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BOAT

Pennsylvania



The Keystone State's Official Boating Magazine

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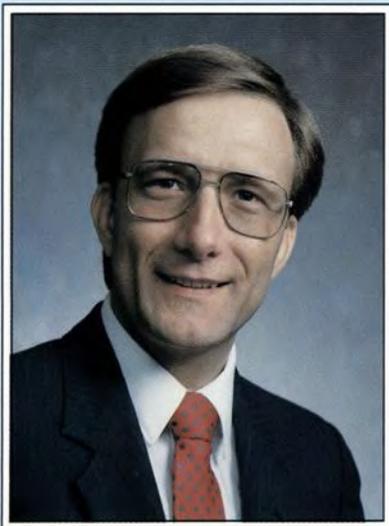
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Viewpoint

The Million Dollar Question



John Simmons
Director
Bureau of Boating
Pennsylvania Fish & Boat Commission

What would you do with a million dollars? I know what I'd do. After taking care of some essentials, I'd plan a little fun. Buy something I didn't need. Go somewhere I'd never been.

What would the Commission do with a million dollars? Even at today's prices there is quite a bit we could do. We could buy 15 new vehicles, 20 new boats, replace a dozen motors, and reimburse deputies for their boating safety patrol work and have money left over. We could present a hundred boating safety education classes, print the *Boating Handbook*, provide grants to schools to offer boating safety programs to their students, produce this magazine and still have money left over. In short, we could do many of the things the boaters of Pennsylvania have come to expect and need.

But Pennsylvania is on the verge of losing nearly a million dollars in federal funding unless we do something about it. As many of you know, the Commission receives funding each year from the Aquatic Resource Trust Fund. This federal program is funded with revenues generated from taxes boaters and anglers pay on fishing tackle and gear, excise taxes on boat motors and imported boats, and the tax imposed on the fuel used in boats.

All together about \$340 million is generated for this fund each year, some \$200 million of which comes from motorboat fuel taxes. Congress has authorized \$70 million of these funds to go to the Boat Safety Account, which is split \$35 million to the Coast Guard and \$35 million to the states to help fund local boating safety efforts. The remainder of the money goes to the Sport Fish Restoration Account to fund fisheries programs.

In 1995, the Administration has requested that no money be appropriated for the Boat Safety Account. Their reasoning is that the program has run its course and has accomplished its goals. The number of fatalities is down and the states have taken up the majority of the funding for the program. The request for zero funding is presented in the name of deficit reduction.

There are two errors in this logic. First, even though it is true that the states make a significant contribution to the funding of boating safety programs primarily through registration fees, the federal funding remains crucial to the continuation of programs as we currently know them. In Pennsylvania, fully 20 percent of our annual budget for boating safety comes from federal funds. Without these funds we simply wouldn't have the same program we have today. Secondly, the failure to appropriate this money does nothing for the federal deficit because, by law, any money that is not appropriated to the Boat Safety Account rolls over to the Sport Fish Account. On paper it looks as if the Coast Guard is reducing expenditures when in fact no money is actually saved. It is simply shifted to another program area. This is money that you, the boater, have paid in fees and taxes to support your program. You deserve to get it back in the form of services.

The federal funds we have received from this program in past years represents over \$3.00 per registered boat. If Pennsylvania does not get this money, the programs outlined above will be severely cut back or eliminated. There is no question about it. We cannot lose 20 percent of our revenue without significant effect on program efforts. We expect that upwards of two-thirds of current boat patrols will be cut. This will have a significant effect on the level of safety that we have enjoyed in recent years and could put our safety programs back 20 years.

The Commission and the national associations we affiliate with are working with Congress to get these funds restored in the final budget. Unfortunately, our own budget year is approaching and we cannot project revenue that is not assured. We must plan as if that money will not be available, because, as I write this, it is not.

The boaters of this Commonwealth have supported the Commission and its need for revenue to provide a superior boating safety program. To lose this money—your money—would be an injustice and a travesty. If you, too, are concerned about the loss of this funding, contact your congressmen and senators. Let them know you want this funding restored. Tell them you want your money back in the program where it belongs.

What would you do *without* a million dollars?

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The cover

This issue's front cover, photographed by Art Michaels, is an upriver view of the Susquehanna River at the Walnut Street bridge in Harrisburg. If powerboating is your delight, check out Piney Dam on the Clarion River, on page 7, and when you're a guest aboard someone else's boat, be sure to follow the advice in the article on page 12. There's a wealth of flatwater paddling in Pennsylvania, and the article on page 20 details how it's done correctly and safely. The article on page 24 examines central Pennsylvania's best flatwater paddling waterways. Would you like to canoe on a new river this summer? Check out how to do that on page 14. Lastly, if you're a paddler or a small-boat enthusiast, the Middle Allegheny River's seven wilderness islands provide a special boating resource. That information begins on page 28.

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10 TIPS for Buying PFDs

by Art Michaels



U.S. Coast Guard statistics shows that the two most common causes of small-boat accident fatalities are capsizing and falling overboard. Together these causes account for 65 percent, just about two out of three, of all fatal boating accidents. In both kinds of accidents, victims nearly always entered the water suddenly and unexpectedly. Is it any wonder that in more than 86 percent of all boating accident fatalities, victims weren't wearing PFDs (personal flotation devices)?

Clearly, wearing a life jacket saves lives. The laws of some 20 states now require that children below a certain age wear PFDs when they are aboard a boat. In Pennsylvania, nonswimmers and everyone under the age of nine must wear a PFD aboard a boat on Commission-owned and operated waterways, and on Department of Environmental Resources waterways.

New U.S. Coast Guard regulations, which take effect May 1, 1995, specify that Type IV PFDs (seat cushions and ring buoys) can no longer be substituted for wearable devices (Types I, II, III or V). The law stops short of requiring everyone to wear a device aboard a boat, but it is designed to encourage boaters to wear devices, not just have them available.

The momentum of state and federal boating law regulatory agencies is certainly moving in the direction of requiring small-boat enthusiasts to wear PFDs. The hidden danger for boaters, however, is that a life jacket that doesn't fit could endanger the wearer as much as not wearing one.

Use these 10 tips to fit yourself—and everyone aboard your boat—into a PFD, and make it a rule aboard your boat that PFDs must be worn.

1 Weight range and chest size are the key factors in sizing a PFD. When you pick a PFD, know the wearer's weight and chest size (measured just under the top of the arms).

2 Infants, non-swimmers and those who are afraid of the water should wear Type I or Type II PFDs, or devices designed specifically for infants. These PFDs are designed to keep most wearers, but not everyone, face-up in the water. Some Type I and II PFDs made for children and infants have a grab loop on the back of the PFD. This feature is useful if it becomes necessary to pluck a youngster from the water.



3 Many Type II and Type III PFDs for children feature crotch straps. These are helpful because in a fall overboard they can keep the PFD on the child. Make sure the strap isn't too tight, but see that it's properly attached whenever the child wears the life jacket.

4 Before you buy, always try on a PFD. A PFD should fit snugly. Use the "touchdown test." With the PFD on, have the wearer raise the arms as if the wearer were signaling a touchdown. When the wearer looks to the left and right, if the wearer can see over the shoulder, and if the chest part of the PFD isn't hitting the chin, the device probably fits.

Another useful test is to have the wearer stand normally, arms at sides. Grab the PFD at the shoulders from either the front or the back and lift it firmly up. If you can move it more than about three inches, keep shopping.

These tests gauge the PFD's ride-up and snugness. Use both fitness measures for anyone trying on a PFD.

Never let anyone aboard your boat wear an incorrectly sized PFD. A life jacket should fit tightly so that in a fall overboard it doesn't come off over the head. A PFD that rides up to cover the face in a fall can contribute to the panic and disorientation

inherent in falls overboard. A PFD that doesn't fit can increase the risk of injury and contribute to drowning.

5 Comfort is a vital consideration because devices have to be worn to work in an accident, and PFDs that are comfortable have the greatest chance of being worn. Consider a PFD that has ribbed panels. Many experienced boaters prefer these kinds of Type III devices for prolonged wear because the more ribs, the more the PFD conforms to the body and is more comfortable.

Check the arm space on a device during the "touchdown test" to see if the device rides up. If it chafes under the arms while wearing it seated or standing, keep shopping.

6 Because trying on devices is essential and testing them is beneficial, don't buy a PFD through the mail. When you shop for a PFD, read the life jacket's label. It tells you the device's size and type, and if the PFD is U.S. Coast Guard approved. Only U.S. Coast Guard approved devices meet legal requirements.

7 Buy a PFD that is brightly colored. Spotting a brightly colored PFD in the water is easier than locating one whose colors blend with the water.

8 Most people panic when they fall overboard suddenly and unexpectedly. For this reason, practice wearing a PFD in the safe confines of a swimming pool or in the swimming area of a waterway so that you learn what the device is designed to do and what it cannot do. Supervise kids attentively in this training and wear your PFD, too.

Adults and children who are swimmers should practice "falling overboard" by jumping and falling into the water with their PFDs on, and then swimming. This practice simulates an accident in which you enter the water suddenly and unexpectedly.

9 Try donning a life jacket while treading water in the deep area of a swimming pool. You'll discover how difficult putting on a PFD is in the water. When you add sudden and unexpected immersion, panic, cold water, wind, waves, a current, and perhaps other injuries, putting on a life jacket while treading water is practically impossible. This experiment clearly demonstrates that the safest strategy is to wear the device aboard your boat. This is also why many regulatory agencies are requiring that boaters wear devices on the water. Most laws currently require only that boaters have devices "readily available."

10 TIPS for Buying PFDs

10 Remember that wearing a perfect-fitting PFD isn't a guarantee that you can't be hurt in a boating accident. In most cases, though, when people wearing their PFDs fall overboard, and when they are otherwise uninjured, the life jacket keeps them up in the water long enough to let them quickly regain their bearings and effect their own rescues. ▼

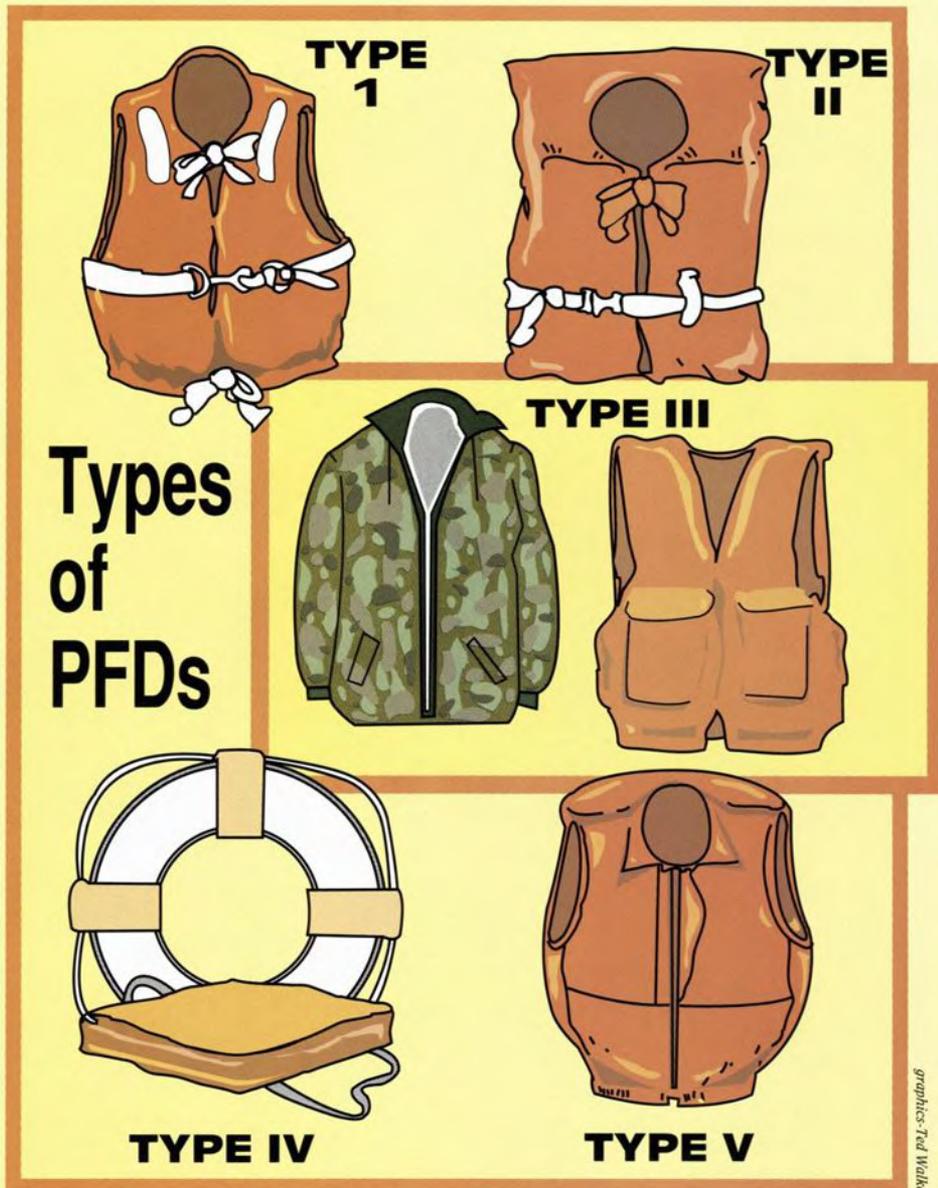
Types of PFDs

- **Type I, offshore life jacket.** A Type I PFD provides the most buoyancy. It is designed for use on open, rough water or where rescue will likely not be immediate. It is also designed to turn most wearers face-up in the water. Two sizes are available—adult and child.

