

September/October 1985

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BOAT

Pennsylvania

The Keystone State's Official Boating Magazine

BOATING COURTESY



Gene Spurl
Assistant Executive Director
Bureau of Waterways
Pennsylvania Fish Commission

Water means freedom to many boaters, but abusing that freedom prevents shoreline property owners and other boaters from enjoying the peacefulness of open water and beaches. It also creates a need for more restrictive laws.

Boaters must respect the rights of shoreline property owners. These rights vary depending on the water level. Generally, property rights extend to the water's edge. The freedom to use waterways does not include the right to use private land. Boaters must have prior permission from the owner to launch or moor a boat on private property.

Noise carries farther on water than on land, especially at night. When anchoring off a waterfront home, keep voices down, play music softly, and leave with a minimum of noise. Be sure to consider winds, waves, and tides. Don't anchor where the boat might drift too close to shore or to other boats.

Water pollution laws prohibit throwing or discharging refuse into the water, so carry a litterbag on the boat. Don't throw any garbage overboard for someone else to pick up.

High-speed boating is dangerous in restricted and congested areas. The boat operator is responsible for spotting and avoiding swimmers and slow-moving craft. This idea is also important when picking up or dropping off water skiers.

Because high speeds produce large wakes, boaters are responsible for damage caused by their wakes to other vessels and to shorelines. Slow down, and watch your wake when approaching congested areas and small boats with low transoms and little freeboard.

Passengers should respect the boat operator's wishes. The operator is responsible for everyone's safety and must be alert at all times. Wear rubber-soled shoes on board. This prevents falls and keeps the deck from being scratched.

The skipper should make sure at least one of the passengers knows how to handle the boat in case of an emergency.

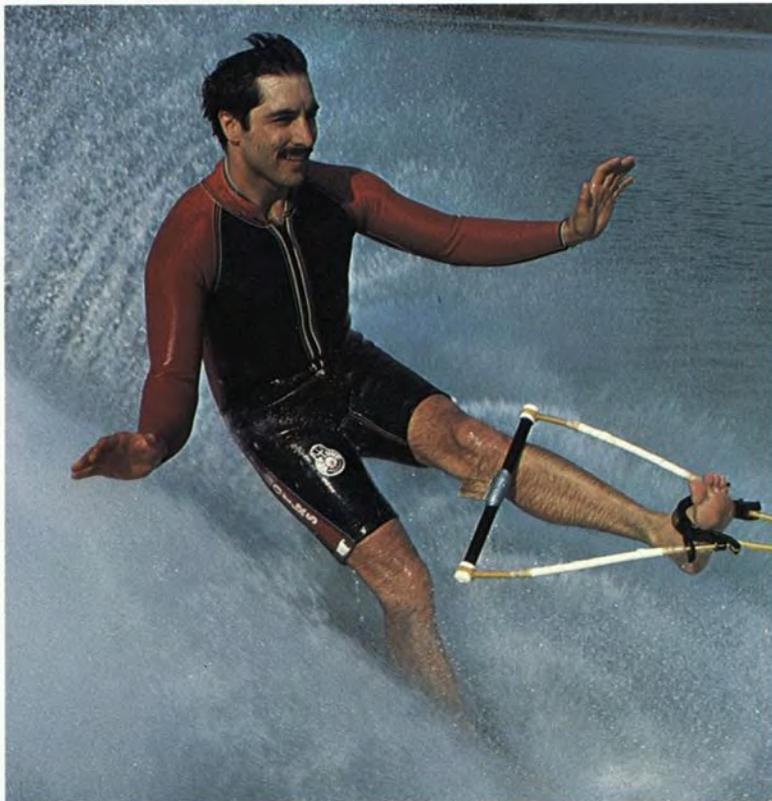
Conscientious boaters know the rules of the road and obey them. They use caution and consideration when mixing noise, speed, and smoke with the gentle, refreshing, relaxing life on the water.

A handwritten signature in cursive script that reads "Gene Spurl".

The imaginative PFD perspective on this month's front cover was photographed by Art Michaels. With your PFD on, if you're a paddler, you may want to ply pages 6, 13, and 27. Motorboaters will want to see pages 18 and 24, and all boaters ought to scan the features beginning on pages 11 and 14.



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Pennsylvania Fish Commission

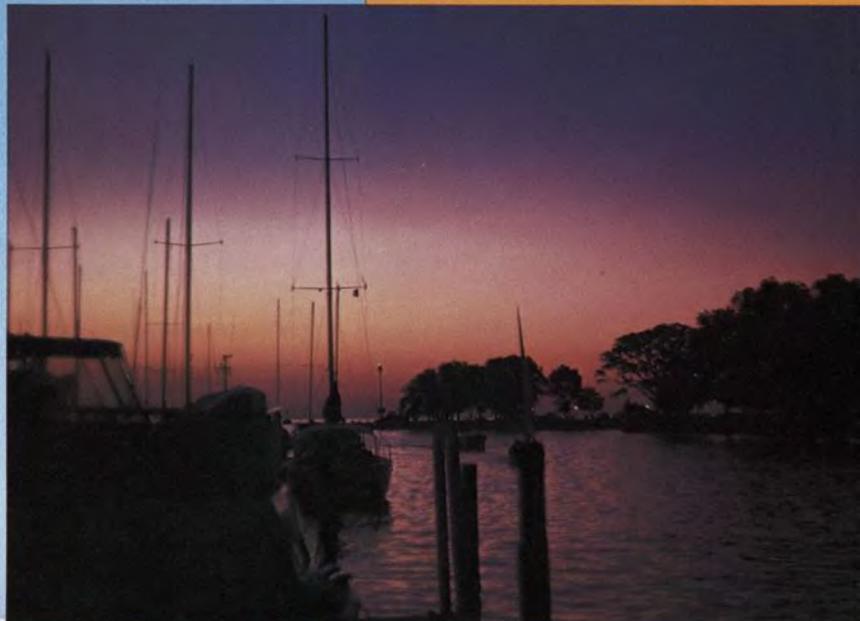
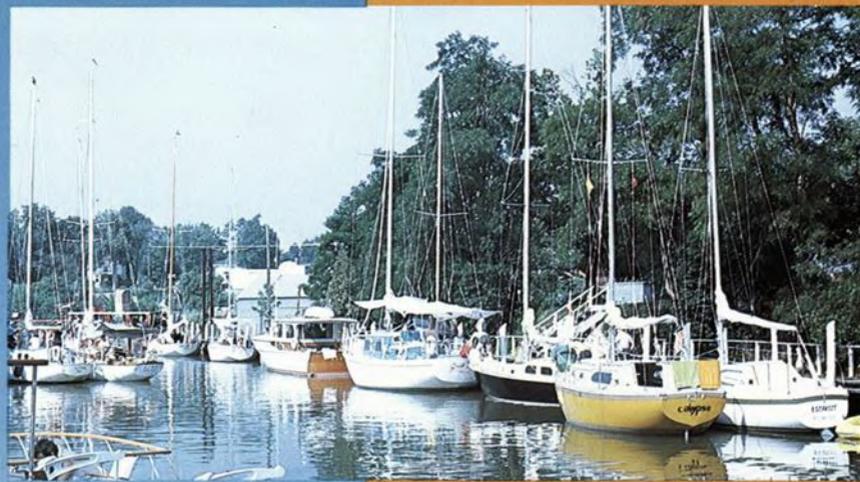
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The Joys of Family Sailing



Here are pictures of ports of call from Erie-based sailors. The large photo and the top inset are Ohio's Put-in Bay. The middle inset is Port Dover, Canada. The inset below is sunset over the Cleveland, Ohio, Yacht Club.

by M. H. McDonald
photos by the author

Some people say you have to have an awfully good reason to go to Toledo, Ohio. Well, my wife, Dorothy, and I had two good reasons. Gus Neuss and Bill Ambro, two great skippers, had asked us to cruise with them, and we had word that Toledo had transformed its downtown harbor into a thing of beauty. This in itself was reason enough for a visit by boat.

So the dye was cast; the skippers met; the plans were made; the yachts provisioned; and the "Erie Armada" of three stout ships set out from Erie on a sparkling summer Saturday morning. There was the beautiful sloop *Vixen*, a Morgan 42; the handsome dark-green sloop *Indian Summer*, a Tartan 34; and our gleaming white *Esprit*, *Indian Summer*'s younger sister.

The course from Erie to Toledo is WSW, but so are the prevailing winds, and the winds did prevail. It was "ready about" and "hard alee" going. If you are in a hurry to get to Toledo, go by car. It's a few hundred miles from Erie to Toledo in a powerboat, but under sail with the wind on your nose it's 300 miles or more. That's a lot of fresh air and blue sky and cool spray. It's the joy of going that counts.

But the joys of sailing are not only in the going. There is the thrill of arriving, after hours at sea, out of sight of land at times, and the sweet satisfaction that comes when you hit the harbor entrance "right on the nose." Then after getting the hook down and set or making fast to a dock with the sun below the yardarm, there is the joy of relaxing in the cockpit.

Between Erie and Toledo are many pleasant harbors—Conneaut, Ashtabula, Fairport, Mentor, Cleveland, Rocky River, Vermillion, Huron, Cedar Point, Put-in Bay, and Port Clinton. We allowed time for enjoying each of them. Each has its own special attraction, and all are full of friendly boatmen ready to give a hand to a visiting skipper.

Vixen had a crew with 100 years combined sailing experience. It is 44 feet long and fast, with a hull speed of

8 knots. It made a great cruising companion for our 34-foot Tartans, whose hull speed is about one knot less. *Vixen* usually arrived in port first and had guest dockage arranged for the two of us when we arrived.

The sister ships *Indian Summer* and *Esprit* are perfectly matched. Although neither of their skippers would admit to racing, it was Gus, 72, and his two grandchildren, Jenny, 15, and Donnie, 13, against Dorothy and me. These unacknowledged races are great fun because you always win.

A two-week cruise provides many opportunities to use lessons learned in the United States Power Squadrons (USPS), beginning with making certain all necessary navigation and safety gear is aboard. While under way, not only navigation, but lessons in seamanship are continuously applied, and with each change in wind and wave new expertise is gained. At night it's secure anchoring or docking and tying up. In port, proper nautical etiquette brings credit not only to the skipper, but to the USPS.

There are very few activities that compare to cruising with family and friends. The togetherness produces an intense level of give and take. The teamwork required, and afterward, the memories of the pleasures and the adversities, forge bonds that are rarely formed in any other way.

Late one afternoon, a few days from Erie, we were approaching Cleveland on our way to Rocky River. *Indian Summer* was close by. Dark clouds were gathering rapidly. We decided to head for the breakwater, which spans four miles along the Cleveland waterfront. Just as we both arrived inside the breakwater not 200 yards apart, the black sky began to boil. Suddenly the wind stopped. The highly charged stillness raised the hair on the back of your neck. Instantly, almost frantically, we began bringing down the sails and binding them tightly. Gus's young crew on *Indian Summer* was doing the same.

Within moments the storm raged. Amid blinding flashes of lightning and deafening crashes of thunder, *Indian Summer* disappeared. Winds of 70 knots ripped across the deck and threatened to sweep it clean of gear and crew. Blinding rain whipped across the boat in horizontal torrents.

A window in the dodger tore out. Within minutes, we were less than 100 yards from the rocks along Cleveland's waterfront airport and we were blown rapidly more closely toward them. I jammed the throttle forward and with the engine wide open we clawed off the rocky lee shore. For 30 awful minutes we fought the wind and agonized over the possible fate of *Indian Summer*.

Then, as suddenly as it began, it was over. There was *Indian Summer* nearly as close as before and apparently unscathed. By radio we learned that all aboard were safe.

This squall will not soon be forgotten. Experiences like these forge permanent links in the bond between skipper and crew, between grandfather and grandchildren, and between husband and wife. The front page of the Cleveland paper the next morning ran a story of the storm that hit the airport. Two planes were overturned, and the roof was blown off one of the hangers.

Under an azure sky, the 30-mile leg from Port Clinton was a six-hour beat to the Toledo Harbor Light. Then we made an exhilarating beam reach, at hull speed, down the 8-mile dredged channel through shallow Maumee Bay to the Toledo Yacht Club. TYC is a delightful place to stop, with friendly members, a grand old Spanish-style club house with an excellent dining room, and a large swimming pool just outside.

Downtown Toledo and its Harbor Place are three miles and four bridges up the Maumee River from the yacht club, so the next morning all boarded *Esprit* for the trip, first making sure that nine PFDs were aboard. *Esprit*'s mast is 50 feet tall, so all four bridges had to be opened for us. All opened on demand (one long blast and one short blast on our air horn). We had to wait a bit for the railroad bridge to open because a Conrail train's horn blew first and louder, but that's all part of the fun.

We tied up at Harbor Place's excellent new docks and spent the day shopping and touring. Harbor Place is a complex of beautiful new office buildings clustered around a lovely large mall. We were not disappointed.

Cruising this way—on long trips—is great fun, especially with the whole family involved. 



