



Northwest River Supplies

1978

INDEX

RAFTS	2
Northwest River Supplies	2
UDISCO	4
Campways	4
Avon	5
Maravia	6
RAFTING ACCESSORIES	6
Frames	6
Oars	7
Blowers & Pumps	7
Adhesives	8
Patching Items	8
Oarlocks & Stands	9
D-Rings & Straps	10
Accessories	11
LIFE JACKETS	12
WATERPROOF BAGS	13
Northwest River Supplies	13
Others	14
WETSUITS	15
KAYAK AND CANOE ACCESSORIES	16
Kayak Paddles	16
Canoe Paddles	17
Foot Braces	17
Floatation Bags	17
Spray Skirts	18
Helmets & Jackets	19
Kayak & Canoe Carriers	20
INFLATABLES	21
KAYAKS . . WHITEWATER BOATS	21
CANOES . . GRUMMAN	22
KLEPPER BOATS	22
CAMPING EQUIPMENT	22
Coolers	22
Dutch Ovens & Griddles	23
Tents & Tarps	23
BOOKS/MAPS/RIVER GUIDES	24
ORGANIZATIONS AND PUBLICATIONS	25

INTRODUCTION

Northwest River Supplies is dedicated to providing whitewater equipment at reasonable prices. Recognizing that there are many types of rivers, river trips and budgets, we carry the best equipment we can find for every level of use and proficiency. Because equipment selection is so important, we test items ourselves or at least get the opinions of knowledgeable users before listing products in our catalog. At times we carry more than one brand or model of the same item when there are differences in opinion about the merits of various product features - sometimes our choice of products is also influenced by factors important to us, such as supplier reliability in meeting delivery dates, willingness to take and ship rush orders, etc. To help you in your selection, all items are described as honestly and fairly as we know how. Our comments are more positive lately because we have improved or replaced marginal items whenever possible. Because our full time employees are experienced river runners, they can assist you in selecting equipment by answering any questions you might have. During the season - February through August - we often are very busy, working long hours, tired, etc., so please don't write questions such as "Tell me about rafts" or "Is kayaking more fun than canoeing?" We really do try to answer all your questions, but it helps a lot if they are simple and concise. You can place phone orders and get immediate response to your questions by calling us between 9 AM and 5 PM Monday through Friday (208-882-2383). See you on the river.



BILL PARKS

NRS GUARANTEE

Most of our items carry manufacturers guarantees of various durations, and so far every manufacturer has stood behind their products with honesty and pride. Naturally we will refund your money on any item you are dissatisfied with when you receive it. Simply return it to us with proof of purchase and include a note stating what the problem is - and whether you wish an exchange, credit, or refund. On items which prove less than satisfactory in use we will try to work something out to your satisfaction no matter what the guarantee. Since most repairs must be completed by the manufacturer and not at our store - please give us a call before you return a product that has been used. Your shipping directly to the manufacturer can speed up the repair and return process quite a bit.

SHIPPING POLICY

Whether it's Pat, Chuck, or any of our other people who handle your order, you can rely on fast, dependable service. We are proud of our two day shipping policy. If your order cannot be filled within two days, we will let you know what the problem is and when you can expect delivery.

TERMS

Payment with order: Money Order, Personal Check, VISA or Mastercharge. For our Canadian customers, please remit in U.S. dollars.

PHONE ORDERS (208) 882-2383

Phone orders are accepted between 9:00 A.M. and 5:00 P.M. (Pacific Time) Monday through Friday. To insure accuracy, please fill out an order form and then read it to us; it can serve as your personal record. We will accept COD orders by phone - but you pay the COD fee (UPS COD fee is only 85¢ - a real bargain if you're in a hurry).

STORE HOURS

Our store hours are 10:00 A.M. to 5:30 P.M. Monday through Friday, and 9:00 A.M. till 4:00 P.M. Saturdays (Saturday hours from March 4th through August 12th only). We are located at 214 N. Main Street (the old Grange Hall) - in the lower level behind the cleaners. If you need further directions, give us a call when you arrive in Moscow.

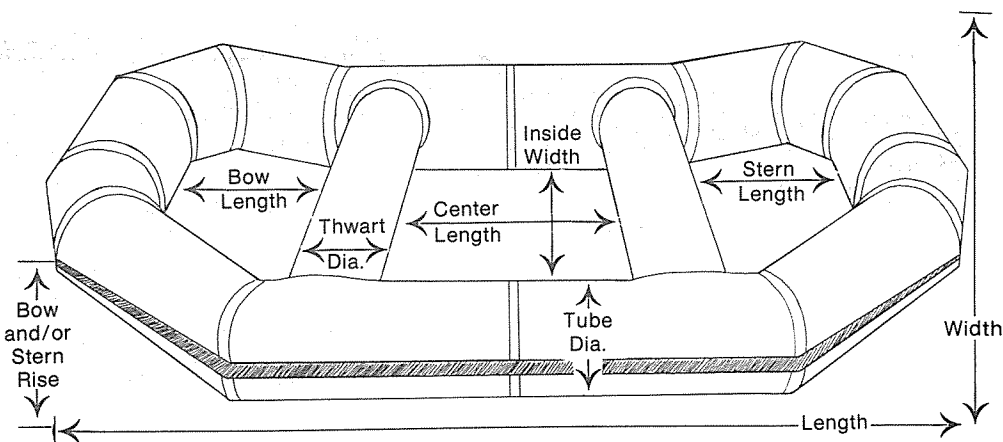
FREIGHT POLICY

Our freight policy is to charge 6% of the invoice for freight with a minimum of \$1.50 and a maximum of \$9.00 in Idaho, \$15.00 in Washington, Oregon, Montana and Wyoming, and a maximum of \$24.00 in the rest of the lower 48 states. All rafts and long oars (8 ft. and over) pay maximum freight charges. Motor freight orders for Alaska, Hawaii, and Canada will be shipped freight collect. Whenever possible we will ship by UPS. However, if you use a post office box as a return address, we are forced to use parcel post (we have found it to be slower).

RAFTS

All raft manufacturers try to incorporate desirable design features into their boats. Length, width, tube diameter, bow and stern rise, weight - all affect the handling characteristics of a raft. Since there are differences of opinion about how best to achieve these desirable characteristics, there are now many different types and styles of boats on the market. Only one manufacturer, Maravia, is located in the United States, Avons are manufactured in England, Camp-Ways, Northwest River Supplies, and UDISCO boats are manufactured in either Japan or Taiwan.

Material comparisons are complicated: coatings (neoprene, Hypalon, urethane), types of base fabric (nylon, polyester, Kevlar), tightness of weave (end count, picks/inch), thickness of the coating, coating to fabric adhesion - all of these factors should be taken into consideration when discussing materials. Generally speaking, the base fabric provides the material strength and resistance to tearing while the coating provides the air tightness, abrasion resistance, and determines the material longevity. Hypalon has the greatest resistance to abrasion and deterioration of any commercially available synthetic rubber. Neoprene was the standard for quality boats until its displacement by the more expensive Hypalon during the last few years, and it still provides for a quality raft at a reasonable price. Kevlar is the strongest of all the base fabrics available - and is also the most expensive. Since up to two-thirds of the manufacturing cost of the boat may be in the material, it is quite easy to see how material choice influences a boat's price. However, even though the selling price of a boat is sometimes a good indication of the material quality, it is only a rough indication of the quality of workmanship. To simplify your questions about how rafts compare to each other, we have included a keyed diagram for your use. All rafts included in this catalog are described in the terms shown in the diagram. All raft prices are subject to change without notice.

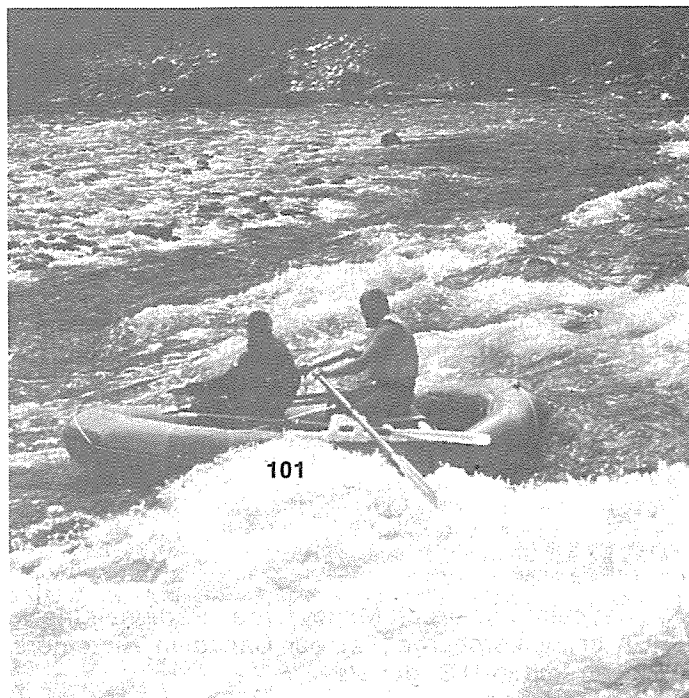


NORTHWEST RIVER SUPPLIES

In 1978 Northwest River Supplies is importing boats of our own design. We spent many hours completing the design, and after testing both prototypes and production models, we honestly believe these boats have features superior to boats costing twice as much. Modifications for 1978 include increased seam overlaps and the use of wider seam tape, increased bow lift, heavier tube and floor materials, and pressure testing. Because we design and import these boats ourselves, we can price them below what their quality and workmanship suggest. We guarantee these boats to be free of defects in workmanship and materials for one full year under normal recreational use - it's our name on this boat and we stand behind it.

101 SPRITE

After a year's experience with the Sprite our customer feedback has confirmed what we knew - we have an excellent small raft in the Sprite. This year we've stayed with the same basic design, but included a number of minor but important improvements. For instance, we improved the lifeline holders to reduce the chance of the line pulling through the holder as it did last year. The two integral thwarts provide an amazing amount of internal support, making the Sprite a practical 4 person paddleboat without a frame. For those of you that plan to use it with a frame, we recommend either 7 or 7½ ft. oars depending upon your frame design. The Sprite is well suited for day use as a paddleboat or for those long trips with a frame (we ran the Middle Fork of the Salmon in one last summer). Due to production delays we can only import a limited number of Sprites in 1978. Usually we will substitute the UDISCO 6 man. This boat is equal in quality to the Sprite and has the same specifications. Specifications are: 11'2" long, 5'2" wide, 16" dia. main tubes, 15" dia. thwarts, 4" bow rise, 30" inside width, 28" bow - 27" center - 17" stern length, 6 air chambers w/small valves, 30 oz. tube and floor material, includes motor mount straps and repair kit, weight - 55 lbs. **\$210.00**





108 SPORT

With the wide experience we have in running rivers in other manufacture's boats, we decided it was time to design a family size river raft. We wanted a boat that would fulfill the following requirements: big enough to have good capacity but not too large for personal use, tubes large enough to be reasonably dry - but not so large as to remove the excitement of the ride, bow and stern rise high enough to ride up over the waves - yet the compartments could not be excessively long. It also had to be wide enough to be stable, have large easy to fill air valves, an adequate number of D-rings, be manufactured in a durable material - and still have a reasonable price. The Sport more than meets our original requirements! It's manufactured of a very durable 38 oz. per sq. yd. 420 Denier Neoprene/Nylon material, the tubes are a light gray color while the floor is black. The 11 large D-rings are positioned to provide frame tie-downs, and with the addition of a life line (life line not mounted - instructions included) still provide convenient hand holds for passengers. The large military type valves provide quick and convenient inflation and deflation. The bow and stern rise is achieved in two steps, thus maximum storage space is utilized without reducing the tube rise. The raised stern shortens the actual water line of the boat, providing quick pivoting and increasing handling ease. It also reduces the chances of getting swamped by water coming in over the stern in really heavy water. The two integral thwarts add internal support to the boat, provide passenger seats, and eliminate the problem of sand and debris working under the lacing and damaging the material. Designed with the non-commercial boater in mind, we feel that with 20" dia. tubes this is the perfect boat to carry 3 to 6 people and gear and still have room for extra food and refreshments on those long trips. We used 10 ft. oars with this boat but many persons would use 9' ft's instead - your preference, we recommend both sizes. The 6'8" width com-

pliments either oar size and still provides a stable boat in almost every water condition. The center compartment is large enough to accommodate an 86 qt. cooler in front of the boatman and still position the pivot point within 10" of the boats' center. Specifications are: 14'9" long, 6'8" wide, 20" dia. main tubes, 16" dia. thwarts, 10" bow and stern rise, 40" inside width, 28" bow - 47" center - 28" stern length, 6 recessed 1" military type valves, 38 oz. tube and floor material, 11 mounted D-rings, includes frame wear patches, repair kit, and quality foot pump, weight - 100 lbs. Due to production delays, the SPORT will not be available until approximately May 1.

\$500.00



UDISCO

UDISCO has been importing boats into the US for more than 15 years. During this period, their boats have slowly but steadily improved in design and quality (our entry into the market last year seems to have increased the pace of improvements considerably). Don't be misled by their inexpensive prices, UDISCO rafts have been used in every type of water you can imagine and have proven to be dependable boats.

110 10-MAN

This boat is often paddled by 4-6 people but here in the Northwest we usually put on a rowing frame and use it for 3 or 4 people, or 1 boatman and the gear for 4-6 kayakers. The raised bow and relatively narrow dimensions give it good handling characteristics while the 18" tubes provide enough capacity for most uses. We recommend either 8 or 9 ft. oars for this boat. Specifications are: 14' long, 5'10" wide, 18" dia. main tubes, 15" dia. thwarts, 9" bow rise, 34" inside width, 31" bow - 52" center - 19" stern length, 6 small brass valves, 30 oz. grey tube and black floor material, includes motor mount straps, weight - 65 lbs. **\$290.00**

114 14-MAN

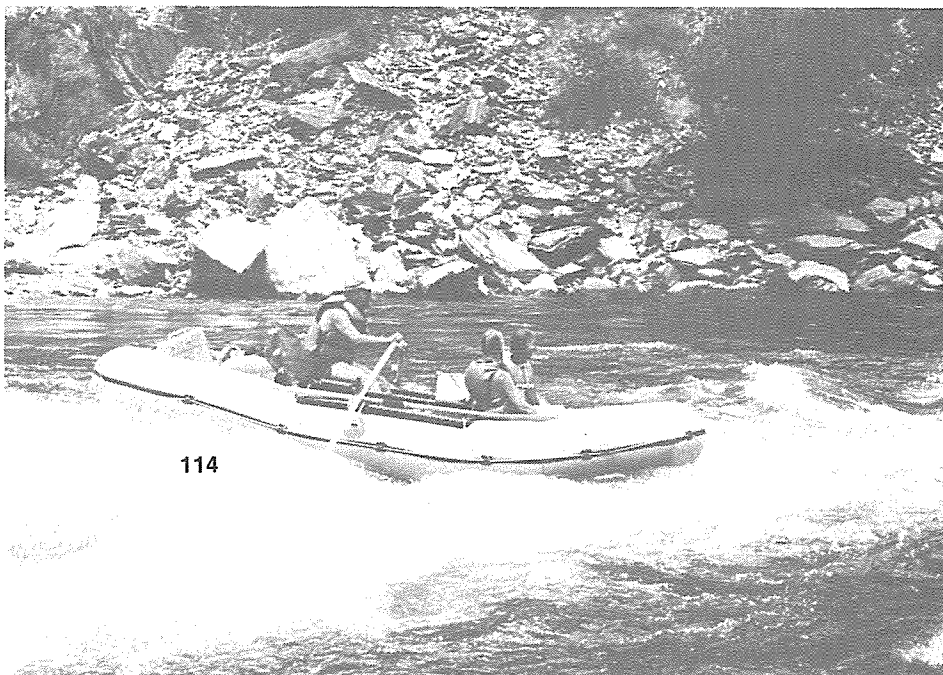
Before I went big time and started using the expensive rafts, this was my favorite, because with its 21" dia. tubes and 16' length I could carry extra gear that no one else would take and still have a relatively maneuverable raft. Because of its relatively narrow width, we recommend 9 ft. oars (use 10 ft. oars only if you plan to build the oarlock pivot points way out there!). Specifications are: 16' long, 6'3" wide, 21" dia. main tubes, 18" dia. thwarts, 11" bow rise, 33" inside width, 33" bow - 54" center - 27" stern length, 6 small brass valves, 30 oz. grey tube and black floor material, includes motor mount straps, weight - 85 lbs. **\$340.00**

CAMPWAYS

Here are some specifics about the 1978 Campways boats. They have recessed hi-volume Nylon valves and raised bow and sterns. The fabric is a new, higher Hypalon content coating on a high strength nylon fabric (420 or 840 Denier depending on the boat). Campways has worked very diligently to improve the quality of their boats - the workmanship is now excellent. All boats are individually pressure tested to 8 P.S.I. (normal operating pressure is a recommended 2-1/4), and include mounted D-rings, life lines, and repair kits. Campways brochure available - drop us a line.

