

American **WHITEWATER**



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Cover Photo of kayaker on Snake River, near
Jackson, WY. Photo by Philip Bobrow

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River Notes

EPRO MEMBER REQUESTS HELP WITH CONSERVATION OF PUCUARE RIVER

In early 1986, The Costa Rican Electrical Institute cleared 2½ acres of virgin tropical forest on the banks of the Pucuaré River as a first step towards building a 200 meter high dam which would wipe out the river. This action was taken despite the fact that the former president of Costa Rica Luis Alberto Monge had signed a decree protecting the Pucuaré River. The new president, Oscar Arias, has so far done nothing to stop this.

Unlike most countries in the developing world, Costa Rica cares about what Americans think. Letters to President Oscar Arias, could be the key to stopping the dam.

What To Say

Tell President Arias that Costa Rica is famous for its beautiful environment and that the Pucuaré River is a national attraction worth preserving. Many of us look forward to the day when we can visit Costa Rica to raft or kayak on the Pucuaré River.

Write To: President Oscar Arias, Casa Presidencial, San Jose, Costa Rica, C.A.

Send copies of your letters to: Michael Kaye, Costa Rica Expeditions, APARTADO 6941, San Jose, Costa Rica, C.A.

Postage from the U.S. to Costa Rica is 78¢.

OTTAWA NATIONAL FOREST

Canoeing beyond the crowds. Just a few hours from the fiberglass flotillas of the Boundary Waters Canoe Area Wilderness is a land of lakes and rivers where seeing other canoeists is a rarity. Its rapids and waterfalls, cold streams and clear lakes offer varied challenges for the canoeist with an independent streak.

Located in the extreme western Upper Peninsula of Michigan, the Ottawa National Forest is nearly a million acres of

hardwood and conifer woodlands blessed with an abundance of water. It also straddles the Great Lakes-Mississippi River divide. This unique geography makes for unique canoeing.

The southern half of the Forest is dotted with hundreds of small lakes, especially near the Wisconsin border. The Sylvania Recreation Area hosts 22,000 visitors annually, who enjoy canoeing the crystal clear lakes and fishing for trophy bass, walleye, and northern pike.

The southern rivers vary from flat water with moderate currents to small rapids. Many of the smaller streams have a thick overgrowth of tag alder and portages over beaver dams may be necessary.

These same rivers undergo a sharp transformation on the northern half of the Forest where they begin their headlong descent to Lake Superior. The rivers flow between high hills and ridges, and fast water, rock ledges and waterfalls are common. The Montreal River, adjacent to the western Forest boundary, was the site of the 1984 whitewater Pan American Cup races.

The best time to canoe the Ottawa National Forest's rivers is in the spring following snowmelt. Other times of the year, they can be flashy, transformed by a rainstorm from rock-strewn shallows to formidable torrents.

Nearly all of the major river systems of the Ottawa National Forest are being considered for potential designation as National Wild and Scenic Rivers.

Within a day's drive of major Midwest metropolitan areas, the Ottawa National Forest and its canoeing opportunities retain a remoteness and North Woods flavor that surprises many first-time visitors.

Additional information, including a river-by-river description of canoeing opportunities, is available from the Ottawa National Forest Supervisors Office, East U.S. 2, Ironwood, MI 49938, (906) 932-1330 or District Ranger Offices in Bergland, Bessemer, Iron River, Kenton, Ontonagon, and Watersmeet.

Dear Editor:

Your lead story in the June, 1986 "American Canoeist" about four experienced paddlers dying in one weekend ("FOUR DEATHS: Now What?"), as well as the notice on page 10 of the same issue that Donna Berglund, an Instructor Trainer, died on a Montana River, got me to thinking about the roll safety has played in the history of canoesport. Let me explain.

Not too many years ago, civil authorities became alarmed by the disproportionate number of deaths associated with canoeing and kayaking; the sport itself was in jeopardy of being outlawed. At the time, expert paddlers, like yourself, realized that the deaths were nearly always due to untrained, inexperienced boaters. And so paddlers, concerned with losing their right to canoe and kayak, got together under a banner reading, "EDUCATION NOT REGULATION." Their mission was to reform the way canoeing was taught, to train the public as well as the authorities that paddling was not dangerous by its nature and that canoes were not "tippy hazards" that needed to be outlawed.

The success of these apostles-of-safety surprised even themselves. Not only were the ACA instruction programs begun and the Red Cross courses improved, but new institutions, such as the Ohio River Rescue School, were formed to address special needs. The early instructional programs focused on safety to such an extent that an observer could get the feeling that teaching students the modern paddling techniques was almost incidental to teaching safety.

The results of instruction were great. In some states, paddling deaths dropped by factors of five or even ten. Meanwhile, the sport grew from an activity pursued by a fringe group of oddballs to a respectable pastime. We couldn't educate everyone who paddled, but any news of fatalities, whether from official reports or by word-of-mouth, always proved: The educated boater was a safe boater.

Of course, results like these were achieved at a price. The efforts of the safety and instruction committees are

part of that price. There is another part of that price also. That part is the purely personal price an individual pays when he or she enforces the safety code over the objections of the group. It's the price a trip leader pays when he tells the group it is just too cold to paddle today and they will have to turn back. It's the price you pay when you tell a friend to go home because he forgot his float bags, or when you have to force someone to walk a rapid which is, in your judgement, beyond that person's ability. The fact that fatalities were being reduced indicated that the price was being paid.

But, over the years, the reports have been changing: I hear of kayakers bailing out while paddling in a crowd on the Yough, only to swim one or two more rapids because no one noticed or cared. I hear of experts paddling class six drops who not only don't scout, but also neglect to advise a newcomer on how to run the rapid, resulting in an injury. I hear of instructors performing rescues while paddling hands-only — on purpose. I hear of trips where the best paddlers are a rapid or two ahead of novices who may need their help. I read of four experienced boaters dying in one weekend, and nine pages later, I read of Donna Berglund, an Instructor Trainer, dying while boating alone. It's no longer just the ignorant who are dying.

To cite a specific example: A few weeks ago, I was standing on a bridge over the Lehigh River gorge. Soon, a threesome of solo open boaters appeared. Their high-tech boats, outfitted with saddles and stem-to-stern float-bags, made it clear they had been exposed to some of the finer points of modern paddling. I was not disappointed. Their performance was flawless. As I watched them glide in and out, I could almost hear the music they made with the rhythm of their eddy-turns. In all this harmony, there was only one discordant note; something just didn't look right. Maybe it was because none of them were wearing life jackets. It's no longer just the ignorant who are ignorant.

What's going on here? Why was their judgement about what was safe so different from mine? And even more

importantly: Why does the safety consciousness of the advanced paddler seem to be slipping?

Or is safety consciousness slipping? After all, the safety rules are not laws; they are guidelines with some flexibility and it's true that no one follows the rules "by the book" at all times.

But how much flexibility is allowed? Does it come down to just a matter of opinion? Did the four dead people simply have the wrong opinion—the wrong judgement—about which safety rules to break? I don't think so. There's another possibility: Perhaps they had no opinion at all. Perhaps they weren't even thinking about safety.

How is it possible to run a river and not think explicitly about safety? It is possible because river-running is, in fact, a relatively harmless pursuit and the usual safety habits we acquire, like wearing helmets and life-jackets, are sufficient protection much of the time. But a boater who runs a river without ever focusing on safety explicitly is just going through the motions and not taking an active part in his own survival. Like the small child at play, such a boater passes from one un-safe act to the next, seeing only what is obvious but never what is potential.

To be sure, most novice paddlers are timid and, therefore, tend to be safety conscious. But many paddlers go through a familiarity-breeds-contempt period when every roll is a success, every eddy is made and the boater is master of every situation. Thus the paddler can forget, if he ever knew, that skill is no substitute for judgement. Set a throw-bag? It's an insult! She never misses a roll. Boat alone? No problem—do it all the time—nothing ever happened. Under-cut rock below my play spot? Only nerds ever get in trouble there. And so goes their contempt for the hazards of river running.

To compound matters, their contempt is not often punished by the river because in river running the penalty you pay is not proportional to the safety violation you commit. The penalties are mostly minor: a long swim, a cut, a

bruise, a minor case of hypothermia. In fact, it seems that just about any incident is considered minor that doesn't involve an ambulance ride.

So, why has this tendency of river-runners to take safety for granted and to confuse skill with safety been allowed to go unchecked. What can be done about it?

I think the tendency has gone unchecked because we, the paddling community as a whole, have lost our fear of the rivers and have forgotten the goals we had when we proclaimed, "EDUCATION NOT REGULATION." Recall that our goal was, primarily, safety. And recall that the word "EDUCATION" referred to safety education, not merely skills development. Recall, too, the personal price people must pay when they enforce the safety rules.

And that is why I am disturbed by what appears to be a change in attitude about instruction. Safety instruction is more important today than ever because, as you have pointed out before new paddlers are progressing too fast to gain a lot of experience before they tackle rapids beyond their rescue abilities.

But, when I read articles by the ACA instruction committee, I often get the impression that instructors are to be judged, not on their safety record or their safety awareness, but on the style of paddling they have adopted and whether or not they have memorized the "official" list of strokes. Even though I don't believe the instruction committee consciously intends to place safety secondary, this emphasis reinforces the notion that skill can substitute for safety.

The change in emphasis from safety to high-tech skills also alienates "older" paddlers who have seen styles come and go and whose experience could serve as a moderating influence over the apparent death-wish of their younger counterparts. Moreover, the change in emphasis makes instructors and trip-leaders less willing to pay the personal price necessary to enforce safety because they sense they are alone in their safety-consciousness, with no philosophical back-up from the paddling "authorities". I call for a return to our

roots, for the sake of all the excellent paddlers out there who have forgotten them. I think that even the most fundamental safety ideas must be repeated, in print, over and over, even though they may seem like old news. That will serve to teach the newcomers and to give authority to the words of safety-conscious trip-leaders.

We must remind paddlers that skill is only one component of safety—and not even the most important. Skill is not some kind of Voodoo against getting hurt. Paddlers must be made to understand that safety preparations don't relate as much to the skill of the boater as they do to the penalties that boater will suffer if her skill falls short. In other words, "It's better to be safe a thousand times, than dead once!" Paddlers must keep in mind: If you're swimming, it doesn't matter that you fell out of a high-tech kayak, or that you are a world-class paddler, you are in just as much trouble as the novice and you should have planned accordingly. (See "The Rating Game" by Sam Chambliss in the May-June 1986 *AMERICAN WHITEWATER*.)

All of which is another way of saying I think that even more emphasis must be placed on teaching safety from the beginning, and on teaching the duties of the trip-leader. Instructors must to teach imagination and judgement—the "what if" attitude that Bechdel and Ray talk about. Trip leaders must be taught to consider themselves responsible for the safety of the group and not just a message center before the trip. They must be willing to pay the emotional price of true leadership—perhaps disagreeing with members of the group or even sending someone home in the interest of safety. They must believe that safety is not negotiable! But the particular style they choose to paddle or the strokes they choose to teach must be appropriate). If we do this we can say, "The educated boater is the safe boater!"

