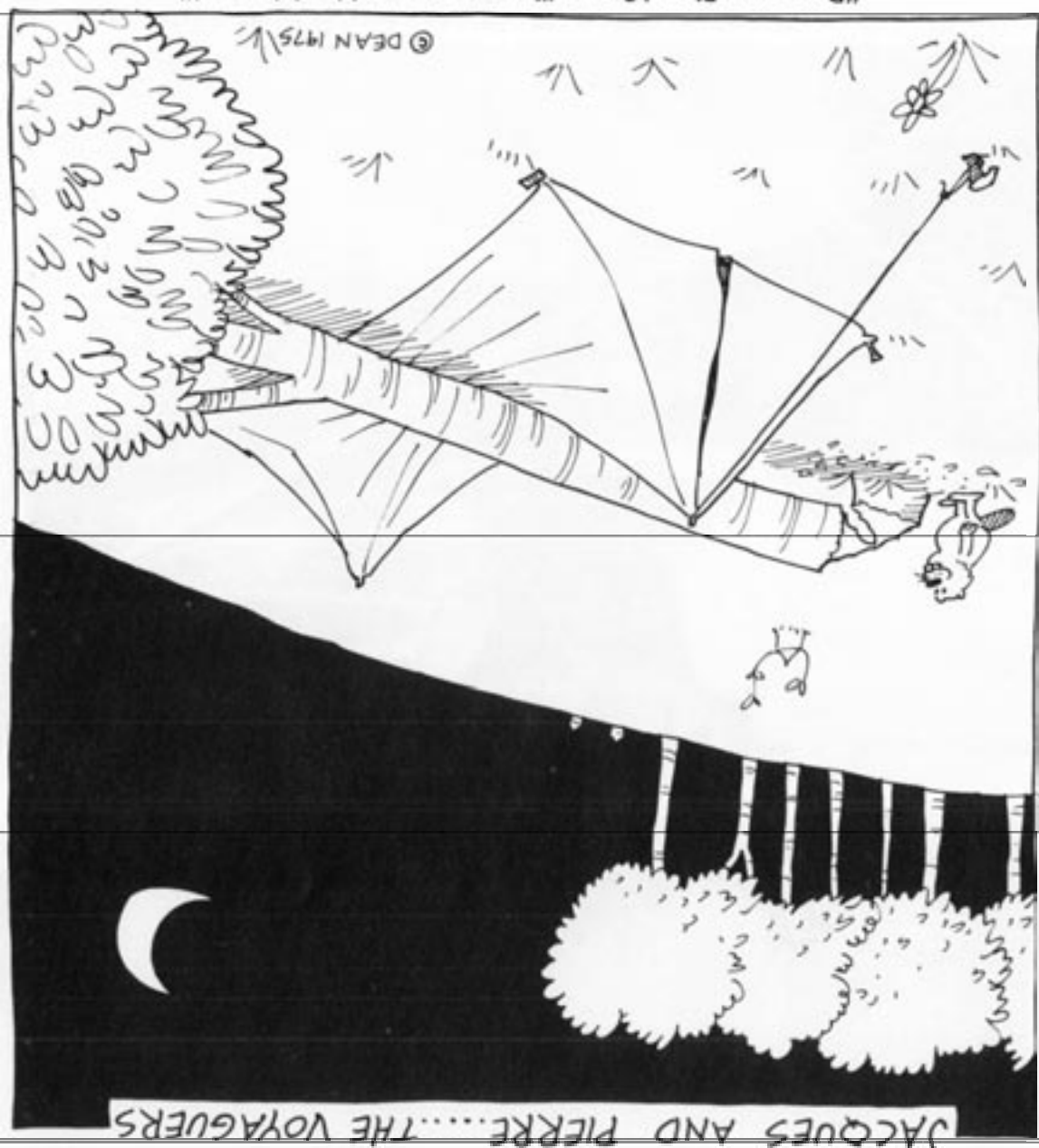
**CANOE
KAYAK
BACKPACKING EQUIP.**

- **WATERPROOF BAGS.** Absolutely water and air-tight. Kayak inflatable Cargo Bags. Patented Designs.
- **LIGHTWEIGHT PADDLES.** Canoe or Kayak. Eight inch wide ABS Blades.
- **BOAT-TAPE.** For Whitewater Repairs.
- **BACK-PACKS.** Tents—Down or Decron-Bags.