- **Type II, near-shore buoyant vest.** A Type II PFD is designed for use in calm, inland waters where rescue is likely to be immediate. A Type II PFD is designed to turn some wearers face-up in the water. Type II PFDs are available in adult, medium child, small child and infant sizes.

- **Type III, flotation aid.** A Type III PFD is designed for use in calm, inland waters where rescue will likely be immediate. Wearers of Type III devices must turn themselves face-up in the water. Type III devices are available in the largest selection of sizes, colors and styles because they are the most comfortable PFDs to wear. Pocketed fishing vests and float coats are examples of Type III PFDs.

- **Type IV, throwable device.** Type IV PFDs are made to be thrown to someone in the water. They are not meant to be worn. They are intended for use in calm water with frequent boat activity where rescue is likely to be immediate. Ring buoys, buoyant cushions and horseshoe devices are Type IV PFDs.



The U.S. Coast Guard has issued final rules that revise the requirements to carry personal flotation devices (PFDs) on recreational boats. See "PFD Rules to Change in 1995" in the "Currents" section, page 18, for more details.

- **Type V, special use device.** Type V special use devices are designed for specific activities and can be used in place of other designs only if they are used in accordance with the label's approval. These kinds of PFDs include deck suits, work vests, board sailing devices, and other devices designed to provide increased protection against hypothermia. They also include hybrid devices.

- **Type V, hybrid inflatable PFDs.** These devices contain a small amount of natural buoyancy, but they contain a chamber that must be inflated. Hybrids must be worn to count toward the legal requirement.

Selected PFD Manufacturers

- Coleman Company, Inc., P.O. Box 1706, Wichita, KS 67202; phone: 800-835-3278.

- Extrasport, Inc., 5305 NW 35 CT, Miami, FL 33142; phone: 305-633-2945.

- Omega/Delta Designs Corp., P.O. Box 424, E. Boston, MA 02128; phone: 800-966-6342; 617-569-3617 (fax).

- Seda Products, P.O. Box 997, Chula Vista, CA 92012; phone: 619-425-3222.

- Stearns Manufacturing Co., P.O. Box 1498, St. Cloud, MN 56302; phone: 612-252-1642.

Boating on the Clarion River's **Piney Dam**

by Jeff Knapp



photo—Mercury Marine

*From a recreational
standpoint, Piney
offers more for the
boater than the
fisherman.*

Few waterways in Pennsylvania offer boaters the remoteness and long stretches of undeveloped shoreline as does the Piney Dam section of the Clarion River.

Mention the Clarion River, particularly about boating, and it's easy to visualize a canoe sliding smoothly over gentle riffles and runs, and long, slow pools. Anyone who has seen the Clarion between Ridgway and Cook Forest State Park wouldn't have a difficult time conjuring such an image.

But the Clarion offers a flip side, one that furnishes powerboating, skiing, tubing—the whole host of aquatic recreation associated with deeper, impounded waters.

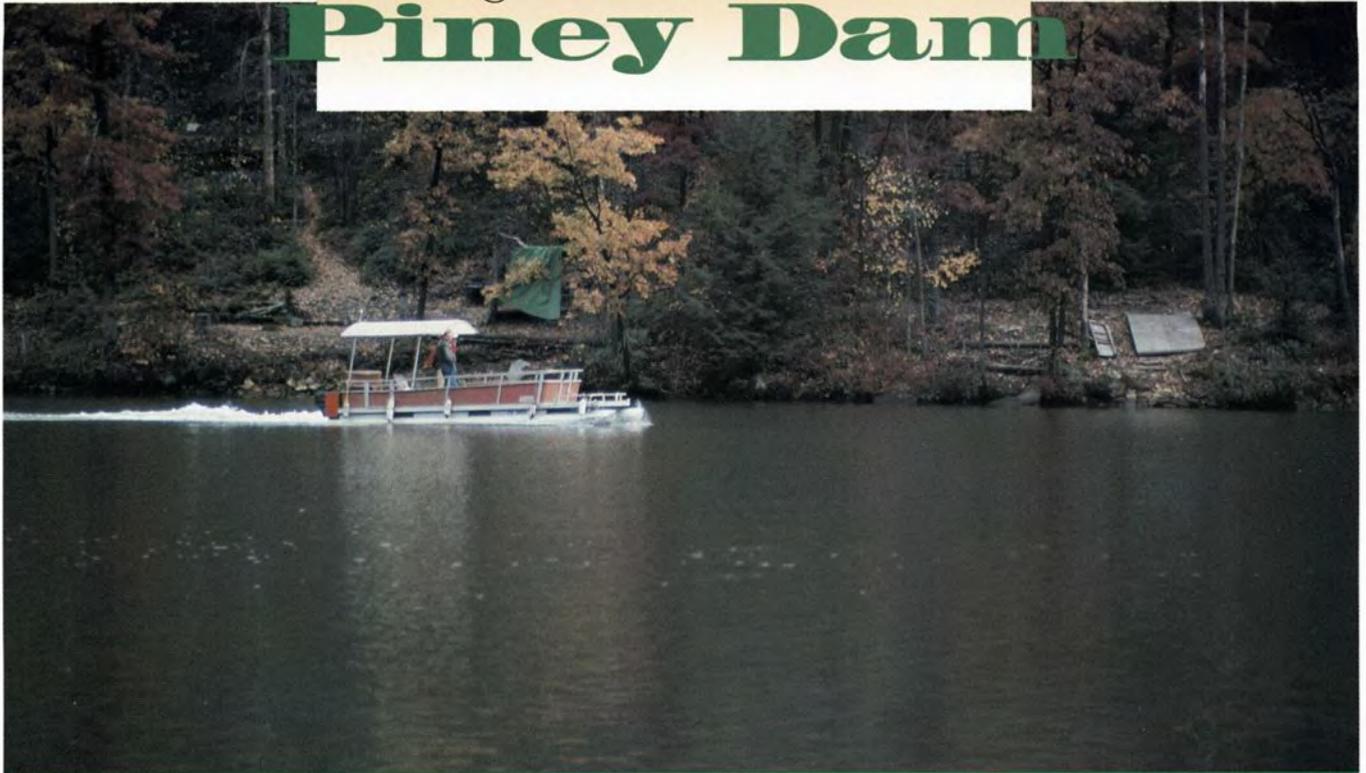
The recreational pool of Piney Dam is formed by an impoundment on the Clarion River located about two miles downriver of the I-80 bridge near the borough of Clarion. Penelec owns and operates the project for the purpose of hydro-electric power generation.

The length of the slackwater pool is slightly over 12 miles. It averages about 350 feet in width, somewhat narrower in the pool's upper portion. Depths of about 80 feet can be found near the dam. There are no horsepower restrictions.

In addition to the I-80 bridge, Piney Dam is traversed by the Toby (Fifth Avenue) and Route 322 bridges.

Boating on the Clarion River's

Piney Dam



Nearby Attractions

The area surrounding Piney Dam offers folks other recreational options in addition to the Clarion River's boating.

Cook Forest State Park sits on the Clarion River about 15 miles upriver of Piney Dam's headwaters. The park offers camping, cabins, picnicking, swimming, hiking and bicycling. Canoeing is very popular in the park, and several private liveries offer rentals and trips of varying lengths. It's a short drive to Cook Forest from Clarion.

For more information on this state park, contact the park office at 814-744-8407.

Clear Creek State Park is located farther upriver of Cook Forest, and offers many of the same attractions but on a smaller scale. Phone the office at 814-752-2368.

One of the more enjoyable times to be on the river is during autumn. Clarion holds its Autumn Leaf Festival each year in early October. The festival lasts about eight days, and provides events over and above the magnificent fall foliage.

For more information on this festival, and other attractions in the Clarion/Piney Dam area, contact the Magic Forests of West Central PA Tourist and Travel Bureau, R.R. 5, Box 47, Brookville, PA 15825, or phone 800-348-9393.-JK.

From a water quality standpoint, things are improving in Piney, and should continue to do so.



photo-left Knapp; graphics-Ted Wolke

Much of the Clarion River flows through steep-sided valleys, and the Piney section is no exception. Some refer to it as a gorge-like setting. The sheer beauty of the area is one of its attractions, the steep banks, lined with stands of hemlock and second-growth hardwoods, encapsulating the twisting river.

From a recreational standpoint, Piney offers more for the boater than the fisherman. Mill Creek, carrying its discharge of acid mine drainage, enters the river about a mile below the start of the slackwater pool. This leaves Piney's water quality marginal, although it does hold some bass and numbers of channel catfish, carp and sunfish (including a good yellow perch population). Clarion County WCO Bob Cortez says the lake also holds a few giant muskies.

From a water quality standpoint, things are improving in Piney, and should continue to do so. Much work has been done in the Mill Creek watershed to offset the effects of old strip mines, and more is planned in the future. As Mill Creek improves, so will the health of Piney Dam and the remainder of the Clarion River from the dam downriver to the Allegheny River.

In addition to its use in generating electricity, Piney also provides some degree of flood protection. As such, it undergoes a "winter drawdown" to increase its flood-preventing capacity in the springtime. Recently, Penelec agreed to hold off the drawdown until the end of October. The impoundment should be back up to normal pool by the first of May, giving boaters about a six-month season.

Even though Penelec's permit allows a drawdown of up to 20 feet, it's actually dropped only about eight feet during the winter months. Only for significant construction work on the dam has the pool been dropped close to the 20-foot level. During the boating season, the pool level can fluctuate as much as three feet because of power-generation releases.

Dock space

Penelec leases up to 300 permits annually for docks on the Piney project. Lease-holders are given first crack at renewal each season. Those leases that are dropped are quickly grabbed by folks who place their names on a waiting list with Penelec's real estate office. Docks normally are located at areas close to access areas, which are relatively rare along the Piney project.

Bob Clossin is Penelec's real estate representative, and the person to contact about dock leases, which cost \$25 per year. Phone him at 814-533-8738 for more information.

Caution

Boating on scenic Piney Dam should be a pleasant experience. To keep it that way calls for some extra caution. The river is relatively narrow, and has plenty of twists and turns. There is no room for mistakes.

"With it so narrow, when somebody stops to pick up a skier, they literally shut down the river," says WCO Cortez. "That puts people in a position where they start to make judgment calls, where the rulebook gets set aside. They think, 'Well, I have room to go around them.'" It creates problems. People need to use their heads and common sense." The Clarion's steep sides fall quickly into deep water, giving boaters a higher percentage of the corridor to use than in a lake with slow, tapering banks. Still, boaters need to be cautious of trees that may have slid into the water. Also, give inside turns extra berth because shallow points can extend into the river.

Tributaries can wash mud flats out into the pool, creating another hazard. This is particularly true where Mill Creek enters the Clarion. A final problem to avoid is floating debris. The changing water level of the impoundment makes some floating wood common, and it sometimes "rafts" in specific areas if pushed there by wind and waves.

Cortez reports that despite the physical constraints of Piney Dam, and having no horsepower or speed restrictions, the safety record there is surprisingly good.

Another consideration for out-of-towners is to plan your trip during non-peak boating times, i.e., during the work week. According to Glenn Neiport, Penelec's operations manager at the Piney project, the quality boating time takes place from Sunday evening to Friday morning. Definitely avoid holiday weekends.

Access

Boat access into Piney Dam is limited. The Fish and Boat Commission has a ramp at the upper end of the pool, where Mill Creek joins the Clarion River. Two roads lead to this access area.

From Clarion, travel east on Route 322 to the town of Strattanville. In Strattanville, make a left at the turn-off to Fisher. Within a quarter-mile the road makes a 90-degree bend to the right. As it does so, a township road—Mill Creek Road—drops off to the left. Carefully make this left turn. Mill Creek Road leads to the river, and the access area. A Penelec sign marks the turn-off.

The township road is mostly dirt, but WCO Cortez says the Clarion township officials are doing a fine job keeping the road in good shape.

The Commission access can also be reached via the upper end of Mill Creek Road. About two miles south of Fisher, Mill Creek Road ties in with the Fisher-Strattanville Road. Many campers use this route, though this section of Mill Creek Road traverses some rugged country, much of it State Game Lands 74. The road gets rough, and the final drop down to the river is a steep one.

At the Toby bridge, Clarion borough maintains a public access. This ramp can be reached by taking Fifth Avenue down the hill out of Clarion. The access area is on the Clarion side of the river.

In addition to the boating opportunities, Penelec provides a park-like setting at the site of the dam and generating station. According to Glenn Neiport, the facility has an observation deck, cooking grills, picnic tables, comfort stations and a children's play area. It can't, however, be reached from the river, because safety considerations necessitate keeping boats away from the powerhouse.

To drive to this area, take Route 68 south out of Clarion. After crossing I-80, take the first blacktop road to the right (S.R. 3016). Go two miles, and then take a tar-'n-chip road to the right, which leads to the dam.

Most folks traveling to the Clarion area use I-80. Two I-80 exits reach Clarion, exit 8 (Route 66) and exit 9 (Route 68).

The Clarion River's Piney Dam offers boaters many opportunities. Its warm summer waters provide a fine surface from which to powerboat and ski. Fall brings scenery tough to rival. The area nearby offers a myriad of additional recreational possibilities. Why not give it a try this year?



NAUTICAL *Honeymoon Surprises*

by Anna R. Hageman



photo-Anna R. Hageman

In the fifties, "yachting" spread from the hobby of the movie stars and millionaires to the hobbies of middle-class Americans. Yacht Clubs proliferated on both sides of the Delaware River. Speed boats, houseboats, sailboats and other varieties of pleasure boats sped, sailed, plodded and cruised up and down a river that was finally responding to 50 years of efforts to clean it up.