Sincerely,
John G. Rako
231 Lone Lane
Allentown, PA 18104

DEATH TOLL RISES AMONG KAYAKERS

Previously I reported on three fatalities which occurred among kayakers in the first part of the year, noting that it was a dangerous trend. I have since heard of two other deaths and a near miss among East Coast boaters. If the trend continues, this will be the worst year that our sport has ever seen.

Late spring, 1986, a squirt boater paddling a Falcon died on the Moose River in upstate New York. While running a Class V-plus drop (the Knife-edge), he was caught in a pour over, then repeatedly ended and blasted, forcing him to eject. He was pinned in a narrow chute so severely that it took two weeks and some blasting to recover the body. The small number of squirt boats being used, combined with the two fatalities of this spring in which the victims lost control of their boats in big water, suggest to me that those who use these low-volume stunt kayaks be aware of the additional exposure and modify their boating accordingly.

Those of us who raced in the 70's are shocked at the death of former U.S. Team member Donna Berglund during a wildwater training run on a Class III-IV river in Montana. The pin which killed her was not that bad, but because she was training alone it proved to be fatal. This reinforces the dangers of solo paddling and especially of training alone in whitewater.

A third incident involved a kayaker who suffered an explosive fracture of two vertebrae as a result of landing flat after a run of 15 foot Big Sandy Falls in West Virginia. The group did not recognize his predicament; he walked a mile over rugged terrain to the car. Doctors marvel that he wasn't paralyzed from the waist down. This underscores the dangers of running falls (this is not the first back injury) and the importance of dealing conservatively with severe back pain. A physician stated that the victim should have been instructed to lie flat pending evacuation by backboard or helicopter. The next victim will not be so lucky.

This series of accidents is of great concern. I see too many people moving too fast without regard for safety rules, water levels, and other matters of importance. I think we all need to re-evaluate our approach to difficult whitewater, particularly with regards to solo paddling and low-volume play boats. Rivers are remarkably forgiving, but can show unexpected signs of bad temper even to the most experienced paddlers. Let's make sure we're not the next to be caught.



Charlie Walbridge
ACA Safety
Chairman

ITS THE LAW:

Whitewater Recreation Releases Required for Gauley Whitewater

On October 17, 1986 Congress made whitewater recreation an official project purpose of the Summersville Dam, and prescribed a minimum of 20 days of releases during the fall flood-control drawdown. More importantly, language in the bill gives whitewater releases precedence over any future hydropower generation during the fall whitewater season.

The language was included in the Water Resources Development Act of 1986 by Congressman Nick Rahall, who hails from Beckley, West Virginia. Congressman Rahall first included the whitewater authorization language in a version of the 1984 omnibus water project bill. It took Congress over 2 years to finalize the overall bill, which relates to hundreds of Corps projects around the nation.

The language is important to the future of whitewater recreation on the Gauley because of past problems in getting cooperation from the Corps for releases, and because the City of Summersville and NOAH Corporation are planning to install a hydro project at the dam. One sentence of the legislation reads, "Except in cases of emergency, no suspension or modification of such

releases may be made solely for reasons associated with the generation of hydro-electric power at Summersville Dam."

In recent years the Gauley River has become a mecca for whitewater enthusiasts from around the nation. The Corps of Engineers, recognizing the economic value of the fall releases, began actively cooperating with whitewater interests groups in 1985 by announcing release dates in January and "pulsing" flows from the dam during dry years to enhance the reliability of the season. After the fall 1986 season, the Corps reported that whitewater recreation accounted for \$16 million in direct and indirect economic benefits during the 20 day season alone.

The legislation resulted from a cooperative effort between West Virginia outfitters and Citizens for Gauley River that initiated the legislation in 1984.

CANOE'S Annual Buyers Guide

The December issue of CANOE includes the 1987 **Buyer's Guide** - an 84 page supplement containing information on over 1700 canoes and kayaks, and almost 200 rowers and inflatables. For the First time this year, the **Guide** includes a comprehensive listing of paddles and life preservers, as well.

There are product listings from over 200 different manufacturers, and each product area is prefaced with a comprehensive and illustrated guide to choosing your canoe, kayak, paddle or PFD.

Whether one is a racer or recreationalist, fisherman or expeditioner, river basher or birdwatcher, there's a boat to meet the most casual or specialized need. Boats in classic wood or utilitarian plastic, built for beauty, built for wear or just plain paddling pleasure, are all here.

CANOE is America's number one magazine for the sport and lifestyle of canoeing and kayaking, published seven times a year, including the Annual **Buyer's Guide**, now in its 14th year.

River Notes

RECREATION GETS NEW STATUS IN AMENDMENTS TO FEDERAL POWER ACT

Whitewater recreation recently gained new status in the deliberations of the Federal Energy Regulatory Commission (FERC) when Congress passed legislation requiring FERC to give "equal consideration" to fish, wildlife, energy conservation, and environmental values in the licensing of hydroelectric plants. The new law requires both procedural and substantive consideration, meaning that FERC **must** consider these matters and show that they responded appropriately.

In the past FERC has given little notice to recreational values downstream of hydro projects. Now FERC is required by law to give recreation interests groups consideration **if they intervene** in the license application process. The new law applies **to license application for new projects, as well as, for the relicensing of old projects**. It also applies to projects where the licensing process is already in progress.

The provision is important to river recreation interests because private developers and municipalities have applied for licenses to install hydroelectric generating facilities at many dams upstream of popular whitewater runs. The Black River in New York, the Youghiogheny and Lehigh Rivers in Pennsylvania, the Gauley River in West Virginia are among the whitewater runs downstream of proposed projects.

To take advantage of this law, recreation interest groups must be prepared to intervene during the licensing of a new project or the relicensing of an existing project. For example, many old hydro projects are scheduled for relicensing between now and the turn of the century (only 13 years from now). Flows beneficial to whitewater recreation can only be achieved by submitting an intervention, which outlines your interest and the conditions you wish attached to the license. You may wish to oppose the issuance of a license altogether, although that is not a prerequisite for intervening.

For more information contact: David Brown 615-524-1045.

NEW SOBEK CATALOG AVAILABLE

SOBEK Expeditions of Angels Camp, California, has announced the release of its new 1987 catalog, *The Almanac of Adventure*. The 40-page catalog more than 65 color photographs illustrating over 200 adventure travel tours in the far corners of the world. The *Almanac of Adventure* is available for \$1 (to cover postage) from SOBEK Almanac, P.O. Box 333, Angels Camp, CA 95222.

All seven continents, both polar regions, and dozens of different activities are featured in the new *Almanac*. SOBEK has long used a trip classification system to rank its trips in difficulty from Easy to Strenuous, so each traveler can find a trip suited to his or her own level. Trip lengths also vary, from 2-day weekend river trips on the Tuolumne River in California to a 49-day "Grand Adventure" in India, Nepal and the Maldives. This wide range of offerings makes the 1987 *Almanac of Adventure* an invaluable resource for travel agents, vacationers or armchair travelers dreaming of the ultimate adventure trip.

The full-color, magazine-style *Almanac* includes 38 programs new this year, further expanding SOBEK's offerings in the popular adventure travel field. Among them are a "High Route to China" overlanding tour across the Hunza region of Pakistan into Xinjiang Province, and a submarine week of diving the coral reefs of the British Virgin Islands, "Treasured Islands." There's also a cabin-based fishing vacation in Alaska's Kenai region, a mountaineer's camp in the Caucasus Mountains of the USSR, and an 11-day "Lost Worlds" trip to Angel Falls in Venezuela, the world's highest cascade.

All programs, totalling over 200 adventure travel tours for every type of traveler, can be booked directly through local travel agents, or through SOBEK, P.O. Box 333, Angels Camp, CA 95222. For further information, call (209) 736-4524.

SIERRA EXPLORATORY

by Jerry Kauffman

In the Agatha Cristie fashion, clues to what stream we boated will appear throughout this story. By the time you reach the end of the tale, you should have guessed our run.

Our scheme started high in the Sierra Nevada with the rare experience of kayaking midst towering Jeffrey Pines. Before us lay a particularly unique first descent. It was surprising and inspiring that the river hadn't been previously snatched up by the authors of *A River Guidebook to the Best Storytellers in the State of California*, or by the apparently now retired "billy-goat" boaters.

The cast of desperados coaxed by yours truly, the instigator of the grand scheme, included Rod Erdman, Bay Area representative of the Church of the Subgenious, Arn Terry, world-record holder as the fastest spray-skirt put-er on-er and squirt boat aficionado, and J. R. "Bob" Dobb, a man known to all.

In one day we planned to boat the 10.5 miles with an average gradient of 310 feet per mile. Our put-in was not far from the scene of the 1983 Grand Canyon of the Tuolumne boat-packing epic. Unlike one member of that team, a diligent cohort of the above-mentioned barefoot writing brethren, we had not prepared for the exploratory by jogging with our kayaks three miles a day. Indeed, we did not jog at all.

We started at a picnic area within plain sight of the local guardians since the road to the campground two miles downstream was still snowed in. Two weeks earlier, when most of the Sierra rivers were peaking, our waterway was too high for safe boating. Now, in mid-June, the water flow was on the low side, but adequate.

The first mile was steep and the rapids were very continuous. Fallen trees were plentiful, some spanning the entire stream width, but eddies were always present for the easy twenty-foot portages. We traded off the lead several times and were soon drifting down easier water near the campgrounds.

While studying the maps, we realized that the next stretch would be the steepest. As we cautiously approached this section, the trees slowly gave way to granite outcroppings. Considering the gradient, we expected to do some "boat shouldering", but we were amazed at how runnable the rapids were.

As the shore turned to solid granite, we encountered a falls of questionable boat-ability. Arn quickly decided to portage. Rod thought I should run it first—but I generously volunteered to photograph him doing the honors.

Rod's line into it was perfect—almost. With a splash he hit the bottom and the reversal quickly grabbed his boat's tail. As the kayak's tail was slowly being sucked down ever deeper and the nose pointing upward more acutely every moment, Rod tried valiantly to paddle downstream with honorable effort. Able to paddle on only one side because of a rock in precisely the wrong position on his other side, he was sucked back into the watery cauldron, thus causing both our pulses to escalate.

With rock walls bordering both ends of the reversal, he could not get out while in the kayak. As Arn and I talked about tossing him the awaited throw-rope, he popped to the surface 20 feet downstream. He was O.K. and had the foresight to swim after his floating shoe. Like a dog chasing a stick, he quickly reached the shoe, put it in his mouth, and swam to shore before the next drop.

Arn and I stared in disbelief as his boat, which was still in the hole, disappeared completely from sight. I positioned myself next to the hole, and when it finally reappeared, grabbed it. After a tug-of-war with the hole, it relinquished its hold and the kayak, too, was safely on shore. With the proof securely in the camera, I considered the run a success and proceeded to portage, as did Bob.

