

American **WHITE WATER**

the Journal of the American White-Water Affiliation



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November, 1959



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American

WHITE WATER

Sponsored by The American White-Water Affiliation

November, 1959

Volume V

Number 3

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American WHITE WATER is mailed to all members of the American White-Water Affiliation in May, August, November and February. Membership is open to all who are interested in river sport, for the sum of \$2.50 per year.

The magazine welcomes contributions of articles, photographs and drawings, but assumes no responsibility for them. Address all editorial material to the Managing Editor or to the nearest Regional Editor. Correspondence regarding the Affiliation or boating information should be sent to the Executive Secretary, Maurice Posada, 417 Riverside Drive, New York 25, N. Y.

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COVER PICTURE CREDITS: Upper left — Frances Whitney; upper right, Roscoe LeGresley; lower left, Martin Vanderveen; lower right, Elizabeth Whitney.



DEAR VAN: I wonder how many readers agree with me in missing competition results that used to form a big feature of AWW? I know you have a space problem, but I like to look back in my old issues for the past records, and this I'll never be able to do for the year 1959. There were big forward jumps in technique this year in the Eastern events; for instance, practically all the kayak downriver and slalom firsts were taken by Paul Bruhin, who is probably the first fully qualified practitioner of the Duffek technique to hit these shores. Bruhin went on to take third in the Salida slalom and second in the tenth annual Arkansas Downriver Race.

We certainly aren't getting this news in the papers, so why not save a little space for it in our own publication?

Peter D. Whitney
2633 Hillegass Ave.
Berkeley 4, Calif.

We anticipated you on this one, Peter. We now have a Racing Editor who will make it his business to gather up not only race results, but also race information and interesting sidelights. See George Siposs' first article in this issue.

GENTLEMEN: Your magazine is truly well-done in print and make-up and shows your outstanding efforts.

Dieter Stiller
Hans Klepper Corp.
820 Greenwich Street
New York 14, N. Y.

Thanks for the kind words, Mr. Stiller. We're trying to put out a publication that will do justice to our sport. We appreciate letters like yours, but we like to get the brickbats too. It's only through constructive criticism that we can further improve the journal.

GENTLEMEN: Here's \$5.00 from your Japan member to cover me for the next two years. Can't think of any other membership that gives me more pleasure, although since I have neither the spare time at present nor any colleagues in the sport over here, my enjoyment is totally vicarious.

I am one of the lucky owners of a mimeographed copy of Walt Burmeister's opus, and would be happy to have you put me down for a volume of the same when published (which I hope will be soon).

I would rather see the name of the organization remain "AWWA" rather than "AWA". "AWA" could be Wanderers or Workingmen or almost any kind of association, but those two big W's have come to mean WHITE WATER with a splash.

Charles "Chuck" B. Bowden
c/o INTECO, CPO Box 601
Tokyo, Japan

Why don't you introduce white-water sport in Japan, Chuck? There must be some good rivers there, and the Japanese would probably take to the sport with enthusiasm.

DEAR MR. VANDERVEEN: Thanks for your letter. I will gladly sell sets of my pictures of the AWA Clearwater trip for the price of \$18.50 per dozen. This set is made up of the best of the pictures I took, and would be 5x7" in size. If anybody wants less they would cost \$2.50 each.

Roscoe LeGresley
Freelance Photographer
Box 448
Kooskia, Idaho

Some samples of Mr. LeGresley's photos are on the cover and with the Clearwater story.

EDITOR: I would like to see more articles on the technique of paddling a kayak or foldboat on a cruising tour.

Fred Verrillo
159 Lewis Ave.
Meriden, Conn.

We don't know of any special techniques required for paddling on a cruising trip other than those normally used for any paddling. However, we do have something of interest to the touring fraternity coming up in the February issue—an illustrated article on how to stow duffle in a kayak.

DEAR VAN: It was a clever move making George Siposs Racing Editor. He is a strong enthusiast and an extremely hard worker. His appointment is an honor for our club (Ontario Voyageurs). I am the cruising type myself, but I disagree with the idea that white-water races are dangerous. To my mind a well organized slalom race is about the safest way of enjoying white water. Careful selection of the course, safety measures and a number of helping hands makes a slalom an ideal training ground.

Together with the British Columbia Kayak Club we are literally pioneering kayaking in Canada. Vern Rupp of the BCKC is making ambitious plans to prepare a river guide for B. C. rivers. I promised him I would find out about the I.C.F. system of river marking. Is the list of symbols published in the Spring issue of American WHITE WATER complete, or where could we obtain detailed information?

George Topol
1557 Main St., West
Hamilton, Ontario

According to the latest information I have the list is complete. However, you might try writing to M. Emile Hoffmann, whose address was published with the maps in the Spring issue.

From your Editor

Several people have suggested a series of articles on favorite river trips in various parts of the country. At first glance this seems a good idea. However, if we wrote up just one trip for each affiliated club it would take over five years for our quarterly magazine just to go through the list of affiliates. It seems to me that it would be more practical for each club to make up a guidebook of all its favorite streams and make copies available either through AWA or directly. Some excellent pioneering has already been done in this field. If the book were printed by an inexpensive process such as mimeographing or even offset, the cost should be within the limits of what a club can afford; and, of course, the club would recover its investment as the books were sold.

The next most frequent comment about the magazine relates to the subject matter of the articles. We have endeavored to maintain a balance in the selection of materials. In addition to trying to have something about each part of the country in each issue, we have attempted to include material on equipment (both home-built and purchased), techniques, safety (what to do if your technique is inadequate), conservation (so our wild rivers won't all be converted into mudholes or millponds), club news and Affiliation news, plus one or two stories of general interest. Racing news has been somewhat neglected, but will be a regular feature beginning with this issue. Let me know what your ideas are.

Every once in a while we run across a new word that seems a graceful and expressive way of presenting an idea. Paddleboats in Wolf Bauer's articles is just such a word. It expresses a collective idea without resorting to the cumbersome phrase "canoes and kayaks."

Martin Vanderveen

The American White-Water Affiliation

We are many individuals who wish to promote river touring, and to keep informed about wilderness waterways and the ways of white water.

We are an affiliation of outdoor groups, outing associations, canoe clubs, ski clubs, hiking groups, all interested in river touring for our members. Our groups range from the Appalachian Mountain Club in Boston, to the Washington Foldboat Club in Seattle. These groups have pioneered in developing river know-how. They are the local sources from which flow the currents tributary to our growing sport. Through group representatives, the knowledge of all is made available to all.

We are a non-profit organization. Our organizational simplicity permits all dues to go directly to the building of our magazine and services.

OUR PURPOSE

To encourage **exploration** and enjoyment of wilderness waterways; to foster research, development, and teaching of improved techniques and equipment designs for safely negotiating white water; to protect the wilderness character of our waterways for the growing number who are discovering the rewards awaiting the river tourist.

OUR PUBLICATION

All members receive our quarterly magazine "American **WHITE WATER,**" which is a voice for all American boatmen. You are urged to contribute articles, pictures, cartoons, information and ideas (to increase the fun of our sport and ideas for improving our services to you).

MEMBERSHIP

Membership is on an annual basis with the new year *starting in* March.

Tell your friends who might enjoy canoeing or cayoneering about the AWA. Their \$2.50 will help foster enjoyment of wilderness water and bring each into the boating fraternity through the pages of American **WHITE WATER** magazine.

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Mail to: American White Water Affiliation, 2019 Addison St., Chicago 18, Ill



Canoeing in Czechoslovakia

BY JAN SULC

Czechoslovakia is a small state right in the middle of Europe. It is half the size of Colorado, but has 13,500,000 inhabitants. That is more than 300 persons per square mile, so it is not so easy to find a real wilderness in this civilized country with highly advanced industry.

Our rivers are mostly calm and relatively small. Our mountains have no glaciers, so the rivers have only the spring snow runoff, and are low in the summer.

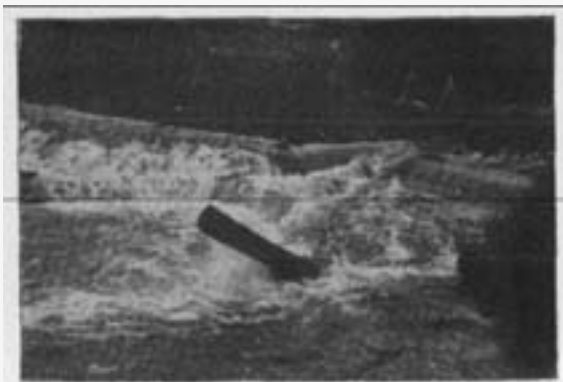
Once we canoeists had a very beautiful river, with adequate water in even the dryest summers, just before the gates of Prague. The name of this mother of Czech rivers is the Moldau. Our world-famous composer **Bedrich Smetana** made it immortal with his symphonic poem "The Moldau." In this excellent music you hear not only the calm and mild parts of the Moldau, but

its torrents and rapids.

If now Smetana could see his beloved Moldau, he would be very surprised. Four high dams have quite changed its character; other dams are being built. They were required to furnish heavy industry with electric power.

Only parts of this beautiful stream remain untouched, along with its tributaries, the **Luznice** and the Otava. What remains is mostly calm, with only easy rapids. The excitement that is available to canoeists on the rivers is at the weirs with sluice-gates formerly used for the passage of rafts. The rafts no longer are seen on the river, being obsolete, but the sluices remain and for all their artificial origin, are real white water!

Canoeing is very popular in our country. In contradistinction to the rest of Europe (with the exception of



France) the Canadian canoe is more popular than the kayak. From this wide participation, have been developed many excellent competitors, particularly in the canoe, who have gained many victories for our colors in the Olympic Games and World Championships. Our sport-executives also have a very good reputation in the canoeing world, the Czech Dr. Karel **Popel** being the President of the I.C.F. and myself and Vacek serving as representatives on the Slalom and Paddle Racing Committee respectively.

The building of dams forces the tourists to seek new stretches of water. There are the upper parts of streams, wilder but of course with adequate water in spring only, or exceptionally in summer after heavy rains.

The relatively new sport of slalom soon found keen enthusiasts in our country. In 1947 and 1949 we went to

Geneva for the first European World Championships as learners, but by 1951 in Steyr, Austria, we were winners in C-1 and in 1953 in Merano, Italy, and 1955 in Tacen, Yugoslavia, we were best nation in the world in this sport! In 1957, in Augsburg, in West Germany, we lost our first place among the slalom nations to the team of East Germany, which was in many respects our pupil.