"They're all yachts." Bill Hageman ran one hand through that thick crop of curly hair I loved as he answered my question. "Yacht is just the insurance company's name for a pleasure boat."

"Then you just bought a yacht!" Delight and then dismay washed over me. It would be fun to have a friend with a yacht. But I hoped Bill was going to propose and buy us a house with those savings.

He answered with his usual habit of

bursting my pretentious balloons. "I bought a little, 22-foot cabin cruiser." He informed me he paid a bit over \$5,000 for it, almost half the cost of the average new house.

I reluctantly embarked on some of the most pleasurable days of my life. We went yacht club shopping for a place to keep it, then dancing at the club. We picnicked on what Bill called, "the boat," jumped off and swam from it.

Finally, he proposed on it and I said, "Aye, Aye, Sir" or something equivalent. If I could have seen some of the events soon to happen, I might have hesitated or even—no, I would not have refused my lovable Bill whatever might happen.

He told me the boat was named after me, *A. Hag*, short and tart for Anna Hageman. Unfortunately, I did not become Mrs.

William Hageman until after the boat was destroyed by Hurricane Hazel.

Bill was the unhappiest engaged man I've ever seen until he bought a successor, the *A. Hag II*. I half-heartedly told folks he was in love with his boat.

Other honeymoons are planned; ours was chartered. I bought sturdy cotton slacks (ladies never called them "pants"), those new "drip-dry" blouses, and even one crushed crepe "wrinkle-proof" (because it was all wrinkles) "tub-fast" dress. It cost a whole \$3.98. I would have bought a more expensive dress but "good" (\$10) dresses must be dry-cleaned. Long before the days of polyester, I was dry-cleaner-free and iron-free.

My heart vacillated, pulled in two directions. I took longing glances at silky, frilly clothes usually sold for honeymoons, and

at the ads for candlelight dinners in luxurious honeymoon havens. We would be cooking most of our own meals in our little galley, the tiniest kitchen imaginable. But then, it was breathtaking to be one of the new "yachtsmen."

We were married traditionally enough, in church in wedding uniforms—I in the long, white satin-and-lace gown, Bill in summer formals. The honeymoon was the beginning of a new tradition. We pushed off in our little boat for a cruise down the Delaware River, through the canal and around Chesapeake Bay.

The *A. Hag II* seemed to me a little floating dream house for two. In addition to the galley, it had a dinette, bunks, and a "head" (marine for bathroom without a bath). The cost was a bit more expensive to operate than a car. On the days we traveled eight hours, we used about 16 gallons of gas. At 32 cents a gallon, that was an output of \$5.12 a day. In a car we would travel much farther on the same amount, but we would have missed the joys along the way.

While Bill was at the steering wheel, I lounged on the roof of the cabin, watching the scenery through binoculars. We both enjoyed looking up at the bumper-to-bumper shore-bound traffic on bridges over the Delaware. The passengers cooked under a blazing sun. Air-conditioning had not yet become a popular option in the average middle-class car. They were hours away from the water we were enjoying.

While I was taking my turn steering, and Bill was resting, I looked too long at the scenery. A head-bursting blast from a tanker jolted me. I looked up and the sky seemed full of tanker. I twisted the wheel, screamed for my new husband. The tanker passed without hitting us, but its wake bounced us around like a cork and drenched us with spray.

We clung to each other, then asked together, "Are you all right?"

An hour later we gleefully scooted past the tankers lined up to go through the channel in the center of the canal. With only a three-foot draft, we had no need for a deep channel. The shallow water between it and the shore was quite adequate to convey us to the Chesapeake Bay.

We spent days exploring the nooks and crannies along the shore, often sleeping in our boat anchored in an isolated cove.



Approaching a low bridge at Reed Point, Delaware, Bill tooted our cruiser's horn. Auto traffic above came to a halt. The bridge rose like an elevator, and we sailed majestically beneath. I glowed with pride at the power of our tiny "yacht."

At the city of Annapolis, we tied up at the dock across from the Coast Guard Station and next to the Acme store where we replenished our supplies. The manager told us there was no objection to remaining there for the night. In the morning, I was making breakfast when I heard the sound of marching men. I ran down the wooden dock to the pavement along the park and watched the cadets of Annapolis march to church. Years afterward, Bill still teased me about "running after men on our honeymoon."

Taking an in-person trip down memory lane, I returned recently by car to rediscover our dock at Annapolis. Boating had become too popular. The dock now has traffic meters.

Some nights we anchored in one of the secluded coves bordering the Chesapeake and its tributaries, jumping overboard for a bath and a swim. Other times we stopped at yacht clubs for a bath and docked there to eat and sleep on our boat. By reciprocal agreement, many other clubs offered us their facilities just as Wissinoming Yacht Club, where we were members, offered theirs.

We made many fascinating friends, including the Stuart B. LeComptes. He was the father of the famous stained glass window artist Rowan Keith LeCompte, who had created the stained glass of the Modern Pilgrim at Princeton University Chapel.

The LeComptes had a home along a "creek," which was really a deep river into

which we escaped one of those sudden storms on the Chesapeake. They looked out and saw us wringing out blankets because I had not learned to batten down the hatches quickly enough. Mr. LeCompte (a formal gentleman who refused to address us by our first names) rowed out in a flat-bottomed boat to invite us in for a hot meal after which they offered us the use of their guest room.

Perhaps our most unnerving experience happened on our second honeymoon, the next year, when we extended the Chesapeake cruise on up the Potomac. I was steering and watching another boat flashing light signals at someone.

Suddenly I realized the boat was bearing down on us—fast! I swung to port. The other boat swung toward us. I veered to starboard. It again turned toward us. We were racing toward each other on a collision course. I screamed. Bill, who had been in the Navy, came up from the cabin and said, "That's a Navy boat." He took the wheel from my perspiring hands and pulled up beside it.

A very polite but firm officer informed us we were cruising in the bomb and missile firing range of the U.S. Navy. The danger was indicated on the marine map our boat supply store was out of.

He offered us coffee, and out of curiosity I accepted. While Bill climbed aboard the big gray boat that made ours look like a child's toy, I sat on the edge of ours and was presented with a mug of coffee with a large bowl of sugar and milk on a metal tray. I swallowed the muddiest, strongest concoction I ever tasted.

When Bill returned he said he had seen their map and had new directions. The speed with which we took our new course was not cruising. Our little boat shuddered with its maximum effort.

Our first child, Marie, loved the boat. Whenever I placed her, in her portable infant cradle, on the boat, she smiled, laughed and made happy sounds during the entire cruise. As soon as we returned and placed her on the dock, she cried and screamed.

When our second child arrived, we realized we could no longer afford the boat. Whenever they were naughty, for years afterward, my husband said, "We should have sold the children and kept the boat." 

BE A GREAT BOATING PARTNER

by Jonathan Angharad

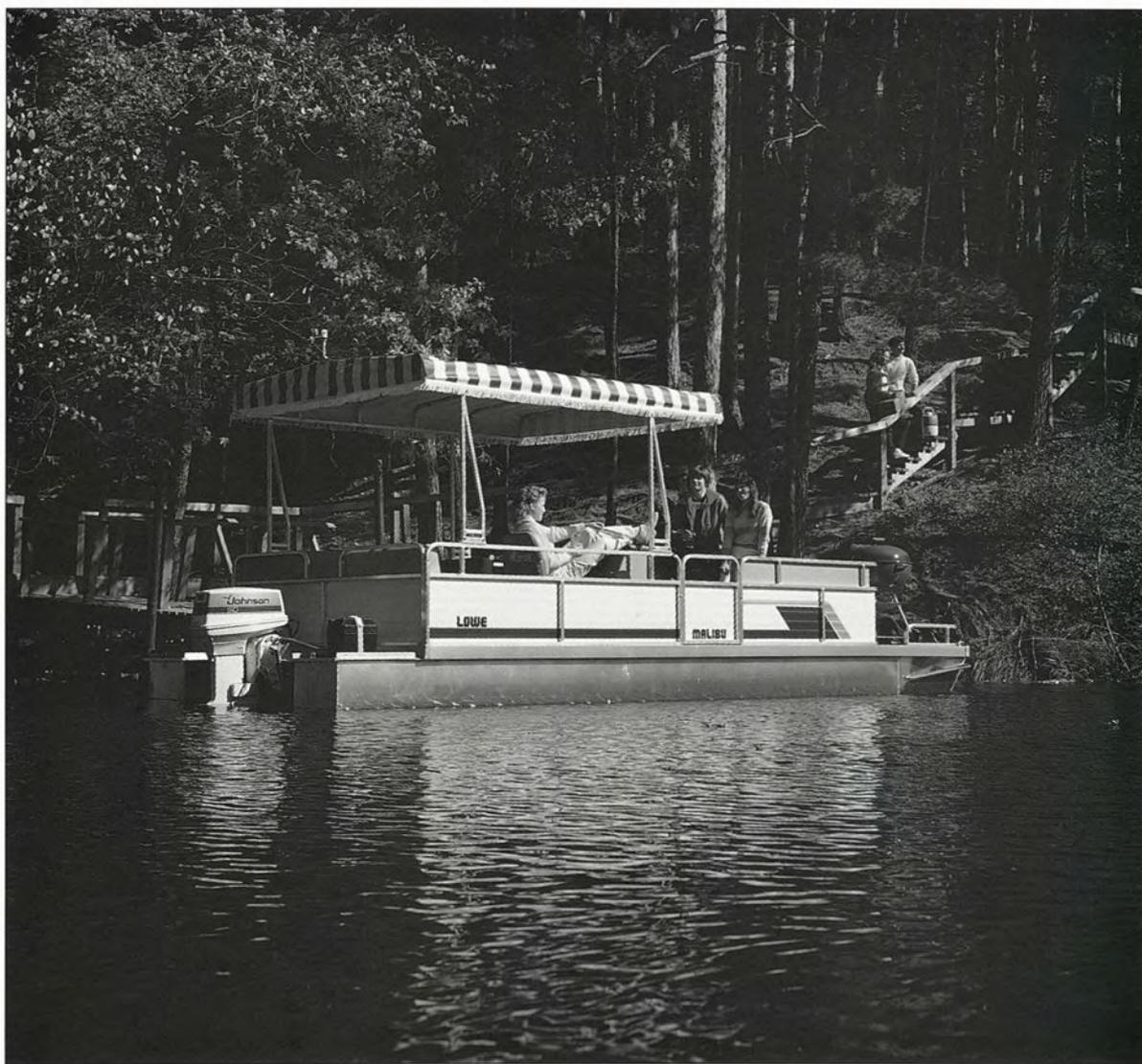


photo-Johnson Outboards

Before I bought my own boat, I used to accompany friends aboard their boats. During those seasons years ago I learned lessons on how to be a good boating partner. I understood that going aboard a friend's boat is like going to his home for dinner. There are do's and there are don'ts.

Much of being a good boating partner is observing the Golden Rule, but translating that rule into specific action aboard a boat isn't always obvious. Here are some ideas on this etiquette. Apply them to your own situations and earn a reputation as a gracious, generous boating partner. You'll get invited back more often, and you'll build lasting friendships.

First, you already know how expensive boating is. But wear the shoes of a boat owner and it could open your eyes to a world of concerns you never considered. A typical 16-foot boat, 75-horsepower outboard, trailer, electronics and accessories cost around \$5,000 or more. The same is true for a typical pontoon boat.

A runabout or a pontoon boat will likely have a 6-gallon gas tank, so figure in the cost of filling it every time out. Gassing up the tow vehicle for a round trip trailering jaunt of perhaps a few hundred miles might also be necessary. And there's the expense of ice, meals and food. And if you and your spouse accompany friends on a longer trip, you have to consider paying for overnight accommodations.

Who pays for what

Who pays for what shouldn't be a preoccupation. But it's something to think about each time the cash register rings during your trip. As you become more aware of these costs, you can begin to see how to apply the Golden Rule. Offer to pay for filling the boat tank or footing the bill for the tow vehicle gas. Propose sharing the costs of food.

My friends and I have worked out a fair system. One friend fills the boat tank and I keep the tow vehicle gassed up. We split all other costs, and we pay for our own food.

Launching, retrieving

Launching and retrieving is another time when you can be a helpful partner. Remember the costs for the rig and you'll know why some people get really nervous when it comes to a partner's "helping" to launch and retrieve.

Put yourself in the boat owner's shoes. If you had all that money invested in a rig, you wouldn't want anyone helping without your explicit direction. Sure, your partner is well-meaning. Sure, he wouldn't damage your rig on purpose. But you have a set procedure for launching and retrieving that guarantees your safety, your partner's safety and your rig's protection.

That's why it's best to ask, "what can I do to help," when you're a guest aboard a friend's boat and it's time to launch and retrieve. Letting him call the shots is appropriate. Your partner will tell you if he wants help. This is especially important if you're a considerably less experienced boater than your partner.

Don't be surprised or offended if you ask with all good intentions, "what can I do to help?" and the response is, "nothing." Respect that decision. Remember, when it's your rig and hard-earned money invested, you can have it your way, too.

Routine

If you and friends often cruise together, you probably have developed a routine that you follow so that each knows what to do and when to do it. This expedites launching and retrieving,

Much of being a good boating partner is observing the Golden Rule, but translating that rule into specific action aboard a boat isn't always obvious.

and makes life easier for everyone aboard. Watch experienced boating partners and you'll see that no one has to tell the other guy what to do.

