

American

WHITEWATER

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The American Whitewater Affiliation

MAY/JUN 1977

Vol. XXII, No. 3

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The American Whitewater Affiliation

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Editorial Chairman and Editor: Iris Sindelar, P.O. Box 321, Concord. NH 03301 Editorial Committee Ed Alexander, O. K. Goodwin, Rose Mary Gabler, Geo. Larsen, Ray Gabler. Bob Lantz. Fred Dietz, Kerry Heidenis, Joel Freund. Joe Bauer Business Manager: Rose Mary Gabler, 10 Boulder Rd.. Lexington. MA 02173 Circulation Manager: Kerry Heidenis. P.O. Box 51. Wallingford, CT 06492 Membership Chairman: Geo. Larsen, Box 1584, San Bruno, CA 94066 Midwest Membership Chairman: Fred Dietz, 1590 Sleepy Hollow, Coshocton, OH 43812 Advertising Chairman: Joel Freund, 440 Mission Blvd, Fayetteville, AR 72701 Conservation Chairman: Robert Lantz, Sunbright, TN 37872 Safety Chairman: O. K. Goodwin, 1240 Moyer Rd., Newport News, VA 23602 Racing Editor: Ray Gabler. 10 Boulder Rd., Lexington. MA 02173 How to Write to American Whitewater: Deadlines for all material, including advertising, are the 25th of Dec., Feb., Apr., June, Aug., and Oct., for Nos. 1, 2, 3, 4, 5 and 6 respectively. Send Race Schedules and results to the Racing Editor. Ray Gabler. Send membership subscription payments, changes of address, non-receipt of copies to Circulation manager. Kerry Heidenis. P.O. Box 51, Wallingford, CT 06492. Send advertising copy and proofs to the Editor, Iris Sindelar. Send Payments for Advertising and requests for advertising information to the Advertising Manager, Joel Freund. American Whitewater is mailed to all members of the American Whitewater Affiliation, an affiliation of boating clubs and individuals interested in whitewater paddle sport. Membership is open to interested individuals at \$6.00 per year and to clubs at \$11.00 per year. Club membership includes listing in the Journal. Publication is planned at 6 times yearly. Single copies, \$1.30 each. Surplus back copies are available at reduced prices. Write Gen. Larsen. P.O. Box 1584, San Bruno. CA 94066.

The Staff and committee members listed above are unpaid Whitewater enthusiasts who volunteer their time and efforts to bring **affiliate/member** subscribers this journal. Your contribution of articles, letters, race results and schedules, photos and drawings are essential for their continued efforts and the timely publication of the American Whitewater Journal. Vol. XXII, No. 3 © 1977 American Whitewater Affiliation. All rights reserved.

COVER: Pam Kelly on the bank of the Pemigewassett R. (N.H.): "It was fun while it lasted." Photo by Jon Bosworth. AT LEFT: The Eel R. (Calif.) winds through a wooded gorge below Lake Pillsbury. Photo by Joe Bauer. See story, p. 92.

Letters from Readers

Dear River People,

It has been some time now since the November 1976 Hearings on the Rogue River and the Appeal on the Snake River. This letter is intended to bring you up to date on what has happened during the interim, outline some of the action being taken and asking your help.

The Snake River Appeal is now before the Chief Forester in Washington, D.C. This is the last **step** in the appeal and the decision should influence whether anyone is willing to test this unjust rule in court. Already this year private boaters have been denied a permit on the Snake River, but told there are commercial openings on the same date through the outfitters.

The private permit drawings on the Colorado and other Western Rivers were held in February. Less than 8 percent of the people who get permits on the Colorado are private. If "the people who use commercial outfitters are the public," then why doesn't everyone compete fairly for the public resource. 92 percent guaranteed commercial use can hardly be considered equal odds. The guides are quick to point out that they provide access to the river for invalids. Who would have thought that 92 percent of the people who use the Colorado are invalids? I don't know about invalids, but for a \$600 per person Colorado trip, I cannot take many of my family on a guided trip.

We hope that an appeal will be filed on the Rogue River soon. In the meantime we are supporting Oregon House Bill 2152 which would transfer authority from the Marine Board to Scenic Waterways. The Marine Board is so biased, that anyone would be better to deal with. Scenic Waterways is more sensitive to recreational boaters.

The Wilderness Public Rights Fund is carrying the banner on a California Court case concerning the Colorado

March 4,1977 River. The outcome of this case will influence all river management. So far in Oregon, there are many people contributing valuable time to this cause and we have never asked for a donation. It should be worth at least \$25 for every private boater to support WPRF. This is peanuts compared to being denied access to the river or **caying** the guide's fee. Whether you realize it or not, their hard work will determine whether you will be able to use Oregon Rivers as a private boater.

> Wilderness Public Rights Fund P.O. Box 308

Orinda, California 94563 Please donate what you can. Please pass this on to other river people.

> John H. Garren Author, Oregon River Tours 01008 S. W. Comus Street Portland, Oregon 97219

1977 NATIONAL WHITEWATER OPEN CANOE CHAMPIONSHIPS

The 1977 Open Canoe Championships will be held on the Nantahala R. Sept. 10-11. The slalom, consisting of 30 gates hung in class 2-3 water, will be on Saturday. Sunday's downriver competition will include **8** mi. of **white**water, a half-mile portage and 7 mi. of flatwater. For information contact Bunny Johns, Nantahala Outdoor Center, Star Route Box 68, Bryson City, NC 27402.

* * * * *

SUPPORT HOUSE CONCURRENT RESOLUTION 181 — INTRODUCED by Representative Timothy Wirth— Colorado

Representative Timothy Wirth of Colorado has recently introducted HCR 181 in the U.S. House of Representatives. This calls for a fair permit system on rivers managed by the Department of Interior and Agriculture. Most all the major Western Rivers are under the management of these **two** departments; Colorado, Green, **Yampa**, Selway, Salmon, Snake, Rogue, Grand Ronde, Owyhee, Deschutes, John Day, etc.

Please write separate letters to Hon. Morris Udall, Hon. Phillip Burton, Secretaries Andrus and Berglund asking that they support this resolution and letters to **each** of our **represen**tatives asking that they co-sponsor this resolution. Representative Wirth is doing this for the private boater and we can help support his resolution by these letters. Send a copy of correspondence to Beth Hulsman (or phone her) then we will follow up on your action.

Addresses:

Ms. Beth Hulsman, 02326 S.W. Greenwood Rd., Portland, OR. 97219

Hon. Morris K. Udall, Chairman, Committee on Interior and Insular Affairs, House of Representatives, Washington, D.C. 20515

Hon. Phillip Burton, Chairman, Subcommittee on National Parks and Territories, Committee on Interior and Insular Affairs, House of Representatives, Washington, D.C. 20515

Mr. Cecil D. Andrus, Secretary, U.S. Department of Interior ''C'' Street, 18-19th St., N.w., Washington, D.C. 20240

Mr. Robert S. Berglund, Secretary, U.S. Department of Agriculture, 14th and Independence Ave., S.W., Washington, D.C. 20250

Representative Les AuCoin, 329 Cannon Bldg., Washington, D.C. 20515

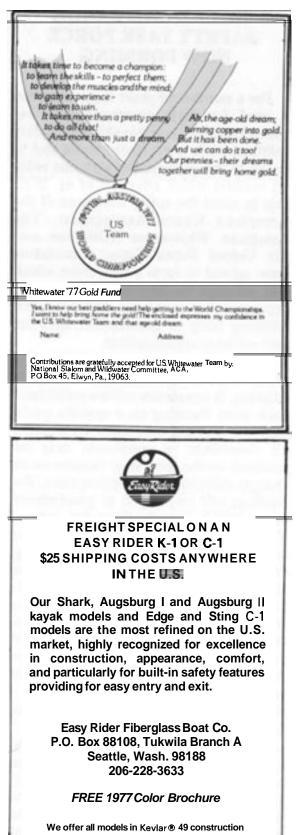
Representative Al Uhlman, 2207 Rayburn Bldg., Washington, D.C. 20515

Representative Robert Duncan, 333 Cannon Bldg., Washington, D.C. 20515

Representative James Weaver, 1723 Longworth Bldg., Washington, D.C. 20515

Senator Bob Packwood, 6327 Dirksen Bldg., Washington, D.C. 20510

Senator Mark **O.** Hatfield, 463 Russell Bldg., Washington, D.C. 20510



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KAYAK AND CANOE SAFETY TASK FORCE NOW FORMING

For a number of years there has been a need for rapid communication between canoeists and kayakists on safety matters, both to exchange views and to speak to the government with one voice on matters which affect all of us. With this in mind the safety chairman of the American Canoe Association, The American Whitewater Affiliation and the United States Canoe Association have agreed to form a task force which will attempt to find solutions to our most pressing problems, and act as an advisory body to government agencies and national organizations.

All people interested in safety are invited to joia no matter what their affiliation. A newsletter will be published, each issue focusing on a specific problem and inviting comment. By reading all comments, a consensus may be reached, or the issue may become more sharply defined. When appropriate, the findings will be relayed to government or canoeing organizations for action. This newsletter is not an attempt to supercede the authority of any existing organizations, but rather to recognize that safe paddling is everyone's business, and that unless we spend some time evolving ways to deal with problems as they occur, the government will try to solve them for us, and reduce our freedom to pursue our sport in the process.

Some of the issues we will explore are as follows:

DEALING **WITH** ADVERSE PUB-LICITY: This spring has brought the usual drownings, and the usual recriminations. A suggestion by Harry Roberts of USCA on how to approach television. stations to explain why the accident happened, and to draw the line between

responsible club paddlers and unprepared members of the general public, was successfully followed by Charlie Walbridge of ACA, with the resulting TV spots helping improve paddler's images in both areas.

