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American Whitewater is mailed to all members of the American Whitewater Affiliation, an affiliation of boating clubs and individuals interested in whitewater paddle sport. Membership is open to interested individuals at $6.00 per year and to clubs at $11.00 per year. Club membership includes listing in the Journal. Publication is planned 6 times yearly. Single copies: $1.20 each. Surplus back copies are available at reduced prices. Write Geo. Larsen, P.O. Box 1584, San Bruno, CA 94066.

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

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COVER: Stevie Day, 13, in Frank Bell's or Whirlpool Rapid on the French Broad River (North Carolina) at about 2100 cfs. This is an ideal place for enders and popups—a nice deep hole that throws you into an eddy. Photo by Phil Colwell.

AT LEFT: George Fosque and Gerry Plummer pause below Nancy Cascades while packing in to the Upper Pemi in New Hampshire's White Mountains. The trail goes up the left side of the waterfall. See story, p. 166. Photo by Jim Sindelar.
There is another access further downstream (also on private property) and let us hope that the property owner does not close it to us because we abuse the privilege of using it. Even now, at least one of the adjacent land owners is disturbed because of cars blocking his driveway. There is another access further upstream (about an hour's paddle I am told) at a bridge near Lenore.

Stanton Warburton III
1630 E. Wood St.
Decatur, IL 62521

OBITUARIES

James Bentley, 57, drowned June 27 after becoming caught on rocks in the East Branch of the South Fork of the Salmon River in Idaho. Jim was with a group of kayakers from the San Francisco Bay area making their yearly visit to a comparable group of highly experienced Idaho boaters, to spend a week running rivers during the prime of the Idaho run-off.

The combined group had run the more difficult (Class V) section of the river, the ten miles below the town of Yellow Pine, and had reached ordinary class IV water when the accident occurred. Midway in the rapid the kayakers had to maneuver from the right to the left side of the river, some of them encountering a barely perceptible group of boulders below the surface midstream in the cross over. It was in this unlikely trap that Jim's kayak became pinned. By the time anyone could return upstream, Jim and his kayak had been drawn under and then were swept free. Attempts at resuscitation by two physicians and a nurse who were members of the Idaho contingent were unsuccessful.

— Carl Trost

Homer Heller, 72, member of Canoe Cruisers Assn., died July 24 of a heart attack while taking his customary morn-

Betty Riedel, editor of the CCA Cruiser, tells of seeing Mr. Heller for the first time at CCA's inaugural Seneca Slalom in March 1964: "This was an occasion memorable chiefly for its unpleasant weather. A cold wind whipped heavy snow squalls down the river as we trudged about in primordial mud. There was this funny guy out there running the course, upside down much of the time in icy water but never failing to roll back up and continue on. You had to admire his tenacity. The remarkable Mr. Heller was then 60 years old. It was a time when little instruction was available, indeed the first fiberglass kayak prototypes were just beginning to appear. Most of our latter-day paddling heroes were still toddling about the nursery. Homer persisted against great odds until he became an expert paddler, one of the early devotees of surfing the big waves in Mather Gorge. He also joined in teaching some of CCA's first kayak classes."

As a result of cardiac illness, Homer Heller eventually retired to flatwater paddling a couple of years ago. Says Ms. Riedel: "Those of us who knew him well believe that paddling added several happy and healthful years to his life. It is this confidence and joy in our sport which Homer would like to leave with all of us." (Quotes taken from the August 1976 CCA Cruiser.)

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

Kerry Heidenis
AWA Circulation Mgr.
P.O. Box 51
Wallingford, CT 06492

American WHITEWATER
APURIMAC EXPEDITION ACCOUNT PUBLISHED

Cal Giddings' account of his 1974 and 1975 expeditions on the Apurimac River in Peru have been published in the Summer/76 issue (Vol. 1, #3) of MARIAH, a new, very slick quarterly journal of exploration. This magazine is high-quality in every sense, 88 pages packed with beautiful color photos in a large 8½ x 11” format. There is much variety in type of article, all of it interesting reading in our opinion.

A single copy of MARIAH may be obtained for $2.50. The regular subscription price is $12.00 per year (four issues), but AWA members have been invited to subscribe for $7.50 (four issues, mailed to one's home). This seems to be one of the better bargains in good reading around these days. (Write MARIAH, P.O. Box 2690, Boulder, CO 80302. The magazine itself is published in Chicago, IL.)

Solution to John Sweet's "Canoe-Acrostic" (AWXXZ. 4):

BURRELL DAVIDSON SHUTTLING

Thanks, John, it was a lot of fun!

Renew before Dec. 1 and save!

AWA MEMBERSHIP RATES GOING UP

As many of you know, AWA membership fees are spent almost exclusively to produce the AWA Journal. Since we don't have to make a profit or pay salaries of staff workers, membership rates have been kept at a minimum. For example, from 1968 through 1973, your $3.50 brought you four issues of the Journal (about 87.5¢ per issue). In 1974 we went to six issues a year and membership dues of $5.00 (about 83.3¢ per issue). Unfortunately our printing and postal costs have in the meantime gone up, not down; this year saw a substantial increase in printing costs, and our bulk mailing rate has increased 26% just since last year. In addition, last year at this time it cost 18¢ to send a magazine by regular third-class mail; now it costs 28¢. Since we must send an appreciable number of magazines by regular third-class mail, this is quite a bite.

Therefore, as of December 1, 1976, AWA membership rates will be as follows: single memberships — U. S. $6.00, foreign $6.50; club affiliation — U. S. $11.00, foreign $12.00. Single issues — $1.30.

BUT—if you renew before December 1, 1976, you may renew at the old rate (i.e. $5/year indiv., $10/year club). But remember, WE MUST RECEIVE YOUR PAYMENT BEFORE DEC. 1, 1976! We haven't the staff to bill for membership fees, so please don't ask.

Thanks for your understanding and support.

Iris Sindelar, Editor

NULHEGAN CUSTOM

Nulhegan Paddle Co.
Box 5G
N. Strafford NH 03890
READERS' SOAPBOX

Age, Fitness and Strenuous Paddling

The section of water on which Jim Bentley lost his life (see obituaries, p. 150) was a relatively easy Class IV rapid following a stretch of very difficult Class V water. Several of the boaters in the California Bay Area group of which Jim Bentley was a member were in top physical condition and powerful difficult-water boaters; they termed the Class V stretch above the fatal rapid "physically, mentally and emotionally exhausting."