Even so, experienced boating partners often ask before they do something to help launch and retrieve. This acknowledges your partner's procedure and informs him that you're taking care of something. You will find that boat-owning partners appreciate your double-checking like this. It makes good safety sense.

For instance, when your partner is ready to push the boat off the trailer at the ramp and you grab the bow mooring line, say that you've got the line. Confirm what you're doing. Don't assume that your partner knows what you're doing during the critical times of launching and retrieving. This prevents mishaps like boats sliding off trailers and slamming into a ramp's concrete short of the water, or boats launched when no one is holding a mooring line.

When it comes to launching and retrieving, remember that the boat owner is the captain, and as the saying goes, "the captain's word is law." Let the boat owner call the shots. Suggest procedural improvements some other time.

Big boats

Be careful of antennas and other boat parts, especially on larger boats. I remember one trip during which my partner saw red. Three of us had taken off after Lake Erie walleye in his boat. The fellow with us accidentally cracked the fiberglass VHF radio antenna by sitting on it. Funny thing is that my partner was angry not because this guy didn't replace it, but because he didn't even offer to replace it.

Similarly, fiberglass and gel coat surfaces are not meant to be used as food cutting boards. Lifting the anchor carelessly so that it bashes the hull doesn't make you well-liked, either. Call a boat dealer and ask how much hull repairs cost so that you can gain greater respect for your partner's boat.

When you board a friend's boat, make sure you know how to operate it. Be certain you know the location of safety and emergency equipment, including a fire extinguisher and a cutoff switch. If the operator becomes incapacitated, you might have to operate the boat or handle an emergency.

All in all, being a guest aboard a friend's boat is like being in a china shop. Follow this rule: You break it, you pay for it. Treat your boat-owning friend's gear as if it were your own. Be generous when you're a guest aboard a friend's boat. Observe the Golden Rule. That's the best way to keep friends.



HOW TO

TACKLE A NEW RIVER

BY CLIFF JACOBSON

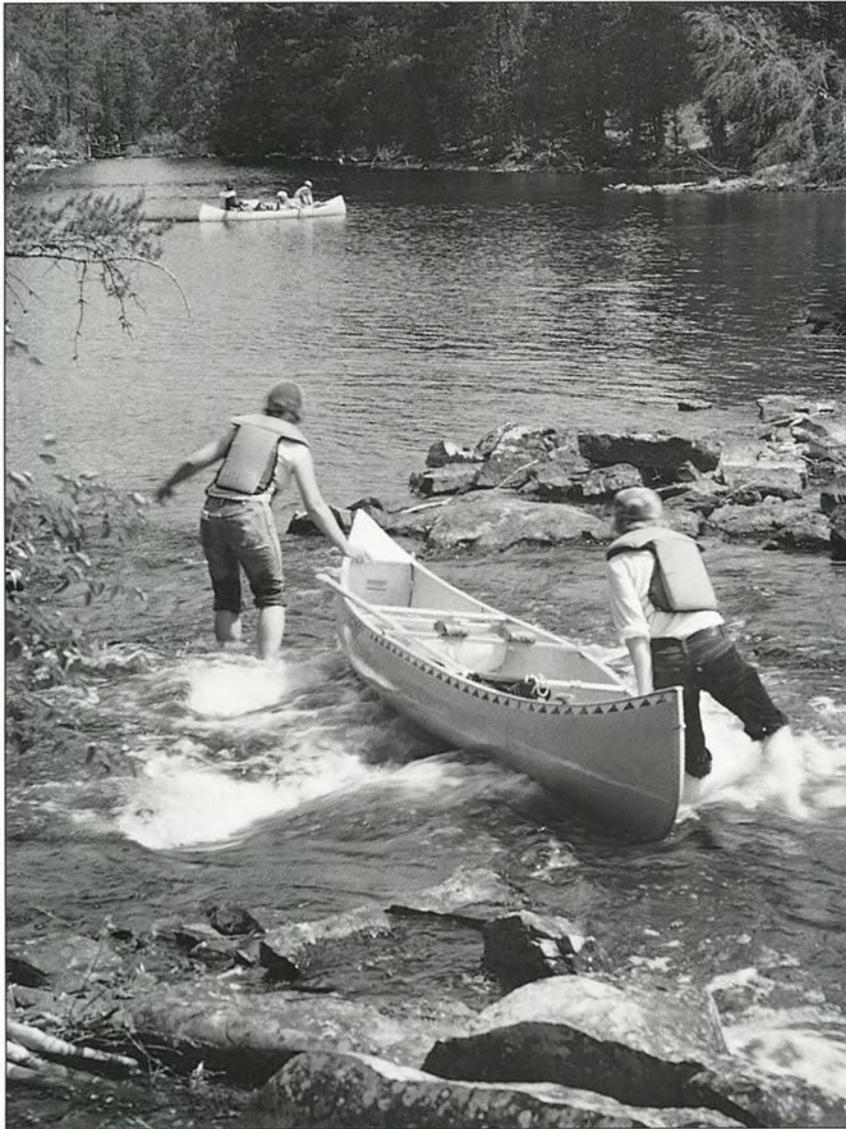


Photo: Cliff Jacobson

There's little excitement in the comfort of an old shoe. Every canoeist occasionally needs "new water" to challenge the skills and spirit.

A peaceful time away from the crowd, the tranquil beauty and lure of a primeval shoreline, and the adrenaline rush of a challenging rapid are among the reasons why I'm hooked on river canoeing. Like most enthusiasts, I have my favorite routes that I paddle over and over again.

Boring? Hardly. Rivers change with time and water levels. There's magic in revisiting old places, even when you know every rock and eddy. But there's little excitement in the comfort of an old shoe. Every canoeist occasionally needs "new water" to challenge the skills and spirit.

Finding a new waterway that matches your skills is easy if you're willing to do some research. Ask your librarian to suggest pamphlets and guide books that describe canoe trips in your area. There are several popular "river trails" books that detail canoe routes in the Keystone State. The route descriptions in canoeing guidebooks are usually so thorough that you can confidently do a new river on the strength of them alone.

Caution: Guide books cannot predict water levels, river bed erosion or changes in water course because of storms. For this reason, you should always seek the advice of canoeists who have recently paddled the river. More on this later.

Lack of published information does not mean a river is not canoeable. In fact, many of the best canoe routes are not included in guide books and brochures. More often than not, the rivers that are not listed are the ones that are least paddled.

The Keystone State has so many wonderful canoeing streams that it would be impossible to list them all in a publication of reasonable size. So guide books concentrate mainly on popular family routes and on whitewater runs that are easy to reach. Small streams that are not serviced by paved roads are seldom included, even though these may be as beautiful and challenging as the "big name" routes that



are promoted in the literature. They are certainly less traveled.

It's probably correct to assume that every Pennsylvania waterway (indeed, every American waterway) has been canoed by someone at some time. The difficult part is finding a knowledgeable paddler who can share timely information.

All the best Pennsylvania whitewater routes are carefully documented, so if running rapids is your game, you need look no further for information than the Commission or your public library. But if like me you have a sweet, responsive touring canoe that runs dead silent and lightning quick in non-intimidating water—one that is easily portaged around storm-downed deadfalls, you may prefer the tranquility and isolation of a relatively unknown route. Here's where real adventure comes into play, and where your homework must be in apple pie order.

Canoe club

First order of business is to join a canoe club. The Commission can provide addresses. Most clubs act as a clearinghouse for training and canoe route information. Your concerns will be quickly routed to an appropriate source. Canoe club membership is absolutely the best investment you can make if you're deadly serious about river canoeing.

While you're at it, join the American Canoe Association, which has members in all 50 states. You'll get their publication, *The American Canoeist*, which features monthly articles on safety, competition, cruising, instructor certification, workshops and more. Address: American Canoe Association, Inc., 7432 Alban Station Blvd., #B226, Springfield, VA 22150.

Maps

If you plan to paddle obscure routes—or to access popular rivers at obscure places—you need large-scale county maps that detail all the roads that service the waterway. Some canoeists accumulate county maps as they research rivers. Others simply buy an atlas.

Photocopy the county maps you need. Don't carry the original map sheets down river.

Some paddlers begin their research by studying the U.S. Geological Survey topographic maps that cover the river. First, they tick off the mileage and determine the "drop" of the river in feet per mile.

Procedure: Mark the elevation at every place a contour line crosses the river. Circle these figures so you can distinguish them from the mile markers. Now compute the average "drop per mile." Simply divide the total drop in feet by the total distance in miles. Be sure to change metric

units (meters) to feet before you begin.

Generally, a drop of three to five feet per mile is easy cruising; better than 10, things get exciting. Fifteen means a probable portage, and 30 or more is about the limit of an open canoe. There are lots of exceptions. The greater the volume of flow, the more dangerous the river. Be aware that rivers seldom drop uniformly. For example, a uniform 15-foot drop over a one-mile distance may translate into a smooth rollercoaster ride, whereas a single drop of half that distance (a ledge) may be a canoe buster.

A river profile provides a rough indicator of the difficulty of a canoe route. Sheer drops (falls) are only evident at places where the drop in elevation exceeds the value of the contour interval.

When the "profile" is completed, the questions begin. Ask folks who live along the river, but don't take their advice too seriously.

Scenario: Out for a Sunday drive, you pause at a covered bridge that passes over a wooded, quaint little stream. The route looks inviting and appears canoeable. It winds determinedly across your county map. You drive to the next access point, which is 20 miles upstream.

Twenty miles of canoeing on a tight, meandering waterway may require more than a full day. Are there other options?

HOW TO TACKLE A NEW RIVER

You bet! Check the farms and/or private residences that border the stream at strategic points. Then locate a cooperative landowner and ask permission to launch your canoe. Why not offer the landowner some money for shuttling your canoe? It's worth investigating.

Be sure to ask about rapids, livestock fences, low-head dams, water levels and "right of way." Most landowners will graciously permit access if you ask permission first. Listen carefully, but don't take their advice about rapids and obstacles too seriously. People who don't canoe don't understand canoes. Local residents almost always exaggerate dangers (and time frames). A simple portage to a practiced canoeist may be an impassable obstacle to a non-paddler. Small, easily manageable rapids are often considered dangerous by those who don't canoe. Most people don't realize that six inches of water is enough to float the average canoe. Weigh the advice of all parties and your own experience, and then act accordingly. Be prepared for the unexpected and you'll have an adventurously good time.

Do take advice seriously on low-head dams. Avoid them.

Points to ponder: Canoeing an obscure stream on the strength of local advice and a county map is a real high-adventure experience. You've chosen the route because you prefer solitude and challenge, remember? "Manageable" surprises are part of the fun. Nightmares are not. For this reason, prudent explorers ask lots of questions. And they always have these things on hand:

- One or two friends in a second canoe. If an emergency develops, you may need friends to hoof it for help. For whitewater travel, the safety rule is "three canoes per party." This allows space for passengers if someone is injured or a boat is destroyed in a rapid.

Admittedly, three canoes is probably

overkill for an intimate meandering stream. A second canoe probably provides a sufficient safety net.

- Each canoe should have a county map in a waterproof plastic bag.
- One compass per canoe.
- Equip each canoe with a carrying yoke and 15-foot rope at each end so you can easily portage the craft around obstacles. Deadfalls, sandbars and cattle fences are the rule on intimate waterways.
- Carry freshwater, or bring water purification materials.
- Except on sandbars, open fires are probably illegal. Bring a stove if you plan to cook out.
- Don't forget a change of clothes, raingear and a flashlight. It's amazing how many "exploratory" trips begin in daylight and end in darkness.

Using only a county map, my wife, Sue Harings, once set out alone in her lightweight solo canoe, to explore a small stream not far from home. She sought the adventure of discovery, so she solicited no advice from local residents and told no one where she was going. Fortunately, she brought all the essentials, including a powerful head lamp, which came in very handy.

In late afternoon, she rounded a bend and came upon (in her words) a "war zone." Wind-blown debris blocked the river as far as the eye could see. There was no way to paddle through or portage around the mess. She would have to strike out overland. Her county map revealed that there was a road about half-mile away. Susie set her compass, tied the bow tracking rope of her canoe around her waist and proceeded to horse the boat and its contents over the deadfalls and through the woods.

It was well after sunset when she came upon a helpful farmer who agreed to drive her and her solo canoe back to her car, which was more than 20 miles away! Fortunately, Susie had accurately plotted

the location of her 80 Saab on the county map. "Otherwise," said Susie, "I would never have found it!"

Serious concerns, dangerous rivers

Common sense—and whitewater etiquette—suggest that you should never canoe dangerous rapids without proper clothing, equipment and an experienced support party that can rescue you if you upset. Space does not permit treatment of even the rudiments of canoeing dangerous waters. Because nearly all river accidents are the result of poor planning and lack of knowledge about canoeing and the river, the best way to avoid disaster is to adopt a humble rather than hot-dog approach to potential dangers. Canoe club membership speeds the learning curve and provide answers to most of your questions.

If I could ask local residents (or recent boaters) four questions about a new river I planned to paddle, they would be:

1. Are the rapids within my ability (you'll need to define it)? If not, are the dangerous ones easy to spot and easy to portage?
2. Can you supply information about water levels? Is there a gauge that indicates rate of flow? If not, is there an unofficial gauge (level of water on a bridge piling or boulder) that canoeists rely on? Note: Most frequently traveled rivers have one or more "unofficial" gauges that are known to canoeists. It is absolutely essential to know which water levels are safe and which are dangerous—another benefit of canoe club membership.
3. I plan to start at point X and end at point Y. Is my proposed route a) too long, b) about right, c) too short?
4. Where are the locations of low-head dams?