Many hard to find items.

VOYAGEUR ENTERPRISES
P.O. BOX 512-A
SHAWNEE MISSION, KS. 66201

"Damn you, Pierre! Stop rolling over on my side of the tent!"



JACQUES AND PIERRE...THE VOYAGERS



Earl and Douglas Potts of Yorktown Heights, NY at 1974 U.S. Open Canoe Championships, Nantahala R. Photo by Edward Columbus Thompson.

RACING TIPS PADDLING C-2 WITH A PARTNER

by Tom Southworth

You probably already know what's tough about paddling C-2 slalom. It's keeping your partner from hitting so many poles. Either he hits them outright or else he jams you into the gate in such a way that no paddler

anywhere could avoid a hit. Don't despair, chances are your lack of togetherness as a team is more to blame than your partner's myopia, poor balance and cowardice all put together.

Ideally, your boat should be like a

well-oiled machine paddled under power in such a way that every move either of you makes is predictable and expected by the other. Most teams can develop this type of racing precision if they are willing to train and race seriously over several years. The following tips should be considered as basic.

1. *Stroke Together*—Every single stroke should be taken in unison. If the stroke rate is too rapid, the sternman will be forced to cheat on his forward pull in order to have enough left in each stroke to steer the boat. Never permit a stern paddler to skip every third or fourth stroke in order to get the boat back on course. Establish a rate that is as fast as the stern man can keep up with while maintaining full steering control with every stroke. That rate will be slower than the bow man is capable of, for which he must compensate by putting extra strength into every pull. It is par-

through slalom gates without either paddler missing a stroke.

2. *Turn Together*—First, it's important to realize that a C-2 with weight in both ends is meant to turn around the center of the boat. Either paddler trying to turn his end alone will find it difficult. But if the turn is coordinated, started at the same time in both ends and executed in unison, the boat will turn easily. Again, turning strokes should be taken together and in a steady rhythm. Mastering this is tough, no question about it. Start by counting (out loud) a three-stroke cadence. For most 180-degree turns, 2½ strokes will do the job, so make half of the third stroke partially forward to pick up speed in the new direction. Draw strokes are fairly obvious and draws are easy to practice together. Pry turns are more difficult, but potentially more powerful. The bowman's three strokes should be (1) a pry that slides forward into (2) a

The Makings of a Great Whitewater Canoe - - -

ABS ROYALEX® HULL
ALUMINUM UPPER STRUCTURE
DESIGN INNOVATIONS



A WORD ABOUT THE CANOEIST.

The canoeist, could develop The canoe its features were recognized and immediately accepted by whitewater enthusiasts.

A WORD ABOUT OTHER CANOES. . .

Now we many new models following our lead. While imitation is, indeed, the sincerest form of acceptance, we worry that buying a canoe "like the Blue Hole" will leave the purchaser only part of our carefully engineered system. For instance: not only do we think it important to use aluminum gunwales and thwart with our Royalex® hull, but it is just as important to incorporate proper temper, and fastening. There are many details carefully worked into our design.



THE BLUE HOLE CANOE COMPANY .

SEND FOR THE FREE BROCHURE! . .

THE 16' BLUE HOLE CANOE ENGINEERED ESPECIALLY FOR THE RIVER CANOEIST!

Dept. A, Sunbright, Tennessee 37872

sweep or forward pull depending on what's needed. The sternman's strokes should begin with a push-away which must not be initiated before the bowman's pry because if it is, the bow's pry doesn't catch any water and is useless. The second stern stroke is usually another push-away followed by a forward stroke that scoops so far under the keel line of the boat that it continues the turn but also begins the forward push. Always count when you practice, and try to count when you race too.

3. Train together—When you think about it, all you have to do in a slalom is to negotiate forward, reverse and upstream gates and get from start to finish in a hurry. And we have already established that the major difficulties in doing that relate to one's partner. Virtually all of the C-2 paddlers that I know are saddled with partners who have learning impediments that can only be overcome by constant practice. Don't fight it. Just find a practice course, set up a dozen gates and practice all possible slalom combinations until you are together on every stroke. If your partner still can't do things quite right, at least you'll be so familiar with his shortcomings that you will know when and how to compensate to save the situation.