What, then, must have been the effect on Jim Bentley, physically the most marginal of this group of "Class-6" boaters? Although strong, he was out of condition and had some respiratory problems. He did have expert technique and river-reading ability, yet instead of ferrying to a clear channel on the left, he blundered into a barely submerged boulder patch and broached. Why? Why did he fail to react properly to avoid broaching? Was he physically and mentally exhausted to the point of impaired judgement and slowed reaction time—an impairment that may have caused his fatal broach?

As a whitewater boater over fifty years of age, I'm especially sensitive to deaths of senior boaters from paddling or paddling-related causes. In recent years two other capable whitewater kayakers in northern California have died on the beach after strenuous river activity apparently beyond their physical endurance (see "Burnt Ranch Run" by Dick Schwind, A W, XVI, 4). They did not expect heart attacks. Jim Bentley knew that he was pushing his luck beyond the endurance and capability of his body. He had warned his family that he might die on the river, but that he could not limit his boating for safety reasons.

It is difficult for vigorous middle-aged men to face the fact that their bodies aren't as enduring and forgiving as in younger years, especially if they don't work continuously at staying in shape. Younger boaters at or near their physical prime accept the companionship of senior paddlers who can hold their own on difficult runs, bless them, but it's difficult for them to understand the limits of an aging body and to understand the driving egos of some of us "over-the-hill" seniors. Should younger boaters put a brake on the participation of senior boaters in their group if the hazards of a venture might exceed the physical endurance of the boater?

If the trip is club sponsored, the leader has the authority and the responsibility to limit the action of the boaters who may be endangering themselves,
but how can this be accomplished in a casual group of paddlers, non-club sponsored, without a specific leader? The group as a group should and must make decisions if they wish to eliminate avoidable tragedies. But in a casual group of skilled paddlers, how can you tell a boater that he won't be allowed to make a difficult run with the group? I don't know, as each case must be decided on its merits. The group should decide as a group, but one individual must have the guts to raise the question in the first place.

Personally, I won't boat beyond Class IV, or ocean-surf big waves. I'm not willing to test my physical endurance to these limits. Neither is Carl Trost, a highly skilled and experienced wild-river paddler. But unfortunately many paddlers over 50 knowingly or unknowingly push themselves to an unreasonable danger point. The untimely death of three such California boaters poses a problem that cannot be ignored and should be discussed in AMERICAN WHITEWATER.

George Larsen
San Bruno, Calif.
Over the Memorial Day weekend, five members of the Arnold Whitewater Association floated a great little river in the "Land of Opportunity" and found some exciting whitewater in the process. A trip to northern Wisconsin had been planned but a last minute check indicated good water level in northeastern Arkansas. We left St. Louis and I thought we were headed for the Mulberry River; little did I know what a surprise and a great float was in store for our group.

Big Piney Creek, not to be confused with the Big Piney River in Missouri, flows south from the Boston Mountains in Newton County to join the Arkansas River west of Russellville. Newton County is also the source of three other great and semi-famous rivers; the Buffalo, White & Mulberry. The upper Big Piney's watershed is protected by the Ozark National Forest and this section has the best whitewater along with scenic beauty that is difficult to match. Big Piney, like most Arkansas rivers, depends on rainfall for proper floating levels. Early spring through the first week in June is usually the only time the river can be floated; after that time you would have to catch it by chance and only after a day or two of hard rain. A gauge is located at the U.S Forest Service campground known as Long Pool; this is also the take-out and the place we arrived on Saturday morning.

The river was running at 4½ feet that day, which made for an ideal float in our kayaks. The range for the best floating is between 2½ feet to 6 feet; above 6 feet the river is dangerous and below 2¾ feet it is impossible. Talking with other floaters at the campground, we decided to float from Fort Douglas to Long Pool, approximately 21 miles. Two other access points are available for shorter floats, Phillips Ford on the west side of the river for a float of 15 miles and Treat on the eastern side for a 12-mile trip. The access at Treat will cost you $1.00 a vehicle since it is on private property but it is worth it as we used this access the next day to repeat the best whitewater sections.

If you have never shuttled a vehicle in Arkansas, you're in for a real thrill, especially in the Big Piney area. The shuttle from Long Pool to Fort Douglas is approximately 50 miles one way, 25 of which are on narrow and twisting paved roads, but the last 25 miles are on even narrower and curvier dirt roads. If you broke down out here, by the time you could get assistance your car would be obsolete.

From Ford Douglas to Treat the river is a series of pools followed by short easy rapids and is generally a class I. After Treat you had better hold on to your hat (Helmet) as class II & III rapids are common with standing haystacks between 3 & 4 feet high. The rapids are not exceptionally technical above the 4-foot water level but as the water drops it makes for a more challenging run, as we found out on the second day.

The Big Piney shares a common problem with the Mulberry River—Willow Jungles—and these can be dangerous at any water level. In several places it was almost impossible to locate a clear channel and on the second day we helped two shaken canoeists extract their canoe from a willow cluster. Since our group follows
the AWA Safety Code to the letter, we were shocked to see canoeists floating this section of the river without life jackets on, a few didn't even have them in the boat. It was also apparent that several people had "gotten in over their heads" and did not have the experience for this river.

Three rapids deserve special mention:

**The Ledge**
One-half mile below Treat a rock ledge extends across the entire river. This one-foot drop creates quite a suction and is a great place to surf or play. One of our club members broke his Cannon kayak paddle blade in half here on the first day and another club member found the broken half the second day just a short distance downstream.

**1-2-3 Surprise**
Many of the rapids on this river sound worse than they are due to the narrow canyon type of valley and the bluffs which reflect the roar quite well. **Surprise** is a real eye opener with 4- to 5-foot waves and several holes ending in a fast run out into another rapids.

**Cascades of Extinction**
I'm sure many of you feel a little strange and maybe shaky about a new river you have never run. I know I did about Big Piney but I soon grew to enjoy the great ride it was providing until I came through this rapid. Cascades is about one mile from the take-out at Long Pool, and lucky for some people since several boats are lost to this rapids yearly. Although not the loudest rapids on the river, you can't get near this one without it telling you something's coming. The current runs to the left bank and a house-size boulder sits almost in mid-stream, so you don't see the rock just under the water in front of
Cascades which is creating a giant hole. At high water you can take the easy route to the right but as the water drops you have to go left and face Cascades head on (or sideways, if you're not careful). If you haven't guessed yet, this is where I lost it and came out of my boat. I tried for the eddy on the left, which was to prove a bad mistake for just downstream are three apartment size boulders, with the current running to the right. The third boulder bit the end of my kayak, breaking the seam and giving my boat more character. One of our club members had a real hairy experience here the second day but I won't get into that, let's just say he came as close to Cascades as humanly possible. Below Cascades are two sections of willows which are worse than any on the river, but the kayaks could get through without a great deal of hassle.