Slalom competitors and touring youth looking for white water in our country get one benefit from the dams in return for the beautiful stretches of water they have taken away. The dams do provide a regular flow of water on the courses that remain.

Recently we succeeded in finding two slalom courses that could be compared with the world's best. One of these, in the south of Bohemia, could never furnish an international race because there is no good lodging in the neighborhood. But the second is the scene of a popular international race.

It is on the **Elbe**, the biggest river of Bohemia. The spot of which I speak is in the Kukonose (Giant) Mountains. Compared to the Rockies or Sierras, there is nothing so gigantic about them. They lie on the northern frontier of Bohemia, and not far from the highest peak, **Snezka** (the Snow Hill), 5,200

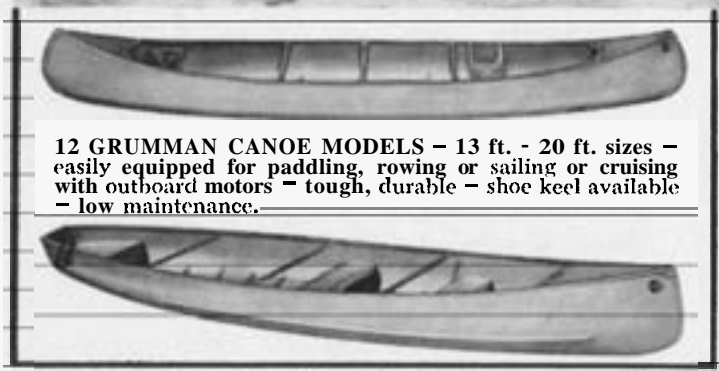


feet, the **Elbe** springs from several sources. Flowing through the famous winter sports center of Spindleruv myln (Spindler's Mill), the river is a quite small and wild creek, from 45 to 75 feet wide. In the summer it is not suitable for canoeing, except that a small dam can be opened to provide water—about 500 cubic feet per second for slalom, about 750 for giant slalom.

Right here we have a white, roaring stream with uninterrupted rapids. A stretch of about half a mile is used for slalom, another 3-mile stretch for the giant slalom. Competitors take 12-13 minutes for this last course, and this short time is **sufficient** to make them quite exhausted. You in the States know that brave little woman from our neighbor, Austria, **Fritzi Schwingl**. She said,

after having capsized in the Giant Slalom in the year when her memory of the United States was quite lively, "The Arkansas River Race is much longer, but not so difficult. Here you have no place to breathe, as you do on our Salza (in Austria) or the Arkansas. Here you have to go without respite, always in the thick of things, and you must endure it and go through, or fail."

The International Combination White Water Race on the **Elbe** at Spindler's Mill is young, but already a very popular race in Europe. Perhaps it will be possible some day to hold the World Championships there and to welcome competitors not only from all of Europe but from the States too.



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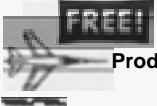
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White Water on the Clearwater

by PETER WHITNEY

Some three-score persons made rendezvous under the red cedars and among the ferns of a campsite on the banks of Idaho's Selway River last August 5. They were about to make history in the field of white-water sport.

They were pioneering the descent of three branches of the Clearwater River by organized white-water teams. They were also pioneering because they were taking part in the first river trip the American White-water Affiliation had ever sponsored.

And at the end their leader, who should know, as he acts as a boatman on Western river expeditions, was to pronounce that it had been the roughest white-water cruise that he had ever seen made by a general river-touring group.

That leader was Oz Hawksley, last year's AWA Executive Secretary. He had spent three weeks before the trip scouting some 200 miles of the three Clearwater tributaries, and had driven 2,000 miles over rough, dusty mountain roads in the process.

Co-sponsor with the Affiliation was California's Sierra Club, whose River Touring Chairman, Lou Elliott, provided ten-men rafts, with boatmen to row them.

About half the people who signed on were AWA members or came on conservation missions from groups across the continent. The other half were regular Sierra Club river tourists, many of them innocent of the joys of fast water.

Some of the Affiliation contingent came from as far away as Philadelphia, New York and Louisiana. And even the Sierra Clubbers had to travel from 1,000 to 1,500 miles to get to the Clearwater, which is the tributary of the great



North Fork of the Clearwater
photo by Oz Hawksley



and Some got Wet
photos by Roscoe LeGresley

Snake River down which Lewis and Clark found their way to the Columbia and the sea.

The river proved to be a stemwinder, particularly the steep chutes and boulder gardens of the Lochsa, on which two days were spent, and the unrelenting downgrade of the North Fork, which took three paddling days.

About a dozen kayaks and canoes were present at the start, but the number was reduced by about half by the time the trip ended. One **foldboat** and one fiberglass kayak were totally **destroyed**. Others were retired by prudent paddlers who acknowledged themselves outclassed and sought refuge on the rafts.

One rapid on the North Fork, having the picturesque and unexplained name of Irish Railroad Falls, was not run by anybody, through when the ten-man rafts were lined down it with a single boatman apiece, some got loose, to the ineffable joy of the photographers. The small boats were portaged around this one.

Another rapid about which the Idaho natives shook their heads was Government Creek, half a day's journey down the river from, where the road ended and true wilderness began.

This proved to be a dilly, all right, with 28 feet of drop in about a fifth of a mile, distributed around an S-turn. It began with a chute immediately followed by a rock garden where the choice of course was nothing short of desperate. It was there that your editor's fiberglass kayak met its end.

The writer of this article had all but shaken hands in final farewell to the Editor at the lip of the rapid, and had asked the latter to keep an eye out for possible wreckage as he followed down. Editor Vanderveen looked but, failing to see that the writer had made it, **assumed** the worst and made for the shelter of an eddy. He made the eddy, but flipped when getting back into the main current. Getting into the lee of a boulder, Van tried to empty the

boat out, but it got away from him, leaving an unheroic looking editor standing on the rock awaiting a lift from the



Some Rocks got in our Way
photo by Pat Vanderveen



This Water is Really White
photo by Jan Hawksley



A Rough Stretch
photo by Elizabeth Whitney



and a Calm Spot
photo by Pat Vanderveen

next raft. Lacking the editorial guiding touch, the well-filled boat continued downstream until it crunched across a rock, thereafter finishing the run in two sections. One half was later found floating peacefully at the foot of the rapid. The kayak's bow section is probably at this moment a caravanserai for steelhead on their spawning progress upstream.

The toughness of the trip was a surprise to all. Advance reports and a study of the river profile maps had not suggested the sharpness of some of the chutes or the cluttered condition of the rock gardens. The Clearwater is the next big tributary of the Snake downstream from the Salmon, but it had never been used for commercial river trips. There was no record of anybody having run the North Fork at all, before the Hawksley scouting party.

For many of the Eastern small-boat men it was their first experience of the use of inflated rafts as tenders for a kayak or canoe group. Westerners have to run rivers far from roads at times; they understandably like to keep their kayaks and canoes filled with flotation bags rather than cooking and eating gear. Hence the blimpish black assault craft act as the pack-mules. Since they are themselves awash with water much of the time, everything has to be rigorously waterproofed and the bags well tied down.

The group's one bad loss of *materiel* came when a raft hung up in a rapid and plastered itself vertically against a rock. The passengers all got safely ashore, and the rescue party decided the raft itself could be dislodged only if it were lightened. In the heat of the moment, Lou Elliott's box of tools was cut away before the human chain was ready to pass it ashore; the box spilled and as a result, hammers, monkey wrenches, and cans of patching material are down there not far from Van's boat.

The rafts ran through rapids of up to class IV difficulty without inspection, even with four or five passengers aboard. The thing that makes this possible is that nobody is worried too

much when a raft hangs up on a rock; its tough neoprene hide can stand it, and even if it did puncture, there are a number of separately inflated compartments in a ten-man raft.

The result was that on continuous white water, the rafts moved faster over a day's average than the small boats. Inspection points for the **latter** were often laborious to get at, involving difficult scrambling over rocks.

One trouble with this difference in pace was that the rafts, which offered the only really safe vehicle for cameras, were seldom around when the small boats were making their most thrilling runs. The raft passengers were missing something. Many said afterward that watching the kayaks and canoes, when it was possible, was the biggest thrill of the trip.

The impression was that it takes a continuous conscious effort to maintain the compatibility of the small boats and the rafts — a **much** magnified version of the problem some Eastern clubs have in keeping foldboats and canoes within the same fold.

This writer reckoned his greatest eye-witness thrill of the trip to be watching a kayaker drop down a two-stage fall of about twelve feet in a narrow rigid slalom kayak. He successfully fought a powerful broaching effect from current funneling in from the side, and after a breathless moment rose to the top of the foam, triumphantly upright.

One purpose of the trip was to demonstrate to Federal authorities and to Idahoans that there is a legitimate interest in conserving the Clearwater as an undammed natural stream. The Corps of Engineers have plans for a dam at Bruce's Eddy that has some local support.

The people of Idaho are aware of the economic value to them of the wilderness to the extent that they will do **almost** anything necessary to preserve hunting and fishing. And the amount of white-water activity on the Salmon and Snake has unquestionably made some impression. But the running of an expedition of three-score



Monte Rowell on the Lochsa
photo by Peter Whitney

people through the wilderness of the Clearwater did undoubtedly underline the values that are threatened by dams and—incidentally—by roads that make the wilderness “accessible”—at the cost of driving the wilderness back upon itself.

Members of the trip were struck by the sudden rise in beauty and peace that followed when the trip passed the end of the road on the North Fork and entered stands of virgin forest.

If anybody had doubted that conservation is a legitimate primary activity of a white-water sports group, this was the convincer. Even the rapids had been adversely affected by the roads on parts of the trip. In the West, with its narrow, geologically youthful canyons, the only way of getting a level grade for a road often is to cut it along the banks of a river.

Dynamite had been used in constructing this “wilderness” road, and for seventeen miles the slopes of sharp newly broken rock had been bulldozed down into the riverbed. They made dangerous cutting edges for the boats’ hulls and yet more dangerous slopes for inspecting or portaging.

The trip got plenty of attention in the Spokane press, having been accompanied by a photographer on the first day out.

When members of the group sat down toward the end to hash over its mistakes as well as its virtues, there

was general agreement that the amount of time spent in shuttling detracted from the trip. The roads were dusty and the driving hours were definitely non-union.

It was agreed by many of the AWA members that the next trip of the kind should be basically a kayak and canoe trip for the paddlers rated skilled and expert, with enough rafts to carry the families of the small-boat men and to support them with supplies.

