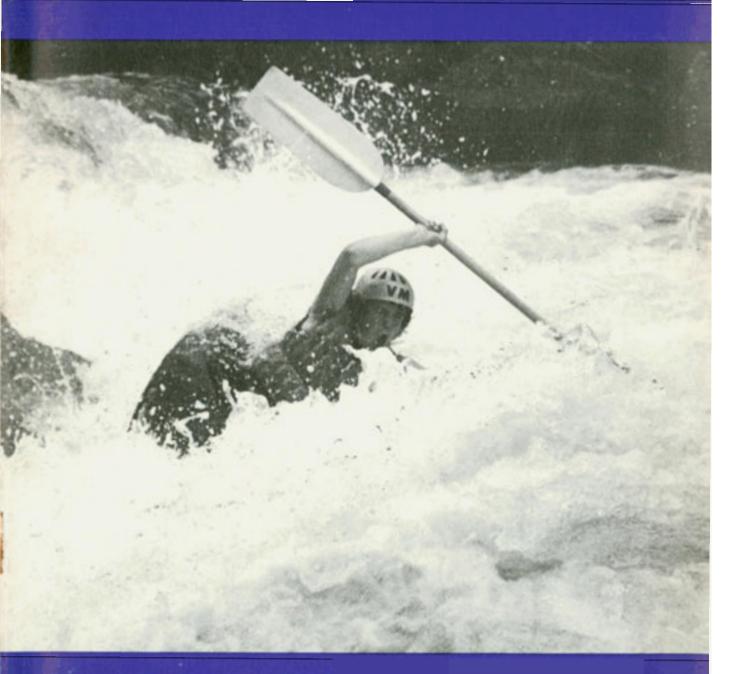
American

WHITEWATER

the Journal of the American Whitewater-Affiliation



JAN/FEB 1974

Vol. XIX, No. 1

AWA Affiliates

ALABAMA N. Alabama River-Running Assoc.
Carter Martin
2602 Scenic 1)r, S.E.
Huntsville, AL 35801 ALASKA Knik Kanoers Ed Swanson 3014 Columbia Anchorage, AK 99504 CALIFORNIA Feather River Kayak Mike Schneller
1773 Broadway Street
Marysville, CA 95901 Outdoor Adventures Dave Orlans 688 Sutter St. San Francisco, CA 94102 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 94040 Echo Wilderness Joe Daley 2424 Russell St. Berkeley, CA 94705 Sierra Club Mother Lode Chapter Sam Gardali 914 Stanford Ave. Modesto, CA 95350 Sierra Club River Touring Bay Chapter, Mert Welti 1440 Jones, So. 2 San Francisco, CA 94109 Truckee River Kayaks Box 1592 Tahoe City, CA 95730 Idlewild Yacht Club Russ Symon, Rep. 800 Market St. San Francisco, CA 94102 COLORADO Colorado White Water Association J. Michael Jacobs 1400 Dayton St. Aurora, ČO 80010 Aspen Kayak & Canoe Box 1520 Aspen, CO 81611 CONNECTICUT Appalachian Mountain Club Connecticut Chapter Christine Papp 418 Blackstone Village Meriden, CT 06450

Aspen, CO 81611

CONNECTICUT

Appalachian Mountain Club
Connecticut Chapter
Christine Papp
418 Blackstone Village
Meriden, CT 06450

GEORGIA

Explorer Post 49
Mark Reimer
2254 Spring Creek Rd.
Decatur, CA 30033
Dean's Club
John hlathieu
6277 Roswell Rd., N.E.
Atlanta, GA 30328

GEORGIA (Cont.)
Georgia Canoeing Association
W. D. Crowley, Jr.
Box 7023
Atlanta, GA 30309

IDAHO
Idaho Alpine Club
Dean Hagmann
1953 Melody
Idaho Falls, ID 83401

ILLINOIS
Chicago Whitewater Assoc.
Bruce Weber
5652 S. California
Chicago, IL 60629
Belleville Whitewater Club
Linda Seaman, Rep.
No. 3 Oakwood
Belleville. IL 62223
Illinois Paddling Council
Jack Snarr
2316 Prospect Ave.
Evanston, IL 60201

INDIANA
American Camping Assoc.
Ernest Schmidt
Bradford Woods
Martinsville. IN 46151
Prairie Club Canoeists
Charles Stewart
364 Rose Ellen Dr.
Crown Pt., IN 46307
Tukunu Club
Nancy Rea
952 Riverside Dr.
South Bend, IN 46616
Kekionga Voyageurs
E. Heinz Wahl, Rep.
1818 Kensington Blvd.
Fort Wayne, IN 46805

KANSAS
Johnson County Canoe Club
Geo. and Joan Weiter
7832 Rosewood Lane
Prairie Village, KA 66208
MAINE

Bates Outing Club
R. Keese
Dept. of Physics, Bates College
Lewiston, ME 04240

MARYLAND
Canoe Cruisers of
Greater Washington, D.C.
6827 Red Top Rd., #I-B
Takoma Pk., MD 20012
Terrapin Trail Club
U of Md., Kathy Canter
7912 • 15th Ave. #302
Hyattsville, MD 20783
Appalachian River Runners
Federation
Joe Monohan, Box 107
McHenry, MD 21541
Monacacy Canoe Club
Box 1083
Frederick, MD 21701

MASSACHUSETTS
Appalachian Mt. Club
Berkshire Chapter
Walter M. Banfield
Pratt Corner Rd., RFD 3
Amherst, MA 01002

MASSACHUSETTS (Cont.)
Hampshire College Outdoors
Program
Eric M. Evans
Aniherst, MA 01002

Appalachian Mountain Club
Worcester Chapter
John Dryden
Grafton Rd.
Millbury, MA 01527

Appalachian Mountain Club.
Boston Chapter
5 Joy St.
Boston, MA 02108
Foxboro Canoe Club
Bob Harpin
Foxhoro Co.
Foxhoro, MA 02035

MICHIGAN

Raw Strength & Courage

Kayakers

Mrs. John Dice

2022 Day St.

Ann Arbor, MI 48104

MISSISSIPPI

Bayou Haystackers
Gary C. Thomann
112 Grosvenor
Waveland, MS 39576

MISSOURI
Central Missouri State University
Outing Club
Dr. O. Hawksley, Rep.
Warrensburg, MO 64093
Ozark Wilderness
Waterways Club
Frank Lane
6729 Kenwood Ave.
Kansas City, MO 64131
University of Missouri
Recreation Committee
212 Read Hall
Colunihia, MO 65201

MONTANA Montana Kayak Club Doug Abelin Box 213 Brady, MT 59416

NEW HAMPSHIRE

Ledvard Canoe Club
Jay Evans
Hanover, NH 03755

Mad Pemi Canoe Club, Inc.
Dennis F. Keating
93 Realty
Campton, NII 03223

NEW JERSEY

Adventures Unlimited
Homer Hicks, Box 186
Belvedere, NJ 07823
Kayak and Canoe Club
of New York
Ed Alexander, Rep.
6 Winslow Ave.
East Brunswick, NJ 08816
Mohawk Canoe Club
Gerald B. Pidcock, Rep.
Jobstown-Wrightstown Kd.
Johstown, NJ 08041

(Cont. on Back Cover)

∠ _ _ WHITEWATER

Sponsored by The American Whitewater Affiliation

JAN/FEB 1974

Vol. XIX, No.1



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** 3003 **Ozark** Circle Chattanooga, TN 37415

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



CIIARLES SMITH 1760 Walnut St. Berkeley, CA 94709



Contents

ARTICLES

Journey to a Wilderness Niagara Jean Bennett	6
The Other Side of the River	16
Where Have All the Rivers Gone?	17
Jonquiere International Gilles Fortin	20
Learn the Screw Roll Jim Sindelar	25
Bear Trap O. K. Goodwin	

DEPARTMENTS

■ Affiliates 2, 36	Try This.	31
Letters 4	Racing Tips · · · · ·	32
a Book Review 18	Classified	35

Editorial Chairman and Editor: Iris Sindelar, 264 East Side Dr.. Concord, NH 03301

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

Editorial Committee: Margaret Tucker, Ed Alexander, O. K. Goodwin, Charles Smith, Geo. Larsen, Ray Gatler, Michael Mutek.

Business Manager: Charles Smith, 1760 Walnut St., Berkeley, CA 94709 Production and Circulation Manager; Surfing Reporter: Geo. Larsen. Box 1584, San Bruno, CA 94066

☐ Membership Chairman: J. B. Dewell, 104 N. 80W, Woods Cross, UT 84087

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 Galiler, 151 Jensen Circle, West Springfield MA

How to Write to American Whitewater: Deadlines for all material. insinding advertising, 1, arg. the 4,25h and December Percenter, June, Aug.,

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

Send membership/subscription payments, changes of address, non-receipt of copies to the Circulation Manager. Geo. Larsen.

Send Advertising copy, proofs and requests for information to the Editor, Iris Sindelar.

Send Payments for Advertising and Club Affiliation dues to the Business Manager, Charles Smith.

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.

Putlication is planned at 6 times yearly. Single copies, \$1.00 each Surplus back copies are available at reduced prices. Write the Circulation Manager for details.

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

ights reserved.

COVER: Carter Martin, Jr. in Nantahala Falls on the Nantahala R., site of the Southeastern Slalom & Wildwater Championships (June 1516, 1974) and Nat'l Open Canoe Whitewater Championships (Aug. 10-11,1974. Photo by Carter Martin, Sr., Huntsville, AL.

Letters from Readers

Dear Ed.—

Mention my name around the Slalom Racing Circuit and you will probably find out that my reputation is, **in** part, that of a complainer. Probably also, you will find that at least some of it is justified. Others **do** recognize that the sport isn't perfect, even if they don't all speak up when they see something wrong.

My chief gripe is in the lack of consistently fair gate judging. It is a problem, and it must be addressed openly to improve our races.

There are several ways of attacking the problem, two of which I would like

to suggest:

Instruction is the most obvious approach. I see by the Canoe Cruisers Association (Washington, D.C.) Newsletter that a course will be offered to all who are interested. Since this is one of our largest clubs, responsible for several of the more important slalom races, the effort to improve the judging is to be applauded. Hopefully, it will interest all competitors within the Washington area and hopefully it will lead some of them to the IEF rating and recognition as a fair judge.

This type of action should be recommended to all the **clubs**, especially those who sponsor races and more especially those who are in the positions of influence. Indeed, these latter organizations have the responsibility of

maintaining high standards in the sport.

Secondly, I would like to suggest that this magazine instigate a "Slalom Forum" under the direction of one of the recognized ICF experts of your choice and encourage readers to submit questions and problems to the expert. The slalom sport could be presented bit-by-bit (in its Jurpose, scoring, administration, etc. to the public and to those interested in improving their knowledge.

A column such as this could utilize photos, diagrams, sketches, as well as the written word to make a most interesting contribution to your

magazine.

Perhaps one or more (all?) of the A.C.A. Slalom Committee would be anxious to make this their **respon**sibility?