Playing the Currents

by Cliff Jacobson

photos by the author

We put ashore just above the drop, then walked a well-worn trail to the high rock outcrop which overlooked the rapid. Two college kids stood near the precipice effusively describing their plans to power around the big rock. I blotted out their chatter and gathered my teenage crew around me.

“Don’t listen to those guys,” I admonished quietly. “It’s a piece of cake if you can ferry and a sure wipeout if you can’t. Here’s the plan: As soon as you clear the tree, kick

the tail to the right and back-paddle furiously. If the stern person is paddling on the left, a hard stern pry will bring the tail around. If the stern is paddling on the right, a draw at each end of the canoe will do it. As soon as you’ve set the angle, paddle back—hard! You’ll scoot sideways across the river, into the clear channel. If you mess up and miss the ferry, you’re done for!

“Any questions? Oh yeah, one more thing: Be sure you’re loaded dead level or a bit lighter in the stern. Move the stern person forward against the rear thwart to lighten the tail if you have to. You won’t be able to hold the ferry angle if the current is working against you.



"Angie and I will make the guinea pig run so you can see how it's done. If you don't think you can handle it, unload your boat and portage. Ready, Angie?"

While we were talking, the young men we'd met earlier shoved off into the current.

"I overheard one of 'em say . . . 'If those kids can do it, we can too,'" said Angie.

"Hmmf!" I nodded.

Within seconds it was over. The inexperienced team tried to power around the rock, but instead, they broadsided against it. Now, two men and piles of camping gear were in the frothy water. But there was no real danger; the pair floated safely into the quiet water below and were helped ashore by a half-dozen excited teenagers.

When the way was safe, Angie and I began our descent. We coasted beyond the downed tree, ferried right, then scooted into the clear channel exactly as planned. It was a classic textbook maneuver, and we earned grade A all the way.

My three other canoes followed suit—no hits, no upsets,

no errors. It was a glorious sight! I smugly congratulated myself for the two days of intensive training I had given this crew before the trip. But best of all was seeing the look of envy on the faces of those dripping wet college boys when two 14-year-old girls, who could barely see over the deck plates of their canoe, artfully negotiated the drop and then did a perfect stern-first landing within yards of their still-swamped canoe. There was no denying that an ounce of skill was much superior to a ton of macho!

Backferry, forward ferry, and in time, the eddy turn. These are the techniques you must master if you plan to negotiate complex currents. As the example illustrates, you cannot always overpower a river, but with the right skills you can outfox it. Here's how.

Learn to ferry

Ferrying across currents is nothing new. Even the ancient Egyptians and Phoenicians were experienced in the art. They simply set the nose of their craft at approximately 30 degrees to the current and powered ahead. The two



3. Watch the shore when you ferry across large expanses of water. It's very difficult to maintain the correct angle without referencing your progress to a land marker of some sort.

4. It's essential that the canoe be trimmed dead level or slightly lighter at the upstream end. It requires a strong team to backferry a tail-heavy canoe.

5. When ferrying forward, the stern has more paddle leverage than the bow. When backferrying, the opposite is true. This means that the downstream paddler has the greatest responsibility for correcting the ferry angle. Competent ferries demand a competent team. One person cannot do it alone.

Once you learn to perform competent ferries, you'll discover all sorts of applications for the technique. Here are two.

• **Landing in Currents.** Rivers run fastest at the center and slowest near the banks, so if you attempt to land nose-first, the current will grab your tail and spin it downstream. In slow currents, the result is an uncontrolled eddy turn—the mark of a novice. On a fast river, it's a neck-snapping spin and possibly a capsize.

For these reasons, it is always best to backferry to shore. Simply tuck your tail in the direction you want to go, then paddle backwards. The harder you paddle, the more speed you'll scrub off. Ultimately, your stern will slide into the quiet water near shore and your bow will follow suit. Easy as pie and guaranteed to elicit admiration from your friends.

• **Negotiating Bends.** Rivers flow fastest on the outside bends, the reason why novice canoeists are often swept tail-

vectors—forward speed of the boat plus sidewash of the current—carried them sideways across the river.

Whether you nose forward (the forward ferry) into currents or backferry instead depends on circumstances. In tight quarters, where quick turns are impossible, the backferry is preferred; for crossing large expanses of open water, the head-on approach is recommended. Slalom canoes, which can spin quickly, usually rely on the forward ferry for all their cross-current maneuvers. But paddlers of standard canoes, which track better than they turn, are best off with a well-controlled backferry.

Ferrying is a game of skill, not of brute power-paddling. Here are the rules for safe passage:

1. Master the specialized strokes outlined below. It's pointless to practice ferry maneuvers with your craft until you've learned to control the engines.
2. A ferry angle of around 30 degrees to the current is recommended. Less than this wastes energy, while more than this is difficult to maintain. There is a definite trigonometric relationship between the efficiency of the ferry angle and the downstream slip. In very strong currents, it may be necessary to angle a full 90 degrees to the river's flow to get to the other bank with a minimum of downstream slip.

However, what looks best on paper often fails miserably in practice. Forty-five degrees is about the maximum angle of attack that most canoeists can hold. Because the penalty for "losing your angle" in a tough current is broadsiding, and possibly capsizing, you'll want to maintain a cautious approach. I usually test strong currents with a 15-degree to 20-degree angle. As confidence builds, I widen the angle, adding or subtracting power as the need arises.

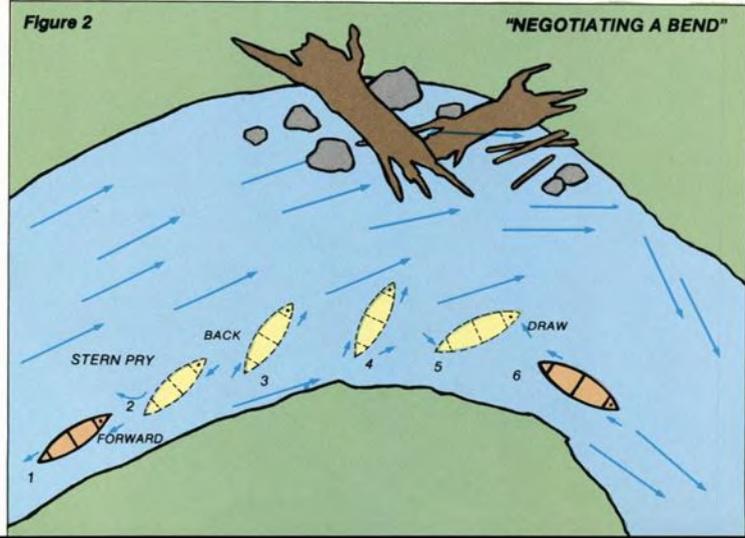
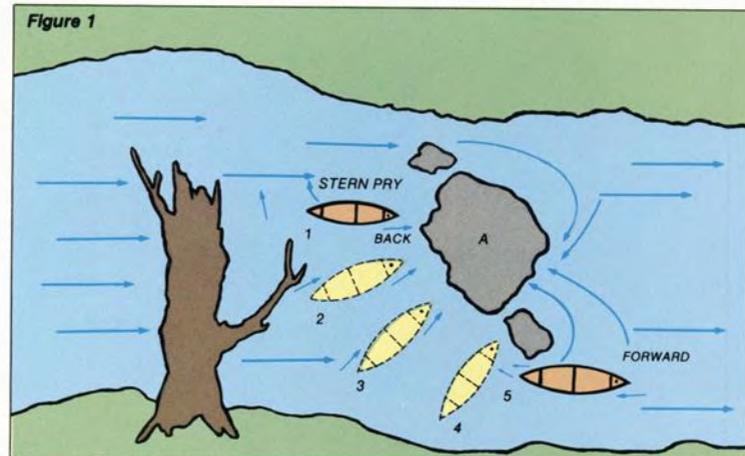
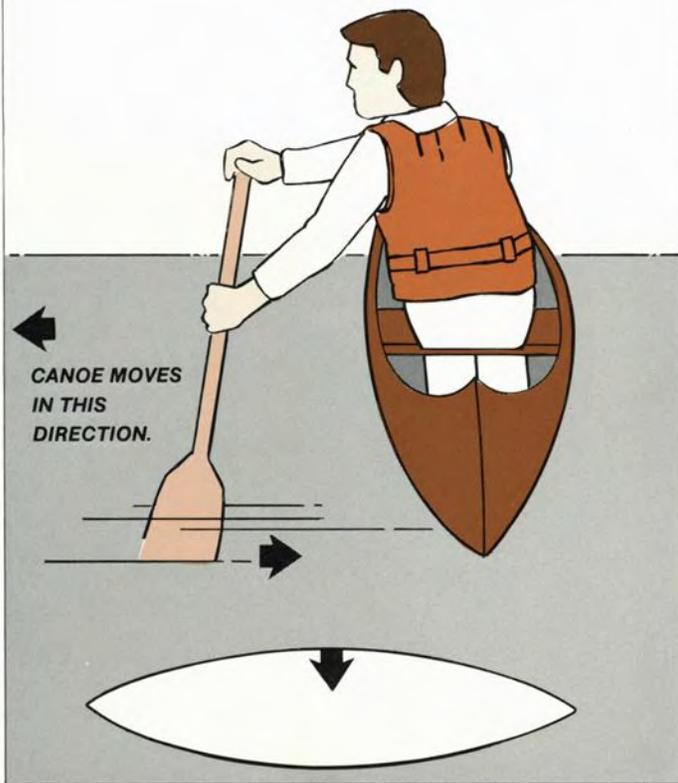


Figure 3

"THE DRAW STROKE"



first into them. So if you want to maintain control of your canoe in a tight curve, you'll have to backferry around it.

Ferrying around the tight bends may be a lifesaver on powerful rivers. Several years ago, I paddled the remote Hood River in Canada's Arctic. Our crew was pinned down for three days by a polar gale that thrashed us with heavy rains and winds of 60 miles an hour. When the storm subsided, we were greeted by a silt-choked river in flood stage. Huge waves and uprooted vegetation filled the river, and everything accumulated on the outside bends.

Avoiding the waves and obstacles was a matter of staying tight on the inside bends—a procedure that required constant ferrying. As soon as we emerged from a hard right turn, the river would curve left. Then we'd forward ferry to the other bank, rest a moment, then spin around and backferry around the curve. It was a frustrating and dangerous day!

Strokes for ferrying

The Draw. This is your most powerful turning stroke in both bow and stern. Reach far out and pull the paddle in at right angles to the canoe. Force water under the canoe, not against it. When the blade is within six inches of the craft, slice it quickly backward and out of the water. Repeat the "draw" again and again as necessary.

The "draw" has a righting effect on the canoe when power is applied. You can reach w...a...y out and you won't capsize as long as you're firmly braced in the canoe and you re-center your weight the moment you let up power on the paddle.

Be sure you submerge every inch of paddle blade when you "draw," and put your entire body into the stroke.

Figure 4

"THE PRY"

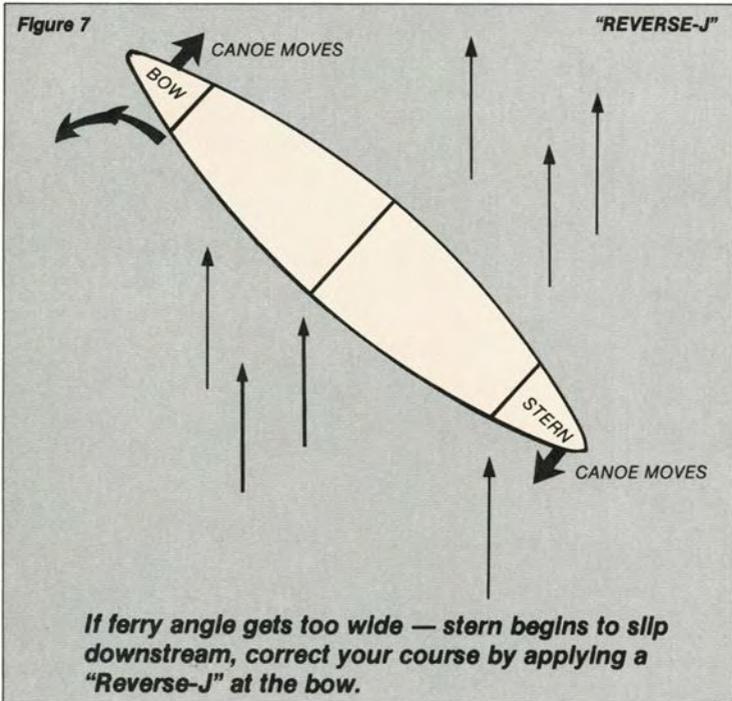
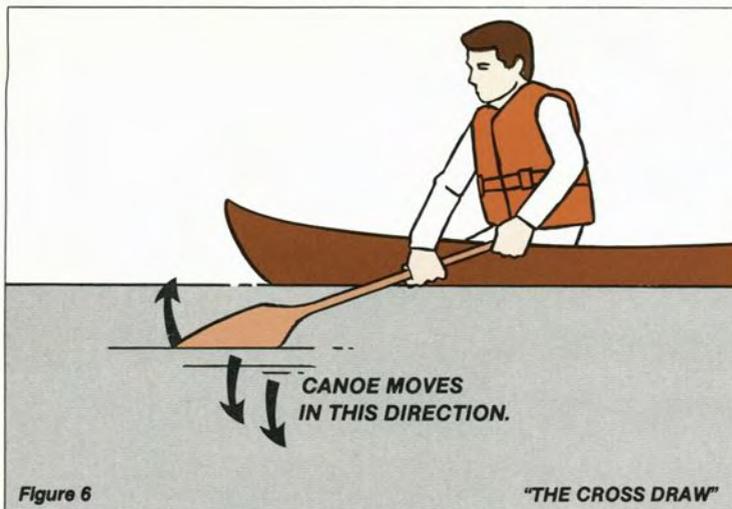


Figure 5

"THE STERN PRY"



The Pry. The "pry" is a powerful stroke for turning the canoe to your "off paddle" side. It is useful in both bow and stern, though for ferrying, it is most often used in the stern. The stern paddler sets the initial backferry angle with a powerful draw or pry, depending on the direction of the ferry.