It was agreed that if there are to be AWA trips in the future, they should be more intensively advertised — listed, for instance, on member-clubs’ river trip schedules.

As to whether there should be more such trips, there seemed to be no doubt that the participation of paddlers from the whole country had been a unique value, which no individual member club could duplicate. Plans are now being discussed for future trips both in the West and in other parts of the country. One point on which there was universal agreement was that the group had found prime white water and had had a wonderful time.



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Left: George Siposs
in the river race

Photos by
Liz Kruzik
& Frank Kunz

Below: Steve Bukojensky
& S. Mazurkiewitch
in the river race

First White-Water Race In Ontario

OR

How and Why to Organize
a Competition

BY GEORGE SIPOSS



The whole thing started over a cup of coffee. Six of us Ontario Voyageurs were practicing the eskimo roll during the winter. One night in February after our weekly session we had a brainstorm: "Let's have our own white-water race. We had fun in the Eastern U. S. last year and learned a lot." At first glance the idea seemed absurd; we are not a racing club. We like to take our time—but to bring a lot of paddlers together and to advertise our sport this seemed a logical answer. A committee was promptly formed to organize slalom and downriver races to appeal to the largest possible group.

We chose the Credit River for the course. It is only twenty miles from Toronto, easily accessible, and during Spring runoff it is a paradise for white-water men. It lies in a picturesque setting and has plenty of turns, natural obstacles and waves. At the spot where we finish our runs there is a public park and an old dam now blown out in the middle, forming a chute and a

series of eddies and whirlpools. There is also a bit of still water below the dam, a highway bridge spanning the river, and a lot of small rapids; in other words a natural spot for slalom.

Early in February we mailed circulars to white-water groups, canoe and ski clubs, YMCA's, Boy Scouts, and AWA members in the Northeastern U. S. and Canada to feel out their reactions. We organized a movie (our old cruising movies) at which 250 people were present. At the show we had a foldboat assembled on the stage for inspection, and we displayed a three-dimensional plaster model of the slalom course. At the Canadian Sportsmen's Show the Tyne Folding Boats representative displayed kayaks and some beautiful photographs of white-water rivers. At the National Boat Show two of our members posted circulars at the canoe displays. We approached our newspaperman friends and articles began to appear discussing this "Canadian first" white-water competition.



Roland Pairedo on the Slalom Course

The response to all this was tremendous. Inquiries and entry form requests began to pour in. At this time we began to feel confident that the race would go over well. We obtained permission to use the public park for spectators. The aid of a troop of sea scouts was enlisted to provide assistance, safety patrols and first aid. The Ladies' Auxiliary set up a refreshment stand in the park. Breweries were approached for prizes. Local newspapers and radio stations were notified. During Easter week-end we were on the river shooting rapids amid **three-foot-thick** ice floes and in freezing temperature. The next week-end we were out with saws, axes and ropes to clean up the river, mark the channels and cut brush. In the meanwhile the **Klepper** representative wrote to Germany, and the Klepper Company sent us flags, start and finish markers, sunvisors for spectators, and numbers for the contestants.

The boys in Hamilton undertook the painting of a complete set of slalom gates. Carling's Breweries donated thirty beautiful prizes. The Klepper company sent us a bronze sea-gull as a team prize. A week before the race a local newspaper published an article about our club and the race, with over half the front page devoted to a picture of one of the boys in a big wave. The phone calls came in every five minutes. Contestants came from as far away as New York and Port Huron, Michigan. The day before the race we set up a

slalom course—and the mere sight of it was a reward for our labors.

We gave final instructions to timers and gate-judges and equipped them with armbands and stop watches. Tents were pitched in the park for the convenience of the competitors. The prizes were displayed, and as we looked at the site of the competition and saw the newly painted gates, flags flying, and competitors practicing there was pride in our eyes. The fruits of our labor were evident. White-water sport began to be known in our cities; people no longer thought of us as daredevils. We introduced a new sport in Canada.

As a final touch, a week-end picture magazine published an article about our club and the competition the night before the race.

At first a lot of people were skeptical about participating. "I am too old," "I am too slow," they said. "Racing is not for me." Their doubts were groundless. Age limits were between 16 and 60! Most of the competitors came just to have fun. This is the beauty of **white-water** competition. Just like the sports car enthusiasts' "drive to work and race week-ends" slogan, foldboats and canoes are used normally for cruising; but in the Springtime when water levels are favorable they can be used for racing.

This type of racing is really a race against the river since competitors are started at **two-minute** intervals. **Boatmanship** and techniques are learned. Through comradeship the groundwork for a club's successful summer season is laid down. New members are acquired, new friends are won, and we all have fun during practice and the race. "Did you miss that tree?" "My, what a lovely standing wave." "That gate 6 really gets me!" This all tends to weld us together. After the race we had a sense of achievement; **some** of us won prizes, and all competitors received awards suitable for framing. We all said, "Next year we'll do it again."



Care and Feeding of Kayak Paddles

by WALTER KIRSHBAUM

We are paddlers, *but* most of us don't pay much attention to *our* paddles. ~~Much~~ more tender and rich is our care for, and our choosiness about, our boats. *It* seems high time that something was *done* about this. A former World Slalom Champion here gives his opinions on *choice* and *maintenance* of the *kayak* double blade.

Length and blade area are the two principal power factors in a paddle.

Almost any kayakist who has ever played around in rapids—particularly the slalomist—has been through the the stage of being fascinated by short paddles. A tip-to-tip length of 82" is intriguing because it permits lightning-quick reactions—which are sometimes vitally important elsewhere than in slalom.

By its nature, however, the short lever arm decreases the chance of multiplying the velocity and hence the effective power of your stroke, which is what you have a paddle for in the first place. To tackle powerful current, a longer lever may be essential. And the farther from the kayak the blade is inserted, the greater its effect in maneuvering.

The length of 87" has, for me, proved to be a reasonable compromise throughout the years for all kinds of races, pleasure trips, and even kayak polo.

Short paddlers may well prefer shorter paddles than this. Certainly still-water racers can afford, with their well-trained muscles, both longer paddles and extra-large blades. Rut for the sports

kayakist, a smaller blade can be more quickly moved.

Thus the ideal compromise should be thought out with the type of boat and your own primary activity in mind.

Double-seater kayaks, or beamy singles, would permit paddler lengths up to 95".

A rule of thumb for sports singles; one should just be able to stand beside the paddle and cover its upper blade tip with bent-over fingers of an upstretched arm.

GRIP

The question most frequently asked about paddles is where to grip the shaft. Try this measuring trick: Grab the paddle and lift it till the center of the shaft rests on top of your head. When the forearms are bent at a right angle, your grip is right.



BLADE SHAPE

Curved blades, I think, give a better "feel" of the water. Flat blades, on the other hand, are safer in turbulent eddy conditions as they don't get caught so easily when you play around in a rapid.

In water polo, of course, it is impossible to "handle" the ball with a flat blade.

FEATHERING: WHY?

We feather the blades at right angles in order to reduce wind resistance. Strong upstream wind can not only thwart your downstream progress, it has not infre-

quently thrown an "unfeathered" paddler over.

I would encourage any beginner to use feathered paddles right from the start. At that time it takes only a little extra trouble to find a steady, solid grip with your right hand while keeping your left hand loose except at the moment of pulling. (This is the most common version, with the left spoon's hollow face upward while your right blade is biting the water).

A person who has once started out with parallel blades finds it much more difficult later to learn the use of feathered ones.

One not unimportant secondary reason: a feathered paddle can much more easily be spotted while floating, because one blade always will stick up.

PROTECT ■ Old-times consider their paddle the most delicate part of their equipment, to be guarded as their eyeballs. Rudi Pillwein, Austrian expert, for example, protected his blades with a canvas sheath when not in use. In train, plane or car he handled them with the same care as his expensive camera, never leaving them out of sight or reach.

IMPORTANCE OF THE PADDLE Paddles broken on white-water trips have often triggered tremendous chain reactions — above all, cap-sized kayaks. As a result, yet more masterless paddles would float gaily down swift and rocky streams. A fellow boater, chasing them, would tip over, losing his own paddle, and so on ad *infinitum*.

SOAK IT In two hours on the rough Passer River in the Southern Tyrol seven years ago, paddles that had not been properly soaked broke on the first impact; the result was several tipovers, bad damage to two kayaks, and escape of three paddles. One of these was recovered after two hours of exhausting struggle, but with a bonus — one perfectly preserved paddle lost by a Swiss friend the week before. Many of us since then have made it a point to let our paddles soak in water for two hours before use. Others began to attach

them to the boat with a line around the center of the shaft (N.B.: Use plenty of slack!)

THE SPARE It seems as if bringing a spare helps a lot; I have never broken or lost a paddle with one handy. I attach an assembled paddle, ready for use, to the kayak's deck if at all possible. Any kind of canvas pocket sewed to the deck, or an elastic cord stretched across it to secure the far blade, plus a snap-fastened strap across the shaft within easy reach of the paddler, will serve the purpose.

I insist on an assembled paddle because the time when the spare is needed is when you are in a tough spot and can't wait to put the halves together. Attach it either to foredeck or afterdeck, but make sure the blades won't interfere with your paddling.

HOME-MADE KAYAK PADDLES?

While I have been fairly successful in building my own kayaks, I say "No" to making paddles. It may be easier with the single paddle, but when it comes to the double I have more faith in well-equipped factories. Craftsmanship is required to produce a sturdy, light-weight paddle which is in good balance, properly centered, and straight. I have been using a good commercial design, and I trust the professionals. They do a tremendous job.

A FINAL TIP For those who want speed: Try to put more effort into pushing your upper blade than into pulling your lower one. Triceps muscles are less easily sprained than the biceps.

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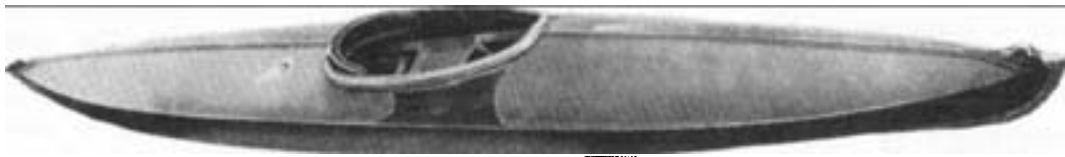
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Introduction to River Navigation

BY WOLF BAUER

In developing and teaching the subject of river touring, we ordinarily begin with the boat and equipment, followed by the basic elements of running water and hydraulics, boat-handling techniques and watermanship, and finally the art of river navigation. Much of the first three subjects can be mastered by students in their first season. Field recognition and mastery of navigational problems, however, are not so easily acquired, since the practice and exposure to its varied problems are seldom met in one season, let alone in one instruction course. To speed up the inevitable slow process of learning-by-experience is the objective of our course.