121 HOPI

This boat is drier than other boats of the same size because of its large tube sizes and design. It is probably the best small boat for rowing with a frame - we recommend 8' or 9' oars be used. Although small, you'll have enough space for 2 or 3 people and gear if you're careful how you load. Specifications are: 12' long, 6' wide, 18" dia. main tubes, 16" dia. thwarts, 6" bow and stern rise, 36" inside width, 21" bow - 34" center - 21" stern length, 6 air chambers w/large recessed valves, 35 oz. main tube material, 60 oz. floor, includes motor mount bracket, D-rings and life line, repair kit, weight - 65 lbs. **\$875.00**



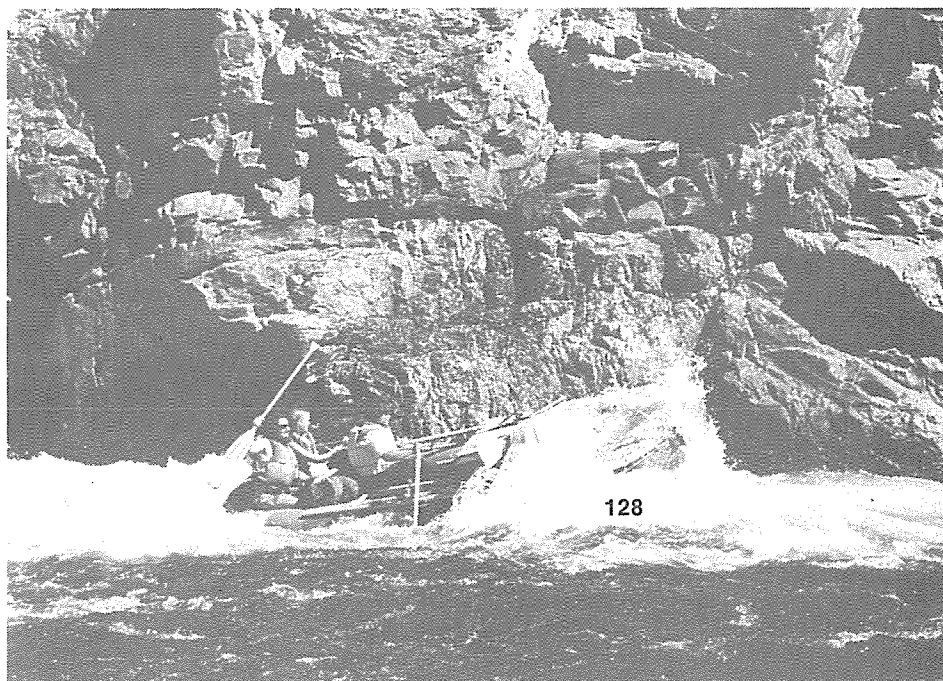
114

126 MIWOK II

Really a stubby rascal, the Miwok is almost a foot wider than the 10-Man but is 6" shorter. The Miwok has become a very popular boat for private parties on the rivers of the Northwest (it'll go anywhere). A perfect raft for many uses, we like it because it'll carry 4 people and gear for those extended trips and still keep its excellent handling characteristics when heavily loaded. For 1978 the Miwok comes in a new 37 oz., 840 Denier Hypalon/Nylon material - very puncture resistant. We use 9' or 10' oars on the Miwok. Specifications are: 13'6" long, 6'8" wide, 20" dia. main tubes, 18" dia. thwarts, 8" bow and stern rise, 40" inside width, 22" bow - 42" center - 22" stern length, 6 air chambers w/large recessed valves, 37 oz. tube material, 60 oz. floor, includes motor mount, D-rings and life line, repair kit, weight - 130 lbs. **\$1150.00**

128 SHOSHONI II

The Shoshoni II is about the largest boat that a non-commercial party is likely to need. Campways tried larger tubes on the Shoshoni III, but found that 20" dia. tubes were better so dropped back to the original size. For those of you that like to run big rivers with large parties this boat should be just the ticket. Most boatmen prefer 10' oars. Specifications are: 15'7" long, 7'2" wide, 20" dia. main tubes, 18" dia. thwarts, 10" bow and stern rise, 46" inside width, 30" bow - 51" center - 30" stern length, 6 air chambers w/large recessed valves, 38 oz. tube material, 60 oz. floor, includes motor mount brackets, D-rings and life line, repair kit, weight - 150 lbs. **\$1,350.00**



128

AVON

Avon has been the Cadillac of the rafting industry for many years now. The Redshank series are excellent boats and we highly recommend them to anyone who wants to row, paddle, or put on a motor and go fishing. In the larger boats, the Adventure, Professional, and Spirit are the finest quality rafts imported into the U.S. today. Avons have a long bow line which gives an excellent ride and can be somewhat drier than a blunter bow (depends on the boatman's ability). By truncating the stern, Avon reduces the overall length and returns the maneuverability that would be lost with a longer stern (there are good arguments for both symmetrical and asymmetrical designs - this is one question we can't answer). Avon boats have an unmatched reputation for quality and durability. The fabric carries a five-year guarantee against deterioration in addition to Avon's one-year guarantee against defects in workmanship. Please write us for an Avon brochure should you have any additional questions.

132 REDSHANK

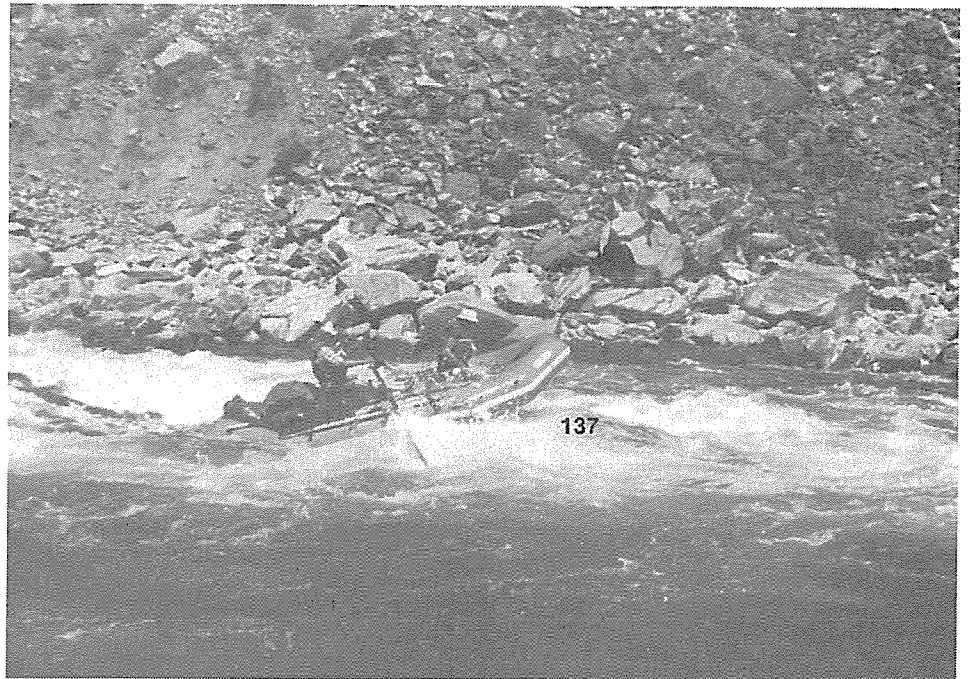
This is a quality boat, and for anyone who wants a small raft for several uses - this may well be the best choice. It has recently become very popular as a framless river running raft, securing the gear above the floor on air mattresses, and using 7' oars. The Redshank comes complete with two tie-in thwarts, integral oarlocks, mounted D-rings and life line, bow line, foot/hand pump, repair kit, and carrying bag. Specifications are: 12'3" long, 5'6" wide, 15" dia. main tubes, 13" dia. thwarts, 11" bow rise, 2" stern rise, 36" inside width, 45" bow - 31" center - 11" stern length, 32 oz. Hypalon tubes, 36 oz. Hypalon floor, 4 Avon valves, includes motor mount brackets, etc., etc., weight - 62 lbs. **\$880.00**

135 ADVENTURER

Private river runners have found this model to be an excellent paddle boat. Outfitters especially like it because it "suffers fools gladly" and doesn't give them any maintenance problems. Its 18" dia. tubes make it an excellent choice for use as a small personal rowing boat. We recommend 9' oars. Specifications are: 13' long, 6'8" wide, 18" dia. main tubes, 15" dia. thwarts, 9" bow and 3" stern rise, 44" inside width, 34" bow - 38" center - 18" stern length, 36 oz. Hypalon tubes, 40 oz. Hypalon floor, 6 Avon-valves, includes motor mount brackets, mounted D-rings and life lines, repair kit, foot pump, etc., weight - 88 lbs. **\$1,395.00**

137 PROFESSIONAL MARK III

Our friend Harry Kindblade used and abused his Avon Pro while learning river running. He ran at high and low water, over, around, and through every rock and obstacle on the Salmon River. He even stuck it on the slab at Whistling Bird rapids on the Owyhee River overnight - both Harry and the Pro survived! (Sorry Harry, but you were the ultimate test for Avons durability). The combination of good capacity, ride, easy handling, and unsurpassed durability has made the Professional the favorite boat for many western boaters - we agree, it's an excellent boat. Harry and most other boatmen use 10' oars on the Pro. Specifications are: 15' long, 7'4" wide, 20" dia. main tubes, 16-1/2" dia. thwarts, 12" bow and 6" stern rise, 48" inside width, 42" bow - 45" center - 20" stern length, 36 oz. Hypalon tubes, 40 oz. Hypalon floor, 6 Avon valves, mounted D-rings and life lines, bow and stern line, repair kit, foot pump, carrying bag, etc., weight - 110 lbs. **\$1,695.00**

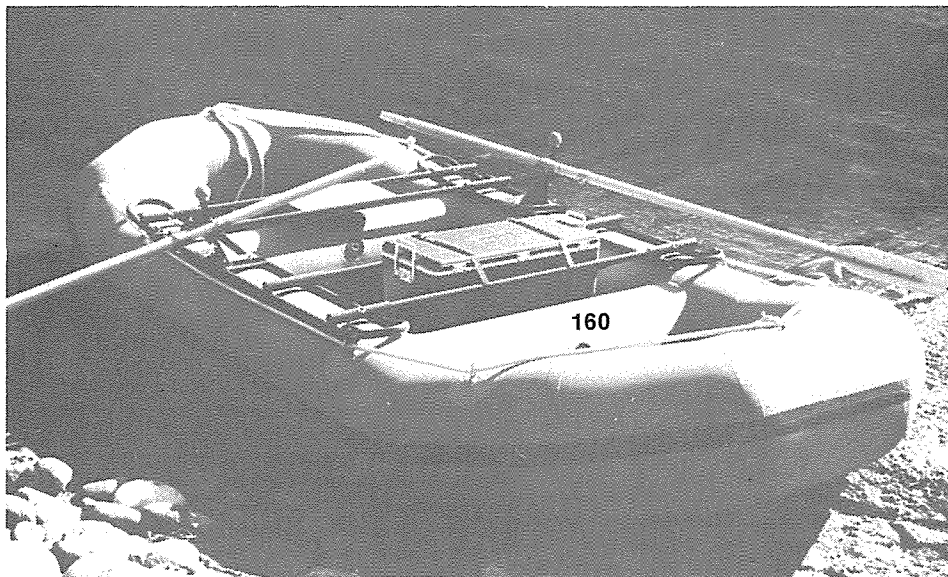
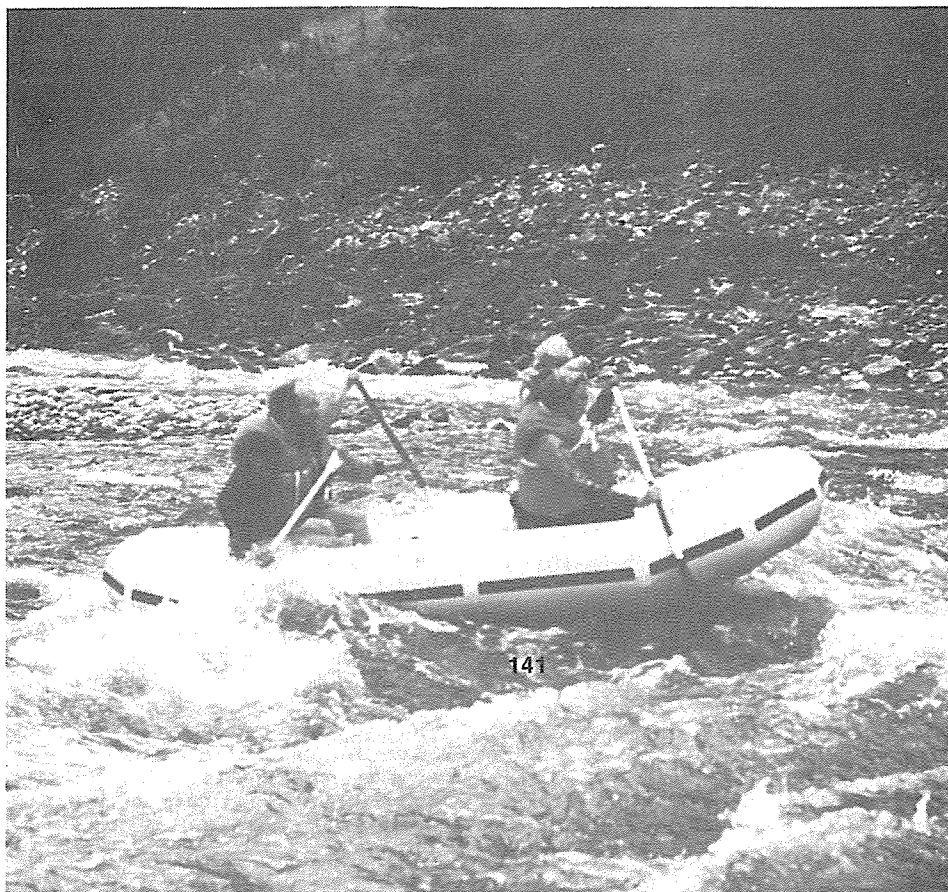


MARAVIA

Maravia is an innovative, state of the art, U.S. manufacturer producing professional river boats. They have one of the most sophisticated and ingenious design features I have ever seen - the main tube is constructed from a single length of material, pleated under to form angles and glued back on itself to form a continuous tube with only two seams. Laboratory testing has shown their 40 oz. PVC/Polyester material to have tear and tensile strength superior to any Hypalon or neoprene material in use today. Although their major emphasis has been on commercial boats, they have several models well suited to personal use.

141 ELAN

This is a super raft built in the eastern tradition with raised bow and stern and a single cross thwart for internal strength and resistance to buckling. My guess is that anyone with a strong desire for a fast boat should think about this one because of the taut floor and slick material. We spent a couple of days running the lower Salmon in this boat and found it to be an excellent paddle boat. Specifications are: 12' long, 5'9" wide, 17" dia. main tube, 12" dia. thwart, 6" bow and stern rise, 35" inside width, 49" bow and stern compartments, 40 oz. PVC/Polyester tube and floor material (tan color), weight - 65 lbs. **\$875.00**



146 WILLIWAU

Last summer I had the pleasure of floating the Middle Fork of the Salmon in this boat. Despite a reasonably heavy load and very low water it was just a joy to row. The design is very functional, the tight floor and long fine bow make for the easiest pivoting and pulling I've ever experienced. The long bow and stern make for a fairly short "pad" in the water which accounts for the easy pivoting. It's this shortness and the tight floor that make for handling somewhat reminiscent of a Mackenzie River boat. I used 10' oars and was very pleased with them. All Maravia boats are custom built, so you can order extra D-rings or extra length in the center section for a nominal additional amount (extra 6" in the center section recommended if you plan to use our frame). Since these boats are all special order items, you should get your order in early. Specifications are: 14'3" long, 6'8" wide, 20" dia. main tubes, 15" dia. thwarts, 11" bow and stern rise, 40" inside width, 30" bow - 42" center - 30" stern length, 40 oz. PVC/Polyester tube and floor material (tan color) weight - 120 lbs. **\$1,400.00**

(See back cover for picture of Williawau).

RAFTING ACCESSORIES

FRAMES

160 UNIVERSAL FRAME

Our frame is really quite simple, there are two pods or side rails formed from steel tubing to fit over the raft's side tubes. Cross member sleeves and oarlock stand plates are welded to the pods. There is an "H" shaped rear seat cross piece and a combination cooler cradle and foot brace assembly. These cross members slide into sleeves welded to the pods. After sandblasting, the entire assembly is covered with a tough epoxy finish. The frame fits together with just 4 fast pins (included) and can be assembled/disassembled in seconds. (The frame components nest together for shipment by small plane if necessary). The cooler cradle fits an 86 quart Igloo cooler (#806) perfectly, but other coolers will also fit. Heavy duty oarlock stands are included and have a 6" adjustment to fit almost every size rafter. We pre-cut the side members to fit your raft, but because individual raft dimensions vary slightly, we ship the cross members undrilled. Merely assemble the frame on your raft and use a 5/16" bit to drill through the cross pieces at the appropriate point. The entire assembly is 82" long by 71" to 77" (depends on the raft) wide and weighs 74 lbs. The Universal frame fits the Sport, Miwok, Shoshoni, Adventurer, Professional, and Williawau rafts. **\$275.00**

162 10 & 14 MAN FRAME

Same design and quality as the #160 Universal frame, but because of the narrow design of the 10 & 14 man rafts this frame holds a 68 Qt. cooler (#808). Frame includes #291 HD Oarlock Stands, measures 82" x 62" assembled, and weighs 72 lbs. **\$275.00**

OARS

Technology is finally coming to river running equipment - and it's about time. We worked with Ken Carlisle last summer to improve the strength and reliability of his new aluminum and plastic oars. We believe you'll agree it was worth it once you've given them a try. Most boatmen, myself included, had never realized what a difference light weight oars make when rowing - no matter how strong you think you are, these aluminum and plastic oars are a welcome surprise. Carlisle AuSable oars are manufactured with 6061-T6 aluminum shafts (reinforced at the high stress blade area) sleeved with Yellow polyethylene tubing. The blades and grips are beige (sounds like a fashion show!) ABS Cycloc plastic. Shaft diameter is 1-7/8", the blade measures 5-1/2" X 26", and the 10 ft. length weighs only 6 lbs. 4 oz.! Because ash oars are progressively more expensive in the longer lengths while aluminum/plastic oars are only so much per foot after the set-up cost, we offer ash oars in 7, 7-1/2, and 8 ft. lengths, and both ash and aluminum/plastic in the 9 and 10 ft. lengths where the aluminum is reasonably price competitive. We had just had it with carrying unfinished oars - excessive warpage in storage has soured us on the whole idea (if you'd like warped ash seconds at a reasonable price - please inquire). We have therefore switched to pre-finished #1 quality oars manufactured by Smoker Oar & Paddle Co. Now under new management, Smoker has taken steps to assure their continued supply of high quality, Northern clear grain white ash oars. For the purist there is just nothing like the flex, and smoothness of these quality ash oars. For comparison, the shaft diameter is 1-7/8", and a 10 ft. oar weighs 8-1/2 lbs.

180	7 ft. ash	\$19.00 ea.
182	7 1/2 ft. ash	\$21.50 ea.
184	8 ft. ash	\$26.50 ea.
186	9 ft. ash	\$36.00 ea.
188	10 ft. ash	\$46.00 ea.
196	9 ft. aluminum	\$37.50 ea.
198	10 ft. aluminum	\$40.00 ea.

