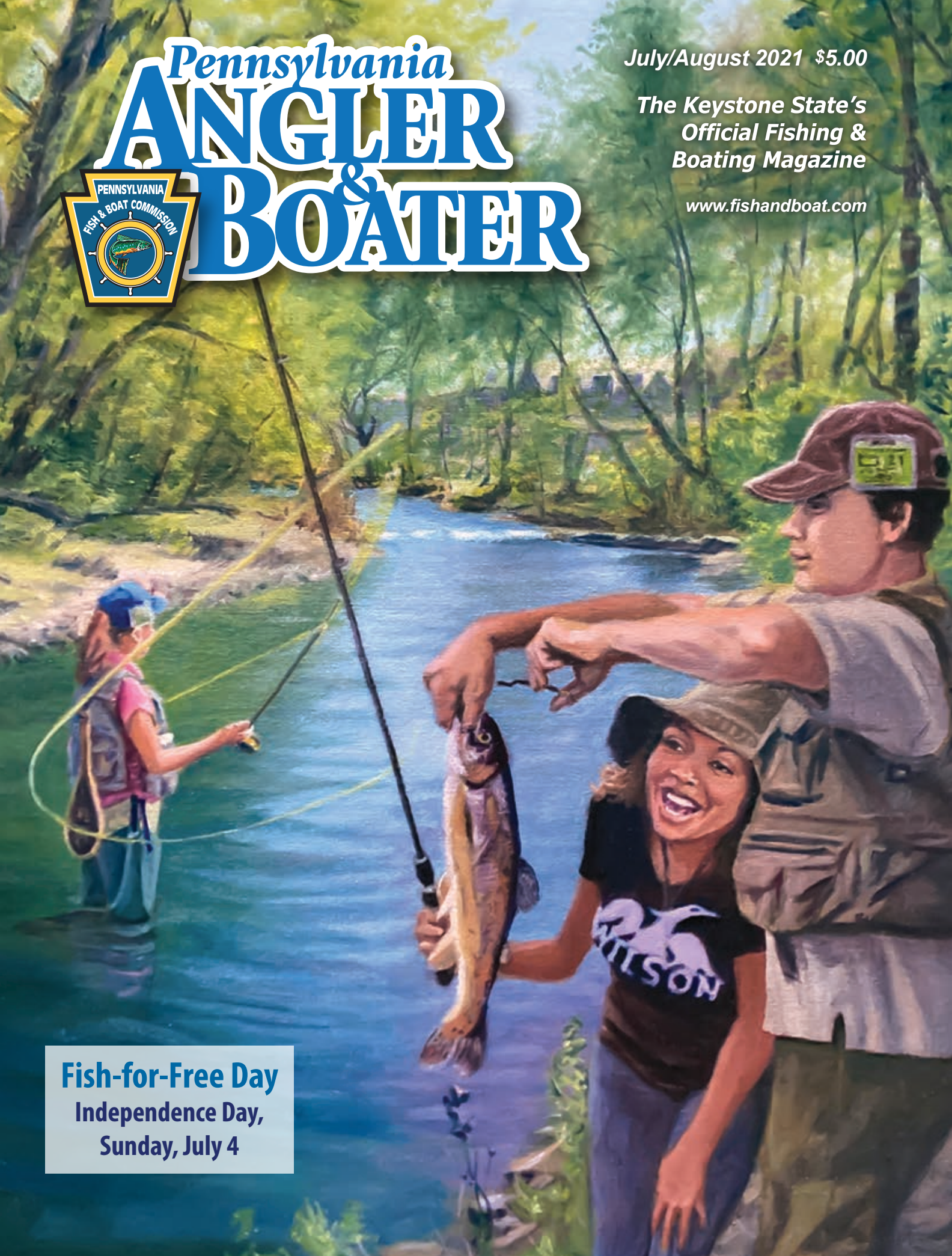


Pennsylvania **ANGLER & BOATER**

July/August 2021 \$5.00

The Keystone State's
Official Fishing &
Boating Magazine

www.fishandboat.com



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Independence Day,
Sunday, July 4



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Graphic Design—Andrea Feeney

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Subscription Inquiries

717-705-7835 • E-mail: ra-pfbcmagazine@pa.gov

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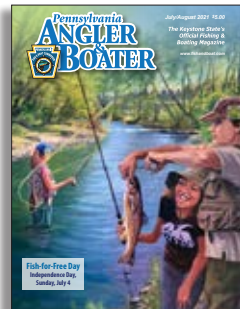
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On the cover

Section 4 of Conococheague Creek, Franklin County, is stocked by the Pennsylvania Fish and Boat Commission with trout inseason and offers early summer trout fishing opportunities to Wilson College students and other anglers. For more information on Non-Resident Pennsylvania Student Licenses and other licenses, turn to pages 32 and 33. See page 58 for more on inseason trout stocking. Painting by Bill Wiist.



The PFBC social media and mobile app:
www.fishandboat.com/socialmedia

Boat Safely This Summer

by **Timothy D. Schaeffer**
Executive Director
Pennsylvania Fish and Boat Commission

The images inside the front cover of this issue of *Pennsylvania Angler & Boater* remind all readers to make it a safe day on the water by wearing your life jacket.

Memorial Day weekend was the traditional kick off to boating season, but a lot of Pennsylvanians skipped tradition and hit the water early this year. That phenomenon this spring, built on the trend of renewed interest in outdoor recreation sparked last year, is clearly continuing this summer as people everywhere look to shake off their COVID-19 cabin fever.

The Pennsylvania Fish and Boat Commission (PFBC) was especially pleased to join the National Safe Boating Council and partners across the Commonwealth and country in celebrating National Safe Boating Week from May 22-28, during which we rolled out a series of safety messages that apply all year long.

This annual public awareness campaign coincides with the time of year when both new and experienced boaters are taking to the water as the weather warms and are making the most of longer days to spend more time enjoying the pleasures of boating.

Even if you are reading this article closer to the Fourth of July or Labor Day than to Memorial Day, the themes of National Safe Boating Week are just as relevant.

Whether you boat to fish, water ski, sail, or simply relax and spend time with friends and family, please keep the following safety tips in mind every time you paddle, start the engine, or unfurl the sails.

Wear a life jacket

Law requires that you have a life jacket on board for every person on your boat. Children ages 12 and under must always wear a life jacket when aboard a boat less than 20 feet in length, including all canoes and kayaks. Life jackets must be United States Coast Guard approved and properly fit the individual, including children and infants. About 80% of all boating fatalities occur annually, because boaters were not wearing life jackets. There were 11 boating fatalities in 2020 in the Commonwealth—none of whom were wearing a life jacket. Wear It, Pennsylvania!

Never boat under the influence (BUI)

Alcohol use increases the chances of having an accident. Alcohol affects balance, coordination, and judgment. It is illegal to operate a boat while under the influence of alcohol or



Commissioner Rick Kauffman and Bureau of Boating Director Laurel Anders help celebrate the reopening of Five Locks Access, Berks County, at a ribbon cutting ceremony held in conjunction with the kick off to National Safe Boating Week. WCO Mark Pisko is pictured at the left.

a controlled substance. Just like operating a motor vehicle on the roadway, in Pennsylvania, a person operating a boat is over the legal limit if he or she has a blood alcohol concentration of point-zero-eight percent (0.08%) or higher. BUI penalties include loss of boating privileges, significant fines, and imprisonment. Waterways Conservation Officers will be on patrol throughout the summer looking for impaired boaters.

Create a float plan

Let someone know where you are planning to boat and when you expect to return. Plans can change when you are having fun, and keeping someone aware of your location throughout the day can ensure that help arrives quickly if you experience a mechanical or medical emergency while on the water. Carry a dry bag in which to keep your cell phone and other valuables while boating. The PFBC's free mobile app Fish Boat PA is a great place to find boating accesses nearby and across the state.

Take a boating safety course

In Pennsylvania, all boaters born on or after January 1, 1982 who operate boats powered by motors greater than 25 horsepower must have a Boating Safety Certificate. A certificate is also required for anyone who operates a personal watercraft (such as a Jet Ski™), regardless of age. Online courses can be found at www.fishandboat.com and completed at your own pace.