To this end I have attempted to simplify river navigation as I did river hydraulics — namely to separate, classify, give terminology, and designate various oft-repeated types of river sections and conditions into the fewest basic components. Just as in hydraulics, where even the most confusing interplay of currents, eddies and waves can be recognized and separated into known individual components; so may any river channel be classified as a form of one or more typical known stream sections. Many paddlers eventually develop a subconscious "river sense" by repetitive experience and photo-memory. Others achieve it only after a relatively long time, depending on their exposure rates to problems, or their inherent or trained powers of observation.

The more navigational know-how we can develop, the less we need to expose ourselves to situations requiring extreme boat-handling skill and physical effort to master unexpected situations. The better we grasp some of the boat maneuvers required in the classic problem spots, the more apt are we critically to evaluate the importance of our boat-handling technique as it finally applies

to river navigation. It may therefore not be amiss, at this point, to discuss navigation before going into the finer points of paddling techniques.

NAVIGATION DEFINED

One of our teaching problems is that of defining the boundaries of navigation and those of boatmanship with respect to handling currents and hydraulic phenomena, so that both students and instructors do not overlap too far and confuse basic issues.

Essentially we may define navigation as that phase of the art and technique of river running which is concerned with choosing the best channel or passage within a river section for whatever purpose of convenience, speed, enjoyment, or safety required. Paddling or boat-handling technique and watermanship concerns itself separately with the reactions of each hydraulic or solid object as it affects boat motion, direction, and stability. Although often carried out with premeditated action and preparation, watermanship is often an instantaneous reflex to the forces seen or felt about the boat as they happen. Navigation, on the other hand, operates with a variable time-lag, and is concerned not with the act of passage, but rather with the choice of passage in time for paddle technique to carry out the act. Navigation is the mental exercise before the physical demand.

Confronted with an immediate decision, the mind invariably first tries to search for anything familiar, to repeat something already known or experienced. Here then is where we can aid the subconscious thru trained recognition of camouflaged basic elements. It is for this reason that the following approach was adopted.

THE CLASSIC PROBLEM PASSAGES

Certain river sections in the form of drops, short rapids, riffles, split channels, bends, etc. can be defined and recognized in the basic variations not only as distinct and different from the immediately adjoining section, but can be found repeating themselves time and again at other locations, or in other streams. Actually there can be very few basically different types of river sections if we keep in mind that we are not talking of size or degree of difficulty of the channel system, but rather cause and effect, as we did with river hydraulics. While it is true that each so-called "classic" section may require a wide range of effort, technique and decisions for its solution and navigation, there is nevertheless considerable justification for saying that it can always be identified and referred to by name (singly or compounded), and thus be more readily filed away in the memory of the navigator. I have used the word "problem passages" to point up the fact that experience in navigation with beginners and experts alike has uncovered many problems not always suspected as basic to the passage. Here then are the minimum classified sections we have come to identify in the streams of our Pacific Northwest, which may cover most situations in other sections of the country as well:

BENDS

1. The narrow, tight, and cluttered bend
2. The **headwall** bend with or without whirl-eddy, fences, or surges
3. The **S-turn** with bouncing current
4. The side-slip riffle
5. The split two-level channel
6. The flood channel
7. The deep vertical-surge eddy channel
8. The graveyard section at green & white eddy stage
9. The full roller-eddy rapid
10. The single or **multi-stage** drop

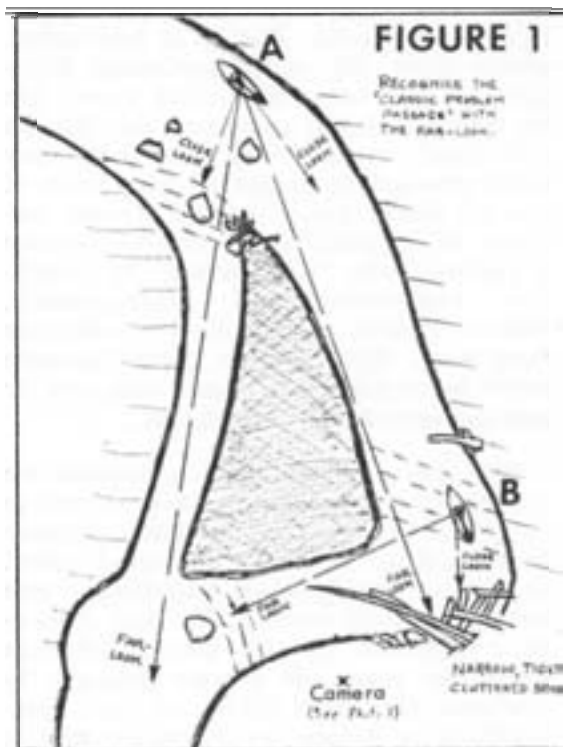
In succeeding articles we will discuss these classic problem passages from the navigation angle.

Boat-handling ability and also boat design can have a strong influence on both decisions and manner of navigating any particular problem passage, and this will be brought out later. At that time we will also touch on party management and influence of size and type of party on navigational decisions at the problem spots.

THE TWO-WAY FORWARD LOOK IN NAVIGATION

In view of the steady and more or less irresistible progress toward or down the stretch of the problem passage, it is of utmost importance that the beginner learn early to form the habit of making at least two navigational decisions at all times. These decisions are based on two consecutive visual observations of the river stretch ahead.

The inexperienced paddler is invariably "near-sighted" and engrossed in the immediate problem just a few seconds away, or a few dozen feet ahead — leaving to chance and surprise the problem that may confront him beyond. How often we can recall how the immediate easy passages lead directly into difficulties farther downstream. [See Fig. 1, Photo 1.] Just as the experienced





Close-look choice of apparent easy channel at position 'A' has lead beginner into classic problem spot which simultaneous far-looks could have solved in time.

driver keeps a sharp eye on several cars ahead of him rather than the one immediately in front, so also must the river navigator realize that the immediate decision may partly hinge on the next decision, and that it can readily be "what's up front that counts" in determining whether a chain reaction of problems is in the offing. We must develop the two-way forward look, which is essentially a combination close and far-look.

Beginners will need more time to interpret the far-look observation, and this may entail selection of a suitable holding spot in which time is gained: for example a back-eddy anchor, a slow current for back-ferrying or hovering, or a side-eddy for stepping ashore for longer study time. [See Photo 2.] The more readily the paddler recognizes the familiar features of the classic problem passages, the less far-look observation time will he need for his decision. I cannot emphasize enough the importance of constantly and consciously practicing the far-look with the close-look, especially while preoccupied with close-look problems.

The close-look generally provides confident and rapid choice, while decisions from the far-look will not always come clear-cut and final. In river running,

the mind must remain flexible to allow instant reversal of decision when adjusting to the frequent variations from the expected norm. It might be pointed out, too, that the partly solved situation seen by the far-look soon becomes the solved problem of the close-look; thus the far-look problem may be only recognized, and need not necessarily be solved simultaneously.

I have gone to some length in discussing the need of navigating far enough ahead with one's eyes to minimize the elements of surprise and need of time for decisions. The two-way forward look is an important navigational tool, and many accidents have occurred because it was not habitually applied. Not only will this habit prove its merit in navigating the problem spots, but also in "cashing in" on the actions of preceding boats at the far-look distance.



"Far-look" navigation may be from shore when eddy anchors are not convenient, or when time and high eye-level are required.

PUTTING ON THE BRAKES

Twelve years of teaching river running have brought unmistakable focus on the most prevalent weaknesses and shortcomings experienced with students. Invariably they center around the beginners' misconception of the time available for each decision and each action and correction. Perhaps the very act of contemplating the approaching problems while sitting comfortably in his kayak imparts a false and complaisant sense of time in the mind of the newcomer. If in addition the student is phlegmatic by nature, and in habit of making up his mind at his own considerate pace, he may have to be jolted into acquiring a sense of urgency.

It takes every beginner some time to become conscious of that fact, that unlike all of his other locomotion experiences, he cannot now stop dead in his tracks whenever he desires. For a time this will give him the feeling of a driver without brakes in city traffic. The paddleboat has unpredictable and usually weak brakes. Its propelling force must be applied in reverse for the purpose of slowing down or stopping; in the case of the river craft this can be done by reversing either the boat or the stroke. Thus back-paddling and back-ferrying, as well as quick pivoting and up-ferrying, are essential techniques taught almost immediately to the new paddler. Since we shall treat the fundamentals of paddle techniques later, let us confine the present discussion to the navigational aids available for stopping or slowing.

LEARN TO "GRASP AT STRAWS"

As the alert beginner picks up river sense, he soon finds that not ■■■ water pushes him downstream. Not only does he become increasingly aware of back and side eddies which he can use to arrest momentarily his irresistible downstream progress, but he also learns to suspect their locations before he can actually see them.

With increasing study it soon becomes apparent that even with a complete ab-

sence of full eddies and slack water there are countless tiny rollers, wavelets, and washed-out eddy disturbances which, if properly used, may provide braking power in addition to paddle power. Here again it should be pointed out that not all hull designs can make equal use of these. Then there are numerous narrow imperceptible side-eddies behind tiny shore projections which need to accommodate perhaps only one third of the hull length to become effective. The technique of holding one self against or alongside rocks, branches, and roots along shore, with or without the use of the paddle must all be practiced and experienced in order to become an effective tool in preparation for the art of navigating rivers. Often in holding-up along the bank without benefit of side-eddy, it is possible to drive the bow far enough upon a slight projection of some kind to gain a temporary friction anchor. Just as a driver on an iced-up slippery road seeks out spots of roughness in which to apply braking force, so will the alert river navigator learn to recognize the innumerable opportunities and methods for slowing down and momentarily halting his downstream motion.

Navigation becomes progressively easier as one's watermanship and paddling techniques improve in the act of "playing the river." On week-end trips in small groups our club members sometimes appear like a pack of hounds crisscrossing up and downstream, snooping continuously for play spots and difficult situations, as the last drop of challenge and fun is wrung out of each problem spot on the way. I must admit that other drops are also wrung out in the process, and the term "wet behind the ears" may not necessarily distinguish beginners from experts.



meet the
CHAMPION
see the Slalom 59 on
the back cover.



Conservation Comment

BY OZ HAWKSLEY

In the absence of Conservation chairman Dan Bradley, *Oz Hawksley*, past Executive Secretary of AWA, has written the *conservation* column for this issue.