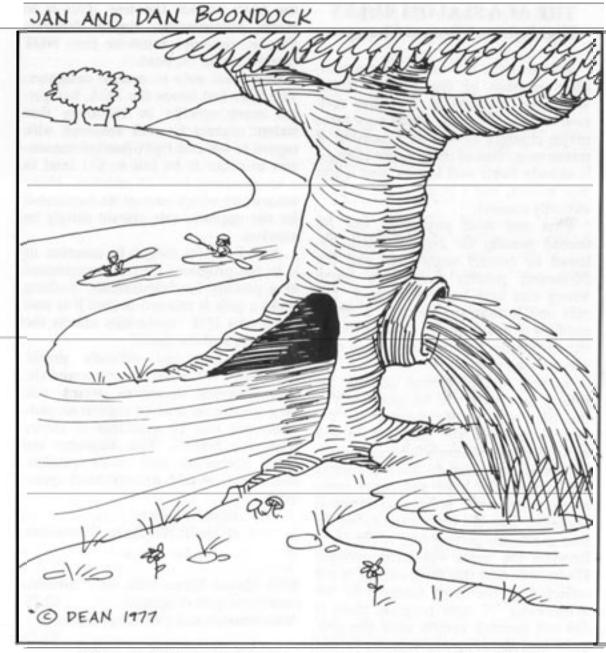
DEALING WITH THE GOVERN-MENT: The Coast Guard and other agencies are quite upset about the amount of factionalism in canoeing, and in particular with the problem of who to give funding grants to among competing **organizations**. We must soon evolve some way of allowing one person to speak for us all on each project, otherwise we will lose our credibility and no one will be funded!

DEVELOPING EQUIPMENT STANDARDS: Life jackets which don't protect the back, boats which collapse, helmets which provide little protection: all of these are major problems. We must find a way to reward those make good equipment, and see that other paddlers know of their existence, by coming up with a recommended list.

COMMUNICATING NEW TECH-NIQUES: Five years ago, no one had heard of foot-trapping; today, everyone is aware. There are many people with good ideas on keeping safe; we need to publicize these ideas. Some individuals, like Ray Miller with his throw-line rescue bag, are quite adept at publicity; others could use the help of someone with a complete mailing list and access to magazines.

DEVELOPING MORE SAFETY **PUBLICATIONS:** We need a list of "approved" publications so that everyone can have access to them. We need to develop pamphlets, booklets, and films which all organizations can support. The more we exchange ideas, the more we learn. Let this be a forum for developing more materials to educate the general public.

I am particularly interested in hear-



"Listen carefully, Jan, and I'll tell you how we run Old Hollow Tree rapids."

ing from: Club safety chairmen or equivalent; manufacturers; professionals from guide services, the Red Cross, and government agencies; and other interested individuals regardless of affiliation. To get the first issue of the newsletter, drop me a line with your thoughts and responses. Please be aware that I am doing the secretarial work not from any wish to dominate the task force, and that everyone will have access to my files.

> CANOE SAFETY TASK FORCE Charlie Walbridge, Registrar Wildwater Designs Kits Penllyn, Pa. 19422

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THE ACA SLALOM RULES Highlights of Recent Changes

Last year the ICF carried out a complete revision of the Slalom Rules, which has resulted in a similar revision to the ACA rules. There were three major changes as well as a number of minor ones. One of these major changes is already fairly well known, one is less well **known**, and I imagine the third is virtually a secret.

First and most important, the 20second penalty for outside touch followed by correct negotiation and the 50-second penalty for inside touch wrong way have been eliminated. The rule now is that any touch is a 10 regardless of how it occurs. That is to say, the distinction between inside and outside touches is no more.

Second, the **50-second** penalty for rolling in a gate will be given only if the boat was upside-down while the body is between the poles, or in C-2 either body or the space between them.

"Third, in order to have a correct negotiation, the head and entire torso of the competitor must pass between the poles. This is a more strict ruling, in that previously getting half of the torso between the **poles** was **good enough**. Please note **that** this **third change** is **not** reflected in the rules excerpts in the Whitewater '77 race program since it did not become known until the program had already gone to press. Article 21.3. a should have the word "entire" in place of the words "at least half of the"."

Three lesser changes also failed to make the press deadline for the program. The **50-second** penalty for both poles of a gate passing between the two bodies of a C-2 is eliminated, hence Article 22.A.10 is eliminated (**22.A.11** is renumbered **10**). Also, finish timing is now done when the body, rather than the boat, crosses the line. This is to make photoelectric timing feasible. Finally, **endloops** must be free, NOT taped down to the boat.

One final note to course designers: The ICF, and hence the ACA, has gotten more specific in requiring that slalom courses be well balanced with regard to left and right-handed maneuvers in order to be fair to C-1 (and to a lesser extent to C-2) paddlers. Hairy maneuvers which cannot be duplicated for the opposite side should simply be avoided.

And I almost forgot to mention (it is in the program) that the assessment of a penalty for intentionally pushing aside a pole is relaxed in that it is now given only if it "materially affects the negotiation of the gate."

Competitors and officials should thoroughly study the new rules and the accompanying diagrams, which will very shortly be sent to registered paddlers and will be available to others from the NSWC. The diagrams are more numerous and more explicit, and hence should answer most questions.

> John R. Sweet, ACA/NSWC Rules Committee

* * * * *

1976 Slalom Rules, with 1977 Amendments and gate diagrams: \$2.25 Amendments and gate diagrams only: \$0.75

Checks payable to NSWC. Order from:

National Slalom & Wildwater Committee Susan Chamberlin, Chairman 545 E. St. Andrews Dr. Media, PA 19063



NEWSLETTER OF THE NATIONAL SLALOM AND WILDWATER COMMITTEE

Anyone who is interested in specific, current information on slalom and wildwater racing in this country should send \$3.00 (check payable to ACA NSWC Newsletter) to:

Bonnie Bliss

11 Larchdell Way

Mountain Lakes, NJ 07046

If you have information for publication please send the material to:

Susan Chamberlin, Editor NSWC Newsletter

545 E. St. Andrews Dr.

Media, PA 19063

Paddler Rankings

Those paddlers who wish to be numerically ranked on the basis of their race performance, as well as receive the newsletter, should send \$5.00 (check payable to ACA Paddler Registry) to Bonnie Bliss at the above address. Paddlers will require a ranking to qualify for entry into certain races; team trials, national championships, etc.

World Championships in Slalom and Wildwater

These will be held in Spittal, Austria, on the Lieser River, from July 17-24. It is a picturesque setting with exciting water so if you are traveling in Europe plan a visit. The top U.S. competitors are training hard for this event and those who are ultimately selected for the U.S. team will need all the financial help they can get. Most of them make considerable financial sacrifices in order to train and race in this country; selection to the team which represents the U.S. in the world championships is an honor and an additional expense. Please help support the whitewater team in 1977 by sending your tax deductible contribution to USISCA, P.O. Box 45, Elwyn, PA 19063.

NATIONAL POLING EVENT COMES EAST

This year, for the first time, the National Poling Championships will be held in the East, in the vicinity of Pittsburgh, PA, June 25-26. Poling is unique among whitewater contests in that it is all performed in and around one rapid, so that all spectators can see all phases of the run. Also the emphasis is on water-reading ability and coordination rather than brawn, as evidenced by the fact that a woman, Mary K. Shaw, last year was a close runner-up in the open class and this year is considered a leading contender for the national poling cup. This cup, incidentally, holds twenty bottles of beer, and there is, according to Al Beletz, an unwritten tradition that the winner, as in the past a few times, must drink it. If he/she can't, it must be passed around and shared with the others. (Mary, do you REALLY want to win this cup?)

Anyone interested in attending or entering can write Mary Shaw and Roy Weil at 5131 **Penton** Rd., Pittsburgh, PA 15213, or **A1** Beletz, 3636 Oxford Blvd., Maplewood, MO 63143. If you send **A1** a self-addressed, stamped envelope, he will enclose a copy of the poling rules and other poling **information**.

INTERNATIONAL CANOE RACE

The 44th annual "Classique Internationale de Canots de la Mauricie" will be held Sept. 3-5 on the St. Maurice River between La Tuque and Trois-Rivières (Pr. Quebec). The race will be divided into three stages of 93, 77 and 23 km. respectively. For information write La Classique International de Canots de la Mauricie, C.P. 601, Shawinigan P.Q., Canada G9N 6V6.



Dave Dauphine'rides the Colorado in his low-volume C-1. Now you see it . . .

C-1 CRUISING THROUGH THE VOLUMES

by David B. Dauphine

Covered boating has gone through a radical five years of design change. The most prominent change to me has been the decrease in size or volume of the boat itself.

My boating began in a big and hence quite heavy C-1. It was a legacy of ten model years earlier and at the time was considered a 'Queen Mary,' 'the scow of the rivers,' 'utmost pig of boats,' I would, with the usual great effort, shepherd the tiny **kayaks** downriver. Maneuverability in such a beast was something **marvelled** at, which entertained my ego. However, the strength and endurance required to perform feats of maneuverability, and also to remain poised amidst the abusive 'Queen Mary' jokes, were draining. The boating scene has pleasantly changed for me. Now I lift my boat to the car roof with one arm, smiling. Why should a **C-1** be big and heavy? Why this stubborn resistance to a light, custom-fitting boat?

"You're not taking that little race boat out there are you?" yodels the veteran.

Why not? My little race boat has outside seams and double foam walls. It fits me perfectly. Before 'beefing it up,' I raced it in big water as well as in 'small.' With success and in comfort, I've cruised the Colorado at 30,000 **cfs**, through the Grand Canyon, in my low volume, Jape **C-1**. The very same design took top honors in the last World's Cup Competition.

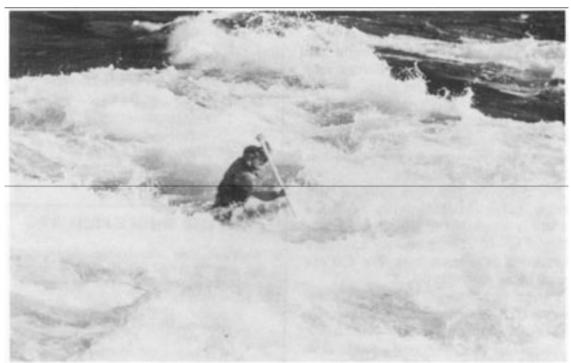
My low volume boat tends to punch through waves. I go into and through a wave with amazing stability, both when under water and when coming out the other side. To accentuate this punching effect, I reach the paddle blade into the wave before I hit it. I lean forward into my stroke. The body lean and **paddle**pull offset and lessen the wave's impact on me, and hopefully maintain my momentum through the wave. My boat finds stability in the solid water just under the aerated surface.

Low volume presents less surface area to be knocked about in turbulent rapids. Or, if you will, high volume presents more area for unstable surface water to hit and push around. Looking at a boat from the side, the higher it is in either end, the more susceptible it is to pushing from side to side. Also, a small difference in weight in the ends of a boat makes a great difference in one's leverage over it. Thus, in larger volume boats, maneuverability tends to be hindered by a 'bobbing' effect of being tossed up and down and from side to side with the surface water. Momentum is hard to sustain. Low bracing and frantic struggling are often typical in the older, larger C-1 designs.

... Now you don't. Photos by Kathy Bolyn.