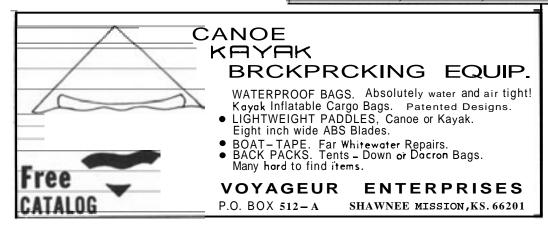
(Name Withheld by Request)

WESTERN KAYAK TRIPS

For advanced & expert boaters, 9-day guided tours in California, Idaho and Colorado, from April through July, including ground transportation, some meals and lodging, and optional boat rental or purchase. Send for brochure: Bert Welti, 1440 Jones, San Francisco, CA 94109.

RENEW NOW!

\$5.00 for 6 issues of 1974 Send your check to: P.O. Box 1584, San Bruno, CA 94066



KAYAK AND CANOE IS BACK

Kayak and Canoe, "A Whitewater Racing Subscription Service for the Casual and the Serious Competitor," has recently resumed operations with Ted Jose, Charles Ohl and Hol Whitney as Directors. Goals of the service are stated as: 1) better communications among paddlers; 2) ease of race sponsorship; 3) the growth of paddle sport; 4) enough solvency in the operation to allow prompt professional services — and hopefully a contribution to the U.S. Team Fund.

For \$4, subscribers will receive a 1974 race schedule, a colorful decal and entry form mailings. Entry form mailing service is offered to race sponsors as in the past.

Kayak and Canoe plans to provide safety at Jamaica this year and hopes to sponsor at least one downriver race on either white or flat water.

Send for a subscription blank to:

Kayak and Canoe P.O. Box 123 Sherborn, MA 01770

WILDWATER DESIGNS C/O WALBRIDGE; PENLLYN, PA. FOR 1974: 19422 -NEOPRENE SPRAYSKIRT KIT 14.11 WET SUIT VEST KIT 14.11

•GLOVE AND BOOTIE KIT. 8.22 1/8" NEOPRENE, NYLON BACKED

-LIFE VEST KIT. W/ PVC FOAM 16P

(RED 18-26 LBS. FLOAT)
BOATBUILDER'S MANUAL ppd. 355
ADD \$1. POSTAGE. CATALOGUE: .25



ABS Royalex® Canoes

- One-piece, Seamless, ABS Royalex® Hull
- Aircraft Aluminum Upper Structure
- 70 Pounds Weight, Complete

LAST YEAR WE WERE FOUND IN TENNESSEE.

CANOE COMPANY

P O. BOX 274 ANTIOCH, TENNESSEE 37013

DURABLE WHITEWATER PRODUCTS



ABS Bladed Paddles

- UV Protected ABS Blade
- Neoprene-covered, 6061-T6 Aluminum Shaft
- Sensuous T-Grip

THIS YEAR WE COVER THE SOUTHEAST.

5

NEXT YEAR . . . ? ?! See your dealer or write us.

Journey to a Wilderness Niagara

Part I: Rabbitkettle Lake to Virginia Falls

by Jean Bennett, 606A Essex Circle, China Lake, CA 93555

The day was crystal clear as "Sierra Queen" flew along up the narrow valley of the North Fork of the Flathead. On our right Vulture, Rainbow, Kintla, Starvation, and other craggy Glacier Park peaks seemed just off our wingtips. Intermittently we'd glimpse turquoise blue lakes nestled between the mountains, and recognize them by their characteristic shapes. Presently, we headed up a likely-looking canyon and started across the jagged range. Hardly a gust rocked the plane to remind us that we were in some of the most rugged mountain country in North America.

But this was only the beginning. Hal and I were on our way north to a really remote spot in the Northwest Territory of Canada to kayak down a river that was said to flow in a canyon deeper than Grand Canyon and over a falls nearly twice as high as Niagara. Sounds unbelievable, doesn't it? But many things about that Nahanni country are hard to believe — like the mysterious Nahanni Indians, the so-called "people who speak like ducks" who roam the area but are rarely seen by white man, or the "tropical" valley that supposedly stays warm all winter while the surrounding areas chill to 40 below. And Headless Valley where two McLeod brothers were found minus their heads after they had ventured up the Nahanni seeking their fortune in gold. The rapids on the Nahanni are reportedly extremely treacherous, drowning unwary travelers and capsizing loaded freight canoes. There are living legends of the area too, the most famous being the prospector Albert Faille who many times has disappeared into the Nahanni country to reappear one, two, or more years later full of unbelievable but true stories of his experiences. All these things intrigued us, and we just had to see for ourselves what the area was really like.

So now, after two years of careful preparation, Hal and I were flying up to Edmonton in "Sierra Queen," our dependable Cessna 182, to meet the other two members of our expedition. Edmonton International Airport on that hot Sunday afternoon early in August was almost deserted, and we couldn't find a sign of Vern, Claus, or the ton of duffel which hopefully was coming with them. On checking the board of arrivals, we noted that the next plane they most likely would take from Vancouver wasn't due for another couple of hours, so in the meantime we cleared Customs and ate a leisurely dinner at the airport restaurant.

Once the PA system announced the arrival of the plane from Vancouver, things happened fast. Vern and Claus appeared and bags started piling up at the baggage collection area. We found that everything had come through fine, there had been no snafus in clearing Customs in Vancouver and, surprisingly, only minimum excess baggage charges. What was now piled in front of us included two 2-person foldboats, food, sleeping bags, tents, and complete supplies for a 3-week wilderness trip for four people. (Once we were on the river there would be no



Rabbitkettle Lake.

corner drugstore to run to in case we had forgotten something!) Hal and I were going to leave "Sierra Queen" at Edmonton on the grass at the edge of the taxiway, in the company of other light planes belonging to the traffic controllers and weather forecasters working at the airport. If we thought our small plane looked out of place among the big jets, think how the man we saw come in in the Gipsy Moth must have felt as he taxied into the terminal area correctly accoutered in World War I leather helmet and flying goggles!

Upon transferring the last few items from "Sierra Queen" to duffel bags in the cool air of early evening we encountered many voracious mosquitoes. Was this to be a forewarning of things to come? On Hal's and my five previous trips to Canada and Alaska, we had taken headnets and many bottles of insect repellent, but in each case we had brought most of them back unused. By

the time we had all the baggage checked in for the CP Air flight to Watson Lake (the following morning), most of the evening was gone and we were ready for a few hours of well-deserved sleep at a nearby motel.

This might be a good time to introduce the four members of our expedition. Hal and I are research physicists working at the Naval Weapons Center in the middle of the Mojave Desert in Southern California (appropriate place for a Naval Base?). In the past few years we have become interested in river touring as a way of enjoying areas which are scenic but inaccessible by other means of transportation. Vern Coats is a mechanical engineer also working for the Navy at China Lake, and has accompanied us on a previous Canadian wilderness river trip as well as several trips on California rivers. Claus Engelhardt is a geologist working for Union Oil 'Company in

VOL. XIX/1

Bakersfield. He is an excellent fisherman, avid skier, and an enthusiastic newcomer to the sport of river touring.

Arriving at the two-story, log-cabinstyle Watson Lake airport the next morning after a short jet flight from Edmonton, we still felt like tourists, but this feeling began to disappear as we loaded our voluminous duffel into bush pilot Grant Luck's pickup for the short haul to the B. C. Yukon float plane base on the lake. There the single-engine Otter waited to whisk us off to the enchanted land, but it was to be three days before the weather permitted a flight to the headwaters of the Nahanni, which was on the other side of the Continental Divide. In the meantime we sampled the few restaurants in town, splashed through the puddles on Main Street, admired the forest of signposts from all parts of the world for which the place is famous (even finding one from our home town of Ridgecrest), and discovered the wonderful collection of books on northern lore at the library. Well-meaning local residents also told us intriguing stories of people who had gone into the Nahanni country and were never seen again!

Getting up at 4 AM on flight day wasn't too difficult after the period of enforced inactivity, and by 5:30 the mist was rising as the Otter skimmed over Watson Lake. Patches of ground fog gave way to puffy cumulus clouds as we headed north, passing first over gently rolling hills, then over valley after valley, each with its meandering stream and partial mantle of morning fog. Then we saw a brilliant fog bow and a range of strikingly backlighted mountains on the eastern horizon. As the plane droned on effortlessly, we noted that the pilot was catnapping and the copilot, a youngster eager to get in some flying hours, had taken over the controls. Soon, as the rocky peaks passed by closer and closer to the windows, the pilot awakened and guided the plane over the pass, leaving not more than 50 feet clearance in places between us and the ground below.

Then we saw our destination — Rabbitkettle Lake — a little jewel nestled in the trees next to a winding stream which, upon closer approach, became the South Nahanni River. As we circled the lake to lose altitude. we startled a moose who casually ambled off into the brush. The landing was so smooth you couldn't tell when the plane touched the water, and the pilot then taxied to the corner of the lake closest to the river (to which we would have to portage all our duffel). He apologized for making us get our feet wet wading the last few steps to shore, but carefully stayed on the pontoon himself keeping dry while he handed box after box to willing hands to be carried ashore. In no time the plane was empty, Hal and Claus pushed it around into taxiing position, the motor started it immediately roared away, waggling its control surfaces as it went. Shortly we heard the motor rev up to full power and the plane, like a big bird, gracefully took off, circled back over us, rocked its wings in a farewell salute, and was gone. We were alone in the wilderness.

This was the moment we had dreamed of for two long years. Here we were, alone, on the shore of a beautiful turquoise lake with the sun shining and the world at our fingertips. What do three fellows think of at a romantic time like this? FOOD! Thus, I, as chief cook, poked among our neatly packaged bright orange food bags until I found bag number 4 which contained breakfast for that morning (bags 1 to 3 contained all our dinners, bags 4 and part of 5, breakfasts, and the rest of 5 and 6,

lunches). It wasn't long before we had a fire going on which stewed fruit was cooking, hot water was heating for our tasty hot chocolate, and an omelet was in preparation.

I offered to do KP afterwards since the fellows seemed eager to go off exploring now that their tummies were full. I leisurely washed the dishes and got loads organized for the portaging operation which would take place shortly, all the while enjoying the breathtaking views around me. It seemed to me that the fellows had had time to walk back to Watson Lake before they returned, but they had blazed a portage trail to the river (we later found a better one), and had gone all the way to the outlet at the far end of the lake, finding it too shallow to be useful.

Now the work started. The fellows shouldered heavy, ungainly loads of boat parts while I carried bulky, lighter

objects. Off we went through the downed timber of an ancient burn. The moose we had seen from the air remained out of sight, but he must have been amused at our antics as we tripped over hidden logs and said all those funny words! Returning to the lake after carrying over our second loads, we couldn't resist a short swim in the warm water. This was supposed to have been a cold weather trip so we hadn't brought luxuries like bathing suits, but underwear served just as well. I did keep my shoes on to give traction on the slippery, moss-covered rocks of the lake bottom. Three-way water fights between the fellows provided excellent material for pictures, which I tried to catch without getting the camera splashed.

Later, while assembling the boats on the rocky Nahanni beach. we wondered if we had forgotten any vital part of the wood framework. The boats, made by

American Whitewater [AWA) Offers You . . .