Begin the "pry" well under the canoe, then pry the paddle shaft over the bilge and/or gunnel. Use a featherbed underwater recovery. The stroke is lightning-fast and powerful. It is also hard on canoe paddles and gunnels. However, the stroke will spin a short slalom canoe 180 degrees quicker'n a cat wink.

Canoeists who paddle stock cruising canoes usually come to favor a slightly modified version of the traditional "pry." Instead of prying near their bodies, they reach back to the tail of the canoe and sweep the paddle outward, prying the shaft slightly off the gunnels for added power. This stroke is really just a short "reverse sweep" with a power-rudder at the end. The farther back you pry, the longer the lever arm of the paddle and the greater the turning effect.

Crossdraw. You're ferrying backwards across a shallow rapid and the angle of attack gets too steep. The bow person has greater leverage than the stern when paddling backwards, so he or she must make the course correction. But a pry from the bow won't work because the water is too shallow to submerge the blade fully. In fact, a pry could be dangerous; the paddle blade could catch on rocks and upset the canoe. There is no hesitation; the bow person performs a "crossdraw."

The "crossdraw" is simply a "draw" crossed over the bow of the canoe. It is never used in the stern. Angle the paddle outward as illustrated and force water under and in front of the bow. The stroke is very powerful. The bow person has greater paddle leverage than the stern when paddling backwards, so the "crossdraw" is the stroke to use for correcting a ferry angle that is too wide.

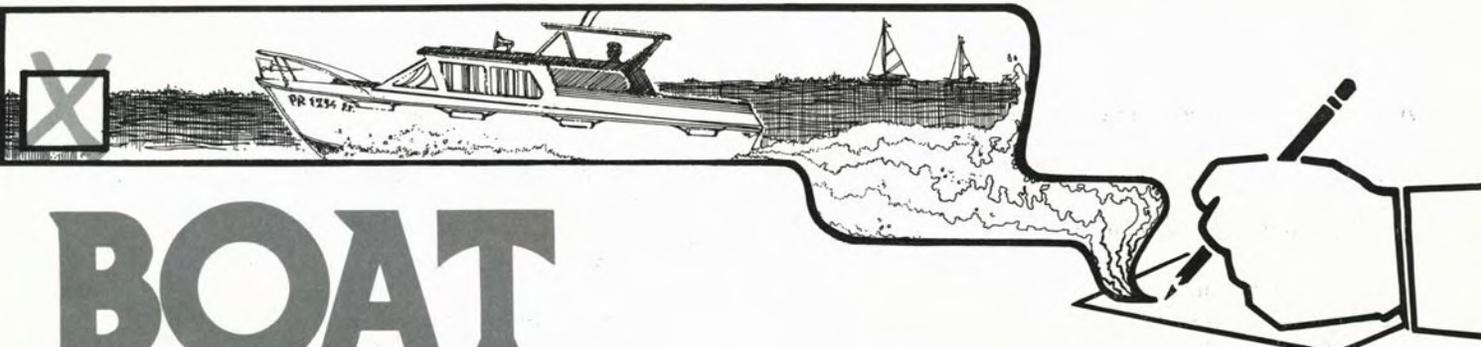
Reverse-J. Here's another bow stroke for correcting a widening ferry angle. The "Reverse-J" is nothing more than a reverse J-stroke executed in the bow of the canoe. It is the only stroke that effectively checks a ferry angle that is out of control. With it, you can snap a fully broached canoe in line with the current almost instantly.

To perform the "Reverse-J," push the paddle blade powerfully outward and hold it momentarily as a rudder until the current spins the canoe back on course. You may not have time to repeat this stroke, so do it right the first time.

Except in very shallow water, where this stroke may catch on rocks, the "Reverse-J" is the best stroke for correcting the angle of a backferry. Master the "Reverse-J" early; you can't ferry across strong currents without it.

Back Stroke. The back stroke needs no explanation or illustration. Every canoeist discovers it for himself when a large rock looms ahead. However, practice makes perfect and the backstroke is no exception. Learn to blend the backstroke with a powerful draw and a diagonal draw (a draw applied at a 45-degree angle to the canoe), and you'll be well on your way to mastering control of your canoe in currents.

As you gain skill, you'll learn sophisticated maneuvers like the eddy turn, peel-out, and side-slip. These advanced techniques add fun to whitewater sport and are essential for playing in complex rapids. Nonetheless, all you really need to get downriver safely is good judgment and mastery of the ferry techniques outlined. With these, you are well-equipped to handle almost any current situation.



BOAT

Pennsylvania

Reader Survey

The Fish Commission invites paid subscribers to answer these questions—this information will be used in no way except to learn more accurately our readers' likes and dislikes and then to fine-tune the magazine according to reader preferences so that the Fish Commission can continue to make *Boat Pennsylvania* as useful as possible. *To thank paid subscribers for completing and mailing back this survey, we'll extend current subscriptions by one issue.*

Please write in this space the number that appears above your name on your mailing label:

You do not have to write your name—only the label number so that we can extend your subscription. If you don't wish to provide this information, you may still send us the questionnaire.

We'd appreciate your providing us with all the information we seek, but you don't have to answer questions you find objectionable for any reason—still, please be as thorough as you can.

Our research deadline for this project is September 30, 1985, and we look forward to receiving your completed survey postmarked by then. *Please mail completed surveys to: Boat Pennsylvania Survey, P.O. Box 1673, Harrisburg, PA 17105-1673.* Thank you for assisting us.

1) Indicate the type of boats you own. If you own more than one, please rank them according to use.

Motorboat

- John boat
- Utility boat
- Runabout
- Cabin boat
- Sailboat (auxiliary)
- Houseboat
- Pontoon boat
- Other

Non-powered boat

- Rowboat
- Canoe
- Kayak
- Sailboat
- Other

2) If you answered "motorboat" above, what is its primary propulsion:

- Electric motor
- Inboard
- Outboard
- Inboard/Outdrive

3) Indicate with a check mark the horsepower rating of your primary motorboat's engine, if you listed motorboat above.

- 0-5 6-10 11-35 36-75 75-110
- 110-150 above 150

4) What is the length of your boat (motorboat or non-powered boat)?

- 0-13 ft. 14-20 ft. 20-26 ft. 27-40 ft.
- 41 ft. and above

5) Please make a check mark in the space next to any of the following electronic devices you own and use on your boat.

- CB radio LORAN Radar
- Marine radio Depth recorder

6) Do you participate in any organized races?

- Yes No

7) What is your age?

- under 18 18 to 25 26 to 31
- 32 to 37 38 to 44 45 to 52
- 53 to 60 61 or older

8) Are you a *Pennsylvania Angler* subscriber?

- Yes No

Please photocopy this survey for completion and mailing if you don't wish to cut your magazine.

9) Are you a member of an organized boating club?

Yes No

10) Please indicate your education.

- not a high school graduate
- high school graduate
- high school plus 2 years
- high school plus 4 years
- high school plus 5 years or more

11) Please indicate your boating experience

- new boat owner in 1985 season
- 1 to 3 years
- 3 to 6 years
- more than 6 years

12) Where do you primarily use your boat?

- Pennsylvania inland waters
- Lake Erie
- Delaware River
- Three Rivers
- Out of state

13) Indicate with an "x" in the appropriate spaces your likes and dislikes of *Boat Pennsylvania* content, according to the categories below:

	Publish more	Keep the same	Publish less
How-to articles			
Canoeing skills			
Kayaking skills			
Navigation			
Powerboating skills			
Water skiing skills			
Sailing skills			
Boat repair & maintenance			
Boat fishing			
Safety ideas			

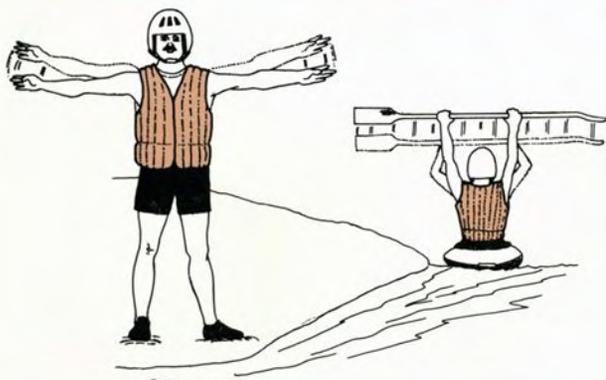
Where-to articles			
Lakes			
River			
Parks			
Whitewater			

General information and entertainment articles			
Nostalgia			
History			
Humor			

14) What is your primary boating interest (choose only one)?

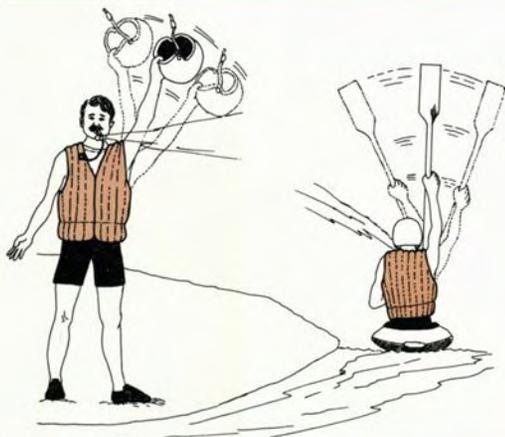
- hunting
- fishing
- racing
- water skiing
- sailing
- float trips
- whitewater
- cruising
- professional
- other (specify) _____

Universal River Signals



STOP: Potential hazard ahead. Wait for "all clear" signal before proceeding, or scout ahead.

Form a horizontal bar with your paddle or outstretched arms. Move the paddle or your arms up and down to attract attention, using a pumping motion with the paddle or a flying motion with your arms. Those seeing the signal should pass it back to others in the party.



HELP/EMERGENCY:

Assist the signaller as quickly as possible.

Give three long blasts on a police whistle while waving a paddle, helmet, or life vest over your head in a circular motion. If a whistle is not available, use the visual signal alone. A whistle is best carried on a lanyard attached to the shoulder of a life vest.



ALL CLEAR: Come ahead (in the absence of other directions, proceed down the center).

Form a vertical bar with your paddle or one arm held high above your head. The paddle blade should be turned flat for maximum visibility. To signal direction or a preferred course through a rapid around an obstruction, lower the previously vertical "all clear" by 45 degrees toward the side of the river with the preferred route. Never point toward the obstacle you wish to avoid.

Signal system devised by an American Whitewater Affiliation committee composed of Jim Sindelar, Tom McCloud, O.K. Goodwin, Bev Hartline, Walt Blackadar, and Charles Walbridge.

signal illustrations by Rose Boegli

The Hermit of Presque Isle

by Jack Grazier
photo by the author

Editor's note: In the days of Joe Root, around the turn of the century, rowboats, sailboats, and naphtha launches plied Presque Isle Bay and the area around the Presque Isle Peninsula in a much more leisurely fashion than the powerboats and racing sailboats do now. And sometimes, as the boaters glided by the shoreline or beached their craft for picnics, they'd catch a glimpse of Old Joe Root, the hermit of Presque Isle. Even today, the old-timers still talk about him. Some even say that his ghost still haunts Presque Isle, along with his "Jeebies."

The afternoon sun was lowering into the coolness of evening. Shadows of the big oaks on Presque Isle were lengthening toward the east as the small party, led by Herbert R. Spencer, trudged into the grove, walking on a hushed path of pine needles and oak leaves from the previous year.

The picnic baskets and blankets had just been set down when suddenly the bushes parted and without a sound, Joe Root, the Hermit of Presque Isle, stepped into their group.

"His entrance was always dramatic," wrote Spencer, who was Root's unofficial biographer in the 1930s and 1940s.

He described Joe Root as an undersized man in tattered clothes and a "medieval" hat, a man "quiet and softspoken, with a smile that children loved and their elders envied."

Joe's exit was equally dramatic, Spencer wrote. "He simply vanished without a sound, usually after accepting all the food he could carry."

"Joe," Spencer would ask him,

"have you had your dinner?"

"Yes sir, Boss," he'd answer, with a longing look at the baskets. "Had a good dinner. Fried mosquitoes today, but I eat only the white meat. I save the dark meat for breakfast."

"What's the weather going to do, Joe?"