Have proper registrations and launch permits

In Pennsylvania, all powered boats must be registered. Anyone operating an unpowered boat, such as a kayak, canoe, or standup paddleboard, who wishes to use a PFBC or Pennsylvania Department of Conservation and Natural Resources boat access, including those at state parks, may either register their boat or purchase a launch permit. Visit www.fishandboat.com for more information on registration and launch permits.

Thank you for boating safely in 2021 and all year long. The water is open to everyone and is waiting for you!

Clear Creek State Park: A Little Slice of Heaven



by Charles Cantella

photos by the author

Last June, good fortune smiled on me, and I found myself with a full day free of any responsibilities. Giddy at the prospect of a day without errands, I did not want to waste the day puttering around the house. This day called for a road trip. Closing my eyes, I blindly pointed to a spot on the Pennsylvania map that hangs in my office. Upon opening my eyes, I saw that my finger was planted squarely on Sigel, Jefferson County. Some quick research revealed that Sigel is close to both Cook Forest State Park and Clear Creek State Park. Having been to Cook Forest State Park previously, I opted for the, as of yet unknown to me, Clear Creek State Park. Car loaded, sunglasses on, radio cranked, I was ready to roll. Clear Creek State Park or bust.

The trip was uneventful. Soon, I was turning off of U.S. Route 80 and onto State Route 949 into and through Sigel. Shortly, I arrived at Clear Creek State Park, excited to see what this park had to offer. Pulling into the



parking lot, I was able to see a body of water through the trees. Later, I learned that the creek had been dammed to create a pond complete with a sand beach, which is open for swimming from late May to mid-September from 8:00 a.m. to sunset. But, be warned, swimming is at your own risk. More exploration revealed restroom facilities, picnic shelters, playgrounds, and camping sites scattered throughout the park.



The beach at Clear Creek State Park offers fun in the sun.

Fishing

Walking toward the stream, I met an angler, Hugh Anderson, on his way back to the parking lot after a morning of fishing. I asked if he had any luck.

“Well, I could see ‘em in there. And, that is the trouble. If you can see the fish, the fish can see you. You really gotta sneak up on the fish, especially in the skinny water,” said Anderson. Then, he gave the half smile of a man who has fished long enough to know that the success of a trip is not measured by the number of fish caught. He asked what bait I had with me. When I told him I was going to try the fly rod, he just smiled and advised, “Watch your backcast.” He suggested a few places on the stream I may want to try and wished me luck.



Discover beautiful bridges in Clear Creek State Park.

I headed towards the stream, under the bridge just below the pond, where the water splashes down the tiered dam, which helps aerate the water. Just like Anderson warned me, the water was crystal clear, and the fish were skittish. Not to scare anyone from exploring Clear Creek State Park, but it may be tricky fishing. The streamside shrubs do not leave a lot of room for a backcast, and the clear water does not leave a lot of room for user error. I learned both lessons immediately. It was a tough day of fishing. I would get a slash or strike at almost every hole. During the brief moment the fish was on, it would stir up the pool and

send the other fish scurrying for cover before throwing the hook. However, there is more to do at Clear Creek State Park than just small stream fishing. Anglers may also cast their lines into the waters of the Clarion River (Section 4), which offers a mix of trout and warmwater fish. This section of the river is designated a “Best Fishing Water” for Smallmouth Bass. But, fishing aside, there is more this delightful park has to offer.

Camping and picnicking

Clear Creek State Park covers 1,901 acres. It not only includes Clear Creek but also a 4-mile portion of the Clarion River. Clear Creek State Park is a part of the 16,229-acre Clear Creek State Forest (see the sidebar). The wooded environs of Clear Creek State Park offer modern tent and trailer campsites (electric, non-electric, and pet friendly).

Pennsylvania state forest system

The Pennsylvania State Forest System encompasses 2.2 million acres of state forests managed by the Pennsylvania Department of Conservation and Natural Resources Bureau of Forestry. State forests are found in 50 of Pennsylvania’s 67 counties. These 20 state forests make up 13% of Pennsylvania’s total forest land.



This creek that runs through Clear Creek State Park is a little slice of heaven.

An amphitheater, dump station, playground, and shower house are available along with two Americans with Disabilities Act accessible campsites. There are two canoe/kayak camping sites along the Clarion River for those who are on multi-day canoe/ kayak trips. The campground is open from mid-April to mid-December. Camping and pavilion reservation information can be found on the sidebar.

Canoeing and kayaking

A part of the Clarion River flows through the western portion of the park. Canoeing and kayaking are popular in the 2019 Pennsylvania River of the Year. A 52-mile section of the Clarion River was designated as a National Wild and Scenic River by the United States Forest Service in 1996. The river is relatively slow and meandering, flowing at an average of 4 miles-per-hour,

but that is dependent on rainfall and other factors. The river may get shallow, and you may need to get out and drag your watercraft over the shallows. While on the water, practice safe boating, and wear your life jacket. More information about the Clarion River can be found in the May/June 2020 *Pennsylvania Angler & Boater*.

Hiking

Hiking is also a popular pastime at Clear Creek State Park. With over 25 miles of well-marked hiking trails, there is something for everyone. Ranging in length from 11 miles, Tobacco Trail (3.8 miles in Clear Creek State Park, which continues into Cook Forest State Park, connecting the two parks), to the 0.3 mile, Big Coon Trail, which connects Big Coon Picnic Area to Clear Creek Trail. Many trails follow old logging roads, offer scenic overlooks, and the potential to spot wildlife such as squirrels, deer, turkeys, and bears.

Hunting

During established seasons, there are about 1,000 acres of the park open to trapping, hunting, and dog training. Check with the Pennsylvania Game Commission for more detailed information.

When I asked Amber Fitzgerald, whom I met walking her dog, what is so special about Clear Creek State Park, she told me, “I absolutely fell in love with Clear Creek years ago, after accidentally stumbling upon it on the way home from a fishing trip up north. The hiking trails, fishing, and pet- friendly camping is what hooked me. Some people love the beach, I love the forest, campfires, and the beautiful creek that runs through it. It is a little slice of heaven.” ☺

Camping and pavilion reservations information

Clear Creek State Park
888-PA-PARKS
www.visitPAParks.com

Local canoe and kayak liveries

Cook Forest Canoe Rentals
814-744-8094
Pale Whale Canoe Fleet
814-744-8300 or 800-860-0160



Wet Wading Pine Creek for Summertime Smallmouth Bass

by Tyler Frantz

photos by the author

Once known for train rails, elk trapping, and timber sales, the scenic Pine Creek Valley's past is checkered as it is historic.

It is where legendary hunter Philip Tome "candled" scores of deer eating moss in the river at night from dugout canoes, marketing the venison to more civilized settlements downstream. It is also where massive evergreens were stripped from the landscape and log-floated by the thousands, leaving scarred mountains behind, and where multiple independently-owned railroads hauled freight, coal, and passengers for much of the 20th century, producing a handful of tragic train derailments and forest fires in the process.

Fully recovered from its prospecting days, the Pine Creek Valley is now a cherished destination for outdoor enthusiasts,

drawn to its pristine wilderness for hiking, camping, hunting, fishing, and boating opportunities.

Pine Creek is 87.2 miles long; 56.7 miles are stocked trout waters revered by both fly anglers and spin anglers alike. However, in the warm summer months, anglers may find delight in wet wading the bathwater-like flows for hefty Smallmouth Bass.

As water temperatures climb, sending pods of trout up cold mountain tributaries, Smallmouth Bass reign supreme in Pine Creek. There is no better way to beat the heat than wearing an old pair of shoes and immersing oneself into the runs and riffles to fish for "Big Pine" Smallmouth Bass.

Gearing up

When selecting tools for the trade, fast-drying, breathable hiking pants serve just as well as cutoff jeans by way of comfort, but they will also protect your legs from poison ivy and bug bites while descending steep banks to access the water.



One year, the author 3-D printed a homemade lure just to see what would happen, and he landed two trophy Smallmouth Bass on consecutive casts, proving Pine Creek bass aren't overly selective.

Old sneakers do just fine, but wading boots provide better support and stability on the creek's rocky bottom. It may get slick at times, so if your "sea legs" sailed away years ago, a wading staff may be a good idea. Finalize your wardrobe with polarized glasses and a comfortable shirt and hat to keep the sun at bay.