The character of the river changed to pool drop as granite domes encroached from both sides. The result was some delightful sliding drops over smooth slabs—the alluring types you typically happen upon while on a backpacking trip with your kayak in the garage at

home. One inviting series of linked slides ended in a nasty hole, necessitating one of our few portages around rapids. Fortunately, the granite dome made for an easy path.

We knew the last cataract above the take-out was a big one and did not want to enter it unexpectedly. The gradient was sustained leading into it so we would have to be careful. Continuing downstream, we frequently got out of the boats to scout around sharp bends.

One of the final canyons had a nice rapid leading into a ten-foot falls. This time Rod quickly decided to portage. After looking at it for some time from an imposing overhang, I offered to continue my success from the aforementioned side of the camera if Arn wanted to try his luck. Walking back to his kayak, he gave me the thumbs-up sign. His run was perfect as he shot over the drop, narrowly missing a vicious-looking boil below. I cocked the camera and proceeded to test the wear characteristics of my Dancer to granite abrasion for the 75 yards around the rapid. Bob chose the dry route also.

Continuing downstream, a hiking bridge above the last cataract soon came into view. We got out of the boats to scout the rapid for posterity's sake. It consisted of a huge initial vertical drop and a sizable final vertical drop separated by a continuous series of intense water over large boulders. The sight was so spectacular that a viewing platform had been erected for hikers by the Federal agency in charge of developing and protecting the area. I would rather have my chances with Niagara Falls than to attempt this drop.

Although an excellent portage trail was present, its steepness and three and one-half mile length compelled us to consider weight-saving measures. Rod was boating in a classic Hollowform kayak. Mention was made of how much easier the portage would be if he was willing to sacrifice the relic for one last spectacular sight. He knew it wouldn't survive in usable condition and said it was worth at least \$150. However, if fifteen people with ten extra dollars each could be found, he would consider it.

Passers-by laughed at the prospect and we started the long walk to our awaiting vehicle at the bottom of the drop. The descent into the glacier-carved, granite-walled valley was a fitting end to a fine day.

(If you still haven't guessed the river's name, it's Yosemite Creek.)

We are going to Chile in January or February. If you are interested in joining us, please call me at (409) 262-6561.

EVERYTHING WE THINK YOU OUGHT TO KNOW ABOUT KAYAKS

by Fletcher Anderson

For perhaps the 100th time, you attempt an **endo** in water a good foot too shallow, knocking off the last six inches of your bow. Checking out the rest of the boat, you see that the stern hasn't been doing all that well either. Indeed, the principal structural component is duct tape. You could set aside two or three days to repair it all, but the only thing you know of worse than sniffing all those resin fumes is itching from grinding off the old fiberglass. "The hell with it," you say, "it's time to get myself a new boat anyway." How fortunate that you should come to that conclusion at the very moment we have chosen to tell you everything we think you ought to know about boats.

BOAT DESIGN

There is no best design. To make an intelligent choice of boat design, you must consider what the boat is going to be used for, where it is going to be used, and who is going to use it. If it is going to be used for racing, forget the rest of this article. New racing designs appear every six months, frequently leaving older designs obsolete. If you want a racing boat, go to a race and ask the top racers what kind of boat they intend to use next season. If you are not a racer, most of your time on the river is probably spent avoiding collisions with rocks or playing in the hydraulics they form. The most desirable boat characteristics for those

activities are extreme maneuverability and bouyancy, and those characteristics are to be found in the high volume slalom length boat that nearly everyone all over the country paddles. Any such boat is suitable for a beginning boater. Depending on your specific needs, some boats will be more suitable for you than others. All else being equal, the flatter the bottom of the boat, the more stable it becomes. The greater the amount of rocker, the more maneuverability (but slower). The more V it has in the bow, the better it will catch eddies (but the harder it will be to draw the bow). The more V it has in the stern, the better it will track (but the worse it will turn).

POPULAR DESIGNS

The easiest way to tell what boat is most suitable for conditions found in your area is to see what all the locals paddle. If they all use the same design, it may be just a fad, but it may also be that a particular design is unusually suitable for local conditions.

In Colorado or Utah, if you don't paddle a Mistle, people look at you strangely and talk about you behind your back. Most rivers in that area are small, constricted, steeply dropping mountain streams, but most people prefer to boat the relatively limited number of huge desert rivers in the Colorado drainabe. The Bill Clark designed Mistles handle both conditions well. Mistles have a moderately flat bottom, rounded sides, and considerable rocker. They are extremely stable with very docile handling, very easy to turn and their well rounded shape is not affected by turbulent boiling water. Mistle 0.2's are custom built on order by Don McClaren of Alta, Utah. The new Mistle MX is custom built by John M. Brown of Boulder, Colorado. Both builders make about 50 boats a year each, all of which are ordered well in advance.

Dan Ruska—Outrage I's and II's are very popular in the Pacific Northwest. Dimensionally quite different from Mistles, they share certain handling traits—notably their extreme predictability. Outrages have very broad flat

sterns which make them handle best when moving forward, less well when drifting. The Outrage II has a higher deck, making it the boat of choice for a larger boater or camper with a lot of gear.

Laid back proponents of the "soft approach" to technique, which emphasizes heavy bracing and frequent rolling—but little maneuvering and no paddling, may find the gently rounded, bulbous Lettmann MK IV most suitable. The Mark IV is a little slow, but extremely bouyant with no sharp catching edges anywhere. When it came out in 1971, the Mark IV was the most popular boat in the country. Idaho boaters still swear by them. Even more suitable for round bodied "soft men," but asthetically shocking, are the blimp shaped Lettman Alpin and Klepper Hammerhead. Perhaps if people could handle the appearance of the blunt ends, the designs would be more popular. Perhaps the best boat for the "soft approach" is a raft, but that falls outside the scope of this article. Lettmann designs are available from Old Town Canoe Company, Old Town, Maine, the only legitimate builder. It is sort of a compliment to Klaus Lettmann that his designs have been ripped off more than anyone else's. Fast buck artists can offer boats at a slightly lower price by not paying for the design rights. Whether or not you deal with them is a matter of personal ethics.

The opposite extreme to the "soft approach" is that of the "hard men" who strive to keep their boats in constant motion, catching all the eddies, surfing all the waves, and ending to the verge of motion sickness. Lean and wiry hard men prefer to go without lunch because the extra weight of a tuna sandwich bogs down their boats. They never wear a wet suit because it restricts arm movement, they camp without foam pads or tents, and they change clothes in full view of the highway. As any woman boater can tell you, a hard man is good to find. Such people may prefer the Prijon Special Slalom, Phoenix Mendesta, Savage, or slightly small Prijon Treska. All these boats have a V bow that gives great speed and hooks into eddies like an anchor.

Their broad flat sterns do not mush in under hard paddling and slide easily from side to side. The vertical sides and squared off bilges can be leaned into like a ski. Novices beware. Though deceptively stable in calm water, these boats can be catchy and unpredictable in the wrong hands. Prijon designs are available from Old Town; Mendestas from Phoenix.

People weighing less than 150 pounds may like Lettmann Mark V's and VI's for high performance river running or low volume rivers. Designed for slalom racing six years ago, they are halfway between contemporary slalom racing boats and river running boats in volume. They have almost no V in the bow, and thus respond very well to bow drawing paddle strokes. Their thin ends slice neatly through the water, but their sharp edges can easily catch and flip the boat, making them a poor choice for novice boaters...though a very light person does not sink the edge down into the water so it will not catch as easily.

If you intend to do a lot of self-supported long distance river trips, you might consider something like an Ohio-pyle Augsburg III or a John Brown Mistle A. Both are extremely high volume boats with deep V at the ends and a flat midsection. They are fast, stable boats that carry a tremendous load of gear.

Faster still is the Phoenix Cascade, a similar boat with a round rather than flat bottom. The extra speed comes at the expense of other characteristics and beginner boat because it tracks well and getting used to this slightly tippy, slow turning boat. (The local Phoenix rep disagrees—she feels this is a great beginner boat because it tracks well and beginners have a hard time going straight.) It is a boat well suited for its intended purpose: self-supported trips on rivers of moderate difficulty.

For really long distances or for flat water, it is wise to consider a longer boat. My personal favorite is the 450 cm Phoenix Isere (vs. 400 cm for all other types mentioned). It has a long clean bow and stern, and its passage barely disturbs the water. Much more maneuverable than a wildwater racing boat, it is

almost as fast...incomparably faster than any other boat mentioned in this article, and able to carry much more weight. It is also more difficult to turn, and is therefore not the boat of choice for day trips on technical rivers. The distances you can cover in such a boat are phenomenal. The 226 miles of the Grand Canyon were run in a record 49 hours last summer in an Isere.

Only 15 of the hundreds of designs are mentioned in this article. Many of those are not mentioned are just as good or better. Before you purchase any boat, try it out or talk to a knowledgeable friend who has, and by all means don't accept this article as the final word. No boat is a bargain if it is not suitable for your use.

CONSTRUCTION

The basic considerations in boat construction are weight, strength, and cost. Fiberglass whitewater kayaks have been built with the same materials and techniques for over twenty years. Boat constructions employing exotic materials and advanced fabrication techniques have been in widespread use for the last six or seven years, but are only beginning to find their way into the commercial market place.

\$200-\$350

Fiberglass can be produced for its structural (S) and electrical (E) properties but the much cheaper E glass has acceptable strength for most structural applications. Of the three plastic resin families commonly used in boat building, polyester, vinylester and epoxy, polyester is the cheapest and the least toxic. Low toxicity is an added bonus for a boat builder, as less stringent safety precautions are required for its use. Boats are made of a number of layers of fabric impregnated and laminated together with plastic resin.

The quickest, easiest, and cheapest way to make a boat is to lay E grade fiberglass in a prepared mold, impregnate it with polyester resin using brushes, squeegees, or rollers and leave the whole works open to the air allowing surface tension to hold it all together until the resin cures. This process is called contact lamination. It is the way my father built fiberglass kayaks in 1956,

and the way most store bought mass production boats are built today. The worst boats of this type use unwoven fiberglass mat, and the best use multiple layers of various weaves of fiberglass cloth, with selective additional reinforcement at various parts of the boat. Some manufacturers use cheaper and lighter nylon fabric to replace some of the fiberglass. The reason this construction technique is in such widespread use is that it is the cheapest way to produce a fiberglass boat of adequate strength for river running.

The disadvantage of contact lamination is that it produces an excessively resin rich laminate. It is generally agreed that the weight of a recreational kayak should not exceed 30 pounds. A 30-pound contact laminated fiberglass boat is only just strong enough for normal river running, and boats of 35 or 40 pounds are not uncommon. The extra resin produces a beautiful finish...and a fragile laminate. No matter how careful you are, you eventually break such a boat in whitewater rivers. A very aggressive paddler lacking finesse might break such a boat every time he goes out.

The advantage of this construction is its low cost and if you paddle easy rivers or paddle precisely and unaggressively, then you don't really need to spend the extra money on a stronger boat.