Even though it rained off and on both days, it always rained at the right time, while we were sleeping, so we had warm sunny days for floating. All was not sunny for our group on this trip however; while our van was parked at Fort Douglas a front tire was slashed and apparently someone tried to break in by a vent window, but did not succeed. Later that evening, someone stole our 5-gallon gasoline can from the van in the campground while we were asleep, We were all so tired that we didn't hear a thing. Sunday was also a tragic day; a 19-year-old boy drowned while swimming in Long Pool.

All the members of the Arnold Whitewater Association indicated they really enjoyed the float despite the theft and vandalism. We were also fortunate to learn a new word in Arkansas, which can be used in a variety of situations. The word is tired, which is pronounced
tarred. With this unique pronunciation, it can mean the black thing on the wheel of your car, what you did to the roof of your house last week, even how you feel after paddling your boat all day. I'm sure there are other applications of this great little word but we will have to wait for another trip to Arkansas to add to our knowledge on this subject.

For maps and information on Big Piney Creek write to:
Forest Supervisor
Ozark National Forest
Box 340
Russellville, Arkansas 72801

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An "Accident Report Form" was sent out with the Jan/Feb 1975 issue of AWA for the purpose of collecting data on whitewater accidents. Bev and Fred Hartline volunteered to collect and tabulate the information which came in and the following is a statistical tally of all reports they received. A total of 51 accidents were reported, having occurred from 1970 to 1975. They report that there was nowhere near enough data for good statistics, but they incorporated all that was received into an ACCIDENT STATISTICS MATRIX which lets everyone draw their own conclusions about the various correlations. Their report (which follows) consists of the ACCIDENT STATISTICS MATRIX and the accompanying notes regarding its use and compilation. Our sincere thanks go to Bev and Fred for their fine effort.

NOTES ON THE USE OF THE ACCIDENT STATISTICS MATRIX

Fifty-one accidents are classified with respect to 9 parameters (one to six categories per parameter). Under the parameter heading of WATER LEVEL for example, there are 4 categories: high, medium, low, and unknown.

The MATRIX may be used to find the correlation between any of the categories in the following way. The numbers down the diagonal are total accidents for a given category. Reading down the "high water" column, we note that 24 accidents occurred in high water. Reading across from 24, we note that of these, 12 involved experienced persons, 11 involved persons with a little experience, and the experience in one case was not known. Continuing across, we see that 11 of those same 24 accidents involved extreme exposure, 12 involved some exposure, and exposure was not known in one case. Further, of the 24 high water accidents, 13 involved death and 11 did not.

Going back to the parameter "water level" at the top of the sheet and following down the four columns involved shows us that of the 51 accidents, 24 involved high water, 13 medium water, 3 low water, and level information is unknown in 11 cases. Note that $24 + 13 + 3 + 11 = 51$ and that things should always add up to the proper totals, barring arithmetic errors in the matrix.

The MATRIX is "symmetrical" about the diagonal, so the top half is left blank. If you are trying to do a correlation that lands in the blank area, simply interchange row and column and look again:

eg. PARAMETER — CATEGORY
Water level — high or flood

VS PARAMETER — CATEGORY
PFD worn = ?

Try instead:
PFD worn
Water level high or flood = 13/24

NOTE: PFD-worn is the only parameter with one category; if you are interested in "PFD-not worn" just subtract PFD-worn from the total number of the second parameter-category.

eg. PFD-worn VS Water level high or flood = 13/24

so "PFD NOT worn" VS Water level — high or flood = 24 - 13 = 11 out of 24

ON SAMPLING BIAS

The reports analyzed fall into four major categories:
1) Reports from experienced boaters re-
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<td></td>
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laid for educational value.
2) News clippings usually of East Coast open canoe accidents involving relatively inexperienced, ill equipped, persons in high or flood waters.
3) Coroner's reports from California—usually joy-ride rafters' fatalities.
4) Major accidents of experienced boaters which get passed around the boating community by word-of-mouth or published in AWA Journal.

This categorization of the sources always shows some of the obvious biasing of the data that can be expected (e.g. most rafting accidents would be expected to involve fatalities). It is not valid to conclude that there are more open canoe accidents than raft accidents (it may be true, but I'll bet not in California).

The sample is really too small to do any valid analysis. I would be very hesitant to make a conclusion based on 1 to 5 points difference in a total of 20... but it's fun to see what correlations might exist!

**ON SCORING BASIS**

I've always wondered about O.C. flotation... in some cases this score is definitely valid, but in others it is just speculation that a lighter (emptier) boat would provide more support for a struggling (no PFD) swimmer, or would pin a victim against whatever the obstacle with less force. I believe in wearing wetsuits if there is any exposure associated with a swim (which is most of the time) so I score "inadequate" if a wetsuit might have helped. I frequently had to "guess" at experience or some other parameters. These were usually "educated" guesses (20/20 hindsight)... after all (s)he can't be very experienced if (s)he paddled a home-made raft over some well known dam in the middle of the hurricane flooding, and wasn't even wearing a PFD.

**FOR BETTER STATISTICS**

We desperately need to expand our coverage: more reports, more people gathering reports, more representation from different areas of the country.

**POINTS WORTH PONDERING**

**EQUIPMENT:**

KAYAK: there has been at least one death associated with the crushing of the deck about the legs. Several cases of persons trapped in their boats either by crushing of the deck or because it is nearly impossible to get out of a K-1 with "good" bracing if you are leaning back (for example if a tree knocks you back against the rear deck, and you then tip over in shallow water).

OPEN CANOE: additional flotation may be extremely valuable. Two separate cases were reported of experienced O-Cists submerging to the river bottom! More flotation might help prevent fatal pinnings which are numerous, as are drownings of inexperienced boaters who swamp their boats in rough water where a little extra buoyancy might have helped them keep their heads above water.

THWARTS are dangerous! There have been a number of cases of somewhat experienced canoeists getting wedged or pinned under their own thwarts during a collision with a rock, or by water flooding into the boat when running a weir, or similarly immersing one end first.