"Oh, they tell me nice day tomorrow, and thunderstorms the next day."

"Who told you, Joe?"

"Why, the Jeebies, of course. I call 'em up."

"You telephoned them?"

"Sure thing. Always tell me true."

"Well, call them up now and tell me what they say."

Then Joe, with his soft shuffling gait, would sidle to the end of the log, put his hat against it, and after a few grunts and chuckles and whistles would ask loudly, "What's the weather coming up?"

The reply would be a long series of mysterious sounds, bird chirps and dog laps, and then Joe would replace his hat on his head and announce in his funny little voice, half squeak and half lisp. "Yep. That's right. Hot tomorrow and rain next day."

Incredibly, according to Spencer, the forecast always came true.

Joe Root was probably born in 1860 in the Erie County Poorhouse. "If as a child he went to school, the effects were never apparent," Spencer wrote.

"He would sit holding a newspaper just the way he saw other people doing, but he was never sure which was right side up. As a young man he hung around the waterfront, occasionally helping out the fisheries, but his mental equipment did not

encourage his ever holding a real job. He was always happy, and he knew he could never be happy very far away from his beloved Presque Isle Peninsula."

Joe spent every summer at Presque Isle, to the delight of boaters and picnickers alike, living in a shack scrambled together from old boxes and driftwood, with a sand floor and a patchwork roof.

As Spencer writes, he was "happy in his own life and content to leave the problems of the world to better minds than his."

When the storms of autumn came and the nights became too cold, Joe would take his customary residence in the County Poorhouse. Finally, when past 50, he was taken from Presque Isle and placed in the state hospital at North Warren where he died on October 29, 1912, at the age of 52.

The story goes that Joe was spirited away from Presque Isle in the dead of night. Some say that Joe stood to inherit Presque Isle through a new law on squatter's rights which was to take effect soon, so he was taken from the peninsula before that could happen.

Everyone was Joe's friend. Spencer wrote that "When he wanted to come into the city, he very politely would ask a ride on the first boat, and they were delighted to ferry him over. In the city, every bar was full of friends eager to buy him a beer, at a time when beer was five cents for a man-sized stein and lunch was free. He returned the same way, and if in the fervor of fellowship he stayed late, he merely slept on the pier until the morning fishermen ferried him back. He was never drunk, but always congenial, friendly, and considerate of

children. That was his invariable mood."

Joe had an old felt hat that had seen so many winters that it could be called a hat only because it rested on Joe's head. "It remained there mainly by capillary attraction," Spencer tells me.

Joe's long hair was sandy gray, covering his neck and his coat collar. His beard—he said he shaved every Christmas—was scraggly and the color of beach sand. Spencer described his mustache as protruding sideways "about as far as his buck teeth protruded forward. His coat covered but did not conceal a high cut vest, which in turn covered and almost concealed the apparent lack of shirt. His shoes were serviceable, or had been, even though they did not match. But his sartorial pride was, or were, his trousers; he always wore four or five pair, and in his pride he arranged them carefully so that the holes of one were covered by the next pair; it usually required at least four pair to attain complete coverage."

Some people believed, or said they did, that perhaps Joe could have been a successful businessman. Spencer wrote that "it was at a bar on lower State Street that first he disclosed his plans for what might have become a profitable enterprise, had he been able to secure capital. Certainly he had vision. Long before the days of airplanes, his ever-active mind grappled with the problem of speed of transportation, and he, having observed the flight of ducks all his life, realized that travel by air was faster than any other medium. In this he admittedly was far ahead of his times.

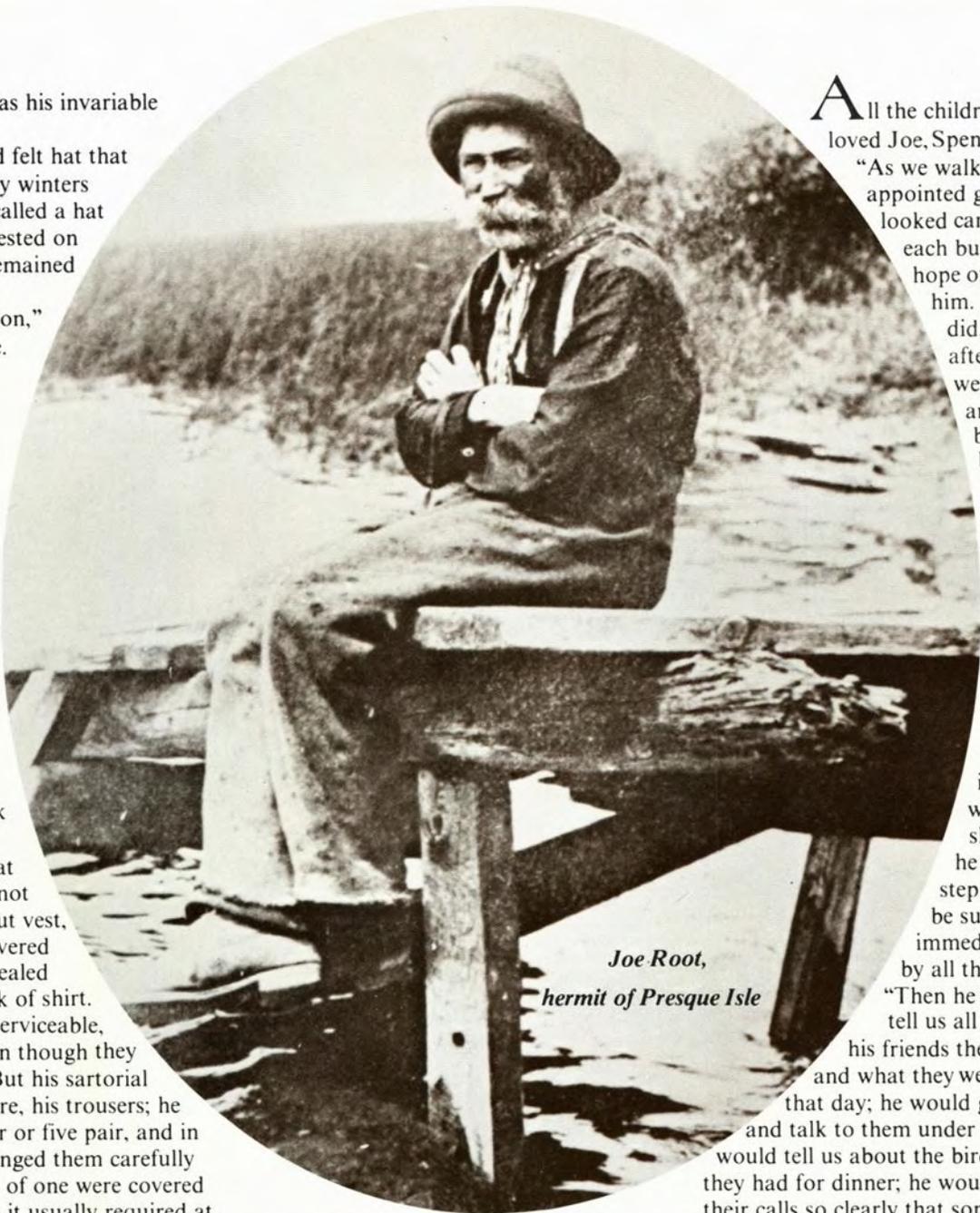
"His well-matured plans were

simple: a balloon farm on his beloved peninsula!

"To travel anywhere, even as far away as Buffalo, the passenger simply stepped into one of Joe's balloons and—whoof!—the wind blew him there instantly.

"The cheapest possible voyage. No fuss, dirt, no clanking engine. In answer to a criticism that perhaps the wind might blow in the wrong direction, he replied that his Jeebies always told him true, invariably."

Another of Joe's pet projects was the building of a "feather factory," but no one was ever able to determine whether he wanted to collect feathers and package them or manufacture them somehow.

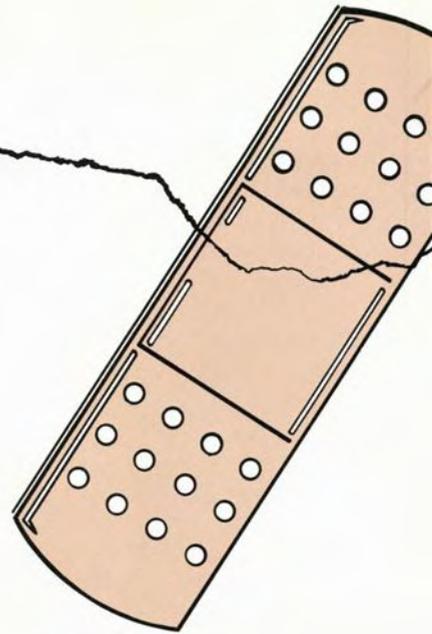


*Joe Root,
hermit of Presque Isle*

All the children loved Joe, Spencer wrote. "As we walked to the appointed grove, we looked carefully behind each bush in the hope of surprising him. We never did. But always after the baskets were arranged and a dinner began to be brought out, and after we had peeked behind every tree and bush, suddenly—Presto!—there was Joe, hesitant to intrude until invited; then with his soft, shy smile he would step in, to be surrounded immediately by all the children. "Then he would tell us all about his friends the Fairies, and what they were doing that day; he would go to a log and talk to them under his hat. He would tell us about the birds and what they had for dinner; he would imitate their calls so clearly that sometimes the birds themselves would answer. He would have an imaginary conversation with a duck, which he would interpret for us; he would interpret our message to the duck, and the duck's replies, all conveyed through the medium of his old felt hat. All this, for hours, in his funny little squeaky voice behind his shy smile. And if one of the very little ones seemed frightened or hesitant, Joe understood and would hold out a friendly hand for the little one to hold with confidence."

"No man is dead until he is forgotten," Spencer tells us. "The memory of Joe Root is alive today in the hearts of all the children whom he made happy."

Fiberglass Boat Repair



Repeat after me: "Yes, I can make my own professional-quality fiberglass boat repairs." Good—Here are the how-to details.

by Howard A. Bach

Lou's voice was more excited than usual when he phoned. For a guy who is Mr. Cool on the water, he can work up a minor frenzy when he calls to set up a boating trip. But boating wasn't on Lou's mind.

"I dropped my new boat," he wailed.

"I'm not surprised," I chuckled. "You always were a lousy poker player."

"No, you don't understand," he replied. "I dropped it off the trailer, right on the corner. It's all caved in. Looks like a total loss."

"Well, bring it over," I suggested, "and we'll take a look at it."

For a boat that was a total loss, it looked surprisingly healthy. It had a broken area on the right rear corner about the size of a heel print, hardly the serious damage Lou thought it to be.

Trouble lamp

To determine the full extent of the damage and the best means of repairing it, we placed a trouble lamp with a 150-watt bulb behind the broken area. It showed that the break was open at the corner with torn fibers of a few inches on the boat bottom. No further cracks were evident, so repair could be localized at the break.

"No problem, Lou; we can easily repair it in several evenings and it will be ready for our weekend trip," I reassured him.

He wasn't entirely convinced, so I explained how fiberglass boats are built, the basis for understanding methods of repair.

Fiberglass construction

Whether the boat is built by hand layup as on larger craft or by mechanized layup as on smaller boats, the hull consists of layers of fiberglass bonded together with a catalyzed resin. The result is a molded boat of great strength with an exceptional ability to take the kind of punishment most boats encounter. Also, when damaged the fiberglass boat is quite easy and inexpensive to repair.

In hand layup, the hull is formed by placing successive layers of fiberglass cloth in a mold, and impregnating each layer with resin combined with a catalyst. As each layer is put in place, the resin is distributed with a squeegee.

In mechanized layup, chopped fiberglass and resin are sprayed onto a rigid wire mold, forming a "blanket" about an inch thick in the approximate shape of the finished boat. The blanket form is then placed on the lower mold, and extra matting is placed on the keel and other highly stressed areas. Addition of the gunwale assembly, hardwood for the transom, and coloring pigment completes preparation for molding the boat. It is then lowered, and the boat is molded for hydraulic pressure of 1,000 tons at 180° F.

In either type of boat, repair is simply a matter of replacing the damaged portion with new fiberglass cloth, or pieces, and impregnating it with catalyzed resin. Such a repair, properly made, is as strong, or stronger, than the original boat, and can be made nearly invisible with a little extra effort.

Damage to fiberglass boats falls into five categories: (1) scratches, (2) surface cracks, (3) separation of bond, (4) abrasive wear, and (5) fracture or hole.

Scratches

A minor scratch can be wiped out by rubbing with a mixture of 75% vinegar and 25% cooking oil. This "blends" the color to hide the scratch. Or rub it with a dab of outboard motor oil, which can also be used to hide the scratch.

If the scratch is deep, open it up and clean it out using a sharp blade, file, saw, or coarse sandpaper. Then fill the void with either polyester putty or a mixture of chopped fiberglass and catalyzed resin. The choice between the two is a matter of need. The chopped fiberglass gives greater strength, but the putty is easier and quicker when the void is small. After the material hardens, sand, buff, and finish with a light coat of pigmented resin or marine paint that matches the hull.