A light to medium action rod around 6½- to 7½-feet in length paired with 6- or 8-pound-test line makes for a fun fight, while still affording the long casts necessary to reach prime cover in wider areas. While not an absolute must, a clip-on net may be an asset if you luck into bass over 18-inches long. A net simplifies the landing, unhooking, marveling, and releasing process, all while controlling the fish underwater.

Of course, you need something to carry more gear than you will use, so pick out a high-riding vest or sling pack. Fill it with a variety of spinners, soft plastics, topwater lures, diving crankbaits, and live bait. Hungry fish will hit all of the above at the right time and location.

Happy hours

The best luck I had fishing Pine Creek, especially during the extreme heat of summer, was before the sun fully exposes itself in the morning and just after it dips below the mountains in the evening. Because of the sheer height of some of the surrounding terrain in the valley, it is possible to have several hours of

heavy action during these two daytime bookends without direct sunlight on the water.

While fish have hit mid-day presentations casted into the shadows, feeding definitely intensifies in lower light, as bass seem more apt to roam than loaf under dawn, dusk, and overcast scenarios—especially during low, warm water periods.

Location

The entire expanse of Pine Creek holds Smallmouth Bass, but denser populations exist in the mid to lower reaches compared to the upper canyon. Seek out fast riffles that spill into long, deep pools, as well as sharp drops near turns and rock outcroppings.

These drastic changes in depth, coupled with freshly oxygenated water, are prime holding zones for mature Smallmouth Bass eager to feed. Cast diagonally from the shallows into the deep water to elicit a strike. There is a variety of structure in Pine Creek. The more you fish it, the more you will learn to read it. The fish love edges. If you locate these steeper transitional drops, you will find Smallmouth Bass.

Techniques

As far as offerings, I am successful with crankbaits, crawfish lures, inline spinners, wacky rigged worms, finesse worms, and a variety of live bait offerings. But, my favorite way to catch Smallmouth Bass is using topwater lures. On summer evenings, the fish absolutely smash these lures when popped across the surface causing subtle splashes along the way.

Sometimes, feisty little bass hit lures half its size. Other times, I am rewarded with a chunky old lunker that barely fits in my net. One year, I caught two successive trophy-class bass on a 3-D printed plug made with glued on hooks from a disassembled Heddon Zara Spook lure, proving hungry fish do not discriminate.

Pine Creek Smallmouth Bass are strong, healthy, and make it well worth visiting this beautiful creek. So, grab your gear, and make some history of your own while wet wading the waters of this scenic and storied valley for summertime Smallmouth Bass. ☑



NOTES *from the Streams*

Close, but no cigar

In mid-January, I received a call from an excited taxidermist after an angler dropped off an enormous Brown Trout for mounting. The taxidermist thought it may be a new state record. I stopped by the taxidermist's shop and inspected the giant trophy Brown Trout, which had been taken on the Yellow Breeches Creek, Cumberland County. State record fish are evaluated based on weight, so I transported it to the nearest certified scale. The trout weighed a whopping 13-pounds, 14-ounces. Unfortunately, for the proud angler, the state record for Brown Trout was set last year when a 20-pound, 9-ounce, Brown Trout was landed in Erie County. While the angler had indeed landed a massive trophy fish, it weighed nearly 7 pounds less than the state record.—WCO David A. Hurst, Cumberland County.

Happy ending

February 16, 2021 was the beginning of the stocking season in northern Chester County. It was filled with all the challenges one could expect on the first stocking of the year. First, we were still dealing with the COVID-19 pandemic, and several snow storms made it more challenging, and it was very cold. Assisting me with the stocking of our four Special Regulation Areas were Sergeant Rhodes, Waterways Conservation Officer (WCO) Steager, and several of Chester County's finest volunteers.

We finished stocking the East Branch Brandywine Delayed Harvest Artificial Lures Only Area (DHALO) in Downingtown, Chester County. It was the last of the three streams we stocked. As luck would have it, we were in an area without cell phone reception, so when the truck driver asked if I would escort him back to the turnpike, I said yes.

As we merged onto Route 113 from the 30 bypass, I noticed a small Cooper's hawk standing in the middle of the road in front of me. I slowed to a stop, expecting it to take off, but it did not move. I activated my emergency lights and exited my vehicle.

The hawk still did not move. I thought it was injured. It did not appear to have a broken wing, but it was just staring.

I went to the bed of my truck and retrieved a tote I keep for such an emergency.

I approached the hawk cautiously and picked it up in my gloved hands. I carefully placed the hawk into the tote. It never flinched or resisted. All this time, traffic in all directions was stopped, watching the scenario play out.

After loading the tote in the back seat of my truck, I made a phone call to Matt Johnson, a local Game Warden, who put me in touch with Marian Quinn from Tri-State Bird Rescue & Research. We met, and she transported the hawk to Tri-State.

Three days later, Quinn called and said the hawk had some abrasions, was given an antibiotic, and was now fit to be released. So, that Saturday morning, we met and released the Cooper's hawk in the area where it had its accident.

One of my many hobbies is photographing wildlife, so naturally I brought my cameras along with me and managed to get a couple of photos. After leaving the tote, it perched 30- to 40-yards high up in a tree for the photo op. I am sure it enjoyed that part of the trip the most; I know I did. It was a happy ending.—WCO Robert J. Bonney, Northern Chester County.

Find the differences

In my youth, I enjoyed opening up the Sunday paper to the comics section. Facing the Garfield comic was generally two small drawings with subtle differences. The goal was to compare the two pictures and identify the differences. I enjoyed this activity, and it was relatively simple because the two pictures were next to each other.

Over one summer, I had the opportunity to test my skills at identifying the differences. I stopped a boat for a navigation violation. In the course of conducting the boarding, I kept looking at his validation decals. At a distance, I did not notice anything unusual, but as I got closer, I began to notice something looked strange. The first thing that caught my attention was the dual color tone. Upon closer examination, I noticed other issues until I finally asked, "Did the Pennsylvania Fish and Boat



illustration—Andrea Feeney

Commission send you these decals?” To which this person admitted they used a vinyl printer to create an overlay on top of an expired 2018 decal. The rest is history. Solving this puzzle was a bit more satisfying than the Sunday newspaper comic.—*WCO Zachary M. Rudd, Northampton County.*

Catfish in the bathtub

I was patrolling Beltzville Lake, Carbon County, with WCO Scott J. Christman from our patrol boat, when we came across two people fishing from the shore. We pulled up and asked to see their fishing licenses. The anglers showed us two valid Pennsylvania fishing licenses. I asked to see inside a small storage container they had on shore. The male angler had no problem showing us. He dumped it out on shore, and it was just water from the lake.

He asked us if he could keep the small sunfish he was attempting to catch. Since there are no special regulations for sunfish on Beltzville Lake, I told the angler he could take home up to 50 that day with no minimum size restrictions. WCO Christman asked the young man if he was planning on keeping the sunfish he caught in the bathtub at his home. The male angler laughed and said no, but the accompanying female angler said, “It is funny you said that, because we do catch catfish and keep them in his parents’ bathtub for two days, so we can filter the catfish out before we cook it. My mom makes good catfish nuggets.” This reply caught me off guard.—*WCO Emily R. Berger, Northern Wallenpaupack.*

A wild ride

On a cold, windy, winter day in January, I was patrolling Duman Lake, Cambria County. I was finishing up a phone call before going out on the ice to check some anglers. While on the phone, I was watching an angler set up some tip ups. He was the only person around his ice shelter. All of a sudden, a big gust of wind came, and his ice shelter went skating across the ice. The angler looked up and went running after it. It came to its final resting place about 40 yards away, out of my vision

because a tree was in front of me. I got out of my vehicle and went toward the angler to make sure everything was okay. As I started walking across the lake, I noticed there were now two men walking back, dragging the ice shelter behind them. I thought to myself, where did the other guy come from? I approached the two men and asked if they were okay. They were laughing it off, so I asked where the second guy came from. They informed me that he was actually in the ice shelter the entire time. He went on to tell me that it was a wild ride. After they assured me that no one was injured, I walked away thinking, “well, that was an interesting start to my day.” —*WCO Nathaniel J. Yingling, Cambria County.*

Cash out

One of the more dangerous duties of a WCO is serving bench warrants issued by the District Courts on defendants charged with an offense and who failed to respond to a citation or pay their fines and court costs.