AWA Shoulder Patches	\$1.00 each
AWA Decals	3 for \$1.00
Vol. 17, 4 issues of 1972	
Vol. 18, 4 issues of 1973	

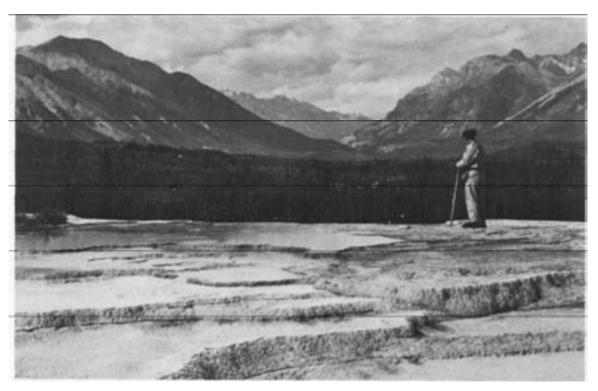
AWA Tells You How To . . .

Make a watertight spray cover (reprint from Vol. 15, #4)50¢ ea.
Make wetsuit gloves and bootsVol. 16, #4
Escape from dangerous reversals, souse or suck holesVol. 16, #1
Ride ocean surf in a slalom kayakVol. 16, #2
Build a fibreglass kayak paddleVol. 16, #3
Tour Idaho and Oregon whitewater, the Salmon and
Rogue rivers. Detailed guide and instructionsVol. 15, #3
Spray cover reprint50¢; individual issues, \$1.00
Specify Volume and Issue Number
OR get this complete AWA HOW-TO-DO-IT LIBRARY for \$4.00

Please mail your check to:

American Whitewater • Box 1584, San Bruno, CA 94066

VOL. XIX/1



Rabbitkettle Hot Springs. Vern Coats at right.

the German firm of Klepper (which has been building folding boats since the early 1900's), go together like a jigsaw puzzle if all the pieces are intact. Fortunately all ours were, so we started the trip with sturdy, rigid boats that will float even if completely filled with water. Packing the boats was a real chore. At home on the porch, all the bags seemed to fit in fairly easily, but out here it was a struggle. Eventually we did get everything in.

I was pleased when we finally shoved off and dipped our paddles into the rippling waters of the river. The current was brisk and we rounded bend after bend with no effort. Almost too soon a major river, the Rabbitkettle, came in on our right and we paddled upstream to test its current. (We wanted to go up it the next day to look for Rabbitkettle Hotsprings.) However, the current was too swift for easy paddling, so we looked around for a suitable place to stay. Across the Nahanni a beautiful sandbar

beckoned. It was the perfect campsite, offering views of the craggy Ragged Range far to the west and closer wooded mountains on the other three sides. Tracks of moose and grizzly bear crisscrossed the area but we didn't see either, only a flock of nighthawks which swooped and cavorted around our camp apparently unperturbed by the bright orange and blue tents. As I was preparing dinner, two ducks landed in the river nearby and, curious, walked up the beach toward us. After approaching within 15 feet or so, they waddled back to the water and unconcernedly swam away. Biscuits in the reflector oven added the final touch to our gourmet dinner, and Mother Nature provided a spectacular sunset followed by a full moon. Who could ask for more?

For awhile the next day we thought the mapmakers had erred when they placed Rabbitkettle Hotsprings on a particular bend of the river. We had been stumbling along over thick reindeer moss, dense shrubbery, and open fields of blooming Alaska cotton, but so far had seen nothing even remotely resembling a hot springs. Then I glanced at the rock at my feet and noted a few yellow stains on it. Looking up, I saw that the stained rock extended up a hill to my left, so I scrambled up the short rise. There, directly ahead of me was a geyserite dome, perhaps 50 feet high! My excited shouts brought the others rushing to the spot, and for a moment the forest resounded with the staccato clicks of camera shutters. One, alas was not heard. Hal's faithful movie camera had run down its batteries and the spares were all back at camp, several miles away!

On top of the dome we saw pools of water of assorted sizes, each with its own ripple-marked "rim" of geyserite and distinctive colored algae. There was one deep hole (which looked much like a morning-glory pool in Yellowstone) that was bubbling, but it was the same temperature as all the others — cold! The view from our pedestal was breathtaking — the Rabbitkettle River meandered up a valley to the west, Hole-in-the-Wall Creek tumbled down a steep incline to the south, the Nahanni River flowed down its own valley from the northwest, and the glaciercovered peaks of the Ragged Range loomed up in the west. What a time to have a camera fail!

A leisurely lunch followed by a nap in the sunshine put us in a good mood to start back through the brush, and Hal decided to return with some fresh batteries. We all came with him, tracking the kayaks well up the Rabbitkettle River to eliminate much of the bushwhacking. (Tracking is pulling a boat up-stream using a single rope attached to both bow and stern. By holding the





For the most complete selections of White Water Koyaks, knowledgeable people rely on Klepper. They know that at kayak-headquarters they can find the specific boats they need— whether fiber glass or Foldaway models.

Klepper also merits recognition as the leaders in racing craft of extreme design – far top level White Woter competition. Typical of thischampianshipgroup: "MUEN-CHEN 72" and "LOISACH" in Diolen.

Write for Free Color Catalog WW10

Hans Klepper Corp.

35 Union Sq. West New York, N.Y. 10003 center of the rope to adjust the angle of the boat, the current can be made to carry the boat either to shore or away as the tracker desires. Under good conditions, boats can be tracked almost as fast as a person can walk.) By the time we reached the Hotsprings, clouds covered much of the sky, creating unusual light and shadow effects on the pools. We wandered around, once more drinking in the wild beauty of the place.

The second trip had an unexpected beneficial effect. The fellows brought fishing rods to try out the clear water of Hole-in-the-Wall Creek. Hal cast his fly line with a well chewed mosquito on the leader and almost immediately pulled in a grayling. As he cast again, another fish struck, then another. Vern was having similar luck with spinners. One of his fish was a giant, but unfortunately it got decapitated before it was measured. Claus, with his exotic hand-tied flies, was the only one not having any luck. Apparently the Arctic grayling just don't have gourmet tastes! The delicious pan-fried fish made our day complete, and we snuggled down in our sleeping bags just as the moon was rising.

The next day, our first full day on the river, found us drifting along for awhile in a fast current. As the river started meandering back and forth across a wide valley the current slackened and we finally had to paddle to keep going. Arctic terns soared and dived around the boats, seemingly unafraid. They make an annual pilgrimage from the Arctic to Antarctic, a round-trip flight of as much as 22,000 miles. We completed only 22 river miles that day (with a total of about 300 miles to go from our starting point), but with such spectacular scenery, who wants to hurry? Our campsite was by what we hoped would be a good fishing stream, but clear water doesn't always imply good fishing as Vern and Claus found out. And for the first time this trip our equipment was given the wind test.Our Cascade tent had already weathered many a storm and did fine after Hal ventured out in his bare feet at 2 AM to drag over boulders to use as tie downs. Vern's new two-man Gerry tent didn't fare as well. One of the aluminum tent poles bent, and Vern "slept" with one arm outstretched, supporting the weakened pole! I especially remember cooking pancakes the following morning in a sheltered spot away from the wind using the elegant spatula Hal had carved out of a piece of ash to replace the one I had forgotten to bring.

And so the days passed: up at 7:00, off at 10:30, drifting, paddling, exploring, fishing. Each day we saw something different — a small log cabin built in 1941 by a trapper named Zinchuck and occupied by him for a couple of years, later visited by the ubiquitous Albert Faille; a full-grown bull moose with a magnificent rack of antlers; a crescent-shaped lake just off the river, sheltering several broods of half-grown ducklings; and always the spectacular steep-sided mountains plunging into the river as it flowed in wide meanders across the valley. We didn't starve either. My diary lists the following "typical" dinner: blueberry muffins, steak, ham'n beans, chocolate cream pie, and Russian tea. No wonder I didn't lose any weight. But then I always served four equal portions!

We had been told exactly what to look for as we approached Virginia Falls. First there would be a white house (water gauging station) on the left bank about three miles above the falls, then a boat landing and cache on the right bank about one-half mile above the falls, then a portage trail starting on



Rapids leading to Virginia Falls.

the right bank just at the edge of the calm water. Why all this detail when one should be able to hear the roar from many miles away? Strangely, sometimes the falls cannot be heard at all from upstream, and the only sign of them is a line of low cliffs. We had heard hairraising stories of people who discovered the falls at the last minute just as they were being swept over the brink, and we didn't want to make a further contribution to the folklore of the area. Fortunately, we spotted the gauging station and then landed at Albert Faille's cache well above the fast water.

Eager to see the highest falls in the entire Canadian north, we grabbed cameras and hurried along the network of game trails that led approximately in the proper direction. We reached the place where the calm water enters a narrow gorge and starts speeding up as it tumbles over a series of rock ledges.

Then we worked our way to a rock outcropping closer to the brink where we could observe the water, now racing along at express-train speed, and see it plummet over a short ledge, split into two channels around a massive monolith, and then disapear from view. We had to wait until the next day to view the full face of the falls in all its glory. But we were convinced. The falls were real and not a figment of someone's imagination or a cartographer's joke. And we returned to our boats, preparing to make camp at the "official" campsite near the cache.

Wooden signs tacked up on poles at the campsite listed names of parties which had visited the falls over the past few years. A French couple parachuted into the headwaters of the South Nahanni and had come down in a small inflated raft. (We heard later that they were unaware of the exact location



Virginia Falls.

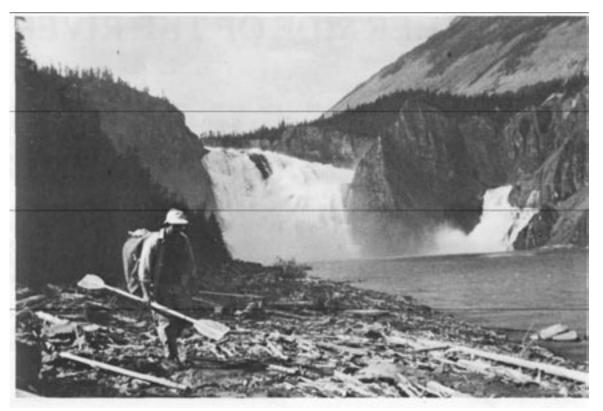
of the falls and only discovered their mistake when they were in the chute hurtling toward the brink! Fortunately they were good rock climbers and were able to scale the cliffs, attaching a long rope to their raft and pulling it to safety.) A party that had just preceded us left a beautifully carved walking stick with the notation, "FLAT RIVER 1971." If the user had really come from the Flat River, he would have done a lot of walking!

But the most exotic party which preceded us by only a couple of weeks was none other than the Royal Scots Greys and British Broadcasting Corporation headed by Sir Ranulph Twisleton-Wykham-Finnes! Ostensibly they were making a film for the BBC, but rumor had it that Sir Ranulph had recently gotten married and was taking his new bride on a honeymoon! They had reached Virginia Falls after an apparently arduous trip upriver, sup-

posedly breaking 50 propellors in the Splits near Nahanni Butte. But according to one newspaper account, Sir Ranulph said (with a typical British flourish), "The Nahanni voyage was really nothing out of the ordinary; it had been done before." When we asked a Canadian Mountie what the expedition was doing on the South Nahanni, he thought a moment, scratched his head, and then said, "Well, that's a good question!"