\$350-\$450

Typically a boat in this price range is a contact laminated boat upgraded by the use of exotic materials. Cheap "E" glass is replaced by durable "S" glass and some layers are replaced by Dupont Kelvar 49 Aramid fiber. The brittle polyester resin is replaced by tougher vinylester. Use of these materials allows a ~~15%~~ 20% reduction in weight with no loss of strength or stiffness. Most racing kayaks employ some variation of this construction.

Rarely seen is a boat made of cheap materials with advanced fabrication techniques. In such a boat, cheap fiberglass and resin would be molded under a plastic bag. A pump pulling between 10 and 20 pounds of vacuum would remove all air from under the bag, and atmospheric pressure would force out all the excess resin.

The absence of excess resin in the laminate results in a roughly 20% weight saving with no loss of strength. Vacuum bagging is rarely used because this technique requires double the labor of contact lamination. It might represent, however, the best boat for a home builder short on cash.

\$450-\$550

Combining exotic fibers, vinylester resins, and advanced fabrication techniques produces an outstanding kayak. A 19 pound boat made using these methods is as strong as a 35 pound contact laminated E glass polyester boat. Typically, river running boats weighing between 25 and 27 pounds are built in this fashion with approximately double the practical strength of basic kayaks. Such boats frequently survive a season of severe abuse with no noticeable structural damage. Their light weight makes them much easier to paddle.

At present, boats of this type are not available from any major manufacturer, as the cost of additional labor, promotional and distributional expenses and retail mark-up would boost the retail price up to around \$800 or more. These boats are sold directly by their builders and custom made on special order.

\$550 AND ABOVE

Boats in this price range are similar to those in the previous group, but made with epoxy rather than vinylester resins. Epoxy is not significantly more expensive than vinylester, but it is considerably more toxic and its use requires the boat builder or his liver to deal with that toxicity. Epoxy is slightly stronger than vinylester and bonds better to the fibers in the laminate, producing a significantly more durable boat. Such boats are built precisely to the boater's specifications with such options as adjustable seats, bag molded deck ribs, bag molded outside seams, and bag molded selective reinforcement, all at additional cost as the buyer sees fit. The price of these boats is high, but for many people, the resulting boat is well worth it. When Fearless Fred Young of Roscoe, Illinois goes off 30 foot waterfalls, this is the sort of boat he uses. Try the same thing in a

typical production contact E glass polyester boat and you wouldn't be able to find all the pieces. The price is a little easier to accept when you realize that such a boat probably lasts five times as long as an off-the-wall boat in a store. You don't really need a boat like this, but like bicyclists who move from one-speed paper bikes to 10 speeds with sewups, once you've made the change, you just don't feel like going back.

CIRCA \$2000

Nobody makes a boat like this, but they do make skins for supersonic jet fighters this way. Substituting graphite fiber for the Kevlar and S glass in a vacuum epoxy boat might save 4 or 5 pounds with no change in strength.

CIRCA \$6500

The vacuum carbon-epoxy boat could be an additional few pounds lighter by substituting fiber boron for some of the carbon. The problems of bagging boron fiber would be difficult to solve. I once slipped when wetting out boron and the fibers went right through three of my fingers and a pair of heavy gloves, pinning everything together until we could pull them out. The fibers were so fine that once extracted they left no hole.

OTHERBOATS

Plastic boats of a material resembling Tupperware are available from Hollowform, Perception, Klepper, White, and others. Such boats are unbelievably strong (at least until the plastic deteriorates), but extremely flexible. When stuck on rocks, these boats have been known to collapse, sometimes trapping the boater's legs, occasionally contributing to his subsequent drowning. Because of such problems, I believe such boats should be used on a more limited basis than is presently the case.

Tupperware boats are extremely popular around Aspen, Colorado, a town well known in boating circles for the invention of the eskimo roll with an open can of beer, the waterproof kayaking stereo tape deck, and boats permanently bolted to the roofs of the cars they travel on.

Inflatable kayaks are also very popular in the Aspen area and can be rented from a number of outfitters in the area. Such boats are slow and clumsy, but difficult to tip over and easy to transport. They provide an excellent option to the guided raft trip as an introduction to whitewater.

Kayaking has become an expensive sport, but the total cost of a first rate kayak and gear still compares favorably to the cost of equal quality bicycling or alpine skiing equipment. For that matter, it still compares favorably with the cost of a commercial raft ride down the Grand Canyon. Once you have the gear, river running is a free sport. Let us hope it always remains so.

Editor's Note: Boat brands referred to herein are not endorsed by AWA, but reflect Mr. Anderson's knowledge and experience. For further information about particular manufacturers, contact Fletcher at 2464 20th St., Boulder, Colorado 80302.

My, how kayaks have changed with technology in the last few years. I printed this story to give the readers a perspective of kayaks over the years. Now it seems the only boats visible are Perception, Hydra, Noah and T-Slaloms.

AWA AND THE AUDUBON SOCIETY RELEASE COMPREHENSIVE STUDY OF HYDRO POWER DEVELOPMENT THREATS

October 30, 1987 AWA and the Audubon Society released a 27 page report which kicked off their respective groups' program push for the upcoming legislative session in New York State.

"This effort is based on our extreme concern for both the overpricing of homeowner and business utility bills and the ravaging of our state's rivers", stated Chris Koll, Director of the AWA Whitewater Defense Projects, based in Syracuse, New York. This concern has culminated in a report released today prepared by AWA and Audubon: "Small Hydro — A Resource Ripoff Rivers and Ratepayers Cannot Afford." (available on request from National Audubon)

"Fresently," pointed out Ronald G. Dodson, Audubon Atlantic Regional Representative based in Delmar, New York, "the State basically provides developers free access to our rivers, does not require environmental impact statements on proposed projects, and guarantees that the local utility must purchase the power generated." "Not only do they have to buy it," charges Koll, "but they must purchase it at several times the cost the local utility company could generate the power for. 48 plants alone will rob homeowners and businesses of around one billion dollars in just 15 years time."

Audubon and the Whitewater Defense Project insist that present hydropower policies are destroying many of the state's best free flowing rapids and waterfalls, making many small hydro developers rich at the expense of the ratepayers while not helping the electrical needs of the state. Koll states "As an example, many people wrongly feel that hydro power is a clean alternative to nuclear power. The fact is that rivers don't run in the heat of summer and the dead of winter when we need the most power, so how in the world can they be expected to replace anything?!"

Koll went on to state, "We just can't keep up with the pace of hydro project applications. We have identified over 100 projects about which we have some concerns out of the 380 or so projects in the works and new project proposals keep coming in the mail. Without some changes in Albany this legislative session, we can kiss our rivers good-by!"

The report is available from Mr. Ron Dodson, National Audubon Society, 282 Delaware Avenue, Delmar, NY, 12054, 518-439-0287.

GAULEY FESTIVAL IN RETROSPECT

Chris Koll, AWA's 1986 Gauley River Festival chairman, reported to the AWA Board of Directors that the gathering netted over \$5400! Not only was the gathering of over 1500 paddlers profitable, but it was also great fun for all who attended. The music, videos, food and prizes exceeded everyone's expectations. Even the weather cooperated in the end.

The list of heroes who made it happen is long. Our helmets are off to Ron Smith, Pope Barrow, John

Barb Rottier, Al Baker, Gary Staub, Jess Gonzales, Menasha Ridge, Class VI Whitewater, NARR, Mountain Streams and Trails, the Beckley Holiday Inn, Budweiser, Rocky Rossi, Perception and Joe Pulliam, and so many others who gave unselfishly of their time and energy.

Preparations are already underway for next year's festival. This event helps AWA strengthen its image in the river community, helps raise money for river conservation and other AWA programs, and serves as an annual focal point for all paddlers east of the Mississippi. In order to buttress and enervate the organizing committee, AWA is seeking a new chairperson. Those interested in any aspect of the 1987 effort should contact Chris Koll at 315-475-7499 immediately.

AWA SEEKS AND GETS GRANTS

AWA can't operate on good will and volunteers alone—cash is desperately needed. For instance, the River Rescue Program and membership drives demand cash to pay for mailings, phone calls and the like. To supplement the earnings from the Gauley Festival, AWA has sought financial assistance from several sources. Two grant proposals were sent to REI in San Francisco and one went to American Rivers. AWA has yet to hear from REI, but American Rivers has generously donated \$550 to help with AWA's small hydro projects. A more ambitious program with outfitters and equipment manufacturers is now in the works.

NEW PRODUCT

The Patagonia Warm Weather Training Shell offers comfort and versatility for paddlers.

Are you a kayak or canoe racer looking for lightweight minimalist protection? Do dry suits, wet suits and long underwear make you feel like Santa Claus in Miami? Do you consider yourself a fair weather paddler? If you answered yes to any of these questions, then our new Warm Weather Training Shell is what you need. It's a full-on paddling jacket stripped down to the bare essentials. Short sleeves with Lycra cuffs allow total arm movement. The neck snugs down with Lycra and a snap to make it stay put, but also opens up wide (without a gusset) to allow for ample ventilation. There's a small zippered pocket for your keys, beer money or nose plugs and a sturdy elastic shockcord with cordlock seals around your waist. We've coated our proven Seal-Coat™ waterproof coating (the same as in our other Paddling Jackets, our Rainwear and our Foul Weather Gear) to lightweight nylon ripstop. The result is the Warm Weather Training Shell, six ounces of pure paddling comfort.



PERCEPTION INTRODUCES DANCER XT

(Easley, South Carolina) The all-new Dancer XT from Perception performs like the original Dancer playboat, yet it offers more legroom, more footroom, and more storage capacity.

"We believe the new XT meets the current market demand for a larger playboat, without loss of performance, without loss of responsiveness," said Perception marketing director, Joe Pulliam.

The Dancer XT is designed for paddlers who are tall, or weigh upwards of 170 pounds, and thus need more legroom and footroom. Because of a higher volume, the XT is also great for paddlers who like to carry lots of gear, or paddle mainly in big water.

Plus, the XT comes equipped with Perception's newest seat and thigh brace system, structured to give you a comfortable ride, easy access to your gear, and easy entry and exit. The new seat also offers increased stiffness in the hull.

The thigh brace is a new concept for Perception. In the past, all Perception boats have been knee controlled. Most paddlers have then padded out the knee brace to afford thigh contact; so we've designed it into our newest boat.

Again, the XT is basically a sized-up Dancer. The length is 11'9", two inches longer than the Dancer. The width is 24 5/8", close to an inch wider than the original design. The outside cockpit dimension is 32" x 18", as compared to 29" x 17 1/2" on the Dancer.

The volume has been increased from 69 gallons in the original Dancer to 78 gallons in the XT, a substantial difference.

The idea behind the XT is to offer a kayak that responds like the Dancer, but is: 1) comfortable for bigger paddlers, 2) roomy enough for multi-day packing; and 3) able to "hold its own" in bigger water, even with a larger paddler or heavier load.

We've taken the same painstaking care to produce the XT that is evident in the Dancer. The XT has gone through multiple prototyping, and input has been gathered from across the country — most notably from Rob Lesser, expert paddler from Idaho, and his big-water play boating buddies.