In holes, low volume tends not to be held so easily as large volume. I find the lower volume boat has a tendency to punch through holes as it does through waves. This seems to be debatable among some of my friends. They have said, "The bigger the boat, the more it straddles holes and waves." Higher volume does not mean a longer waterline. It does mean more surface area to get moving through, up, and out of a hole. I've also heard that lower volume boats will get caught in holes which will be too small for larger volume boats. I don't agree with this statement either. The same displacement occurs whether one is in a large or a small volume vessel. The difference in performance between the two volumes is in the degree



of 'closeness' of the paddler. to the water. A lower volume boat will tend to sink deeper into a hole, sink through the aeration, into the more solid water going through and out of the hole. It becomes a wetter ride in the lower volume boat, but, it is not my experience that lower volume will be 'caught' where high volume won't.

In medium-size and larger holes, I believe the extra volume and weight in the ends of high volume boats to be of particular detriment. The amount of buoyancy and surface area presented to the reversal is critical. With lower volume and less surface area to my boat, I have more physical power (leverage) over it. I have seen high-volume **C-1's** stick and toss in holes where I have disappeared and popped up downstream or endered out of the 'mothers.'

The lower volume boat is lighter as less of everything goes into the construction. It is cheaper and less of a hassle to lay up if you're building your own boat. Outfitting is easier, as the hull and deck shape can be used in brace formation. Lightness and custom fit mean quick response and sensitivity at your paddle tip! Surfing and playing, and general clowning around are always possible, easier than before, and fun. Low volume is easier to roll, or, for those of us who don't make it, easier to rescue (they hold less water). These advantages make it all the more sensible for the beginner to jump into low volume as soon as possible.

For more control, less fatigue, and hence safer boating, low volume for me is much better than the 'Queen Mary's' of old. The game for kayakers changed a few years ago. We C-l'ers are just now catching up.

(A word in defense of the "Queen Mary" C-1: many paddlers, especially with muscular legs, find it impossible to keep their feet from going to sleep in a low-volume C-1. — Ed.)

USISCA 1977 WHITEWATER RACING PROGRAM

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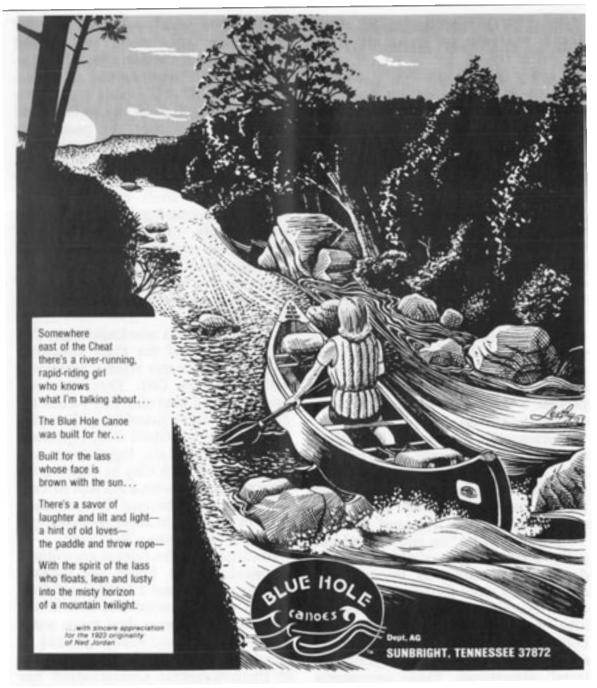
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RESERVOIR RELEASES FOR CANOEING IN NEW YORK

April 1, 1977 may be the day of rebirth for fine canoeing and fishing in rivers of southeastern New York State. On that date, the State's Department of Environmental Conservation will take charge of new conservation releases from **Catskill** reservoirs owned by the City of New York. The Cannonsville, Pepactin, Neversink, and Schoharie are the first of more than thirty major reservoirs scheduled to come under State control within a year. The reservoirs are owned by several different municipalities and power companies, all of whom have historically exercised little regard for stream conditions below their impoundments. This program has been made possible by passage of unique and far-reaching legislation which may provide a model for other watersheds around the Nation.

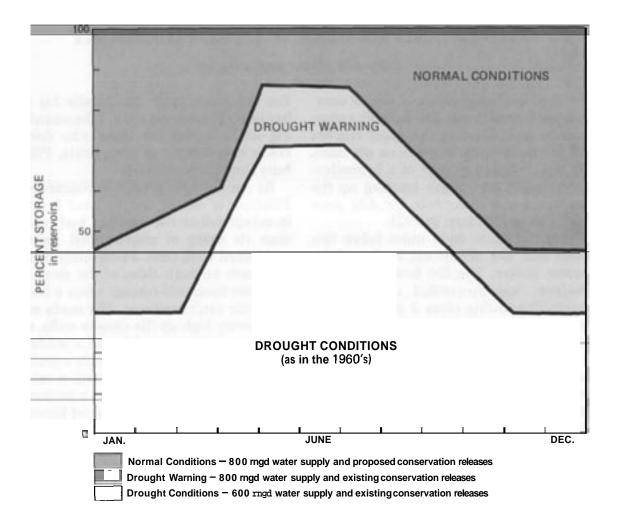
Cannonsville, Pepacton, Neversink, and Schoharie spill into the West and East Branches of the Delaware River. into the Neversink River, and into **Esopus** Creek, respectively. All of these streams have been damaged by New York City's brutal "on and off "release policy whereby a gout of whitewater one day is often followed by artificial drought and mass fishkills the next! In recent summers, canoeists have had to hike their canoes across rocky river bottoms parched by the City's adher-ence to out-dated "conservation release" agreements. These agreements were made in the 1940's before any scientific study of the rivers had been attempted. Even in Winter, shallow waters have resulted in solid freezes; killing off the bottom life on which the summer's fish must feed.

More than five years ago, **Catskill** sportsmen and river lovers began to work towards rescuing their rivers. They banded into a group called **Cats**-

skill Waters, which enlisted the aid of the State's Departments of Law and Environmental Conservation. The Department of Environmental Conservation (N.Y.S. D.E.C.) made an innovative statistical study of stream flows and reservoirs levels over the past thirty years, and developed flow criteria for improved stream conditions. It was discovered that by careful distribution of releases, river levels could be raised without jeopardizing New York City's water supply. Computer modeling of the reservoir system produced drought warning levels to allow release cutbacks in time to ward off the effects of the worst recorded dryspell. (See figure 1)

Armed with this new knowledge, **Cat**skill citizens and the State attempted to negotiate a water release agreement with New York City. They were surprised to find that the City would not discuss its water hoarding philosophy. The **citizens** mobilized their representatives in the State legislature, and shocked New York City by clearing the Governor's desk with a bill that extended State control beyond the four reservoirs in question to cover all major reservoirs in southeastern New York.

According to the release regulations proposed by the State, the Catskill streams will become a haven for fishermen, if not for canoeists as well. While there will be a great deal more water than previously, and canoeing could be greatly improved, the State Department of Environmental Conservation has taken no concrete steps to guarantee special touring events and races. Both the American Canoe Association and the Kayak and Canoe Club of New York are exerting pressure on the State to gain privileges similar to those enjoyed by canoeists on other rivers below multipurpose dams. However, the State's Department of Environmental Conservation licenses fishermen (receiving



substantial revenues thereby), not canoeists, and is disturbed by making concessions to an unfamiliar group. In addition the State still seems surprised to have so much new power and it will probably be some time before it is able to feel confident with the advanced water management techniques embodied in its new plan.

A moderate position is perhaps wise, given the complex politics of water use in the Delaware basin. The State has relied upon the support of both fishing and canoeist groups at the hearings on water release program held in New York and neighboring Delaware River states. Above all, the State and its supporters are bracing for New York City inspired court action, expected with the first increase in stream flows on April 1.

At the time of this writing, additional roadblocks have been erected by Pennsylvania's Dr. Goddard of the Department of Environmental Resources who regards certain aspects of the N.Y.S. proposed rule curves inconsistent with the U.S. Supreme Court Decree governing flows in the Delaware **River**. Negotiation between the States and the City will hopefully obviate the need for renegotiation of this issue in the Supreme Court.

Peter N. Skinner, P.E. Josh Cohn

THE EEL RIVER BELOW LAKE PILLSBURY

Story and photos by Joe Bauer

The Eel River system is almost completely free of dams. The notable exception is Scott Dam on the upper reaches of the main stem. Scott is an old dam. It was designed as part of a hydroelectric project and began backing up the medium-size reservoir (86,400 acre feet), Lake Pilsbury, in 1921.

It's the six or eight miles below this lake that are of interest to the **white**water boater. The Eel flows through a narrow, heavily-wooded canyon with many interesting class 3 and a couple of class $3^{1/2}$ rapids. This stretch is affectionately known as the Pillsbury Run.

Pillsbury was the first class 3 that I ever ran. After a couple of successful trips on the class 2 Russian River, my brother John and I took our long touring kayaks to the Eel, not really knowing what to expect. It was too much for us. We made it, but it wasn't all fun. At the end I made a note to myself that I shouldn't run that stretch of river again.

The next year we went back with our new slalom boats and found out what a great run it can be. I've been back many times since then and hope to make many trips in the future because Pillsbury is one of the nicest runs in Northern California.

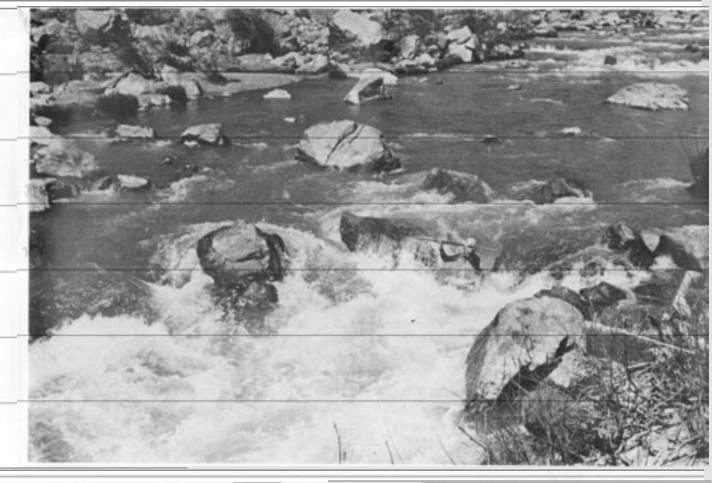
Not only is this run about the closest class 3 river for our group, it has the most reliable flow of any North Coast river because of the usual 300 cfs released from Scott Dam required for power generation. 300 cfs is a good level for this rather small river bed (290 square miles at the put-in). It's very rocky and the maneuvering is tight, sometimes over some pretty big drops.