Upon locating and serving the warrant, the WCO takes the defendant into custody and accepts a signed guilty plea and collects the full amount of the fines and costs, or accepts a signed not guilty plea and collects the full amount of collateral or accepts the amount of fines and court costs due following a guilty plea or conviction. If the defendant is unable to pay or post the full amount of the collateral, the defendant is then taken into custody by the WCO for a hearing before the District Magistrate.

A WCO faces the possibility of physical harm by a defendant. WCOs must be alert of their surroundings. Serving bench warrants during my career as a WCO has taken me to defendants’ addresses, from rural areas to the city—whether it is a house, apartment complex, a makeshift shelter under a bridge, or even a tree house. It has also included visiting their place of employment. Some defendants will be cooperative. Some defendants go to the extreme of preventing the bench warrant or

being taken into custody. Sometimes, they avoid being served the warrant, because they have other outstanding warrants for other offenses.

Whether going to the defendant’s last known address or their place of employment, a WCO must always keep an eye out for those defendants who have an outstanding bench warrant, because they may appear when you least expect it.

Such was the case one day while I was on patrol and stopped at a local convenience store. Upon entering the store, I noticed a man seated on a stool, playing a skills slot machine. As he turned away from the slot machine, I immediately recognized him and knew I had an outstanding warrant for him, because he failed to pay his fines for fishing violations. Although he did not live in the area, he was known to frequent the area and locating him was a difficult task. Upon noticing me, he began a small conversation with me. During our conversation, I asked him if he was winning, which he proudly replied that he was doing well on that particular machine. I told him I was glad that he was winning, then informed him that I had an outstanding warrant for him, because he failed or ignored to pay his fine and court costs for fishing violations. Fearing that he would be taken into custody and transported to the District Magistrate, he immediately replied that he would cash out his winnings to pay his outstanding fines and court costs.

Although it left him a little short of his winnings to satisfy the outstanding warrant, it saved him from being taken into custody. Although serving bench warrants is a dangerous aspect of the job, sometimes a little humor may also arise from the situation. During my career, I have taken many paths to serve bench warrants, but I could never recall serving a warrant upon someone actually playing a slot machine.—*WCO Scott J. Christman, Southern Carbon and Southwestern Monroe counties.*



Summertime Open Water Bass

by Jeff Knapp

photos by the author

The Smallmouth Bass hit the fluke-style soft jerkbait with such force it nearly ripped the rod from my hand. The subsequent fight caused the bow to swing 90 degrees. After several tense minutes, I slipped the 21-inch, 5-pound-plus Smallmouth Bass over the rim of the net. Even after four decades of serious fishing, my knees were weak.

Catching a quality Smallmouth Bass during the summer on a soft jerkbait is not exceptionally noteworthy. But, doing so over 50 feet of water, far from the bank, with a lightly-weighted bait that runs only 12- to 14-inches under the surface is impressive. Particularly when such events become the rule rather than a coincidence.

In certain circumstances, Largemouth Bass and Smallmouth Bass defy the accepted locational parameters that suggest focusing one's efforts around structure and cover. Indeed, from mid-summer well into the fall, it is possible for a significant portion of a lake's bass population to be suspended in the water column, far from such classic spots.

The reason may be simply explained with one word—food. Lakes that feature pelagic, open water baitfish such as Emerald

Shiners, Rainbow Smelts, Gizzard Shad, and Alewife have the potential to attract foraging bass to an offshore buffet. And, even lakes lacking such a food base may see some open water feeding activity as schools of young-of-year panfish—large enough by late summer to warrant attention from adult bass—wander out over open water to provide easy pickings.

In my experience, lakes with the highest potential for suspended, offshore feeding will not only have the food source but will be relatively clear as well. It is likely that in this situation bass rely heavily on visual sense, attacking baitfish schools from below, perhaps from a great distance. This could explain the powerful strike described at the outset, from a bass that hit the bait on the run, going the other way.

So, what keys you into offshore feeding activity? At times, the feeding may be so close to the surface that it provides easy-to-identify visual clues. Sprays of baitfish escaping the water followed by a brief but intense melee of larger fish churning the surface. This activity is spotted from a great distance on light wind or windless days, which provide an otherwise calm surface.

Obviously, fish feeding in such a manner are aggressive and catchable. The key is to be in position to make a quality cast—one that targets where the fish are going, not where fish



Blade baits can be cast a great distance and excel at targeting visible bass feeding near the surface over open water.



Hard jerkbaits and soft jerkbaits excel at taking foraging bass by pushing baitfish near the surface.



Soft swimbaits can be counted down to work various depths for suspended bass.



Lakes that support Rainbow Smelt as well as bass likely have the latter feeding on the former during the summer and early fall.

were previously located. If you cast to the melee, the fish are probably no longer there unless it is still going on. A better plan is to cast to each side of it in hopes of intercepting fish exiting the disturbance.

Over the years, I have been in situations where multiple surface disturbances can be spotted at nearly the same time, spanning several acres of water. It is tempting to follow feeding packs of fish. This is a low percentage strategy. Fish movements are too random to anticipate; and quality-sized bass seem to detect boat movement and trolling motor noise, always staying a cast-and-half away.

A better approach, when consistent feeding activity is occurring, is to stay stationary, quietly waiting for a feeding school to wander into casting range. Look for dimples (baitfish) on the surface that preface a bass attack.

Obvious offshore feeding activity is exciting. Catching bass from a motionless boat is an unconventional and unique approach. But, I have recently learned that visible surface/near surface feeding commotion is often just the beginning. Some of my most notable days have occurred when little or no such activity was present.

It takes some faith to cast shallow running lures over 30- to 80-feet of water with no evidence that there is anything there to take lures. My transition came on a day when I held the boat close enough to shore to work “traditional” shallower water, while disciplining myself to fire every other cast out toward open water. Several quality bass later, all from the offshore side of the boat, and my confidence was instilled.

Use baits that are easily detected and can be cast a long way. I find both soft (fluke-style) and hard suspending jerkbaits effective. The pause with which these baits provide may be important. I have had bass “kiss” a bait several times before it zeroed in on it. I like to fish flukes on a 1/16-ounce swimbait hook for extra casting distance and to keep the bait just under the surface. Blade baits and jigging spoons can both be cast a mile and excel when targeting visible feeding activity. Count the lure down a few seconds after splashdown and retrieve it at a quick pace back to the boat. Surface lures like the classic Zara Spook and Rapala X-Rap Pop are adept at calling up bass. Soft swimbaits such as the Keitech Fat Swing Impact, Galida’s Grubz, and Lake Fork Live Magic Shad—when rigged on worm nose or darter style jighead—can be counted down to work various depths for suspended bass.

While this may seem like fishing for a needle in the haystack, sonar plays a key role in upping your chance of contacting bass. The presence of baitfish on traditional and down viewing sonar increases chances that bass will be nearby. Side viewing sonar can do the same thing and looks out away from the boat, providing information as to which direction to cast. I suspect forward looking sonar would narrow the search more.

Like all fishing situations, there are days when one is not successful catching bass on open water. But, I have taken suspended offshore Largemouth Bass and Smallmouth Bass well into the fall. After fall turnover, the patterns change. ☐



Tying
Together

DOG DAYS:

Teaching Children to Tie the Golden Retriever

by Christian A. Shane

photos by the author

“Imitator or attractor? It’s both! The marabou tail in combination with being front-weighted keeps the fly in motion, which is added to by angler manipulation or current.” Mike O’Brien, *The Mid Atlantic Fly Fishing Guide*, writing about Jim Finn’s Golden Retriever pattern.

My Uncle Frank and I headed to Sinnemahoning Creek, Potter County, in late summer to target the temperature transition where both trout and bass are present. Eager to test out a fly pattern called the Golden Retriever, I anticipated its effectiveness by its resemblance to a small crustacean or crayfish. My friends from Penn’s Woods Trout Unlimited, Paul and Rich, had shared fly instructions with me in the spring, and it was my first time adding it into my fly box arsenal. Fittingly, my black Labrador Retriever, named River, also tagged along with us on the fishing trip.



The tan marabou feathers in front of the author's dog, River, are the signature mark of the Golden Retriever.

The fly demonstrated its worthiness while I fished it. I was amazed at how both trout and even Smallmouth Bass reacted to it in the water. It worked while dead-drifting and even fishing it as a traditional streamer pattern. I also found the Golden Retriever to be a great substitute for Woolly Buggers and crayfish patterns when tying with my student fly tiers. With only three components, try this quick, easy, and effective fly pattern with your young tier.