RAFTS: from the data received, we have no way of judging adequacy of rafting gear in most of the rafting accidents. BUT NOTE: There were two accidents involving potential equipment failure with the same problem in each. Both were commercial raft trips, only one involved fatalities, the problem is entrapment under an overturned raft. Many commercial rafts are fitted with "splash guards," water repellent fences
which keep waves from incessantly splashing the fare paying passengers. This is fine so long as the raft is upright, but should it flip over, and should one or more persons be dumped underneath the boat, they are then faced with the problem of swimming under these "splash guards" to get rescued or to get to shore or even to get air if the raft didn't happen to trap air underneath it. This swim may be rendered extremely difficult as type 1 (25 lb. buoyancy) PFD's are usually required to be worn. You have to swim down against 25 lbs. of buoyancy! Hence two fatalities in one accident (it could have been more except for the efforts of the boatsman). The second accident was reported by a kayaker turned tourist who credited his training in keeping cool underwater (rolling his kayak) with providing him the margin to get out from under the raft safely.

**PFD'S (LIFEJACKETS):**

**EDUCATION:** Lots of inexperienced persons never think they might end up swimming a rapid, or don't understand that rapids are much harder to swim in than are lakes or back-yard pools.

**VOLUME:** there is an open debate about PFD volume . . . we need to get more opinions out into the open. I suspect that adequate buoyancy depends strongly on the character of the river being run, or worse still, perhaps it varies depending on the particular accident you happen to get into!

**CLOTHING:**

**HELMETS:** Many O-Cists and rafters neglect to wear these. Two fatalities in this report were possibly associated with blows to the head. Also I've known of one scalp laceration and one star fracture of the skull which were received right through hockey-type helmets.

**WETSUITS:** Wetsuits are very frequently not worn by relatively inexperienced persons even in weather/water conditions of extreme hypothermic potential. Commercial rafters also neglect this precaution often even in early season runs. If you aren't dressed to swim in it, you shouldn't boat in it!

**DURING PORTAGES:** There were two reports of accidents during portages, one fatal. Suggestions: 1) Careful selection of footgear for traction on slippery, rounded rocks and boulders is indicated. 2) Wear your helmet!

**OBSTACLES:**

It would appear that each type gets its victims. Logs and trees are an obvious danger to both boaters and swimmers; we are just beginning to realize the danger of being trapped by rocks or cracks between rocks (at least two fatalities) while swimming. Weirs and dams are seemingly obvious, but frequently hard to spot from above—they should be marked, prominently, with plenty of room to get out! Other man-made obstacles include irrigation siphons, bridge abutments, and electric fences—watch out! Finally, lumped in here, is water pollution: at least two parties contracted Giardia lamblia (an intestinal parasite) in the vicinity of the Middle Fork of the Salmon (Idaho)—one of the classic "wilderness" runs.

**WATER LEVEL & EXPOSURE:**

High and flood waters are quite frequently associated with accidents. This is in part due to increased exposure to inadequately dressed and (usually) inexperienced boaters. BUT NOTE: some experienced boaters have been getting in trouble because they are unwilling to cancel their trip when they get to the river and find it's "in the bushes." The use of water gauge information which is often available from county hydrology departments as well as from the U.S. Army Corp of Engineers should be encouraged, although
boaters can be quite a nuisance . . .
groups should perhaps delegate one
person to act as an intermediary clear-
ing house for such data.

EXPERIENCE:
According to the limited statistics
available here, experienced boaters are
more likely to be adequately dressed
and equipped when they get into ac-
cidents than are inexperienced persons.
Experienced persons are perhaps less
likely to be fatally involved as well,
although this may be sampling bias.
Still it makes sense; experienced
boaters should probably consider it part
of their duty to help train less-
experienced persons in the skills and
safety precautions of boating.
Then there are always the people who
think it doesn't matter if they can't
swim because they are boating, not
swimming (at the moment . . .).

TRY THIS
Everybody knows that tape for boat
repairs is something one should not be
cought without. But it is an easy item to
forget, and on Eastern rivers with roads
on the bank, it is often tempting to
leave the tape in the car—we can always
just take out after all . . . . The fact is,
of course, that for lack of 12 inches of
tape, we often limp along and finish the
trip in misery with a sinking boat that
needs bailing every 2 or 3 rapids.
A good solution is to wind six feet or
so of tape around the shaft of each of
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river without your tape!

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Vol. XXI/5 163
THE STUFF-BAG RESCUE ROPE

by Ray Miller, Program Specialist
Small Craft Safety Programs of the American Red Cross

The stuff-bag rescue-rope idea is not new. It is reported to have been used during WW II by the U. S. Navy. It had, however, for some unknown reason faded into obscurity until recent years.

The idea is so beautiful and the actual use of the bag so trouble free, that it warrants serious consideration as a way of keeping 75 feet of rescue rope ready to throw at any time. This method virtually prevents the rope from tangling while stored, while being transported, or while being readied for use.

I have personally used this device for over a year and have yet to have it tangle. For example, on a recent trip to Seattle, Washington, I was to demonstrate the use of the "stuff-bag rescue-rope." Prior to leaving, I went to the trunk of my auto (where the bag had been, ready for use, for over a month), retrieved it, and packed it in my suitcase. After being in Seattle two days, I picked up the bag and proceeded to an area where I was to demonstrate its use. When I got to the waterfront, I tossed the bag to a few of the observers and actually kicked the bag to add to the potential tangling of the rope it held.

Upon demonstrating the proper use of the bag and watching the 3/8" rope feed out smoothly to its 75-foot length, I knew once again that the idea had impressed another group of onlookers. To their amazement, there wasn't a hitch. I quickly pulled the line in, permitting it to coil and clump at my feet. The bag had partially filled with water giving it enough weight to be thrown again. With that I gave it another toss and it once again went to its full length. All this took less than one minute. I was bombarded with many questions about where I purchased the device and how much it cost. When told that I made the bag and bought the rope to put in it, the group was astounded.

The possibilities for use of such a device are many, especially in boating. River running and whitewater activity puts the greatest demand on such a device. Every boat can have a rescue rope on board. It is compact, easily handled, and virtually trouble free. The end of the colossal 10- to 15-foot "tangled-rope" throw is at hand. No more watching the person and his boat drift by as you attempt to untangle the coil. And nearly any person can successfully complete a throw at any time.

To my knowledge, you can't purchase the device anywhere but still anyone can have one. The diagram is simple and easy to follow—now build one. Try it, you'll like it.

The 6" x 12" bag is of medium to light weight cloth (canvas or nylon is best). A 1"-thick x 6"-diameter disc of styrofoam or cork is in the bottom of the bag. The disc serves two purposes. First it is used for flotation and secondly it helps to give the bag a beneficial shape. The bag has a drawstring at the top to partially close the bag thus preventing the rope from accidentally coming out en masse.