Once you start down river, there's no going back for a life jacket, map, duct tape or rain coat. So use a check list to be certain you don't leave important items behind. And, oh yes, don't forget to tell someone where you are going and when you will return. Ten miles a day is plenty if you're tackling a new river on the strength of a county map alone. If you encounter a lot of obstacles enroute, you may need the flashlight I suggested earlier. ▀

A peaceful time away from the crowd, the tranquil beauty and lure of a primeval shoreline, and the adrenaline rush of a challenging rapid are among the reasons why I'm hooked on river canoeing.



Maps, Resources, More Info

- Type 3, or the larger multi-colored Type 10, County General Highway Maps show all public roads including state, township and forest roads. Lakes, rivers and streams are also shown. Contact PA Department of Transportation, Publications Sales Store, P.O. Box 2028, Harrisburg, PA 17105. Phone: (717) 787-6746.

- *Guide to Public Fishing Waters and Boating Access* is a 102-page book that lists waters open to public fishing, and Fish and Boat Commission owned or controlled boating accesses, Department of Environmental Resources lakes, and U.S. Army Corps of Engineers impoundments. Boating access entries include details on facilities available, customary class of boat used, and the primary kind of boating available.

This book is available postpaid for \$2 from the Fish & Boat Commission. Pennsylvania residents add 6% state sales tax. Make checks or money orders payable to Pennsylvania Fish & Boat Commission, and

send order to: Publications Section, PA Fish & Boat Commission, P.O. Box 67000, Harrisburg, PA 17106-7000.

- A full-color "River Canoeing Poster," 22 inches by 34 inches, produced by the Fish & Boat Commission, is packed with important information every river paddler should know. Topics include self-rescue, equipment recommendations, proper attire, basics of running a shuttle, and guidelines in planning a float trip.

This poster is available for \$3.50 postpaid from: American Canoe Association, 7432 Alban Station Blvd., #B226, Springfield, VA 22150. Phone: (703) 451-0141.

- The 1994-95 *Boating Handbook* is a summary of Pennsylvania's boating laws and regulations. Its 44 pages include six chapters on safety details and other useful information. This publication is available free from the Fish & Boat Commission (address above).

Aids to Navigation

Unlike the roads and highways that we drive on, the waterways do not have road signs that tell us our location, the route or distance to a destination, hazards along the way, speed limits or lane markers. Instead, the waterways have aids to navigation. These waterways markers are most often buoys.

Two aids-to-navigation systems found in Pennsylvania are the "uniform state waterway marking system" and the "lateral system." The uniform state waterway marking system was developed to give the small-boat operator adequate guidance to safe boating areas by marking the presence of either natural or artificial obstructions or hazards. It is also used to mark restricted or controlled areas. The buoys in this system have orange geometric shapes against a white background. The meanings associated with the orange shapes are:

- a vertical open-faced diamond signifies danger.
- a vertical diamond shape with a cross centered within indicates that boats are excluded from the marked area.
- a circular shape indicates that certain operating restrictions are in effect within the marked area.
- a square or rectangular shape contain directions or instructions.

The lateral system is uniformly used in the United States to define the port (left) and starboard (right) sides of a route or channel. Wherever you travel within the country, the system is the same. You don't need to learn a new system for new waters. These buoys are red and green. The expression "red, right, returning" has long been used by the mariner to remember that red buoys are passed on the starboard (right) side of the boat when proceeding upstream. Conversely, green buoys are kept to port (left) side of the boat.

In addition to the uniform state waterway marking system and the lateral system, there are three additional distinctive buoys used in the state system:

- Safe water marker buoy. This buoy is commonly referred to as a "mid-channel" buoy. Mid-channel buoys indicate there is navigable water all around the buoy. Mid-channel buoys are colored with red and white vertical stripes.
- Special marker buoy. Special marker buoys are not primarily intended to assist

in navigation, but to indicate special areas. They may be used, for example, to mark anchorages, cable or pipeline areas, and traffic separation schemes. Special marker buoys are colored solid yellow.

- Mooring buoy. This buoy is white with a blue horizontal band. This distinctive color scheme is used to facilitate identification and to avoid confusion with lateral and uniform state waterway marking system aids to navigation.

- Signs provide another way the state marks controlled, hazard and restricted areas on Commonwealth waterways under the uniform state waterway marking system. These signs can be found on bridge abutments, at access areas and even in the water. They have the same importance and meaning as buoys--they are still aids to navigation for boaters.

The uniform state waterway marking system and the lateral system have been developed for uniformity in marking channels and hazards to navigation. The system is designed to satisfy the needs of all types of small boats. Boaters should not rely completely on the position or operation of floating aids to navigation. Buoys can be carried away, shifted, capsized, sunk and vandalized. Know the waters on which you are boating and report any discrepancies to the Pennsylvania Fish and Boat Commission.—Fred Menke, *Aids-to Navigation Coordinator*.

PFD Rules to Change in 1995

The U.S. Coast Guard has issued final rules that revise the requirements to carry personal flotation devices (PFDs) on recreational boats. The rules are designed to encourage more boaters to wear the safety equipment and save lives.

Under the new rule to take effect May 1, 1995, the Type IV PFD—a throwable flotation device (seat cushion or ring buoy—can no longer be used as a substitute for a wearable device (Type I, II, III or V). On boats under 16 feet in length, wearable PFDs are required to be carried for each person on board.

The requirement for boats 16 feet and longer remains unchanged. There must be a Type I, II, III or V for each person plus one Type IV throwable PFD on the boat.

Conservation Officers of PA Publishes Best of the Field

What's sure to be welcome news to *PA Angler* readers is that a hardcover 275-page collection of *Angler* "Notes from the Streams" and *PA Game News* "Field Notes" is now available. The Conservation Officers of Pennsylvania, an organization of Fish & Boat Commission and Game Commission officers, has published *Best of the Field*, a collection of the most interesting and humorous "Notes from the Streams" and "Field Notes" that have appeared in *Game News* since 1932 and in *PA Angler* since 1931.

Copies ordered by January 31, 1994, cost \$9.95 plus 6 percent sales tax and \$1.95 for shipping and handling. Beginning February 1, 1994, copies cost \$11.95 plus 6 percent sales tax and \$1.95 for shipping and handling.

To order *Best of the Field*, send a check or money order to: Conservation Officers of PA, P.O. Box 3304, Williamsport, PA 17701.

"Water Watch" Guide

The National Marine Manufacturers Association (NMMA) is offering a new brochure titled "Water Watch." This environmental guide offers information on boat operation, maintenance and preventive actions individuals can take to maintain clean water and minimize the on- and near-shore effects of water-based recreation. The text was adapted from the Chesapeake Bay Foundation's "Your Boat & the Bay," with additional material provided by The Izaak Walton League of America and other outdoor recreation and conservation organizations.

"Water Watch" offers a common sense approach to protecting the aquatic environment. Topics include choice and correct use of marine sanitation systems; low-impact painting, cleaning and maintenance routines; litter control; sensible fueling practices; engine care recommendations; and a catch and release fishing reminder. A 10-point checklist is also included to serve as quick reference to important environmental concerns.

For a free copy, write to: NMMA Water Watch, 401 N. Michigan Avenue, #1150, Chicago, IL 60611.

First the Zebra Mussel, Now the Quagga Mussel

Since 1992, we have watched the successful colonization of Lake Erie by another exotic, unwanted animal from Europe. The Quagga mussel has quickly adopted the deep-water habitats of Lake Erie, where its relative, the Zebra Mussel, prefers to live. Although at first look the Quagga can be confused with the Zebra mussel, it is generally larger and seems to be much more tolerant of temperature extremes. The Quagga mussel has other competitive advantages because it is more prolific and can colonize a greater variety of habitats than the Zebra.

Recent trawling surveys conducted by the Commission Lake Erie Research Unit have found astronomical numbers of Quaggas in the deeper waters, generally on the mud-clay bottoms at depths of 80 feet or more. Dense sets of mussels have clogged trawl catches and have prematurely worn the bottoms of the trawl nets because of their razor-edged shells.

Of greater concern is the prodigious capacity of the mussel to filter the suspended plankton and biological matter that is the foundation for Lake Erie's food webs. Although mussels have been responsible, in part, for causing unusually clear water in recent years, these conditions, however aesthetically pleasing, may represent serious alterations to the lake's ecosystem, which ultimately may affect productivity of Lake Erie fish stocks.—Roger B. Kenyon, Fisheries Biologist, Lake Erie Research Unit.

Pleasure Boat Sales Improve in 1993

Pleasure boat sales are up for the first time in four years, according to a report by the National Marine Manufacturers Association (NMMA). The broadest part of the market includes family runabouts and fiberglass and aluminum fishing and utility craft. Growth in this sector is welcomed because it indicates that current owners are trading up, as well as an increase in the number of first-time boat owners.

"Boating 1993," the annual NMMA publication, reflects an improvement of nine percent in total industry sales—including new and used boats and related products and services. Unit sales of all new products, from canoes to yachts, also increased seven percent.

Sales of personal watercraft are up, and a related category of small jet boats is also seeing a rapid increase in sales. Some suggest that consumer interest in these areas is greater partially because of a low-cost entry fee. Jet boats retail for \$7,000 to \$15,000, while personal watercraft retail for \$5,000 to \$8,000. Both categories attract a younger operator, but older enthusiasts often get hooked while trying out the personal watercraft of sons and daughters.

Boat manufacturers are optimistic about sales in 1994. Yacht manufacturers report growing interest now that the luxury tax has been repealed. Inboard/outboard manufacturers have improved designs and are offering better prices for the value-conscious customer. With the forecast of favorable boat financing availability, steady or possibly falling fuel costs and a more traditional boating summer, the industry should maintain its upward momentum this year.

Marine Manufacturers Work Toward Cleaner Environment

The existence of the U.S. recreational boating industry depends on clean water. As with many recreational activities, boating does affect the environment. However, in the past 30 years, and more so since the early 1980s, marine engine makers have recognized the need to change their products to lessen the effect on the environment.

Manufacturers are researching new product technologies with guidance from the Environmental Protection Agency (EPA). Manufacturers are evaluating several new products that will offer consumers performance and efficiency. They are developing two-cycle engines that will cut exhaust emissions of hydrocarbons by 60 to 80 percent.

Outboard motor manufacturers are working on ways to reduce emissions. They are developing "orbital" engines, direct-injection two-cycle engines and four-cycle engines. Recently, an agreement was signed by two major marketers of outboards to develop four-cycle powerheads to provide this choice in the five- to 50-horsepower range. Motor manufacturers are adapting advances like electronic fuel injection for use with inboard and sterndrive engines.

When specific emission targets are established by the EPA, manufacturers will proceed with the necessary changes to their facilities to produce engines that meet or exceed federal standards. This process may take four to seven years, but the result will be worth the wait. In the future, additional gains will be achieved through fuel and oil advancements, carburetion fine-tuning and continuing engineering refinements.

Cleaning up the environment through alternative powering and boat designs are also possibilities. As the marine industry focuses on maintaining a clean environment, products that are more efficient, safer and easier to use and maintain will continue to be produced. Today's outdoor enthusiasts demand convenience and fun while boating, but they cannot continue this pursuit with products that are incompatible with the environment. In boating, recreation is clean...and will be even cleaner in the future.

Booze & Boats Don't Mix

More than 50 percent of the boating accidents that result in death can be traced to alcohol impairment.

National Safe Boating Council



Flatwater Paddling Know-How

by Cliff Jacobson



photo-Cliff Jacobson

Flatwater canoeing is not a low-skill sport for unadventurous weenies. It is precision paddling at its best. And contrary to popular belief, there are plenty of scary moments.

Most whitewater paddlers don't think much of flatwater canoeing. After all, what could be attractive about muscling a boat around a dead calm lake when nearby there's a sparkling river filled with exciting rapids? Indeed, some whitewater canoeists wrongly believe that a simple forward stroke and rudder are all that's needed to paddle a canoe confidently around a lake. They have no conception of the modern linked strokes and maneuvers that make canoeing flatwater a viable recreational pursuit and beautiful art form.

Watch a skilled paddler pirouette a solo canoe around a series of dead heads, gunnel awash, or surf controllably down the face of a good-sized wave, and you'll marvel at the show. Flatwater practice hones the paddle skills that are essential for performing complex maneuvers in rapids. Indeed, to confidently paddle whitewater you must first master flatwater.

a serious flatwater cruiser), or packs that can be shoved ahead.

With these thoughts in mind, let's refine our definition of proper "flatwater trim."

Trim rules

- Trim the canoe dead level for casual cruising. Ditto when paddling currents and rapids.
- Trim the canoe slightly (one inch is enough) stern down in a strong tail wind.
- Trim the canoe slightly bow down when paddling into a strong head wind.
- Trim the canoe slightly bow down for racing or ultra-fast cruising. Remember, when you push a canoe hard, the bow rises and the stern falls into the trough created by the wake.



photo-Cliff Jacobson

The term *flatwater* is really a misnomer, for by definition, "flatwater" contains no discernible rapids. Powerful currents? Yes! Rock-strewn riffles? Absolutely! Dangerous white caps, undertows, wing dams and tides? You bet! Power dams, waterfalls, whirlpools and motorboat wakes? Of course. These hazards are all part of the "flatwater" experience.

As you can see, flatwater canoeing is not a low-skill sport for unadventurous weenies. It is precision paddling at its best. And contrary to popular belief, there are plenty of scary moments. We'll look into some of them in the course of this article. But first, let's review the basics.