Retriever underbody

What makes the Golden Retriever effective is its use of fly tying materials and its appearance below the water. That contrast begins with the red underbody of floss or thread. After your young tier adds the beadhead and some weight to the hook shank, the tier can begin the under wrapping of the body. A young fly tier can accomplish this step with regular red 3/0 thread or by using flat wax thread. Either choice, the tier will build up a decent body of thread wraps along the hook shank. If your tier decides to wrap weight, the thread body can be joined to make the entire body uniform. Leave a little room at the hook bend to add in the tail. Sometimes, it is best to tie the tail in first. Then, finish the gaps in the body with the thread or wax to help make it even.

Retriever tail

Using tan or gold marabou, your tier can add the second tail component along the bend of the hook. I usually direct the tier to measure their marabou and pinch it at a length and a quarter or a length and a half of the hook shank. Choose marabou feather tips that will undulate in the water. Wrap the tail in forward until it meets up with the lead wire. Do not forget to wrap around and behind the tail to lock it in place. With short strikes,

fish may miss the hook and get a mouth full of marabou if the material is not secured to the hook shank. After adding in the tail, the thread diameter of the body should be the same length by adding wraps in gaps where necessary.

Retriever ribbing

Lastly, your tier will tie in the Estaz rib. Since this is more durable than feather fibers, the Estaz is a great material for children to tie. The tier should tie off a 3- to 4-inch section of material to add to the body. If the tier exposes the thread part of the Estaz, capture the string part on the hook with thread. Tying it in at an angle encourages the wraps to follow in the direction of the palmering.

Wrap the thread forward and then palmer the Estaz in smooth turns around the hook shank. This is a great step to teach your tier to use control

and keep pressure on the material while leaving at least 1/8-inch between wraps. The thread will show through the Estaz wraps to display the red underbody. When a tier reaches the hook eye, the tier can make a small collar of red thread at the beadhead and whip finish or half hitch.

Fishing the retriever

The Golden Retriever is versatile. Anglers may dead drift it in the current as a nymph or tumbling crayfish, strip it as a crippled minnow, or swing it as a creature in the current. Different species of fish will strike the Golden Retriever using these varying fishing methods.

The Golden Retriever may be tied in shades of pink, white, black, or even root beer, depending on which colors your tier selects for the marabou or the Estaz body. These color combinations mimic many other creatures such as minnows, leeches, and crayfish in your local waters. Other options include using a tungsten bead instead of the beadhead, which allows it to ride hook point up.

Try some tying and fishing with the Golden Retriever, and enjoy these "dog days" of summer. ☐

Golden Retriever

Hook: 3X long, #8-12

Thread: Red flat nylon or 3/0 thread

Bead: 5/32-inch gold bead

Weight: .025-inch lead wire

Tail: Tan marabou

Body: Gold, tan, or peach Estaz



Three Killer Flies for Bass

by Nick DelVecchio

photos by the author

While a lot of fly fishing attention is spent on trout, bass are also a fun fish to target throughout Pennsylvania. The prevalence and propensity of bass to smash a fly quickly makes these fish a favorite among those used for picky trout and steelhead. Rivers and lakes across Pennsylvania are teeming with Smallmouth Bass and Largemouth Bass. Choosing the correct fly is one of the first steps to success. There are many fly options to choose from, and it is easy to become overwhelmed looking at hundreds of fly patterns specifically marketed for bass. The best fly choices are those that imitate the food that bass eat while providing a level of versatility that anglers may utilize while out on the water.

Clouser Minnow

There is perhaps no more resourceful fly than the Clouser Minnow. The Clouser Minnow mimics everything from a wounded Bluegill to a shad darting to escape a hungry bass. The Clouser Minnow is

built to catch a number of different fish, but it was originally created as a bass fly to best Susquehanna River Smallmouth Bass. That alone makes it a worthy addition to this list, and no bass angler should leave home without a full arsenal of Clouser Minnows in a variety of different colors. The sleek design and heavy dumbbell head combine to create a fly that sinks fast and moves well through the water. Another way to fish the Clouser Minnow, and one that produces some serious results, is to let the fly sink to the bottom and then slightly twitch it with a light retrieve. Brown, olive, and tan Clouser Minnows mimic crayfish crawling on the bottom. It is no secret that bass cannot resist crayfish.

Foam Popper

As is the case with many bass flies, the Foam Popper fishes best when it is retrieved through the water. What makes this pattern unique is that the Foam Popper spends some time near the surface. With each retrieve, it scoops down into the water before floating back up. When used in a green or yellow combination, the popper can perfectly imitate a frog scooting through lily pads. While the strong thud of a bass striking a streamer is a ton of fun, there is nothing quite like watching a Largemouth



Few flies match the productivity of the Clouser Minnow.

Bass come up to inhale a popper as it rests on the surface for a brief second. There is an incredible amount of versatility with poppers as well. Long rubber legs give the fly extra movement in the water, while different sizes and shapes of the head pulse more or less water depending on the desired effect.

Game Changer

While newer to the game, the Game Changer is rapidly taking over as a mainstay baitfish imitation for bass anglers everywhere and for good reason. Its movement through the water is unrivaled, and white versions look exactly like a shad darting away from predatory fish including bass. The Game Changer comes in many color schemes, making it possible

to get deadly combinations to match baitfish in bass waters throughout Pennsylvania. That means imitating anything from Bluegills, Brown Trout, Rainbow Trout, and perch. The most unique thing about the Game Changer is how different parts of the fly move in distinct directions when it is retrieved. This is by design due to multiple connected segments, and there is perhaps no better fly at creating the life-like action of a swimming baitfish.

Specific baitfish imitations may vary by waterway, but these three patterns are tested and true. These patterns are carried in a variety of sizes and colors to best mimic the different parts of the bass diet and provide a ton of action on the water. It does not take many encounters with a Largemouth Bass that inhales



A Largemouth Bass is released to fight another day.

a popper to turn casual bass anglers into full-blown bass fishing enthusiasts. It is likewise that an aggressive follow and violent strike of a Smallmouth Bass on a Clouser Minnow will make you forget about every trout you have ever landed on a nymph. Pennsylvania has no shortage of opportunities for bass. When armed with these patterns, it is possible to have some extraordinary days on the water. ☐

Westmoreland Lakes



by Bob Frye

This is a story of wondrous treasures hidden in plain sight.

You have probably seen a movie plot where a master thief steals a fortune in gold. The authorities, aware of his shady past, suspect him immediately. So, they tear apart his house, dig up his yard, and search his place of work. They post a squad car outside his home, watch his family, and question his friends and associates. However, the investigation comes up empty-handed. All the while, detectives overlook the seemingly ordinary bird bath in the thief's front yard. They walk by it and lean on it several times. No one suspects that the bird bath is the gold, melted down, and reshaped until it can be snuck away.

So, it is with warmwater fishing in Westmoreland County. Five small, close-to-home, county-owned lakes offer excellent opportunities. Outside of trout season, four of the lakes are stocked. Fishing pressure at each is surprisingly low as anglers are focused on other places. Take advantage of these overlooked treasures.

Mammoth Lake

Mammoth Lake is a 25-acre water home to a disproportionate number of big fish. The Pennsylvania Fish and Boat Commission (PFBC) includes Mammoth Lake on its list of "Pennsylvania's Best Fishing Waters" in the small reservoir category (those less than 50 acres) for Largemouth Bass and crappies.



This 10-pound, 23-inch bass was caught and released by Pennsylvania Fish and Boat Commission biologists during a survey of Mammoth Lake, Westmoreland County, in 2019.

When PFBC biologists last surveyed Mammoth Lake near Mt. Pleasant in April of 2019, the PFBC caught and released a 10-pound, 23-inch bass. For comparison, the state record Largemouth Bass weighed 11-pounds, 3-ounces.

Besides that whopper, biologists handled 10 more bass exceeding 20 inches, some in the 7-pound range. Going even further, anglers can expect about 1 in 3 bass to measure longer than 12 inches and 1 in 10 to be longer than 15 inches.

As for crappies, Mammoth Lake holds a mix of Black Crappies and White Crappies. Black Crappies are most common, but White Crappies tend to be bigger. In either case, there are lots of fish longer than 9 inches in the population in any given year.