The rope should be 3/8" in diameter, 75" long, and made of a floating type material such as polypropylene. Tie an overhand knot 18" from one end and pass that end through the hole in the disc and the hole in the bottom of the bag. Make a grab loop in that end of the line by splicing in an eye or tying a bowline.
The other end of the rope should also have a grab loop. This is for the rescuer and makes retaining the rope much easier.

The device is now complete and ready for use. Simply stuff the rope into the bag from the bag end and permit it to coil or collect naturally in the bag. Keeping the grab loop at the free end of the rope out of the bag, close the bag loosely with the draw string and tie it off. You are now ready for your first practice toss.

Restuffing the bag is not necessary in actual practice as the bag will collect a certain amount of water which will give it weight enough for an additional throw as necessary.

You now have a very functional throw rope which is compact and not likely to tangle—ready for use in any emergency.
Three trips down New Hampshire's Upper Pemi

Words and photos by Jim Sindelar

"Say, do you know anybody that would like to hike in and run the upper East Branch of the Pemi this spring?" So read a note I got from Charlie Walbridge in Pennsylvania last March. I had never met Charlie, but had written back and forth, had almost made it down for a run on the Gauley with him a couple of years back, and had had good experience with a few of his well-thought-out whitewater kits. Naturally I immediately said "Sure. When are you coming up?" I suggested the last part of April or early May. And so a trip was born.

The East Branch of the Pemigewasset is one of New Hampshire's premier rivers, originating in the "Pemigewasset Wilderness" area of the White Mountain National Forest north of the Kancamagus Highway. From the Kancamagus bridge above the Loon Mt. ski area down to Lincoln the river follows the road and is one of New Hampshire's best advanced runs. After joining with the smaller Main Branch below Lincoln, the Pemi flows south through New Hampshire, merging with the Winnipesaukee River at Franklin to become the Merrimack River, after which it meanders through Massachusetts and Connecticut to the sea. The East Branch above Lincoln is one of those whitewater rivers that would be absolutely perfect if it only ran all year—as it is, it is perfect only in May. It is clear, cold, extremely scenic, and drops an average of 80 feet per mile in a big, boulder filled bed. But everybody runs that. The part that
interested us was the 9 miles or so of whitewater north of the Kancamagus bridge in the roadless Pemi Wilderness. The map showed a drop of 80 to 200 feet per mile, and the view from the bridge upstream promised a great run, with about the same volume as the lower part for at least 3 miles to the junction with Franconia Brook. It would be smaller between that point and the North Fork some three or four miles further up, and smaller yet above the North Fork, but with good water, it should be runnable all the way from Stillwater Junction where several brooks join to form it, we figured.

We discussed equipment, personnel, and plan of attack. Charlie wanted to hike over the height of land from Crawford Notch to Stillwater Junction. Noting an elevation increase of 2000 feet up and 1000 feet back down in the 7-mile or so hike, I suggested following a jeep road up from the bottom the first time around and won out. But it made me suspicious of Charlie and of what I might be getting into. As to boats, I was dying to try out my new inflatable Klepper Skate/Metzler Spezi* which seemed made to order for such a venture, weighing about 35 lbs., and rolling up onto a pack frame. "What about you, Charlie?" I asked during a phone call. "Well, might be rocky, I'll prob'ly take mah river pig. Only weighs 50 lbs." Eh, how do you plan to carry it? I asked cautiously. "Why, I just put the foam seat on top of mah head, balances right there—nothing to it." I decided right then I'd better do exercises and eat lots of Wheaties before the trip, pray for level going, and consider hiring some porters. But, I said O.K., I'll see if I can find some other crazies up here to go along.

First inquiries to usual boating companions were not promising. "Isn't there some other way in there?" and "Walk 9 miles uphill with a boat! But look at all the good whitewater along the road!" were some early responses. However as the critical weekend arrived, we got some live ones. Indomitable river rat Ted Acton was interested from the start. George Fosque and Harry Zane, also of Boston fell for the bait. And rolling in from the West at the last minute, Gerry Plummer who had been on last year's Apurimac Expedition was an enthusiastic addition. We had a trip—now if Charlie shows up. Wonder what he's like? I figured on a raw-boned six-foot-plus type who ate raw meat and lifted weights all week, with a neck the diameter of my waist. I was therefore totally prepared when he rolled in after the brutal 8%-hour drive (straight through, naturally, in true whitewater fashion) and unraveled himself from the cab of his four-wheel-drive Dodge pickup.

We got started a bit later than planned and arrived at the Loon Mt. bridge about 9:30 a.m. Saturday to find the river low, but runnable, at least at that point. Ray Gabler's gauge read .6 feet, with his guidebook suggesting .5 feet as the minimum. But the river is pretty wide at the gauge, and anyhow, low water is great for exploration, right? Luck favored us in that we found we could drive up part way, but all too soon the road petered out and the trip began in earnest. The river still looked runnable above Franconia Brook, so we continued on up. We were prepared to do some walking, with lunches, wetsuits, boating gear, and a yoke of some type for all the boats except my Duck and Charlie's Pig. Charlie and Gerry soon were ahead of the pack in their exuberance to get to the river. The rest of us were a little more leisurely about

the trip which was really a delight in spite of the loads, due in part to the sunny weather and beautiful surroundings, and in part to Ted Acton's fascinating tales of early whitewater running and of his participation in the very first National downriver race on the Rapid River in Maine which took place in 1940 before the rest of us were born.

It seems that there were only two foldboats, one containing Ted and the other containing Mr. Kissner of the Folbot company. And all the open canoes sank and broke up by the time they got to Pond-in-the-River. The only boats to finish were the foldboats, and the yard of the damkeeper's house was completely covered that night with broken wood and canvas. But that is another tale.

The stories stopped as we came to a grind up a steep hill, then down, and finally, the suspension pack bridge a mile or so below the junction with the North Fork where the trail crossed the river. It was now early afternoon, and there was just about enough water to slither down, so we decided to put in. After a short breather, I blew up my boat and we were off.

The water was definitely a bit thin and it gave me more trouble than the others for the inflatable liked to “stick” to the rounded rocks and I had to push and pole over with my hands in a number of places. This was a drawback of the boat, though I discovered later that a couple of coats of good paste wax does wonders. The river was all more or less runnable, a rocky, shallow, very continuous class 3 of the type that would soon put a smile in your boat if you let up to daydream. The riverbed consists mostly of bread and bushel basket-sized round granite rocks and boulders. The crystal clear water whistled around and between them giving the river a completely unrunnable appearance, but it was deceptive, as there usually were a number of runnable channels. The steep gradient gave the shallow water enough push to give anxious moments to anyone caught broadside. I remember a couple of interesting ledges, a quick stop at the truck for lunch, and a boulder-patch rapid where Ted missed an eddy and went for a swim.