Many fiberglass boats have a smooth exterior coat called gelcoat. This gelcoat is about 0.15-inch thick. Where a gelcoat is involved, the repair finish coat should be color-matched gelcoat paste, catalyzed, and spread with a spatula. To achieve a smooth, glossy surface, cover the patch with cellophane and squeegee it with a tongue depressor or similar flat stick until smooth. Because gelcoat is basically air-inhibited, it's a good idea to keep the cellophane cover on the patch to seal it while curing. Placing a heat lamp at a safe distance also aids the curing.

Gelcoat manufacturers use paraffin in the gelcoat, which comes to the surface while curing to seal out the air and speed the cure. If you have a tacky surface in spite of your precautions, it can be removed by washing it off with lacquer thinner or acetone. After the gelcoat patch has completely cured, finish the surface with fine, wet sandpaper and rubbing compound.

Cracks

These are readily apparent cracks, or crazing. They are the result of resin-rich areas, and the repair is the same as for deep scratches. If the crazing is over a wider area, about the size of your hand, sand the surface to the bottom of the cracks and refinish with fiberglass cloth as described under "Abrasive wear" below.

Separation of bond

This damage is most frequently a case of the seat coming loose from the hull in a smaller boat. The first step is to clean out the crevice with a putty knife, followed by sanding the mating surfaces. A double sanding disk does this job on both surfaces at the same time. Next, work in polyester putty to get a good coat of putty between the mating surfaces. In this operation, wedges should be used to maintain the separation while putty is worked in.

Next, compress the joint to permit the repair to set. This can be done with clamps, screws, or by lashing the boat to a

post so its weight compresses the repaired parts. Whatever the means of compression, the proof of a good joint is the bead of putty that will be squeezed out along the entire joint. Finish with a coat of pigmented resin or marine paint.

Abrasive wear

This type of damage usually results from the boat being dragged excessively across concrete, rocks, or other surfaces and will most frequently show up as a split bow. If access to the inside of the split is available, repair this first. Support the bow in place (an inverted wheel barrow makes a good cradle for a small boat) and caulk the split with polyester putty to a smooth one-inch fill. After this has hardened, cover the caulked area with strips of fiberglass cloth that has been impregnated with catalyzed resin, lapping the strips across the joint.

Next, repair the outside of the split section, first building up the worn area with polyester putty, or with chopped fiberglass and resin. File or sand the hardened putty to shape, then cover the area with strips of fiberglass cloth saturated with catalyzed resin, again lapping the strips to give added strength across the split and building up the bow against further wear. Finish the repair by sanding the hardened cloth enough to remove the cloth pattern, and give it a coat of pigmented resin or marine paint.

Fracture or hole

Back to Lou and his "dropped" rig. Our first step was to cut away all damaged fiber, keeping such removal to a minimum. If a hole results from such trimming, use an aluminum sheet or cellophane backed by cardboard to support the patch until it hardens. Use layers of fiberglass mat or cloth saturated with catalyzed resin to build up the patch to the original level.

In the case of Lou's boat, all it required was a chopped fiberglass and resin mixture to build up the edge. After it hardened with the aid of a heat lamp, we filed and sanded the patch and applied a coat of pigmented resin to complete the repair.

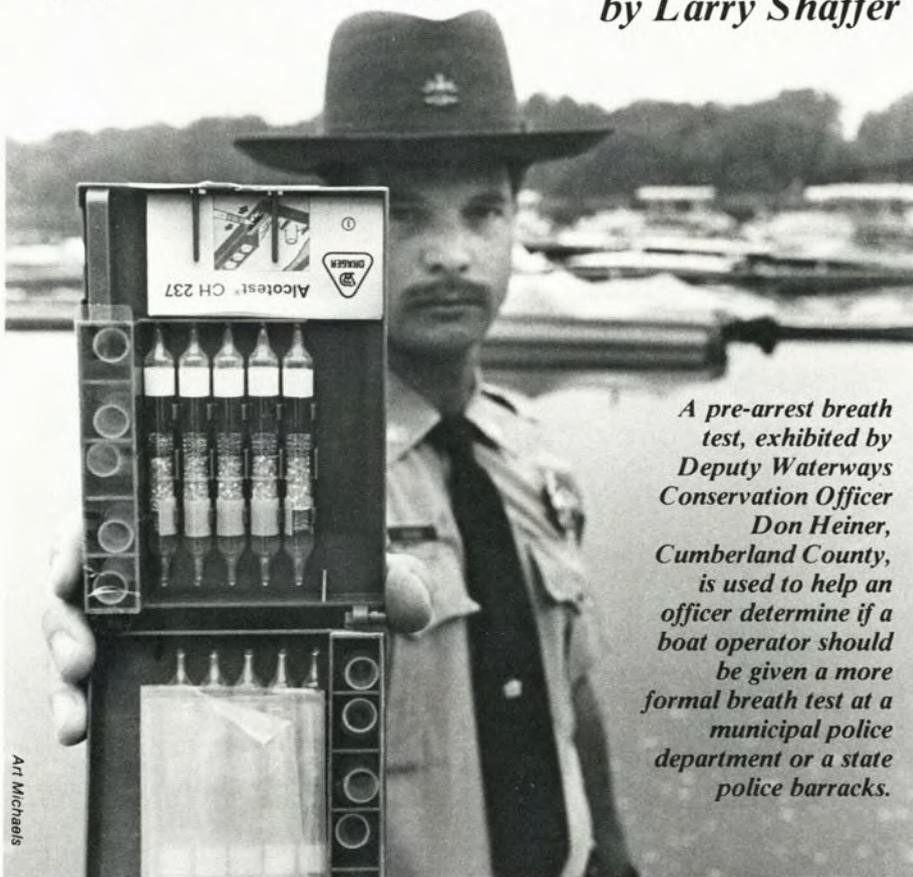
The repair materials needed, from fiberglass cloth and resin to polyester putty, marine paint, and plenty of free advice, are available from boat dealers, boating supply stores, and chain stores that handle boats. In some cases the entire selection is available in a kit that includes the proper color resin.

Repair of fiberglass boats is not only easy and inexpensive, but is also a self-satisfying project. With a little care, common sense, and patience, any home craftsman can complete a professional-quality repair of his boat.



Boating and the Effects of Alcohol

by Larry Shaffer



Art Michaels

A pre-arrest breath test, exhibited by Deputy Waterways Conservation Officer Don Heiner, Cumberland County, is used to help an officer determine if a boat operator should be given a more formal breath test at a municipal police department or a state police barracks.

As we move into the colder months of the year, we anxiously look forward to spending as many fun-filled days on the water as we possibly can. Boating in Pennsylvania is growing by leaps and bounds, but unfortunately, not without problems.

Boating accidents continue to be a fact of life—or in too many instances—a fact of death. During 1984, 23 persons lost their lives in boating accidents in Pennsylvania, and in many cases, alcohol played a part in the tragedy. Studies have shown that alcoholic beverages are a contributing factor in more than 50 percent of the boating fatalities

recorded nationwide. That's a frightening figure.

Drinking and operating a boat is no different from drinking and driving an automobile or truck. It all starts innocently enough. A couple of friends in a boat or canoe, out for an afternoon of fun and relaxation. They may be on a river, a smaller stream, or one of the many lakes in Pennsylvania. It's a warm day, and a cooler full of beer seems to be one way to find relief from the heat.

But then something happens; the craft capsizes for one reason or another, or someone simply falls overboard, or there's a collision. In any event, someone ends up unexpectedly in the water. He's probably physically fit and a good swimmer, but in spite of that, the afternoon ends in tragedy. An investigation shows a high level of alcohol content. Another needless loss of life.

Why? What happens with even just a moderate intake of alcohol? Several things. Lack of stability, for one. Even though undetected by the person involved, his balance is greatly lessened. Falls overboard and capsizing of boats under 16 feet are the primary causes of boating fatalities. And alcohol simply compounds the problem. These small crafts are a poor place to experiment with balance.

Studies show that, inebriated, a person is probably unable to swim, even though sober he may be an excellent swimmer. What's worse, thrown unexpectedly into the water and a bit tipsy, he's confused, scared, and cold. The water is dark and murky. He is just as likely to swim downward—to drown—as he is to swim up to safety.

Also affected by alcohol is the capacity to receive and integrate signals sent from the various sensory organs to the brain. It is difficult to sort out these signals and combine them into meaningful actions; reaction time can be doubled.

Furthermore, alcohol reduces inhibitions, especially in risk-taking situations. A person under the influence is more apt to try dangerous feats or stunts that he would not consider when sober. Mr. Milquetoast suddenly and tragically becomes macho-man.

Finally, vision is affected by alcohol and becomes especially critical at night. Recovery time from glare following exposure to bright lights can be delayed 20 to 50 percent, and may take up to six hours to return to normal or to pre-drink glare recovery time. In addition, did you know that intoxicated persons lose their ability to see primary colors at night (such as red and green)? Isn't it a bit frightening when we realize that red and green bow lights help to control boat traffic, just as red and green lights control traffic on our streets?

Drinking while boating is dangerous. Think about it. 

Larry Shaffer creates and produces the Fish Commission's weekly radio broadcasts, from which this article is adapted. Commission broadcasts can be heard on 70 AM and FM radio stations throughout Pennsylvania.

Regulation Roundup

by Dennis Guise

The Fish Commission and its Boating Advisory Board recently reviewed proposed changes to boating regulations for 1986. After considering advice from the Boating Advisory Board, the Commission decided to publish a notice of proposed rulemaking and solicit public comment concerning several changes.

Current boating regulations contain several prohibitions relating to operation and equipment of boats. The Commission decided to clarify these provisions by adding a new regulation making it clear that the operator of a boat is ordinarily responsible for compliance with operational and equipment requirements. The operator may be cited for violations of these requirements unless the regulation clearly makes compliance the responsibility of the owner or some other party.

The Boating Advisory Board recommended, and the Commission agreed, to seek comment on a proposal concerning operation of boats on waters where horsepower restrictions apply. Several Commonwealth waters limit the horsepower of motors used for propelling boats on those waters. If the boat has a motor with more horsepower than permitted on a particular lake, current regulations require the operator to disable the motor by removing the propeller and leaving it ashore. As proposed, the requirement for removing the propeller is deleted. It is still illegal to use a larger horsepower motor than permitted on restricted horsepower lakes, but if the proposal is adopted, operators will not have to go to the trouble of removing the propeller. The proposal does not apply to Pymatuning Lake where propellers will still have to be removed from boats with motors larger than 10 horsepower pursuant to an agreement with the state of Ohio.

The Commission is also proposing several minor administrative changes to its boating regulations. These changes include deletion of references to form numbers in the text of the regulations and requiring that accident reports be completed when filed with the Commission.

In addition to the proposed changes to general boating regulations, the Fish



Art Michaels

Pictured above are the members of the Boating Advisory Board appointed by the governor. From left to right, they are: David Coe, chairman of the Pennsylvania Federation of Sportsmen's Club's (PFSC) Boat Committee and member of the PFSC board of directors. Mr. Coe is also active in the U.S. Coast Guard Auxiliary and U.S. Power Squadrons. Clayton Buchanan (second from left) has served on the board since 1977 and has been chairman since 1981. Helen B. Lange (third from left) has been a member of the Pennsylvania Boating Association (PBA) since 1950 and was elected as a PBA director in 1981. Mrs. Lange is also an active Coast Guard Auxiliary member who has served as flotilla vice commander. Ed Rogowski (far right) is president of the Delaware River Yachtsmen's League and Southeast Region PBA president. Absent from this picture is Leon Lyon, who also serves by appointment of the governor. Boating Advisory Board ex officio members include Ralph W. Abele, executive director of the Fish Commission; Gene Spurl, Commission assistant executive director; and George Kaufman, Bureau of State Parks.

Commission proposed changes to two special boating regulations applicable to particular waters. The Commission proposes removal of special boating regulations on Bear's Dam, Cumberland County, and Swatara Creek Dam, Dauphin County. Neither of these impoundments is suitable at this time for high-speed boat operation or water skiing because of damage to the dams. The Commission therefore proposes to delete regulations on speed zones and water skiing for these waters.

Both the Boating Advisory Board and the Fish Commission value public comment on proposed regulations. The text of the proposals described in "Regulation Roundup" is published in *Pennsylvania Bulletin*, and public input is invited. If you have questions or desire more information about these proposed regulations, contact John Simmons, Administrative Officer, Bureau of Waterways, Pennsylvania Fish Commission, P.O. Box 1673, Harrisburg, PA 17105-1673 (717-657-4540).

Dennis Guise is chief counsel of the Pennsylvania Fish Commission.

Ron Frymire Wins Evinrude Contest

Freelance writer-photographer Ron Frymire has placed first in the 1984-85 Evinrude Contest for his article, "1984: New Wake on the West Branch," which appeared in the July/August 1984 *Boat Pennsylvania* and in the August 1984 *Pennsylvania Angler*.

The contest, sponsored by Evinrude, is part of the Outdoor Writers Association of America annual awards program. The contest honors the authors of the best newspaper or magazine articles written in the interests of boating or the boating environment. Frymire won a \$1,000 savings bond. His article was selected from a field of entrants that includes the nation's top boating writers, whose work appears in just about every boating magazine and boating column published in the U.S.