Shore access is excellent. Canoes and kayaks are permitted May 1 to October 31.

Northmoreland Lake

Like Mammoth Lake, 17-acre Northmoreland Lake is home to lots of Bluegills. What is different is that its sunfish tend to be big.

Sunfish here are managed under "Panfish Enhancement Special Regulations," which limit harvest of Bluegills to 20 fish per day, all at least 7 inches in length. That rule has resulted in lots of quality-sized fish.

It is not unheard of to catch Bluegills 8 inches and longer at Northmoreland Lake, and fish exceeding 7 inches long are common. That is why this lake is rated one of Pennsylvania's Best Fishing Waters in the small reservoirs category for the species.

Located just southwest of Vandergrift, this lake is encircled by a walking trail, so shore access is good. That, together with the park's restrooms and picnic areas, makes this a family-friendly place to fish. Canoes and kayaks are permitted from May 1 to October 31.

Upper and Lower Twin lakes

Located near Greensburg, 20-acre Upper Twin Lake and 30-acre Lower Twin Lake are similar, equally producing big Channel Catfish and plenty of Largemouth Bass.

The PFBC stocks both lakes with catfish, which lately go in as 8- to 10-inch fingerlings. This boosted survival tremendously, creating a fishery where once there was almost none.

Best of all, those catfish grow fast—faster than just about anywhere else in Pennsylvania. The result is fish up to 27- or 28-inches, with lots in the 20-inch class.

As for bass, surveys of Upper Twin Lake and Lower Twin Lake routinely yield more than 300 bass per hour of electroshocking. This is one of the highest catch rates anywhere in Pennsylvania.

Most bass fall in the 10- to 15-inch category, though the number of fish on the larger end has been increasing. Some 5-pound, 20-inch fish turn up, too. So, if catching bass after bass sounds like fun, these lakes are hard to beat. You may even catch a trophy-sized fish.

Both lakes offer easy shore access. Lower Twin Lake also permits boats rented from a concessionaire.



photos: Bob Frye

Northmoreland Lake offers nice Bluegills.

Acme Dam

Here is the one exception: 24-acre Acme Dam, Chestnut Ridge Park, is the only lake on this list that does not get stocked with trout. Therefore, it rarely draws huge crowds, even in spring.

But do not be fooled. Acme Dam rates as one of "Pennsylvania's Best Fishing Waters" for Bluegills and bullheads.

Bluegills are abundant and may be caught all around the lake, whether from shore or in unpowered boats or boats with electric motors. Bluegills are usually 7- to 9-inches long, making this a destination water for serious panfish anglers.

The bullhead fishing may be even better. If anything, small fish are hard to find. Most bullheads are 12- to 15-inches long, with lots of even larger fish.

If filling the frying pan with catfish does not do it for you, Acme Dam has a nice Largemouth Bass population, too.

That is five lakes in one county. Three of these lakes are among the best of its size for different species, and the other two lakes are up-and-comers. Westmoreland lakes are all treasures, hidden or not. ☐



Acme Dam is home to Yellow Bullheads and Brown Bullheads. Quality fish of both types fill the lake.

Creek Channel Bounties



by John Allen

photos by the author

The lifeblood of most lakes in Pennsylvania comes from the creeks that flow into these waters. Incoming waters provide fresh water to lake pools in the form of added nutrients and cooler temperatures, which attract baitfish and many other aquatic creatures that fish rely on as food sources. Since most lakes in Pennsylvania started as creeks, creek channels go well beyond the mouth of creeks. To be successful, anglers must be able to locate and fish creek channels.

Location

A glance at a satellite aerial map helps identify the incoming creeks in each lake and allows you to see how the channels move before entering deeper water. Usually, the larger the creek, the bigger the creek channel “trough” that you will see running through the lake. When I fish a

new lake, the first thing I do is identify the creeks worth fishing. If there is more than one creek, I focus on all streams greater than 3-feet wide and at least 1- to 2-feet deep. Anything less than that is generally not worth fishing as it does not supply enough nutrients, food, or temperature change. When I locate a creek I want to fish, I want to know what kind of creek it is and how the channel flows beyond the mouth.

The type of creek reveals how many baitfish and aquatic food sources may enter the lake. A limestone stream is ideal, but the chances of finding a limestone stream entering a lake in Pennsylvania is slim. The most common type to find is one that has a sustainable wild trout population. If the creek holds wild trout, I am confident in the water quality. After a wild trout stream, I go to a stocked trout stream that usually gets too warm to hold trout year-round. These creeks tend to be cooler than the lake itself and provide a decent food source. Next on the list would be a warmwater stream that has a viable minnow population. Often, these creeks can be silty, which causes the trough-like creek channel to slowly fade away over time.

Figuring out how the channel winds along the bottom of the lake may be deceiving just looking at a lake. Looking at a satellite map, you will often see creeks winding in ways that do not seem to make sense. If you stand at the mouth of the entering creek, you can come up with a general starting point for how the former creek should flow through the former valley. If the water clarity of the lake is clear enough, you can usually follow the channel easily out through the lake. In deeper depth and cloudier water, sonar equipment helps a lot. In using sonar, when you drift over the creek channel, you will often see the clear as day "trough" formed by the old creek. Lakes that see water levels fluctuate seasonally will usually have more pronounced channels at the beginning than lakes that stay at a steady level.



An entering creek cools the lake's water temperature.

Fishing

Now that you have located a creek channel, what is next? First, decide what species you would like to target. It is not uncommon to see bass, catfish, crappies, perch, trout, and Muskellunge in the "trough" looking for food. In the summer months, it is common to see baitfish schooled together in creek channels in 5- to 25-feet of water. The result is a feeding frenzy for predatory fish. I usually find myself cruising along the edges of the channel, waiting for the next ball of bait to break the surface. I generally have two rigs ready to go when I am chasing these fish. The

first is a chatterbait/swimbait combo that I fish in a fast jerk-reel-jerk pattern. This is great for larger bass, pickerel, and the occasional Muskellunge. The other rig is a wacky-rigged sinking worm. I cast near the ball of bait and then immediately pull it across the water making an obvious splash across the surface. Let the bait drop and wait for a strike. The splashing across the surface gets the fish's attention. Then, the slow-sinking bait presents an easy meal.

While fishing for trout and panfish in a creek channel, I often find these fish are actively feeding. I

tend to fish live bait on an ultralight rod with a simple hook and splitshot rig that I then fish along the bottom. Using sonar in deeper waters, I keep my boat pinpointing just over top of the "trough", so I am consistently on the fish. In lakes with a diverse fish population, the creek channel bounty is usually a mixed bag. It is nothing to catch five or more different species in a day on some lakes by only fishing the creek channel.

The next time you are fishing a new lake, do a little research before you start fishing. ☐



Either by boat or by shore, a creek channel is often a great spot to fish.

PERFECT MORNINGS



by Jeff Woleslagle

photos by the author

I have never been accused of being a morning person. If you try to have a meaningful conversation with me in the early hours, all I can tell you is good luck. Odds are high that I will just stare at you as I try to comprehend what you are saying. However, getting up early pays big in fishing. If the early bird gets the worm, the early angler gets the bass.

When a friend sent me a text that said, "Let's fish tomorrow morning. I will meet you at the boat dock at 4:30 a.m.," I naturally cringed. I knew for me that meant getting out of bed at 3:00 a.m. to start coffee, load the gear, and make the drive. When I arrived in the predawn stillness, there was no wind, and the river looked beautiful with just the hint of coming daylight reflecting off the surface. The early morning bird chorus was just beginning, and my brain was getting closer to normal function. When the boat motor started, so did my leap to full consciousness.

It is difficult not to get excited with the possibilities that every new day on the water represents.

The rising sun was just a sliver on the horizon, and there was a slight mist coming off the water when we pulled into our first stop, which was a large eddy created by a rock bar jutting out into the current. I made a long cast with a topwater plug toward the shoreline, let it settle, and then twitched it twice. Immediately, my offering disappeared in a violent eruption of water, and I set the hook into our first Smallmouth Bass of the day. The beautiful bass made several long sweeping runs and took to the air twice before coming to the net. Some folks are superstitious about catching one on the first cast of an outing and believe a subpar day will follow. I have never subscribed to that superstition and I tend to believe it sets the stage for a perfect morning.