BLOWERS AND PUMPS

202 BIG BLOWER

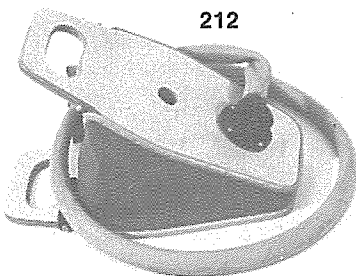
If you have access to 110 volt, 6.5 amp, AC or DC, this pump is the answer at a put in. It gives up to three pounds pressure and will inflate an Avon Spirit or Havasu III in under five minutes! There just isn't anything on the market even approaching this for quality and speed. The electric motor is 1 full horsepower, and it puts out 60 cubic feet per minute. **\$80.00**

204 NEW BARREL PUMP

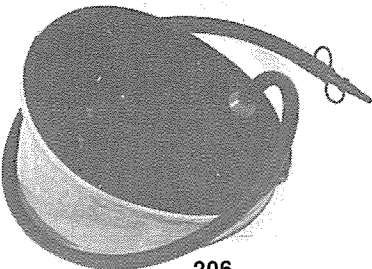
A wonderful idea from Jim Potochnik - take out some of the HD Pump's special features and bring down the price. Single instead of double hose, simpler base, etc., but insides are the same and at 5 1/2" x 18" it puts out a lot of air. Quality fittings with ports for inflation and deflation. Nozzle fits Sport, Campways, Maravia, and other military style valves. **\$60.00**

212 REDSHANK PUMP

A combination hand and foot pump of unsurpassed quality. It will also fit military style valves. **\$42.00**



212



206

206 NRS GERMAN PUMP

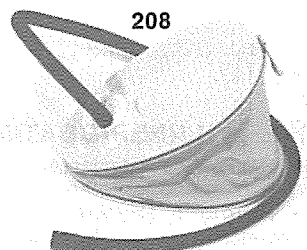
We finally found a reasonably priced pump. Heavy duty steel hinge, solid molded rubber top and bottom (molded around steel plate for strength) 8" x 12". This pump fits rubber duckies and UDISCO boats and is nearly the same size as the CW and Avon pumps. We also supply an adapter to fit the military style valves of the Sport, Campways, Maravia, etc. **\$25.00**

208 FRENCH PUMP

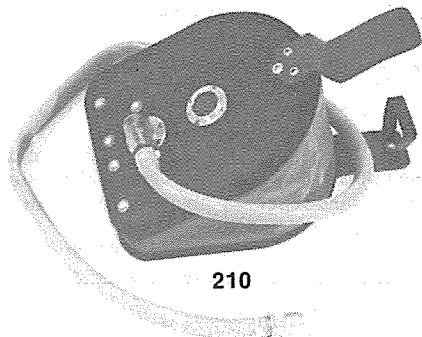
This is the new Sevylor pump and is a fairly good pump. It is a new design and should hold up better than their former one. Fits inflatables and UDISCO rafts. **\$12.00**

210 CAMPWAYS' PUMP

This foot pump has the right fitting for the Campways rafts. This pump was good when it first came out and it's getting even better (they improved the handle). It will also fit the Avon Redshank, Sport, and Maravia rafts. **\$36.00**



208



210

214 PROFESSIONAL PUMP

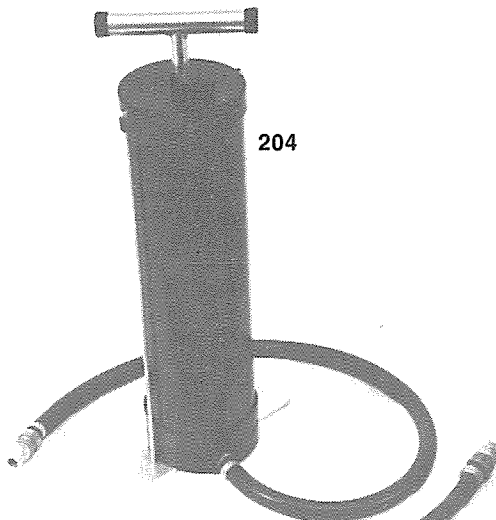
This pump only fits the Avon Adventurer, Professional, and Spirit rafts. **\$53.00**

216 HD HAND PUMP

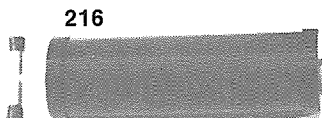
This 3" x 12" pump is super for topping off most any raft (fits military style valves only). Same superior quality as the barrel pumps. **\$24.00**

218 HD BARREL PUMP

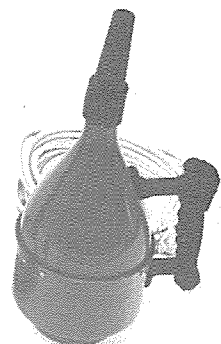
This is the deluxe version of the pump Jim Potochnik designed a couple of years ago. It is 5 1/2" x 18", has 2 hoses instead of only 1 (also includes a plug so you can use only 1 hose if you wish), carrying strap, folding base, etc; this means you can use it on most any raft and fill two chambers at a time. We stock spare hoses, nozzles, plugs, and repair kits for all of Jim's pumps - if you have the need, please ask! **\$100.00**



204



216



202

ADHESIVES/THINNER/COATINGS

There is a difference between adhesives, especially when using different types of materials (Hypalon, Hypalon coated neoprene, neoprene, etc.). Although all the adhesives and materials we've tested will bond together, there are certain combinations that bond better than others. Because of this, we are offering three brands of adhesive for 1978. No matter what the material or adhesive, the following steps should be followed when repairing a raft:

1) Prepare the surfaces (both boat and patch) by roughing it up, using a sand stone, rasp, sandpaper, or anything to abrade the surface.

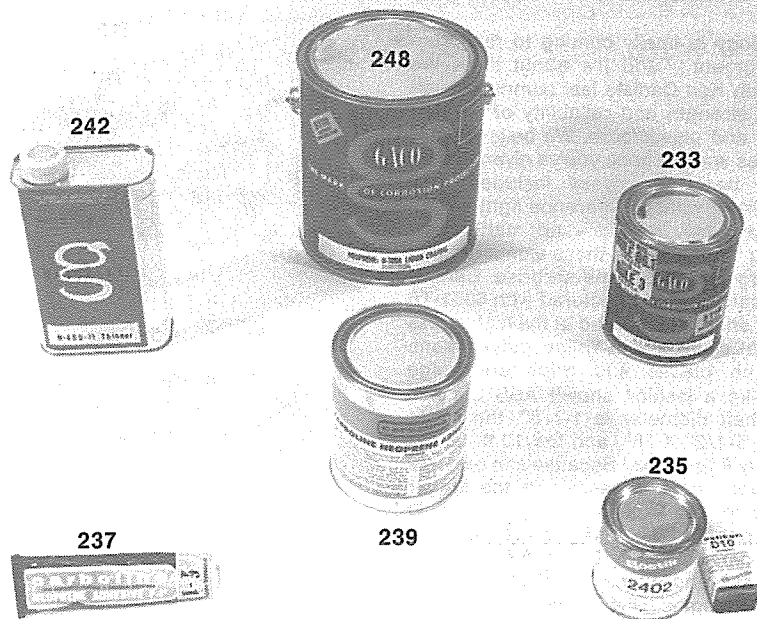
2) Clean the surfaces with cleaner if possible (do not use an oil base solvent such as paint thinner).

3) Apply the adhesive and wait (follow the directions because each type seems to require different drying times) - the most common error is not letting adhesive dry enough.

4) After contact, press the surfaces together with a roller, the side of the adhesive can, or any other means you can come up with. The more forceful the contact, the better the bond.

We have found that GACO bonds neoprene better than the other adhesives. So we recommend its use with our NRS boats, the UDISCO boats and any other neoprene raft (yellow duckies included). Best results are obtained if you allow the GACO to dry 1 to 1-1/2 hours before applying the patch (make sure it's beyond tacky dry). We've found that Carboline bonds best with Campways material (and Dan Baxter recommends it). The 3 oz. tube of Carboline is my choice of the way to carry your adhesive. It doesn't dry out in the tube and is easy to pack and apply. If you can get someone else in your party to carry a quart - this is the ticket - it's great for day trips too. The 2-part Bostic adhesive is a little difficult to work with, but its superior bonding strength makes it worth the effort. We recommend it for the Avon boats (if you can afford it). To prepare a raft for either patching or painting, the surface should be free from all traces of oil, dirt, beer, etc. GACO thinner/cleaner does this quite well and at a reasonable price. Painting a raft has lately been questioned but we still feel it prolongs the useful material life by providing abrasion resistance and protecting from ozone and UV deterioration (there's no question that the aluminum color reduces heat build-up).

231	GACO Adhesive - Pint	\$ 4.00
233	GACO Adhesive - Quart	\$ 6.25
235	Bostik 2-part 1/4 ltr.	\$ 5.00
237	Carboline - 3 oz. tube	\$ 3.00
239	Carboline - Quart	\$ 8.00
242	GACO thinner/cleaner - Quart	\$ 5.00
246	Aluminum Coating - Quart	\$ 8.00
248	Aluminum Coating - Gallon	\$28.00
249	Black Lettering Paint - Pint	\$ 4.50



PATCHING ITEMS

251 NRS REPAIR KIT

Includes a 6" x 53" piece of neoprene material, a roller/rasp, an assortment of small patches and a tube of carboline adhesive. We need a source for a good waterproof plastic cannister for these! Please write if you know a manufacturer. **\$6.00**

253 NYLO-FLEX PATCHES

These patches are excellent for all types of boats. These nylon reinforced patches are the best thing for a sturdy patch on a small hole. Can be used with any of the adhesives we offer. Contains 1 - 6", 2 - 3 1/2", 3 - 2 1/4", and 4 - 1 1/2" patches **\$2.50 set**

255 16 OZ. NEOPRENE MATERIAL

This is what we use to patch neoprene rafts, material is aluminum colored on 1 side, black on the other. Roll is 60" wide, cost is per running foot. **\$4.00**

257 AVON REPAIR KIT

Includes a piece of Avon material, (6" x 19"), tube of adhesive, sand paper, and directions. Very practical for day trip use. **\$4.50**

259 AVON HYPALON MATERIAL

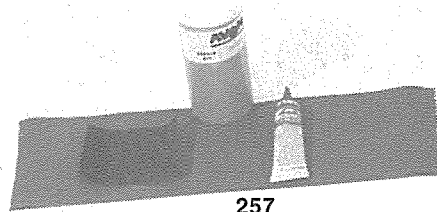
High quality Hypalon for patching any boat. Sold by the running foot, roll is 57" wide. **\$7.50 ft.**

261 ROLLER WITH RASP

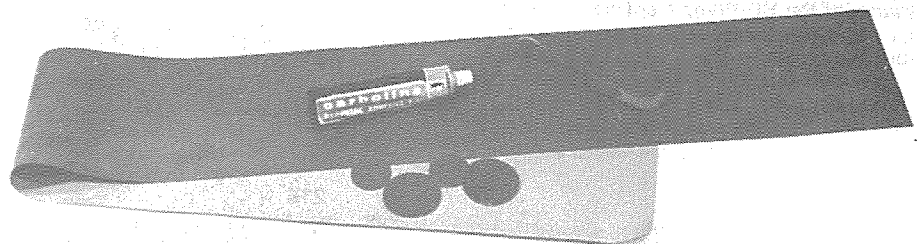
Use the rasp to rough up the surface after it's clean. Use the roller to roll the patch down to get a good bond. Very practical. **\$1.25**

262 PROFESSIONAL ROLLER

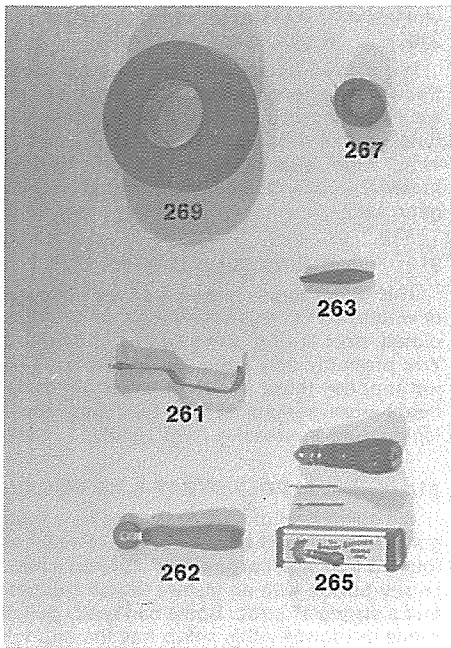
Large wooden handle gives a better feel and is not as tiring to use as the #261 roller. **\$2.75**



257



251



263 SAND STONE

A really fine idea for roughing up material before patching. Shaped to fit your hand, coarse enough to scrape yet won't cut or tear material. **\$2.00**

265 SEWING AWL

Bill McGinnis mentions sewing tears before patching in his book WHITEWATER RAFTING. For those of you who want to sew, here's a practical little sewing awl that contains needles and thread (and conceals them within the handle for easy storage). **\$2.50**

266 EXTRA NEEDLES

Two extra needles for the #265 Sewing Awl, one straight and one curved needle. **\$1.00 pr.**

267 EXTRA THREAD

30 yds. of #140 coarse waxed thread for use with the #265 Sewing Awl. **\$.75**

269 DUCT TAPE

This is good stuff and has many uses for patching and repairing. We carry a special ARNO tape which has a polyethylene film to make it more water resistant, much better than the cheap stuff you find at discount stores. Roll measures 2" x 60 yds. **\$5.00**

OARLOCKS/STANDS/STOPPERS

280 MANGANESE BRONZE OARLOCKS

Long shank (3½"), 5/8" dia. shaft, horn opening is 2" with 2-5/8" ID. Until we found the silicone bronze oarlocks, these were the best horn oarlocks available. If forced open, these can be pounded back together (for smaller oars you may want to close the throat to about 1-½"). The shaft must be sand-papered or filed down to fit a 5/8" socket (polishing the inside of the horn is a good idea, too). Drilled for keeper. We recommend these oarlocks for use with the aluminum/plastic oars. **\$8.00 pr.**

282 SILICONE BRONZE OARLOCKS - SHORT

Silicone bronze horns spring back to their original shape if forced apart. Shaft and horns are sized and polished, 5/8" dia., 2-1/4" shaft is drilled for keeper, horn opening is 2" with 2-5/8" ID. (Intended for #290 Oarlock Stands). **\$13.50 pr.**

283 SILICONE BRONZE OARLOCKS - LONG

Same size as the #282 Silicone oarlocks but the shaft is longer, 3-3/4" shaft fits all sizes of oarlocks stands. **\$14.00 pr.**

284 HAIRPIN COTTERS

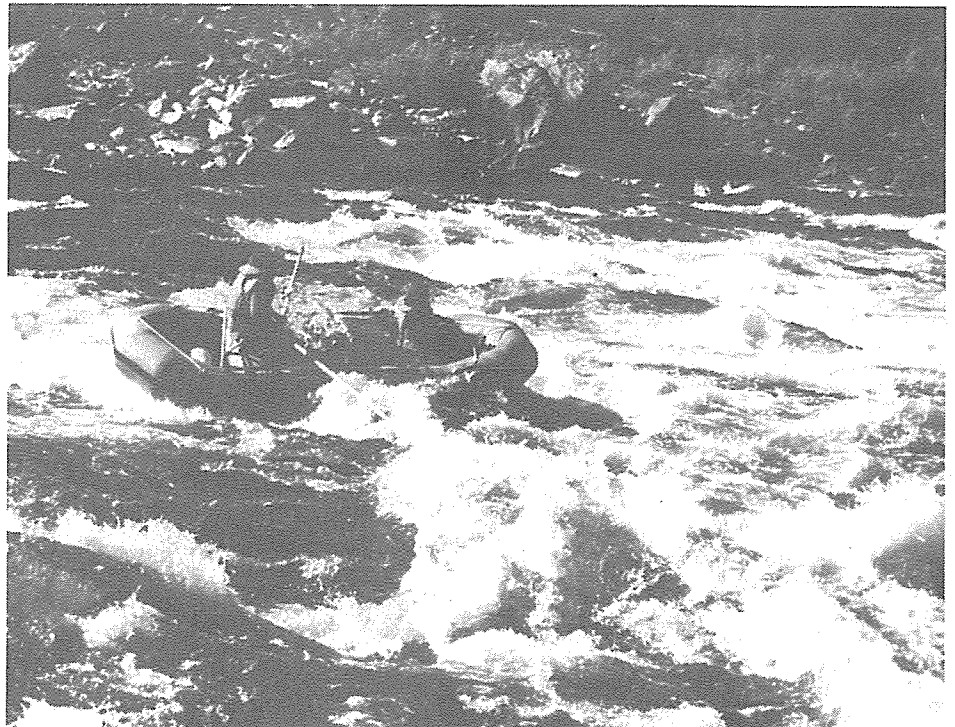
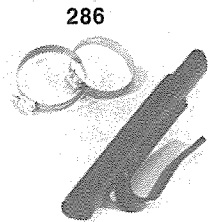
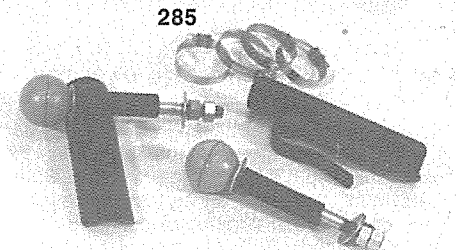
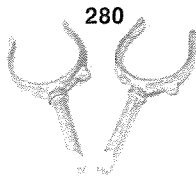
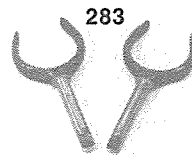
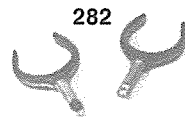
Strong, secure, and convenient - Hairpin cotters are the practical way to fasten your oarlocks into the stands. **\$.50 pr.**

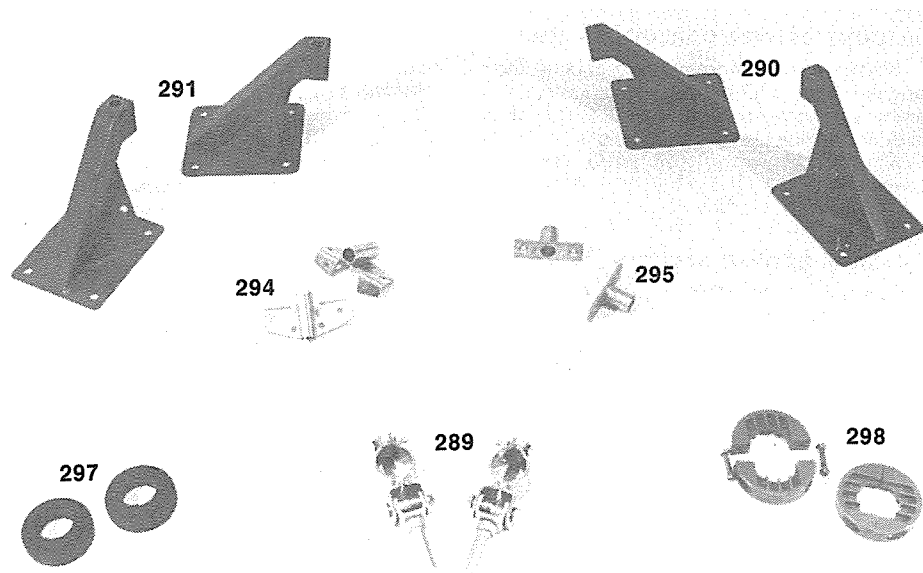
285 PIN & CLIPS

Pin and Clips are more popular in California and the Southwest than here in the Northwest, where horn oarlocks predominate. The pin & clips give you more confidence and power in your strokes, but you lose some useful rowing maneuvers. The set contains two 5/8" dia. bolts, bushings, rubber safety balls, nuts and washers, plus the 2 clips and radiator clamps for fastening on the oar. **\$20.00 set**