The mile-long portage trail around the falls went far inland, avoiding the finger-like bluffs we had been scrambling over to view the falls, and then dropped precipitously to the narrow beach at the base of the falls. Next morning we broke camp and paddled the boats carefully down to the head of the trail near the edge of the calm water. The place was well marked by a red gasoline drum and a flat-bottomed scow in almost new condition. (We heard later that the boat had belonged to a guide who flew hunting and fishing parties into the falls. Unfortunately he flew himself and a planeload of people into a mountain during a storm, so the boat is now ownerless.) We unloaded our kayaks and lifted them out of the water, subsequently taking them apart and stuffing the pieces back into bags. The actual portaging didn't take too long if one doesn't count the time we spent photographing a chipmunk, ptarmigan, and wildflowers, packstraps, and slogging painfully through a particularly muddy, easily avoided section of trail for the photographer's benefit. The last precipitous stretch on the trail had once been improved with log steps, but these were now in complete disarray. Hal got some unrehearsed action shots of me stumbling down the "trail," waving my arms wildly to keep my balance!

14 American WHITEWATER



Vern Coats carrying paddle and boat skin around Virginia Falls.

It was a pleasure to sit for a few moments and drink in the power and beauty of The Falls. Never have I seen such a sight! Dropping nearly 300 feet, there was no problem hearing the deepthroated roar from this position, where the canyon walls acted as sounding boards. Later we hiked up to the very base of the falls and discovered that it was an excellent way to get a free shower from the blowing spray. Claus, as a geologist, was intrigued by the limestone cliff that was responsible for the falls, and he identified many ancient marine fossils embedded in the rock. Some of the best cephalopods came home with us as souvenirs of our scrambles around the rocks beneath thattumultuous shower. We camped for two nights at the base of the falls and remember this campsite as the most spectacular one of the trip. One evening we watched a brilliant sunset flame and die over the falls, and were very glad

that we had not accepted as fact the inaccurate information that no campsite could be found below the falls.

(In the next issue: Part II, Through the Land of No Return.)

NOTICE

This issue is being sent to all subscribers of 1973; RENEW NOW to receive the next five issues of 1974.

MADAWASKA KANU CAMP CAMADA PERSON WARREST SCHOOL FOR KANAKS AND CARDONS

July and August 1974 Classes for beginners, advanced and experts 14 yrs. and older For more information write:

THE Canada Holl SU 885

THE OTHER SIDE OF THE RIVER

(As told to D.G. Cowart; from the newsletter of the Ill. Paddling Council, Vol. 5,' No. 5)

I am a man who has a cornfield; also a house, barn, pigs, and other items common to rural life. The cornfield is of special interest to canoeists because it is the best place for them to take out of the Vermilion River (Oglesby, Ill.). The house is of interest because it provides a place to take care of canoeists' emergencies, and the road and drive are a good place to park canoeists' cars. The pigs and other items are of very little direct value to canoeists, though in the long run they do help provide the necessary ham and eggs for energy to enjoy their sport.

Now, my canoeing friends, after several years of pulling stuck cars out of my cornfield with my tractor (I could also see that cars running over the corn was not helping me feed the pigs); having mounds of litter piled on the riverbank by those lovers of the beautiful out-of-doors, which I carry off so the natural beauty will remain for the next bunch of Boy Scouts and canoeists to dump their excreta and other wastes on after they properly admired the beauty I have provided, I am fed up with you wonderful, conservationminded people, those young, idealistic people full of the spirit of salvation of this stretch of river for generations to come. (I wish they would help me just save it for the people who live there every day.) Anyway, I have put a cable across that road to my cornfield and riverbank, and the land is posted: Keep Out! But, you know what, here come the Boy Scouts and canoeists anyway. Now, instead of parking in the field, they just park in my drive. How would

you like to come home expecting to enjoy a nice barbecue of pork ribs only to discover that you can't even get into your own property because of the canoeists' cars (like 22 of them) parked for all-day canoe trips? Then I get cussed out for having my vehicle on my property, in the way of some Boy Scout leader who has been parked in my driveway all day. Who needs that kind of people, the kind I see paddling the canoe?

Yes, Mr. Boater, let's save the river for you to canoe, save it just for you. Condemn my property so you can land your canoe, a landing just for you.

U S I S C A
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.

WHERE HAVE ALL THE RIVERS GONE?

They are vanishing one by one as free-flowing rivers are dammed, channelized, dredged and developed; therefore the American Rivers Conservation Council, ARCC, has been formed by a group of paddlers, fishermen, conservationists and scientists from all over America as a National clearinghouse with Bill Painter on the legislative scene in Washington, D.C. The functions of ARCC are as follows:

- 1. Assisting groups and individuals engaged in river protection.
- 2. Preparing Action Handbooks on methods for river protection.
- 3. Publishing an Action-Alert Newsletter with vital articles on rivers and river issues.
- 4. Collecting and distributing technical and legal information on river conservation.

FLOTATION BAGS

K-1 Set **3%** lbs. \$ 9.75 C-1 Set 5 lbs. 9.75 C-2 Set 7½ lbs. 12.50

SPLIT BAGS (SET OF FOUR)

K-1 \$15.25 C-2 \$18.25 C-1 15.25

Shipping \$1.25per set in U.S.

Deal direct with manufacturer on your air bags.

All bags are 20 mil. vinyl and carry a one-year warranty.

Satisfaction guaranteed or your money refunded.

We ship the same day we receive your order.

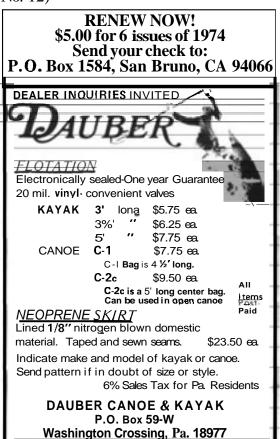
All orders should be sent to:

AMERICAN POLY-SEAL

Fourth & Seminole Lester, PA 19113 (215) 521-9550

- 5. Direct involvement in legislative action in Washington, D.C. aimed at increasing the number of rivers protected under the wild and scenic river laws.
- 6. Upgrading of poor management practices of government agencies charged with the protection of designated National Wild Rivers.
- 7. Encouraging innovative methods of river preservation.

ARCC has been initially funded by a small group of action-minded individuals and organizations. Your help - your membership - is needed now. \$10 is the regular membership fee. Students \$5, Founding Member \$25 or more. You will receive regular mailings. Write AMERICAN RIVERS CONSERVATION COUNCIL, 324 C St., S. E., Washington, D.C. 20003. (From the Sierra Club RTS News Bulletin, Vol. 5, No. 12)



BOOK REVIEW

BOATBUILDER'S MANUAL: How To Build Fiberglass Canoes & Kayaks for Whitewater, by Charles Walbridge. Publ. by Wildwater Designs, 1973. \$3.00. 64 pp. Avail. from Wildwater Designs, Inc., Penllyn Pike & Morris Rd., Penllyn, PA 19422. An excellent book on the technology, materials and techniques involved in building whitewater canoes and kayaks. The author is a seasoned river rat and obviously an experienced craftsman and boatbuilder. He lives in Pennsylvania, which is perhaps the area with the largest concentration of whitewater boaters in the country. This is where the first fiberglass slalom canoes in America were designed and built in the early fifties, and boaters there have developing boatbuilding been technology ever since and testing the boats by smashing them up on the super rivers of West Virginia.

I think the author has done a remarkable job of distilling the techniques developed and tested by the area's most active boatbuilders into a comprehensive, easy to read booklet. It actually has enough information to set up a small commercial boatbuilding

operation. If you are only going to build a kayak or two, or even a kayak a year, you probably won't want to set up the shop facility recommended or get all the suggested tools and supplies, but it is nice to know how it should be done, and I think you will be able to decide which corners to cut.

The booklet really covers just about everything you would want to know about building a whitewater boat comments on boat design and hull shape, discussion and evaluation of available materials (including the more exotic and newer materials such as epoxy, nylon, polypropylene, diolen, Sglass, PRD, et~.), shop equipment, safety precautions, layup procedure, outfitting and bracing, and SOURCES OF SUPPLY for various materials mentioned, including trade names and mailing addresses. Includes also: suggestions on mold-making, paddlemaking and boat patching. Physically similar to a fat AWA Journal (64 pp.), it is well worth the price if you are going to build boats. — Jim Sindelar

NOTICE

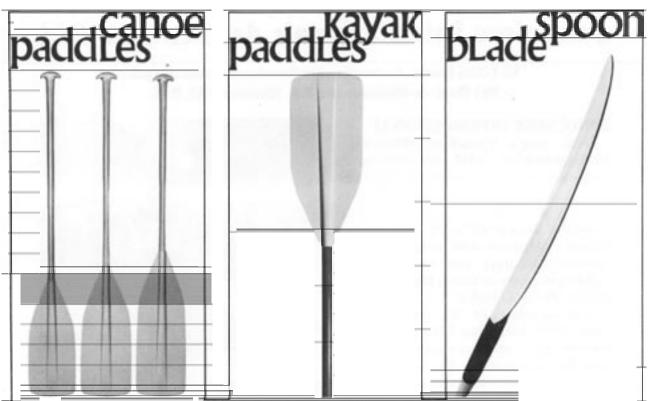
This issue is being sent to **all** subscribers of 1973; RENEW NOW to receive the next five issues of 1974.

COUNT ME IN ...

as a 1974 member of the American Whitewater Affiliation which brings me 6 issues of the Whitewater Journal.

New Members/Subscribers Please check your option and mail with payment:	
6 issues of 1974 starts in February \$ 5.00, Foreign \$ 5.50	
Club affiliation for 1974 \$10.00, Foreign \$11.00	
(Includes club listing in Journal plus 2 copies of each issue) Other specified back issues at \$1.00 each, Foreign \$1.15	
Note; New and renewal memberships start with the Jan./Feb. issue, 1974.	
Name	
Address	
Zin Code	\ _
Zip Code	-

Mail to: WHITEWATER, Box 1584, San Bruno, California 94066



Iliad paddles are the only paddles that combine the large blade area, high strength and durability of composite aluminum, fiberglass and epoxy construction with the light weight and ease of handling formerly found only in the finest wooden paddles.

All paddles are hand fabricated around a high strength aluminum alloy shaft that extends to within three inches of each blade tip, and within ½" of the top of the canoe paddle grip. The shafts are ovalled in the grip or throat areas and are covered with a textured nylon/epoxy coating or a neoprene rubber sleeve, which combines an exceptionally secure wet grip with superior comfort.

The blades are built up on the shaft with high density glass cloth and carefully compounded epoxy resins; they are cured under high pressure and elevated temperatures in matched metal moulds to create a lightweight blade only 1/16" thick of unbelievable strength and durability. All Iliad paddlesfloat well.

KAYAK PADDLES

BLADE: Flat blade-8 3/4" wide x 22" long

Spoon blade-8 3/8" wide x 22" long

LENGTH: 78", 80.82". 84".86" oval shaft.

WEIGHT: 2.8 lbs.

PRICE: Flat blade standard (neoprene covered shaft) \$45.

Classic (Nylon/epoxy covered shaft) \$46. Spoon blade standard \$49., Classic \$50.

ORDERING: Specify flat or spoon blade and shaft length.

Specify that of spoon blade and shall length.

Specify shaft color red, yellow or blue on

custom models only.

Spoon blade paddles will be shipped for right

hand control unless left hand control is

specified.