Although Pillsbury isn't really a very difficult run, it is one to be respected.

For the boater who can handle his or her boat, Piilsbury is a joy. Likescratching an itch. But for those who don't really have control of their boats, Pillsbury can be a nightmare.

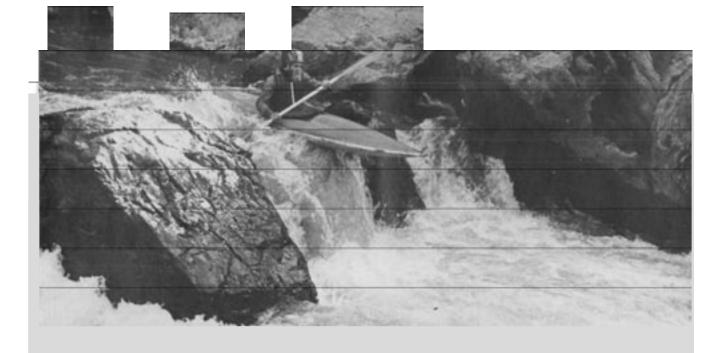
As far as our group is concerned, Pillsbury is almost always good for an in-action roll or two and has had more than its share of unscheduled swims and forced walk-outs. Fortunately there are roads on both sides of the river to facilitate these self-rescues when a boat or boater can't continue. The roads are both pretty high up the canyon walls, so the run retains something of a wilderness character and a walk out is a pretty difficult scramble. But it's still a relatively painless way to salvage a **broken**boat disaster or a severe case of **blown**out boater. So this run is a good choice for introducing the intermediate boater to something a little more difficult, but definitely shouldn't be attempted by non-rolling novices.

The first few miles below Scott Dam are pretty flat, with occasional class 2 rapids. We usually put in below here from the logging road on the south side of the river. From here it's a fairly short way before the action starts, about two miles of almost continuous class 3 action, lots of narrow slots, rock dodging and nice sluice turns. Scouting isn't usually necessary, but getting out and climbing around on the rocks deep in the canyon can be very rewarding. Pillsbury is typical and an excellent example of the beautiful and varied sculptured boulders found on many of the rivers of California's North Coast. Rocks of many different colors piled on each other like jewels create a perfect environment for a whitewater trip. We usually try to make at least two



ABOVE: A typical drop on the Pillsbury run. a tight and tricky class 3. BELOW: One of the trickier places on the Pillsbury run, often prompting a swim or a roll from less experienced boaters. It is also a favorite play spot for old hands.





Brant Shenkarow takes the left side of Double Falls, always an exciting rapid.

lunch stops just to linger in the gorge and soak up some good feelings.

The climax of the hot section comes at Double Falls, which probably should be scouted. This rapid begins with a high (3- or 4-foot) drop which can be taken on either side of a large boulder in midstream. It's a little tricky because if you take the right chute, the jet from the left side tends to push you right into some half-submerged rocks downstream; and if you take the left drop, the right side jet can push you into a rock wall on the left. But if you take the first drop with some power, chances are that you'll end up in the middle, which is the only place to be down below. At a thousand cfs this drop forms a formidable stopper wave that must be punched decisively. It was here that we were convinced of the wisdom of wearing life jackets, after a pretty long swim, mostly underwater.

Below Double Falls the river quiets

down somewhat for the last couple of miles to the take-out, with spaced class 2 and class 3 rapids, some of which are quite interesting.

Like the put-ins, there are a selection of take-outs on both sides of the river as it winds another couple of miles down to the Van Arsdale diversion dam. Here the water is diverted through a tunnel to the East Russian River, leaving the rest of the Eel below Van Arsdale virtually dry except for the rainy season. So we run the lower parts of the Eel in the winter and spring. But it's great to have Pillsbury in the fall when almost nothing else is running.

Rivers Need Friends! Join FRIENDS OF THE RIVER 1021 R St. Sacramento, CA 95814 (916)446-3971

Send a self-addressed, stamped envelope for more infirmation.

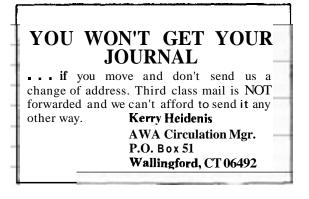
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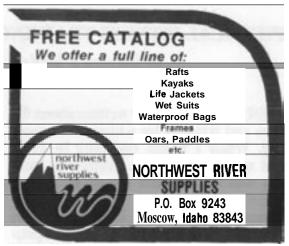
BOOK REVIEW

Whitewater Canoeing by William O. Sandreuter (New York: Winchester Press, 1976); \$8.95.

Of late, **congestion** on the rivers has been closely matched by congestion on the presses, as book after book comes out on some aspect of canoeing. Few of them are worth buying, and this book is a good example why not. For one thing, so far as instruction is concerned, it is quite inferior to some cheaper and thinner books put out by canoeing clubs. I defy anyone not already familiar with eddy turns to follow the diagrams and steps in this book. For another, the book contains serious misinformation. Apparently the author is not familiar with the standard river classification, for he has his canoeists running **4's**, 5's and even 6's. (I would have thought that he was using the alternative 10 level classification, but he explicitly says that he is using the 6level one.) One diagram shows a boat staying in the deep water on the outside of a bend despite what appears to be a fallen tree just waiting to trap the paddlers. There are a few good things in the book, including descriptions of loading boats on cars and suggestions on soling river shoes with indoor-outdoor carpet so they stick on rocks. However, these points are hardly worth the price. As andreuter says, "You are aware that the number 5's and 6's require coolhanded control and experience." Well, so does book buying, and most of us will avoid this book just as we avoid 5's and 6's.

–David B. Brooks, Ottawa, Ontario







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PHYSICAL FITNESS TRAINING FOR THE WOMAN PADDLER

By Barbara S. McKee, Penn. State Outing Club Photos by John R. Sweet

Lately, much has been written about fitness and training for whitewater canoeing. When I began paddling in 1972, not much was known. Especially lacking was information aimed at women paddlers in general and non-racing women in particular. Public attention is finally focusing on women competitors who excel, but for every woman who achieves top ranking in her sport, there are hundreds who work hard to keep fit for their own well-being and pleasure and who paddle not to achieve world-class status, but for personal gratification. It is to this group of paddlers that this article is primarily addressed.

Many people who take up whitewater paddling have previously done very little strenuous physical activity. This is especially true of women, who suffer from the neglect that our society has imposed on their early physical development. While physical conditioning as a positive and necessary activity is finally being accepted for growing girls as well as boys, many women several years out of high school or college are exposed to nothing more taxing than carrying the weekly groceries. At the end of my first season of paddling, I realized that although I had previously enjoyed hiking, biking, swimming and other outdoor activities, I did not have the physical stamina to pursue the sport to the limits to which I aspired. A leisurely float trip on class **II** or **III** was one thing, but for heavy duty cruising and a lot of playing, I was simply unfit.

Frequently I have seen men as well as women upset and swim, not so much because of a real lack of skill, but because fatigue made them sluggish and sloppy. And I have seen this occur on



Figure 1 The author and her sometime C-2W partner, Louise Nichols, take time out for a run at last year's Savage International race.

amazingly short runs! The fact is, that the average American is out of shape, and those who wish to become competent whitewater paddlers should do something about this limitation. Based on my own experience and from watching those around me, I believe that those in shape enjoy the river more and are better equipped to survive a tough situaton unscathed.

You don't need a lot of elaborate equipment to improve your fitness. I suggest a three part program of which anyone can do all or part. First, run to improve the cardiovascular system. Second, lift weights to add body strength and condition the muscles. And finally, play squash, tennis, or some other quick game to keep reflexes sharp. Find a place to work out and set a time to do it daily. You may have to

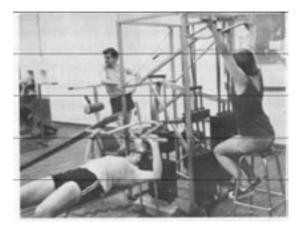


Figure 2. Claire Gesalman and Elizabeth Watson lifting on a Universal Gym machine.

join the Y or some other specific group, but most likely the local high school or college will have a track and at least one Universal Gym machine which you may use. (See Figure 2) You can run anywhere, and if you run outdoors everyday, even as the weather gets cold, by the time winter comes your throat and lungs won't mind the frigid air. It is surprising how warm you can keep while running. If you can't find a Universal Gym, a single bar, some weights and a bench can be purchased for the home from Sears at relatively little cost. I personally prefer to work on a U Gym because it eliminates the need to have a second party standing by. If you work with a bar you will need a spotter AT ALL TIMES. (Figure 3) Many women, because of a lack of nearby facilities, or small children to watch, find it more convenient to lift at home. Dumbbells can be made by filling a length of pipe with lead or sand. Clorox bottles filled with sand also make good homemade weights. Use your imagination in adapting these to the exercises which follow.

Several women *I* have talked to encouraged me to be very specific in making suggestions for lifting, so below I will describe a program which has worked well for me. There are other approaches. Anyone who is beginning

needs a prescribed program, but will no doubt evolve her own variations as her lifting continues in order to adjust to her own needs and time schedule. I was fortunate in that I lived at Penn State where I had access to the best equipment and the best paddler/ coaches. At that time, many Penn Staters were training seriously. An attitude of eagerness to work hard and a congenial sharing of individual improvement prevailed there. Beginners are encouraged. My background, then, is based on an amalgamation of advice from such people as John Sweet, Norm Holcombe, Tom Southworth and Dave Kurtz. From all my sources I have concluded that there are three general statements that apply to all programs, and should be remembered.



Fig. 3. When lifting with a simple bar and weights, always have a spotter standing by for safety.

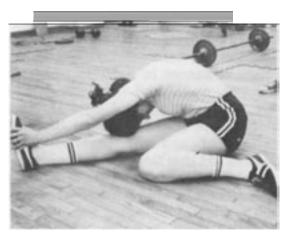


Fig. 4. Stretch out thoroughly **betore** running or lifting.