Slalom racing being competitive means that a paddler's skill depends in part on how well the others in the class can perform. The winners in World class competition are distinguished by their speed. On the regional and national levels many races are decided by penalties. Because of the teamwork required in C-2, it is virtually impossible to train at one speed then try to step it up during a race. You must race under control at a pace that's familiar from practice.

The complexity of coordinating two people's minds and actions adds a dimension of difficulty to the mastery of C-2 that is quite uncommon to the

singles classes. Rather than focusing on individual skills, C-2 paddlers must concentrate on paddling together in order to achieve top racing performance.

This column, a regular feature of American Whitewater, is designed to help the novice racer develop better techniques. Each "TIPS" column will feature a specific slalom or downriver racing skill. Please send questions or situations you'd like discussed to:

Ray Gabler, AWA Racing Editor
151 Jensen Cirde
W. Springfield, MA 01089

1974 ATLANTIC DIVISION SLALOM CHAMPIONSHIPS

(These results were incorrectly published in the SEP/OCT 1974 issue.)

- C-1**
1. John Sweet
2. Robert Kauffman
3. Dave Knight

- K-1**
1. Ned Iose
2. Steve Martin
3. Peter Clechenko

- K-1W**
1. Barbara McKee
2. Rasa D'Entremont
3. Mary Hesselgrave

- C-2**
1. S. Feldman/P. Liebman
1. S. Chamberlin/J. Stahl
3. K. Huffman/G. Huffman

- C-2M**
1. R. D'Entremont/G. Lhota
2. S. Chamberlin/S. Chamberlin
3. C. Knight/D. Knight

**NOTICE TO ALL RACE ORGANIZERS
REQUEST FOR RACE RESULTS, WW &
SL** Send to: Bonnie Bliss, 11 Larchdell Way,
Mtn. Lks., N.J., 07046.

Include:

1. **Name of** race as given in the '75 WW Program. Also the date. Name, address, phone of Race Organizer, classification of water (A, B, C, D slalom course w/o gates) (V, IV, III WW).
2. **COMPLETE NAMES** and **LEGIBLE** result sheets. Complete names on both partners in doubles. Indicate if **C1W** and/or **C2W's** run with **C1** or **C2** classes. Indicate foreigners and Canadians.
3. Give number of gates on course.
4. Results must be **NUMERICAL**.



Dan Isbister at **Tariffville** Gorge, April **1975**. Photo by David **deCourcy**.

1975 WHITEWATER RACING PROGRAM

Contains complete race schedule as well as paddler **rankings** and information about whitewater racing, races, racers and rivers.

\$1.50 + .35 postage

Bulk orders of 25 or more may be obtained at **\$1.25** each postpaid.

Quantities may be obtained on consignment for sale at races and club events; distributors may keep 25% per program for their club or organization.

Also available: U. S. Whitewater Team posters at **\$2.00** each + .35 postage. Specify slalom or wildwater design. Profits on the above items go to support the development of the U. S. National Whitewater Teams, slalom and wildwater.

Order from: Elizabeth Metzler
220 Hillview Dr.
Springfield, PA **19064**

PUT YOUR OWN NAME

OUT FRONT WITH ...



SOUVENIR RACING BIBS

Designed and numbered front and back for perfect fit. A souvenir or re-usable. Plain numbered in stock. Numbered with name or special logo imprint. Two colors. Very photogenic. Fully field tested. Completely water proof and re-usable.

ALSO FROM RELIABLE: Super plastic slalom poles. Bamboo poles. Standard cloth bibs. Start/Finish banners. Flags.

FOR FREE CATALOG WRITE

**RELIABLE
RACING
SUPPLY**

624 Glen St.
Glens Falls, NY 12801
or call
(518) 793-5677

BOOK REVIEWS

NEW ENGLAND WHITE WATER RIVER GUIDE by Ray Gabler. Tobey Publishing, paperback, 1975.236 pp.