SHIPPING: East of the Mississippi \$3.00-West \$4.00

CANOE PADDLES

BLADES: 8 3/4" x 22", 9" x 25", 9%" x 28"

LENGTH: 51". 54", 57", 60, 63", 66", 69", 72"

WEIGHT: 1.8 lbs. to.2.7 lbs. Shaft strength matched to

length and blade size.

SHAFT: Oval shaft, nylon/epoxy covering; standard

color red.

PRICE: \$37.

ORDERING: Specify length and blade size 22". 25" and

28".

SHIPPING: East of the Mississippi 52.00-West \$3.00

Massachusettspurchasers add 3% sales tax.

GUARANTEE: A paddle failure due to faulty materials or workmanship will be replaced or repaired at no charge. Paddles damaged through accident or the rigors of the sport can often be repaired economically.



Ask your dealer for Iliad paddles or write for descriptive brochure.

Inquiries from dealers and clubs welcomed.

170 Circuit Street, Norwell, Massachusetts 02061, 617-659-4698 • 878-3404

VOL.XIX/1

19

Jonquiere International: An Olympic Bid

By Gilles Fortin, Federation Quebecoise de Canot-Kayak 881 Boul. de Maisonneuve Est, Montreal 132, P.O.

JONQUIERE INTERNATIONAL

This year's Canadian Whitewater Championships, held on September 2nd and 3rd at Jonquiere in northern Quebec Province, became the theatre of a truly international event. An outstanding organization by the Quebec Canoe Federation, and good weather (it snowed three days later) brought about 3,000 spectators to watch the race of the year in North America.

Ten members of the French Team came over, including Claude Peschier, former K-1 world champion (1969), and the Lefauconnier brothers, current world champions in C-2 downriver. The 1973 world champion K-1 paddler, Norbert Sattler, was also on the spot along with a very fine contingent of top American paddlers. All this proved to be very tough competition for our paddlers: only two Canadians managed to make it to the top ten in senior men's kayak.

Through taking one penalty, Norbert Sattler proved his high class by edging Claude Peschier by 0.3 sec and Michel Magdinier by 1.5 sec, both having clean runs. In fourth place was U.S.A. slalom champion Eric Evans with a questionnable penalty that cost him first place. Eric Munshaw of Toronto, 6th overall, won the Canadian title with last year's champion Jan Stary of Jonquiere coming second. Both were on the Canadian team for the 1973 World Championships. In the team event the twenty penalty run of the U.S.A. team Evans/Nutt/Nutt provided an exciting spectacle of precision clockwork.

According to Sattler the slalom site was excellent: "The current is strong and the obstacles hard enough to per-



1973 World Champion Norbert Sattler of Austria at Jonquiere. Photo by Louis Falquet. mit good technical work, which is important in canoe-kayak." "A site technically superior to Muotathal," according to Peschier. The Au Sable River, near Jonquiere, is characterized at 1,200 c.f.s. by two offset holding rollers at mid-course, which proved fatal to 16 of the 86 participants, including C-1 Olympic bronze medalist Jamie McEwan.

The downriver was held on the Metabetchouan River, 45 minutes from Jonquiere, a somewhat short but steady heavy grade III rapid. To be noted is the very fine performance of Magdinier of France, 23 seconds in front of the American Billy Nutt, and the excellent second place of the Philadelphia crew Stahl/Chamberlin, only 4.2 sec behind

the world champions Lefauconnier/Lefauconnier, who took a bit of water, we must add, but that's part of the game.

SLALOM AND THE MONTREAL GAMES

The news of the coming of the Olympic Games to Montreal in 1976 was to all of us of the Quebec canoe family the promise of a challenging future. Canoe slalom was on the program of the Munich Games and it would be our turn in 1976. Because of our present paddling level, the challenge to put up an honest performance was certainly a big one, but the means to do so would be greatly enhanced by the promotion of canoe slalom to the level of other Olympic Sports. In short, we would gain ten years of hard promotional work.

With this in mind, the "Federation Quebecoise de Canot-Kayak"

1969 World Champion Claude Peschier. France, at Jonquiere. Photo by Louis Falquet.





Olympic Bronze Medalist Jamie McEwan of U.S. Photo by Louis Falquet.

established a seven-member site investigation committee who drafted a 35-page report by December 1972 on twelve possible sites in the Montreal area. For reasons of proximity, an artificial site 15 minutes away was selected for the purpose of a detailed feasibility study. Plans of the proposed course, an improved Augsburg, were included with a cost estimate including complete facilities of \$2,000,000. A fair proposal, we felt, in comparison to the \$5,000,000 of Augsburg.

It was but a month after, in our first direct contact with the COJO, the Montreal Organizing Committee, that we were startled to learn that canoe slalom was not part of their plans for the Montreal Games. The I.O.C. Csanadi Commission on the Game program had ruled, among other deletions (even before the Augsburg events took place, it seems), that slalom should not be part

21

of future Games. Probably on grounds of high costs, though slalom was among the cheaper events of the very expensive Munich Games, but the fact that the commission members came from countries not competing in slalom and furthermore had never seen a slalom had probably more to do with their decision.

From there on the negative stand of COJO grew stronger, as the deletion of one more event meant cheaper Games. In May 1973, the I.C.F. President Charles de Coqueraumont and General Secretary Sergio Orsi spent two days in Montreal with Mayor Drapeau and the COJO officials. The unfortunate neutrality of COJO was stressed once more: they had no say to changes in the Olympic program, this was entirely I.O.C. business. The Tokyo COHO had pressed for Judo, the Munich COJO pressed for Handball and Canoe slalom, but our COJO refused to endorse the only Olympic sport that originated in Canada.

Two more sites, having the financial support of nearby cities, were added to the established list. With this additional information, the I.C.F. made an appeal before the I.O.C. Executive Committee in Lausanne, June 23/24th. When asked by I.O.C. if they desired canoe slalom, the Montreal COJO replied NO, and so the I.C.F. appeal was rejected.

THE **JONOUIERE** BID

A desperate move by the Quebec Canoe Federation was attempted to convince the COJO before the Varna Congress. The 40-page Jonquiere Bid presented by the City of Jonquiere, following the success of the Jonquiere International and 1973 Canadian Whitewater Championships, included all aspects of slalom presentation. A separate Olympic village was proposed, 300 miles from Montreal. The newly built Jonquiere College can accommodate up to 400 persons on a private room

rental basis during the summer holidays at a moderate price. The total cost of slalom presentation, including facilities on site and athletes' room and board, was estimated at \$430,000 of which the COJO share was \$250,000, the balance being taken care of by local authorities.

This cheap proposal did not suffice in convincing COJO in time for the Varna congress where apparently nothing new happened. The Quebec Canoe Federation is determined to hold an annual slalom at Jonquiere. It is unfortunate that this spectacle must remain at least for the time-being the privilege of whitewater freaks only.

1973 CANADIAN WHITEWATER CHAMPIONSHIPS RESULTS

DOWNRIVER:

K-1JR

1 Jeff Mc Coll		Ont.	16.37.2
2 Bob Yip		Alta.	17.01.0
3 Wilson Tim		Ont.	17.10.6
4 Niels Kalckay		USA	17.26.2
5 Harold Van Winssen		Ont.	18.48.6
6 Remi Falquet		P. Q.	52.56.4
	K-IW		
1 Jean Schley Campbell		USA	17.11.8
2 Bonnie Losick		USA	17.21.2
3 Louanne Labelle		P. Q.	23.52.2
Michel Magdinier William Nutt Thomas McEwan Iean Guyot David Nutt Sandy Campbell Norbert Sattler Claude Pechier David Hartung Henri Bureaud Manfred Bour Dale O'Brian John Mc Coll Bruce Jacks Gilles Fortin Darryl O'Brian Klaus Streckman R Claude Pelletier Ted Bentley Michel Falquet Eric Munshaw David Mc Clure John Mc Coll	<u>K1</u>	France USA USA France USA Aus. France USA Alta. B. C. Alta. Ont. P. Q. Alta. Ont. Alta. Ont.	14.43.6 15.06.6 15.36.8 15.45.6 15.47.4 16.02.2 16.04.0 16.10.9 16.11.4 16.42.0 16.42.8 16.47.0 16.51.6 17.00.0 17.08.2 17.50.8 18.12.6 18.17.6 18.58.2 26.18.2
I Jim Mc Ewan	G	USA	16.45.3
2 Arthur Hohmann		Ont.	16.48.2
Arthur Hohmann Guy Huteau Miroslav Neckar Dennis Hendrey Bill Frenette		France B. C. Ont. USA	16.48.2 17.23.1 18.07.9 18.48.8 20.48.6

1	Le Fauconnier/Le Fauconnier

- 2 Joseph Stahl/Steve Chamberlin3 De Villeneuve/De Villeneuve
- Daniel Renaud/M. Andre Renaud
- 5 Brad Kilb/Stan Piorecky 6 Robert Dumouchel/Roger Plante

France	15.43.6
USA	15.47.8
France	16.22.8
PQ.	17.47.2
Alta.	18.28.2
P.O.	18,31.8

SLALOM:

K-I JR

11	1011			
1 Dieter Poenn 2 Ned Jose 3 Niels Kalckay 4 David Reker 5 Bob Yip 6 Remi Falquet 7 Hans Hoefnagel 8 Wilson Tim 9 Alan Westman 10 Harold Van Winssen 11 Graeme Sandilands 12 Richard Quintal 13 Bernard Desjardins	Ont. USA USA USA Alta. P. USA Ont. Ont. Ont. B. C. P. USA P. USA Ont. USA O	10 50 60 70 60 110 120 140 150 80 330 400 440	236 229.8 229.8 264 283.3 248.5 240.5 291 295 378 261 265 230	240 269.8 289.8 3.34 343.3 358.5 360.5 431 445 458 591 665 670
1 Bonnie Losick 2 Monique Bourdon 3 Jean Schley Campbell 4 Linda Seaman 5 Louanne Labelle 6 France-Line Magdinier 7 Joanne Potter 8 Christine Gagnon 9 Rasa D'Entremont 10 Johanne Larochelle	USA P. Q. USA USA P. Q. France Ont. P. Q. USA P. O.	90 160 130 200 400 370 420 530 570 670	272.4 220.8 251 264 204 255.9 233.9 197.2 278 152.5	362.4 380.8 381 464 604 635.9 653.9 727.2 848 822.5

K-1 178.7 188.7 1 Norbert Sattler Aus. 189 Claude Pechier France 0 189 2 Claude Pecmer 3 Michel Magdinier 190.2 190.2 France 184 194 4 Eric M. Evans 194 201 194 USA 0 5 David Nutt Eric Munshaw William Nutt 201 Ont 202 USA 8 Bougault 9 Jan Stary 10 Sandy Campbell II Henri Bureaud 12 Redgi De Buriatte 10 10 203 204 France 213 20 30 20 203 USA 195 223 Alta. 243 10 239 249 Raymond Potvin P.O. 90 110 130 14 Don Irvine15 Charlie Seaman. Jr. Ont. 212 192.8 322 322.8 16 Jean Guyot 17 Charles Frame 18 Gilles Fortin 257 227.6 300 Bruce Jacks 60 170 360 228.8 231 20 Robert Dumouchel 21 David **Newhall** 170 150 401 265 237 22 Claude Peneue. 23 Michel Falquet 415 417 Claude Pelletier 180 170 240 220 24 Thomas McEwan 462 Roger Plante 245.8 465.8 26 Leonard J. Harding 216 240.4 269.4 260 27 Guy Drouin 28 Manfred Bour 520.4 589.4 29 David Mc Clure 30 Darryl O'Brian 31 Dale O'Brian 320 Alta. 340 624 650 Alta. 32 Richard Che 33 Dave Anglin 200 Richard Chevalier P.Q 460 660 450 Ont 34 Klaus Streckmann 35 David Laufe Ont. 510 510 195.1 228 USA 705 1 36 Paul Cooper 37 Ted Bentley 738 Alta. 131.9 650 600 781.9 Alta. 785

USA

185

107

1974 WHITEWATER

RACING PROGRAM

Contains complete race schedule as well as paddler rankings ond 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 individuals. Help is requested at the local level for distribution.