Loading the canoe

Canoes almost always handle better when loaded dead level. If an uneven distribution of weight is unavoidable, the lesser of two evils is to lighten the bow slightly. But a light bow tends to weather-vane around in a headwind, making it difficult to keep the canoe on an upwind course. On the other hand, a weighted stern provides better directional control in a following sea, though if the tail is too low, huge waves may pour in.

In currents and rapids, directional control is almost always reduced by burying one end. With the bow high, you may successfully negotiate large waves, but you might later pile up on a rock because you can't maneuver. So load dead level whenever possible and keep the weight close to the center and low in the canoe.

When a canoe is paddled hard, the bow rises and the stern sinks into the hollow created by the wake, effectively knocking the boat out of trim and slowing its speed. The solution is to re-trim the canoe by shifting the weight of the paddlers or cargo forward—simple enough, if the craft has a sliding bow seat (essential on

Some paddlers glue a small "fish-eye" bubble level into the hull so they can see at a glance how the boat is running. But it's easier to simply pour a cup of water into the boat and observe the flow. It should pool below the center thwart for casual cruising, a bit forward for racing. Keep your eye on the puddle as you paddle and you'll learn a lot about the effects of hull speed on trim.

A few progressive canoe makers paint "trim lines" on the outside of their hulls. This wonderful idea dates to the days of the Yankee clipper ships. Trim lines are beautiful and practical. Onlookers can tell at a glance if your craft is trimmed properly. Anyone can apply trim lines to a canoe—all you need is masking tape and paint.

Sit or kneel?

Modern flatwater cruising canoes are built narrow for speed and have low sides to cheat the wind. The seats are mounted very low to keep the center of gravity low. Canoeists refer to these craft as "sit-down" boats because they are designed to be paddled exclusively from a sitting position. Sit-down boats must have adjustable footbraces so you can "lock" your body into the hull and apply maximum power with each stroke of the paddle.

A length of wooden dowel rod, tethered to the seat frame with parachute cord, makes an acceptable (and quickly removable) footbrace for a "sit-down" canoe.

The high-mounted seats of general purpose aluminum and Royalex canoes dictate that you kneel when waves begin to roll. However, after a time, kneeling becomes uncomfortable and you yearn to sit—a precarious and possibly dangerous situation in a high-seated canoe in rough water. What to do?

Rule: Adding weight to a canoe lowers its center of gravity

Flatwater Paddling Know-How

and increases stability in rough water. A high-seated, tippy canoe becomes a docile plow horse when 100 pounds of gear is placed in its belly.

At the turn of the century, Sault Ste. Marie, Michigan, Indians would net whitefish from their big freighter canoes as they rode them through the dangerous St. Mary's rapids. To resist capsizing in the huge waves, the Indians added plenty of weight to the canoes. Often they would solicit passengers from town who wanted to experience the thrill of riding a canoe through whitewater.

Positions for running upwind, downwind

On the seat or on your knees, buttocks planted firmly against the leading edge of the seat frame, is the rule, in both tandem and solo canoes. The exception is when the lake "stands on edge."

Scenario: You're a quarter-mile from shore when suddenly the wind blows up on the big lake. You point the bow upwind and paddle for dear life. Three hundred yards ahead is an island refuge. As you pour on the coal, waves pour determinedly over the bow. What to do? If the stern paddler stays put and the bow paddler moves behind the front seat, the bow will be lightened and the craft will rise more easily to the waves. However, the heavy stern may cause the craft to weather-vane, broach and capsize.

Solution: The stern paddler shuffles forward, chest touching the stern thwart. He applies a paddle brace, and then commands the bow person to move back behind the front seat. The weight shift lightens both ends of the canoe, and allows the craft to "teeter-totter" over the waves. Dead-level trim is restored, so there is no loss of directional control.

Some canoeing experts advise paddlers to stay in their original positions and simply "quarter" big waves at approximately a 30-degree angle as the bow beats upwind. This procedure shortens the canoe's waterline and makes it easier for the craft to fit between waves. The result is that the canoe runs drier and rises more easily to the waves.

However, a canoe on a quartering tack is constantly on the edge of broaching to the wind. The stern paddler must have complete control of the craft. An error and over you go! That's why quartering waves is best reserved for experts. Beginners are best advised to move closer amidships, as suggested above, and paddle head-on into the wind.

Contrary to popular belief, running downwind is much more dangerous than going upwind. If a tail wind drives the canoe to "surfing speed" and the craft stalls on the crest of a huge wave, you must act fast. Backpaddle or turn abruptly, and you'll capsize for sure. Your best bet is to keep paddling forward, quickly ruddering as necessary, to stay on course.

Fortunately, canoes seldom surf for very long. In a few seconds the big wave will pass and the canoe will slide into the trough of a smaller, more manageable wave. Now, pour on the coal and get to shore before the scenario is repeated.

Paddling alone in a tandem canoe: Always trim dead level in windless conditions. Best procedure is to rig a removable seat about 18 inches behind the center yoke bar. If you find it difficult to reach the water from your centralized position, scoot sideways and place both knees close together in the bilge of the

canoe. This "Canadian" position is very comfortable on quiet water, though you'll have to limit your paddling to one side.

Many people prefer to solo a tandem canoe from the stern seat because the canoe is so narrow at this point. But this knocks the canoe way out of trim. The bow rides high while the stern sinks low. In effect, your paddling a seven-foot canoe with a 10-foot overhang. The slightest breeze will capsize you instantly. And any degree of control or speed is impossible.

All other "solo techniques"—paddling backward from the bow seat, or stroking in the stern with the bow weighted, are inefficient, and to a greater or lesser extent, downright dangerous.

Paddling solo in a solo canoe: The leading edge of the seat in a true solo canoe is generally mounted about four inches behind the canoe's geometric center. This allows near dead-level trim for most paddlers. Most solo canoeists carry a small day pack, which they can shove forward or back to adjust trim further.

Some solo canoes feature a sliding seat, which allows the paddler to re-trim the canoe easily as wind conditions change. However, "sliders" are bulky, heavy and awkward, and they add a pound or more to the weight of the canoe. Solo craft are best controlled from a dead-center, fulcrum location. Moving the seat forward or back reduces paddle leverage and control.

My advice? Order your solo canoe with a fixed center seat (leading edge four inches behind center). Slide a small day pack forward or back to make trim adjustments.

Currents

Currents are moving water that is free of obstacles. Rapids are currents that contain rocks that redirect the flow. Currents are a feature of tides and flatwater rivers. Rapids define the "whitewater" experience.

I can't think of a better way to prepare for a whitewater adventure than to paddle a flatwater cruising canoe a mile or two up a strong current. You'll experience all the features of a lively rapid in microcosm. There are eddies and eddy lines on the inside bends, and downed trees and brush piles (strainers) on the outside curves. Where the river widens, the current slacks, only to pick up again at each constriction.

To pilot a straight-keeled cruising canoe upstream and around bends and strainers requires skill, coordination with your partner, effective use of eddies, and a knowledge of how to ferry across currents. Cross an eddy line wrong in a flatwater cruiser and you'll swim for sure. To understand rapids you must first understand currents. And to understand currents, you must spend time paddling them.

Leaning the canoe

A straight-keeled flatwater canoe will turn much more easily if you lean it to the outside of the turn as you apply power. For example, to make a gradual turn to the right, with the canoe under power, lean the canoe to the left—the reverse of what you would do on a bicycle. If you hold the lean, the canoe will cut a nice arc in the opposite direction of the lean. Caution: Don't use this technique for quick turns in strong currents—you'll upset the canoe.

Flatwater hazards

Alertness, common sense and research are the only set rules for avoiding these hazards. Even with proper precautions, there are screwups. Power dams maim and kill many canoeists every year. Yet, these obstacles are easy to avoid. Dams are drawn



Flatwater practice hones the paddle skills that are essential for performing complex maneuvers in rapids. Indeed, to confidently paddle whitewater you must first master flatwater.

boldly on every map (road, topographic and river) and you can hear them thunder miles away when the wind is right. Keep your eyes on the shoreline! If the trees ahead suddenly drop off the horizon, get to shore immediately—easy enough if you know how to ferry across currents. If you don't, you have no business on this kind of flatwater!

Tides

The Kellet River begins about 20 miles north of Wager Bay at the edge of the Arctic Circle. It's a remote challenging river that to date has not been canoed. My friend Bob O'Hara attempted the river in 1980, but he was unsuccessful. The path to the Kellet was choked with ice.

Bob told me he didn't have an up-to-date tide table (a very big mistake). "One afternoon we stopped for lunch on a rocky outcrop in Wager Bay, tied the canoe to a boulder and then went off to explore," said Bob. "When we returned a few hours later the tide had gone out. I mean *really* out! There was a half-mile of huge boulders between the canoe and open water. We just sat and waited for the water to return."

O'Hara learned that tides to 14 feet inundate Wager Bay every 12 hours. After his first "tide-bound" experience, O'Hara made it a practice always to stop and camp on a high hill that had a near vertical drop to the water.

O'Hara also discovered that tide water sometimes moves rapidly and forcefully. "Once, on a side trip downriver we lined around a good-sized ledge. Later, when we followed the tide back upstream, we rode a full-blown rapid. The ledge was completely washed out!

Bob O'Hara's advice? If you'll be canoeing in an estuary, like the lower Delaware, get a current tide table and learn to use it. Many marinas and tackle shops in the Delaware Estuary area can provide tide tables. And bring an accurate watch!

Whirlpools

Whirlpools form on big, powerful rivers where strong currents collide. They are most common after heavy rains when the water is high. Whirlpools are easy to spot if you're above the level of the river. They are not at all easy to see from the seat of a canoe. There may be no escape from the swirling water that leads to the vortex of a large whirlpool. The way around whirlpools is to avoid them! You can portage or line, or if you're real gutsy, "time" the current flow and paddle when conditions are right. Whirlpools tend to move up and down the river, or across it in a regular pattern. For example, one minute the vortex is on river left. Thirty seconds later it has undulated to river right. Time the flow, "go for it" at the appropriate time, and you're home free. Screw up, and you may be buried at sea.

Wing dams

Some years ago, I tore a gaping hole in the chine of my wood-strip solo canoe while paddling a backwater of the Mississippi River near my Hastings, Minnesota, home. I was surfing hell-bent for leather down a wave face when I crashed into a hidden wing dam. Fortunately, I had some duct tape along and was able to effect a repair. I still regularly paddle the Mississippi, though now, I check my map for wing dams before I launch my canoe.

As you can see, "flatwater" is seldom very flat. And only infrequently is it boring to paddle. There are currents and riffles to negotiate—dams, whirlpools and strainers to avoid. There is compelling beauty in the long placid stretches, and the exhilaration of paddling an efficient, swift canoe. "Put the ash to 'er and watch 'er run," as the saying goes. "If all you hear is the hiss of her wake, you know you're doing it right!"

Oh yes, in case you're wondering why I haven't defined specific paddle strokes in this article, it is because flatwater paddling technique is far too complicated to detail in 2,000 words. A book-length manuscript, dozens of illustrations, hours of diligent study and a summer's practice on the water will get you started right. To this, add paddling videos, seminars taught by master paddlers, and still more practice under the watchful eyes of experts and eventually, all you'll hear is the hiss of your wake. Then, you'll finally know "you're doing it right." ▀

Central Pennsylvania's **BEST** Flatwater Cruising

by Heidi Milbrand

Most of us think of our lakes as being overcrowded and having boats that go too fast on them. Where are there quiet lakes in this state? The Fish and Boat Commission offers 49 tranquil lakes where mechanical propulsion is limited to electric motors. The Bureau of State Parks has 42 lakes where the maximum horsepower is 10, Bureau of Forestry has seven lakes where electric motors are the maximum allowed, and the Army Corps of Engineers even has three lakes with the maximum horsepower of 10. Of course, each lake offers its own personality and share of wildlife, so let's take a look at a few.

Northcentral

The Fish and Boat Commission has seven lakes in this region—Beechwood and Nessmuk in Tioga County, Colyer in Centre County, Rose Valley in Lycoming County, Hunters in Sullivan, and Walker Lake and Middle Creek in Snyder County.

Colyer Lake is 77 acres and is located five miles east of State College off Route 322, at Tusseyville. This is a very popular lake for sailing. Rose Valley Lake, 396 acres, is located six miles east of Trout Run on Route 15. This is a well-liked lake among the locals for fishing. Walker Lake is 239 acres located one mile south of Troxelville off Route 235, and Middle Creek has 100 acres and is located off Route 235 between Beaver Springs and Bonford. Beechwood Lake is 67 acres, and Nessmuk is 60 acres. Both offer peace and quiet. Hunters Lake is 117 acres located off Route 42 between Muncy Valley and Eagles Mere.

The state parks in this region are popular because of their location. Who wouldn't want to camp at any of the parks in this region? All offer solitude, great scenery and views as well as their share of wildlife.

Take Route 504 from Philipsburg to Black Moshannon State Park in Centre County, which has a 250-acre lake that gives the

canoeist a chance to view flora and fauna not found elsewhere in the state. "Black Mo" also offers camping. Hills Creek State Park is worth getting to. Go north on Route 15 to Mansfield and then take 660 west and follow the signs. It is tucked away in the rolling hills of northcentral Pennsylvania and offers a 137-acre lake and camping. Little Pine is another park worth seeing. Nestled in a valley, it has a 94-acre lake, camping and an outstanding view of the stars. Make sure you float your boat at night on this one. Go north on Route 44 to Waterville and a hang a right after crossing Little Pine Creek. Lyman Run State Park in Potter County has a 40-acre lake and camping. Take 44 north to 144 and follow the signs.