A good, conscientious guidebook which covers in detail a number of the most popular New England whitewater runs. As more and more quick-buck artists hit the guidebook market, it is reassuring to see this book; the author has run the rivers personally in the time-honored tradition, and a real effort has been made to provide water level information.

The book treats some sixty-odd "runs" on approximately 45 rivers. The runs are the sections of the rivers which are most often run by area boaters because they have the best rapids, convenient put-ins and takeouts, and are generally suitable for weekend whitewater boaters.

Information on each run is generous: length, average gradient, maximum gradient, difficulty (International Scale, I to VI), scenery, level information, gauge information, length of shuttle, and detailed suggestions on how to run the difficult rapids. There is also a map (traced from USGS maps) for each river, showing put-in, takeout, gauges and danger points.

Generally written from the viewpoint of covered boats (a number of runs are not suitable for open canoes), runs and levels suitable for open canoes are indicated.

Particularly commendable is the author's effort to provide level information on the rivers. If USGS river gauges existed, level information is based on these, and if there was no usable gauge, the author painted his own on convenient bridges or rocks so that a reference would be available.

Available from Tobey Publishing, Box 428, New Canaan, CT 06840 for \$5.95 plus 35c postage.

Jim Sindelar

"CANOE POLING" by Al, Frank and Syl Beletz. A. C. MacKenzie Press, paperback, 1975.148 pp.

Poling a canoe has long been recognized as the fastest means of navigating upstream. It is also the only way to ascend grade II or III rapids, should the impulse ever strike. Poling is quite popular in the foothills of the Ozarks, for exploring shallow streams or simply permitting a round trip without car shuttle.

Drawing upon their own expertise and that of many peers and predecessors, the Beletz brothers of Maplewood, Missouri have compiled an informative and entertaining treatise on "Canoe Poling". The 148 page book is written in a variety of styles—instructive, descriptive and narrative, and is profusely illustrated with photographs, sketches and cartoons. While it stresses the basics, it also gives a glimpse at a few of the more kinky applications like poling in surf, on ice, and in an Olympic C-1.

No more qualified authors could be found for a book on canoe poling. Indeed, there are likely no other three people who have done as much to promote and develop a single aspect of canoeing. After developing cruising and competitive poling techniques in the St. Louis area, Al, Frank and Syl Beletz were instrumental in securing poling as a recognized activity of the American Canoe Association. In 1965, under auspices of the Meramec River Canoe Club, the first ACA National Poling Championship was held. It has grown annually, and with it has grown the Beletz storehouse of poling knowledge, anecdotes and humor.

The book is a must for canoeist and humorist alike, and easily worth the \$3.95. It is available at paddling retailers or by mail from A. C. Mackenzie Press, Box 9301 Richmond Heights Station, St. Louis, Missouri 63117.

(From *the* Illinois Paddling Council Newsletter, Vol. 7, No. 1)

**A paddle is known
by the company it keeps —
PRIJON, KOBER, WOOD-LYTE**

Wood-Lyte? Wood-Lyte is new

Wood-Lyte needs only to be introduced to compete with the world's finest. That's one reason we charge less for this unique paddle featuring:

- laminated native Silka spruce and ash wood construction for flexibility and high strength.
- fiberglass-covered blades for added protection and durability.
- stainless steel tipped, not aluminum, for tip wear reduction.
- predrilled and sealed rivet holes for prevention of split stress.

A full line of canoe and kayak paddles designed to improve your performance and increase your pleasure.

For more information, write:

Wood-Lyte

P.O. BOX 204, LEMONT, PA. 16851



wood's better, naturally.

BAGS AND PACKS

OF WATERPROOF NYLON FOR:

CANOEISTS
KAYAKERS
RAFTERS
SAILORS

MANUFACTURERS
WHOLESALES
RETAILERS

FREE BROCHURE

CANOE
CALIFORNIA
P.O. BOX # 91W
KENTFIELD, CALIF 9404



FREE CATALOG of

good things for canoeing
camping, kayaking. Write
GREAT WORLD, Dept W.
Box 250, W. Simsbury CT 06092

**WHERE HAVE ALL
THE RIVERS GONE?**

You enjoy them — help us save them. American Rivers Conservation Council: the paddlers' voice in Washington.