286 EXTRA CLIPS

When using our #285 Pin & Clips, all the spare oars must have clips mounted before use, so here they are. Includes 1 clip and the 2 radiator clamps for fastening it to the oar. **\$7.50**





289 WYNN CLAMPING OARLOCK

These oarlocks clamp on the oar and slip down into any 5/8" dia. socket. They position the oar vertically and also hold the oar in a fixed position so it doesn't slide in or out. Spare oars must also have an oarlock on them so they can be used (single oarlock sold at 1/2 the price listed). Not a bad set-up, particularly for someone without a lot of rowing experience. These are really best for smaller rafts, shorter oars, and light or medium-duty use. **\$5.00 pr.**

290 OARLOCK STAND

These stands are professionally designed and manufactured for river use. They have a 5-1/4" x 5-1/2" steel base with 4 mounting holes and a welded steel bracket that gives a 6" rise. The socket itself is 5/8" dia., offset 2" with a 14 degree outward tilt for correct oar alignment. The built-in rise and tilt make it much simpler to build a quality frame yourself. They can be used with any oarlock that has a 5/8" dia. shaft. **\$30.00 pr.**

291 HEAVY DUTY OARLOCKS

Whatever you design, someone can bend it up. So here is an extra heavy duty model with a longer socket, interior bushing, heavy gauge base plate, etc. We recommend these stands when using 10 ft. or longer oars - the #282 oarlocks will not fit these stands. **\$40.00 pr.**

293 RUBBER OARLOCKS

These are the type of rubber oarlocks found on the Avons and Campways boats. Very popular here in the Northwest for rowing without frames. **\$21.00 pr.**

294 WYNN SOCKETS

Designed to be fastened to the outside of a wood block. Has an angle plate with holes for screws or bolts. These are a good set-up but not as heavy-duty as they should be for big rafts. Use with any 5/8" dia. oarlock. **\$2.00 pr.**

295 CAST IRON SOCKETS

A hole must be bored to mount these. Used on many raft frames with side rails, most people just drill a hole in a solid block of oak or ironwood. These are galvanized cast iron and you have to be careful installing them or they will crack. Fits any 5/8" dia. oarlock. **\$2.00 pr.**

297 RUBBER STOPPERS

These rubber stoppers are used to keep the oar from sliding through the oarlock. Some people use a radiator hose clamp on the stopper to hold it in place, or you can glue or tape them into position (silicone rubber cement seems to be the best for glueing). **\$3.00 pr.**

298 PLASTIC STOPPERS

Adjustable oar stoppers made of heavy duty plastic with locking bolts on each side. Can be shaped to fit the oar and hold firmly. Recommended as well worth the extra cost - especially with the Carlisle AuSable oars because of glueing difficulties. **\$5.50 pr.**

299 1/4" NYLON ROPE

To protect the oar from the oarlock, we suggest 1/4" nylon rope (anything from 1/8" to 3/8" will do), wrapped tightly and tacked with very small brads. Always pull the rope ends under the wrap (make sure the ends are on the top of the wrap - not on the sides where they will interfere with the oarlock), and then tack them down (too many brads or too large of brads may weaken the oar). This is what we wrap our wooden oars with, usually 35' is needed per oar. Not recommended or needed with plastic/aluminum oars. **\$.12 ft.**

D-RINGS/STRAPS/HARDWARE

310 NRS D-RING PATCHES

We started our production on these items three years ago when we could't buy them and we have improved them steadily. 6-1/2" dia. outer patch, 1-3/4" cadmium plated steel D-ring, high quality heavy weight Hypalon material - use these for attaching frames, gear, etc. **\$5.00**

312 D-RING/BOW LINE PATCH

This is our super large patch for bow lines or whatever. 11" dia. outer patch, 3" cadmium plated steel D-ring, extra wide webbing, etc. You probably only need the #310 model, but we suppose there are some times when you might want something like this. (Besides, it looks more impressive than #310). **\$8.00**

314 3 ft. POLY STRAP & HD BUCKLE

We spent a lot of time searching for a really good buckle for heavy duty use. Finally we found a maker of cargo slings that had a really sturdy buckle with an instant thumb release - and a strong 1" strap. Boats can really pull on frame tie-downs - this setup has the strength and reliability to take extreme conditions. **\$2.00**

315 6 ft. POLY STRAP & HD BUCKLE

Same as #314, only 6 ft. long for tying down gear. **\$2.25**

316 9 ft. POLY STRAP AND HD BUCKLE

Same as #314, only 9 ft. long for tying down coolers, etc. **\$2.50**

318 6 ft. STRAP

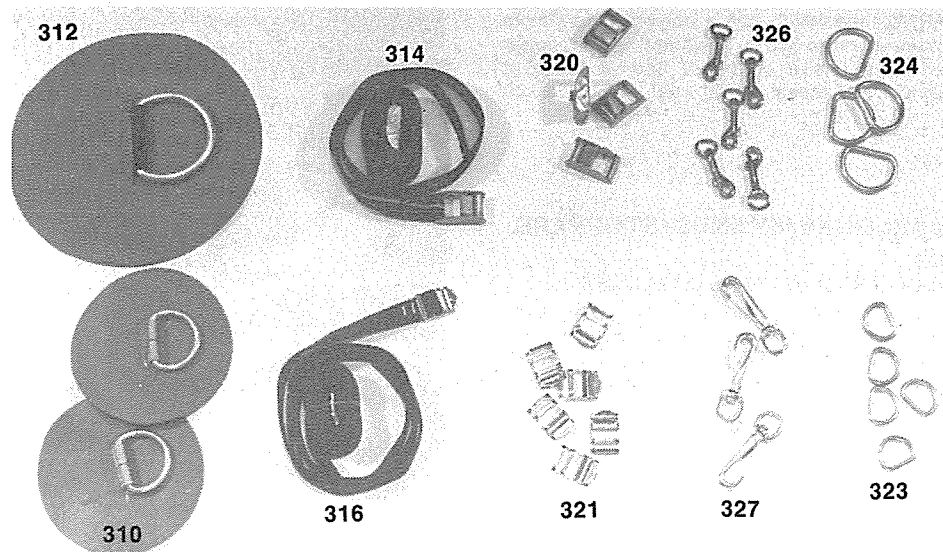
Regular nickel plated buckle and 1" wide poly strap. Good quality, but without the super HD buckle. Great for tying down gear. **\$1.25**

319 9 ft. STRAP

Same as #318, only 9 ft. long. Long enough to go around just about anything. **\$1.50**

320 HD CAM-ACTION BUCKLE

We know some of you will want to make your own straps, so here is the HD buckle that we use in our #314, 315, and 316 Poly straps. **\$1.50**



321 STD. BUCKLE

These are the 1" buckles we use in our #318 and 319 straps. Great for poly or nylon webbing, they are easy to cinch up and release - get some webbing, sew your own straps - and get rid of that mess of ropes you've been using to tie down gear. Package of 10. \$.75

323 1" D'S

High quality cadmium plated, heavy duty welded steel 1" D's. For use in making your own gear tie-down points or whatever. Package of 8. \$1.00

324 1-3/4" D'S

These cadmium plated steel D's are what we use in our #310 D-rings. If you like to do it yourself and don't mind a low return on your time here's the ring to make your own D-ring patches. Package of 4. \$1.00

326 SWIVEL EYE BOLT SNAP

These are cast maleable Iron and not cheap pot metal. They are handy for baggage lines, etc. Bill McGinnis doesn't think much of them because he says they might not stay closed in emergencies (WHITEWATER RAFTING), but they have never given me any trouble and I like them. Overall length - 3", dia. of eye - 5/8". \$.60

327 SPRING SWIVEL SNAP

These are the type recommended by McGinnis. Excellent for attaching to the end of a throw line when rescuing a raft. Overall length - 4", size of eye - 5/8", cast maleable iron. \$.90

331 1" WEBBING

Poly webbing for use in making up your own straps, D-rings, etc. \$.10 ft.

333 1-3/4" WEBBING

This is the heavy duty webbing that we use in our #310 D-ring patches. \$.25 ft.



338 1/2" BOW/LIFE LINE ROPE

We did some checking around and found this 1/2" hollow braided poly rope to be the most practical rope on the market for bow & life lines. Its naturally ultra-violet resistant, rot resistant, floats, and is easy to work with (braids back into itself to go around D's and tie-downs, etc.) Yellow, sold by the foot. \$.20 ft.

ACCESSORIES

341 RESCUE LINE

Ann Dwyer has really produced a quality item this time. It's 60 feet of 2,000 lb. test, solid/braid rope in an orange nylon bag (it floats) that's always ready to throw. The snap-strap insures easy unhooking from the raft or canoe, both ends of the rope are treated with a non-slip material, and the bag keeps the rope out from under your feet. If you should miss with your first throw, then pull it back in and try again (no need to recoil the rope, water in the bag will provide enough weight to throw it the second time.) There are now a number of Rescue/Throw lines on the market - but this one is the best and is well worth the few extra dollars. \$21.00

342 THROW ROPE

Another quality throw rope, this version doesn't have the snap-strap handle, nor the coated rope ends that the #341 Rescue Line has. Never-the-less, it does offer 50 ft. of high quality 1,700 lb. test 3/8" braided polypropylene rope in a convenient, bright orange nylon bag. If you're still too dollar conscious for this model - at least carry 50 ft. of rope with you on the river - how much is a life worth? \$12.00

344 OTTER BAG

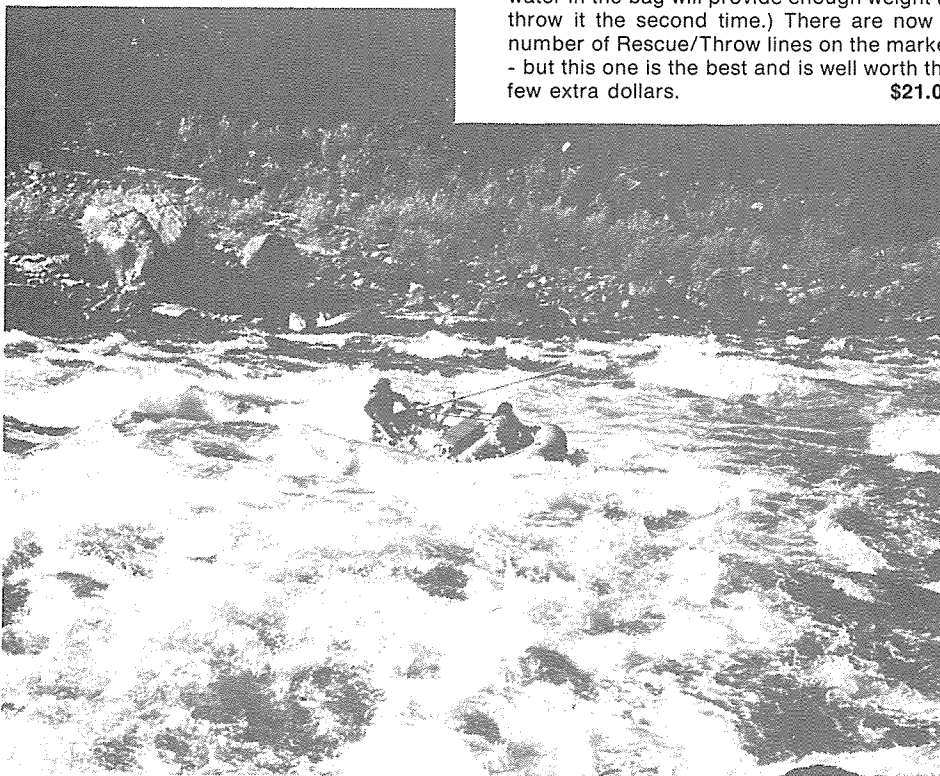
The Otter Bag is another great idea from Dragonfly Designs, it ties onto a thwart or seat as a catch-all for all those items laying around the boat; sweaters, suntan lotion, empty beer cans, maps, etc. Made of a 1.9 oz. rip-stop K-kote nylon with a firm backing for easy opening. Measures 15" x 12" - really practical. \$3.90

348 RAFTING POGIES

Bonnie Losick started making these for crews rowing in the Fall and Spring. If you are a rafter who is as "crazy as a kayaker" then these waterproof nylon mitts are for you. Side holes allow the oar grip to slide into the mitt (will fit any oar we've ever heard of), elastic wrist closure keeps the water out and still fits loose enough to wear your gloves inside of the mitts. No problem getting your hand free - just give a pull and the pogie slides off your hand - very practical in cold weather. \$6.00 pr.

350 OLAM RAFTERS JACKET

There are many good kayakers jackets on the market, but for rafting and canoeing we wanted a longer, fuller cut jacket with an optional hood if possible. Olam has made the jacket we wanted - but they called it a wind jacket. It's a 3/4 front zipper, pull-over jacket manufactured in a very durable, rip-stop waterproof nylon. There is a large zipper and center pouch that can be used even with a life jacket on - and that's a handy feature. It has a draw string bottom closure, elastic & snap wrist bands, and a full hood that can be removed (zips on and off). It is sized to fit over a down parka so for ordinary use you should order a size smaller than you normally do. Medium fits 6 ft. & 180 lbs, Xlarge is a small tent. Dark blue, sizes are: XS, S, M, L, and XL. \$27.00



LIFE JACKETS

For lakes you might save some money and buy cheap vests at a discount house. For whitewater use - get something good!

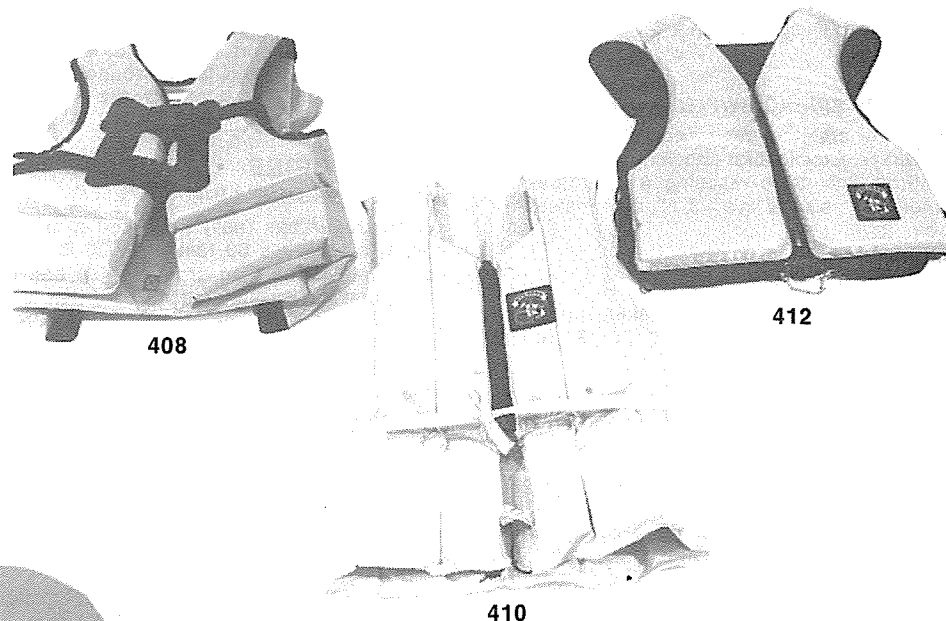
400 TYPE 1 JACKET

For maximum protection at a low cost, we offer the commercial all-vessel jacket (Mae West type). These jackets have vinyl pouches filled with kapok that provide at least 22 lbs. of floatation, better closures (wrap around straps and a lower clasp instead of just a tie), and an outer shell of orange nylon. All jackets of this type should be treated carefully (do not compress) to avoid puncturing the vinyl pouches. **\$20.00**



404 STEARNS RIVER RAFTING JACKET

This jacket has a solid feel and performs well in the water. These type V jackets are becoming very popular due to their greater dependability and comfort as compared to the #400 jacket. Two chest straps, side adjustment panels, and a third, lower adjustable strap provide a good fit and secure feeling. Coated orange nylon outer shell, solid foam filler, nylon mesh inner liner (allows the air to circulate around your body), padded foam filled collar that provides some behind the head protection when you're in the water. Large/XLarge size fits chest size 44" and over, Small/Medium fits everything under that but really doesn't fit small people as well as it should. **\$38.00**



408 MARAVIA TYPE V JACKET

This jacket was the first type V approved by the Coast Guard for commercial use. Designed much the same as the #404 jacket it is foam filled, has 2 quick-release buckles on the front and 2 adjustable straps on the back. Its unique use of vinyl coated polyester mesh allows MARAVIA to guarantee this jacket for 2 years against any defect in workmanship or material. Universal adult size adjusts to fit all sizes. **\$40.00**



410 STEARNS KAYAKING JACKET

Deliverence - what a crummy name for a good kayaking jacket. This jacket has ribbed foam floatation in a nylon shell. The bottom section may be worn up (probably should be) for comfort and so you won't mess up on your roll. Has a good zipper and cloth tie at the break-in waist. Gold or blue colors. S (36-38), M (40-42), L (44-46), XL (48-50). **\$27.00**

412 STEARNS CANOEING JACKET

Last year I made some comments about the name (Gatsby) and a couple of you took it personally. Yes, it is a great jacket for comfort, thus people will wear it rather than sit on it. This alone makes it very desirable and for most canoeing trips it's really an ideal jacket. However, for severe whitewater if you don't use a type I, I suggest either the Rafter's jacket or the Deliverence jacket. Nylon outer shell, foam filled, mesh inner lining, zipper closure with a bottom chain, blue denim color, Universal adult size. **\$23.00**

413

STEARNS YOUTH CANOE JACKET

Same as the #412 except this fits children who weigh 50-90 lbs, gold color. **\$21.00**

416

STEARNS KINDERGAARD

Designed for children that weigh less than 30 lbs., this jacket will turn them face up and keep that way in the water. It looks like a large collar (foam filled) with a body shirt under it. Slip it over the child's head, adjust the velcro side panels, buckle the safety belt and your child has the second best protection possible. The best protection is to never leave an unsupervised child in or near the water. **\$17.00**

417

STEARNS PEE WEE JACKET

A small version of the standard Stearns jacket, plus the added features of body/leg straps. USCG approved type III for recreational use, once your children are in these jackets the leg straps hold'em in so there is no worry about the jacket coming off. Three sizes by color: Blue fits ages 2-5, chest 20"-24", Red fits ages 5-7, chest 24"-27", Gold fits ages 7-9, chest size 27"-30". **\$16.00**

418

MARAVIA CHILDRENS JACKET

Same as #408, however this one is designed to fit the little people that weigh over 50 lbs. **\$32.00**

WATERPROOF BAGS

NORTHWEST RIVER SUPPLIES

This is the second year we are offering bags of your own design - last years experience has enabled us to add further refinements to both bags. We use a PVC-covered 18 oz. Dacron fabric which is extremely resistant to puncture, abrasion, and weathering. All buckles, D-rings, and snaps are nickel plated steel for longer life. We honestly believe the bags to be superior to any other bags on the market at any price. Both bags are guaranteed for one year against defects in materials and workmanship.