The LAW & YOU

by Dennis Guise

Each year, waterways conservation officers and their deputies prosecute more than 10,000 summary violations of the Fish and Boat Code and regulations. Summary offenses are often resolved by field acknowledgements of guilt or in summary proceedings before district justices. Persons involved in such violations occasionally express concern about whether their involvement will damage their reputations as law-abiding citizens.

A summary violation of the Fish and Boat Code or regulations is roughly analogous to a traffic ticket. Summary violations ordinarily involve no allegations of moral turpitude and require no showing of specific intent to violate the law.

Even when the person commits a summary offense by mistake, he or she may still be guilty. When someone pleads guilty or acknowledges guilt of a summary violation of fishing or boating laws and regulations, he or she is not admitting to deliberate criminal misconduct.

Boat User Fees, Nav Chart Charges in House & Senate

Both the House and Senate have proposed allowing the secretary of commerce to recover more costs associated with the production of nautical charts. In the House, Norman Shumway's (R-CA) H.R. 2775 would triple current chart costs over a 3-year period. In the Senate, the National Oceanic & Atmospheric Administration Authorization bill (S. 990) was amended to allow for chart prices to be increased over a 3-year period to recover all costs associated with information collection, compilation, printing, and distribution.

In related developments, both the House and Senate's budget resolution for fiscal years 1986-88 contemplate charging recreational boaters user fees to pay for certain Coast Guard

Except in rare cases, apprehension for a summary offense does not involve the arrest of the violator. Summary violations of the Fish and Boat Code and regulations are handled in much the same manner as are minor traffic violations. Violators may be cited, or if they desire, they may dispose of cases by field acknowledgements of guilt, which involve use of a procedure unique to the Fish Commission and our sister agency, the Pennsylvania Game Commission. Most summary offenses are punished by fines of \$10-\$100 plus court costs.

The Fish Commission obviously wants everyone to avoid violations of fishing and boating laws and regulations, and we try to keep everyone informed about the contents of our rules. However, everyone realizes that violations will occur, and that sometimes they result from oversights or omissions by well-meaning, respectable law-abiding citizens. Persons convicted of summary offenses are not "criminals." As long as an individual is not involved in repeated or persistent violations of the Fish and Boat Code or regulations, a summary violation should not damage his or her reputation.

Dennis Guise is Fish Commission chief counsel.

services. House Concurrent Resolution 152 includes an instruction to the House Merchant Marine and Fisheries Committee to reduce budget authority and outlays by \$50 million in each of the next three fiscal years, assuming an offset in user fees to such Coast Guard services as patrolling races and regattas. Senate Concurrent Resolution 32 looks for government savings of \$150 million annually in the same time frame by charging boaters for non-life-threatening search and rescue missions.

Members of the House Merchant Marine & Fisheries Committee, mindful that existing user fees paid by recreational boaters in the form of motorboat fuel taxes are in danger of being substantially withheld or diverted from their intended purposes under the Wallop-Breaux Act, have written to the House Budget Committee urging them to hold firm in defending the lower House figure of \$50 million for direct and identifiable Coast Guard service in the Budget Conference.

Free Pamphlet

The American Canoe Manufacturers Union (ACMU) has published a 45-page pamphlet called, "Learn Canoeing!," which lists 183 locations in 40 states where canoeing is taught by experienced instructors. It also advises how to keep a canoe from tipping, how to find and join a canoe club, and how to buy a canoe.

Most of the organizations listed in "Learn Canoeing!" offer guided canoe trips allowing the application of new skills in the company of experts, and a chance to meet other canoe enthusiasts. For a copy, send \$2 to cover postage and handling to ACMU, 439 E. 51st Street, New York, NY 10022.

Prop Peculiarities

Cars have the driver's seat on the left-hand side (except for places like England), so why do powerboats have the seat on the right side?

There is a practical reason. When observed from behind a boat, the engine propeller turns clockwise when the boat is under way. The prop is said to have a right-hand rotation. Water resists the clockwise motion of the propeller, so it causes the boat to roll slightly in the opposite direction—down on the left side. To offset this slight imbalance, the operator's seat is placed on the right (starboard) side.

How many blades should a propeller have? Propeller technology, like much of life, represents a compromise. A single-blade propeller theoretically is the most efficient—but the vibration would be intolerable. Adding blades reduces both efficiency (which is bad) and vibration (which is good). So most props have three blades—a reasonable compromise between efficiency and vibration.

What's the advantage of having a thin-bladed prop or one with thicker blades? There is only so much power available from the engine, so blades should be as thin as practical. That's because it takes more power to push a thick blade through the water than a thin one. Does this mean that a boater should buy the thinnest blade he can find? Not necessarily. The thinner the blade, the more likely it is to break (when compared to a thicker prop of the same design and material).



Dedicated to the sound conservation of our aquatic resources, the protection and management of the state's diversified fisheries, and to the ideals of safe boating and optimum boating opportunities.

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Thank you for sending me a copy of your July/August issue of *Boat Pennsylvania*. I enjoyed reading it very much. The magazine offers a great deal of information on many subjects of interest to the general boater.

The editorial material is well thought out and presented with interest for the reader. You have also included some good educational information.

Be the way, the photography throughout the magazine is outstanding.

Keep up the good work and I am sure your circulation will grow well beyond the present 10,000.—*Robert R. Leslie, immediate past president, National Boating Federation*

Your magazine *Boat Pennsylvania* is certainly first class. It's informative, easy to read, and has many excellent articles about boating.

Congratulations! We support your efforts to improve a boater's knowledge of safety, courtesy, and legal operations of watercraft. Excellent editorial on hydrilla.

Everyone should become aware of the ecology and the environmental pollution that threatens our country. We all need to be more aware of our responsibilities to prevent pollution of any kind. Best wishes for continued success.—*Lawrence R. Thibault, Director, Outdoor Program Services, National Office, Boy Scouts of America*

Let me congratulate you on the article, "Six Small-Boat Sailing Secrets," in your July/August 1985 *Boat Pennsylvania*. This is one of the finest articles for new sailors that I have read in a long time because it gets across fairly complex concepts in simple and easy-to-understand words. The only thing I think you should add in any sailing article is a warning about the danger of overhead powerlines to all users of sailboats. This doesn't happen very often, but when it does, it can be very catastrophic. Good magazine! Good article!—*Doug Campbell, president and general manager, Hobie Cat*

Publications for Paddlers

The Fish Commission has available several pamphlets and guidesheets for canoeists and kayakers. Each provides immediately useful information and safety facts. Now is a good time to prepare for a season of safe boating with the vital information these publications contain.

- **Canoe Safety** is a pamphlet that spells out seven rules of safety with other practical ideas.
 - **Survival in Cold Water** describes the dangers of cold water and ill-prepared boaters. It also explains what to do in cold water if you are suddenly and unexpectedly immersed, and how best to be prepared. First aid for cold-water victims is also detailed.
 - **Personal Flotation Devices** is a pamphlet that describes the PFDs available, and how and when you need them.
 - **Suggested Maps and Guides for Paddling Pennsylvania's Waterways** is another useful guidesheet that shows where to obtain maps of the Keystone State's largest rivers and streams. These materials are essential in planning a float trip.
- All these items are free, but with requests include a business-sized stamped, self-addressed envelope. Contact: **Boating, Pennsylvania Fish Commission**, P.O. Box 1673, Harrisburg, PA 17105-1673.

Sobering Facts About Alcohol and Boating

Alcohol is involved in at least half of all boating fatalities, according to a new brochure on alcohol and boating, published by the Boat/U.S. Foundation for Boating Safety.

The fact-filled brochure, the first of its kind slated for national distribution, describes in detail the physiological effects of alcohol, which present unique hazards in the marine environment. A chart, describing the danger zones for drinking boat operators, is a featured part of the brochure.

Copies of the publication are available by writing to: Boat/U.S. Foundation, 880 S. Pickett Street, Alexandria, VA 22304.

Calendar

September

1 Water ski contest, sailboat and canoe races, Lake Heritage. Lake Heritage Property Owners Association, Box 420, Gettysburg, PA 17325.

1 Sailboat races, Lake Nuangola. Nuangola Yacht Club, Commodore Stephen Fleetwood, 15 Nuangola Avenue, Mountaintop, PA 18707.

1 Sailboat races, Conneaut Lake. Conneaut Lake Yacht Club, Mark D. Prather, 791 North Main Street, Meadville, PA 16335.

1, 2, 15 Sailboat races and instruction, Yellow Creek State Park Lake. Prindle Fleet #65, 530 Brunswick Drive, Greensburg, PA 15601

1, 2, 8, 15, 22, 29 Sailboat races, Quaker Lake. Quaker Lake Yacht Racing Club, P.O. Box 1702, Binghamton, NY 13902 (races through 10/13).

1, 7, 8, 14, 15, 21, 22, 28, 29 Sailboat races, Pymatuning Reservoir. Pymatuning Yacht Club, Jamestown, PA 16134.

1, 8, 15, 22, 29 Sailboat races, Susquehanna River, Long Level. Susquehanna Yacht Club, RD 1, Wrightsville, PA 17368 (races through 10/5).

4, 11, 15, 22, 28, 29 MORC regattas, Lake Erie. Erie Yacht Club, David Preston, P.O. Box 648, Erie, PA 16512 (races through 10/6).

5 Penn's Landing Boat Show, Philadelphia. National Marine Manufacturers Association, 353 Lexington Avenue, NY, NY 10016.

7, 14, 21, 29 Sailboat races, Presque Isle Bay and Lake Erie. Presque Isle Yacht Club, Harold Eisert, 3217 S. 25th Street, Erie, PA 16505.

7, 14, 21, 22 Sailboat races, Lake Nockamixon. Nockamixon Sail Club, Joseph M. Galli, 406 Calais Drive, Sellersville, PA 18960 (races through 10/20).

7, 14, 21, 28 Sailboat races, Lake Arthur, Moraine State Park. Moraine Sailing Club, P.O. Box 692, Pittsburgh, PA 15230 (races through 10/5).

8, 14, 15, 29 Sailboat races, Lake Marburg. Lake Marburg Sailing Association, 67 Oakway Road, Timonium, MD 21093 (races through 10/6).

8, 15, 22, 29 Sailboat races, Delaware River between Betsy Ross and NJ/PA turnpike bridges. Delaware River Yacht Racing Association, 200 Fulton Street, Riverton, NJ 08077 (races through 10/6).

8, 15, 22, 29 Sailboat races, Rose Valley Lake. Lycoming County Yacht Club, James Bryan, 322 Union Avenue, Williamsport, PA 17701 (races through 10/13).

8, 22, 29 Sailboat races, Marsh Creek State Park Lake. Marsh Creek Sailing Club, Graham S. Thompson, 97 Waterloo Avenue, Berwyn, PA 19312 (races through 10/20).

14, 15 Pennsylvania Fish Commission Boating Information Van to Speedwell Forge Lake during Lancaster YMCA triathlon. Janet R. Mayer, Bureau of Waterways. Telephone: 717-657-4540.

14, 15 Keystone Slalom, Reading, PA. American Canoe Association, P.O. Box 248, Lorton, VA 22079.

14, 15 Slippery Rock Creek Slalom, Portersville, PA. American Canoe Association, P.O. Box 248, Lorton, VA 22079.

14, 21, 28 Sailing regattas, Leaser Lake. Windward Sailing Club, Michael J. Geisen, 1771 Peachtree Circle, Whitehall, PA 18052 (races through 10/26).

14, 28 Sailboat races, Conewago Lake, Pinchot State Park. Pinchot Sailing Club, Keith W. Brown, 615B Third Street, New Cumberland, PA 17070 (races through 10/12).

15, 28, 29 Sailboat races, Blue Marsh Lake (State Hill Access). Blue Marsh Sailing Association, Murry Fink, 3120 Octagon Avenue, Sinking Springs, PA 19608 (races through 10/27).

21 Water release from Francis E. Walter Dam on the Lehigh River. U.S. Army Corps of Engineers, 215-597-3311.

21, 22 Riversport Slalom, Confluence, PA. American Canoe Association, P.O. Box 248, Lorton, VA 22079.

28 Canoeing and Outdoor Skills Day (training event), Hereford Manor Lake (Upper). Beaver-Castle Girl Scout Council, 443 Third Street, Beaver, PA 15009.

28, 29 Lenape Slalom, West Chester, PA. American Canoe Association, P.O. Box 248, Lorton, VA 22079.

October

5 Sailboat races, GP 14 North Americans, Marsh Creek State Park Lake. Marsh Creek Sailing Club (see September 8, 22, 29 entry).

5, 6 Fiddler's Elbow Slalom, Pennsylvania Championship Race #3, Hummelstown, PA. American Canoe Association (see September 14, 15 entry).

13 Pennsylvania Sunfish Championships, Marsh Creek State Park Lake, Marsh Creek Sailing Club (see September 8, 22, 29 entry).