The jointly sponsored Sierra Club-American White-water Affiliation Clearwater River trip in August has helped to clarify and identify the conservation problems in that area. It is hoped that this issue of American WHITE WATER will focus the attention of boaters on the issues at stake. It is especially important that lovers of wilderness rivers, and of rivers suited to non-powered recreational boating, begin to make themselves heard on the subject of dams and other "development" in the Clearwater drainage, especially since Congress recently overrode the President's veto of the Public Works Appropriations Bill. It contained \$1,185,309,093 for a wide variety of flood control, navigation and reclamation projects. Among these was an allocation of \$770,000 for continued detailed planning for the unauthorized Bruce's Eddy Dam on the Clearwater River.

Other conservation organizations have dwelt upon the wildlife and fisheries values of the Clearwater and its tributaries so that these values should be familiar to all our readers. The Clearwater trip this past August was conceived with the idea of exploring the river touring potential of the area and, if possible, giving such values nationwide publicity. If developing interest in the scenic and river boating values of Dinosaur could help save that area, why would the same approach not aid in bringing needed attention to the Clearwater? The first trip produced a group of 60 persons who **could** spread information to other conservationists and it is hoped that this number can be increased next summer.

As we contacted local people in the daily business of scouting for the trip, we engaged them in conversation about the recreational potential of the area. Surprisingly enough, we found that

there were very few people who supported the idea of dams in the area. Most of the local people would prefer to keep their rivers in a natural condition which would preserve the steelhead runs and the elk herds. Few had ever thought of the possibility that the rivers could bring in groups such as ours. They were not only receptive to the idea, but took great interest in our activities and gave us full cooperation in every respect. It was also encouraging to note that the people of Idaho take great pride in their wilderness recreation areas. The Salmon River and Selway-Bitterroot areas were often called to our attention by our hosts. During the summer, a series of articles on the Salmon River wilderness area was run in most of the Idaho papers. We found that the Selway and lower North Fork of the Clearwater are often run by local people (mostly by fishermen in small rafts) but that most of them would not attempt the Lochsa or some of the upper parts of the North Fork run by our group. Many northern Idaho residents deplore the building of roads along their wilderness rivers but justify them with the comment that they are necessary for timber access and that without timber profits their economy would collapse.

A brief summary of the condition of rivers with boating possibilities in the Clearwater drainage seems in order here. Twenty miles east of Kooskia, in the Clearwater and Nez Perce National Forests, the Selway and the Lochsa join to form the Middle Fork of the Clearwater. Although a few miles of the Middle Fork are excellent for boating, the desirability of this river is greatly reduced by the presence of a black-top highway along the bank and, nearer the junction, highway under construction. A narrow gravel road, of the type usually found in national forests, runs along the Selway as far as Selway Falls. There is little traffic along this road except on weekends, when fishermen come into the area. There are several Forest Service campsites along the river including the new

"primitive" O'Hara camp nine miles below Selway Falls. The section of the river between the Falls and O'Hara is beautiful, has several nice rapids, and retains much of its wilderness flavor in spite of the road. Unfortunately, this is not true of the Lochsa where blasting for the Lewis and Clark highway (still gravel but destined to be "improved" eventually) has destroyed natural cliff faces and produced an unsightly shoreline of sharp, jumbled boulders on the north bank. This, added to the fact that the Lochsa watershed has been badly scarred by fire in the past, would make it seem wholly undesirable for river recreation, if the Lochsa did not possess clear water and challenging rapids which make it one of the most exciting streams in the West for small boats and rafts. Twenty-five to thirty miles of the river above the junction can be run (with caution) at the proper water stage and the highway does furnish easy access.

The only true wilderness river area in this section is the upper Selway (above Selway Falls). This is in the Selway-Bitterroot Wilderness Area. Those who have seen it, praise it highly. A forester told us of virgin western red cedars which averaged 10-14 feet in diameter! Although the usual means of access to this area is by pack train, it is felt by some that small rafts and canoes, or kayaks, would be ideal. One group of foldboaters has already attempted a trip through the area, but was unsuccessful because of low water at the late season in which they attempted it. A scouting trip into the area is planned for next year and, if successful, should pave the way for group trips in 1961.

The North Fork of the Clearwater lies 40 miles north of the Selway and Lochsa rivers. Above Bungalow Ranger Station, a gravel road runs along the North Fork and the area is much frequented by fishermen. A road is also ~~under~~ construction from Bungalow to Government Creek, at the foot of Government Rapids. Beyond this point,

FOREST SERVICE IS COGNIZANT OF RECREATIONAL values and the District Ranger who spoke at one of our campfires assured us that local areas such as Moscow Bar would be left uncut as would much of the actual shoreline of the river. However, logging of the surrounding hills will do much to destroy the natural beauty of the area, even though Bruce's Eddy dam would not flood this far up the river. Logging of the National Forest lands adjacent to the river seems inevitable and our best approach to river conservation here would seem to be in encouraging the Forest Service to retain as much as possible of the areas immediately adjacent to the river for recreation. From our standpoint, Bruce's Eddy Dam should be opposed because of the "wedge" it would provide for further damming of the river at higher levels and because of the precedent it is setting for appropriations for unauthorized projects.

The Clearwater and Bruce's Eddy Dam situation is far from being hopeless. Now is the time to let your Senators and Congressmen know that you disapprove of the recent action of Congress in passing legislation which included appropriations for unauthorized and objectionable projects. The other thing you can do to help save this particular recreation resource is pleasant enough. USE IT! Local residents, legislators and the general public must be convinced of the recreational values, and use is an important criterion. Watch for announcements of next year's trip in *American WHITE WATER*.

o/σ



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Bob Downs & Van Lint — Hudson River Derby

RACING NEWS

A new department and a new staff member have been added to American WHITE WATER. Racing news has been a problem; if we covered each race individually it would take more space than our magazine can afford; if we failed to cover them we were ignoring an important phase of the sport. To solve this problem we have a new department to be handled by Racing Editor George Siposs.

All race announcements, race news, race results and pictures should be addressed to George, who will consolidate them into a single feature story for each issue. An effort should be made to get the material to him early, so he can get his story ready before deadline. Address your material to: George Siposs, 80 Clearwater Heights, Apt. 207, Toronto, Ontario.

This appointment, it is worth mentioning, helps give an international flavor to our publication, since George is our first Canadian staff member.

WORLD CHAMPIONSHIPS The World Championships this year were held at Geneva, Switzerland. None of the contestants escaped receiving penalty points. The superior physical condition of the East German team proved itself in their winning the C-2, C-2 mixed, C-2 team, F-1 ladies and F1 team events. Jirasek of Czechoslovakia was a comfortable winner in C-1. Farrant of Great Britain churned his way to victory in the F-1 class, becoming the first Englishman to win a world championship. He defeated the world's best, even Duffek of Switzerland. Duffek forgot to take a gate, and despite a brilliant performance scored fourth place. Another surprise came when Hilde Ubaniak of East Germany won the women's Class F-1, despite being a long shot.

AMERICAN NATIONAL CHAMPIONSHIPS This year's Nationals were at Glenwood Springs, Colorado, July 3rd, 4th, and 5th. The course was unique, involving two rivers, the Roaring Fork and the Colorado. The Roaring Fork enters the Colorado at Glenwood Springs by splitting itself around a gravel island. Gate No. 5 on the downstream corner of the island was the first surprise. The junction created an unusual twisting action in the water.

Rigid and folding boats raced against each other in both the slalom and the downriver race. No protests on this procedure were forthcoming. It was evident that in the slalom event a rigid boat has no particular advantage over the folding craft. In the downriver race the rigid boats, many specially design-

cd for speed, did show an advantage over the folding boats, but not so much as to evoke any complaints.

The same old problem with slalom racing appeared but to a minor degree at Glenwood. Trained and experienced gatekeepers were not always immediately available. The island served as a center point from which to control proceedings by telephone. Colored cards were used by gatekeepers to flash the points picked up by each boatman.

Slalom Race

C-2	
John Berry & Bob Harrigan	491.0
Dick Bridge and Bill Bickhan	494.5
Bob Worrell and Conrad Swenson	511.0

K-1	
Eric Seidel	342.0
Eric Frazee	367.7
X. Wuerfmannsdobler	387.5

Teams	
Eric Frazee, Eric Seidel, X. Wuerfmannsdobler	411.0
Dick Ryman, Ted Young, Ron Bohlender	544.1
Larry Zuk, Ron Warren, Dick Prideaux	552.7

Downriver Race	
K-1	
Walter Kirshbaum	<u>1:20.07</u>
Ron Bohlender	<u>1:20.59</u>
Lawrence Campton	<u>1:21.34</u>

F-2	
John Holden & Fred Hopman	<u>1:30.12</u>
Ron Warren	<u>1:30.24</u>
Frank Asley & D. R. C. Brown	<u>1:47.04</u>

C-2	
Bob Harrigan & John Berry	<u>1:31.20</u>
Bob Worrell & Conrad Swenson	<u>1:31.59</u>
Art Kidder & Roy Kerswill	<u>1:32.27</u>

SALIDA RACES The 11th Annual Arkansas River White Water and Slalom Races and 2nd Annual Western American Slalom Championships were held on June 11th through June 14th. The International Slalom was on June 12th and 13th.