A normal summer pattern is for bass to feed actively each morning from sunrise until about two hours after sunrise depending on weather conditions. Topwater fishing in the predawn and into the first hour of daylight can provide some of the best action and excitement an angler may experience. If you know the common forage

in the waters you are fishing, match it as closely as you can. If I am fishing on an unfamiliar water body, I usually start with a floating minnow bait in the 3- to 5-inch range in either a silver or white color. Target areas with structure such as visible rock, riprap banks, and wood cover. Shallow flats may be excellent in the early morning hours. Baitfish activity typically increases near sunrise while light conditions are still low, so look for baitfish breaking the surface. Whenever a school of baitfish is spotted, ease over to the area and cast from as far away as possible to avoid startling the bass. Work your bait slowly through the area, and be ready to set the hook. If you miss a fish on the surface, having a rod ready with a follow-up bait such as a wacky-rigged stick worm can be highly effective. Fluke type baits twitched just below the surface can also be successful when bass are encountered actively pushing bait to the top of the water column.

As the sun gets higher in the morning, bass often move from the flats and position along deeper weed edges. Target these locations with wacky-rigged stickbaits, tubes, and creature baits fished carefully along the weed line. Crankbaits, spinnerbaits, Ned Rigs, and chatterbaits are good as well when fished parallel to long weed edges. Later in the day, bass will transition toward even deeper water and often move into aquatic vegetation. Target bass by using Texas-rigged worms and creature baits pitched to any openings found in the growth, no matter how small. Pitch the bait into the opening, let it sink to the bottom, and hop it once. If there is no immediate bite, move on to the next one. Watch the line closely, as many bites will occur on the initial fall of the bait. If you see the line move sideways, set the hook immediately.

To circle back to the trip that I mentioned in the beginning, we went on to boat numerous Smallmouth Bass and a Largemouth Bass that morning, with a few measuring over 18 inches. We were back to the dock by noon. While I may not enjoy it when the alarm sounds, I am never disappointed that I fought the urge to return to my slumber and instead went in search of a perfect morning. ☑



Alisier Pugh with a Smallmouth Bass to start a perfect morning.



Fluke type baits are deadly when bass are pursuing baitfish.

LAKE REDMAN



photo-Carl Richardson

by *Emma Olney*

Pennsylvania has a unique culture of aquatic recreation as a state with one of the highest mileage of streams, creeks, and rivers in the United States. For Pennsylvanians of all ages and backgrounds, there is nothing more relaxing than quietly drifting downstream on a hot summer day, shaded by overhanging red maples and hackberries. One body of water that has become a York County favorite is Lake Redman. For fishing, boating, kayaking, canoeing, paddling, hiking, and bird watching in the park that surrounds it, Lake Redman is a summertime staple for residents. It offers many opportunities for visitors to enjoy themselves, bond with friends and family, and connect with their local ecosystem and community.

William H. Kain County Park, which incorporates Lake Redman, was established in 1977 and made possible by a 50-year lease agreement between The York Water Company and York County. Lake Redman was actually visualized before the park itself, as The York Water Company was in the process of

dam building after a massive drought in 1967. The park boasts 1,637-acres of land and two lakes (Lake Redman and Lake Williams)—impressive for the region. The lake harbors two boat launches, with rentals available for pedal boats, canoes, kayaks, and rowboats.

Lake Redman has several other unique features besides the lake itself. Surrounding the body of water is 12 miles of multi-use trails for mountain biking, hiking, and horseback riding. Pavilion rentals are available for gatherings and celebrations, fostering a distinct sense of community in the outdoors. The Lake Redman region is one of the most popular sites for birding in York County, too, as its forest and wetland edge attract shorebirds, waterfowl, songbirds, and raptors. The fluctuating water levels in the backwaters of the lake also create unique mudflats preferred by certain birds, such as the short-billed dowitcher and the black-necked stilt. To accommodate the birders in this area, the York County Parks Office constructed a 350-foot walking deck that offers a closer view of migratory birds in the spring and fall. In addition, canoers or kayakers on the lake can paddle under the I-83 bridge to get an excellent sight of cliff and barn Swallow nests, typically seen from May through June.

Lake Redman offers visitors many opportunities for paddling. Kayaks, pedal boats, and rowboats may be rented by the hour, and special staff are available to assist guests with rentals. Staff also provide pointers for newcomers, creating a welcoming environment for all ranges of experience. At Lake Redman, canoes hold a maximum of three people, while kayaks are fitted for either one or two people. Paddleboards hold a maximum of one person. A life jacket must be worn at all times and are supplied by staff. All paddleboarders must be 16 years or older, while kayakers younger than 16 years of age must have an adult in the boat with them. Canoes are the most cost-effective method of paddling at Lake Redman, being \$16 to rent for the first hour, then \$8 for each additional hour.

Lake Redman is included in the Pennsylvania Fish and Boat Commission's Big Bass Program. The lake is known for Largemouth Bass, Muskellunge, Northern Pike, catfish, crappies, and sunfish.

Being a resident of York County, I have paddled at Lake Redman many times over the years. I have often switched between canoeing and kayaking for new experiences. Whether sunny or overcast, warm or cool, drifting on the water of Lake Redman brings a feeling of contentment, peace, and satisfaction. People on and around the lake are always friendly and willing to discuss aquatic life and recreation. In addition to paddling, I have also hiked along its wooded trails and watched waterfowl from the shore. The



photo-Emma Olney

Lake Redman, York County

camaraderie this lake brings only reinforces the sense of community one instantly feels upon entering William H. Kain County Park and its Lake Redman.

As important environmental issues—such as climate change, habitat fragmentation, and loss of biodiversity—mount in severity, it is increasingly important that the public fights to preserve our natural spaces. Whether this protection is cleaning up our waterways, enjoying nature recreationally and bringing in revenue, or simply learning more about our ecosystem, we can protect what makes Pennsylvania “home”—the land, its forests, and its waterways. ☐



photo-Carl Richardson

William H. Kain County Park, which incorporates Lake Redman, was established in 1977 and made possible by a 50-year lease agreement between The York Water Company and York County.

Day Tripping



photo-courtesy of Nockamixon State Park

by Deborah Weisberg

If there is a silver lining to the COVID-19 pandemic, it is that the pandemic has motivated people to discover or rediscover the great outdoors.

Record increases in fishing license sales, kayak launch permits, and visits to state parks indicate renewed enthusiasm for ecotourism, and with Pennsylvania's robust array of woods and waters, there is plenty to explore.

Pennsylvania has about 86,000 miles of streams, making it second only to Alaska, and 121 state parks, ensuring that most residents can access fishing, hiking, biking, birding, kayaking, or hunting opportunities close to home.

Elk Country

"People love to come in fall when the bull elks are bugling and the leaves are changing color," said Ben Porkolab, an educator at the Elk Country Visitor Center in Benezette, Elk County.

Although the elk herd is spread across 10 counties, it is densest near Benezette, and the 225-acre property the Keystone Elk Country Alliance leases from the state includes viewing blinds and hiking trails, some with scenic waterfalls. "If you are coming to see the elk, you would miss out on a lot if you did not stop here," said Porkolab. "The visitor center's immersive 4-D theater shows a spectacular film about elk, and we offer free educational programming every weekend."



photo-courtesy of Keystone Elk Country Alliance

Keystone Elk Country Alliance conservation education coordinator Ben Porkolab talks about elk with school children at the visitor center.

Anglers who fish for trout may want to bring along their tackle, because the Bennett Branch Sinnemahoning Creek flows through Benezette, just a mile from the center.

Lake Erie

This watershed is a fishing emporium with Walleyes, bass, and perch in the lake, Northern Pike and panfish in Presque Isle Bay, and steelhead in the tributaries in fall.

The area has even more to offer, including excellent birding, since the bay, a National Natural Landmark noted for its unique habitats, supports rare species and serves as a stopping point for migrating birds. The 4,300-acre peninsula is also a swimming, cycling, and hiking destination. According to www.goerie.com, it has the second-best sunsets in the world.



Wildlife watchers may see bald eagles nesting on property adjacent to the park.

A good starting place for any visit to Erie is the Tom Ridge Environmental Center at the gateway to the park. This “green” research and teaching hub, open free of charge, offers guided tours, large-format movies, and interactive exhibits, as well as a 75-foot observation tower.