We picked up a bit more water as Franconia Brook came in, and all too soon, it seemed, we were at the Kancamagus bridge, so Gerry and Charlie and I continued on down to the Loon Mt. Bridge before taking out. We still had to go back in and pick up Charlie's truck, and at Loon Ski Area we noticed an International Scout with a kayak on top which Charlie recognized. Carl Lundgren had been taking a ski patrol test all day and was more than willing to look at a good river, so off we went. Back at the truck, it started to sprinkle. Road space was limited, so Carl waited while Charlie got his truck cranked around, and we rolled out of sight down the trail never giving a second thought to Carl, who, when we first ran into him, had muttered something about his Scout not starting too hot lately. We had a bit of trouble ourselves with the narrow trail and when we hit the Kancamagus, the three of us struck out for Concord in the rain, which was by now fairly heavy, thinking all the time of the hot stew and homemade wine which Iris had waiting. It was a bit of a shock to find, therefore, that Carl had called during the drive home—seems the Scout got ornery and didn’t start and Carl had to walk five miles in the rain to a phone. The message was strained and concise——"guess I'll walk back and sleep in the car—would appreciate help in the morning." We certainly did feel terrible about the situation, but we really couldn't do much until morning, so we toasted Carl with blackberry wine and turned in. The rain poured down American WHITEWATER
Charlie burns off excess energy at the put in.

Backwards over a drop in the Klepper Skate. Photo by Gerry Plummer
all night! In the morning we gathered together all the car fixing stuff I could think of for the Scout and all the muddy-road-stuck-car tools I could find for us and got an early start.

The change in the rivers overnight was startling, for all the streams we passed were nearly out of their banks! We could easily picture poor Carl up to his axles in the rising Pemi and ourselves up to our hubcaps in mud as we tried to get back to him. But sometimes things just work out right, for the Pemi at the Kancamagus bridge read two feet, the jeep road was still in good shape, and when we got to the end of it, Carl was gone! It seemed ridiculous to waste the chance to run down again just because Carl hadn't waited for us, but we weren't too keen on leaving the truck in the face of more rain. However it was definitely cold, and I was suffering from a bad cold which had gotten worse the day before, so I volunteered to drive the truck back out and take pictures for the story I planned to write, while Charlie and Gerry ran. The river was a real howler this time, an absolutely continuous class IV with 5- to 6-foot waves all over the place, a ferocious current, and almost no eddies. The time it took to scramble down over the bank with camera and rescue rope made it tough to keep the truck ahead of them! We were at the Kancamagus in no time at all, and since Jack Nevins and the Boston gang were just putting in, I parked the truck, grabbed my C-1 and joined the party.

It was pushy enough below the bridge, but Charlie claimed it was a picnic compared to the upper section which he described as "really physical." This time we ran all the way down to the Lincoln IGA store. The fantastic rapid that was created a few years back when
the Lincoln dam washed out is really impressive at that level. Then to complete Charlie's visit to New England, we went east, up over Kancamagus Pass and took in the Swift River at a good level that afternoon. I still remember Charlie's comment after running the rapid we call "the Gorge." When he had asked me about the river, I said we might want to scout that one and the "staircase" below it, but that the rest was fairly straightforward, although continuous. I called "the Gorge" a big, pushy, upper class IV at that level. At the bottom, Charlie turned to me and said "James, that was a V. I was out of control." Glad we could send him home happy with good tales of New England.

Well, that sounds like the end of an adventure, and frankly, since the snow was about gone, I was afraid we had had it for the year, as the rainwater would certainly run off by the following weekend. In fact the water in the Pemi was already down a good foot by Sunday night when we drove home. But now that I had a taste of the river, I certainly did want to go back and run it from the top. About two weeks later the chance came. The level was just about 1 foot on the Gabler gauge at the bridge, a perfect level to explore the upper reaches where the steepest stuff was. The hike to Stillwater Junction from the bottom was about 9 miles with a rise of 100 feet a mile or so, a total of some 1000 feet on an old logging railroad bed which makes a super trail. But it certainly did sound neat to pack in over the top! It just had to be done.

I called Charlie, but no soap—he was off to West Virginia for the weekend. Harry Zane really wanted to go but couldn't shake loose. But Gerry Plum -mer was enthusiastic and George Fosque was up for it too, and they were both backpacking types who didn't bat an eye when I suggested going up the Nancy Pond Trail over the Nancy Cascades from Crawford Notch with overnight gear.

It was Saturday morning before we got it all together, noon by the time we left George's Blazer at the Kancamagus bridge, and 1:30 by the time we got my van and our gear over to the Nancy Pond trailhead in Crawford Notch on the Saco River. We shouldered our loads and off we went. George and Gerry had fiberglass kayaks and I, my Duck. We used two different systems for carrying the rigid kayaks. As anyone who has ever tried knows, the only acceptable way to carry a kayak (or a C-1) any distance is over one's head, Gruman style. However, unless you happen to be a Charlie Walbridge, a yoke or some other means of transferring the weight to your shoulders is a must. The best system is one which also allows adjusting the load for different centers of gravity. George used a frame of wood consisting basically of two parallel slats spanning the cockpit from front to back with space between for his head. This was held to the boat with tape and the slats were padded with ethafoam for his shoulders. Gerry found that the top of his packframe was just about exactly the same width as his cockpit, and that the boat balanced almost perfectly on the top two clevis pins which held the packsack to the frame. If one were not so lucky, it might take some fudging to adapt this system, but the principle of transferring the weight of a boat to shoulders and hips with no extra gear strikes me as ideal.

The trail was steep, and we soon found that 2000 feet of elevation change is no joke with 60-pound loads. The weather was cloudy/crisp and just about perfect for the foolishness we had in mind. I was doing pretty well until we hit the Nancy Cascades. We were standing there at the bottom of this spectacular 400 foot waterfall, admiring. Gerry then pointed out the trail ahead,
which went right up the side of the waterfall. From here to the top, the trail was rugged and the climb a real grind. At the top of the Cascades we collapsed in a heap, then continued up more gradually to Nancy Pond at the height of land between the Saco and the Pemi river basins. The trail from Nancy Pond across the top to Norcross Pond was level, but hubcap deep in mud and water. We had been hoping to get down into the Pemi drainage to camp, but it was starting to look like we wouldn't make it. At Norcross Pond, Gerry couldn't resist the temptation to boat instead of walk. It must be a first, we reasoned—who else would be goofy enough to drag a kayak way up here?