International Slalom	
Eric Frazee (USA)	207.0
Erich Seidel (USA)	214.1
Paul Bruhin (Switzerland)	216.7

Team Races	
Carol Dailey, Charles Dailey, James Burk	341.2
Larry Zuk, Ted Young, Ron Warren	775.8
Ron Bohlender, Dick Stratton, Leo Lake	854.2

Downriver Race (International and U.S.)	
F-1	
Laurence Campton	2:23.59.0
Paul Bruhin	2:25.04.0
James Burk	2:25.15.8

THIRD ANNUAL EASTERN WHITE WATER SLALOM CHAMPIONSHIP and CHAMPLAIN CENTENNIAL DOWN-RIVER RACE These races were held on April 25th and 26th on the West River in Vermont. As a new event this year there was a down-river race, connected with the Champlain Centennial. Sponsoring and competing clubs included The Appalachian Mountain Club (four groups represented); Buck Ridge Ski Club; Washington Canoe Cruisers Association; Norwich University Outing Club; Penn State Outing Club; Kayak and Canoe Club of New York; Ontario Voyageurs Club of Canada. The water was lower than in 1958, but the slalom had many challenging gates. The most spectacular incident was Paul Bruhin's upset in the team event. Paul, a Swiss competitor, was tired from demonstrating eddy turns between races, and he upset coming out of an eddy; he "eskimoed" up on the third try. In the downriver race the racers had to streak by a group of intermediate canoeists extricating a wrecked canoe from the river; the result was a white-water traffic jam. Results were as follows:

Third Eastern Slalom Championships	
C-1	
William W. Bickham PSOC	274.1
Robert Harrigan WCCA	310.5
William L. Heddon AMC	317.5
C-2 Mixed	
McNair-McNair BRSC	287.0
Pratt-Pratt AMCC	306.3
Sikes-Moulton AMCC	314.0

F-1			
Robert G. Field	AMC-B	269.6	
Charles Grabner	OV	284.3	
George Siposs	OV	289.6	
F-1 International			
Paul Bruhin	KCCNY	233.1	
E. W. Schlesinger	KCCNY	260.2	
Donald Taylor	BRSC	355.6	
C-2 Men			
Bickham-Newell	PSOC	263.7	
Rupp-Rupp	BRSC	272.1	
Berry-Harrigan	WCCA	274.6	
Team Race			
AMC Connecticut		366.0	
RRSC - 2nd team		375.7	
BRSC - 1st team		442.6	

Champlain Centennial Downriver Race

F-1			
Paul Bruhin	KCCNY	23:03	
E. E. Schlesinger	KCCNY	24:08	
R. Field	AMC-B	24:14	

C-2			
Berry-Harrigan	WCCA	25:28	
Bickham-Newell	PSOC	25:30	
Sykes-Jacobs	AMC-C	28:05	

C-1			
Homer Dodge	AMC	30:39	
Cornelius King	AMC-NY	31:24	

HUDSON RIVER SLALOM For the first time in the U. S. a giant slalom was organized in addition to the Second Annual Hudson River Derby. The course was above North Creek, N. Y., on a 3½ mile stretch of the Hudson. Eighteen gates through class I-III water, made the course interesting. This type of race is ideal for a beginner who would like to gain experience in white water and slalom.

There were 41 boats competing in the 8 mile Hudson River Derby, with a crowd of 3,000 spectators. The **Johnsburg Fish and Game Club**, organizers of the race, handled the publicity and safety departments very well. **Giant Slalom**

F-1 Novice

- (1) Lorraine Ward, Rockville Center, N. Y.
- (2) Dr. Homer Dodge, AWA
- (3) Katherine Weiss, AWA

C-2 Novice

- (1) W. Heinzerling & R. Schaffer, Buck Ridge
- (2) W. Baker & B. Swain, North Creek
- (3) Hopes & Pratt, Bolton

F-1 Experts

- (1) Paul Bruhin, KCCNY
- (2) Edi Schlesinger, KCCNY
- (3) Charles Grabner, OVKC

C-2 Experts

- (1) W. McRoberts & C. Walker
- (2) W. Heinzerling & R. Schaffer, Buck Ridge
- (3) L. Hunt & H. Hand, "Run the Rapids" Club

Hudson River White Water Derby

F-1

Paul Bruhin	KCCNY	1:04.24
Edi Schlesinger	KCCNY	1:04.35
Prime William	New York	1:08.02

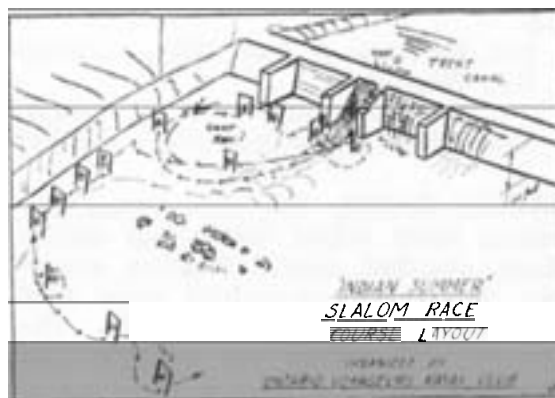
C-2

Scott & Hadwen	Ottawa	1:10.06
L. Hunt & H. Hand	Scotia, NY	1:12.43
W. McRoberts & C. Walker		1:14.08

F-2

Crowe & Hollingsworth	Ottawa	1:15.21
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INDIAN SUMMER SLALOM RACE At the end of the summer all rivers dry up in the East to the point that it is hard to find a reliable spot suitable for slalom. The Ontario Voyageurs Kayak Club organized an excellent race below a lock (dam) on the historic Trent Canal, 80 miles northeast of Toronto, Ontario. The idea was to set up a very tough course that taxes the ability



of any kayaker. This has paid off handsomely. The race was a great success and although this was a club race, next year they are planning an international (US vs. Canada) event. The water flow over the dam can be fully controlled and even at the end of summer there is more than enough water available.

Gate No. 1 is a spillway with a 20-ft. drop at a 45 degree angle. The spillway itself is so narrow that paddles have to be held parallel to the boat. At the bottom the kayak plows deep into a jet, and after a short underwater ride it is buoyed up. The paddler then fights to stay on top of the boil and following the line of the giant eddy (100 ft. diameter) takes gate No. 2. Gates No. 3 and No. 4 are "flush" parallel to the dam. No. 5 is at the bottom of the spillway at a right angle to the jet. The kayak takes a terrific buffeting to cross the jet, at the other side of which is a left 360 degree loop. No. 7 is placed close to No. 2 so that the boil has to be crossed again. No. 8 is a reverse gate on the other side of the dividing line between the giant eddy and the downriver section.

The remaining gates are an array of offset, loop and upstream gates in class III water. The course is full of powerful cross currents but is not dangerous as the water is deep. Most competitors capsized after coming out of the jet, on top of the boil. The course was well supervised, and since it is fairly open it can be observed by a large number of people. A good campsite and parking area and good weather in the fall should make this race very popular among Eastern and Midwest kayakers and canoeists.



Broken paddles at Glenwood Springs. Above, Bob Worrell & Conrad Swenson. Below, Benny Campton. Photos by M. B. Schultz.



C-2 winners Mike Scott & Ross Hadwin — Hudson River Derby.



meet the
CHAMPION
 see the Slalom 59 on
 the back cover.

Some Notes on Self-Rescue

BY FRANK (RED) COCKERLINE

To the canoeist who tests his skill and judgment against the river, a tip-over may be but a nominal penalty for miscalculation provided there is a clear stretch of water below for recovery and he is practiced in self-rescue techniques. To a boater who takes chances without heed for downstream conditions and available support, a tip-over can result in a situation of primary survival.

The Eskimo roll recovery is a very desirable self-rescue technique for deep water. Even though complete mastery may not come immediately, an increased confidence in your paddle brace will reward practice efforts at rolling. The use of nose clips to prevent the discomfort of flooded sinuses and crash helmets for head protection have been found desirable.

Getting out of an overturned boat is a critical self-rescue skill, especially with spray deck and apron in place. Safety release features should be tested under safe conditions for quick, positive action before reliance is placed on them. For exit, a forward rotation of the body (jack knife fashion) is proposed for the following reasons: (1) The possibility of contacting the bottom head first is reduced; (2) the chance of fouling a small opening is decreased by increasing the body angle to it; (3) on shallow rocky stretches the spray sheet is frequently left off for a hasty exit rather than risk breaking a paddle in a recovery try or become wedged between boat and river bottom in a complete tip.

Tipping in aerated or murky water can be dangerous if contact with the boat is lost, because one may be unable to locate the surface. It is believed that good swimmers have been drowned at night, simply because they lost orientation and swam down or parallel to the surface until exhausted. The lesson to be learned from this is not to waste effort until orientation with the surface

is established. A good life jacket is a big help in attaining the surface. As soon as escape from the boat is completed one should immediately go to the upstream end of the boat to prevent being pinned between it and a possible downstream obstruction. In this position the boat also serves to shield against the full fury of the waves.

It is often desirable to re-enter the boat after a capsized. Re-entry is a skill in itself without shore support to stabilize the boat. The best method is a lunge across the boat amidship, propelled by a couple of vigorous kicks, then a jack knife to get into paddling position.

If you are a skilled canoeist it is unlikely that a tip-over will occur in water you ordinarily swim in. Should you have to swim, a life-jacket is essential; it will bring you to the surface automatically, thus conserving your energies for swimming in the direction you wish to go. It is wise to have mapped the river ahead with a possible tip-over in mind. This approach will provide a plan of action ready to be acted upon in event of a spill.

Swimming in moving water is usually directed at right angles to the current to conserve effort. Swimming upstream is fatiguing if not futile, while going downstream simply requires patience. The most frequently used swimming techniques are back and side strokes; these place the feet downstream while going through the rough stuff and place the swimmer in position to gain a footing. For boat rescue these strokes are natural and convenient.

When rescuing a capsized boat the swimmer is advised to pull the boat after him in the direction he wishes to proceed; to establish an earlier footing or eddy anchor with which to check the boat.

A life jacket should be tested for suitability before relying on it for a



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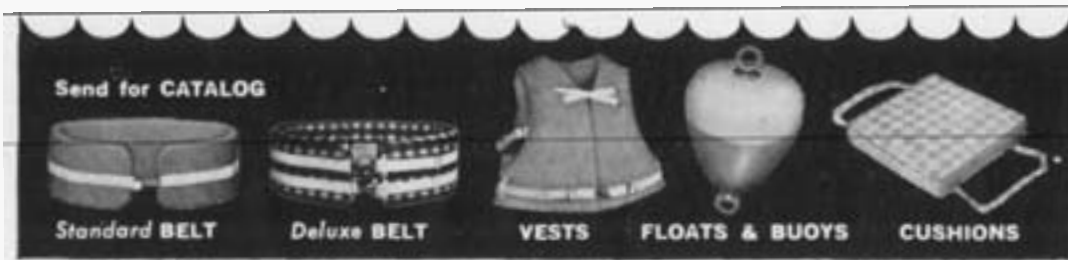
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trip. Some jackets have too **much buoyance** in front, making swimming awkward, and causing a spinning tendency when negotiating waves. While on the subject of life jackets it is well to note that they are of value only when worn and securely fastened.

Do you sometimes get water down the wrong way? Here are some suggestions that may help. Try holding your breath until you find a relatively smooth spot, then cough. Voluntarily holding your breath momentarily reduces the urgency of a spasm and aids in harmonizing your breathing with the wave pattern. Coughing while you have a "catch in your wind pipe" depletes the air in the lungs without allowing any back in, resulting in a more urgent desire to inhale. It is wise not to exhale completely while in the water, as **this** reduces your buoyancy; and a reserve of air is desirable.