Clearfield County has Parker Dam State Park. I can remember going to this park as a little girl and my dad rowing me all over the 20-acre lake. With camping and cabins, it also contains an area where tornados ripped through it a few years ago. Travel Route 80 to 153 north.

Mt. Pisgah State Park, located four miles north of Route 6, has a 78-acre lake. Poe Valley State Park in Centre County has a 25-acre lake and camping, and is located approximately 10 miles off Routes 322/22 on top of Seven Mountains. Sinnamahoning State Park, located off Route 120, has a 142-acre lake and camping.

Sullivan County contains two Bureau of Forestry lakes, Bear Wallow, which has 28 acres, and Sones Pond, which has 16 acres. Neither has camping, but World's End State Park is nearby with camping and cabins.

Southcentral

Three Fish and Boat Commission lakes are located in this region. Letterkenny in Franklin County, Meadow Grounds in Fulton County and Opossum in Cumberland County. Letterkenny Reservoir is located at Roxbury on Route 641 and offers 54 acres.

Central Pennsylvania, from the New York border to Maryland, offers 49 tranquil lakes for fine flatwater cruising.



photo-Dan Martin

Located three miles west of McConnellsburg off Route 30, Meadow Grounds Lake is 204 acres. Opossum Lake has 59 acres and is located six miles northwest of Carlisle off Route 641. Make sure you follow the signs.

Several state parks are found in the southcentral part of the state. In Blair County, there is Canoe Creek (how appropriate) with 155 acres to drift on. It is located approximately eight miles east of Hollidaysburg along Route 22. Unfortunately, no camping is available. Codorus and Gifford Pinchot State parks are found in York County. Codorus, two miles east of Hanover on Route 216, has 1,275 acres of lake to explore, and Pinchot, located on Route 177 between Lewisberry and Rossville, has 340 acres. Both are very popular lakes for sailboaters, canoeists and fishermen.

Cowans Gap in Fulton County has a 42-acre lake and camping and is located off Route 30 at the top of Tuscarora Mountain. Perry County has Little Buffalo State Park and an 88-acre lake and is located between Newport and New Bloomfield. Memorial Lake State Park, in Lebanon County, has 85 acres. This lake is well used by the Fish and Boat Commission to train people in safe boating. It is located at Fort Indiantown Gap along Route 443.

Pine Grove Furnace State Park is by far my favorite park. It always brings back memories of childhood summers spent here. Although it has two lakes, only Laurel Lake, 27 acres, allows boats. Pine Grove also offers camping. Take Route 233 south from I-81, exit 11. Bedford County has Shawnee State Park, with a 451-acre lake, plus the biggest beach I've ever seen, and camping.

Shawnee is located off Route 96 between Schellsburg and Mann's Choice. In Huntingdon County there is Whipple Dam State Park, with a 22-acre lake. It's located off Route 26, 10 miles south of State College.

Only one Bureau of Forestry lake is found in this region in Adams County—Long Pine Run Reservoir. It offers a 145-acre lake to cruise on.

These are only lakes located in the central part of the state. Don't forget there are other regions to explore. Grab a map, your canoe and hit the roads.



Pennsylvania Safety Tips

Some special regulations regarding Fish and Boat Commission owned and operated lakes and Department of Environmental Resources owned lakes (state parks and forestry) are that each nonswimmer and child nine years of age or under must wear a personal flotation device (PFD or life jacket). It's always a good idea to wear one at all times. Some other safety items to take along include a sound-producing device (whistle or horn) and lights, required between sunset and sunrise. Another useful piece of safety equipment to take along would be a throw bag or a coiled piece of rope.

Take along water and sunscreen, and always take clothing that can be layered. You never know when it might rain. Always be prepared.

Simple Sailing

by Louis Bignami

Sail fascinates. Pick a good day with a mild breeze. Balance your sails and your craft effortlessly glides across the water. Gain more experience and venture out in wilder weather and you enjoy all the challenge anyone can handle. Sailing starts with a first, usually habit-forming cruise. Then, like those who revel in the tales of Michener, it can build to such an acute state that only a South Pacific crossing or an "if you have to ask, you can't afford it" yacht offers a cure. Sailing helps your powerboating, too, because it demands you pay attention to wind and weather.

Sail is basic. Greeks and Romans sailed off to war. Ancient Chinese probably sailed to California. Vikings sailed to the New World. Pennsylvania sailing craft sailed and fought in the Revolutionary War, brought tea back from China and took 49ers to California and gold back. Sails pushed cargo barges, sails moved timber, ore and produce.

Today, while salt chuck sailors collect most of the ink, active sailing groups dot Pennsylvania lakes and rivers. YMCA, Scout and other organizations teach beginners and hone more advanced skills. There's no excuse to stick with what my fellow "ragbaggers" derisively call "stink pots" when your first sail is as close as a call to your local sailing club.

Start as a passenger, as my wife did years back on the Maine Coast, and enjoy the sight, sound and silence. Don't start with friends. Even Philadelphia lawyers may know little about sail. Skilled sailors aren't always skilled teachers, either. Other skippers—especially when the crew is related—revert to Captain Bligh mode at times. As a result, wise folks don't teach their spouses to sail.

What you should not do is start on your own. As an NCAA pilgrim—NCAA, in this case, stands for No Clue At All—you discover that, while sailing isn't complex, it's not always obvious, either.

Granted, a tiller or wheel in the hands of someone like Dennis Connors, lifts sailing to a high art. Subtle changes bring easing the helm to keep waves from slowing the boat, then speeding the craft down the slope behind the wave crest. Such skills come to those who start young, sail hard and have a gift. For the rest of us, getting from point A to point B in a seaman-like manner offers its own reward.

Sailing theory is simple. The wind blows on your sail. The sail tries to push the boat with the wind. This works fine when the wind's over the stern, and not at all when the wind's over the bow and you're "tackless."

However, if the wind is at an angle to the direction you want to go—it is, it usually is!—you need a centerboard, leeboards or a fixed keel to keep your boat pointed in the right direction. Centerboards are, what else, boards that slide up when you go with the wind to reduce drag, and drop when you sail across the wind to offer stability. Leeboards, popular with canoeists, do the same thing except they attach to, and swing down from, the sides of the boat. Keels, as in "keel hauling" that dragged recalcitrant sailors over a barnacle-coated keel as punishment, are simply weighted hydrodynamic add-ons that help keep the sailboat upright.

Wind also pushes sailboats over at an angle. Picking the exact angle that maximizes without capsizing is recommended, as is learning to tack, to change directions back and forth so you can, eventually, move against the wind.

What you should not do is start on your own. As an NCAA pilgrim—NCAA, in this case, stands for No Clue At All—you discover that, while sailing isn't complex, it's not always obvious, either.



Part of the pleasure of sailing is the vocabulary that's developed over generations. It's fun to know the difference between *line* and *rode* and the many other terms of art you share with mariners present and ancient.

Part of the pleasure of sailing is the skills. Sailing teaches you about knots, weather, waves and more. Ragbaggers don't walk down to the marina, fire up and go! Master the basics, and you enjoy a sense of control spiced with that little uncertainty all sailors enjoy. You can whine down the lake at the helm of a jetboat. Give me the wheel of a big old sailboat like my cousin's antique J-Boat once used in the America's cup, and my problems fade away.

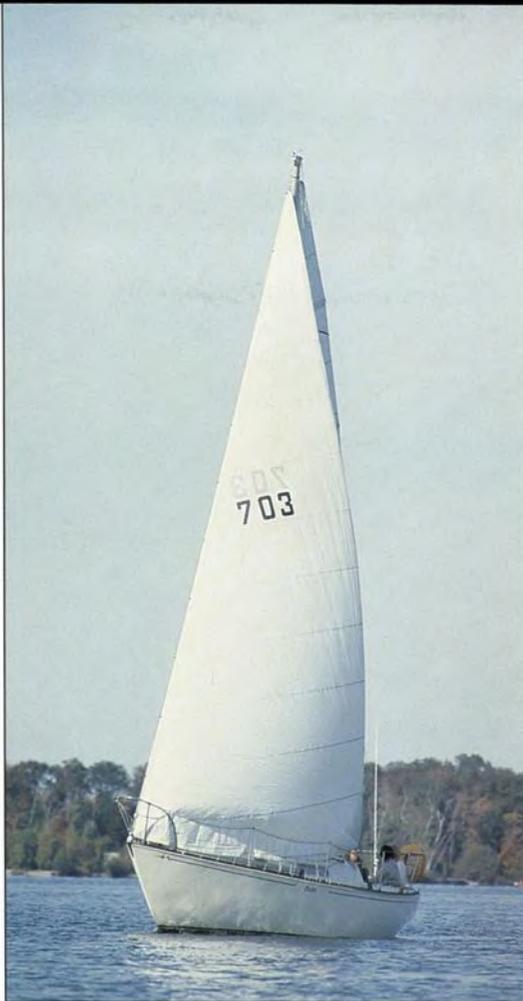
Kids, and adults new to sailing, usually begin in forgiving craft like an El Toro or Bluebird. El Toros, or "bullboats" as they are fondly called, reduce sailing to its basics. The tiller steers, the single sail moves the boat, and the centerboard slides up and down in its slot when needed to stop from blowing these tidy dinghies off line.

El Toros do have one drawback. With the mast weight in the extreme bow, their catboat rig balances if you don't hold onto the mast as you hop off the dock into their inviting bow. If you do this, pick a day with warm air and water. This is also the case if you decide to start with something like a sail-rigged canoe or an all-out racing craft.

Getting wet isn't unwelcome in summer's heat, but staying wet rarely improves the day. Most boaters should start with cotton clothing—cover up or use sunscreen to avoid the sunburn common on the water—and some "no slip" shoes like sneakers, a brimmed hat and sunglasses to protect your eyes and a sweater and rainsuit in case it gets chilly.

Dress comfortably and casually and you'll fit right in at sailing clubs, and aquatic recreation centers that have fleets of forgiving craft such as Toros, Bluebirds and the like.

After four to 10 hours of free or inexpensive basic instruction, most groups run informal weekend regattas all summer. After all, if you put two people in two boats of the same type, a race seems usual. Incidentally, the road to fiscal ruin lies in the realization that you can always go faster by buying a bigger, better and more expensive boat.



Racer's screams for rights of way ram the rules of the road through your head. Is it starboard tack, or port, that has the right of way? Have trouble remembering starboard and port? Think "right and left." The longer words in both pairs match. "Port" and "left" are both four-letter words, too, and they go together. This beats getting *starboard* and *port* written on the back of your hands with indelible marker by your dad.

Day sails offer noncompetitive pleasures of their own. A small sailboat, a brisk day with a hint of white caps and scudding clouds overhead, and a waiting beach or cove ready for a picnic blanket do much to heal the injuries of the work week. I grew up with an ancient wooden Snipe—then a popular racing class. On days when I didn't chip paint, varnish wood or wash cotton sails, I'd gather a buddy—preferably a nubile young lady who would bring lunch. At this date I'm not sure if the "nubile" or "lunch" mattered most. We'd set sails for a tiny island with a white, sandy beach that offered a view of the passing cargo craft. Days went quickly and pleasantly, and after I discovered it was wise to bring along oars or an outboard in case the wind dropped, I managed to stay out of sight and out of trouble. Dad, you see,

owned a 65-foot wooden ketch and always needed slave labor.

Day cruising can mean fishing, too. Sailboats run just the right speed to troll up all sorts of fish. My brother and I both troll big plugs for stripers on our favorite water. We've taken fish up to 45 pounds. Even a hand line works for bass, trout and panfish. You may catch dinner.

Now, when we cruise, my brother's 12- and 14-year-old boys manage the trolling lines and man the helm.

Sailing is, of course, a good way to teach kids responsibility. Mess up, and "you clean the mess up" quickly demonstrates this to the kid who didn't lock the galley cabinets when a container of maple syrup breaks on the deck.

Once you discover the joys of day cruises, and hear that the "really neat" spots are just a bit too far, you are ready to move to overnights. The latter myth also sends boaters from each end of the lake to the other.

Try a gentle introduction to overnight via the inn or B&B route before you moor out on a lee shore. Sailing, and housekeeping afloat, are different games. Practice with some meals afloat—we cheat and bring frozen home-made dishes to cut galley times on overnights. Try to nap in your V-berths. Most are designed by skinny folks about five-foot five. Consider—how can I put this delicately—your toilet arrangements. Men tend to have rather rough and ready ideas that involve bushes and flashlights. A portable toilet seems reasonable on co-ed overnights.

With small craft like canoes you will, of course, shore camp. I'd rather not sleep where I cook, thank you very much. So we often tote sleeping bags, pads and a small tent. If you bring teenagers, tote camping gear so you can maroon the kids in an island giggle ghetto and the adults enjoy nocturnal privacy afloat.

While I've enjoyed many exotic sailing adventures, like many older sailors I get just as much fun taking my sail-rigged canoe out on the reservoir near home. For sailing is, with apologies to those compelled to buy bigger, better, faster and more expensive boats each year, mostly mental. Master the basics and your mind can freely roam with Sir Francis Drake or John Paul Jones, and fence out today's complex world.





Allegheny River Islands **WILDERNESS**

by Mike Bleech

I put my .22 rifle over my shoulder and pivoted in a complete circle, just like Ray had told me he had done when he was a young man, a half-century earlier.

"There is an old, hollow sycamore on that island so big that you can do a complete circle inside of it with a rifle over your shoulder and not touch it at all," he claimed.