19 Water release from Francis E. Walter Dam on the Lehigh River. U.S. Army Corps of Engineers, 215-597-3311.

20 Bellefonte Slalom, Pennsylvania Cup Championships Race #4, Bellefonte, PA. American Canoe Association (see September 14, 15 entry).

26 Pennsylvania Fish Commission meeting, Edinboro. For details, contact the Fish Commission at 717-657-4522.

26, 27 Rowing races, Schuylkill River. J. Sweeney, Commodore, Schuylkill Navy of Philadelphia, #4 Boathouse Row, Philadelphia, PA 19130 (races through 11/24).

26, 27 Easton Slalom, Pennsylvania Cup Championships Race #5, Easton, PA. American Canoe Association (see September 14, 15 entry).

To have your organization's activities considered to appear in *Boat Pennsylvania's* "Calendar" Column, send the information to us at least three months before the date of the activity. For instance, if your group's event occurs in December, we must have the details in September. Send items to: The Editor, *Boat PA* "Calendar," P.O. Box 1673, Harrisburg, PA 17105-1673.



Last May, the Fish Commission hosted a meeting of the National Boating Safety Advisory Council (NBSAC), a group of 21 industry, state, and public boating representatives who advise the Coast Guard on boating matters. Gene Spurl, Fish Commission Bureau of Waterways Assistant Executive Director, is one of seven state officials on the council.

Coast Guard Considers New PFDs

A new life preserver, which is said to be lighter and more wearable than currently approved devices, was presented to Secretary of Transportation Elizabeth Hanford Dole by A. Newell Garden, chairman of the National Boating Safety Advisory Council. Called a "hybrid," the part-conventional, part-inflatable new vest uses less buoyant material but supplements this with air. It offers 7½ pounds of inherent buoyancy, enough to float 75 percent of all boaters until they can inflate the air chamber. When inflated, the life preserver provides 22 pounds of buoyancy compared to 15½ pounds in a conventional device.

The development of the hybrid, which is more comfortable and designed to be worn continuously while on deck, is expected to reduce the number of drownings. Most boating fatalities involve drowning by boaters who are not wearing life preservers.

Coast Guard Hotline

The U.S. Coast Guard has recently initiated a boating safety hotline. The hotline provides information on boats and associated equipment involved in safety defect (recall) campaigns for the past five model years. If you own a new boat or if you're buying a used boat and don't know if it's been in a defect campaign, you can find out and get instructions on how to get the defect corrected.

A hotline operator is on duty Monday through Friday from 8 a.m. to 4 p.m. The operator on duty takes complaints about possible safety defects, and assists consumers having difficulty getting corrective action for a safety recall already announced. Pennsylvania boaters who want to take advantage of this service can dial the toll-free number, 1-800-368-5647.

BOAT

Pennsylvania

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Piloting Pennsylvania's Major Rivers

by Mike Sajna

photos by the author

You can't be too careful while piloting a boat. Everybody who intends to operate a boat on one of Pennsylvania's major waterways should be acquainted with the fundamentals of river boating. The fundamentals set forth here, together with a set of charts or guidebook for the river on which you plan to operate, can help you be a safer river boatman and add to your enjoyment of major rivers.

To begin, for normal running, stay in the main channel shown on the chart that covers the particular section of river on which you are operating. In straight sections of the river, the channel is usually in the center. Where the river bends, however, the current swings wide and the outside bend usually has the deeper water. Sand and silt collect to form shoals on the inside of bends. For this reason, it is not a good idea to take shortcuts across river bends.

Buoys

Along with charts, many buoys, lights, and daymarks that mark docks, intakes, piers, and other facilities are designed to help boaters follow the main channel and avoid both natural and manmade hazards. The most common types are the red nun buoys and the black can buoys. Moving downstream, a red nun marks the left side of a channel and the black can, the right.

Sunken barges and other unusual

obstructions are sometimes marked by lighted temporary buoys with a flashing light, red or white on the left of the channel, and white or green on the right. Sometimes an oil drum with a lantern also may be used.

Orange and white regulatory buoys are often placed by the Fish Commission, the U.S. Army Corps of Engineers, and private businesses to mark construction, dredging, race courses, and submerged hazards. If you do not know why a buoy is in a certain area or what it signifies, the best course of action is to avoid it.

Coast Guard buoys are painted with a white band at the top to help make them stand out from the shoreline. They also carry bands of reflective

material designed to make them easier to pick up with a spotlight at night. Reflectors on nuns are red and on cans they are white.

However, you will notice a change in the next year or so with black can Coast Guard buoys. As each buoy is inspected or replaced, it will be repainted green, so for a time there will be both black and green buoys. After the changeover is complete, all can buoys will be green. Nun buoys will remain red.

On major rivers, the Coast Guard also has established numerous lights and daymarks along the shore that boaters can use as references. Lights and daymarks are normally shown on all charts. Navigation lights are white or red on the left descending bank, and







white or green on the right descending bank. All daymarks carry reflectors that can be picked up by a spotlight at night. Marks on the right descending bank have red reflectors and on the left, green.

Bridges and locks regularly carry lights to alert boaters. Bridges are marked with green lights at the center of the channel and red lights on the piers.

Many dams are now marked with regulatory buoys both upstream and downstream. These buoys mark a restricted area into which boats may not travel.

Although buoys and lights are great aids in navigating rivers, nobody should depend on them completely. Remember that buoys drift and lights burn out, so always have a chart along. Furthermore, any problems with buoys should be reported to the Coast Guard at once, as should any unmarked shoals or other obstructions that you might encounter.

Shallow water

While buoys, lights, and charts are all important aids to navigation on rivers, the good skipper never overlooks his own senses and past experience. Knowledgeable boaters know that high, steep banks mean deep water even close to shore and that gentle, sloping beaches can mean shallow water far out into a river. In addition, they know that they can expect shoals on both the upstream and downstream end of islands, above and below dams, and at the mouths of tributaries.

But those are only the obvious places to look for shoals. Good skippers also are aware that a restriction or slowing in a river's flow is another sign of shallow water. A change in the color of the water to a lighter shade, and ripples or a patch of quieter water in a choppy stretch, is also a sign of shallow water.

A change in the sound of your boat's motor is still one more indication of shallow going. In this situation, the stern usually squats as the prop pulls water from under the boat. The "V" of your wake widens and the wave, which normally runs off the quarter, tends to move ahead.

When approaching an area that you suspect contains shallow water, the best move is to run at bare steerage, using the prop only enough to make headway, and post a lookout on the bow if it is at all possible.

If you encounter a sandbar, the safest action is to cut the motor immediately to save the prop. Shifting into reverse won't stop the boat in time, and just as much damage can be done in reverse as in forward.

Debris

Along with shoals, debris is another hazard that river boaters encounter far more than those who use lakes. Rivers commonly drain thousands of square miles, so a large amount of flotsam can be expected to be brought down by almost every rain.

Most debris floats high on the surface and can be avoided by an alert captain. Even heavy debris can be

passed through. However, do so slowly enough to push it aside and not suck it under.

If you do hear a heavy thump and rattle, check the hull immediately for damage. A piece of driftwood spinning off a prop has put holes in more than one hull. If an unusual vibration follows your encounter with the drift, head at a slow speed for the nearest place where the prop can be checked for damage. High-speed running with a damaged prop can cause more problems with bearings and fittings.

Towboats

Besides the natural hazards of shoals and debris, and the manmade problems of bridge piers, dams, and sunken equipment, major rivers, especially in Pennsylvania, also contain another trapping of industrialized society for which boaters must keep an eye out: Towboats.

A typical tow of six barges and a towboat is approximately 600 feet long. Loaded it weighs about 7,000 tons and draws nine feet of water. When loaded, it needs almost a half-mile to stop and entirely all of the river in which to turn.

Pleasure craft should never cross the bow of a tow at less than 500 feet. Visibility from the pilothouse of a towboat is restricted by the barges it is pushing, and a blindspot of up to 600 feet beyond the lead barge is not uncommon, especially if the barges are empty and riding high on the water.

If crossing a towboat's path is hazardous, running alongside is only slightly less dangerous. The power of a towboat's prop is enough to trap a small boat and smash it against its hull in the blink of an eye. The props also push out a huge volume of water that even the largest cruisers might not be able to handle.

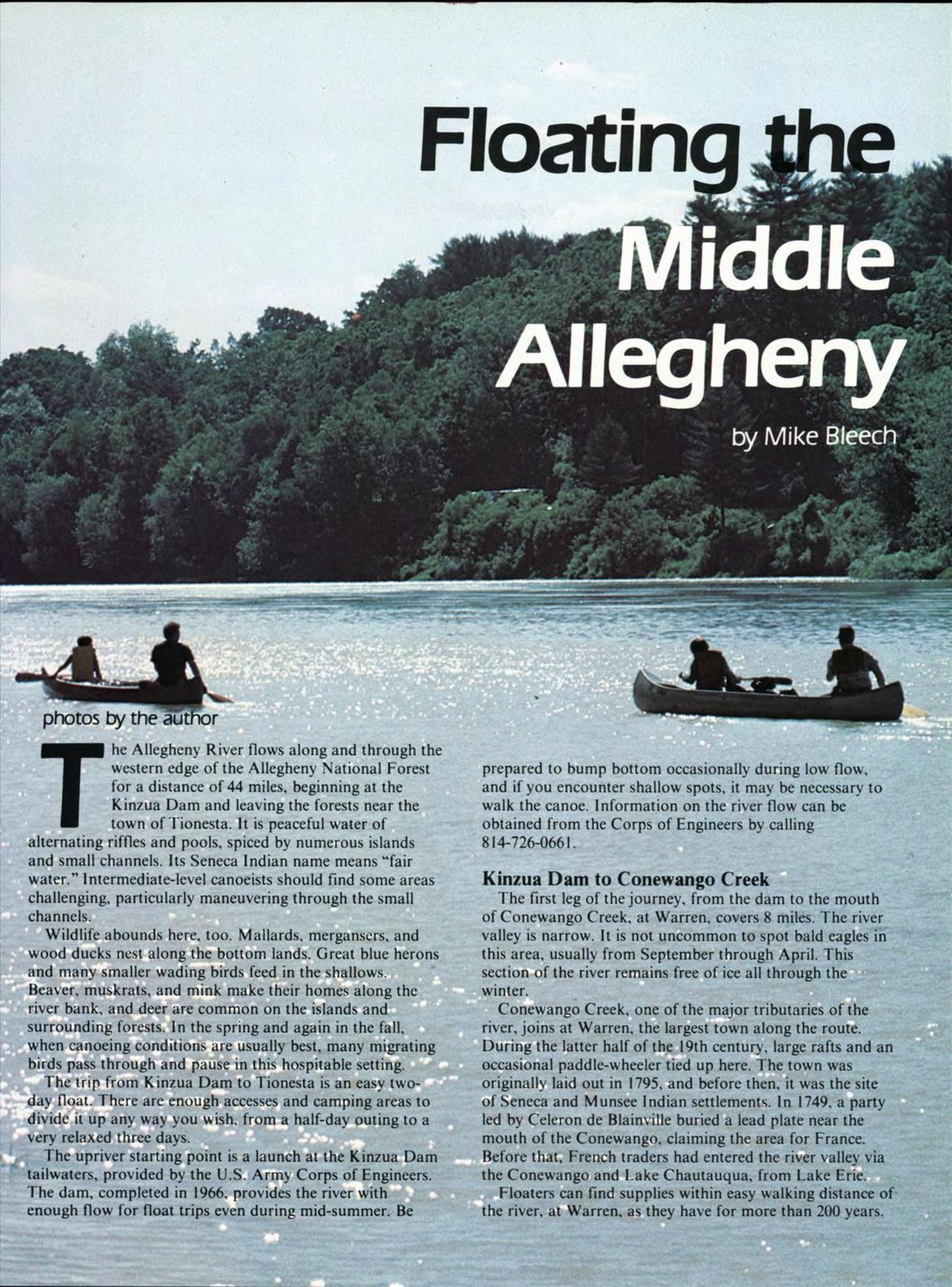
Finally, if you have questions on safe boating or on specific river sections in Pennsylvania, contact the Fish Commission regional law enforcement office nearest the waterway. The addresses and phone numbers of these offices are listed on page 21 of the 1985 Summary of Boating Regulations. Be sure also to check the summary for additional information on navigation aids and markers.

These ideas are some of the basics of safe river boating. Keep them in mind for the safety of your passengers and your boat.



Floating the Middle Allegheny

by Mike Bleech

A photograph of two canoes on a wide river. The canoes are dark, and the water is light blue with some ripples. The background is a dense forest of green trees under a clear sky. The text is overlaid on the bottom left of the image.

photos by the author

The Allegheny River flows along and through the western edge of the Allegheny National Forest for a distance of 44 miles, beginning at the Kinzua Dam and leaving the forests near the town of Tionesta. It is peaceful water of alternating riffles and pools, spiced by numerous islands and small channels. Its Seneca Indian name means "fair water." Intermediate-level canoeists should find some areas challenging, particularly maneuvering through the small channels.