Also available: colorful U.S. Whitewater Team posters at **1.50** each \mp .35 postage. Profits on the above items go to support the development of the U.S. National Whitewater Teams, slalom and wildwater.

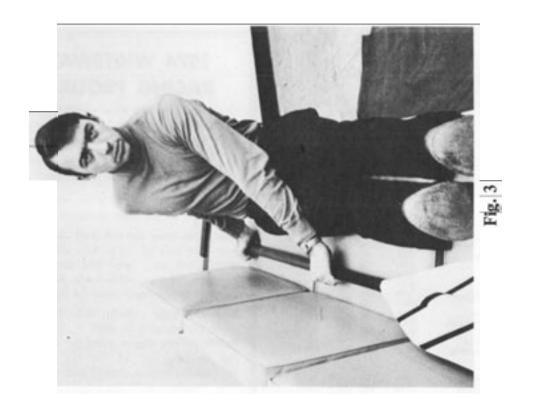
Order from: FRED YOUNG

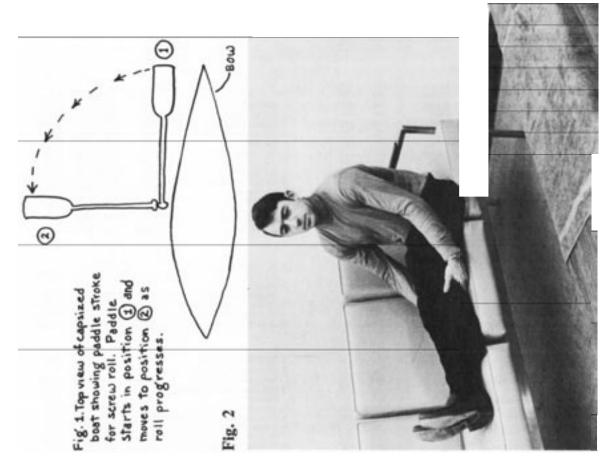
P. O. Box 246, Roscoe, **■ 61073**

C-1

	6-1				
3 4 5 6 7 8 9 10 11 12	Jim Mc Ewan Arthur Hohmann Miroslav Neckar Jim Blight Steven Fulton Guy Gingras Bill Blight Dennis Hendrey Luc Verger Ken Johnson	B. C. USA Ont. B.C. Ont. USA P. Q. Ont. Ont. France Ont. France USA USA	10 40 80 90 140 2W 220 240 220 360 180 440 480 830	237 215.2 257.2 291.6 263.4 252.2 290 295 352.6 265.3 482.7 305 360 186	247 255.2 337.2 381.6 403.4 502.2 510 535 572.6 625.3 662.7 745 840 1016
1	De Villeneuve/				
ı	De Villeneuve	France	20	258.2	278.2
2	Joseph Stahl/				
2	Steve Chamberlin	USA	170	317	487
3	Daniel Renaud/ MAndre Renaud	P.O.	290	345.5	635.5
4	Brad Kilb/Stan Piorecky	Alta.	790	155.5	945.5
	К-1 т				
	K-1 10	eam			
	Nutt/Nutt/Evans Pechier/Magdinier/	USA	20	220	240
	Bougault Munshaw/De Buriatte/	France	60	236.1	290.1
5	Poenn	Ont.	130	235	365
4		P.Q.	200	267	467
5	Dumouchel/Plante/Falquet		350	255	605
6	Irvine/Wilson/Westman	Ont.	1070	281.5	1351 5
7 8	Bour/Green/Sandilands O'Brian/Yip/Bureaud	B. C. Alta.	1410	476	1886
0	O Ditail Tip Durcaud	riid.		-	

38 Dave Green 39 William A. Baker





LEARN THE SCREW ROLL

by Jim Sindelar

If you are a kayaker, it is almost certain that either you can right your kayak using an Eskimo roll, or you want to learn. The Eskimo roll, after all, is half of what modern kayaking is all about. It is the fastest and safest way to recover from a capsize — it minimizes exposure to rocks, cold water and the other dangers a swimmer encounters. It is the ultimate in self-rescue techniques.

The best roll to learn is the screw roll. the roll of the experts which allows one to roll without changing the grip on the paddle. The advantages are 1) the speed, and 2) the fact that the paddler is ready to start paddling immediately to avoid any further damgers that may have materialized while he was underwater. The screw roll is named after the propellor-like stroke of the paddle that supplies the rolling torque. Kayak paddles have two blades, but only one of them is used when doing Eskimo rolls. The blade being used will be called the working, or *active blade*. The one on the other end of the shaft will be called the *inactive blade*. For the screw roll, the paddler starts the active blade of his paddle on the surface of the water near the bow of his boat. The blade is positioned at an angle of about 45 degrees with the surface of the water so it will tend to plane over the water when moved. The paddler then sweeps the active blade in a wide arc (see Fig. 1); the angle of the blade and its motion through the water gives the support necessary to allow the paddler to flip his boat upright with his hips.

This doesn't sound bad at all, and when you watch someone do it, the ac-

tion of the paddle is easily understood. It looks effortless and easy. The trouble with the screw roll, as almost everyone who has tried it will tell you, is that it is difficult to learn. The motion is complicated enough that when you are upside-down and underwater, the confusion factor is significant. Here is a way to do the thinking and figure out the required body motions and arm and paddle angles ahead of time in your house without the confusion of boat and water. Once you understand the physics involved, accustom yourself to the feel of the correct arm angles and motions, and practice a bit on dry land, the actual roll is much easier to learn. In the case of a semi-athletic person with a logical, engineering type mind, the first try in a boat often results in a roll. In any case, the instruction time required is usually drastically reduced. Proceed as follows.

The equipment required is a canoe paddle (more convenient and easier to learn with than a kayak paddle) and two bench/couch-like platforms about 15 to 18 inches high, separated by two or three feet. I learned on a couch and a coffee table. If you use a coffee table, some newspapers will protect the top from scratches, but make certain it is sturdy enough to support most of your weight.

The couch is your kayak. Sit on the couch with your legs out in front of you in kayak position and your seat quite close to the edge (Fig. 2). The coffee table should be on your left if you plan to roll up on the left side (the illustrations all show a left-side roll). The most natural side on which to roll is

VOL. XIX/1 25









26

American WHITEWATER

the side opposite your "control hand." When paddling a kayak, the control hand grips the paddle shaft and does not move during normal paddling, with the shaft rotating as necessary in the other hand. For a right-handed person, the control hand is usually the right hand, and he would usually roll up on the left side. Now, leaving your seat, legs and feet in position on the couch, put your hands on the floor and lower your head and torso toward the floor (in much the same way that they would move if you tipped over in your kayak) until your head is resting on the floor. Consider now that you are in almost exactly the same position as you would be in a tipped-over kayak. The surface of the coffee table is in the same position as, and represents the surface of the water.

Sit up in the original position, pick up the canoe paddle as though you were going to paddle a canoe, and move it to the position shown in Fig. 3. Note the position of the hands — knuckles down for both hands. Study the position of your paddle and arms relative to your torso. Now lower yourself to the tippedover position and hold the paddle in exactly the same position relative to your torso as it was when you were sitting up (Fig. 4). You are now ready to roll. When you start the rolling motion, the blade will sweep out over the coffee table (water) surface. Before you start the motion, study the angle of your blade relative to the table surface. IT MUST BE AT ABOUT 45 DEGREES RELATIVE TO THE TABLE, AND IT MUST MAINTAIN THIS ANGLE THROUGHOUT THE ROLLING STROKE. As you execute the rolling

NOTICE

This issue is being sent to all subscribers of 1973; RENEW NOW to receive the next five issues of 1974.

stroke, the geometry of your arms and shoulders naturally tends to change the angle of the blade so that the blade would dive into the water (table). One must compensate for this by rotating the blade progressively more with the wrists as the stroke progresses.

Start the sweep of the blade across the coffee table (Fig. 5). Pay particular attention to the angle of the blade relative to the table surface. IT MUST BE AT A PLANING ANGLE AT ALL TIMES. Your head should be tucked down on your lower shoulder. Continue the sweeping stroke until the paddle shaft is just about straight out from the couch (Fig. 6). Then, by pushing down on the hand nearest the blade and pushing up on the other (control) hand, lever yourself upright (Fig. 7). The motion to practice is that shown in Figures 4, 5, 6 and 7. Pay particular attention to the angle of the blade and the awkward stretching feeling you experience in your arms and shoulders as you reach out and make the sweeping paddle stroke. This method has the advantage that the table forces the paddle to stay on the surface during the roll and thus the paddler gets used to the strange positions of arms and shoulders this causes. People who start learning in a boat do not know this feeling, do not realize how much stretching is involved and how unnatural it all feels. As a result they generally spend most of the first session with the paddle making (far more comfortable) circles under the surface and closer to the boat where it is not effective.

When you start to feel at home with the motion and understand the paddle stroke, you will want to try it out in your boat. Here are some tips.

Besides your boat, spray skirt and kayak paddle, take along a diving mask, your canoe paddle, and if possible, a friend. A kayak instructor in

a swimming suit is best, of course. However, anyone who doesn't mind getting wet is useful to help you back upright if you fail, and even a "dry" observer who can compare your form with the illustrations is very worthwhile. The canoe paddle is suggested as a starting point because blade angle is critical and the canoe paddle has the nice handle on the end that allows a very good grip and gives a positive indication at all times of the exact angle of the blade. Start out where the water is only three or four feet deep so that it is possible to right your boat by pushing the paddle on the bottom whenever the roll fails. This saves having to bail out and dump the boat each time. The mask is so you can watch the blade and make certain the blade angle is correct. Place your paddle in roll position (Fig. 3) before you tip over and maintain that position until you are completely upside down. Don't move yet. Study your situation and see that it is the same as it was in your living room. THINK about the motion and the stroke. Bend forward from the waist and take a firm grip on your paddle (still the same "roll position" as before you tipped — Fig. 4). Double check the angle of the working blade relative to the water surface AND THAT THE BLADE IS ACTUALLY ON THE SURFACE OF THE WATER. THIS IS ESSENTIAL. Tense yourself like a spring and say one, two, three, GO! Put all your muscle into it this first time and sweep your paddle into a wide arc, REACHING AS FAR OUT AWAY BOAT AS FROM THE YOU POSSIBLY CAN. Watch the active blade through the entire stroke, as this will tend to force your head and shoulders to do the right things, as well as allow you to correct the blade angle as necessary to keep it at a climbing angle. If you duplicate the motions illustrated and do it forcefully, there is a

good chance you will roll the first time, and some chance that you will come up so fast that you will go right over on the other side.