YES, I want to help protect our remaining free-flowing rivers.

Enclosed is my contribution of:

- ☐ \$5.00 — Student Member
☐ \$10.00 — Regular Member
☐ \$25.00, or more — Founding Member

Name _____

Address _____

City _____ State _____ Zip _____

ARCC
324 C St. S. E.
Washington, DC 20003

U S I S C A

1975

I desire to support the United States Slalom and Wildwater Canoe Team.

Name (print) _____

Address _____

Date _____

Type of Membership:

- ☐ \$100 Sponsoring
☐ 50 Supporting
☐ 25 Contributing
☐ 10 Associate
☐ 5 Paddling

Amount enclosed \$ _____

Amount pledged \$ _____

USISCA
State College, PA 16801
Box 921

Contributors will receive a decal.
U. S. Income Tax Deductible.

AWA Affiliates

ALABAMA

N. Alabama **River-Runners Assoc.**
Ron Coe
8120 Hickory Hill La.
Huntsville, AL 35802

ALASKA

Knik Kanoers & Kavakers
Ed Swanson
3014 Columbia
Anchorage, AK 99504
Alaska Whitewater **Assoc.**
Jim Hunter
Box 463
Fairbanks, AK 99707

ARIZONA

Dry Wash Canoe & Kayak Club
Ron Ehmsen, ECG 348
Dept. of Chem. & Bio Eng.
Arizona State University
Tempe, AZ 85281

ARKANSAS

The Bow & Stern
Joel S. Freund
1408 Rockwood Trail
Fayetteville, AR 72701

CALIFORNIA

Southern **Calif.** Canoe Assoc.
Ron **Ceurvorst**
3906 S. Menlo Ave.
Los Angeles, CA 90037

LERC Voyageurs Canoe & Kayak Club
Leon Hannah
12814 Armita St.
N. Hollywood, CA 91605

Lera Canoe Club
Harold Black
200 Almond Ave.
Los Altos, CA 94022

Sierra Club
Loma Prieta Paddlers
Joe Kilner
185 Loucks Ave.
Los Altos, CA 94022

Idlewild Yacht Club
Bob Symon, Rep.
800 Market St.
San Francisco, CA 94102

Sierra Club River Touring
Bay Chapter
Norman Glickman
62 Hancock St.
San Francisco CA 94114

Mother **Lode**
Whitewater Experience
Pacific High School
Ken Brunges
581 Continental Dr.
San Jose, CA 95111

American Youth Hostels
Santa Clara Valley Club
R. C. Stevens
5493 Blossom Wood Ave.
San Jose, CA 95124

CALIFORNIA (Cont.)

YMCA of San **Joaquin** County
640 N. Center St.
Stockton, CA 95202
The **Confluence**
Box 76
Vallecito, CA 95251

COLORADO

Colorado White Water **Assoc.**
4260 East Evans Ave.
Denver, CO 80222

Whitewater Expeditions
Tom Anderson
P. O. Box 9541
Colorado Springs, CO 80932

Colorado Rivers
Preston B. Ellsworth
P.O. Box 1386
Durango, CO 81301

Aspen Kayak **School**
P.O. Box 1520
Aspen, CO 81611

CONNECTICUT

Appalachian Mt. Club
Connecticut Chapter
David Sinish, Chmn. WW Comm.
20 ~~Drive~~ Ave.
Collinsville, CT 06022

Great Works
W. B. Haskell, Jr.
250 Farms Village Rd.
W. Simsbury, CT 06092

Good Earth, Inc.
Dan Kogut
539 Broad St.
Meriden, CT 06450
OGRCC **Family Paddlers**
20 Arcadia Rd.
Old Greenwich, CT 06870

GEORGIA

Georgia Canoeing Association
W. D. Crowley, Jr.
Box 7023
Atlanta, GA 30309

IDAHO

Idaho Alpine Club
Pat Leonard
460 N. Ridge
Idaho Falls, ID 83401

ILLINOIS

Northern Prairie Outfitters
Randy Hendee
206 N. W. Highway
Fox River Grove, IL 60021