Wildlife abounds here, too. Mallards, mergansers, and wood ducks nest along the bottom lands. Great blue herons and many smaller wading birds feed in the shallows. Beaver, muskrats, and mink make their homes along the river bank, and deer are common on the islands and surrounding forests. In the spring and again in the fall, when canoeing conditions are usually best, many migrating birds pass through and pause in this hospitable setting.

The trip from Kinzua Dam to Tionesta is an easy two-day float. There are enough accesses and camping areas to divide it up any way you wish, from a half-day outing to a very relaxed three days.

The upriver starting point is a launch at the Kinzua Dam tailwaters, provided by the U.S. Army Corps of Engineers. The dam, completed in 1966, provides the river with enough flow for float trips even during mid-summer. Be

prepared to bump bottom occasionally during low flow, and if you encounter shallow spots, it may be necessary to walk the canoe. Information on the river flow can be obtained from the Corps of Engineers by calling 814-726-0661.

Kinzua Dam to Conewango Creek

The first leg of the journey, from the dam to the mouth of Conewango Creek, at Warren, covers 8 miles. The river valley is narrow. It is not uncommon to spot bald eagles in this area, usually from September through April. This section of the river remains free of ice all through the winter.

Conewango Creek, one of the major tributaries of the river, joins at Warren, the largest town along the route. During the latter half of the 19th century, large rafts and an occasional paddle-wheeler tied up here. The town was originally laid out in 1795, and before then, it was the site of Seneca and Munsee Indian settlements. In 1749, a party led by Celeron de Blainville buried a lead plate near the mouth of the Conewango, claiming the area for France. Before that, French traders had entered the river valley via the Conewango and Lake Chautauqua, from Lake Erie.

Floater can find supplies within easy walking distance of the river, at Warren, as they have for more than 200 years.

Conewango to Buckaloons

The next leg of the journey carries floaters to the mouth of another major tributary, Brokenstraw Creek, 7½ miles below the Conewango. The Buckaloons Campground (U.S. Forest Service) is located along the river, above the Brokenstraw. The campground is named after a large Indian village that was located a short distance downriver. Before the area was settled by Europeans, a trading post was located at the village.

The trip from Kinzua Dam to the Buckaloons takes about three to five hours, and many floaters make the campground their first overnight stop. Group camping is available by reservations with the U.S. Forest Service. The phone number is 814-968-3232.

If primitive camping is your game, camping is permitted on most islands that are not posted. Make special efforts to leave the island campsites as you find them. Cut no live trees, and carry your trash out. The islands offer a unique wilderness atmosphere that must be preserved.



Middle Allegheny River Services and Facilities

Canoe Rentals, Campgrounds

Allegheny Outfitters
P.O. Box 691
Warren, PA 16365
814-723-1203

Clover Leaf Campground Resort
R.D. 1, Box 50
Tidioute, PA 16351

Indian Waters Canoe Rentals
Box 56
Tidioute, PA 16351
814-484-3252

River View Campground
342 River Road
Warren, PA 16365
814-723-5960

Indian Valley Campground
P.O. Box 36
West Hickory, PA 16370
814-755-3578

Eagle Rock
Box 433
Tionesta, PA 16353
814-755-4444

Map

U.S. Forest Service
P.O. Box 847
Warren, PA 16365
(Send \$1 cash, check, or money order made payable to U.S. Forest Service, and ask for "Forest Recreation Map," and river floating information.)

This information is provided by the author.

Remember, though, that the river valley is not an uninhabited wilderness. Residents frequently voice complaints about river travelers. Major offenses are littering, trespassing, and discharge of firearms. The river flows through the national forest, yet much of the river bank is privately owned. Most of this land was not posted a few years ago, but inconsiderate travelers have forced property owners to close their land.

One of the most interesting islands is Thompson's, about three miles below Buckaloons. Here, in August of 1779, an advance guard of General Daniel Broadhead's army skirmished with and routed a band of Senecas. This was the only Revolutionary War battle in northwestern Pennsylvania. The army continued upriver, destroying Indian villages and the surrounding corn fields, and carrying off plunder.

Buckaloons to Tidioute

Any of the unposted islands between Thompson's Island and the small town of Tidioute makes a good overnight stop for floaters on a two-day journey from Kinzua Dam to Tionesta. The longest pools are in the lower half of this journey, so it is wise to float more than half the total on the first day. The wind, which usually blows upriver, can make the going slow through the mild current of the long pools.

Tidioute, like the rest of the valley, has a rich history. The town was a bustle of activity during the lumber and oil booms of the previous century. As you pass through town, let your mind wander back to the time when fortunes were being made, bands of highwaymen plundered travelers, and wicked Ben Hogan's infamous floating casino got its share of the money in this wild frontier town. Babylon Hill, on the south end of Tidioute, was aptly named. It made the "wild west" seem tame!

Tidioute to West Hickory

At Tidioute, the journey has encompassed 30 miles. The next leg, to the bridge and Fish Commission access at West Hickory, covers about 8½ miles. The river is now noticeably larger than it was when you began.

Many floaters choose to end their floats at West Hickory. Strong paddlers should have little trouble making it from the dam to this point in one day, but such a journey leaves little time to linger along the way.

About 3½ miles below the West Hickory Bridge, you pass through an area devastated by one of many tornadoes that struck the area in early June 1985. Almost all trees were uprooted or snapped off, and buildings simply disappeared. The storms took a terrible toll in life and property. Only a small portion of this scar on the land, which is one of many, can be seen from the river. It is hard to imagine that what you see from the river is only a small part of the damage.

West Hickory to Tionesta

The journey ends a few miles past the path of the tornado, at the Fish Commission access on the upriver edge

of the town of Tionesta. Note that this access area is above the large riffle at the edge of town, adjacent to the Tionesta Fish Cultural Station. By this time, you have traveled about 44 miles, sharing the valley with the spirits of rivermen from past centuries.

Bison, elk, moose, and cougar were disappearing from the area by the time the first Europeans arrived. The last otter was seen 50 years ago. Concerned citizens and government agencies are doing their best to preserve the natural splendor of this valley. Enjoy your float trip, but be sure that the beauty which attracted you to the middle Allegheny remains when you leave.





BAREFOOTIN' BASICS

by
John M. Cornish

In any sport there is a progression of advancement from the beginning stages to harder and more impressive feats, and water skiing is no different. Every recreational skier has felt the thrill of getting up on two skis for the first time and eventually raising enough courage to venture outside the wake. In pursuit of more excitement, the skier attempts small jumps off the crest of the wake. It isn't very long before he or she has the urge to try a slalom ski, and in time masters it.

The skier might now reach out to several options of challenge and excitement by riding trick skis, shoe skis, knee boards, and other similar devices.

"What's next?" the skier asks. Someone is always quick to reply, "Barefooting."

Barefoot water skiing is probably the summit of recreational skiing. "Footin'," as referred to by all

barefoot water skiers, requires faster speeds, critical and more precise body positions, and great personal fortitude. The entire idea of standing on top of the water on your bare feet goes against all our notions. This is what challenges most people to try it, and it gives you the feeling of exhilaration when you succeed.

How can a recreational skier learn to barefoot? There are two basic methods: Stepping off a slalom ski or standing up from a knee board. The most obvious and safest start into the world of barefooting is to attend a ski school and learn it with the aid of a water ski training boom. This strategy could save you a lot of time and physical abuse.

Here are some guidelines if you want to try barefooting on your own. Regardless of which of the two methods you try, when learning to barefoot, there are some safety facts to consider.

Safety

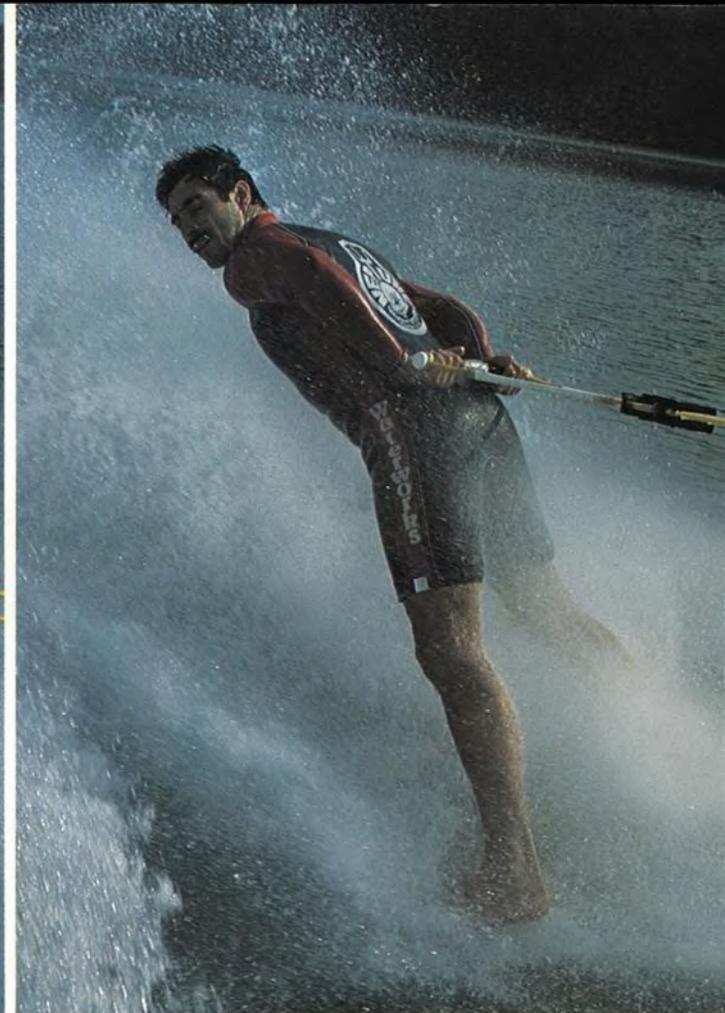
Barefootin' is done close to the surface of the water in the midst of a spray of water. Wear a heavy pair of shorts. A wetsuit or rubber shorts are

strongly suggested. Second, wear a good, safe personal flotation device. Wearing a barefoot wetsuit in addition to a PFD also adds security. In addition, the skier needs to be comfortable on skis at speeds from 35 to 40 mph with a knowledge of how to tuck for falls. It is imperative that the skier roll up for falls rather than open up to break the fall.

A rule of thumb for barefooters to set their speeds is to divide the skier's weight by 10 and add 20. This figure gives the appropriate boat speed in miles per hour within 1 to 2 mph either way. For example, a skier weighs 167 pounds. Divide 167 by 10 to get 16.7, or about 17. Then $17+20=37$ miles per hour. This formula should be used as the top speed for the boat operator to attain. The water needs only to feel solid under the skier's feet. Keep in mind that faster speeds mean harder, more dangerous falls.

Kneeboard starts

The first step is to learn to sit on the kneeboard with your feet sticking out over the front as you straddle the board. The driver and skier must



make plans beforehand because the skier will be covered with spray and bouncing, making hand signals impossible. The driver gradually increases the boat speed to barefoot skiing speed. When the skier feels the water becoming hard under his feet, he should apply some weight on the heels and slowly stand up, reaching barefoot skiing position as the boat speed levels off.

It takes several attempts to get the feel of the position. Barefoot skiing position is in a semi-crouched position with the feet shoulder-width apart. The skier should look as if he or she were sitting in a straight-backed chair. Barefooters call the skiing posture the "chair position." The shoulders should be back and the handle kept low. The skier should keep his head straight and look at the tree line. The knees must be bent, allowing the skier's weight to set the heels in the water and toes up.

Step-off method

The step-off method begins with an easy riding, stable slalom ski. To alleviate other obstacles, you may want to remove the front toe rubber

to allow easy exit for your foot. The skier should get up and ride on the ski as he or she normally would with some exaggeration of the bend in the knees.

The boat should be accelerated to barefoot speed after the skier maneuvers outside the wake to the side so that the plant foot will be next to the wake. The "plant foot" is your rear foot on the slalom ski, which you place on the water first. With the knees bent and beginning to get in the chair position, the skier plants his heel in the water easily but firmly. The skier's feet should be approximately shoulder-width apart, the knees are bent, and toes are up.

If the skier's foot is getting pushed behind him, it's because the skier is not keeping in the crouched position with the body weight keeping the foot in front of him. The skier must shift his weight over the plant foot just as though he were on two skis. Continue to shift the weight onto the plant foot until you can lift your foot and gently set it back down beside the ski. Continue to shift your weight evenly to both feet.

This method of learning to barefoot

is probably the hardest but the more thorough in learning technique and proper barefoot skiing position. Both methods require the same safety procedures and speeds.

Seeing a barefooter spraying water high in the air as he speeds over a lake is much more common today than it was a few years ago.

Keep in mind that many of these footers have learned safety through proper instruction. Learning to barefoot has its stories of bone-crushing falls. Some individuals are afraid of barefooting due to their experiences while attempting the "feat," so you may want to seek professional help to get you started. In any case, good luck and happy footing!



Pennsylvanian John M. Cornish is an accomplished, experienced teacher and water skier, presently operating a water ski school at Youghioghney Lake. He is a past two-time national champion barefoot water skier, and recently served as coach for the 1985 U.S. Barefoot Ski Team, which placed second at the World Titles.

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