424

420

BILL'S BAG

Although this bag turned out even better than we hoped for, we still discovered some shortcomings and have made improvements for 1978. Fill it with all your gear, press the velcro tabs together, roll down the top and cinch down the 2 top straps and 2 side straps - you now have a waterproof bag. The Bill's bag is large enough to provide room for even the worst packer with his big Sears-Roebuck sleeping bag. Careful packers who don't carry a lot of extra junk can get two people's gear into this bag. The bag has 2 adjustable straps on the back for carrying that can also be used to tie the bag to a thwart or frame member. Material is 18 oz. PVC-covered dacron, dimensions are 20" x 10" x 48" high. **\$30.00**

424

BLUE BAG

Same basic design as the #420 bag, but with only 1 top strap and 2 side straps (remember old surplus black bags). Careful packers will find this an ideal size bag, dimensions are 15" x 8" x 26" high. Small enough to fit behind a kayak seat yet large enough for 1 persons personal gear. Bright blue color. **\$22.00**

420



420



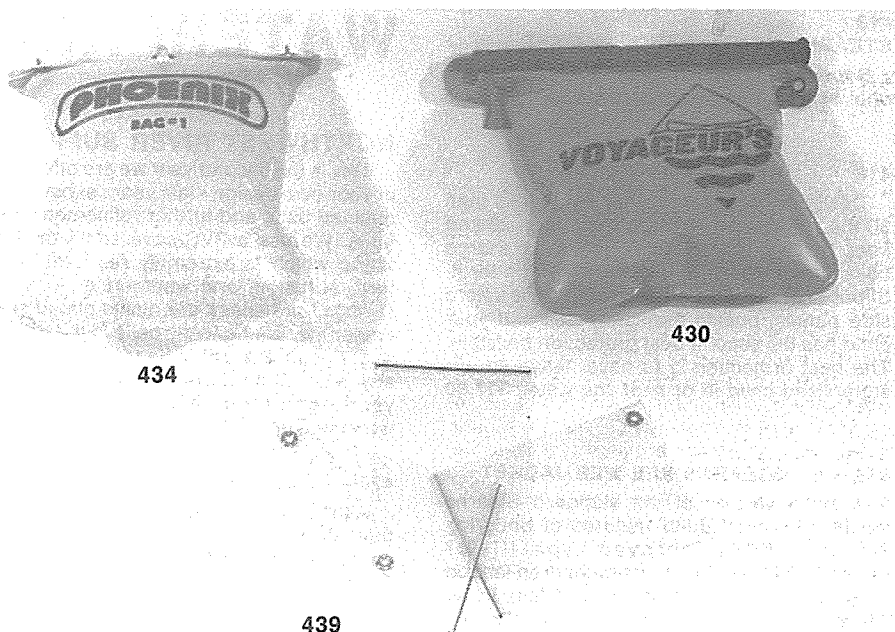
OTHER BAGS

428 KLAMATH RUGGED PACK

This is a Duluth-type pack made with a heavy Dordura nylon bottom and a 6 oz. oxford nylon top (light material used to insure a tight "tie" closure). It has a 4 mil. plastic liner bag (26" x 42") that keeps your gear dry while the nylon outer bag provides the abrasion resistance needed for river use. Dragonfly Designs is noted for their well designed products, and this bag is no exception. Two shoulder straps (snap-ended & adjustable) and a large carry handle make this a convenient bag to use. It's large enough to hold one persons gear if you pack tightly, dimensions are: 10" x 17" x 23" (H). **\$29.00**

429 VOYAGEUR CAMP-PAK

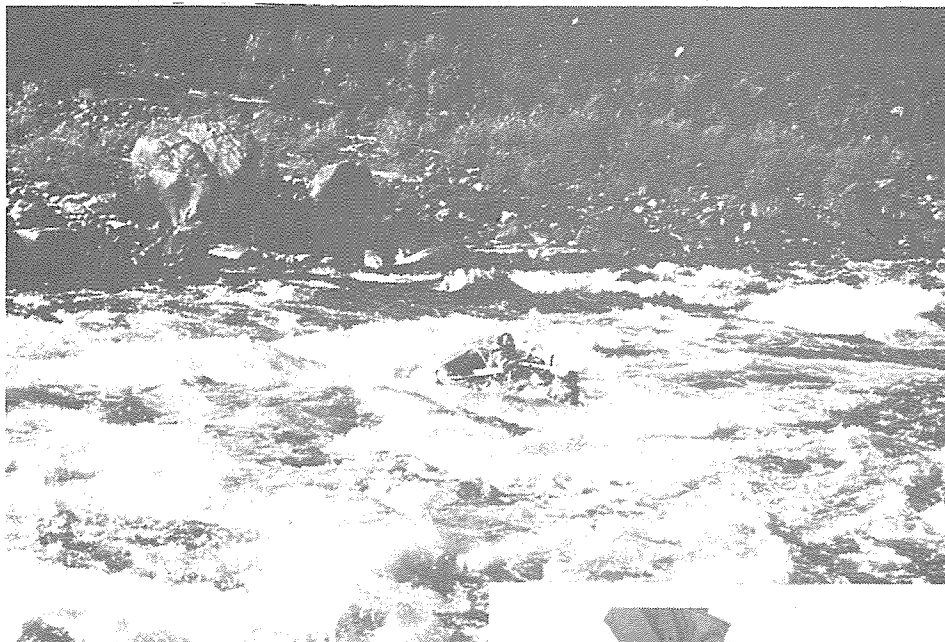
In the past we didn't carry these packs because there were so many cheap surplus bags available. A second look convinces us that these bags are a good buy for the money. It's a 12 mil. vinyl bag enclosed in a woven polypropylene sack for protection. The pak uses the Voyageur slide-closure to make a waterproof seal. Dimensions are: 22" x 36", weighs 1 lb. **\$10.00**



434

430

439



434 #1 PHOENIX DRY BAG

This is made out of 20 mil vinyl with a fold-over lip that fastens into a water tight clasp. Also has two heavy-duty grommets for tying it into a canoe, raft, or kayak. Peter Sonderegger used these bags in the Northwest Territories and says they're really nice. Dimensions are 13-1/2" x 18". **\$10.50**

436 #2 PHOENIX DRY BAG

Same design as the #434 bag, same high quality, but larger. Dimensions are 18" x 24". **\$13.00**

439 MAP CASE

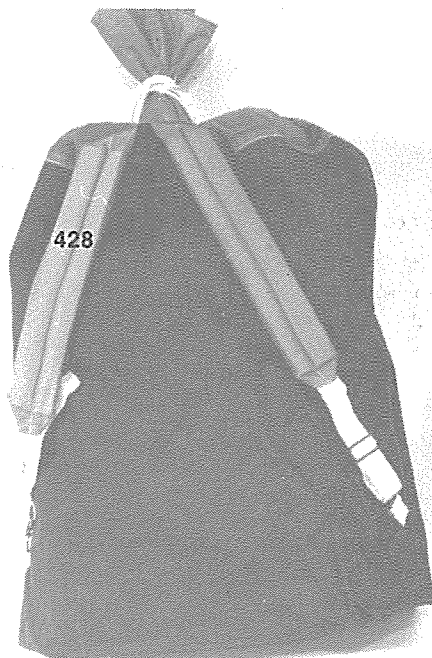
This see-through 8 mil. plastic pouch is great for maps and river guides. Its' zip-lock closure makes it waterproof (and easy to open), while the corner grommet makes it easy to secure (belt - frame - thwart). Also can be used to store wallets, books, etc. Dimensions are: 6-3/4" x 10". **\$.75**

430 VOYAGEUR CAMERA BAG

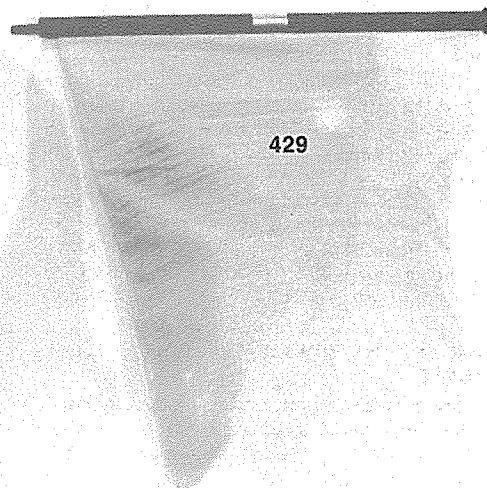
For two years now I have used a Voyageur camera bag to carry a camera in my kayak. No problem - its been a super bag. The bag has an inner foam padding to protect your camera and a valve so you can add a little air for further protection. The stem is just long enough so I can blow up the bag after it is in the place behind the seat. The tab/ears are beyond the slide closure so if they were ripped off (don't ask me how) the bag would still be water tight. Dimensions are 12" x 14", light blue 20 mil vinyl, includes repair kit. **\$12.00**

431 XLARGE VOYAGEUR CAMERA BAG

Same design as the #430 bag, only much larger. You can probably get a movie camera, with film or lunch, and a sweater in this one. Large enough to be a practical day bag, dimensions are 17" x 19". Light blue color, also includes repair kit. **\$15.00**



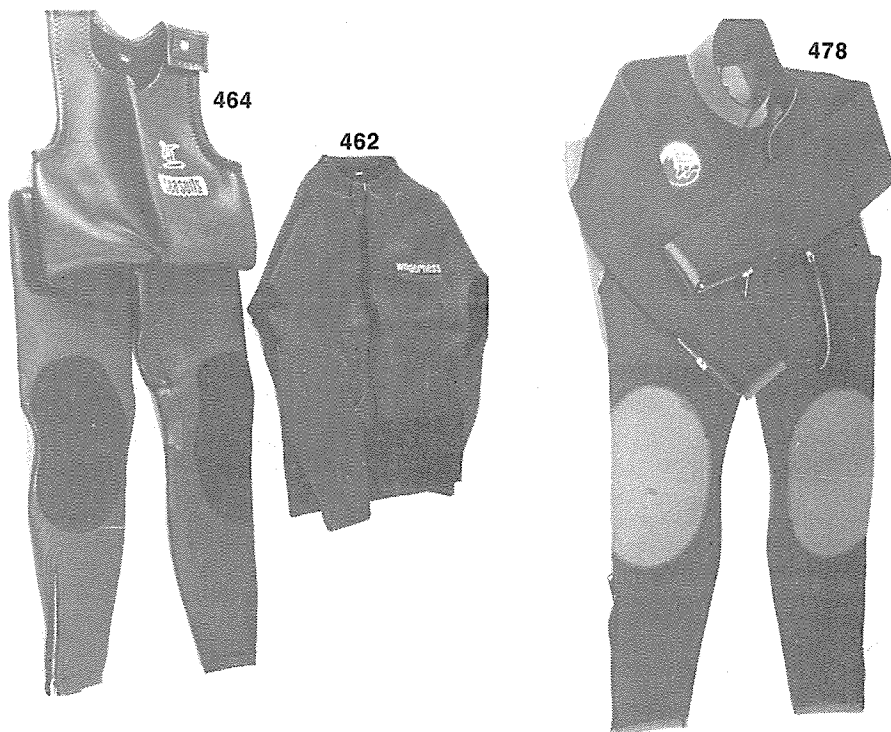
428



429

WET SUITS

Wet suits are a complicated topic and it's taken us some time to learn the relative merits of some types of wet suits. The heavier gauge suits (3/16" and 1/4") are sometimes necessary for diving because the neoprene compresses at depth. We don't sell these suits (except as special orders) because they give you sort of an ape-man feel, and aren't recommended except for those who dive. The 1/8" suits are flexible and comfortable and offer sufficient warmth for almost all trips including those in early spring. The farmer john pants and jacket combination provides two layers of neoprene over the vital body areas and should be sufficient protection for all normal situations. Arm and leg zippers are standard on all our suits that have arms and legs because after a day of kayaking, it's really a drag to take ten miserable minutes trying to get out of your suit. These suits are of the finest domestic nylon-lined neoprene - all suits carry a one-year unconditional guarantee against defects in material and workmanship. Full suits offer the most protection, and are also the most versatile because you can wear the top or bottom alone, I wear a full suit for really cold weather, and either the top or bottom alone the rest of the time. If the weather is nice, then the farmer john gives good protection without roasting - and you can loan out the top to someone who doesn't have a suit. The short john provides emergency protection for rafters, and is a good kayaking suit for warmer weather - because it doesn't have arms it provides a lot of freedom and you don't have to worry about smelling like a goat at the end of the day. The T-shortie model has short arms and legs and gives a little more warmth than the short john and is therefore more comfortable in colder weather. The long john model has long arms and legs, offers very good protection, and is popular with those who are willing to give up some of the versatility offered in the two-piece suits to save a little money. For severe weather conditions, wet suits of any thickness are often cold, but just wearing a nylon shell takes off the chill. Suits are available in many models and sizes. If you need or would like a custom suit (or want a suit model that we don't offer), just send us your needs and we will reply right away.



WILDERNESS SIZING CHART - USE FOR WETSUITS #462 AND #464

MEN	CHEST	WAIST	HIPS	INSEAM	HEIGHT	WEIGHT
Small	36-39	29-32	31-34	26-29	5' 6"-5' 8"	135-150
S-Medium	38-40	30-33	32-35	27-29	5' 7"-5' 10"	140-160
Medium	39-41	31-34	33-36	27-30	5' 8"-5' 11"	155-170
M-Large	39-43	32-35	34-38	28-31	5' 9"-6'	160-175
Large	41-44	33-36	36-40	30-33	5' 11"-6' 2"	170-190
X-Large	44-46	35-39	40-44	32-34	6' 2"-6' 4"	195-220
WOMEN						
Small	31-33	24-26	33-36	22-24	5' 0"-5' 3"	95-110
Medium	33-36	26-28	35-38	25-27	5' 3"-5' 7"	110-135
Large	35-39	28-30	37-40	28-30	5' 7"-6' 0"	135-150

** Custom suit information upon request **

462 WILDERNESS JACKET

This jacket is cut an extra 6" long - thus it provides about the same protection and yet more freedom than the beaver tail type jacket. These jackets are made of 1/8" Rubatex nitrogen blown neoprene with a nylon inner liner. The full length front zipper, 2 arm zippers, and 6 sizes offer an almost custom made fit without the custom charge. We've found the sizes to be a bit large, so if you fit two sizes - we recommend the smaller. \$40.00

NRS SIZING CHART - USE FOR WETSUITS #470, #474, AND #478

MEN	CHEST	WAIST	HIPS	INSEAM	HEIGHT	WEIGHT
Small	33-36	28-31	34-36	25-27	5' 4"-5' 6"	120-140
Medium	34-38	30-33	36-38	26-28	5' 7"-5' 10"	140-160
Large	36-41	32-36	38-41	27-30	5' 11"-6' 1"	160-190
X-Large	37-43	33-38	40-43	29-32	6' 1"-6' 3"	190-220

464 WILDERNESS FARMER JOHN PANTS

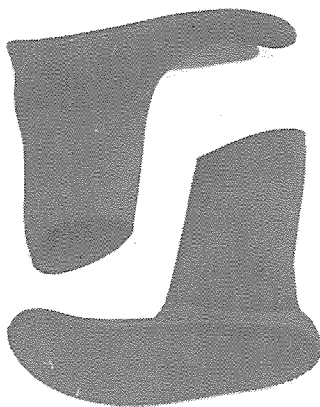
Same material and workmanship as found in the #462 jacket. Cut like a farmers bib overalls with leg zippers - an ideal rafters suit. Keeps your legs and body warm, yet doesn't bind the upper body and arms. Again, 6 sizes offer an almost custom fit - also a bit large so check the smaller size that fits you. \$50.00

WOMEN	BUST	WAIST	HIPS	HEIGHT	WEIGHT
Small	32	24	34	5' 3"-5' 5"	110-120
Medium	33½	26	36	5' 5"-5' 7"	120-135
Large	35	28	38	5' 7"-5' 9"	135-150
X-Large	37	30	40	5' 9"-6' 0"	150-165

** Custom suit information upon request **



484



480

465 WILDERNESS SUIT

Buy both the jacket and the farmer johns and save \$4.00. When ordering, please size both the jacket and the farmer johns separately - we will mix & match sizes to insure a correct fit for you. **\$86.00**

470 NRS SHORT JOHN

Resembles a one-piece (and modest) bathing suit. 1/8" neoprene, velcro shoulder entry with snap, short arms and legs. This suit is sometimes worn under other clothing by rafters for emergency protection. **\$36.00**

474 NRS T-SHORTIE

A partial suit with short arms and legs, zipper entry. 1/8" neoprene, nylon lined, short collar. This is a popular model for moderately cool water and weather - protects the upper body well. **\$46.00**

478 NRS LONG JOHN

Shaped like the old one-piece Union suit, except much better looking. These suits have rolled cuffs, knee pads, full length front zipper, and arm and leg zippers. A good three-season suit - also a very practical buy cost wise. **\$70.00**

480 SURF BOOTS

The soles are thicker than they were in the past so there is less chance of rock bruises. The best way to keep your feet warm and also protect your feet from stickers and sharp rocks is to wear a pair of boots inside a pair of tennis shoes a couple of sizes too large. Make sure the shoes have rubber soles instead of vinyl for better grip. Also, some people glue indoor-outdoor carpeting on the soles of the tennis shoes to give better traction on rocks. 3/16" neoprene, nylon inside lined. Mens sizes 4-13 (please state if ordering womens sizes). **\$13.00**

482 MOLDED SOLE BOOTS

These are a new (and we believe superior) type of wetsuit boot. They have a molded non-skid rubber sole that provides great traction and good abrasion resistance. Kayakers often wear out the heel of their boots against the bottom of the kayak - this shouldn't happen with these boots. I wore a pair all last summer and found them to be very comfortable. 3/16" neoprene bonded to a 3/4" rubber sole, sizes 4-13 (please state if ordering womens sizes). **\$20.00**