WHITEWATER

The XT does not replace the original Dancer. It's an alternative. As Larry Hewett, Perception's promotions director, put it, "I'm 6'3" tall and weigh over 200 pounds. At last I know what it feels like to paddle a Dancer. This boat performs the way I've imagined the original Dancer does for the smaller paddler."

The XT is available in all the same great colors and special package options as the Dancer and Mirage. It is manufactured by Perception's patented Gyraflow molding process, using Perception's special Xylek polyethylene. Check with your authorized Perception dealer for earliest availability, or contact: Perception, Inc., 1110 Powdersville Road, Easley, South Carolina, 29640, (803) 859-7518.

Book Reviews

KEEP IT MOVING BAJA BY CANOE

By Valerie Fons

Approx. 330 pps.; 6 x 9
24 color photos, 3 maps, Clothbound
\$15.95—USA, \$19.95—Canada

Before the Baia journey, Valerie Fon's biggest challenge was Sunday afternoon canoe races on Seattle's Green Lake when, through chance or fate, she was invited to join Verlen Kruger on a leg of his 28,000-mile "Ultimate Canoe Challenge."

The statistics alone are daunting: 2,650 miles on the Pacific Ocean and Sea of Cortez in a canoe, 3½ months of paddling an average of 10 hours and 26 miles a day. Then consider that the paddlers were a 31-year-old woman who was inexperienced in canoeing other than placid lakes and bays, and a man past 60 who had already completed over 20,000 miles of paddling on three oceans and every major waterway of North America. The result was a compelling adventure, where ocean storms and near-swampings contrast with sunny coastal explorations, and raw determination overcomes debilitating illness.

Far more than a narrative of a canoe journey, this is a story of personal growth as the author, belatedly realizing she's in over her head, must change to survive.

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Avant-Garde — Attack Yaks

By John Ferguson

W H I T E M A T E R

I had intended to write on another subject. But this nagging ache in my side demands that I address the topic of attack yaks. If you've kayaked for very long, I'm sure you have had close encounters with these renegades. Now you may be familiar with a particular band that often lurks around Surf City on the Deschutes. They take great pleasure in dashing out on the surfing wave and playing a game of whitewater chicken with oncoming, out of control rafts. Occasionally contact is made and I know for a fact that one intrepid yakker landed in a raft after a pop-up, (although this maneuver requires great skill and luck, rafters fail to find humor in this feat).

But, these are not the attack yaks I'm referring to. I'm talking about an insidious creature that appears suddenly, belligerently, bearing down upon the innocent and defenseless. Often they are piloted by trusted companions who, for lack of concentration or skill, lose control, allowing their boats to wreak havoc.

My most recent encounter with an attack yak was on the Illinois River in April. Six miles into the trip, I had found a frisky hole and was whooping it up while the other yaks waited their turn in an eddy immediately downstream and off to the side. Just as I was shot out of the hole, my buddy Dave's boat lurched out of the eddy directly into my path. Dave had a temporary space-out. He may have been contemplating the mystery of wind. (You know, why can you feel the wind hit you but can't see it). Anyway, I was facing upstream and was oblivious to danger until the impact of bow and ribs. Talk about pain! I tried to determine the force imparted by a rushing kayak but the physics were too complex. But consider a boat, a paddler and some bilge water somewhere around 200 pounds hurling along at 5 to 10 feet per second or more, all concentrated into a point about two square inches in area. I limped down the river for a day, then crawled onto a raft, unable to take a decent stroke. The cracked and bruised ribs took about a month to heal.

I've had other encounters too. Once, while surfing a wave, another attack yak piloted by the infamous Dr. Fong entered the wave and speared my elbow, immobilizing my arm for a couple of weeks. Another time I was sitting in an eddy minding my own business when an attack yak came screaming in like a bat out of hell and skewered my glass boat, opening up a 6-inch rip. These attack yaks also frequent the ocean. On a club picnic a few years ago, I saw one come flying down a large wave backwards and blast Bob Breitenstein directly in the chest. Bob said it damn near killed him. I'm sure everyone can think of at least one incident. The near-misses are innumerable.

It's strange. As dangerous and as prevalent as these friends are, they are never mentioned along with other hazards like rocks, holes, and strainers. There's not much defense either. They usually appear so suddenly that reaction time is minimal. Short of using some sort of Kung-Fu block, (this works well since the nose of a yak is easily pushed aside), the practical thing to do is flee. Since this is often impossible, it's best to be constantly on guard so a potential attack can be spotted in advance.

Places to be especially vigilant include:

1. Small eddies near good play spots—especially those with fast chutes and jet ferries.
2. At the bottom of drops. Boats seem to gather here and jump into holes just as other kayakers are coming through. Remember, the boat coming downstream has right of way and the guy stuck in the hole at the bottom is in a very compromising position.
3. Anywhere there is an overabundance of kayakers. There's always someone in front of you trying to catch a wave.
4. The ocean. There is generally less control here and boats riding on a wave move awfully fast. There's no rocks to duck behind either.
5. Any play spot. Often a good play spot has eddies on either side with yaks entering from both sides. There's no excuse for two boats to enter simultaneously due

4 to lack of communication. Be a nice guy. Point to the other guy to indicate he goes first. Then wait till he's out of the hole before entering.

H The tougher the water, the greater the tendency to jam up. Relax. Spread out. Kayaking is one of the world's most dynamic sports. Everything is moving fast requiring sorting through lots of sensory input and making quick decisions. And that's when you're moving and all the obstacles are stationary. When the obstacles are moving too, it gets real crazy. Beware of the attack yaks.

PRESS RELEASE

The American Whitewater Affiliation yesterday gave awards to four persons who have made outstanding contributions to the preservation of whitewater rivers in America. The American Whitewater Affiliation (AWA) is the only national organization dedicated exclusively to the enjoyment and preservation of whitewater rivers.

According to AWA spokesman, Pete Skinner, the award recipients were singled out for their dedication, persistence, and skill in achieving this goal. Whitewater rivers, Skinner said, are "as rare as hen's teeth and many of the best of them are now under siege from hydropower developers". Since good whitewater moves downhill fast, it inevitably attracts electric power producers. Mr. Skinner noted that Federal legislation enacted during the energy crisis in the late 1970's inadvertently encouraged and subsidized the widespread destruction many fine whitewater streams.

One of the awards made yesterday went to Brian Faller, a Washington lawyer who broke newground in numerous lawsuits brought on behalf of the AWA and other organizations seeking to preserve whitewater areas.

A second award was made to Charlene Dougherty, a respected Washington lobbyist. As a Washington representative of the National Audubon Society Charlene has become a leading expert in Federal water policy. During the last Congress she was a key player in obtaining improvements in the standards under which hydroelectric licenses are issued.

The third award went to two persons jointly, a husband and wife team, Paula Dinerstein and Dave Conrad. Ms. Dinerstein, a lawyer, has worked extensively on a volunteer basis to defend free-flowing rivers. Her husband, Dave Conrad, is the senior Washington water policy specialist for the environmental group, Friends of the Earth. According to AWA, Mr. Conrad is widely recognized as the leading expert in the nation on environmental problems caused by water projects. Conrad was extremely instrumental in convincing the 99th Congress to constrain certain Federal incentives for the building of environmentally harmful hydropower projects. Contact Pope Barrow at 301-320-4015.

TECHNIQUE: HOW TO DEAL WITH ROCKS

Learning to boat (Kayak, C-1 and C-2) is no different from learning to walk, ski or drive. First, you learn the basics, which seem to be distinct parts of the whole, and then you integrate them into a working unit. After practicing the basics, you find that they blend together, rather than maintaining their separate identities. After even more practice, you learn how to "bend the rules," which sometimes heightens your skill level and sometimes ends in disaster.

Now that the water is low, we'll look at how to deal with rocks. Most novice and intermediate boaters view rocks as menacing, boat crunching and dangerous. True,

they can be all of the above, but only if they are misused and not respected.

Most rocks will have slow moving water in front of them as well as behind them. This slow water upstream of the rocks can be thought of as a "cushion" and can be used as such (Figure 1). Some rocks have very small cushions, while other nasty ones have none at all. These cushionless rocks tend to be sharp or streamlined like trees or bridge pilings, and should be avoided. Others, however, are rounded or flat on their upstream side and will usually have great cushions to play with. A rock with a large eddy behind it will usually have a good cushion above it.

ALSEK RIVER

Excerpts From My Diary

By Walt Blackadar

WHITE WATER

(Editor's note: Walt Blackadar sent a copy of his diary to a gentleman named Scott and described his thoughts as, "As you say—perhaps not worth the *trip*—and, I agree—but it was there and was bugging H out of me! Glad I went—but going to pick another river next time. Thanks for your notes." "Best Wishes, Walt". These are his notes on the famous *Turnback* Canyon on the Alsek and the first solo trip. Such was the character of the late Walt Blackadar).

August 13, 1971

My birthday! Looked in the mirror and decided that I wasn't getting any younger. After spending a sleepless, I decided to paddle the Alsek and to do it this year solo if I can't get a competent boater to go with me. Take-off date—next Wednesday evening.

August 19, 1971—Thursday

Busy week. Tried to get Billy, Al Chase, Kay, Mary, Al Beam, etc., but all busy and I did not want to urge. Barb called this morning and gave me "H" as has everyone else who knows of my plans. But I am going anyway. Left home at noon after doing all my honey-does. Took out a two week accident policy for \$50,000 which will pay off all my debts and leave a reserve.

August 20, 1971

Flew to Juneau and sent my boat air freight on the same flight after driving all night to Seattle. Waited in Juneau all day for the weather to clear and at 5:20 p.m. took off with Layton Bennett to over-fly the canyon between storms. The following are my impressions immediately after the flight: The severe part of the canyon is shorter than stated. I would guess five miles long. Just as tough but the walls are not sheer. There are two or three good eddies but the tough spots can't be scouted easily. The toughest can be carried if necessary. All the worst water is in the first half. Several very impressive boiling pots with boils ten to twenty feet high. Very active. I think I can avoid these. One roller all the way across which will be sure flip but I

don't believe it will hold. In fact, I saw several sure flips but no holding holes and no danger unless I swim. There are lots of landing fields (sand bars) all over the river. Approximately every five miles I felt that I could make a landing field if I were stranded on the ground. In brief, I was 200 feet high, the water was brown. I am not sure of the magnitude but they looked big. I was told there was a falls in the canyon. I saw a couple of drops but nothing that I didn't feel was runnable. There is nothing in the Grand Canyon however with as much violence or power or water hydraulics. Also, there are a few strategic rocks. I am glad I am solo because unless I had Al Chase I doubt if I would run it. I know I would come home if Mary Nutt were here or Barb or Jane, etc. I know all who read these notes will say I shouldn't have run it but that is what drives me. I must prove things to myself and I am my harshest critic.