We camped at the far end of Norcross pond just at the brink of the rocky ledge where Norcross Brook goes tumbling and splashing down the moun-

tainside into the Pemi basin. It was now getting dark, and was cloudy and windy and quite cold to boot. We ate a meal of cold meat, cheese, granola, and boiled water for hot chocolate which helped considerably. The wet wood didn't burn too well to start with, and the wind blew away the heat as fast as it came out, so we gave up on the campfire and crawled into Gerry's tent with our supply of Iris's blackberry wine and listened to the wind howl up out of the Pemi basin through the pine trees above us. Strangely enough, due to some quirk of topography, the wind sounded like a real gale but scarcely rippled the tent.

Morning came, and it was COLD. After fighting a brief but losing battle with a fire, we took my small stove and retreated to the tent where we were soon very cozy. The breakfast was mostly Iris's blueberry muffins, which had un-
Fortunately been entrusted to Gerry who stuffed them into his pack at the last moment, then sat on his pack at the rest stops. I got even giving him his share in the form of the small crumbs, which I poured into his cup of hot chocolate, and threatening to tell Iris what he'd done to them.

We were soon on our way down, and compared to the trail up, the trail down was pure pleasure—open, well-drained, and of uniform gradient.

From the start we had been looking forward to meeting some hikers and we now got great pleasure from the incredulous looks and open-mouthed stares of the three we met coming up from Desolation Shelter. Almost worth the whole effort right there.

It only took an hour to get down to the junction of Norcross and Anderson Brooks. We had hoped we could boat from here, but the roaring Pemi was still just a little trout stream with lots of gravel bars and blow-downs. We decided to put in anyhow, figuring that we could wade and float the boats easier than we could carry and we might even get to boat a little before Stillwater. I boated a lot of this with my feet on the deck so I could hop out quicker.

At Stillwater, several other brooks joined in, and it was definitely time for spray skirts. Directly below we hit about a mile of really interesting river, where the rapids were formed by a series of ledges in strange configurations. It was all boatable, as I remember, but we stopped to scout a number of times, and frantic moves were the order of the day. Somewhere in here George blasted into an eddy trying desperately to stop above a ledge. His bow glanced off and over Gerry in Norcross Pond. (He said the pack made things a bit topheavy.)
Gerry's stern, ripping off the packframe that had been taped there and neatly depositing it on the sloping bedrock shore where George came to rest like a beached whale. Below here there was a less interesting gravelly section and I believe it was near Crystal Brook where we hit the steep stuff which showed on the map as 200 feet per mile. At our level, it proved to be a steep, bouldery, cascading strainer with all the chutes offset the wrong way and definitely a carry. We found a trail which soon joined the old logging railroad grade and the half-mile or so portage was not too bad. We got back in, but the going was still steep, with several short portages or lining operations over ledgy rapids. We were now a bit tired, and were hoping to hit the North Fork soon. The river from the North Fork to the suspension bridge was still an unknown quantity, with the 6 or 7 miles we had previously boated still to go, and it was already well past noon. Finally we saw the trail bridge that crosses where the North Fork comes in and felt somewhat better, although the volume was almost doubled which upped the ante. The weather was not the best either, with increasing clouds and a wind, definitely chilly. The river proved to be boatable from the North Fork down, a beautiful whitewater run. We stopped briefly at the suspension bridge for a bite to eat and so I could dig out my extra sweater and windbreaker for George who was starting to suffer from the cold weather in spite of his wetsuit.

We were all tired by now, but I was enjoying the river and my new boat so much I scarcely noticed. In the heavier water, I really liked the Spezi. Its extra width makes it harder to roll, but it's so stable one can get away with murder and not flip. It is very maneuverable, and in big waves, the big bow bobs up...
and the boat flexes ever so slightly for a very pleasant, soft, dry ride. Charlie Walbridge had been very concerned about the boat collapsing on the paddler's legs when pinned broadside on a rock, a possibility which definitely warrants some extra care and a readily available large knife. However I now found there is another side to the coin. When I found myself bridged across a chute with the bow and stern stuck on rocks and water piling up on the deck, I noted that the boat started to bend a little, so I bounced hard with my feet and POP. The bow bent up sharply just ahead of my feet, the boat slid off and down the chute, and POP, my bow snapped down into place again. Try that with fiberglass!

The river had been a continuous class IV, and continued all the way, increasing in volume as small brooks came in, and becoming definitely heavy below Franconia Brook which was at least as big as the North Fork had been. George swam at one of the ledges, and between that and the previous bashing it had taken, his boat started to leak badly, requiring frequent stops to dump. We had tape, but it was now raining again and drying the boat would have been tough so we decided to limp in. We arrived at the Kancamagus bridge at 5:30 Sunday night. It took most of an hour to get out of the river and load up the boats, and an hour each way to drive over to Crawford Notch to get my van. We stopped at a restaurant and ate a good meal, then George grabbed a cheap motel and collapsed saying he wasn't really needed at work Monday morning anyhow, or some such thing. Gerry and I pulled into Concord at 11:55, with Iris about ready to institute search and rescue.

I'm glad we did it, it was a great trip, etc. But once is enough. However if you want to go up from the bottom and run from the North Fork down when there is good water. I'm definitely interested. And Charlie Walbridge thinks it would be neat to hike in and do the North Fork from the top. He admits the Thoreau Falls section is probably not runnable at about 300 feet per mile, but then, one never knows. . . .

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New Brunswick, NJ 08903

NEW YORK

Appalachian Mt. Club
New York Chapter
Emile Penz
145 Sheridan Ave.
Roselle Park, NJ 07076

Kayak and Canoe Club of New York
Ed Alexander, Rep.
9 W. 38th St.
East Brunswick, NJ 08816

体育 Rites Club Inc.
Kat LeClair
Brayton Park
Ossining, NY 10562

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

Niagara George kayak Club
Doug Bushnell
41-17th St.
Buffalo, NY 14213

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

NORTH CAROLINA

Carolinas Canoe Club
Tom Erickson
Box 901
Watansu Whitewater Club
Richard Furman, M.D.
State Farm Rd.
Boone, NC 28607

Nantahala Outdoor Center
Payson Kennedy
Slar Rt. Bx 88
Bryson City, NC 28713

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

Haw River Paddle
Stop 211 E. Main St.
Carborro, NC 27510
River Runners' Emporium
3353 Hillbilly Rd.
Durham, NC 27705