484 3-FINGER MITTS

These are a new style of mitt for us. We've found that this design is much more comfortable, insures a better grip, and seems to last longer than the old style mitts. You still can't pick up a dime when you have the mitts on, but how many dimes do you need on a river? Very practical for both kayaking and canoeing, sizes: S, M, and L. **\$9.00**

488 WETSUIT GLUE

Really a black liquid neoprene in some sort of solvent base. Use for fixing your spray skirts or wet suits, or can even be used for repairing rafts. 4 oz. can with brush top. **\$1.50**

489 MILITARY SURPLUS BOOTS

We bid on a large number of new divers boots - and they were all small - fit women's sizes 7 and under. Very good buy while they last - manufactured by major U.S. Sports Goods firm - #1 quality. Semi-hard sole cannot be worn inside tennis shoe. **\$5.00**



470



474

KAYAK AND CANOE ACCESSORIES

KAYAK PADDLES

601 ILIAD FLAT BLADE

The Iliad paddle is the best handling and most durable paddle we know of. It was improved last year by the addition of a neoprene shaft covering - it makes a really great grip, and doesn't take heat away from your hands like a metal shaft would (however it can give blisters to the unwary). Truly this is the best paddle we have ever used and its widespread popularity is well deserved. We offer three lengths: 82", 84", and 86". For most people the 84" length is correct, smaller than average - 82", larger than average - 86". Yes, Iliad does make a less expensive model of paddle, but it's not meant for whitewater use. **\$62.00**

602 ILIAD SPOON BLADE

Same quality paddle as the #601 paddle, but with a slight spoon blade. Neoprene covered shaft, blade measures 8-3/8" x 22", 84" paddle weighs 3.2 lbs., right hand control only!, 82", 84", 86" lengths. **\$62.00**

604 84" NRS PADDLE

These are our own design, it has a heat shrink vinyl grip and integral caps to stop leakage (it floats). The vinyl gives an excellent grip and also helps keep your hand warm. We use Cannon Magnum blades (9" x 20") and Alcoa 6061-T6 aluminum shaft. Shipped unassembled. **\$24.00**

606

7 ft. CARLISLE AUSABLE PADDLE

These 7 ft. breakdown kayak paddles have 8" x 20" blades, smooth ABS plastic covered 1-1/8" shafts, and the most secure slide-lock joints we have ever seen. The breakdown feature allows you to carry it under your float bags, or with the use of the #607 handles - have the rafters/canoests carry your spare paddle for you. Beige blades with Brown shafts, weighs 50 oz., waterproof so it floats. **\$24.00**

607

KAYAK/CANOE ADAPTER HANDLES

These handles allow you to change a Carlisle AuSable breakdown kayak paddle into 2 canoe/raft paddles - the best idea we've found for taking along that spare paddle. Sold only in pairs, 7 ft. kayak paddle becomes two 60" canoe paddles. **\$6.00 pr.**

608

8 ft. CARLISLE AUSABLE

Same quality paddle as the #606. This is the paddle we recommend for use with the inflatable canoe/kayaks (their added width makes it a bit difficult to paddle with a normal 7 ft. paddle). Beige blades with brown shaft, with #607 adapter makes into two 66" canoe/raft paddles. **\$25.00**

609

108" NRS PADDLE

Same as the #604, but 24" longer, Bill Rollins, who first persuaded us to make these double bladed canoe paddles, says they are far superior to single bladed paddles for solo canoeing (also can be used in the small yellow duckie type rafts). The technique is really quite simple - and the advantages are obvious the first time you try them. Shipped unassembled. **\$26.00**

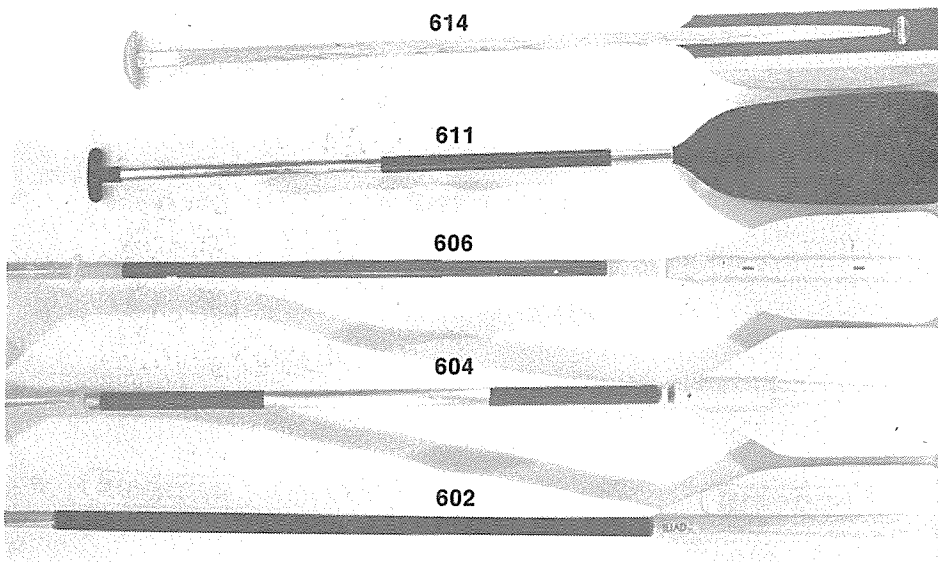
CANOE & RAFTING PADDLES

Paddles have progressed a long way in just the last few years. The new aluminum and plastic paddles are stronger and less expensive than quality wood paddles. For whitewater rafting, fairly long paddles may still be necessary, but for canoeing, the wider shorter blades allow you to use a shorter paddle. Don't get sucked in by all that up to your chin, nose or forehead stuff. Choose a shorter, more comfortable length. Rafters will need the slightly longer lengths, particularly in a raft with large tubes.

611

MOHAWK PADDLE

We have now had a whole year of experience with these paddles and they are an outstanding buy. Despite their low price (it takes us just as long to wrap a Mohawk as it does to wrap an Iliad), we still prefer them to competitive models costing twice as much. The small 1-1/8" dia. shaft is now anodized (new for 1978), has a heat shrink vinyl shaft grip, and a molded plastic T grip which is pretty comfortable and gives good control. The blade is made of a tough ABS plastic with a metal insert. It can take a 90 degree bend in the lower blade, and seemingly it suffers no ill effects. The paddle and T grip are forced inside the shaft - the result is a waterproof (it floats) paddle. We offer three lengths: 57", 60", and 63", 60" is the most common choice for rafting use. **\$8.95**



614

SAWYER CANOE PADDLES

If you love the feel, flex and look of a fine wood paddle, Sawyer has the paddle for you. These are paddles you can use for a full day without feeling the strain. The SCT-8 has a modified T grip, a laminated 3 piece fiberglass reinforced blade, and a quality shaft finished in a durable marine finish. Weighs less than 2 lbs., sizes: 54", 60". **\$14.00**

617

12" GLASS-IN FOOT BRACE

Longer version of the #615, 9-3/8" adjustment. **\$12.00 pr.**

618

13" SCREW-IN FOOT BRACE

Longer version of the #616, 10-1/4" adjustment. **\$12.50 pr.**

YAKIMA FOOT BRACES

If you are making your own kayak, or have bought one without braces, these individually adjustable foot rests are just the ticket. They are the new model with the simple little latch to adjust them easily. You can even adjust with your foot while sitting in the kayak! They have a neoprene covered foot pad and are the best we've seen in any kayak. Most manufacturers have switched to them, and some customers have taken out the foot rests in their new and very expensive name-brand kayaks and substituted these. Improved last year by doubling the number of adjustment slots and simplifying the installation of the screw-in models. We offer models for fiberglassing or drilled and tapped with screws, in the past I've always recommended fiberglassing, but the new screw-in models are so simple and neat you must be a purist to take the extra effort to fiberglass (if you do-be careful not to get resin in the slide!). The longer lengths and adjustments are ideal if you have several different size people using the same kayak.

615

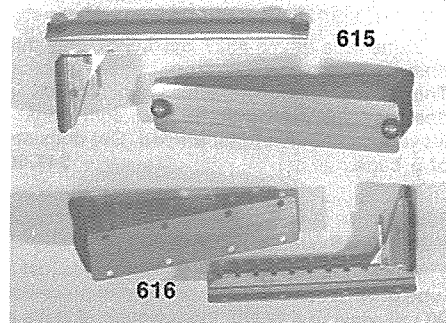
9" GLASS-IN FOOT BRACE

These have holes bored in the base plate to help the fiberglass bond them in - 6-1/4" adjustment slide. **\$10.00 pr.**

616

10" SCREW-IN FOOT BRACE

All it takes is two screwholes and these are in place. Screws included, 7" adjustment. **\$10.50 pr.**



FLOATATION BAGS

621 KAYAK FLOAT BAGS

Why risk it? These are a great help in keeping your kayak healthy. 20 mil. vinyl, high quality seams, inflation tube and large deflation valve. Bow and stern bag. **\$20.00**

623

KAYAK SPLIT BAGS

Designed for boats with foam center pillars (or for any other reason) these are quality 20 mil. vinyl bags to keep your boat afloat. Set of 4 bags (2 bow and 2 stern). **\$31.00**

625

VOYAGEUR STO-FLOATS

We switched to Voyageur Sto-floats after seeing these bags in use for several years. The quality of these 20 mil. blue vinyl bags impressed me. They have a positive closure that resists the pressure of big water on the deck, the side entry slide is easy to open but somewhat difficult to get your gear in and out of. Set includes bow and stern bag; and repair kit. **\$33.00**



627 PHOENIX STO-FLOATS

Phoenix has developed a nice combination storage set which consists of two short float bags and a large sto-float bag. The two float bags stay inflated all the time, this way the float integrity is maintained separately from the gear. The gear bag uses the Phoenix roll and twist lock closure system - proven trustworthy thru seasons of use. 20 mil. clear vinyl, set consists of 3 bags. **\$36.50**

628 PHOENIX SPLIT STO-FLOATS

Same idea as the #627 Sto-floats, only this time the short bow and stern bags are splits. This is the only system we know of that is designed for both storage and split bags - leave it to Phoenix to fill a need. Set consists of 5 bags. **\$47.00**

630 VOYAGEUR VINYL REPAIR KIT

This kit isn't as extensive as some - its just a tube of vinyl cement and some small pieces of 20 mil. vinyl in a handy foam pouch. But it's a lot less expensive than the bigger ones and adequate for any repair job we've ever had. **\$1.25**

631 C-1 FLOAT BAGS

20 mil. vinyl bags to keep your boat healthy if you should decide to leave it suddenly. Set consists of 2 bags. **\$24.00**

633 C-1 SPLIT BAGS

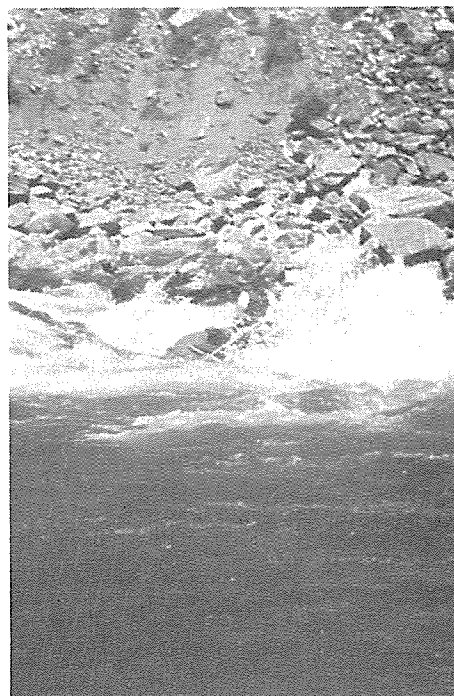
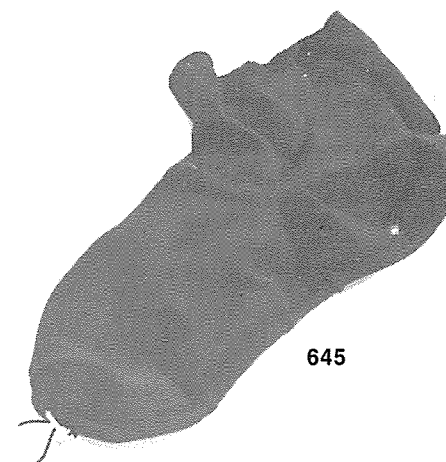
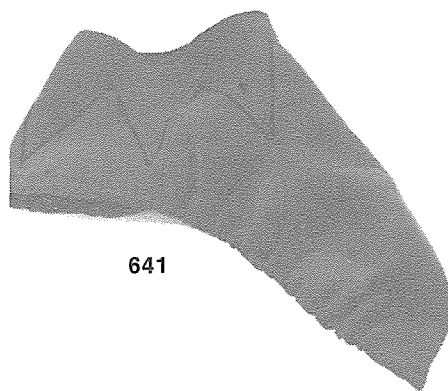
Same idea as the #631 bags, only for those of you that really put your C-1's into heavy water, here are the bags that may bring you back out! Set consists of 4 bags. **\$34.00**

635 C-2 FLOAT BAGS

Same 20 mil. vinyl construction, only the set consists of 3 bags. One large center bag and two short bow and stern bags. **\$29.00**

637 SEDA OPEN CANOE FLOAT BAG

It's a big 3' x 5' center bag for those of you that put your open canoes into the really big whitewater. 20 mil. vinyl construction, has 4 grommet tie-downs. **\$18.00**



639 PHOENIX DRY-STORAGE BAG

Although this is the bag that is used for storage in the #627 & 628 kayak sets, it can be used as a center sto-float bag for an open canoe or C-2. Measures 25" at its widest end and tapers to a width of 20" at the small end, total length inflated is 31", opening of the bag is 20", 20 mil. clear vinyl construction, has 2 grommet tie-downs. **\$20.00**

SPRAY SKIRTS

641 NRS SPRAY SKIRT

This is our high quality standard spray skirt. Don't avoid this one just because it's less expensive. 1/8" neoprene, sewn and glued seams, stretch-type draw cord, fits any boat that measures 72" or less (measure under cockpit rim with a rope or cloth tape). Waist sizes: Small - fits up to 30", Medium - 31" to 35", Large - 36" & up. **\$21.00**

643 NRS TOURING SKIRT

Same construction as #641, fits boats with cockpits larger than 73". Also same waist sizes as #641. **\$22.00**

645 SUPER SPRAY SKIRT

Aquaterra makes this model and it really is neat. It not only has glued and sewn seams, but it also has reinforced grab loop with a whiffle ball and a foam pad built inside the back so you can roll and paddle in comfort. This is the best spray skirt we have ever seen or heard of - well worth the price. Small fits up to 30", Medium - 31" to 36", and Large 37" and up. Fits boats with cockpits up to 74". **\$25.00**

647 AQUATERRA TOURING SKIRT

Same quality construction as the #645, designed to fit boats with cockpits larger than 74", waist sizes the same as #645. **\$27.00**

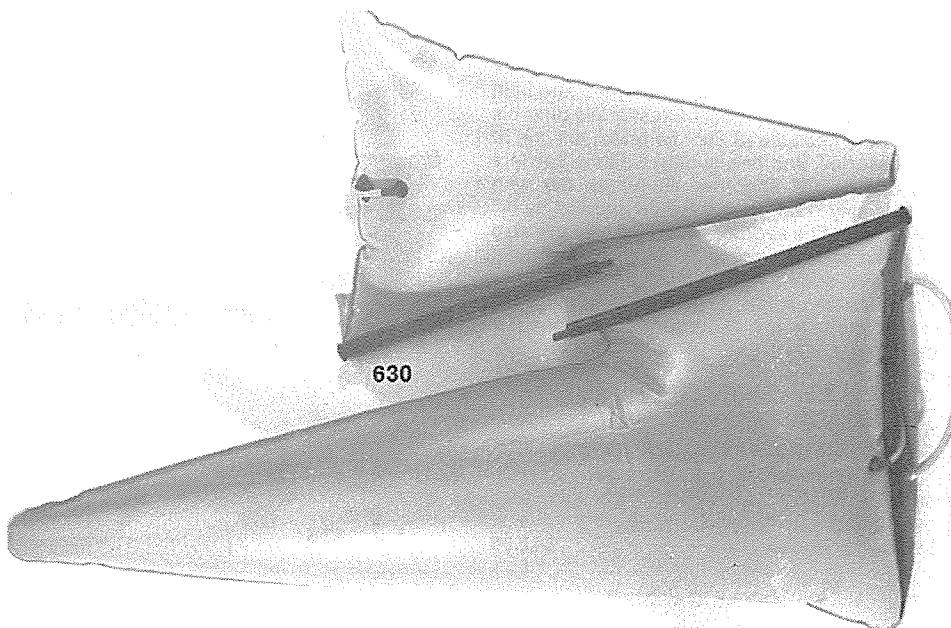
649 C-1 SPRAY SKIRTS

Our first venture into C-1 skirts - we haven't tried it but since its made by Aquaterra, we know it's good. Should fit all models of C-1's, waist sizes same as #645. **\$24.00**

HELMETS/JACKETS/ MISCELLANEOUS

650 NONA HELMETS

As you may recall, we weren't very satisfied with the helmets available in the past - they didn't offer enough protection. Nona put a lot of time and effort into the problem and they now have a superb helmet. So for 1978 we have limited ourselves to one helmet - it's not the only good helmet around, but it is one that we know and trust (beware of the light plastic helmets - we've found that you can hit your head just as hard in a class II as in a class IV rapid). The Nona helmet has a high impact fiberglass shell, a styrafoam liner with velcro-backed foam pads for sizing, and a heavy duty chin strap with a D-ring type closure. We offer the helmet complete with chin cup and detachable visor, also in your choice of either Orange or White. S/M fits size 7 and smaller, L/XL fits sizes 7½ and up. **\$36.50**



655 KAYAKING POGIES

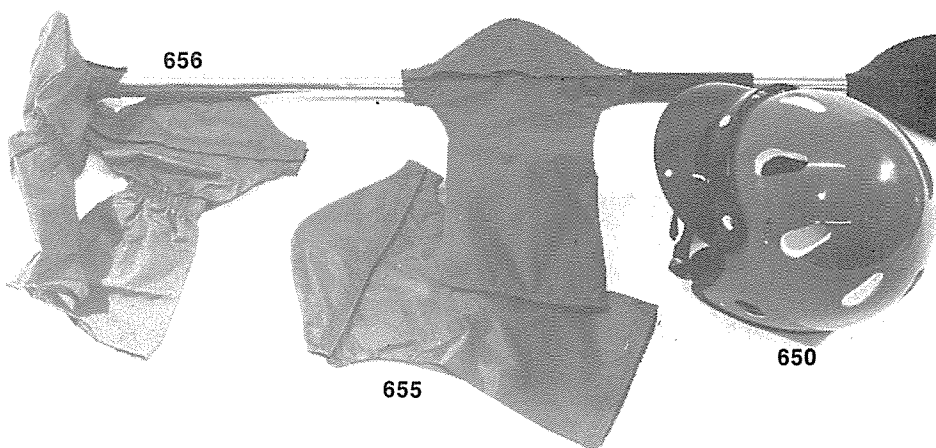
These neat little items attach to your paddle shaft and you then put your hands through an opening to grasp the paddle. Coated nylon, elastic wrist bands, velcro adjustments to fit the paddle shaft. One size fits all. Great idea for cold weather. **\$11.00 pr.**