First, gradually stretch out all your muscles and get warmed up and limber before running or lifting hard to prevent muscles pulls. (Figure 4) Second, exercise the whole body. Don't concentrate on the arms while neglecting the legs and back since your goal is overall fitness. Also work opposing muscle groups: strengthen the muscles used to pull, then those used to push. And third, build up your strength by lifting heavier weights fewer times, then switch to endurance building by increasing the number of lifts but decreasing the weight. I personally try to build strength throughout the winter, then take up more endurance work in February in anticipation of the upcoming paddling season. Keep in mind that each individual is different. One woman might have strong wrists and weak biceps, while another may be strong in the shoulders but weak in the back. The weights given as examples are merely guidelines and should be adjusted up or down to suit the individual. In general, it is a good rule of thumb to begin at the lowest possible weight and adjust upwards to avoid strain if you have never lifted before.

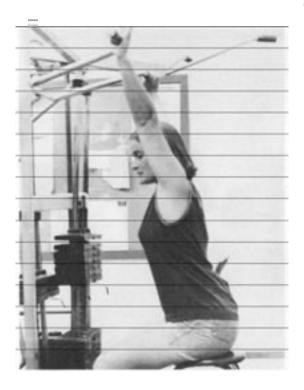
RUN FIRST. If you tire yourself lifting you won't push your heart and lungs during your run. A good hard run

also gets your muscles warmed up before lifting. Build up gradually at first until you are sure you can run without being so sore the next day that you have to skip a workout. Run a distance which makes you feel tired and winded, but not whipped. Then walk the same distance and repeat several times. Work up to a mile, then work on running a faster mile. Unless you are very overweight, most of you should be able to do a 10 minute mile once you have built up to a continuous mile. You must be willing to really hurt at the end of a mile or your time won't improve. If you push yourself you will find your times come down fast at first. It helps to watch a clock or have someone call out your quarter mile splits. I found breaking an 8 minute mile was a minor barrier, but a rewarding achievement. It marked my shift from jogger to runner. Breaking a seven minute mile was even harder. I finally enlisted the help of a "rabbit^w—a faster runner to pace me to my goal. After that I could do it on my own. So far the six minute barrier is the hardest. The faster you get, the slower your times will come down. After about six months I began doing distance and have since done a lot of road racing and long distance running, but I just happen to love running. It is more important to work hard at less mileage than to try to do more, but with less effort. You may find you just can't stand running. In that case, you probably won't keep it up anyway so you would be better off biking, swimming or doing some other activity which will work your heart and lungs continuously for at least 10 minutes. *Try using* your pulse as a measure of how hard you are working. Take your "rested pulse" some morning when you wake naturally, while you are still in bed. Count the number of beats per minute. If you have just begun a program to get in shape, keep a record of your pulse

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rate when you start and notice how it decreases as the months go by and you get into better shape. Women's pulses tend to be faster than men's. The lowest rested pulse **rate for** a woman paddler known to me is 42 **beats/minute**. That is also the lowest male paddler's pulse I happen to know of although some long distance runners have pulse

SIT UPS – Start with as many as you can do, try to increase to at least 30. By bending your knees you will isolate the abdominal muscles so they will get full benefit without help from the **legs.** Do at least one **set** before and after you **lift.**



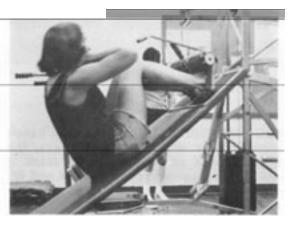
LEG FLEXIONS – Alternate with **sets** of shoulder presses. This builds the hamstrings on the back of the thigh, **which** are usually weaker than the quardriceps. Lie on your stomach with your feet hooked around the bar. bend your knees slowly.

3 x 10120 lbs.

- 3 x 6130 lbs.
- 3 x 3140 lbs.

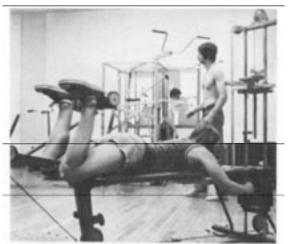
rates in the 30's. When you are really working hard, as in a fast mile run, your pulse may come close to 200 beats/ minute. Your pulse should return to normal quicker as you get into better shape.

When you finish your run, stretch out again, rest a few minutes then begin your weight program.

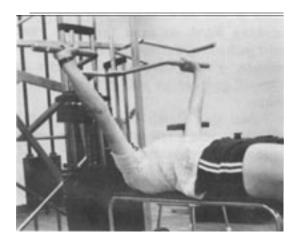


SHOULDER PRESSES - These will strengthen your shoulders, especially **important** for minimizing the risk of **dislocation.** Stand or sit, but be sure to use your shoulders to lift, do not arch your back so that you **are** "bench pressing."

3 x 10160 ibs. 3 x 5/60 lbs. 3 x 3/65 lbs. 2 x 20140 lbs.



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BENCH PRESSES – These will strengthen the push part of your stroke. Pick a weight you can do ten times then do three sets of ten lifts each (total 30 lifts) with a brief rest between each set of 10. Then move the weights up 10 lbs (or 5 lbs. if 10 seems like too much) and do three sets of 6 lifts each. Finally, try 3 sets at the next heavier weight, with three lifts per set. A sample bench workout is written like this:

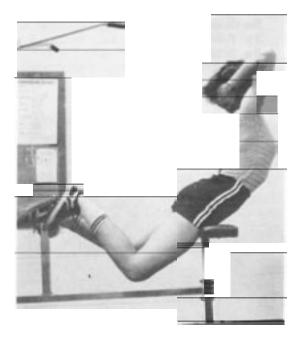
- 3 x 10/70 lbs.
- 3x 6/80 lbs.
- **3 x** 3/90 lbs.

Rest more thoroughly between weight move ups. To build endurance, you would do 4 sets of 20-25 at 40, then 4 sets of 15-20 at 50. These may be done with a barbell and bench as can shoulder presses.

LEG EXTENSIONS – Alternate with bench presses. This works the quadriceps, the large muscles on the front of the thigh. It will also strengthen the knees. Sit and lift with your ankles, straightening the leg slowly.

3 x 10/30 lbs. 3 x 6/40 lbs. 3 x 3/50 lbs.

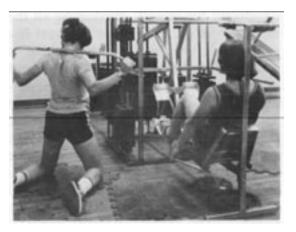
These can be done at home with weights made from gallon paint cans, their (padded) handles hung over your feet, filled with as much sand or concrete as you desire for weight.

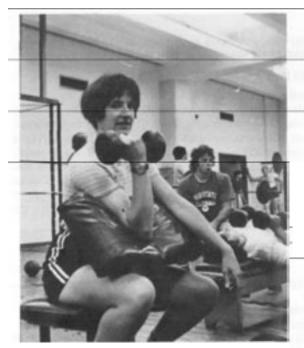




BACK FLEXIONS – These are important for canoe and kayak where a strong, flexible back is desirable. DEAD LIFTING a bar bell also strengthens the back. Bend at the waist flexing the knees only enough to avoid low back strain. Slowly straighten keeping the arms straight so that your back lifts the weight. Try lifting a sand-filled gallon bleach jug in each hand if **you** work out at home.

CHIN UPS AND **LAT** PULLS – **Are both** done on the same bar. Kneel and pull the bar down behind your head using a wide grip, to exercise the *latissimus dorsi*, the muscles across your back, and also the *trapezius*, the muscles across the top of your shoulders which get so tired and sore after a long day of paddling. Pull the bar down to chest level in front to simulate chin ups and strengthen the biceps. Here Claire demonstrates the Lateral exercise while Elizabeth uses the leg press. For home workouts you can hang a pulley from your ceiling and attach a sandfilled paint can at one end of a rope, a dowel at the other end.





Of course **PUSH UPS** and **PULL UPS** are good too, as well as many other exercises too numerous to cover in one article. Every gym will have slightly different equipment and the thing to do is ask one of the local jocks for some help and advice. Hopefully, this article contains enough basics to get you started. Experiment a little once you see what it is like. Increase the weights on a given exercise weekly, or whenever you can do a workout fairly easily. Remember you will have bad and good days. You should give your muscles CURLS - These are good for the biceps. and will strengthen the pull part of your paddle stroke. Sit or stand, use a dumbbell or the curl bar on the U Gym. Don't use any back or shoulder motion. Move the arm below the elbow only.

3 x	10/15 lbs.
3 x	6/20 lbs.
3 x	3/25 lbs.

WRIST CURLS – Many people have trouble with cramping forearms after hard paddling. With a bar or dumbbell in your hands, palms up, curl the weight upward from the wrists only, keeping the rest of the arm motionless. Repeat with palms down. Do about 3 sets of **20** each way, at a fairly light weight. moving only the wrists. These should be done at the end of the workout as they will tire the wrists and prevent effective bench pressing and other lifting intended to work the more powerful muscle groups.

time to recover thoroughly after a weight workout. It is during this recovery period that they rebuild themselves stronger. Therefore, you should lift no more frequently than every other day, or if you do lift daily, plan to work different groups of muscles. A Monday, Wednesday, Friday or a Tuesday, Thursday plan is good and it leaves you time to recover and to paddle weekends.

Lifting for women is a relatively new concept. There are as many opinions as there are women and their "coaches." I have had success with the program I

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developed for myself, combining all the various bits of advice over the past few years. It is still in a constant state of revision. I don't pretend to be an expert on the subject. I am interested in comparing notes with other women about programs they are doing to keep fit for paddling, no matter how informal. To do this I have prepared a questionnaire (see below) which I hope all women paddlers will answer and send to me. (You don't need to tear out the page, just number your answers.) Don't hesitate, even if all you do is a few sit ups in the morning. I plan to publish the statistical results of this survey as soon as I have my findings compiled. If we are to get a true picture, we must have a wide response. My goal is to reach all women from National Chamuions to the most casual cruisers. I am especially interested in what the "average" cruisers, about whom we seldom hear, are doing to keep fit.

> **Barbara** McKee 863 Post Ave. Rochester, New York 14619

MEN: Please pass this page along to your wife, girlfriend, or any female paddler. PHYSICAL FITNESS SURVEY OF WOMEN WHITEWATER PADDLERS

Conducted by Barbara McKee, 863 Post Ave., Rochester, N.Y. 14619.

Please answer and send in **a.s.a.p.**

This is a three part survey of women who paddle whitewater. It is primarily aimed at the "average cruiser" rather than the serious racer, although I want to get responses from all women from national champions to the most casual beginners in order to make comparisons. The purpose of this survey is to determine what physical exercise programs women paddlers are involved in to keep in shape generally and for paddling specifically. Not all questions will apply to all women. Please answer even if you don't workout and only paddle when it is above 80 degrees with your partner doing all the work! If we're to get the complete picture everyone must respond to the parts of the questionnaire which apply to them. Don't hesitate because you are too old, too young, too much a novice, etc. I plan to publish the statistical results of this survey, but all names and personal information will remain confidential.