Now for my plans: The pilot will pick me up on a landing field at the mouth of Dry Bay on September 2nd. I figure I can paddle the river in seven days. Will allow ten days before pick-up date. If I am not out on September 2nd, he is authorized to spend \$1,000 over-flying the canyon before calling Shirley. If he finds anything suspicious like a tent, boat onshore, etc. and no sign of me, he will land wherever possible and check it out or send a helicopter. I have left a letter at home with Sue to my wife instructing her to spend \$2,000 to \$5,000 to prove me alive or dead. But if my boat is found swamped and no sign of me for 10 to 14 days, I am dead. I will stay with the river. It's an open river with flat banks so little chance of bear trouble. Also, I'm sure I can make a landing field if I am on the ground and not injured. If I am found dead, the pilot has been told to bury me there and not bring me home but to bring positive identification to Shirl. Finally, if I don't come out, I would still not discourage a group of good rollers from the Gorge. There are occasional stops and eddies. The left bank is

steep—six or seven thousand feet and sheer. Still a scout or two on the side is possible. The right side is rock also, not ice. A scout or two is possible and one can climb out in a spot or two without rope if needed. It's only five miles or so for real severe stuff. I don't know about a raft. Below the canyon it's terribly braided and multi-channels. Never deep enough for a float plane to land safely because of multiple, changing channels.

August 21, 1971

Went by boat to Haines with Harvey King since there is no ferry for two or three days. Lovely relaxed trip on his fifty foot launch.

August 22, 1971—Sunday

Arrived at Haines Junction after riding here with a school teacher who had a truck. Checked with the Mounties at 6:00 p.m. They plan to fly down the Alsek to the B.C. Junction on the 24th to count game with a helicopter and will check on me. I expect to reach Dry Bay on the 30th. May fly to Yakutat on the DC-3 and commercial back to Juneau but Layton Bennet will land on the 2nd unless I phone him. And then he will be in charge of the rescue. I have a citizen's band channel nine radio with me which will broadcast five miles to his airplane and one set of spare batteries. I will never turn it on unless I hear the airplane motor and will be able to talk to him over to me. It will take a thousand feet of runway for him to land and we have agreed how to mark it, etc. I am carrying one week of full rations and another week of half rations. Looking forward to the trip tremendously. Wish I had camp company to the canyon then I'll be glad that I'm alone. Water is clear up here but muddy in B.C. and Alaska. Weather is bad but the water is not too cold here. Starting with a wet suit, top and bottom, boots and gloves. Well, off to the ocean!

August 22, 1971—Later

Left the road after sending notes to Shirl at 7 p.m. Weather overcast. Headwind. River-2 Miles Per Hour. Paddled until 8:30. I took the left channel when it split the first time. It was OK but the right looked better. Raft would have had wind trouble but no water trouble. Six inch minimum. Camped at 8:30 with a head wind of 40 MPH. Waves 2 feet high.

Tent up and flapping. All Secure. Boat tied up with life jacket. In bed by 9 PM. Four big beaver dams and the most beaver I have ever seen. Saw two beaver and four ducks.

August 23, 1971-Monday night

In camp and dry with tent up, raining like "H". Got a fire going with four matches and two birthday candles in the rain. Cooked beef stroganof. Am setting in the tent eating it now. Terrific blow last night for two to three hours. Watched stopped so I am on local time. Today I paddled down the Dezadeash River from Haines Junction where I slept just back of town and into the Kaskawulsh. These two rivers join to start the Alsek. The current is faster-six to seven miles per hour. Fished several times but no strikes. Muddy water. I'm now about half way to Lowell Glacier. Raft possible so far but would take two times as long. One golden eagle, six ducks, one porcupine, one beaver. Rain quit during the night. Had a good sleep.

August 24, 1971—Evening

Good camp, sheltered. But three things wrong: 1. Sheltered from bears but it's only two jumps down on me. 2. No morning sun. 3. Wind upstream and tent facing upstream so bear approaching from downstream will surprise us both. Big water today. No scouts needed. Stayed in the center but the water four plus on the AWA scale and six to seven on the Grand Scale. No flips but my heart pounded once or twice along cliffs with boils and huge hydraulics. This water is so cold that I can't force myself to practice rolls so that I can psychologically steel myself for the canyon. I know that a flip is a 30-50% chance of a slim. It's ice and brown-about like halfway through the Grand. One can still read the water and relax since the crests are white but it's thick. Lowell Glacier is out of sight! Worth the whole trip. Three calves born with a cannot shot and a tidal wave while I was there. Had trouble getting out of the icebergs but continued to the end and found the runout OK. Must have come fifty miles today. Stopped at Bates Creek but did not find anything except one tin can there. Located the home-

made boat photographed in the Alsek write up. I am now in B.C. just above the Tweedsmuir Glacier. Decided to quit for the night since I was tired but I could have gone all the way to the Tweedsmuir Gorge. I plan to sleep late in the morning and proceed gradually. No sign of helicopter. If not tired before 2 PM local time, I will tackle the gorge. Otherwise, I will wait until the next day at noon. I have been paddling in feet and gloves and full wet suit but no wet suit head-stall, only my regular helmet. For the glacier gorge I hope to be able to take off my gloves. I am two to three days ahead of the Alsek write up schedule and going strong. Very relaxed. My 25 ounces of Vodka will see me home with spare. Wish I had company but more relaxed and less tension being alone. I would be concerned with any company. I would probably paddle the gorge alone and walk back to tell what's there. That really wouldn't help either of us so who knows. It is easier this way but harder on Shirl. Two golden eagles, two ducks and one white friendly shore bird-fatter than a thorn, small beak, gray brown, banded tail.

August 25, 1971—Evening

In the gorge and stranded. Almost directly across from the lowest creek which gushes down the mountain on the left forming an impressive waterfall. I am on the right, my boat is directly across from the creek and I am a hundred yards upstream on a big sandbar. This has been a day! I want any other kayaker or would be expert to read my words well. The Alsek Gorge is unpaddable! Class six+ on the AWA scale and twelve plus on the Grand Canyon Scale. Unbelievable! After a careful scout it's two times as bad out in it. I have scouted on shore all but one horrendous mile of ,HAIR-thirty feet wide, 100,000 CFS and seeming a forty-five degree grade going HOME. Incredible. I never flipped in that mile or I wouldn't be riding. But to go back: I scouted the first half mile and ran it with two flips and tremendous respect for the rapids I saw. Stopped on the left and scouted another mile to a huge drop-twenty feet on the left for about a hundred yards. I could avoid the drop with an apparently quite easy stop into

an eddy on the left. There are two huge icebergs which have calved off of Tweedsmuir Glacier that are running with you in the gorge. I have hit two already, very hard in big water. Boat OK. And surviving well. I paddled down to the eddy in seemingly quiet water. A whirlpool suddenly appeared. The boat was sucked by the stern into a perfectly vertical position. I was whirled one and one half times around and plopped in upside down. I rolled up, however, immediately and caught the eddy as planned but at the upstream edge. I could stay there all day but I couldn't get out because the cliffs and I had to work my way to the extreme lower end of the eddy in order to get out. This I couldn't do by going along the shoreline as I had planned because of the terrific current. I would judge that the lower end of the eddy was ten feet higher than the top where I was. Consequently, I had to go out into the current and back into the bottom of the eddy which I did twice but never caught the apex and ended up back at the top of the eddy where I had started. So, on the third trip out I went a little further out and you guessed it. I went too far. I knew I had a paddle ahead. Just then I saw an iceberg the size of my bedroom immediately along side me and both of us charging for the thirty foot drop. I had to hurriedly turn around and do an upstream ferry with all my strength, all the time dropping backward toward the "falls". PS-I missed the iceberg which went ahead of me and I rolled up for the fourth time. Very solid, very confident in my roll, no question of swimming. The cold does not bother a bit when you are under there. I know that if I leave my boat I have a good chance of dying and plan to stay here to the end. Caught an eddy. Stopped and relaxed for five or ten minutes but there was no way out and I could not scout what was ahead. Soon I started on around the corner without scouting. I was soon headed home with only the hair showing. I don't know how far it is and I can't get back easily to see it but it was forty-five degrees down and the most horrendous waves and hair, and holes on all sides of me. Very narrow. Reminded me of trying to run

down a coiled rattler's back. And believe me, the rattler was striking at me from all sides. I got shoved to the left bank about an inch off the cliff wall and there a foot wide eddy existed. For about a mile I skidded and swirled and turned down this narrow eddy line. I kept telling myself I could roll in this but all the time I knew I couldn't. I knew I would get jammed into the cliff but never touched it. However, I flipped once more, number five, in a whirlpool below. I was able to stop on the right for a scout to what I hope is the end of the gorge—approximately half a mile below me and one huge lava four plus to go. Just above me, as I am trapped in the canyon however, a huge roller blocked the river. I scouted from the cliff and also worked my way down to the very edge of the river and looked at it carefully. There was no way to carry and it was tremendously dangerous. A definite hold all the way across the river. I finally paddled through the easiest spot to crash the roller but had to go through a terrible hole some distance below if I didn't come up on my first roll. I went into the roller paddling as hard as I could. Got my paddle through the wave and my body with it and hung on upside down feeling my boat tear apart under me. Missed my roll and in fact I found I was not in the boat so I snuggled back in probably as I hit the next hole. I got scrubbed and washed and scrubbed, rolled and missed, rolled and missed. Finally I came up on probably my sixth try. Found the boat swamped. I was in the middle of the river heading lava four plus below me. Suffice it to say that I caught this the last and only eddy on it. And at that, a hundred yards downstream of the eddy, I rolled out on the bank and said thanks. I found that I had torn the left hook off the deck and part of the deck off as well. That popped the skirt and swamped me. I am trying to dry the boat now and fix it. If I don't get it fixed I will scout the canyon further and if it is just the lava four plus below me, I'll have to try it crippled. I'm not coming back. Not for \$50,000, not for all the tea in China. It's a no-no. Read my words well and don't be an ass. It's unpaddable.

August 25, 1971—Wednesday—Later

After finishing all my vodka and feeling better, I have the first patch on the boat, my air mattress up over the boat repair, my tent is cozy and I found wood in the canyon. I also solved the

riddle of this messy gorge. I flew it on the twentieth and a huge rain upstream caused it to crest. I can see the mark on the canyon here ten feet or so above my sandbar and probably thirty feet above the water level at this time. It might be paddable at crest but not now. You can scout the full length of the canyon with a sure ferry. Watch the eddies. They are harder to catch in a loaded boat. I hadn't run anything except that mile of hair without scouting from the rim and water's edge. I started at 1:00 PM and ended here on shore at 5:00 PM. Total running time was probably only ten minutes.

August 26, 1971—Evening

Boat fixed by 2:00 PM so took off. What a ride. Hole at the top was twenty feet deep. I slipped by the edge but spun around and gushed down the chute backwards, hit the cliff with my stern, braced both sides at once but didn't flip. I scouted then for two miles and nothing else. It's a good thing because I had had it. No more hair left for me this trip. I did flip again in a backwards vertical hole a third of the trip and the next five miles of gorge were tough but nothing like the previous. I am spending the night now relaxing and I am glad I am out. I'm at the base of Vern Richie Glacier. Bald eagle and one other large arctic gull-like bird-friendly, came to visit and stood around. Saw two big grizzlies today and another just now out my back door. I hope he goes by.