Chicago Whitewater Assoc.
Pamela Allen
5460 S. Ridgewood Ct.
Chicago, IL 60629

Belleville Whitewater Club
Linda Seaman, Rep.
No. 3 **Oakwood**
Belleville, IL 62223

INDIANA

Hoosier Canoe Club
Rusten Smith
824 Aumen East Dr.
Carmel, IN 46032
St. **Joe** Valley
Canoe & Kayak Club
YMCA 200 E. Jackson Blvd.
Elkhart, IN 46514
Tukunu Club
Nancy Rea
952 Riverside Dr.
South Bend, IN 46616

KENTUCKY

The **Viking** Canoe Club
Ken Wentworth
5117 W. Pages La.—
Pleasure Ridge Pk. KY 40258

SAGE—School of Outdoors
209E High St.
Lexington, KY 40507
Four Rivers Canoe Club
Brad & Betty Arterburn
523 Alben **Barkley** Dr.
Paducah, KY 42001

LOUISIANA

Bayou Haystackers
Susie **Latham**
624 Moss St.
New Orleans, LA 70119

MAINE

Saw Bound Canoe & Kayak
Ned **McSherry**
Fryeburg, ME 04037

Bates **Outing Club**
Steve Rhodes
Box 580, Bates College
Lewiston, ME 04240

Sunrise County Canoe **Exped.**
Marty Brown
Cathance Lake
Grove, ME 04638

MARYLAND

Terrapin Trail Club
Bx 18 Student Union Bldg.

U. of Maryland
College Park, MD 20742

Potomac Paddlers
Sea Scout 489
Jim Hill
18505 Kingshill Rd.
Germantown, MD 20767

Baltimore Kayak Club
Al Karasa
1099 Tollgate Rd.
Belair, MD 21014
Monocacy Canoe Club
Box 1083
Frederick, MD 21701

Mason-Dixon Canoe **Cruisers**
Ron **Shanholtz**
222 Pleasant Tr
Hagerstown, MD 21740

MASSACHUSETTS

Hampshire College **Outdoors**
Program
Eric M. Evans
Amherst, MA 01002
Experiment with Travel Inc.
Box 2452
281 Franklin St.
Springfield, MA 01101

AWA Affiliates, *continued*

MICHIGAN

Raw Strength & Courage
Kayakers
Mrs. John Dice
2022 Day St.
Ann Arbor, MI 48104

MINNESOTA

BIG Water Associates
Andy Westerhaus
1905 River Hills Dr.
Burnsville, MN 55337

Cascaders Canoe & Kayak Club
Stephen Parsons
3128 W. Calhoun Blvd.
Minnneapolis, MN 55416

MISSOURI

Arnold Whitewater **Assoc.**
John M. Schuh, Pres.
490 Pine Ct.
Arnold, MO 63010

Meramec River Canoe Club
Earl G. Biffle
26 Lake Rd.
Fenton, MO 63026

Central **Missouri** State University
Outing Club
Dr. O. Hawksley, Rep.
Warrensburg, MO 64093

Ozark Wilderness Waterways
George Chase
4941 Laramie La.
Kansas City, MO 64129

Ozark Cruisers
Robt. A. McKelvey
#1 Blue Acres Tr. Ct.
Columbia, MO 65201

University of Missouri
Chris Wilhelm
Wilderness Adventures Comm.
18 Read Hall
Columbia, MO 65201

MONTANA

Montana Kayak Club
Doug **Abelin**
Brady, MT 59416

NEW HAMPSHIRE

Ledyard Canoe Club
Steve Ruhle
Robinson Hall
Hanover, NH 03755

NEW JERSEY

Mohawk **Canoe Club**
Dartery Lewis
455 W. State St.
Trenton, NJ 08618

NEW MEXICO

Rio Grande River Runners
Buck Cully
2210 Central Ave., SE
Albuquerque, NM 87106

NEW YORK

Appalachian Mt. Club
New York Chapter
Helen Chapman
RFD 1 Bx 573
Princeton, NJ 08540

Kayak and Canoe Club
of New York
Ed Alexander, Rep.
6 Winslow Ave.
East Brunswick, NJ 08816