PARTIPERSONAL INFORMATION

- 1. Name (optional), City, State, Age, Hgt, Wgt.
- 2. Occupation (brief description, does it require physical activity?)
- **3.** Educational level completed
- 4. How would you classify your skill level as a paddler (Beginner-ClassI water; Novice-Class II; Intermediate-Class **III**; Advanced-Class IV; Expert-Class V):
- **5.** Married? If so, does your husband paddle with you? Who started paddling first, you or your husband?
- Did you paddle while pregnant? **6.** Pregnancies(number)? Did you work out? during your pregnancy?
- 7. Do you have trouble controlling your weight?
- 8. Do you consider yourself an athlete?
- 9. Did you consider yourself an athlete before you began paddling?
- 10. What physical activities did you participate in *before* you began to paddle?
- **11.** What do you do now in addition to paddling?
- **12.** Do you regard yourself as competitive?

PART # INFORMATION RELATING TO PADDLING

- **13.** How long have you been paddling?
- **14.** Why did you begin paddling?
- 15. What is your *current* motivation for paddling?
- 16. How often do you paddle (warm weather only, all year around)?
- **17.** What is the usual length of your river trips?
- a) Slalom, WW, Both **b)** Seldom, Occasionally, Full season, Never? **18.** Do you ever race? **19.** Why do you race? To improve river **running**, End in itself. For fun. Other (write reason)

Until which month?

Is he more or less advanced?

Until which month

- 20. Do you rate yourself successful at racing?
- **21. Does** anyone else in your family paddle? Race? What relation?
- **22.** Are you now or were you ever competitive in another sport before paddling? What sport and during which period of your life?
- 23. How long had you been paddling when you took up racing?
- 24. When did you begin racing? If retired, how many years did you race?
- 25. What **class(es)** do you race in order of importance?
- **26.** Do you work out or train in a boat specifically for racing? How often (brief description of your program)?
- 27. Are you coached? By a relative? Friend? Paid employee?
- 28. How does your menstrual cycle affect your paddling and/or racing **ability** (not at all, adversely, beneficially)?
- **29.** If you are now retired from racing or cruising, indicate here, but fill out the above information for the period during which you were training seriously or actively paddling, and note how many and which years you were involved.

PART III INFORMATION RELATING TO PHYSICAL WORKOUTS

- **30.** Do you "work out," that is, set aside a time daily, weekly, or whatever, especially to exercise?
- **31.** Do you have a formal program or plan for working out?
- **32.** How long have you been working out?
- 33. If you have a specific program, how did you develop it (from what source or on whose advice)?
- 34. Briefly outline your program. (Example: Bench presses: 3 x 10 at 70 lbs; 10 English gates; 1 hour tennis; 50 miles of running weekly. BE SPECIFIC as to times weekly, amount of weight lifted how ofter, etc.)
- **35.** If you run, list best times for several distances: **Mile**: Quarter mile: Half **Mile**: Two mile: Other, for your best distances:
- 36. What time of day do you usually work out? For how long do you work out each session?37. How frequently do you work out (daily, weekly, sporadically)?
- 38. Do you work out all year? List the months you work out.
- **39.** Do you enjoy working out? For what reasons?
- 40. Who else in your family works out?
- **41.** What would you say is your primary motivation for working out (feel better, look better, weight watching, strength, survival, friends do it, **etc.**)?
- 42. How would you characterize your mental attitude toward working out (proud of accomplishment, hate it, relaxing, do it to please someone, enjoy it for itself, etc.)?
- **43.** Please answer questions covering aspects of your program this survey has **overlooked** and make general comments and suggestions. Add your thoughts on women's physical training.

FIND A WAY TO EDUCATE

How can one make people aware of the awesome power of moving water? Every year brings needless deaths to people who expected nothing more than a carefree jaunt down a pleasant river amid beautiful scenery. Reversals (below dams and in rapids) continue to be unrecognized for the hazard they are. Henry Wallace wrote of the drowning last fall of Bobby Clayton Powell, a 27-year-old surgeon, in a dam reversal (CANOE NEWS, Feb. 1977, "Tragedy on the Elkhorn"). On May 7, 1977, a 16-year-old girl, a non-swimmer with no lifejacket, drowned in N.H.'s Pemigewassett R. when her canoe flipped in a rapid and she was caught in a "whirlpool."

We can find many opportunities to educate if only we look. I recently accompanied a group of grade-schoolers on a field trip to look at a river in flood. At the dam we stopped at, I started telling about how dangerous a reversal is, and how people in boats stand no chance if they blunder into such water. As if on cue, a huge shelf of ice floated over the dam and was totally pulverized at the bottom of the 12-foot drop. This made an extremely vivid impression on the kids. Keep your eyes open for chances like this.

Iris Sindelar

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OCEAN KAYAKING IN GLACIER BAY

by Malcolm Moore, P.O. Box 123, Marlboro, VT 05344

(Reprinted with permission from the Dec. '76 Appalachia, semi-annual journel of Appalachian Mtn. Club, Boston, MA.)

August, 1974; Puerto Montt, Chile. Sharon Childs and I were visiting this coastal town for several days, and heard that a couple of New Zealanders were paddling a kayak up the coast and were due to arrive any day. Later, we were standing on a street corner when an obviously foreign girl walked over and asked in proper British "Do you speak English?" She had to be the one. I said "Yes, and you're a Kiwi, and you've been paddling a kayak in this endless rain . . ." She admitted with surprise that it was true. They had begun at the Straits of Magellan in February (the end of the southern summer) and paddled north 1,000 miles among the islands off the coast of Chile (against the prevailing wind and current) for six months, arriving in Puerto Montt that day. They were supported by a grant from the National Geographic, in return for an article. Would we join them for a beer? Would we like to borrow their kayak for a few days? Does a bear go in the woods?

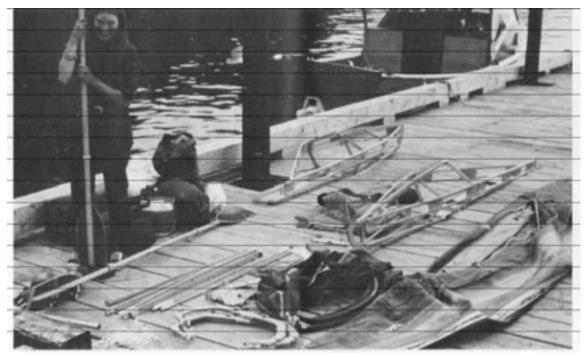
October, 1974; Marlboro, Vermont. The two New Zealanders, since they were in the U.S., came to visit us in Vermont. For long days John Dowd sat in the back room of my house, writing his article. And we ended up buying their kayak, a folding two-man Klepper fully equipped for ocean touring, with three paddles, spray decks, and rudder. For many months we had talked about kay-

Malcolm Moore is a climber and devotee of ocean and whitewater kayaking, and is the director of the Outdoors Program at Marlboro College in Vermont. aking on the coast of Alaska, as I did two years before. Now it was suddenly reasonable, and we began serious preparations, choosing nautical charts and the Coast Pilot, buying and making the right equipment.

The following spring, we made several test runs on the coast of Maine, Nova Scotia, and Newfoundland. In May, Sharon and I were married, and we began to call the Glacier Bay trip a honeymoon. In early June we got on a Canadian National train to Prince Rupert, B.C., and caught an Alaska state ferry to Juneau.

June, 1975; Juneau, Alaska. We hurried around town in the rain, doing lastminute errands: talked briefly with the National Weather Service, the Alaska **Dept.** of Fish & Game, and the Coast Guard, stopped at a nautical store to get more charts and fishing gear, went to a supermarket to buy food for three weeks, and finally arranged to leave a few things with a friend until we returned. In a day of continuous rain we repackaged all the food in multiple waterproof bags, and assembled the kayak. The local people said it had been raining continually for two weeks; since it seemed that that was not about to change, we decided to start early the next morning, June 11.

Surprisingly, it was not raining as we packed the kayak at dawn, and in the next few hours it miraculously cleared up to bright sunshine and blue sky. We soon decided we had better take advantage of the good weather and put many miles behind us. Less than four hours after leaving Auk Bay we were rounding Point Retreat; the tidal current lifted us over the reefs below the lighthouse with a swirl, and we headed south in the Lynn Canal.



There is something awesome about looking at a humpback whale from a kayak. First the whale spouts, a muffled *whooosh* in the distance, and you see a thin fountain of spray. Then it arches its back to dive and lifts its tail flukes in the air, a huge tail which looks much too big but gives away the actual monstrous size of the whale. Sitting in a 17foot kayak in the same ocean with a 50foot whale, in water 1,000 feet deep, we felt very small.

Every couple of hours we stopped on shore, to stretch our legs and have a bite to eat. This is my kind of country, big and wild, where the sea and forests and mountains are all together. The rugged trees and crowded together right down to the rocky shore, and waves crash on the small gravel beaches. With blue sky and sunshine it was fabulous.

We crossed the Lynn Canal at its narrowest point, where it is about four miles wide, and as the tide was running out at the time, we also got free transportation for a couple of miles down the "canal." While we were about in the

middle a state ferry steamed up from the south, and we paddled furiously for twenty minutes in fear of its huge wake. Five minutes after it finally passed, the long gentle swells rolled harmlessly by underneath us. That first night we camped at Point Howard in a long sunset, Over an open fire we cooked up some bear ribs which John Skeele had given us in Juneau, and wondered if some other bears would come and take revenge. We had thought of continuing on to look for a small, bearless island to camp on, but after paddling 25 miles on our first day we were too exhausted to search farther.

The next two days were alternately sunny and squalling, and we followed the north shore of Icy Strait steadily westward. On our fourth day out of Juneau, we decided to try to make a long haul all the way to park headquarters at Bartlett Cove inside Glacier Bay. The first eleven miles were along the huge **mudflat** off Gustavus, and we wearily paddled against both the tide and the wind. We even ran aground five hundred feet off shore, and it only



takes four inches of water to float our loaded kayak! Several miles later we rounded Point Gustavus, and Glacier Bay opened before us, 65 miles long. The whole Fairweather range stretched across the horizon to the west, gleaming silver-white in the afternoon sun. In contrast to our entrance to the bay, in placid water and bright sunshine, I remembered some other scenes this bay has seen: the ice here in 1750, John Muir canoeing past here in 1880, the warnings to us about the tide rips in the entrance, the people sport fishing in fiberglass boats, even the cushioned jet airliners overhead. But today all was **calm**, and the nearby shore offered us an endless luxurious campsite. We continued paddling the final 8 miles to **Bartlett** Cove, and without conversing with official dom we set up camp in another slow, subarctic sunset.