And I did it. I took the .22 along just so I could.

It was not easy to find, though, even such a monumental tree, in the thick jungle of Crulls Island. Grasses, ferns and other succulent plants grow taller than a full-grown man, and where they don't, thickets of multiflora rose, willows, hawthorne, or choke cherry are virtually impenetrable. Any exposed parts of your body are ripped by thorns or stung by nettles.

Don't walk through those pretty touch-me-nots. The ground under them is soft.

Of course, there are the bugs, the water snakes and even more disgusting creatures, all sorts of crawling, hopping, creeping, slithering things.

Not many people take leisurely strolls across the islands of the middle Allegheny River. Though none of these islands is large, their interiors are as remote as any place in the state, guarded by the thickest vegetation in the state.

A thousand feet lower in elevation, the islands and other river bottomland are a different world from the surrounding highlands, an intrusion of more southern climate and plant life. Most obvious are the stately sycamore trees, some a hundred feet tall, their blotchy, light-colored bark a vivid contrast to the other trees, the silver maples and American elms. Lower to the ground there are slippery elm, dog-toothed violet, and several others.

So unique are these islands that in 1986 Congress designated seven as the Allegheny Islands Wilderness. These seven islands—Crulls, Thompsons, R. Thompsons, Courson, King, Baker, and No-Name—are along the western border of the Allegheny National Forest, just a few miles from the Hickory Creek Wilderness, which was so designated along with the Allegheny Islands. Together they are the only designated wilderness in Pennsylvania.

Perhaps the smallest wilderness in the country, all of the islands total just 368 acres. Crulls is the largest island, 96 acres, while 9.9-acre No-Name is smallest.

The Allegheny River flows 45 miles along the border of the Allegheny National Forest, from Kinzua Dam to the village of Tionesta. The wilderness islands make ideal campsites for two- or three-day floats of this stretch.

This is part of the Allegheny Wild and Scenic River, which continues downriver. It was designated as part of the Wild & Scenic Rivers Program by Congress because of its recreational qualities.

At normal summer flow, the river is suitable for even novice canoeists. Riffles are mild, class I. You almost certainly scrape bottom from time to time, and if you are not careful you might strike mid-river boulders, so you should take normal safety precautions.

Most people use canoes to float the wilderness islands area. Some use inflatable craft. Fishermen, mostly, sometimes use light johnboats or semivee boats. Rowing is becoming a forgotten recreational sport. Some of my most pleasant time on this water was in an old wooden row boat. They are so much more comfortable than canoes!

For a three-day journey start at the Kinzua Dam tailwaters, adjacent to Route 59, at the Big Bend Recreation Area. A steep blacktop road over the bank near the lower end of the large parking lot leads to the boat access.

The river valley is steep and narrow all the way to Warren. Eagle watching is one of the favorite pastimes here. I have seen as many as 11 bald eagles at one time. Watch for them soaring, or perched on limbs that lean over the river. Bald eagles began living here soon after the Kinzua Dam was completed, thanks to reduced pesticide use and hacking operations in nearby New York. They find solitary places for nesting on the steep river ridges, and good feeding opportunities on the river. Fish are their main diet. Because the river does not freeze completely over for several miles downriver from the dam, they can feed here year-round.

The Buckaloons Recreation Area, 16 river miles from the dam, is the closest public river access for floating past all the wilderness islands, just a mile upriver from Crulls Island. Start here if you want to see all the wilderness islands in a two-day float, or a leisurely three-day river trip. This area includes campsites, group campsites, picnic tables, and a paved launch ramp.

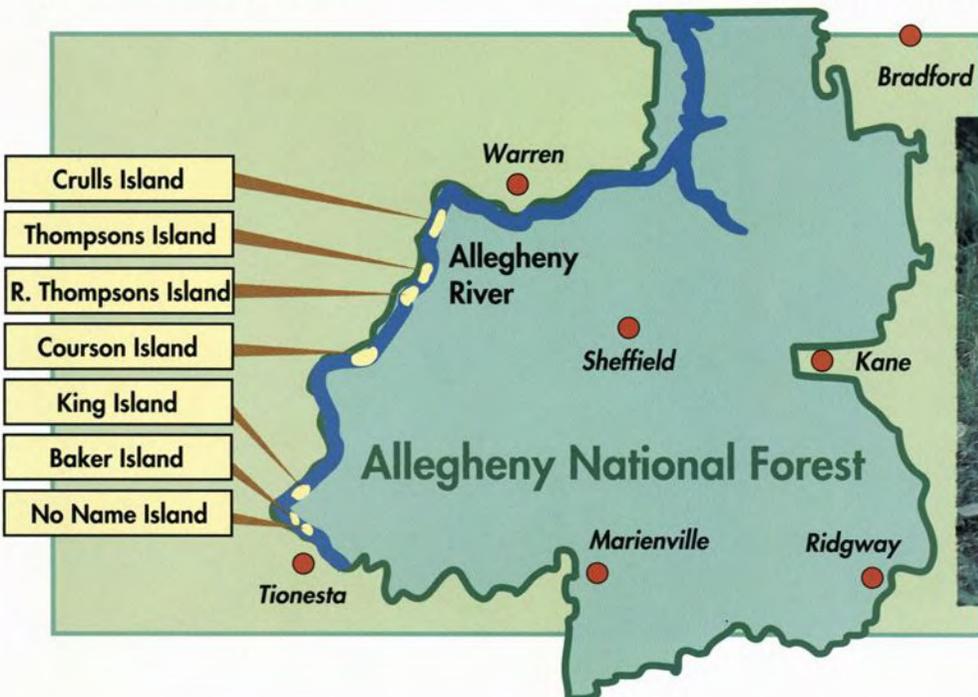


photo-Mike Bleech; map-Ted Walke



Allegheny River Islands WILDERNESS

Crulls Island

Crulls is the first wilderness island encountered by floaters. It is about 16 1/2 miles from Kinzua Dam. Take the right channel if you plan to camp on this island. Any campsites along the left channel would look over homes or camps, and get a lot of highway noise. The upper three-quarters of the island along the right channel is buffered from a lightly traveled road by dense river-bottom forest. This situation is similar at most of the islands, so check your maps to determine which side is most remote.

Another important factor in determining which channel to take is the amount of water in the channel. Some channels are so shallow during typical summer flow that you have to drag your craft over rocks. Even some of the larger channels are impassible anywhere but in the main current, so watch for those slick Vs.

Crulls Island was tilled for many years. The cultivated fields have long since been reclaimed by nature, hardly recognizable any longer. The broad valley on the west side of the river has a long history of cultivation, starting sometime in the forgotten past with native Americans. That ended with the punitive expedition of General Brodhead in 1779, when his army destroyed the village called Buckaloons and the extensive cornfields in the vicinity. For many years a stately mansion was the center of activity for farming, but that also has passed into history.

Thompsons Island

At the upriver end of Thompsons Island, the next island downriver, occurred the only battle of the Revolutionary War in northwest Pennsylvania. A forward party of General Brodhead's army ambushed a group of 30 to 40 Senecas. Accounts of the battle are sketchy, though it is likely the Senecas were routed.

R. Thompsons Island

Getting around on R. Thompsons Island, one of the medium-size islands, is complicated by many blown-down trees, the result of a local wind storm in 1975. This island is about a half-mile from the lower tip of Thompsons Island.

The first three wilderness islands are aligned one after another. From the upriver end of Crulls Island to the downriver end of R. Thompsons Island is about 4 1/4 miles, in river distance from 16 to 20 1/4 miles from the boat access at the Kinzua Dam tailwaters.

Somewhere in here is probably the right place for a first stop during a three-day float through the wilderness islands. This is a considerable distance from the dam to canoe in one day, but it is about what you must average to do this journey in three days. If you are at least a moderately skilled canoeist and you do not have to fight a stiff headwind, you should be able to do it without working too hard. A mile-long pool at Warren is the longest stretch of slow-moving water. There is more riffle and slick than pool.

Courson Island

Courson Island is the midway island, 7 3/4 miles downriver from the downriver end of R. Thompsons Island, 13 miles from the Buckaloons access, 28 1/2 miles from the dam. Situated just upriver from Tidioute, here is the place to stop during a two-day float. And it is a good place to get your bearings. In case you have lost track of which island is which, you can see the Tidioute bridge from the lower end of the island.

A Pennsylvania Fish and Boat Commission access at Tidioute is a good place to stop for supplies. Stores are within easy walking distance.

The lower three wilderness islands are the final three before the Pennsylvania Fish and Boat Commission access at the upriver side of the community of Tionesta.



King Island

King Island is the first island you encounter below the West Hickory bridge. This is a fine place to make your second night campsite during a three-day float. It is about 40 1/2 miles downriver from the Kinzua Dam, 24 miles from Crulls Island, and 12 miles from Courson Island. Few places in the East have such majestic trees as King Island.

Baker Island

Like most of these islands, wildlife lives mostly undisturbed on Baker Island. White-tailed deer use it as part of their normal range, wandering back and forth to the mainland with ease. Most of the islands are surrounded by shallow slicks and riffles. Deer trails lead to the shallowest places where deer can wade rather than having to swim.

Baker, one of the larger wilderness islands, was partly leveled by one of the great tornados of May 1985. Some of the largest, most devastating tornados ever seen swept through northwest Pennsylvania that spring, leaving blow-down paths through the forest more than a mile wide. The biggest trees were snapped off at the trunk like so many toothpicks, their tops twisted into a huge, gnarled brushpile.

No-Name Island

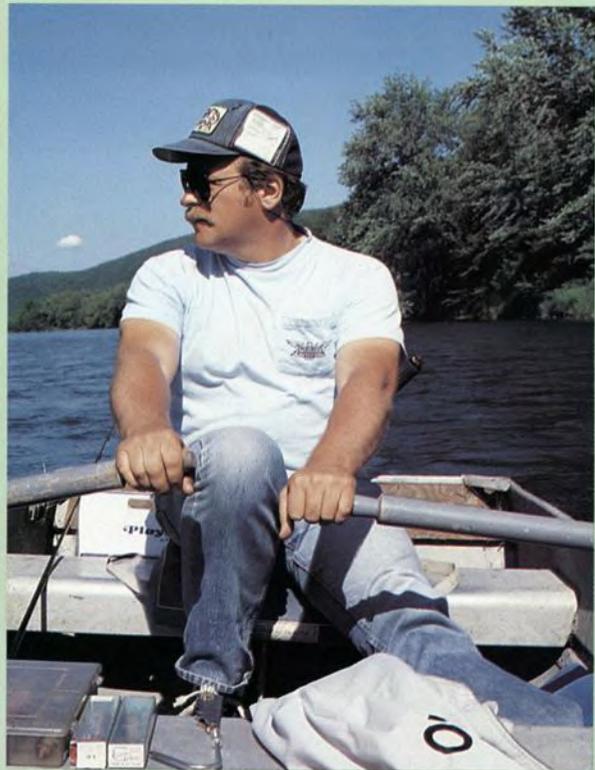
No-Name Island, the smallest wilderness island, 9.9 acres, and farthest downriver, is a typical mix of river-bottom forest and dense lower vegetation.

Keep to the left after No-Name Island. The Fish and Boat Commission access is on the left (east) side of the river, just before one of the bigger river riffles. This is the end of a Middle Allegheny float trip. Just below the Tionesta bridge there is a community boat ramp that might also be used.

At Tionesta you can relax from the river journey, eat at a restaurant, get a motel room, take a hot shower. It is the perfect place to wind up the journey, in a county with no four-lane highways, no traffic lights, and more deer than people. ▾

RIVER DISTANCES FROM KINZUA DAM

Mileage	Landmark
00.50	Corps of Engineers access at tailwaters
15.50	Buckaloons Recreation Area
16.50	Crulls Island
18.50	Thompsons Island
20.00	R. Thompsons Island
28.25	Bonnie Brae Access (PA Fish & Boat Commission)
28.50	Courson Island
30.25	Tidioute Access (PA Fish & Boat Commission)
39.00	West Hickory Access (PA Fish & Boat Commission)
40.50	King Island
42.50	Baker Island
43.25	No-Name Island
44.25	Tionesta Access (PA Fish & Boat Commission)



LEAVE NO TRACE

Gathering around the evening campfire is part of the river tripping tradition. Dense river-bottom forest seems to be trying to swallow you. Listening to the sounds of wild creatures of the night, and there are plenty of them on these wilderness islands, you experience primal fears. The fire is what stands between you and whatever it is out there in the darkness. It is easy to let your mind wander to the days of the voyageurs, when there really was danger.

Nowadays the greatest danger is ourselves. Special regulations aim to protect the wilderness nature, and wilderness experience of the islands. Right at the top is a regulation forbidding any motorized equipment. Leave your chain saws at home! These are the most frequent violations of the no motors code I have observed.

Camping is allowed on the Allegheny Wilderness Islands. However, all camping is primitive. There are no facilities such as latrines, picnic tables or fire pits. Nor should you construct any. The general rule is to leave the area as you found it.

Fires are permitted, but only under certain conditions. Before building a fire, clear away surface debris down to bare soil for a fire circle, keeping away from trees, roots and logs. Use only downed, dead fire wood. Do not cut any standing tree, even if it is dead. Keep the fire small. Do not leave it unattended, and make sure it is completely extinguished before leaving.

Carry out all of your trash. Do not bury it.

Dig a hole at least 8 inches deep, at least 100 feet from any water, for human waste. Cover the hole with dirt before leaving your campsite.—MB.

*Upriver view of
the Susquehanna
River from the
Walnut Street
bridge in
Harrisburg.*