August 27, 1971—Friday

At Dry Bay. I can't find the airfield in the dark. Put tent up on huge grizzly track. No fire tonight. Nuts, fruit, candy. Today grizzly number seven, a mountain goat, two bald eagles, fifteen ducks. The Alsek Glacier was terrific with a whole string of "ocean liners" (icebergs) coming down to Alsek.

August 28, 1971—Saturday

Early up and found Bill Dunklebergers (Dry Bay Hilton). Got through to Yakutat on the radio and Layton Bennet will pick me up this evening in a float plane and take me back to Juneau with my kayak strapped outside. There is no DC-3 until the 31st or the 1st of September. Yakutat is without reservation south on commercial. Alex Brogle from the Alaska Fish and Game Department flew in to interview regarding the Alsek. He stated that the gorge is too fast for salmon, even kings—the only spot known where the speed of the water stops fish. Usually it's a drop or a falls. I know the area well! I have seen it for the last time!



CHINA: DRIFTING THE LI

By Jack Mills

It was 2 p.m. on a Tuesday in January. The misty rain falling on the village beside the Li River was going on its fourth day. With the chill in the air, Chan thought he might see some snow by morning.

There was nothing to do in weather like this but chat quietly with friends in the shelter of the doorway that opened onto the square.

It was then they appeared, four of them. They were walking into the square from the narrow alley that led to the river, between the one-story brick and stucco houses.

The looked human, but never in his 19 years had Chan seen anything like them. They were big—bigger by far than anyone in the village—and they walked stiffly in their heavy hooded clothing that glistened in the rain.

As they approached, his friends backed warily into the darkness of the doorway, but Chan held his ground. They stopped a few feet from him, and smiled. Because they looked so strange, Chan hardly noticed they were speaking to him, softly, in a tongue he had never heard.

They looked ugly, even pitiful. The only part of their bodies that showed were their faces. Their eyes were almost round, the skin was sort of gray-pink, and on three of them, hair grew on the lower part of the face. These were probably men because Chan had seen a few beards in his lifetime.

The fourth was the strangest of all. It was as tall as the others, but had even lighter, pinker skin, rounder, lighter eyes, and no hair on the lower face. Instead, it had bright curly red hair sticking out around the face from under the hood. Perhaps, he thought, if the other three were men, then this fourth might be a women of the same species.

Suddenly, Chan realized they were *trying* to communicate with ~~him~~. ~~They were~~ no longer talking in that strange, soft, slow language, but were making gestures with their hands. With his *left* hand, one held an imaginary bowl of rice to his mouth while shoveling food into it with an invisible pair of chopsticks.

Then another put his two hands together horizontally next to one ear and tipped his head sidewise on his hands while closing his eyes. Could these two gestures mean they wanted food and sleep?

Weird as they were, Chan instinctively wanted to help, but he had neither the ability nor the authority to provide food or shelter. He would take them to his elders across the square.

What Chan saw that January afternoon were the participants of probably the first river trip by inflatable raft in the history of China.

And who were the four members of the first such trip in China?

Peter Byrne, 58, professional international boatman and blueberry farmer from Parkdale, Ore.

Cynthia Fagan, 29, a 6-foot, red-headed crime reporter from the New York Post, New York City.

Grant Lowes, 26, banker and adventurer from Portland.

Jack Mills, 53, former banker, now a rancher from Mount Hood, Ore.

For almost a year the two senior members of this unlikely foursome had discussed the possibility of making China's first inflatable raft trip on the Li River in Southeastern China, beginning north of Kweillin.

The river was not expected to be a boating challenge, but the concept of being the first on an uncharted river, to drift among the villages whose residents had never seen the likes of us, seemed irresistible.

From March to December 1983, numerous letters and telexes requesting permits were sent to Chinese officials of all kinds. Not a single response came back. When in the fall of 1983 we read of Portland outfitter Ken Warren's permit problems with the Yangtze River Expedition, we concluded we would probably not be able to secure a permit for our little venture.

With only three weeks left before the scheduled departure from Portland to Hong Kong on Jan. 7, 1984, we had to decide whether to scrub the trip or "wing it." We had a game crew and decided on the latter, which meant we would go as quietly as we could, as far as we could. We would go until we were stopped or until we had successfully completed our run on the river.

The four-hour train ride from Hong Kong to Guangzhou, with all of our gear including raft and accessories, brought us into the People's Republic of China and up to our first bureaucratic hurdle, Chinese Immigration and Customs. (In Hong Kong we had obtained 30-day tourist visas to visit five major Chinese cities, including Kweillin.)

The Chinese officials and spectators, (we and our gear drew quite a crowd), were friendly, polite and curious. The 14-foot raft, deflated, folded and wrapped in burlap, drew the most attention. We explained that we were going camping near Kweillin.

They were not familiar with "camping"; so we were waved on with smiles and a shake of their heads. Americans were indeed crazy.

The 24-hour train ride from Guangzhou to Kweillin on the "hard-bed sleeper" (second class), included a two-hour train change in Hengyang at night, a ceremonial belt of brandy in honor of the first hour of Lowes' 26th birthday and the temporary loss of our raft, food and camping gear.

The next three days in Kweillin were tense, although we tried hard not to show it. Our equipment caught up with us, leaving our problems focused on how to get it and ourselves north up the Li River and ultimately onto the water.

The Chinese, in their eagerness to leave a good and lasting impression on all visitors, did not want anybody to do anything out of the ordinary that might fail and result in injury or unhappiness and thus reflect on the government.

Therefore, nobody would take the responsibility of allowing us to get onto the river. The people we were talking with were extremely friendly and polite, but several times we came within a breath of being officially told "No," and having to abort the trip. We learned, also, that one does not hurry any Chinese person in a decision-making process.

Without the delightful and dedicated assistance of three Chinese/English speaking "friends of friends" whom we located in Kweilin, we would have been stopped short at this point. When we asked our friends, "What will they do to us, if we do this or that?" they would just laugh and shake their heads and say, "We don't know, nobody has ever tried to do it before."

After a couple of days of testing the climate, we had the feeling that time was running out before the local Kweilin officialdom determined what we had in mind and was forced into giving us an official "No."

So we went for it with one last plan. China Travel Service is the official government travel agency and was our major stumbling block to accomplishing what we wanted without special permits.

With the help of our interpreting friends, we went directly to the travel service office and signed up for the round-trip tour up the Li River, to the canal that connects the Li to other rivers and ultimately to the Yangtze. It is about 65 kilometers from Kweilin to the area that is not yet open to overnight visitors. We asked for the agency's biggest van and agreed to include two tiny and friendly vacationing Chinese nurses from Hong Kong. That was one of our better moves.

At 8 a.m. Monday, Jan. 16, while our Chinese-speaking friends and the two Hong Kong nurses involved the driver in a lively conversation, the four of us loaded the raft and all of our gear, with ourselves on top, into the back three rows of seats in the van. When the driver and two nurses were then ushered into the front seat, the driver looked a little shocked at his load, but not understanding what was happening, he shrugged and we headed north, up river toward the canal.

After a couple of hours of looking at the sights around the canal, we attempted, through one of the nurses who spoke a little English, to make a deal with the driver who spoke no English. What we wanted him to do was take us farther up the Li River, as far as he would go, and then we would cope with the problem of being left on the river bank in "forbidden territory."

We offered yuan to cover extra expenses, but the driver was adamant. Where we wanted to go was off limits to tourists. For him even to consider such an impossible request we would have to telephone back to his superiors in Kweilin. We did not want that telephone call to be made, so we went to plan 14B.

Not far from where we were negotiating, we had crossed a bridge over Li River. We asked one of the nurses to tell the driver we were ready to start back to Kweilin as planned, but would like to stop at the bridge and take some pictures of the river.

This we did, and while two of us were talking to the driver, the other two quickly unloaded the gear on the side of the road and pushed it over the bank.

The driver was faced with an dilemma, which the two nurses solved beautifully. They reminded him that they had paid for a round-trip tour from Kweilin to the canal and back, and they wanted to go back now.

The four of us gratefully said our "shay shays" (thank yous) and slid down the river bank as the van drove off.

Working our way through the system and onto the river was a thrill. You might have thought we had won an Olympic gold medal. The trip on the river, eight days of it, was magnificent and humbling.

The water was ample for floating and pretty simple. A few riffles and a number of man-made barricades used for trapping fish were the only barriers. The trick there was to spot the 8-to-10-foot opening, before we drifted by it and got hung up, and then to shoot through.

It rained lightly most of the time, but with one day's exception the wind and current were at our backs.

We were traveling light. Our one pot, one kettle and four metal dishes were purchased at a hardware store in Kweilin. Each evening was a new experience. Sometimes we camped in our tents, and sometimes were found shelter ashore. Usually we combined the dried food brought from home with fresh Chinese vegetables and rice or noodles.

Most mornings when we broke camp, it was 29 to 32 degrees. Occasionally during the day the temperature got up to 36.

Of all the experiences on the river the people were the most exciting.

One afternoon, about midway in the trip, we were cold and wet. We thought we would seek warmth in a village, and it was here that we met Chan.

We pulled our raft up on the sandy beach as close as we could get to the main cluster of small buildings and walked stiffly in the cold, through ~~the short~~ narrow alley into the square. The only people visible were Chan and his young friends. We headed toward them, smiling and mumbling a few simple English words such as sleep, bed, food and fire. It became ridiculously apparent, at this moment and for the next 18 hours, the only words we could say to communicate with these people were "shay shay" for "thank you."

When Chan took us across the square, he opened a wooden door into an unlighted windowless room with a hard dirt floor. The front of the room might have passed as an old-time pharmacy. There was a high counter, string scales and a rack with rows of small wooden boxes behind it.

The room was large, but only the front quarter of it was visible. The rest was partitioned off ~~with woven~~ straw mats 6 to 8 feet high. From ~~behind~~ the mats we could hear men's voices, elderly men we thought, mumbling incoherently, at least to our ears.

At the end of the counter, three men squatted on wooden stools about 4 inches high. They were hunched over a large metal dish, shaped something like a gold miner's pan, which was 'filled with hot coals.

As we entered, all three stood up immediately, two of them putting away pipes about 18 inches long with very small tobacco bowls on ~~the end~~. Fagan, our street-wise New York reporter, said she immediately recognized the pungent odor of opium.

The men stood up to offer their places around the pan of glowing coals, and they soon had a fourth stool to accomodate all of us.

The heat from the coals was welcome, as was the glass of almost boiling hot water, given to each of us to drink. As we absorbed the heat, internally and externally, the crowd gathered in the room and the noise level intensified.

The children were closest, the front row being pushed against our backs by the second, third and fourth rows. Behind them stood the women and young men, and farther back were the older men of the village. Most of the villagers, however, were straining at the door to get in and have a look.