Adirondack Mt. Club
Schenectady Chapter
Betty Lou Bailey
Schuyler 16, Netherlands Village
Schenectady, NY 12308

Wild River Canoe Supplies
Wm. Machonis
Ludingtonville Rd.
Holmes, NY 12531

Colgate Outing Club
c/o Recreation Office
Colgate University
Hamilton, NY 13346

Niagara Gorge Kayak Club
Doug Bushnell
41-17th St.
Buffalo, NY 14213

Adirondack Mt. Club
Genesee Valley Chapter
John A. Robertson Jr.
581 Lake Rd.
Webster, NY 14580

NORTH CAROLINA

Carolina Canoe Club
Tom Erikson
Box 9011
Greensboro, NC 27408

Nantahala Outdoor Center
Payson Kennedy
Star Rt. Bx 68
Bryson City, NC 28713

River Transit **Authority**
Amber Alley
Chapel Hill, NC 27514
& 700 West Market
Greensboro, NC 27402

OHIO

Columbus Council, AYH
Joe Feiertag
1421 Inglis Ave.
Columbus, OH 43212

Toledo Area Canoe & Kayak
John Dunn
5837 Elden St.
Sylvania, OH 43560

Pack & Paddle
Ronald J. Morgan
4082 Erie St.
Willoughby, OH 44094

Keel-Haulers Canoe Club
John A. Kobak, Rep.
1649 Allen Dr.
Westlake, OH 44145

Cuyahoga Canoe Club
Chuck A. Tummonds
Box T
Mantua, OH 44255

Wilderness **Adventures**
Charles Comer
256 Forrer Blvd.
Dayton, OH 45419

OREGON

Oregon **Rafting** Club
Joe Chappell
427 Marshall St.
Woodburn, OR 97071

Oregon Kayak & Canoe Club
Box 692
Portland, OR 97205

Northwest Outward Bound **School**
3200 Judkins Rd.
Eugene, OR 97403

PENNSYLVANIA

Sylvan **Canoe Club**
132 Arch St.
Verona, PA 15147

Pittsburgh **Council, AYH**
6300 Fifth Ave.
Pittsburgh, PA 15213

Canoe, Kayak & Sailing **Craft**
Douglass Ettinger
701 Wood Street
Wilkinsburg, PA 15221
North Allegheny River Rats
Tim Hawthorne
1130 Sandalwood Lane
Pittsburgh, PA 15237

Mountain **Streams & Trails Outfitters**
Ralph W. McCarty
Box 106
Ohiopyle, PA 15470

Oil **City** Canoe
Rt. 62 N. Rd. 2
Oil City, PA 16301

Allegheny Canoe Club
Walter Pilewski
755 W. Spring St.
Titusville, PA 16354

Penn State Outing Club
John R. Sweet
118 S. Buckhout St.
State College, PA 16801

Wildwater Boating Club
Robert L. Martin
LD 179
Bellefonte, PA 16823

Allentown Hiking Club
Bill Bevan
124 S. 16th St.
Allentown, PA 18102

Appalachian **Trail Outfitters**
29 S. Main St.
Doylestown, PA 18901

Philadelphia Canoe Club
Dr. David Knight
4900 Ridge Ave.
Philadelphia, PA 19128

Buck Ridge Ski Club
Louis F. Metzger
986 Anders Rd.
Lansdale, PA 19446

RHODE ISLAND

Rhode Island Whitewater Club
Rist Bonnefond
10 Pond St.
Wakefield, RI 02879

Summit Shop
Christopher Hardee
185 Wayland Ave.
Providence, RI 02906

(Continued on Back Cover)

AWA Affiliates, *continued*

SOUTH CAROLINA

Carolina Paddlers
Jim Parker
3912 Edmond Dr.
Columbia, SC 29205
Savannah River Paddlers
Explorer Ship 121 &
Sea Scout 404
Jim Hill
1211 Woodbine Rd.
Aiken, SC 29801