656 CANOEING POGIES

Same as #655, except one Pogie has a single hole to fit over the end of the canoe paddle. **\$11.00 pr.**

657 UNIVERSAL POGIES

Combination of #655 and 656. Two kayak pogies and one canoe pogie for the real fanatics. **\$16.00 set**



660

A.B. SEA PADDLING JACKET

I've been wearing an early model of this jacket for a couple of years now and really like it. The jacket is a simple design that has proven to be very comfortable, dry, and warm. Manufactured in a dark blue, waterproof nylon with neoprene cuffs, velcro neck and collar closures, and a waist drawstring. It has a large (center of the chest) kangaroo pouch with velcro closure and a fold away hood that is really great when it rains. Sizes run a bit small: S, M, L and XL. **\$30.00**

662

AQUATERRA PADDLING JACKET

Brian Hall has been steadily improving this jacket for a couple of years now, and it's really a tough decision between this and the A.B.-Sea jacket. This jacket has a better designed-pouch (also a zipper closure) and an added strip of material under the raglan sleeve to make paddling very comfortable. It doesn't have a hood, but it has a velcro and snap closure system on both the arms and the neck. Dark blue nylon with light blue stripes, sizes run a bit large: S, M, L, and XL. **\$26.00**

667 SEDA BOAT POLISH

This stuff really brings back the color and life to a well used boat. 8 fl. oz.s' of non-toxic, biodegradable, non-explosive polish in a plastic bottle. **\$2.75**

668 SEDA BOAT TAPE

If you're going to take the time to polish it, the least you could do is replace that beaten up old seam tape. 1" by 36 yards, black, blue, red, or white. **\$3.75**



665

SEDA FIBERGLASS REPAIR KIT

Most other kits are just resin, hardener and cloth, but Seda took the time and effort to put in all those little extra items like brushes and stirrers that really help simplify a repair job (especially on a trip). Packaged in a metal can, contains 1 pint resin, hardener, cloth, etc. etc. **\$12.00**

KAYAK AND CANOE CARRIERS

The workmanship on the Yakima Kayak Carriers, as on all products designed and built by Otto Lagervall, is just fantastic. We offer his products because of the low price, full line of accessories, and fine quality. Yakima carriers have a 1-1/8" anodized aluminum bar with two quality "feet" on each side padded by 1/4" neoprene. The saddles for the kayaks are also padded with neoprene to protect the boats. We have added the full line of Quik-N-Easy products for canoes this year. We felt that extra strength might be essential to transport canoes - Quik-N-Easy carriers fulfill that demand.

670

54" STANDARD KAYAK CARRIER

Includes two 54" bars with attachments, saddles for 2 kayaks, hold down kits, etc., everything you need to transport 2 kayaks. Drilled for accessories. **\$42.00**

671 VW KAYAK CARRIER

Same as the #670 carrier except the bars are 43" long and the "feet" are longer to compensate for the roof slope. Nice for some other sub compacts too because there is less chance of striking your head on the bar end. **\$42.00**

672 6 ft. KAYAK CARRIER

This is the best kayak carrier for a van or bus. All the equipment for 3 kayaks is included. If you only wish to carry 2 kayaks, deduct \$10.00 and state "for 2 kayaks" on your order. Because of its length, the 6 ft. carrier is not drilled for accessories. **\$58.00**

675 KAYAK SADDLES

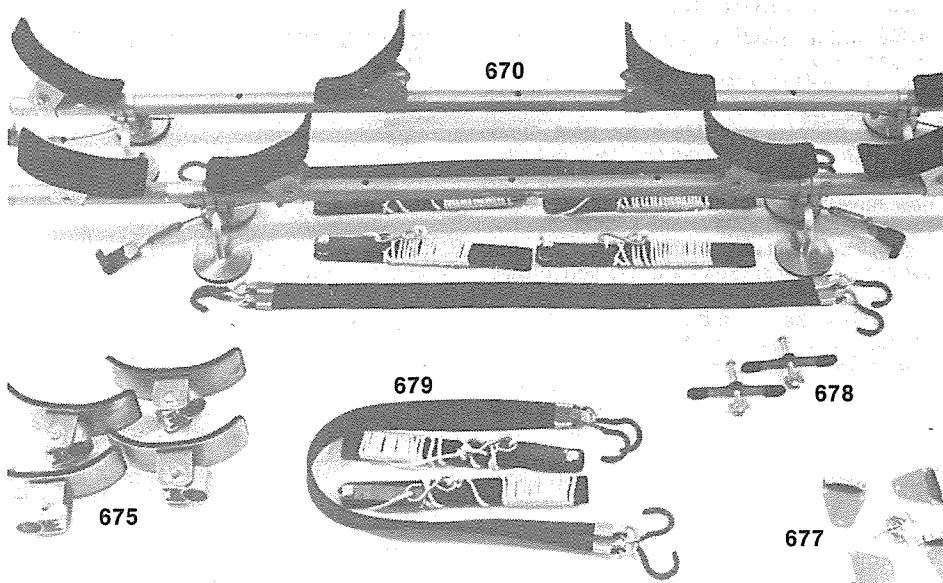
Set of 4 neoprene-lined kayak saddles, designed to fit a 1 1/8" dia. bar. The most practical and careful way we know to carry a kayak. **\$7.00 set**

676 1" BAR ADAPTERS

Set of 4 shims needed to make one set of Yakima Kayak saddles fit a 1" dia. bar carrier. (Quik-N-Easy, Ranger Racks, etc.) **\$1.00 set**

677 GUTTERLESS ADAPTERS

Set of 4" Yakima adapters for cars without rain gutters. Requires drilling of holes into the roof to mount. **\$1.00 set**



678 YAKIMA SKI BARS

Ski bars (pair) for one pair of skis. An easy way to convert your standard or VW carrier for winter use. **\$1.25 pr.**

679 KAYAK HOLD DOWN PACKAGE

Rubber belts with plastic covered hooks, bumper clips, rope tighteners, bow and stern hooks, braided nylon rope. All the items necessary to fasten your kayak securely to your bumpers and rack. This package lets you secure the kayak in seconds without having to tie a single knot. **\$4.50**

681

QUIK-N-EASY BRACKETS

These are those neat little brackets that allow you to make your own rack (from 2 x 4s or plywood). Set includes four brackets; complete with plastic covered gutter hooks, turn-buckles, etc., - all you need to do is drill 4 holes and mount the wood and you have a rack. **\$19.50**

682 CAMPER BRACKETS

This bracket fits on your canopy or camper. Requires drilling before mounting - bolts not included. Quik-N-Easys' answer for the person who wants to build their own rack, but has a canopy. Set of 4 brackets. **\$16.00**

684

STANDARD CANOE CARRIER

Quik-N-Easy standard canoe carrier includes 4 tumbled yokes with levers, clips, tube holders, 2-60" long 1" dia. steel tubes, and 1 set of boat clamps. Everything you need to carry 1 canoe. **\$38.00**

686 DOUBLE CANOE CARRIER

Same as the #684 carrier except the bars are 78" long and the carrier has 2 sets of boat clamps. Have no concern that two canoes might be too heavy, Quik-N-Easy zinc plated steel tubes are safety rated to carry up to 500 lbs. **\$50.00**

688

QUIK-N-EASY SKI CLAMPS

Ski clamps set includes 2 clamps with eye bolts, wing nuts, and washers. Set holds 1 pair skis. **\$4.50**

690

FOAM-BLOCK CANOE CARRIER

This carrier has been very carefully designed and beautifully made for vehicles without rain gutters. Kit contains 4 foam blocks, bow and stern tie downs which use HD hardware and 1" webbing, and 2 straps to go around the canoe. Not recommended for station wagons with luggage carriers. **\$20.00**

692 RUBBER BELTS

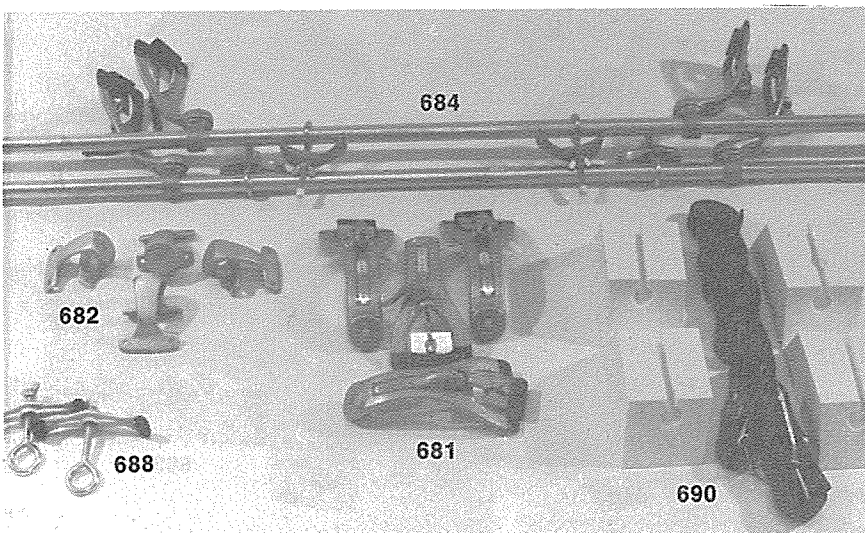
Stronger than bungee cord and better hooks, too. 36" long, plastic covered hooks - great for tying down kayaks, canoes, etc. **\$2.25 pr.**

694 MANTA RUBBER ROPE

This is heavy-duty stuff. Use it with #695 hooks for securing canoes - 12' and 4 hooks make a good bow and stern tie down set. We've used it to lash down gear in a raft - great for just about anything. **\$.30 ft.**

695 STEEL HOOKS

Hooks for use with the #694 rubber rope. You need 2 hooks for each piece of rope. Package of 4. **\$1.00**



699 CANOE CARRIER

Although pack design has improved tremendously over the past few years, canoes are still carried inefficiently and painfully on the shoulders. Chris Tapfer mounted little frames on his pack and placed the weight on the hips where it belongs. I refined his design so the bracket fits down inside the frame (fits most aluminum frames including Camp Trails, REI Cruiser, Kelty, etc.). The cast aluminum bracket fits into the top of the frame and is held in place by the top pack clevis pin. The rubber-covered brackets hold your canoe securely on the pack frame. This bracket is a simple inexpensive replacement for portage yokes which were always a drag to use.

\$14.00 pr.



753

INFLATABLES

Inflatable canoe/kayaks we can really recommend! Canoe/Kayak? They're open like a canoe but should be paddled like a kayak with a double bladed paddle. They handle more like a kayak than a canoe, but can anyone out there do an Eskimo roll in one? We really like this design and for years have thought they were more fun than any other boat for playing in rivers without needing the skill level demanded for a kayak. We think the ribbed inflatable floor is the key to their success.

751 K-77 TAHITI

Although this boat is made of unsupported PVC material, Sevyllor assured us last year that they had the seam problem corrected. We carried them, and haven't had a recurrence of the previous problems. These boats are covered by a limited use (no rental or professional use) 12 month warranty. Since the design is nearly the same as the Sea Eagle Explorer, yet the price is half as much, these boats seem to be an exceptional buy. Beware of much cheaper boats, they are usually poor quality and don't last. Dimensions are: 11' long, 2'10" wide, 9½" dia. tubes, 2" bow & stern rise, 3 air chambers w/small valves, weight: 19 lbs.

\$110.00

753 GT-79 TAHITI

I first saw these on the lower Salmon being used by Orange Torpedo Tours. They were quite happy with them and felt this model offered substantial improvements over the K-77 Tahiti. We agree with them, this is a well designed boat. Although both models of the Tahiti are the same length and width, the GT-79 weighs 5 lbs. more - much heavier tube and floor material! It also has a larger seat, improved bow dodger (really deflects the water), and 3 large one-way/screw-in type valves. The GT-79 is designed to be used by one person - in a lot of whitewater! Dimensions are: 22' long, 2'10" wide, 9½" dia. tubes, 4" bow and stern rise, 3 air chambers with large valves, weight - 24 lbs.

\$150.00

757 340 SEA EAGLE EXPLORER

Leisure Imports has developed a new, stronger, supported PVC material for use in the Explorer line of boats. Relatively high strength and low expansion factors are obtained by using a polyester scrim between two vinyl layers. The seams are now overlapped ¾" which promises exceptionally dependable service. In the past, holes could always be patched, but seam leaks and splits rendered many PVC boats useless - this new material should mean the end to seam problems. The #340 is large enough for two people, or one person and a few days gear. Dimensions are: 11' long, 2'9" wide, 9" dia. tubes, 2 large screw-in type valves in main chambers, inflatable floor, weighs 34 lbs.

\$230.00

754 SEVYLOR REPAIR KIT

An adequate river kit designed by Sevyllor for use with their boats. We also have extra valves, etc., - items that you might need during the life of your Tahiti. Please request and we will answer.

\$2.25

759 LEISURE IMPORTS REPAIR KIT

Designed by Leisure Imports for use with their Sea Eagle boats.

\$2.50

KAYAKS - WHITEWATER BOATS

Kayak design is complicated and mainly intuitive. Dick Helds' whitewater/slalom boats have become very popular here in the Northwest with big water kayakers. His boats have four layers of glass cloth saturated with Isotholic resin and extra reinforcements in the bow, stern, and cockpit rim. The top mold is specially constructed so the rim can be an integral part of the deck. The boats use the excellent foot braces by Yakima Industries and knee pockets for bracing to keep you snug in a roll or in heavy water. The seats are removable and adjustable. Kevlar bottomed boats are available for an extra \$50.00 (1 layer of glass, 2 layers of Kevlar, 1 layer of glass). For more information write for Dick's brochure. Because of freight problems all boats must be picked up in Moscow, Idaho or Cedar City, Utah.

761 SALMON

The Salmon is very maneuverable and has the high volume so desirable for use in big water. The boat has a slight "shovel" shape in front which keeps it from diving when surfing or riding big water. This may be the best surfing kayak in the country. You can carry all your gear on a river such as the Salmon (guess where he found the name) and still not feel like you are paddling a log. Some big water boaters won't use any other model. Length: 13'2", beam: 23-¾", weight: 33 lbs.

\$295.00

763 LOCHSA

A smaller volume version of the Salmon in a fast medium/low volume boat. Has the same hull design as the Salmon, but superior ability to slice through "stoppers". If you don't need the carrying capacity of the Salmon, this boat may be the best answer. Length: 13'2", beam: 23-¾", weight: 31 lbs.

\$285.00



KLEPPERS

Klepper is the oldest and may be the most respected whitewater boat manufacture in the world. They have been building top quality folding boats for over 70 years - people who own Kleppers swear by them (not at them as is the case with some manufacturers boats). We believe these European touring kayaks to be much faster and more efficient than canoes, why they aren't used more here in the U.S. is a mystery to us. With the availability of lightweight back packing equipment it becomes unnecessary for a boat to be able to carry extremely heavy loads (75 lb. tents and 100 lbs. of flour, etc.), canoes are used because people automatically think "canoe" and don't consider the alternatives. Kleppers are now widely used for ocean touring and we expect they will soon become much more popular inland. Klepper brochure available upon request.

784 SKATE

Five days on the lower Salmon gave me a much better appreciation and understanding of this boat - it is comfortable, stable, and responsive. At first I worried that an inflatable kayak could wrap around a rock with the boatman still in it, however, after blowing it up to its recommended air pressures I found the Skate to be extremely strong and nonflexable. However, being safety conscious I would still avoid extreme rocky whitewater conditions that could lead to this potential danger. The hull is a heavy-duty hypalon material, 5 air chambers provide the floatation and rigidity to make this inflatable handle like a kayak (at first it is difficult to roll because of its width - just power it up). It's wider and deeper than the usual hard shell kayak, thus it is a little slower - but that extra width makes it very stable. Why must recreational kayaks conform to racing rules, a shorter (11 or 12 foot) and wider kayak would be a great idea for playing in whitewater. The skate has knee pockets, adjustable (air bag) foot braces, a fiberglass lace-in cockpit, bow and stern loops, and comes complete with a foot pump and plastic carry bag. Dimensions are: 13' long, 29" wide, weight - 35 lbs. **\$380.00**

780 AERIUS 2

This is the Klepper folding kayak that has been used all over the world - it's the absolute tops in its field. Packs down into 2 bags, yet its total weight is only 70 lbs. The 31 piece wooden frame (hand-crafted Ash and marine-laminated Finnish Birch) assembles in less than 30 minutes without tools or force (snaplocks into place). The shell has a heavy hypalon hull and a weather resistant canvas upper deck. Built-in airspoons assure stability and seaworthiness, all metal fittings are anodized and rust free. Boat comes complete with accessories: seat cushions, back rests, 2 wood touring paddles, carry bags, and repair kits. Dimensions are: 17' length, 34" beam, weight - 70 lbs. **\$840.00**

CANOES - GRUMMAN

Of all our products, these are probably the most well known. These canoes are light, very well designed and excellent quality. Product tests made by others and reported in CANOE MAGAZINE indicated Grumman first among aluminum canoes in quality, maneuverability, etc. Same freight problems as kayaks so you must pick these up in Moscow, Idaho.

771 17 ft. WHITEWATER CANOE

This model is made of .050 6061 aluminum alloy, has a beam of 36" and a weight of 81 pounds. Seven ribs provide extra strength and the shallow shoe heel gives excellent maneuverability. **\$425.00**

773 17 ft. STANDARD CANOE

This model has the same dimensions as the whitewater canoe, but has only 3 ribs and weighs 74 pounds. The standard T-keel gives excellent tracking ability for cruising, can be used for light river use - but we don't recommend it. **\$400.00**

CAMPING EQUIPMENT

We carried a few items for river camping in the past, but weren't really too excited about them. Last year we launched a search for items that are particularly well suited for river use and found the items listed below. Please send your suggestions for improvements and additional items.