One of the most feared things that may occur in the water is a cramp. Although this is frequently mentioned as a cause of drowning, actually there is little reason why a cramp should result in disaster. Usually only one part is incapacitated. Possibly the person experiencing a cramp may be distracted from doing anything for self preservation. One experiencing a cramp should summon help and swim with a back stroke which requires minimum effort.

Cold water immersion increases the chance of a cramp due to poor circulation and reduced heat production in the cooled parts. Some **delay** in the onset of cramps might be gained by deliberate and voluntary shivering. Moderate muscle activity increases heat production. As circulation in the small blood vessels is controlled by muscular pumping, tensed muscles should be consciously relaxed periodically to **stimulate** circulation.

General debility, to the point of being inefficient in **self-rescue**, is most often noted in those who start the boating season off with a dip in recently melted snow water. It is possibly due to anxiety-induced shock in conjunction with the rapid cooling experience in

cold water immersion. **For** the brisk dip crowd there should be planning for the eventuality of a tip-over. Previous experience in self-rescue and acclimatization to cold (such as cold showers) are valuable in instilling confidence and promoting personal effectiveness in cold water survival. Also, certain equipment has proved its value in cold water.

The wet suit helps in three ways: (1) Insulates the dunker from cold water effects, allowing prolonged exposure; (2) provides buoyancy, reducing the swimming effort required, and thus aiding in the delay of exhaustion and cramps; (3) provides a buffer between rocks and brush, lessening the extent of bruises and lacerations from impact. The result can be a more confident individual than the unaided swimmer in warm water. Woolen underwear is of some value in retaining body heat. Whether the water is cold or not, wearing a life jacket conserves swimming effort, enhances confidence, and provides some protection from collisions. Swim fins aid the swimmer to become significantly more effective. Double paddles may be used by the swimmer to paddle to shore, but are more tiring than fins and usable only in smooth water.

The non-conformist, who is bent on clearing a channel for himself, will benefit by keeping his head upstream and drawing himself into a ball to prevent becoming a fixture **himself**—wrapped around the upstream side of a rock or tree trunk.

Should the swimmer become entangled in brush a quick-release device on his life jacket will rid him of one encumbrance. A sheath knife carried where it may be reached might be useful to cut free of entangled clothing. The canoeist who has prepared himself by practicing self-rescue techniques and breathing control, who has provided himself with good equipment, has learned his own limitations, and who takes trips only in the company of an organized outing, is undoubtedly safer than in his own automobile.



POSADA'S PODIUM

BY MAURICE POSADA, EXECUTIVE SECRETARY, AWA

CLUB ACTIVITIES

By way of a change from the usual kind of trips, or when the water's not so white during the off-season, some of our affiliated clubs found other ways to extend their boating pleasure during the year.

After the typically short three months of the eastern spring season came to an end in June, the BUCK RIDGE SKI CLUB of Philadelphia lazed the hot summer days away with a fleet of 23 sail. They call it "canailing" because the sailing is done in canoes. At the low-low cost (as TV commercials say) of only \$25 per Gunter sailing rig, they licked the problem of the usual high-high price of \$130 or so. How? By mass-production do-it-yourself methods: when they needed ten more rigs, each person made ten of one part, for example. Buck Ridge canailors (or is it cansailors?) can now choose from a list of over 20 places with free launching into lakes, rivers, and Chesapeake Bay. A directory of sailors, listing names, phones, and home bases, is grouped according to where they live, so that **impromptu** trips can be instigated by notifying one person in each group. Scheduled trips were also arranged. One in particular was listed for the not-so-lazy in the fall—Canoe Sailing Championship Races at Cooper's Creek, near **Camden**, N.J.

An idea for adding a new dimension to foldboating in the Rockies came to Ron Bohlender of the COLORADO WHITE WATER ASSOCIATION in the form of a special boat carrier. It doesn't have the conventional rubber suction cups, nor does it stick in the gutter; instead, it has four feet, a mane, and a tail. That's it, a pack horse. Plans called for a ride and climb to over 10,000 ft. into the **Rawah** Wilderness where in **McIntire** and neighboring lakes

motors are still unheard and fish still gullible.

But I thought the CWWA fellows were overdoing it a bit when I heard that last January **3rd**, with the temperature below freezing and snow on the ground, they took to the water for a game of **foldboat** water polo. It turned out that they did it in **Glenwood** Hot Springs where, with steam around them and warm water to Eskimo roll into, they were helping the city of **Glenwood** celebrate its winter festivities.

A flat-water 100-yard dash with a flying start was the main event at a **CWWA** boat race meet in August. The idea was to compare the speeds of different boats and techniques. We don't know how conclusive the results were, what with fiberglass kayaks registering both the highest and lowest speeds, but the event proved very popular.

In the round of Sports and Boat Shows that take place throughout the country, usually between the first of the year and the first thaw, CWWA had a booth and an act at the Denver show. In the act, suspense was provided by a tug-of-war with a deep-sea fisherman at one end and a big red tuna fish of a canoe at the other. At the climax both fisherman and paddlers ended up in the water. As a result of the booth and the act, many people got to know about CWWA, about white-water **foldboating** and canoeing, and also about the AWA.

Clubs need new blood, especially young blood, if they're to retain their vigor, carry on their tradition, or even survive. The AWA, too, needs to grow to provide better services for all its members and affiliates. And there must be many people who haven't heard about us and would like it if they did. Perhaps members and other affiliated

clubs will want to spread the word around at next year's sports and boat shows. The AWA will be able to supply you with extra copies of the magazine to have on display or distribute. Copies of our Safety Code or other literature may also be available. And while you're there—or anywhere else for that matter—keep an eye open for potential advertisers in this magazine and let our advertising managers know about them. They're precious blood, too.

Inter-club trips to get acquainted with new rivers and other paddlers seem to be growing. The PRAIRIE CLUB CANOEISTS of Chicago invited SIERRA CLUB paddlers to join them on the Iroquois River in Illinois for a fall colors cruise. On Labor Day weekend they joined forces with the COLUMBUS, OHIO, AYH on the St. Joseph River in Michigan. With 26 boats assembled to carry 31 Hostellers and 31 P.C. Canoeists, Columbus skipper Jim Nelson and Chicago skipper Adolph Steen rose to the naval occasion and maneuvered into line, which was reported by one source to have been about a mile long. Another source had it that on the third day there was reason to believe that the lead boat arrived at the cars before the sweep boat left the campground. That should have solved nicely the old problem of what to do about early risers and late sleepers. Everyone should have been happy that day. "The whole affair was a tremendous success, members of both groups getting along famously," wrote Jim Nelson, who added, "We will undoubtedly have more such trips in the future, and we hope our success will encourage other groups to do likewise."

When the summer's simmering in Chicago, P.C. Canoeists gather for an evening down by the shore of Lake Michigan for a picnic and moonlight float.

Among the things that keep P.C. Canoeists' interest alive all through the summer and into the fall are the hundred-mile pins and the grand mileage award. Figured on the basis of an average of 10 miles per day, a record is kept of the **number** of days on which

each member turns out for a club trip, and at the end of the season awards are made to those who have passed the 100-mile mark and to the one who has made the highest score.

The KAYAK AND CANOE CLUB OF NEW YORK has a product of Switzerland that has proved very popular with eastern foldboaters. From New England to Washington, D.C., there has been a big demand for Paul Bruhin of Geneva to show his way with a paddle and the roll. We got an unexpected insight into his technique one day on the shore of a lake where curiosity led Paul to approach a group of singing, dancing, and drumming Puerto Ricans. After watching them for a while, he joined in their dancing, and then the secret of his Eskimo roll came out. Paul shakes a hot hip. So for those who are learning to roll on weekends, we recommend practicing the rumba on weekdays. It helps.

KCCNY is unique, but we hope not for long—in one respect at least. All its members are also members of our Affiliation. Dues are collected to include both memberships. KCCNY realizes that being a member of an affiliated club isn't enough. To get full value you need your own copy of the magazine and membership roster and personal access to privileges of membership. And even if you're an individual member, you get bigger value if your club is an Affiliate with Affiliate services and privileges. Congratulations, KCCNY, and thank you for your enlightened support.

NEW AFFILIATE

From Chicago comes word that the newly chartered Great Lakes Chapter of the Sierra Club has voted to affiliate with the AWA. The new club is getting off to a good start, with a substantial membership already enrolled. We wish them every success.

BUSINESS

There has been a proposal to discontinue our annual membership roster. This announcement is being made so that you may have the opportunity to express your opinion about the proposal.

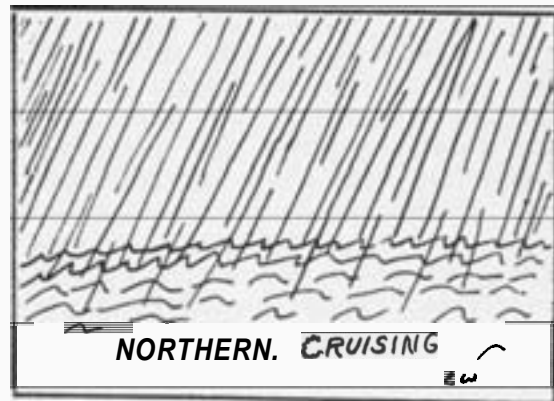
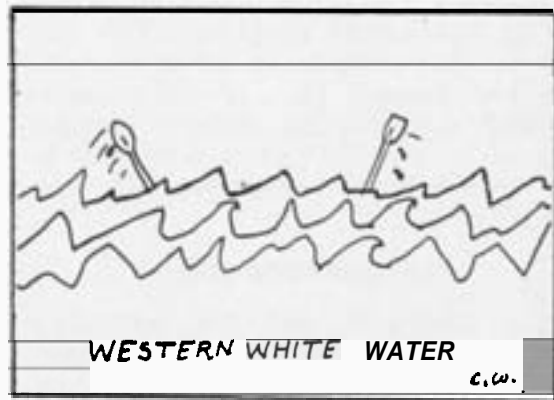
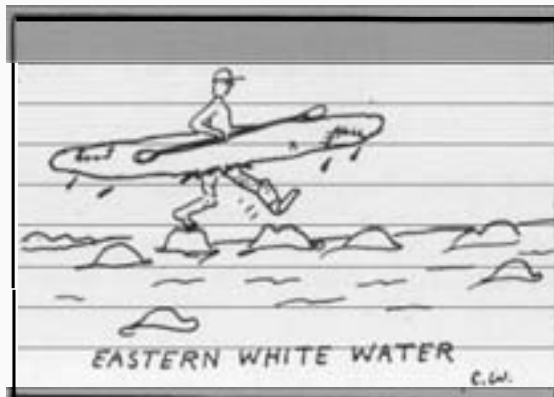
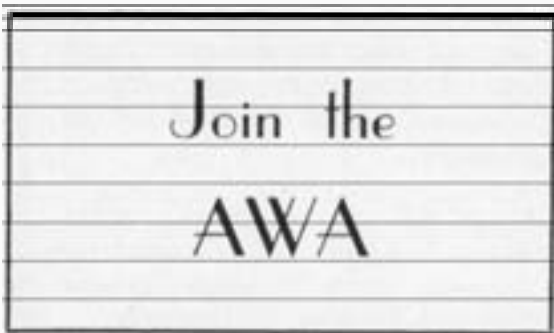
It can be put to the vote of the General Committee one month after this announcement has been published, so please let me know your wishes before then, so that I can present them to the General Committee now in case the matter comes up for an early vote.