Once you have succeeded, practice with the canoe paddle trying to refine your paddle stroke and body motion until you have minimized the force of the paddle stroke required. Finesse and good body motion mean a lot. Remember that some people can get enough force to roll using only their hands no paddle at all. When the roll comes easily and nearly always succeeds, you should switch to the kayak paddle. To begin with, switch your grip and move your control hand so you are holding the very end of the inactive blade (Fig. 8). This is the "extended paddle" version of the screw roll that kayakers call the Pawlatta. The action of the working blade is identical, but the effective length of the paddle shaft is much longer and thus the working blade won't sink as fast when you roll. Plant the corner of the inactive blade firmly against the heel of your hand, grip the end of the blade and cock your wrist (Fig. 9). The extra length of the shaft makes this perhaps even more effortless than the canoe paddle version, but the grip on the end is not as good, and THE BLADE ANGLE MUST BE THE SAME. Watch the angle carefully and control it with your wrist as needed (Fig. 10).

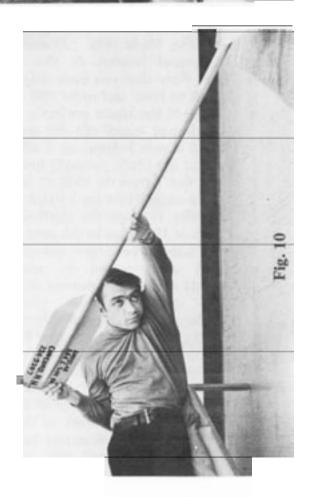
The final step is to do the same thing with kayak paddle held using normal paddling grip — the actual screw roll (Figs. 11 and 12). Your body motion must be pretty good to make this work, as the effective length of the paddle shaft is much shorter now and the

RENEW NOW! \$5.00 for 6 issues of 1974 Send your check to: P.O. Box 1584, San Bruno, CA 94066









VOL. XIX/1

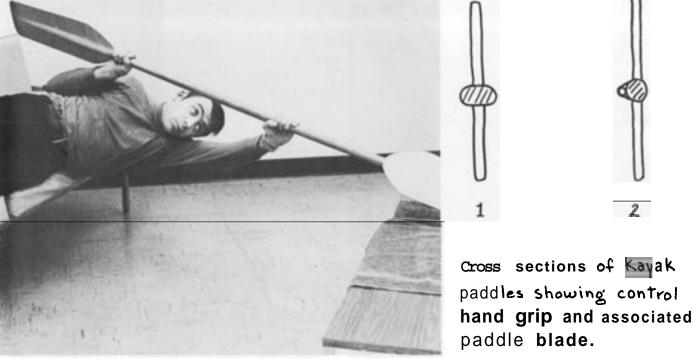


Fig. 12. Photo by J² Aspnes.

Fig. 13

working blade will sink much faster. For this reason it is well worth the extra second it takes to slide your control hand back until it rests against the inactive blade (Fig. 12) and many experienced boaters do this when they roll. Note that you have only the round shaft to hold and must still control the angle of the blade perfectly. Some sort of shaped handhold for your control hand is very helpful, as it allows you to orient the blade properly just by feel so you don't have to look at it. Here are some suggestions for a hand grip on the paddle: 1) shape the shaft slightly oval for 8 or 10 inches in the area of the control hand. The largest dimension of the oval cross-section is usually perpendicular to the nearest blade, and if the shaft is wood, wood should preferably be removed only on the sides where the grain is such that the strength is least affected (trade mark side on a wooden baseball bat). If shaft is aluminum, it is often just squashed slightly in a vise. 2) Tape an 8 or 10 inch wire or sliver of wood to the shaft by wrapping with electrical tape so the ridge thus formed lies under your knuckles when you hold the paddle.

(Fig. 13 shows shaft cross-sections for both systems.)

The last step is to practice tipping over in various assorted positions and get into roll position UNDER water instead of before you tip. When you tip accidentally in a river, you are rarely in roll position. One final suggestion is to practice some rolls with your eyes closed. A friend of ours could roll perfectly in a pool, but for a long time always failed to roll when he tipped in rivers. He finally found that he had been relying on his vision to get the correct blade angle, which worked fine in the still clear water of the swimming pool, but not worth a darn in the bubbles where he tipped.

Practice hard. There are few thrills in boating that come up to the feeling one experiences after doing his first roll "under fire."

HAUTHAWAY KAYAKS

640 Boston Post Rd. Weston, MA 02193

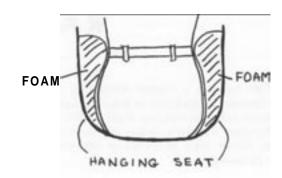
Slalom, Downriver, Touring and Junior Models Surf Kayak, Lightweight Canoes

Paddles Spray Covers Life Vests Floatation

TRY THIS

HIP BRACES — Many of the readymade kayaks on the market today come with a hanging seat in one size only. Unfortunately kayakists' seats come in many different sizes. To get the maximum effectiveness from your braces and to insure a good eskimo roll you need good body contact with the seat and do not want to slide around in one that is too big. Cutting strips of foam (the same kind that is used for knee braces) and contact-cementing them to the seat bottom will help, but putting in hip braces will help even more.

Make the braces out of a block of foam or cement pieces together. Either tape them in with duct tape, which allows easy removal if someone else uses your boat, or use contact cement to put them in permanently. See diagram.



The kayakist will have to move up in the kayak and slide back so that the foam forms a pad around his hips. This makes the kayak extremely sensitive to body movements and allows maximum use of the hips in the roll. However, a wet exit will not be prevented because the foam will give. (Submitted by Michael Mutek)

Readers' contributions are solicited for this column. Send to Try This Editor, Michael W. Mutek, 446 E. 3rd St. South, Apt. B-2, Salt Lake City. UT 84111.

SPRAY SKIRTS

neoprene — nylon back Calif. residents add 6% tax.

\$16.50

plus \$1.25 shipping

Colors: red, white, blue, orange, green. Fits most standard kayaks. Send waist size and color when ordering.

FLOAT BAGS

Split bags for foam pillar boats

Kayaks, **\$1** *2.50*

C-1, \$12.50

C-2, \$1 9.50

Coming soon — reinforced vinyl bags – transparent material, lightweight.

DEALER INQUIRIES WELCOME

Whitewater West

727 S. 33rd

Richmond, CA 94804

Easy Rider

We specialize in kayaks ond canoes for:

FAMILY BOATING • FISHING AND HUNTING • WILDERNESS TRIPS • WHITEWATER TOURING • WHITEWATER COMPETITION • SURFING

We are the exclusive U.S. manufacturer of top notch slalom boats designed by Pau! Hohn, West Germany. Hahn boats won one Bronze and two Silver Medals at the 1972 Olympics.

Complete line of accessories like Kober paddles, Harishok life vests, flotation bags, spray skirts, etc.

Write for free 1974 brochure.

Dealer inquiries invited.

For more information on our Competition boats, touring boats and top accessories like paddle jackets, spray skirts, car racks, etc, write for free catalog. Dealer inquiries invited.



RACING TIPS

This column, a regular feature American Whitewater, is designed to help the novice racer develop brttrr 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 Circle W. Springfield, MA 01089

The Reverse Gate

by John R. Sweet, Penn State Outing Club

At least four reverse gates are required in a slalom course, and there are generally more than this minimum, sometimes eight or ten. Most novice and intermediate paddlers have more trouble with reverse gates than any others, but this need not be so with knowledge and practice.

There is, of course, no single correct way to run a reverse gate, as conditions vary, but there are several things to keep in mind. First is the approach, and here timing is of utmost importance. The turn from forward to reverse must be at the correct spot, which varies with the skill of the paddler. Ar expert should usually snap a quick turn immediately before the gate, while a less skilled paddler will need a bit more room to line up. Too early a turn, however, will generally cause poor alignment as the boat tends to drift off course when backing up a long ways. Similarly, when the gate is approached with a ferry, such as from an upstream gate, you should try to ferry only high enough to get above the gate, avoiding a long reverse approach.

Second is the negotiation itself, where speed and angle are of paramount importance. Frequently all that is necessary is to get the boat moving backward with the current and guide it thru the gate. Powering backwards is unimportant if the reverse gate is followed by a forward gate requiring a quick turn. In fact, under some circumstances it may be necessary to paddle forward in the reverse gate to slow the boat for a very quick turn. But when the course allows it, paddling vigorously backward will shave seconds off your time. Rarely should a gate be run straight thru, even reverse. Always angle the boat to give an advantageous approach to the gate following.

Finally, in leaving the reverse gate, it is important to initiate the move to the next gate quickly, often before your bow has cleared, but without the overanxiousness which can cause a pole touch with the last few centimeters of the boat.

In summary then:

- 1) Turn crisply, as close to the gate as your skill permits.
- 2) Paddle as forcefully thru the gate as the course allows, slowing only if essential.
- 3) Start your next maneuver quickly as (or before) you clear the gate.
- 4) Naturally work to avoid careless touches thru out the negotiation.

CLASSIFIED AD APPEARING IN THE JANUARY, 1974 WVWA "SPLASHES":

WANTED: All weather chick to paddle open C-2 bow. Prefer outspoken brunette with strong pry. No heavies. Must be good swimmer, or at least an easy floater. Contact Owen Cecil, Pittsburgh.

BEAR TRAP

by O.K. Goodwin, AWA Safety Chmn.

The combination of a swamped canoe, a swimmer and rock-strewn rapids is dangerous; especially so, when the swimmer is unaware of the potential danger.

It is inevitable that the situation described here is waiting for unsuspecting beginners in whitewater. It is a classic example of how the graceful canoe, gliding through the beautiful rapids, can suddenly become the instrument that bruises, maims, or kills.

If for any reason a canoe swamps in whitewater, it is transformed into a graceful but stupid juggernaut. It is pushed along by the current in a sluggish pattern and slowly, ponderously makes its way through the rock garden, leaving little ground-off spots of color on the rocks it caresses.

Each time a rock is kissed, the **press**ure of water against canoe is **translated** to the point of contact with rock such that the resultant concentration of force is beyond comprehension. By calculation, this force has been found to be in the range of **tons per square inch!**

This, I think, is reason enough for a swimmer to avoid that position between a swamped boat and the rocks just downstream. To let himself stay in that area would be like tippytoeing onto the trigger of a monstrous bear-trap. The whitewater manuals all tell of this danger. It is true of any moving water and is a hazard that you will quickly respect once you have witnessed the consequences.

The point (with emphasis):

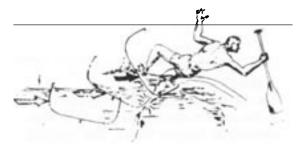
If you find yourself in the water drifting along with your boat, get away from the downstream side of the boat! Even if you are able to stay in your boat after it swamps, be aware of the following customary sequences of events:

A swamped boat is virtually uncontrollable in moving water.



SWAMPED

It broaches (becomes broadside to the current) easily. Drifting in this position, the boat tends to catch on any obstruction, jolts to a stop, and the paddler's momentum carries him over the side — downstream.