TENNESSEE

Tenn-Tucky Lake
Canoe-Camping Club
Calvin Phillips, Jr.
Rte. 1, Box 23-A
Tennessee Ridge, TN 37178
Tennessee Scenic Rivers Assoc.
Box 3104
Nashville, TN 37219
Sewanee Ski & Outing Club
Hugh Caldwell
University of the South
Sewanee, TN 37375
Tennessee Valley Canoe Club
Geo. M. Marterre
Box 11125
Chattanooga, TN 37401
Footloggers
P.O. Box 3865 CRS
2220 N. Roan St.
Johnson City, TN 37601
Carbide Canoe **Club**
Herbert Pomerance
104 Ulena Lane
Oak Ridge, TN 37830
E. Tenn. WW Club
Tom Berg, Bx 3074
Oak Ridge, TN 37830
Chota Canoe Club
Box 8270 University Sta.
Knoxville, TN 37916
Bluff **City** Canoe Club
P. O. Box 4523
Memphis, TN 38111

TEXAS

Down River **Club-Dallas**
Paul W. McCarty
1412 Oak Lea
Irving, TX 75061
Texas Explorers Club
Bob Burleson, Rep.
Box 844
Temple, TX 76501
Explorer Post 425
A. B. Millett
708 Mercedes
Ft. Worth, TX 76126
Trinity Univ. Canoe Club
Major Sharpe McCollough
Bx 180, 715 Stadium Dr.
San Antonio, TX 78284

TEXAS (Cont.)

Terns Whitewater Association
Thomas B. Cowden
P. O. Box 5264
Austin, TX 78763
Explorer Post 151
Tom Sloan, Scoutmaster
2008 Bedford
Midland, TX 79701

VERMONT

Marlboro College
Outdoor Program
Malcom Moore
Marlboro, VT 05344
Northern Vermont Canoe **Cruisers**
Edwin Amidon, Jr.
Bx 254
Shelburne,
VT 05482

VIRGINIA

Canoe **Cruisers** Assoc.
John Sessler
1623 Seneca Ave.
McLern, VA 22101
Coastal Canoeists, Inc.
Hope Gross
RFD 4, Mockingbird Lane
Spotsylvania, VA 22553
Explorer Post 999
R. Steve Thomas, Jr.
3509 N. colonial Dr.
Hopewell, VA 23860

WASHINGTON

U of W Canoe Club
Jean M. Dewart, Pres.
IMA Bldg.
University of Washington
Seattle, WA 98105
The Tacoma Mountaineers
Kayak & Canoe Comm.
Bob Hammond
3512 Crystal Spg.
Tacoma, WA 98466

Whitewater-Northwest Kayak Club
Box 1081
Spokane, WA 99201

WEST VIRGINIA

West Virginia
Wildwater Assoc.
Idair Smookler
2737 Daniels Ave.
S. Charleston, WV 25303
White Water Canoe **Club**
Mt. Lair Recreation Ctr.
West Virginia University
Morgantown, WV 26506

WISCONSIN

Sierra Club
John **Muir** Chapter
Howard Kietzke
7541 S. 31st St.
Franklin, WI 53132
Wild Rivers Club
Steve Kaufman
4901 36th Ave., Apt. 206
Kenosha, WI 53140
Wisconsin Hoofers Outing Club
Wisconsin Union Directorate
800 Langdon St.
Madison, WI 53706
Wolf River Canoe Club
R. Charles Steed
Wolf River Lodge
White Lake, WI 54491

WYOMING

Croaking Toad Boat Works
Game Hill Ranch
Bondurant, WY 82922
Western Wyoming Kayak Club
Donald L. Hahn
General Delivery
Wilson, WY 83014

CANADA

B. C. Kayak and Canoe **Club**
1606 W. Broadway
Vancouver, B. C., Canada
Federation **Quebecoise** de
Canot-Kayak Inc.
881 Est. Boul. de Maisonneuve
Montreal 132, P. Q.
Canada, HZL 1A9

AUSTRALIA

Indooroopilly Canoe Club
Box 36, Indooroopilly.
Queensland, Australia

NEW ZEALAND

Gisborne Canoe & Tramping Club, **Inc.**
Tony Geard
Box 289
Gisborne, New Zealand
Palmerston North Canoe Club, Inc.
Box 1126
Palmerston North, New Zealand

SWITZERLAND

Kanu Club Zurich
Otto Kosma
8008 Zurich Dufour Str. 3
Switzerland