The first white men to see Glacier Bay were on Capt. George Vancouver's ship, exploring this coastline in 1794. At that time, an immense glacier filled

the entire bay, so that all they actually saw was a small inlet with a huge glacier at its head. They described this in their journal and drew it on the map, and sailed on. By 1879, when John Muir paddled his 35-foot long "canoe" up Glacier Bay, the ice had retreated 50 miles: Muir and friends built a cabin on the east shoreline, where he stayed several summers. By 1916 the glaciers had receded 65 miles from the mouth of Glacier Bay, to approximately their present position. Nowhere else have glaciers receded at such a rapid pace. As these glaciers receded faster than trees can grow, plant succession is graphically displayed in a horizontal progression up the bay. It is a land of superlatives, and the scenery is stupendous. The tides average twenty vertical feet, and much of the bay is over 1,000 feet deep. The outer coast, facing the open Pacific, is one of the wildest coastlines in North America; an earthquake nearby in 1958 sent a tidal wave sloshing 1700 vertical feet up a mountainside

next to Lituya Bay. Land mammals and shore birds are omnipresent; we saw a couple of humpback whales every day. The vast quantities of fish and shellfish in Southeastern Alaska supported the Tlingit Indians with security for several centuries, allowing them to develop advanced forms of art and material culture: the Tlingit culture has progressively shrunk since the coming of the Russians in the 1700s and 1800s and the Americans in the 1800s and 1900s, but its remnants still survive. Outside the Monument, fishing and logging are the economic support for the coastal towns.

Glacier Bay was formally proclaimed to be a National Monument in 1925, and it is administered by the National Park Service. From the start, mining has caused problems there. In 1936. feisty old Joe Ibach, a lone prospector in Glacier Bay, got the monument formally opened to new mining claims. The most spectacular claim is one on some nickel ore under the Brady icefield; a large mining company wants to build a road 15 miles inland, tunnel under the Brady icefield to extract the ore, and carry it down to a processing plant and seaport which they want to build on the wild outer coast. But slowly we realize that we need wilderness as much as we need minerals. This year the U.S. Congress decided to close Glacier Bay to new mining claims.

Having visited many National Parks and National Forests throughout North America. I approached park headquarters at Bartlett Cove with caution. But the administration of this National Monument is different and it is superb. The staff of rangers is continually helpful. Their love for the land and the bay shows again and again. They don't measure success by the number of people shuttled through, but encourage people to quiet contact with the land. They themselves are interested in the geologic forces, the wildlife, and the history, and they discuss it as a sharing of personal interests. Where else will the park Superintendent take an hour and a half to talk with you, and show you the files and library? Where else will he answer real questions personally and not like a bureaucrat, and give advice which really is useful? This one does. Several of the rangers have their own kayaks, and use them during their time off. The chief naturalist talked with us about what wildlife we might see, and on our way back he invited us to his house to hear what we actually had seen. We easily spent all day around park headquarters, talking and reading and talking some more, as this park is administered with rare wisdom.

On June 16 we got up at 5:00 a.m. to catch the rising tide going north out of Bartlett Cove, and paddled out among the Beardslee Islands. Here the water is shallow with many reefs, which keeps the motorboats out, **and** the endless low islands and waterways reminded us



of the lakes in Minnesota. (Except for that 20-foot tide, and the silver Fairweather range in the distance.) Again it was a cloudless, clear day, most rare in Southeastern Alaska, and again we put in long hours paddling in expectation of rainy days to come. Seals surfaced near us, and paddled along at just our speed, evidently out of curiousity. At one point we counted 25 trailing along behind us; then one by one they disappeared again. After 20 miles we camped on Sturges Island, made dinner and went to sleep in the sunset at 11:00 p.m. By this point my watch was working only fitfully, and after this I frequently reset it by the tide table.

Next morning was gray with a solid overcast, but we were about to cross the mouth of Muir inlet, and again had to get up early to catch the right tide. We quickly packed the kayak and paddled two hours to the far shore of the inlet before stopping to cook breakfast. We carried all of our food with us from Juneau, packed tightly in stuff bags which Sharon had made to fit the kayak. In this type of travel you have two alternatives for food preparation: either you bring all of your food from home, which gives you time to cover a lot of ground, or else you catch a lot of your food from the sea, which takes time and reduces the distance you travel. Our kayak was tightly packed with food for three weeks, but it actually rides more stably when loaded, and with more careful planning we could have gotten in food for a longer period.

Camping is allowed anywhere in the Monument, and the land offers hundreds of idyllic campsites. In setting up our camp on a gravel spit just south of Tidal inlet, as I rummaged around inside the kayak searching for gear, I heard a tremendous splash some distance off shore. I spun around to see what it was, but there was nothing.

Bewildered, I scanned the water; we had not seen anyone else all day, and there was complete silence. A moment later, a whale shot straight up out of the water, turned on its side in mid-air, and slammed back into the water with a thunderous splash. I ran for my camera, and in another moment a second whale jumped, then the first again. For five or ten minutes they alternated, frolicking for a mile or more down the bay, in a magnificent display of **power** in the wildest setting. Was it play? Or a mating display? Or just scratching barnacles off their sides? No one knows for sure. There are no documented reports of these whales making an unprovoked attack on a boat, but they sure play hard. We saw a couple of whales every day; we had been pretty respectful before, and now we knew we didn't want to play. All the others we saw were swimming peacefully along a few hundred yards off shore, with the tide, probably feeding.

On our third day out of Bartlett Cove we crossed the main bay to its western shore, and paddled against the wind and tide up to Reid inlet. Joe and Muz Ibach built a cabin at Reid inlet in the 1930's, and lived there each summer for two decades while working their gold mines a thousand feet up on the mountainside. Their cabin still stands, and though she died in 1959 and he shot himself in 1%0 ("There is a time to live and a time to die. This is the time.") it feels very much like their place: their three spruce trees planted 30 miles north of those in the normal plant succession, their terraced garden and paths, even their rhubarb still coming up fresh every year. It is strange there, half way between archeology and a visit to a famous person.

We stayed another day at Reid inlet, as we were tired and it was cold and windy. I studied the bird book, and in



Calm, silent beauty of Glacier Bay. Note glacier in background.

the afternoon we hiked up to Dave **Bohn's** lookout over the wondrous scene. During the night the wind blew our tent down with us in it, as there was nothing to tie it to on the sand bar; we moved in the semi-darkness into the lee of a small hill, and rolled up some boulders to anchor the tent lines.

We expected that in one more day we could paddle up Johns Hopkins inlet to the very head of Glacier Bay. Shortly beyond Reid inlet the Lamplugh glacier flows down into the sea; as we approached the ice face I listened intently for the fabled sound and silence of ice blocks calving into the sea. Abruptly I felt it. There is an almost tangible sound there, whether it is sounding or not; it is stunning and timeless. "The sound lingers on when one has heard. Down the centuries the booming primeval thunder."* Hurriedly we paddled past the Larnplugh glacier, a quarter mile away *Dave Bohn, Glacier Bay: The Land and the Silence 1967, p. 142.

from the ice face.

Beyond the glacier we hugged the left shoreline. Huge cliffs rose out of the water and overhung us 500 feet above; the chart shows 150 fathoms (900 feet) of water below us, next to the cliff. We talked quietly about the awesome size and stillness of everything, and about our aloneness here and our utter dependence on this fragile wood and canvas kayak. Feeling very respectful of Glacier Bay, we paddled among scattered ice pans around a final point of land, and Johns Hopkins inlet opened before us. I was surprised to see an aluminum boat upturned on a rock beside us, and then an outboard motor lying beside it. Then a bearded face appeared, and the whole image of isolation was broken. It was the Park Service biologist and an assistant; they had been camped here for several days, counting seals and pups (1400 of them in Johns Hopkiis inlet alone). We were the first people they had seen in five

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days, and they were at least as surprised as we were! After a good discussion of Glacier Bay biology, we suggested that it was time for lunch, but they replied that since it was 7:00 p.m. they were going to cook dinner! My watch was off again, and with twenty hours of daylight we never knew it. So we shared supper with them and accepted their offer of a six-pack of real store-bought beer.

In the evening we paddled several miles farther up the inlet, toward the glacier front, but could not get through the pack ice to a campsite on shore. This inlet was clearly the high point of our trip; we paddled among icebergs on glassy smooth water a thousand feet deep, up the narrow inlet lined with mountains, with dirty glaciers creeping down their sides to the sea. At the head of the inlet the Johns Hopkins glacier descends from the giant peaks of the Fairweather range, standing orange above us in the sunset. And yet despite the incredible display of raw geologic force, the most impressive fact is the

silence, the stillness and gentleness of the stunning scene. Along with the huge peaks with grinding glaciers, and the deep sea with 20-foot tides, there is a soft alpenglow and complete silence except for the dipping of our paddles and the occasional cry of a seal. Virtually no sound, no wind, no movement; just pastel colors lighting up some of the most stunning scenery on earth.

Carefully we wove back through the ice floes, impressed that there was not a break in the rock walls on either shoreline sufficient to allow us to land a kayak or set up a 5×7 -foot tent. Finally we stopped, miles back at the mouth of the inlet, and slept on a boulder pile, squeezed into the narrow line between a snow slope and the high tide.

It took four more days to paddle the 60 miles back to Bartlett Cove. After passing the Lamplugh glacier and Reid inlet again, we made a short portage behind Gilbert Island and paddled south in Hugh Miller inlet through an incredible variety of water birds. There were hundreds of black oystercatchers,

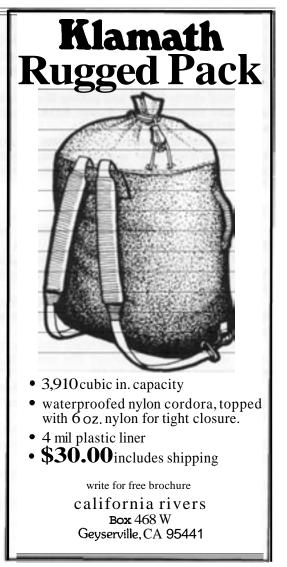


American WHITEWATER

pigeon guillemots, and common mergansers, plus a few harlequin ducks and tufted puffins and various others. We glided through a huge school of minnows and, of course, saw two more whales.