Venture Program
John B. Griffin
Cone Ump, Ctr. UNCC
Charlotte, NC 28223

SOUTH CAROLINA

USC Whitewater Club
Box 80090
University of South Carolina
Columbia, SC 29033

OHIO

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

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

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

Keel-Haulers Canoe Club
1649 Allen Dr.
Westlake, OH 44145

Cuyahoga Canoe Club
Chuck A. Tummonds
4082 E. 436
Mantua, OH 44255

OREGON

Oregon River Club
Joe Chappell
Rte. 1, Box 300
Hubbard, OR 97032

Sunshine Expedition, Inc.
605 Hutt Lake
Grants Pass, OR 97526

Willamette Kayak & Canoe Club
P.O. Box 1062
Corvallis, OR 97330

PENNSYLVANIA

Canoe, Kayak & Sailing Club
Douglas Ettenger
701 Wood Street
Wilkinsburg, PA 15221

Slippery Rock State College
L. L. Heddeston, Director
Student Activities & Recreation
Slippery Rock, PA 16057

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

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

Wildwater Boating Club
Robert J. Martin
1D 179
Belleville, PA 16283

Conewago Canoe Club
George F. Figdore
2267 Willow Rd.
York, PA 17404

Allentown Hiking Club
Bill Bevan
124 S. 11th St.
Allentown, PA 18102

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

Appalachian Mt. Club
Delaware Valley Chapter
Fred Cox
476 Kerr Ln.
Springfield, PA 19064

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

(AWA Affiliates, continued)
AWA Affiliates, continued

**PENNSYLVANIA (Cont.)**
Dauber Canoe & Kayak
Walter Dub
Box 50
Washington Crossing, PA 18977

**TENNESSEE**
Tennessee Scenic Rivers
Box 3104
Nashville, TN 37219

Sewanee Ski & Outing Club
Hugh Caldwell
University of the South
Sewanee, TN 37375

The Baylor School
Chattanooga, TN 37401

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

Footloggers
P.O. Box 3663 CRS
2220 N. Roan St.
Johnson City, TN 37601

E Tenn., WV Club
Richard Gammage
Oak Ridge, TN 37830

Chata Canoe Club
Box X70 University Sta
Knoxville, TN 37916

Bluff City Canoe Club
P.O. Box 453
Memphis, TN 38104

**TEXAS**
Down River Club-Dallas
Paul W. McCarty
1412 Oak Lea
Irving, TX 75061

Greater Fort Worth Sierra Club
River Touring Section
P.O. Box 1057
Fort Worth, TX 76101

Texas Explorer Club
Bob Burleson, Rep.
Box 844
Temple, TX 76501

Explorer Post 425
A. B. Millett
708 Mercedes
Ft. Worth, TX 76126

Kayaks Limited
Larry A. Dailey
1140 Markham St.
Houston, TX 77027

R & M Outfitters
Maurice Huford
2534 Texas Ave.
Houston, TX 77080

TMC Canoe Club
Tom Sloan
800 College Blvd.
San Antonio, TX 78209

Texas Whitewater Association
Thomas B. Cowden
P.O. Box 5264
Austin, TX 78763

**TEXAS (Cont.)**
Trinity Unit, Canoe Club
Major Sharpe McCollough
Bx 190.73 Stadium Dr.
San Antonio, TX 78284

**UTAH**
Wasatch Whitewater Assoc.
Chris Arthur Speirs
161 South 111 East
Salt Lake City, UT 84102

**VERMONT**
Northeast Canoe & Kayak
Malcolm Moore
Marlboro, VT 05344

**Northern Vermont Canoe Cruisers**
Edwin Amidon, Jr.
824 Shelburne VT 05482

West River Canoe
Route 100 South
E. Jamaica, VT 05343

Johnson Whitewater Club
Pamela C. Peckham
Box 449
Johnson, VT 05656

Brattleboro Outing Club
Donald L. Kinley
21 Dracan Pl.
Brattleboro, VT 05301

**VIRGINIA**
Canoe Cruisers Assoc.
John C. Hefli
1515 N. Buchanan St.
Arlington, VA 22205

Coastal Canoelists, Inc.
Hope Gross
422E, Mockingbird Lane
Spotsylvania, VA 22553

Explorer Post 999
R. Steve Thomas, Jr.
3539 N. Colonial Dr.
Hopewell, VA 23860

Blue Ridge Voyagers
Ralph L. Smith
8119 Hillcrest Dr.
Manassas, VA 22110

**WASHINGTON**
Washington Kayak Club
P.O. Box 24264
Seattle, WA 98124

White Water Sports
Larry Jameison
6820 Roosevelt Way N.E.
Seattle, WA 98115

The Tacoma Mountaineers
Kayak & Canoe Comm.
Bob Hammond
3512 35th Ave.
Tacoma, WA 98466

Desert Kayak & Canoe Club
Larry E. Thomas
450 Mateo Ct., Richland, WA 99352

**WEST VIRGINIA**
West Virginia Wildwater Association
Idair Smookler
2737 Daniels Ave.
S. Charleston, WV 25303

**WISCONSIN**
Wisconsin Houseboat Outing Club
100 Langdon St.
Madison, WI 53706

Wolf River Canoe Club
R. Charles Steed
Wolf River Lodge
White Lake, WI 54541

Fond Du Lac Voyageurs
114 Harrison Pl.
Fond Du Lac, WI 54936

Sierra Club
John Major Chapter
Rosemary & David Welsh
2034 N. Murray Ave.
Milwaukee, WI 53211

**WYOMING**
Western Wyoming Kayak Club
Donald L. Hahn
General Delivery
Wilson, WY 83014

**CANADA**
Canadian Whitewater Affiliation
Don Galraith
436 Stirton Ave.
Burlington, Ontario
Canada L7R 2W9

Canot-Kayak-Camping L’Aval
Jacques Cassista
1600 Rue St.-Denis Ste.-Foy
Quebec, Canada

Edmonton Whitewater Paddlers
P.O. Box 417 S. Edmonton P.O.
Edmonton, Alberta
Canada T6E 4S8

North West Voyagers
10922 88th Ave.
Edmonton, Alberta
Canada

**AUSTRALIA**
Southern Cross Canoe Club
Barry Ellis
11 Jewish Rd., Croydon
Victoria, Australia

P.O. Box 588
Wagga Wagga N.S.W. 2650
Australia

**NEW ZEALAND**
Gisborne Canoe & Tramping Club, Inc.
Tony Geard
Box 289
Gisborne, New Zealand

**SWITZERLAND**
Kanu Club Zürich
Otto Kosma
8008 Zurich Dufour Str. 3
Switzerland