ICE CHESTS AND COOLERS

802 2 GALLON WATER COOLER

Igloo and Gott both make superior coolers for mixing lemonade, etc. on the river. We were already ordering from Igloo so we went with their 2 gallon insulated cooler with the heavy-duty top you can sit on to make a stool. Includes spigot and 1 gallon plastic divider. Dimensions: 11" (W) x 13½" (H), red and white. **\$12.00**

806 86 QT. ICE CHEST

This is the freezer to all the competitors coolers. Having ice at the end of a week-long trip is only possible in these wonderful boxes. We know they cost a lot more than Coleman or Thermos, but the quality difference is there. These have Center Water Freezers, salad compartments and cutting boards. You can sit on them, and use them as seats in your frame (fits our #160 frame). Buy it if you can afford it. Dimensions: 33½" (L) x 16" (H) x 16½" (W), red and white. **\$70.00**

808 68 QT. ICE CHEST

Same quality as #806 but smaller, so it fits our #162 frame. Dimensions are: 28¾" (L) x 16½" (H) x 15¼" (W), red and white. **\$45.00**

DUTCH OVENS AND GRIDDLES

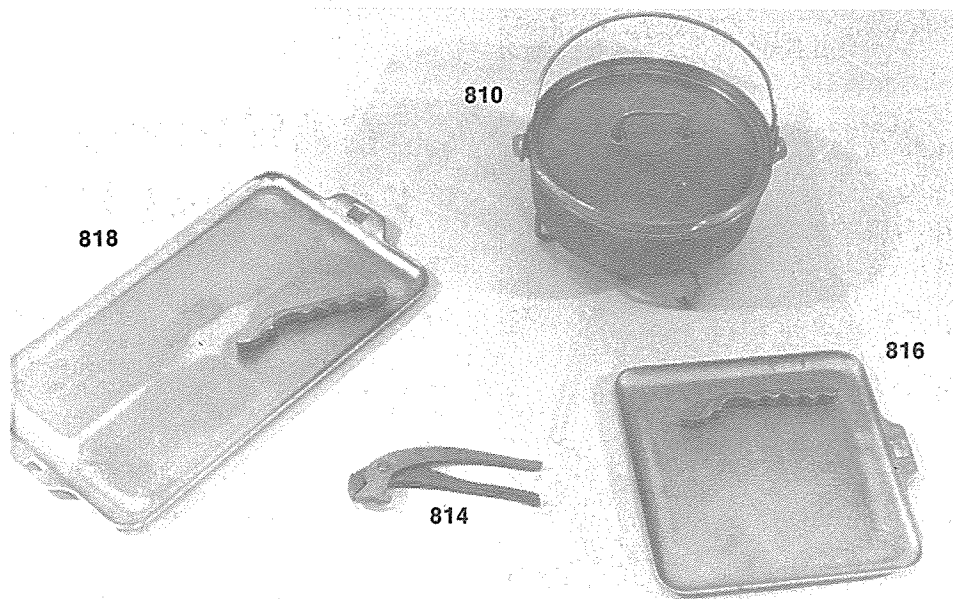
A Dutch Oven is a wonderful cooking utensil for outdoor (and indoor) use. For years we couldn't locate an aluminum Dutch Oven manufacturer (and didn't try too hard because we were told hot spots are a problem). After some research, we found cast aluminum is a very efficient heater conductor and performs very well. (Efficiency becomes important when you carry your own fuel). Light weight and tolerance of unusual cleaning methods make the Aluminum Dutch Oven an ideal river accessory.

810 10" ALUMINUM DUTCH OVEN

Use this for smaller parties, when space and weight are critical, or for side dishes. I'm tempted to take this one on a kayak trip when we don't have raft support. Nests inside the larger Dutch. Weight including lid, 4 lbs. **\$15.00**

812 12" ALUMINUM DUTCH OVEN

Serious river cooks usually use this size Dutch for cooking main dishes, desserts and some breakfast menus. Weight including lid, 7 lbs. **\$20.00**



814 ALUMINUM POT PLIERS

These are well designed because they have a good grip and the gripping angle lets you lift without getting scorched. They are compact, light (4 oz.) and have a grab loop for wire handles. If you don't buy the tongs, try those slip groove waterpump-type pliers from your local hardware store. In fact, try the pliers anyway, because they are much better for most river uses than regular pliers. **\$2.25**

816 10" ALUMINUM GRIDDLE

Perfect size for small groups, 10" x 10" griddle only weighs 2 lbs. Same quality workmanship as the Dutch Ovens, includes carry handle. **\$7.00**

818 18" ALUMINUM GRIDDLE

This is the one that we use the most because of its size, 10" (W) x 18" (L), more than enough room to cook bacon and eggs for a large party. Includes carry handle, still only weighs 3 lbs. **\$10.00**

STOVES AND SAWS

Environmental considerations are prompting more and more restrictions on fires for river trips. We agree with this concern for our environment.



821 PEAK 1 BACKPACKER STOVE

Although designed for backpacking, we feel that this is a perfect small stove for river use. Its light weight and compact size make it very easy to pack, either in a kayak or a raft. It burns Coleman fuel (Peak-1 is a new division of Coleman) very efficiently, and is relatively easy to operate. Comes complete with instructions, integral windscreen, and pan support. Dimensions are: 6-1/2" H x 5" x 5", weighs 31 oz. **\$27.50**

825 SVEN SAW

Requiring fire pans for river use makes a saw, which was formerly just a nice optional item, almost a necessity. The SVEN saw folds and slides into itself, making a package just 1/2" x 2" x 21" (saw teeth are covered so they can't cut or puncture anything!). This is the only compact saw that we know of that also cuts wood easily. Weighs less than 1 lb. **\$8.00**

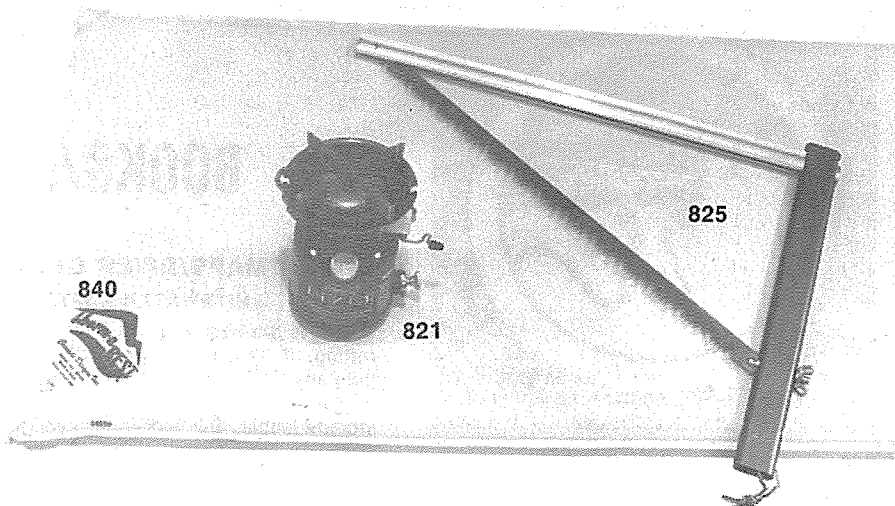
TENTS/TARPS/PADS

836 PAK TARP TENT

Three years ago we offered a tarp tent and thought it was a great idea. We dropped it because the importer discontinued it. Well, for 1978 the tarp tent is back! Manufactured by the Pak Foam people, this is a quality tent at a low price. Its big (9 by 11 ft.), absolutely waterproof, and versatile enough to cover from 2 to 6 people depending on how you pitch it. It's fire-retardant, lightweight, urethane coated, Ripstop nylon with overlapping, double stitched seams. 5 sewn-in tabs and 8 grommets let you pitch it just about anyway you can imagine. Includes 50-ft. of nylon braided cord (quick drying and rot resistant), weighs 36 ozs. **\$24.00**

838 GROUND CLOTH

A big 64" x 96" ground cloth to protect your sleeping bags from ground condensation. Water proof (urethane coated) nylon sheet has reinforced grommets for easy tying down. Weighs almost nothing. **\$10.00**



840 THERMA-REST MATTRESS

Why didn't I think of this? Open cell foam makes a good pad but is bulky, and air mattresses are cold and uneven but fold up into a small bundle. These people put a very light open cell foam in a nylon air mattress and it's neat! You just unroll it, open the valve and it sucks the air in! Give it a couple of puffs if you want it a little firmer and close the valve. To pack, open the valve, roll it up tightly, and close the valve. It stays rolled and slips into a plastic case only 4" in diameter. I'm going to give up my nylon covered foam for this even though I prefer a full pad to a 3/4 one. Coated nylon twill, 47" x 19" x 1 1/2", weighs only 24 oz. **\$29.00**

PEAK 1 TENTS

Peak 1 is a new division of the Coleman Company that specializes in innovative light-weight camping equipment. Their tents are modified A-frames (often referred to as Freestanding tents). The exterior stressed ridge pole provides rigidity and a cross mounted spreader bar increases interior volume and keeps the sidewalls out of your way. These tents are well designed and manufactured with excellent materials and quality workmanship. Two stuff sacks are provided for your packing convenience - and we include the optional shock-cord set to simplify tent set up.

832 PEAK 1 TWO PERSON TENT

This is a generous two person tent with more than average useable space - an excellent river tent. Floor measures 5' x 7', inside height is 44" at highest point, total weight is 5 lbs., 10 ozs. Includes tent, fly, poles & stakes, shock-cord set, 2 stuff bags and directions. **\$100.00**

834 PEAK 1 FOUR PERSON TENT

Now this is my idea of a tent! Lots of room if you need it - a good place to spend a stormy day with your friends. Floor measures 7' x 8', height is 59" at highest point, total weight is only 7 lbs., 10 ozs. Includes tent, fly, poles & stakes, shock-cord set, 2 stuff sacks, and directions. **\$130.00**



900 NRS BELT BUCKLE

A quality, solid brass buckle with our NRS Logo on it. Commercialism! Well maybe, but we still like'm. Other firms offer buckles for \$7.00 - not us. 3" dia. buckle with black background. **\$4.50**

973 RIVER OF NO RETURN

We haven't been able to see a finished copy of this yet - but the authors tell us it'll be as good as their MIDDLE FORK & SHEEPEATER WAR book (#970) - and that's good enough for us. Approximately 250 pages, it covers the Salmon River from Galena Summit to the confluence with the Snake River some 400 miles down stream. Major sections include a history of the area, history of navigation, and a mile by mile river map/guide (with diagrams and pictures) starting at North Fork, Idaho, and continuing to the Snake. Sorry, but this book will not be available until 1, May 78. **\$8.95**

BOOKS/MAPS/RIVER GUIDES

BOOKS/MAPS/RIVER GUIDES

950 WHITEWATER RAFTING

This is the best book we have ever seen on rafting. It has more and better information than any other book including some good tips on rowing a raft. For the novice, this book is indispensable. Bill McGinnis has good sections on equipment, reading and running whitewater, water emergencies, etc. The only "picky" criticism we have is that McGinnis doesn't think much of using small and light-duty boats for river running. Aside from this, we have to say this is the best book ever on the subject. If you can afford it, this should be your first choice. **\$12.50**

952 RIVER RUNNING

Verne Huser has many years of experience in running and guiding river trips. He is also a contributing editor to Downriver. He has done some excellent writing, and his book has good information although he is somewhat oriented towards going on a commercial raft trip rather than taking your own trip. This widens the audience, but at the expense of some information for people who take their own boats. Like Whitewater Rafting above, this book slights the use of small and inexpensive rafts. However, in the paperback edition at \$4.95, this is an excellent buy. **\$4.95**

954

ALL PURPOSE GUIDE TO PADDLING

This book has 15 chapters and 15 authors, each chapter is written by an expert in a different area of river use. Covers everything from kayak surfing to river conservation - very useful to both the expert and beginner boatman. We learned something new from every chapter - very well written - edited by Dean Norman. **\$5.95**

956 KAYAKING

Sub-titled The Whitewater Sport for Everybody, this is the first book to approach the quality and information necessary to help someone get started in kayaking and continue to reasonable levels of proficiency. The book is really excellent, and though we were afraid Jay Evans (former Olympic coach) would write mostly on racing, this isn't the case at all, and the book is well done and balanced. **\$4.95**

958

A.M.C. WHITEWATER HANDBOOK FOR CANOE AND KAYAK

A fine book for rafters as well as kayakers. Valuable information for all skill levels, but mostly for beginners. **\$2.95**

960 YOU, TOO, CAN CANOE

I'm not sure if I like the title, but the book is superb. It is a complete book on river canoeing, and unlike many of the "complete" books, this book offers excellent information on virtually every topic concerning river running. John Foshee has obviously paddled and organized many-many trips, and he has brought it all together in a virtual encyclopedia of useful information. Don't be misled, this is an interesting, simple to read and understand book. We highly recommend this one. **\$9.95**

962 COMPLETE WILDERNESS PADDLER

Written by James Davidson and John Ruge, this book combines a narrative account of an actual trip with step by step information and instruction. Get this book if you are into canoeing and want to think about longer trips **\$10.00**

966 BOATBUILDER'S MANUAL

This manual covers all the steps and procedures for fiberglass whitewater canoe and kayak building. Written by Charles Walbridge and now in its 3rd edition, this book gets better with each edition. If you are going to build your own fiberglass boat - this is the book to read. (Don't let the typos bother you!) **\$4.50**

968 STRIPPER'S GUIDE TO CANOE-BUILDING

Written by David Hazen, this book reflects the personal experience of a master in the art of building Cedar strip boats. I don't know how many of you have even seen these beautiful creations - but if you have, perhaps you felt the momentary longing to build such a thing of beauty. The author entices you into the creative experience and then provides the notes, directions and plans for the project. **\$7.95**

970 THE MIDDLE FORK & THE SHEEPEATER WAR

Written by Johnny Carrey and Cort Conley, this is a marvelous combination history and river guide. After a brief history of early Middle Fork running attempts, the book switches into a history of the river - organized mile by mile starting at Dagger Falls, and working its way down to the confluence with the Main Salmon. The final major section is a narrative history of the Sheepeater Indian War taken from the combined diaries of some of the participants. We can't say enough about this book - it makes fantastic reading. **\$5.95**

972 MIDDLE FORK SALMON RIVER MAP

Compiled by Mike Donley, this is a beautiful river map. The topo river map is divided into 7 panels which accurately pinpoint just about everything of interest in the river. On the reverse side of the map is an accurate and up to date description of all the rapids and camp sites. Water resistant, 4 color, 24" x 36", well worth the money. **\$4.95**

974 ROGUE RIVER MAP

This is the way maps should be made. Colored contour map with all kinds of extra information, even including maps of each of the major rapids. Mike Donley put a lot of work and thought into this one. Waterproof edition, 4 colors, 24" x 36", etc. **\$4.95**

976 OREGON RIVER TOURS

Written by John Garren, this book covers 13 different river runs. Filled with maps, charts, and some really great pictures - this book is the only source of information for many of the small but exciting Oregon rivers. **\$4.00**

978 WEST COAST RIVER TOURING

Written over the course of several seasons by Dick Schwind, this is an amazing book. It contains information on 170 different runs, all but 8 having been personally boated by the author. Noted for its accuracy and fine descriptions. **\$6.95**

980 SIERRA WHITEWATER

Charles Martin does for the Sierra Rivers what Schwind did for the coastal rivers. **\$5.95**

982 CANOEING WATERS OF CALIFORNIA

Written for those of you who use open canoes, this book sketches tidewater, lake and river runs in California. **\$3.50**

984 GRAND CANYON RIVER GUIDE

Even if you never get to run the trip, you will enjoy this guide book. It is an experience just to go through the guide and look at the pictures. Waterproof edition by Buzz Betkamp. **\$6.95**

986 SNAKE RIVER GUIDE

Standard edition, an even better book in some ways for browsing than the Grand Canyon Guide - only covers the Upper Snake (Grand Teton National Park area) **\$4.95**

ORGANIZATIONS AND PUBLICATIONS

AMERICAN CANOE ASSOCIATION

Supports Canoeing, Kayaking, and Rafting through education and safety programs, preservation of waterways, publication of materials, etc. Open to all individuals, \$10.00 membership includes subscription to CANOE Magazine. Please write ACA, 4260 East Evans Ave, Denver, CO 80222.

AMERICAN WHITEWATER AFFILIATION

Dedicated to the sport of whitewater paddling and the preservation of wild, freerunning rivers. Open to individuals & clubs, \$11.00 membership includes subscription to AW Journal. Please write AWA, P.O. Box 51, Wallingford, CT 06492.

WILDERNESS PUBLIC RIGHTS FUND

Founded in 1974 to attempt, through administrative/legal action, to change the present allocation of river use in the Grand Canyon. It is WPRF contention that qualified noncommercial river runners must by law be given priority. Contributions needed - please write: WPRF, P.O. Box 308, Orinda, CA 94563.

RIVER RIGHTS ACTION COMMITTEE

A joint committee of the ACA and AWA formed to develop a national plan and policy for river management. Concept includes long-term preservation of river resources, equitable distribution of access opportunities, and the enlightenment of the general public. Issues RRA NEWSLETTER, subscription \$5.00, please write: RRAC, 4260 East Evans Ave., Denver, CO 80222.

UNITED STATES CANOE ASSOCIATION

Formed in 1968, USCA is dedicated to the unification of paddlers through preservation of scenic waterways, conservation, and the development of safe boating standards. Open to all individuals, \$7.50 membership includes subscription to CANOE NEWS. Please write: USCA, P.O. Box 9, Winamac, IN 46996.

WESTERN RIVER GUIDES ASSOCIATION

Organized for the purpose of promoting commercial river-running and the advancement and preservation of wilderness and wildlife areas in the western United States. List of member Professional Outfitters available upon request, please write WRGA, 994 Denver Street, SLC, UT 84111.

AMERICAN WHITEWATER JOURNAL

Bi-monthly journal for the Gung-Ho whitewater enthusiast. Photos, technique and equipment evaluation. Write: AMERICAN WHITEWATER, Box 584, San Bruno, CA 94066.

CANOE MAGAZINE

Canoeing, Kayaking, and some Rafting. Excellent articles, a good source of information. Write: CANOE Magazine, 1999 Shepard Road, St. Paul, MN 55116.

DOWN RIVER

Kayaking, Rafting and some Canoeing. Reflects the western boaters influence toward river running. Write: DOWN RIVER, Box 366, Mountain View, CA 94942.

EASTERN PROFESSIONAL RIVER OUTFITTERS ASSOCIATION

Organized for the purpose of promoting commercial river-running in the eastern United States. Membership list of Professional Outfitters available upon request, please write: EPRO, P.O. Box 252, Hot Springs, NC 28743.



Northwest River Supplies

*214 N. Main
P. O. Box 9243
Moscow, Idaho 83843*

BULK RATE U. S. Postage PAID Permit 191 Moscow, Id.

Rush: Dated Material