Our annual membership roster is the list of the names and addresses of all our members and affiliated clubs, a copy of which is mailed to each member at least once a year.

In making the proposal to discontinue it, Martin Vanderveen said, "The list is nice to have, but it really doesn't serve any important function and it requires a **helluva** lot of work, not to mention the expense of stencils, mimeo paper, extra postage, etc. I **recomm**end that we just discontinue making up rosters, as I fail to see what practical purpose they serve."

Van's proposal affects our proposed by-law 5, as published in the Winter 1959 issue: "The membership list and the addresses of affiliated clubs should be published and sent out to the entire membership at least once a year." Our proposed constitution and by-laws have not been ratified yet by the General Committee, but most of us think it's best to follow them as closely as we can until ratified or amended. One of them reads, "Proposed amendments must be presented to the **membership-at-large** at least one month previous to the vote." That's the reason for this announcement.

Maurice Posada
417 Riverside Drive
New York 25, N.Y.



PRODUCT INFORMATION

NEW CATALOGS

L. L. Bean, Inc., Freeport, Maine, have issued their new Fall catalog listing an extensive line of outdoor equipment including many items of their own manufacture. Chuck Wagon Foods, Newton 64, Massachusetts, have published a new price-list for their camp and trail food packages. Ski Hut, 1615 University Ave., Berkeley 3, California, has a new catalog of light-weight equipment. Ski Hut has not only made up an attractive book, but has devoted part of its valuable catalog space to an editorial urging passage of the Wilderness Bill. This is an approach we appreciate in our suppliers.

WATERPROOF MAPS

The Clearwater trip saw something new in river maps. Lou Elliot, Chairman of the Sierra Club River Touring Section, printed detailed section maps of the Selway, Lochsa, and Clearwater Rivers. The 24-page bound volumes of maps were detailed and clear, but the important news is that they were printed on waterproof paper, thus being able to withstand the wear and tear and repeated dunkings they were likely to be subjected to on the river. Lou says he can print other such maps at a cost of about \$250.00 for the first hundred, with costs somewhat lower for larger quantities. The cost might be somewhat high, but it could prove to be a worthwhile investment for clubs that run favorite rivers year after year.

GRUMMAN LINE

Grumman Boats, *Inc.*, has announced a new line of fiberglass boats. The firm has had extensive experience working with fiberglass in aircraft construction, and states that the new line will compare favorably with its long-established line of aluminum craft. The fiberglass canoes may not be available for some months yet.

LIFE JACKET FOR GLASSES



Optic-Glass Float Co., P.O. Box 5427, Tulsa, Oklahoma, is making Spec-A-Floats, hollow plastic tubes to attach to the temples of your glasses to keep them afloat if dropped in the water. Available in a variety of colors.

LIFE JACKETS FOR WHITE WATER

Several manufacturers are now producing life jackets made of plastic foam flotation material. This new material is more durable and less bulky than kapok and permits a freedom of design not available in older materials. Two such manufacturers have promised to supply AWA with samples of the new jackets for testing. Look for a report in an early issue.

KAYAK TRIPS

This is not exactly product information, but it certainly comes under the heading of news. Don Hatch of Hatch River Expeditions writes that he is planning to run foldboats trips down the Middle Fork next summer. Write to Don for information.



WANT ADS

THE WANT-AD DEPARTMENT IS A REGULAR FEATURE OF **AMERICAN WHITE WATER** FOR THE USE OF **AWA** MEMBERS WHO WANT TO BUY, SELL OR SWAP **EQUIPMENT**. RATES ARE 15 CENTS PER WORD WITH A MINIMUM CHARGE OF \$2.00 FOR AN INSERTION.

* * * *

Books on Rapids-running: White Water Primer, **54¢**. Notes for Experts, \$1.08. Douglas Brown, Box 664, **Meriden**, Connecticut.

BOOK REVIEWS

SLALOM and WHITE WATER COURSE, written and illustrated by members of Ontario Voyageurs Kayak Club, 30 Clearview Heights, Toronto, Ontario, 51 pages mimeographed, \$1.50 from Ontario Voyageurs.

Here is a book that fills an important gap in our literature — a textbook for white-water. The volume starts off with the assumption that the reader is a complete novice at the sport; it begins with the fundamental theory of boats and paddling, describes boats and equipment, proceeds through basic strokes right up to advanced techniques, gives advice on slalom racing, and winds up with chapters on water reading, negotiation of rapids, and on safety considerations.

The authors were careful to waste no space on profitless digressions, and they carefully avoided confusing the neophyte with undefined terminology.

The book makes no pretense to being a complete encyclopedia of white-water sport. It is strictly a textbook, complete with practice assignments at the end of each chapter. A beginner who purchased this book and conscientiously went through all the practice assignments would almost certainly develop into at least a competent white-water man. Clubs that have training courses for beginners could very well make use of this book as a text.

Reviewed by Martin Vanderveen

LIGHTWEIGHT CAMPING EQUIPMENT AND HOW TO MAKE IT, Gerry Cunningham and Meg Hansson, Highlander Publishing Company, Ward, Colorado, \$3.25.

This slim little volume is worth many times its weight—not in gold—but in good camping equipment. Gerry Cunningham has had long experience in making and handling lightweight camp gear, and in his book he passes his knowledge along to the public.

The book is divided into six sections: Materials; Patterns and Sewing; Packs; Sleeping Bags; Tents; Clothing. Even a

person who has no intention of ever making any of his own camping gear can profit by acquiring the knowledge of what to look for and how to judge quality when making purchases. The section on materials compares the various types of fabrics and describes their qualities of weight, porosity, tear strength, abrasion resistance, and water repellancy. In addition to this it goes on to discuss insulation, leather, closures of various types, hardware and water repellants, and lists sources where such items may be purchased.

The section on patterns and sewing presents a simplified exposition of the hows and whys of the various types of construction. The remaining chapters give actual patterns and instructions for making the variety of equipment listed in the index. All instructions are presented clearly and understandably; a person with a modicum of skill should be able to do a good job in making much of his own light-weight camping equipment.

Reviewed by Pat Vanderveen



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Pitfalls and Problems of Hull Design

BY LEONARD "RED" FANCHER

Red Fancher, an old-time canoeing instructor, has been designing and building his own plywood canoes for years, and currently has a fleet of five craft of his own construction.

The purchaser of a new craft is often confused when looking for the one that will best suit his needs. The manufacturers' data on length, beam, depth and weight are not sufficiently informative. Rocker, deadrise and turn of the bilge also have a bearing on the characteristics of the craft. Very small changes here and there can alter the whole performance; this happens even between craft of the same manufacturer (who may have more than one mold with very minor variations).

In short, the only truly effective way of finding the ideal boat for your needs is to try each model in the water, even if this means imposing on friends and strangers to get the feel of their craft.

To illustrate my point, here are comparative data on two of my canoes that were built over the same mold. "Smoo" is ten years old and a delight to everybody who has used it. There is always room for improvement, so in building Red I decided to incorporate a few changes.

"Smoo" is a straight-running craft with about 225 pounds load limit, and a bit stiff on the turns. So for "Red" I increased the beam three-quarters of an inch and raised the sheer one inch. To improve turning qualities I increased the rocker by one-half-inch. These changes are slight, and could easily have occurred even had I attempted to

make an exact duplicate of "Smoo."

"Smoo" is still everybody's choice between the two canoes, because "Red" turns too quickly and requires too much paddle control to hold a straight course.

Where did I goof? The figures tell the story. The $\frac{3}{4}$ " increase in beam increased the bottom area about $\frac{2}{3}$ square foot, which in turn increased the buoyancy about 4%. The change in draft amidships is not appreciable, but the ends of "Red" are barely awash. Had I left the rocker alone "Red" would still have been a better turning craft. Or should I, perhaps, have increased it only $\frac{1}{4}$ "? Guess I will have to build at least two more craft to know the answer.

"Red" has not been tried in fast water yet, but indications are that her extra maneuverability will be appreciated — and the extra freeboard will make her a dryer craft. As a member of the Safety Committee, I hesitate saying she will be tried out in white-water.

For the mathematicians, the figures below are only approximate. The exact draft of this type of hull can be measured only in the test tank; calculations can only come close.

Perhaps it should not be said that I really design my craft. It's more fun getting all the materials together and developing them full scale as I start building. Sometimes it is a faired curve that pleases the eye and seems functional; while again, curves can be forced to be more functional without losing all of their beauty.

	OVERALL LENGTH	WATERLINE LENGTH	WATERLINE BEAM	DEADRISE	KEEL	BOTTOM AREA	AMID-DRAFT	BOW & STERN DRAFT
SMOO	13'0"	12'0"	24.75"	1.75"	1.5"	2376	2.32"	.82"
RED	13'2"	12'1"	25.50"	1.75"	2.0"	2465	2.24"	.24"

Bottom area is given in square inches, and is equal to 16.5 and 17.1 square feet respectively. Amidships draft was figured for a displacement of 200 pounds including weight of craft.

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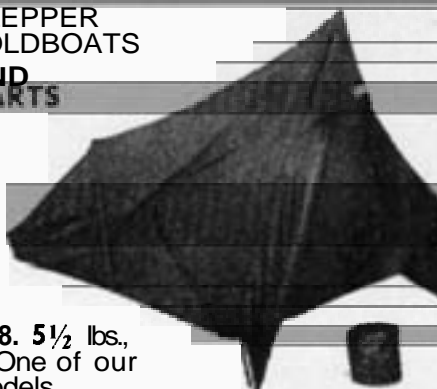


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