2 BROACHED, BOUNCED-OUT

The trap is set!

By directing his attention to the boat (attempting to get back aboard, fending-off or just trying to hold it) the paddler is caught in the closing jaws of boat and downstream rock.

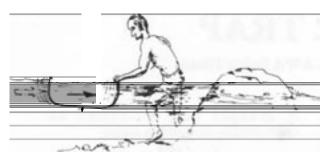
CANOES WEST BAGS

Made of waterproof sturdy nylon Various shapes and sizes \$7.50 •\$19.90 Free Brochure — Write

ANN DWYER'S CANOE CALIFORNIA

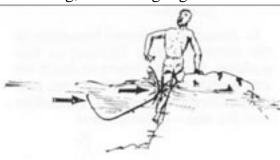
P. O. Box 61, Kentfield, CA 94904 Dealer inquiries welcome

VOL. XIX/1



3 INATTENTION TO CLOSING VISE

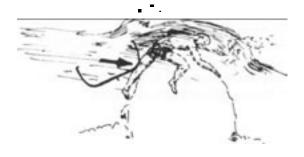
When boat and rock meet with ankle (or leg, or torso) those tons of force build quickly in an excruciating, bone-mangling vise.



4 PINNED! (7 TONS OF HYDRAULIC FORCE AT 5 MPH)

Gotcha!

The situation could be even worse: If the events described occur in fast, somewhat deeper water, the trapped paddler with leg or ankle anchored, might be forced underwater by the strength of the flow — and drown.



5 DEEPER WATER

(This last possibility almost became fact again on the Lehigh River July 21, this year. It is believed that the only thing that saved the victim was a pocket of air which formed

in the moving water downstream and under his face. This allowed him to breathe even though he was fully submerged, until the rescue was **successful.**)

After the trap is sprung, the victim is helpless. **Immediate** practically assistance and a lot of muscle power are then imperative. Very possibly one or two persons can aid the victim (if they can get to him) by easing the pressure of the boat on his anatomy, helping him to keep his head above water, possibly even shifting the boat so that a release can be achieved. Getting to him may be a problem, however. Swimmers need support to maintain their position in moving water, otherwise they sweep past the victim with the speed of the water, as helpless as the victim. Even when the water is relatively shallow, a safety line, in secure hands upstream will provide a steady support.

Once it is determined that the release of a victim requires more muscle, every available paddler should be utilized. An urgent rescue should muster **all** hands, immediately.

One or more hauling lines, placed so that the boat position can be shifted as quickly as possible, should be employed. Experienced trip leaders usually have a line with them (some even carry light, "Come-along" blocks and tackle) and know how best to use them. This effort applied must **use** the force of the water; simply pulling upstream against the flow is seldom successful.

The boat may be rolled, slid or tilted so that the water flow will help lift it and release the trap. Each situation requires its own solution.

Unfortunately for the victim this movement of the boat may cause additional pain. Seldom will a boat be released without it. The sooner the rescue is accomplished, however, the less pain must be endured. If the situation remains uncorrected for long, the victim may become more securely

trapped by a collapsing boat. **Speedy** rescue is essential whenever the trap closes.

Potentially, the trapping of a paddler between boat and rock is so serious that it should be avoided at all costs.

It takes only a little knowledge and effort to prevent this type of accident. Legislation cannot do it. Beginning whitewater paddlers must be made aware and you, the paddlers that are aware, must do it.

WHITEWATER

COACHING MANUAL

by Jay Evans, U.S. Olympic Coach

A guide for the serious racer and the person who wants to help him. Tips on physical conditioning, mental preparation, advanced slalom and wildwater technique, use of videotape, how to run a training camp, psychological testing, etc.

\$5.00

201 McNutt, Hanover, NH. 03755

CLASSIFIED

NUMBERED RACING BIBS. Souvenir type or re-usable. Name imprinted or plain numbered in stock. Start & Finish Banners. Catalogue. RELIABLE RACING SUPPLY, 253 Bay Road, Glens Falls, N.Y. 12801 (518) 793-5677.

CANOEING WATERS OF CALIFOR-NIA by Ann Dwyer. \$4.00 pp. (CA residents add tax.) CANOE CALI-FORNIA. Box 61. Kentfield. CA

WHITEWATER GUIDES. Nantahala Outdoor Center located on the Nantahala River and Appalachian Trail, near the Smoky Mountain Park and the Chattooga River, needs experienced paddlers as whitewater instructors and guides during the coming season. Openings for restaurant and motel workers also. Write Nantahala Outdoor Center, Star Route, Bryson City, NC 28713.

instructions for CARE AND HANDLING OF YOUR CIRCULATION MANAGER

When handled properly, your AWA Circulation Manager will give you an enormous amount of service, at times approaching the miraculous. He will tackle jobs that no one else would want even if they were being paid for it. The following tips on the care and handling of your Circulation Manager will greatly enhance your chances for a productive and mutually rewarding relationship.

- 1) **SEND IN RENEWALS NOW** if you haven't already. Don't put it off and then chew out your C.M. in July for not coaxing you along as commercial magazines do.
- 2) WHEN YOU CHANGE YOUR ADDRESS, you must write him or you won't get your American Whitewater. Include your old zip code: that's his filing reference.
- 3) **DON'T BE NASTY OR THREATEN**; your C.M. has tender feelings and may misplace your letter for several months while he cools off.
- **4) HAVE PATIENCE:** your C.M. has a full-time job, a family and a love for paddling besides his C.M. duties. Requests for information and Back Issues are a heavy load and of necessity have less precedence than other circulation detail.
- 5) **ENCOURAGE MEMBERSHIP.** With more subscribers, your C.M. would be able to hire more clerical help to give you the service you expect. Show **Whitewater** to your paddling friends. Have your club newsletter print a publicity blurb like the following:

The American Whitewater Aftiliation and Bi-Monthly Journal tells you how, where and when to paddle whitewater safely, plus slalom and wildwater racing news and photos. For sample issue write AWA, Box 1584, San Bruno, CA 94066.

VOL.XIX/1

AWA Affiliates, continued

NEW JERSEY (Cont.)

Murray Hill Canoe Club
W. J. Schreibeis
Bell Labs., Rm. 1C-249

Murray Hill, NJ 07974

Rutgers University Outdoor Club Mrs. Rusak Douglas College Library New Brunswick, NJ 08903

NEW MEXICO

Albuquerque Whitewater Club Glenn A. Fowler, Rep. 804 Warm Sand? Dr. S.E. Albuquerque, NM 87123

NEW YORK

Genesee Down River Paddlers Al Carlin RD-2 Proctor Rd. Wellsville, NY 14895

Adirondack Mt. Club Genesee Valley Chapter Doug. Smith, Rep. 769 John Glenn Blvd. Webster, NY 14580

Adirondack Center: For Outdoor Education Rist Bonnefond Glenburnie Rd. Putnam Station, NY 12861

Appalachian Mt. Club New York Chapter John Meirs Midlane Rd.. Box 1956 Syosset, NY 11791

Ka-Na-Wa-Ke Canoe Club Arthur Miller 407 Beattie Street Syracuse, NY 13224

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

The Boulder Bashers Canoe Club Rohert Evans 353 Seneca Rd. Hornell, NY 14843

NORTH CAROLINA

Carolina Canoe Club Bill Brauns Box 9011 Greensboro, NC 27408

Cuyaboga Canoe Cruising Club Chas. A. Tummonds 10465 SR 44, Rox T Mantua, OH 44255

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

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

Wilderness Adventures Charles Comer 17 Lonsdale Ave. Dayton, OH 44519

OREGON

Oregon Kayak & Canoe Club Box 692 Portland,, OR, 97205

PENNSYLVANIA

Penn State Outin John R. Sw 118 S. Buckhc State College, P Philadelphia Can Dr. David K 4900 Ridge Philadelphia, PA

Sylvan Canoe Donald Huec Arch Stree Verona, PA 15147

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

Canoe, Kayak & Sailing Craft
Douglass Ettinger
701 Wood Street
Wilkinsburg, PA 15221
Wilderness Voyageurs
Lance Martin
Box 97
Ohiopyle, PA 15470

Appalachian Mt. Club, De Lavare Valley Chap. Don H. Pitkin 923 Springwood Dr. West Chester, PA 19380

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

SOUTH CAROLINA

Carolina W W Canoeing Assoc.

Jerry L. Paul

3412 Harvard Ave.

Columbia, SC 29205

Savannah River Paddlers Explorer Ship 121 & Sea Scout 404 Jim Hill 1211 Woodbine Rd. Aiken, SC 29801

TENNESSEE

Carbide Canoe Club Herbert Pomerance 104 Ulena Lane Oak Ridge, TN 37830

Bluff City Canoe Club L. Migliara Box 4523 Memphis, TN 38104

East Tennessee White **Wa*er** Club Rht. G. Humphries, Jr. 119 Alger Rd. Oak Ridge, TN 37830

Tennessee Valley Canoe Club Geo. M. Marterre Box 11125 Chattanooga, TN 37401

Sewanee Skiing & Outing Club Catherine Perry University of the South Sewanee, TN 37375

Tennessee Scenic Rivers Association Box 3104 Nashville, TN 37219

TEXAS

Texas Explorers Club Bob Rurleson, Rep. Box 844 Temple, TX 76501 Explorer Post 425 B. Millett, 708 Mercedes Fort Worth, TX 76126 TEXAS (Cont.)

Boy Scout Troop 51 Tom Sloan, Scoutmaster 2908 Bedford Midland, TX 79701

Down River Club—Dallas Paul W. McCarty 1412 Oak Lea Irving, TX 75061

Mrs. Bruce C. Hodgman 100 MacDonough Dr. Vergennes, VT 05491 Marlboro College Outdoor Program
Malcom Moore
Marlboro, V T 05344

VIRGINIA

Coastal Canoeists, Inc. Tom Frink 319 • 65th St. Newport News. V A 23607 Explorer Post 999 R. Steve Thomas, Jr. 3509 N. Colonial Dr. Hopewell, VA 23860 Ridge Voyageurs Ralph T. Smith, Rep. 8119 Hill Crest Dr. Manassas, VA 22110 University of Virginia Outing Club Box 101X, Newcomb Hall Sta. Charlottesville, VA 22901

WASHINGTON

U of W Canoe Club
IMA Bldg.
University of Washington
Seattle, WA 98105

WEST VIRGINIA West_Virginia Wildwater Assn. Idair Smookler, Rep. 2737 Daniels Avenue South Charleston, WV 25303

WISCONSIN

Wolf River Canoe Club R. Charles Steed Wolf River Lodge White Lake, WI 54491 Wisconsin Hoofers Outing Club Shirley Delsart 1309 W. Dayton Madison, WI 53715 Sierra Club John Muir Chapter Jim Senu 10261 N. Sunnycrest Dr. Mequon, WI 53092 Kayaks Ltd. John Weil 5980 Dawson Ct. Greendale, W I 53129

CANADA

B.C. Kayak and Canoe Club 1606 W. Broadw Vancouver, B.C., C North West Voyag Canadian Youth Hoste 10922 - 88th Av Edmonton, Alberta T

AUSTRALIA

Indooroopilly Canoe
Box 36, Indooroop
Queensland, Austr