We decided to cross the central part of Glacier Bay at Willoughby Island, to avoid the tide rips reported closer to the mouth. It is five miles across to the nearest of the Beardslee islands, so with caution and with an outgoing tide and a north breeze blowing three-foot waves, we paddled towards the middle. With the wind and the tide going in the same direction, we were carried sideways as much as forward: the immensity and power of the natural forces confirmed our respect for this wild country. As we got into the shallow water near the islands the tidal current died out, and in a light rain we coasted in again among the idyllic Beardslee islands. These gentle islands are an impressive contrast to the huge mountains and deep sea all around; if Herman Melville has not stolen the name for the Galapagos islands I would call these "Las Encantadas": the enchanted isles.

We stayed another day at our campsite in the Beardslees; the light rain continued, and we took several hours to gather shellfish for a fine soup. The previous day a sharp pain developed in my shoulder, which recurred on every paddle stroke, and I decided to give it a day's rest. We ate and ate, and relaxed and read and ate some more. The next day we continued south, and in a few hours paddled against the rising tide through the back entrance to Bartlett Cove. The pain in my shoulder was getting worse; at night I could not sleep on that side, and I did not look forward to four long days of paddling back to Juneau. We had made previous commitments to meet up with climbing



friends from Seattle, so after another round of discussions with the park administration, we caught a **passing** power boat for a ride back to Juneau in four hours. Southeastern Alaska has the best ocean kayaking in the Americas, and probably the best in the world; we're making plans now to go back.

SOURCES OF INFORMATION

Park brochure, and Boating Guide to GBNM, 75c available from: Superintendent, Glacier Bay National Monument, Box 1089, Juneau, AK 99801

USFS recreation map of Tongass National Forest (including most of Southeastern Alaska) available from: Forest Supervisor, Tongass National Forest, Box 2278, Ketchikan, AK 99901. U.S. Coast Pilot #8 — Dixon Entrance to Cape Spencer, available for \$2.50 from: National Ocear. Survey, NOAA C 324, Rockville, MD 20852. The Coast Pilot is written for bigger boats, but is still of some use to kayakers. Has annual supplement.

Nautical charts (\$1.75) and indices (free) available from: National Ocean Survey, NOAA **Rock-ville**, MD 20852.

Fishing licenses (non-resident fishing **\$20.00**) required for fresh-water or marine fishing; available from: Alaska **Dept.** of Fish & Game, Juneau, AK 99801.

BOOKS

Glacier Bay; The Land and the Silence, by Dave Bohn. Ballantine, **1967**, \$3.95.

Edible? Incredible!, by Marjorie Furlong and Virginia Pill; Erco, 1973; mainly on West coast seafoods.

Stalking the Blue-Eyed Scallop, by **Euell** Gibbons; **McKay**, 1964. **\$2.95**; mainly on East coast seafoods.

Seashores; A Guide to Animals and Plants Along the Beaches, by Herbert **Zim** and Lester Ingle. Golden Press, 1955. **\$1.50**.

Birds of North America: a Guide to Field Identification, by Chandler Robbins, Bertel Bruun, and Herbert **Zim.** Golden Press, **1966.** \$2.95.

Discover Southeast Alaska with Pack and Paddle, by Margaret Piggott; the Mountaineers, Seattle, 1974. **\$7.95.**

Glacier Bay, by William *D*. Boehm. Alaska Northwest Publishing Co., Anchorage, 1975.

Mountain Gazette, **#20**, April, 1974: "Glacier Bay; Gray is Beautiful," by Ned Gillette.

THE ENVIRONMENT

Rain — long and light; continuous, frequent, or intermittent. When the weather clears up, the scenery is so stunning that you immediately forgive the rain.

Humpback whales — we saw several every day, had no problem. Supposedly they like to play, but they are too big to play with. They usually swim with the tide, ¹/₄ mile off shore. Spouting and sounding are impressive. We saw no killer whales.

Bears — we had no problem. Take normal precautions including (1) cook away from tent. (2) hang food in trees. (3) bang pots together to scare them off. (4) avoid sow and cubs. (5) camp on small islands. (6) leave no food around. We never carried a rifle; hunting is not allowed in GBNM.

Seals follow at a safe distance. Lost baby seals cry plaintively.

Shorebirds everywhere; ditto for intertidal life. Bring field guides and binoculars for observation, and catching equipment for seafood.

EQUIPMENT

Prepare for rain.

Tide table — available from hardware stores in Juneau, Haines, etc.

Nautical chart No. 8202 includes Juneau, Icy Strait, and Glacier Bay; available from NOS or marine stores in Juneau.

Waders — they keep your feet warm and damp, and you can keep your fragile kayak off the rocks. Impossible to swim in them.

Sunglasses and a *broad-brimmed hat;* water reflects a lot of glare.

Water should be **carried.** Plastic gallon jugs are good. 2 of us use one gallon for supper and breakfast. Fresh water is available from the many streams.

Stuff bags — lots of them. We made 14 of all sizes and shapes and colors, made of waterproof coated nylon, to fit the kayak. Especially useful are long narrow bags to fit beside the seats, held in place by shock cords. A frame pack is not compatible with a narrow tapered fragile kayak; leave it at home.

Rain jacket — it is very warm to wear on cold days, even when it is not raining.

Wool clothes — only two complete sets. The only **footgear** we brought was waders and sneakers; this worked well.

Wetsuit mitts — questionably useful in rain and cold water. Usually go with bare hands even in cold water; the exercise keeps you warm.

Watches — bring more than one for a long trip. My one stopped so we had to tell time by the tide table instead of vice versa. In Juneau the sun is up 18 hours a day in June.

Huge rubber bands made of cross-sections of inner tube are good for keeping it all together. Scraps of rubber are good for starting fires with wet wood.

Plastic bags for everything. I carried my camera and telephoto lens safely in zip-loc plastic bags inside a coated nylon stuff bag on my lap.

Tides — Be careful of the 15-20 foot tides. Paddle with the tide. Be aware of the strong currents, and camp above the high-water mark on the beach. If you keep these in mind, the tides should not cause you a problem.

Winds — In Glacier Bay a north wind often springs up around noon. Otherwise in **Southeast**em Alaska the prevailing wind is from the southeast, or follows the long straits.

Sleeping bags — We used middle-weight fiber-fill bags and were plenty warm.

Rain or **rainless** weather sometimes comes in runs of a week or more. National Weather Service has a big office in the Federal Building in Juneau, and can be helpful.

Lifejackets — The Coast Guard and state re-

quire one in the boat for each person. They can be useful as seats or backrests. We sat on our foam pads, which were warm, soft, and waterproof.

Tents — Make sure they are rain-tight and mosquito-proof. Camp anywhere in Glacier Bay National **Monument**; there are no designated sites except at Bartlett Cove, but there are a thousand idyllic natural sites. Camp above the 20-foot tide; make open fires below the high tide.

Time & speed — We usually went 15-20 miles a day; covered total distance of about 200 miles in 12 days actually paddling. Juneau to Bartlett **Cove** in 4 days. Bartlett Cove to Johns Hopkiis Inlet and **return** in 10 days, **including** 2 days not moving.

When in Gustavus, be *sure* to eat at the **Gusta**vus Inn; Jack & Sally **Lesh** serve fabulous lunch for \$4.00, dinner \$10.00, a good price for the area.

Kayak repairs — Bring a tube of plastic rubber, a tube patch kit, and a needle and thread. Broken frame members can be splinted.

Kayaks — For a commercially-available **two**person folding kayak you have basically 3 alternatives: Klepper (made in Germany), Folbot (made in U.S.), and Tyne (made in England). A spray deck and spray **skirts** are essential for ocean use, and so is rudder controlled by foot pedals; a sailing rig is not essential.

Our stock *Klepper* Aerius II worked well. The skin of canvas with a rubber coating is extremely tough and long-lasting. The frame is strong but the joints are loose enough that the whole kayak flexes over waves. The air **sponsons** along the sides keep the skin tight, provide emergency flotation, and serve as fenders. We bought our kayak used for \$300, but to buy a new Klepper fully equipped for ocean touring would cost about \$900. Klepper kayaks imported by: Hans Klepper Corp., 35 Union Square West, New York, NY 10003.

A similar *Folbot* kayak costs about half as much as a Klepper. The Folbot has significantly more room inside, and excellent seats that can be used at two different levels. Its skin is nylon with a plastic coating. A Folbot is probably the best deal for the money, if equipped with a Klepper rudder. Folbot kayaks built by: Folbot Corp., P.O. Box 7097, Charleston, SC 29405.

We were not impressed with *Tyne's* folding kayak, and it costs more than a Folbot. Tyne Kayaks imported by: Tyne Kayaks — Moor & Mountain, 63 Park Street, **Andover**, MA 01810.

Getting to *Glacier Bay* from Juneau: (summer 1975)

(1) Paddle in 4 days, Auk Bay to Bartlett Cove

(2) Alaska Airlines flies daily to Gustavus, \$23 per seat.

- (3) You can charter a 180 from **S&M** in Juneau airport for \$50. for the **trip** to Gustavus.
- (4) You can charter a floatplane from Juneau for \$95/hour; it will run a little over an hour round trip to Bartlett Cove.

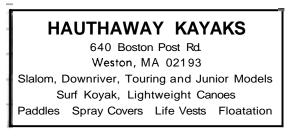
More current detailed **information** is available from the Park Superintendent.

Commercial kayak trips **thru** Glacier Bay and elsewhere in Southeastern Alaska (about \$250/ **person/week)** are run by "Alaska Discovery:"

Chuck Homer, Gary Cole, & Ward Hulbert P.O. Box 41

Haines. Alaska 99827





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Sierra Club Riser Touring Bay Chapter Tom Alien 1943 Napa Berkeley. CA 94707

Antioch Whitewater Club Max Young. Pres. 40 N. Lake Dr. Antioch, CA 94509

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IDAHO Northwest River Supplies Bill Parks P.O. Box 9243 Moscow. ID 83843

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

Wildcountry Wilderness Outfitters 516 N. Main St. Bloomington, IL 61701

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KENTUCKY The Viking Came Club Halsey Sanford 622 Maryhill La. Louisville. KY 40207

SAGE—School of Outdoors 209E High St. Lexington. KY 40507

LOUISIANA Bayou Haystackers Susie Latham 1829 Casa Calvo New Orleans. LA 70114

MAINE Mattawamkeag Wilderness Park Robert Kelly. Park Manager P.O. Box 104 Mattawamkeag, ME 04459

Penobucot Paddle & Chowder Society William F. Stearns Box 121 Stillwater. ME04489

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