A couple of nights before the leader of another village where we stopped, who happened to be the village school-teacher, had offered us the schoolhouse for shelter. Guessing this village would certainly have a good, dry schoolhouse, I tried to make the suggestion. I tried first to draw a picture of a Chinese schoolhouse, with a ball point pen, on the inside of my left palm. I was soon given a ~~very thin piece of~~ tissue paper to elaborate upon my art work. That attempt also failed to gain an understanding response.

After almost a half-hour of this nonsense, punctuated with raucous laughter because of our inability to communicate, Byrne was taken by the arm and led up the street. He returned in a few minutes and announced that we had been offered room in a family home.

With the help of most of the villagers, we carried the raft and gear into the square and gratefully accepted the shelter. A large wooden door led from the street into a small dirt courtyard out of which several smaller wooden doors led to more rooms around the courtyard.

We were led to a dark windowless room, about 12 by 15 feet, with a clean-swept dirt

floor and a straw bed along one wall. A door from this room led into a second room, about the same size, with two straw beds, a wooden stool and a row of wooden shuttered windows that opened back onto the street. Looking through this row of windows into the room, peered what seemed to be hundreds of curious, smiling black eyes.

A woman about 40, with a hard but pleasant face, and dressed in faded blue pants, jacket and cap, was sweeping the dirt floor of this second room. It was her family home and our shelter for the night.

The four of us were immediately accepted as if we had been lost family or friends. A pan of hot coals was set in the middle of the floor with wooden chairs and stools around it. More hot water was brought in for drinking and washing. Then, with considerable fanfare, mosquito netting was set up over the two beds. (There could not have been a live mosquito within a hundred miles of the frigid spot, but the gesture was made, and again, gratefully accepted.)

During the course of our cleanup and warmup, we were shown the partitioned community outhouse, around the corner and about 30 yards down the street. (The contents of this and similar structures in other villages, are emptied on a regular basis, mixed with water, hand-carried in wooden buckets to nearby fields and spread with a wooden dipper to fertilize the lush green crops.)

As we were settling into our new quarters, under the surveillance of multiple faces in the door and windows, another woman came into the room carrying a very live white chicken. She pointed to the Gerber sheath knife hanging on my belt and made a cutting gesture with her forefinger across the throat of the chicken. I tried to show my appreciation for the opportunity to execute the squawking bird while at the same time declining the honor. The woman looked surprised and a little hurt, but took the chicken away to prepare it elsewhere.

Soon we were brought a cast iron kettle of steaming white rice and several pans of well-cooked, unrecognizable vegetables. We were each handed a china bowl with chopsticks to use with it. The chicken entrée followed. It had been plucked and boiled. Then the whole bird had been chopped with a cleaver, feet, head, wings, et al., into bite-sized pieces. It was served in a large pot with more vegetables.

We ate almost everything under the smiling eyes of our hosts, but did have a few troubled moments with the feet and head. (We were allowed to politely decline the second bird that was offered for breakfast.)

After dinner we had the chance to become village heroes by breaking out a Polaroid camera that had been brought for just such occasions. When our host, whose room we were using, saw his picture materialize before his eyes, he became very excited. Everybody in the building, all three generations of them, immediately changed into his and her very best shoes, coats and hats and lined up for pictures. (Some of our favorite pictures are of our benefactors posing for the Polaroid.)

With no electricity in the village, we were given a couple of candles as darkness fell. Age and beauty triumphed as Byrne and Fagan took over the straw beds while Lowes and I hit the dirt floor. We all slept well, warm and dry as the rain turned to snow in the early hours.

Shortly after the few remaining live roosters announced daybreak, our host walked into the room. He indicated by hand gestures, that while our overnight accommodations were compliments of the house, he would appreciate a few yuan to cover the chicken. We gratefully settled up and headed back to the river with our gear.

As we pushed off of the bank and into the current on our blue raft, we looked back at a crowd of almost 100 smiling, waving and cheering men, woman and children.

They still did not know who we were, where we had come from or where we were going. We did not even know the name of their village or where it might be located on a map. We did not look like them, we could not understand their language nor they ours.

To those gentle people we were as strange as strangers could possibly be, yet they had accepted us as we were and offered us everything they had.

It was one group of human beings, treating an entirely different and minority group of human beings, in the most humane manner possible.

It was total hospitality, and it is the way I shall always remember China.

THE HYDROPOWER EARLY WARNING PROJECT

AWA Director Pope Barrow announced at the end of January AWA's newest hydro project guerilla combat strategy—the "Early Warning System." AWA volunteers will scour the daily docket files of FERC for documents signalling developer intentions to seek construction permits from that federal agency. With the nature of such intentions in hand, AWA, American Rivers and the other organizations will contact all statewide and local groups who may be concerned about such projects so that they can seek timely intervention in any administrative proceedings FERC eventually announces.

Kevin Coyle of American Rivers stated that this "early warning will give many recreational and conservation groups a real chance to express their objections to environmentally damaging hydropower development." Early warning has become critical nowadays because FERC throws out any interventions which are not on time or are defective without regard to merit.

A NEW FERC CHAIRMAN—MARTHA HESSE

The new FERC chairperson, Martha Hesse, had some interesting things to say January 16, 1987 about the recent congressional enactment, the Electric Consumers Protection Act, when she appeared before the American Bar Association. This piece of legislation was intended to strike a more equitable balance between power development and environmental interests.

Some points raised in her speech are of interest to paddlers and river savers.

"Another thing we have already moved on—commencement of an in-depth study on whether PURPA incentives should continue to be extended to hydro facilities using new dams or diversion structures." The determination will be published February 13, 1987. Look for it in the Federal Register.

"Our regulations contain deadlines for filing certain documents...G one are the days when applications gather dust

waiting for comments from a state agency or someone else..."

"I also encourage applicants...to be creative and pro-active in responding to this new law....'Grease with the skids' by trying to anticipate what you need to do to comply with the new law and do it."

"While environmental concerns are a crucial factor in our deliberations, Congress explicitly made it clear that the FERC is to continue as the ultimate arbiter of all issues affecting the public interest."

NEW YORK COALITION CALLS FOR HYDRO MORATORIUM

In a strong show of consensus, New York's Environmental Planning Lobby, the statewide coalition of all environmental groups called for a two year moratorium on issuance of small hydro plant permits and a generic environmental impact statement on the state's river protection program. This unanimous action was taken at the conclusion of a short debate between AWA Director Peter Skinner and Chris Nolin representing the Independent Power Producers of New York.

Until late spring of 1986, Ms. Nolin worked for the NYS Legislature developing energy legislation assigned to well known Northern Canada paddler and Chairman of the Assembly Energy Committee, William Hoyt. Preparation of legislation to implement this new proposal is underway now.

NEW YORK'S GOVERNOR CUOMO CALLS FOR RIVERS STUDY

In his January 7, 1987 "State of the State Message" New York's Governor (and often hinted Presidential candidate) Mario Cuomo promised to direct his Department of Environmental Conservation to undertake a study"...identifying these potential conflicts and recommending mitigation measures..." Sadly, he also intoned "We must continue to promote development of indigenous (i.e. small hydro) energy resources."

AWA's FUTURE

AWA DIRECTOR'S ELECTION RESULTS

John Karch of Maryland recently announced AWA's recent Board of Director's election results. All of AWA welcome the new board members and the efforts they have offered to make on behalf of America's oldest whitewater organization. Based on ballots counted until January 16, 1987, the election results are:

Candidate	Votes
Pope Barrow	78
Marge Cline	75
Keith Thompson	69
Richard Lewis	60
Phyllis Horowitz	60
Ron Smith	57
Steve Daniel	24

The top five candidates were declared the winners.

The Directors face substantial challenges in their upcoming terms of office including the 1987 Gauley Festival organization, Journal publication reorganization and the substantial membership expansion effort.

Another Directors election is scheduled for late Spring to replace AWA directors whose terms ran out in 1986. Candidate nominations are welcome at AWA, 146 N. Brockway, Palatine, IL 60067.

JOURNAL FORMAT CHANGES PROPOSAL

In a recent letter, 1986 AWA Gauley Festival chairman Chris Koll made a proposal for consideration of format changes in the Journal. Since this

proposal appears to offer substantial benefits and has been echoed by several other concerned members, his proposal is set forth below for member consideration and comment. All comments should be tendered to Chris within two weeks of Journal receipt at 6 Farnham St., Cazenovia, NY 13035.

"What business wouldn't welcome the opportunity to manufacture a product for less money, in faster time, and with superior quality? Why not consider home computerized desktop type-setting and layout based on a 8% by 11 format?"

Traditionalists may howl, but the larger size is an idea which can no longer be relegated to the 'perhaps' closet. The available space is a larger format Journal will increase dramatically because much less relative space will be gobbled up by margins and open space. Thanks to more compact text, and the larger pages, the 36 page Journal can be reduced to, say, 24 pages without sacrificing content.

In addition, the large page allows more flexibility for innovate lay-out and the ability to reproduce larger photographs. Advertisers will be thrilled to have sufficient space so their ads will have clout that is now precluded by the microscopic size the 6 x 9 inch format creates.

Finally, AWA should consider other paper styles which can eliminate the need for expensive metal printing plates, but will not have an undue adverse effect on the quality of reproduction. In short, an 8.5 by 11 Journal will be an economical, efficient and attractive alternative. It's a product all the members and Directors of AWA should welcome."

BUYER'S GUIDE



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THE WHOLE RIVER CATALOG, published three times a year in AMERICAN WHITEWATER, is an AWA service designed to link up our readers with the best and most convenient sources of boating supply, instruction, and general whitewater paraphernalia. Prices for a full year's participation in the catalog range from only \$40 to \$90, depending on type of listing. If you know a supplier who would like to appear in the WHOLE RIVER CATALOG, just send the firm's name and address to AWA, Whole River Catalog, 146 No. Brockway, Palatine, IL 60067 and request further details.

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Individuals send \$15.00 to AWA Circulation Mgr., 146 N. Brockway, Palatine, IL 60067. Clubs send \$17 to same address. Be sure to include club name, contact, and address as you want it listed in the Journal.

You're Not Getting Your Journal OR If you have Moved:

For any circulation problem, contact Peter N. Skinner, AWA Circulation, Box 272, Snyder Rd., West Sand Lake, NY 12196. Be sure to include new address and code number off your mailing label.

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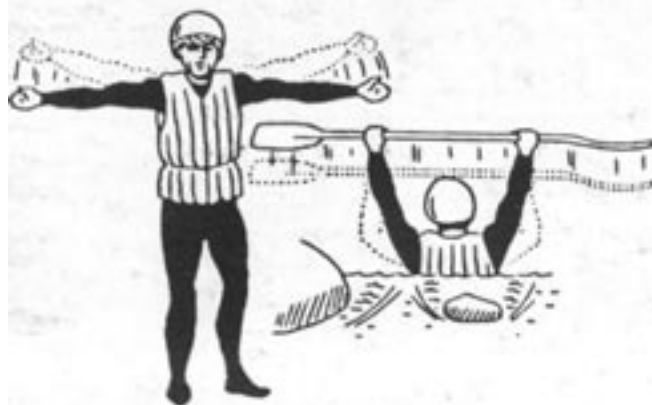
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