Bald Eagle State Park

Presque Isle Bay State Park is open only to day trips, so folks wanting an overnight getaway should consider Bald Eagle State Park, Centre County, where options range from cottages, yurts, and campgrounds with electric hookups to The Nature Inn, a Leadership in Energy and Environmental Design (LEED)-certified hotel. It is rated the number one eco-lodge in America. Private balconies overlook Foster Joseph Sayres Reservoir, a warmwater fishery that allows unlimited horsepower boating.

Nestled in a broad valley near Bald Eagle Mountain, the park boasts a network of hiking trails through a variety of habitats ideal for bird and other wildlife watching.

Nockamixon State Park

For folks living in and around Philadelphia, Nockamixon State Park is the perfect retreat from urban strife. Its 20-horsepower lake is known for producing Chain Pickerel, Channel Catfish, Muskellunge, Striped Bass, Walleyes, bass, carp, and perch. Its forage base of Alewife and Gizzard Shad is so abundant “fish do not go looking for dinner; it swims to them,” said Terry Shock, park ranger.

“Anglers caught 7-pound Chain Pickerel, 42-pound Striped Bass, and 6-pound Smallmouth Bass. There are bass tournaments here all summer,” said Shock.

Paddleboarders and kayakers are drawn to Nockamixon State Park, too. “Boating in general is a big attraction, even in cold weather. Our marina can accommodate 800-plus boats, and our boat ramps are open 24 hours a day. We rent kayaks and canoes,” said Shock.

About 80% of the park is open to hunting, which draws small game, deer, spring gobbler, and waterfowl enthusiasts. “There is not a lot of hunting in Bucks County, so people come here. We get hunters from New Jersey, too,” said Obie Derr, park manager.

The Pennsylvania Game Commission stocks pheasants in an adjacent state gamelands.

Wildlife watchers, hikers, mountain bikers, and equestrians have their choice of trails and opportunities to see bald eagles, which nest on nearby private property. “In fall, the foliage is pretty and brings out the leaf peepers,” said Derr.

Other adventure spots

Lesser-known adventure spots worth exploring include Allegheny Islands State Park, a series of three alluvial islands in the middle of the Allegheny River, northeast of Pittsburgh. Comprising a total of 43 undeveloped acres, this park provides no amenities, although camping is permitted.

Similarly, upriver, near Tionesta, there is the federally-designated Allegheny Islands Wilderness, a series of seven alluvial islands scattered across 57-miles of the Allegheny River, where visitors will find old-growth bottomland forest and prolific birdlife to explore, especially in early spring before vegetation thickens. This same stretch is within the National Wild and Scenic Rivers System.

In the center of the state, in Huntingdon County, Trough Creek State Park offers gorgeous views of Rainbow Falls, Copperous Rock, and an ice mine. The 541-acre park is open to hiking, biking, and picnicking as well as camping. Cabins are available.

Other picks with unusual features include Black Moshannon State Park, Centre County, with its reconstituted bog and unusual fauna; Cherry Springs State Park, Potter County, which boasts the darkest skies on the East Coast and an observation field free of light pollution; and Cook Forest State Park, Clarion and Forest counties, whose last remaining stands of old growth forest have earned the park Natural Area of Pennsylvania and National Natural Landmark designations.

Other unique destinations include Delaware Canal State Park, Bucks and Northampton counties, with its historic, intact canal and towpath; Hickory Run State Park, Carbon County, with its ancient field of giant boulders; Hyner View State Park, Clinton County, a hang-glider’s mecca with breathtaking views; and Ohiopyle State Park, Fayette County, which is famous for some of the best whitewater rafting on the East Coast. ☐



photo-Pennsylvania Great Outdoors Visitors Bureau VisitPAO.com, Jeff London

Cook Forest State Park, Clarion and Forest counties.



photos-Jeff Woleslagle

Yellow Perch Fishing: Tips and Techniques

by Nathan Woleslagle

Yellow Perch, a member of the Percidae family like Walleye, are found throughout Pennsylvania's rivers, streams, and lakes. Yellow Perch are one of the finest fish to eat, with fillets consisting of light, flaky white meat. Yellow Perch, with its delicious table fare, accompanied by its abundance in some Pennsylvania fisheries, make these fish sought-after in Pennsylvania. However, fishing for Yellow Perch may require some education on its behavior, where to

consistently locate Yellow Perch throughout the year, and ideal lures to use.

Yellow Perch are found in a variety of habitats and fisheries across Pennsylvania. Some of the best fisheries for Yellow Perch are Presque Isle Bay, Erie County; Lake Erie itself; Lake Wallenpaupack, Pike and Wayne counties; as well as a plethora of smaller lakes, reservoirs, and streams. Perch favor areas of water containing weed beds and gravel bottoms. Yellow Perch are also considered a coolwater species and tend to reside in cooler areas of a water body, especially in the warm summer months.

Yellow Perch are a schooling fish. Where one Yellow Perch is found, often there will be many more. This can lead to fast and furious action when a school has been located. To locate perch, search out areas containing abundant weed beds, gravel bottoms, and around structure. Structure can consist of outcroppings of rocks, dock pilons, as well as sunken trees. Flowing water, especially in the spring, may also draw schools of perch.

Yellow Perch are voracious eaters, with its prey mainly consisting of macroinvertebrates, small baitfish, and fry of other fish species. I witnessed perch pursue scuds, small minnows, and leeches with desire. These prey types can be somewhat difficult to imitate with lures, especially scuds, but not to worry. Perch are again voracious eaters, and there are plenty of lures that draw attention.

For live bait anglers, worms are difficult to beat. Small minnows hooked through the back and fished on a float are efficient at getting perch to bite, especially if the perch are being finicky eaters. When fishing for perch in deep water, which is often the case in Lake Erie and other fisheries, small jigs and spoons are the lures of choice. These jigs and spoons can be tipped



Sydney Woleslagle with a Yellow Perch that took a nightcrawler.



Small jigs that mimic baitfish or macroinvertebrates entice Yellow Perch.

with minnow heads, waxworms, or small leeches to present an even tastier offering.

Fishing for Yellow Perch requires attention to the time of year, as behavior changes seasonally. My personal favorite times to fish for perch are in the spring, winter, and late summer. During the spring, Yellow Perch begin to congregate and relocate to ideal spawning areas. These areas often consist of gravelly bottoms, adjacent weed beds, as well as flowing water that can draw in schools of perch. I know several small creeks that enter into larger lakes that schools of perch run up into the creek mouth each spring to spawn. Fishing for perch in these creeks makes for a more intimate setting and offers endless fun. The perch can often be sight-fished if the water is clear enough, with the action and bites coming fast.

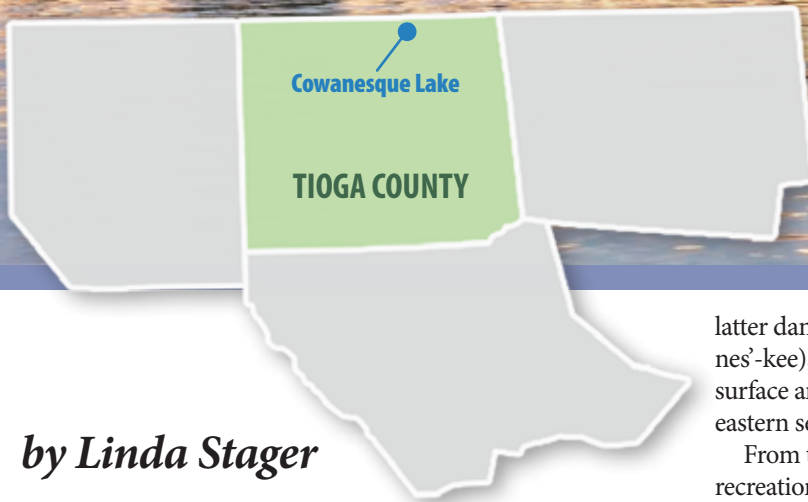
The winter, if safe ice develops on a lake or pond containing perch, is a favorite time for many Pennsylvania anglers to pursue Yellow Perch. Jiggging small spoons, teardrop jigs, and live minnows are all ideal presentations. Perch feed throughout the winter months and readily take presentations through the ice. Yellow Perch also taste delicious when caught in the winter, as the meat is firm.

Late summer can be an opportunistic time to pursue Yellow Perch, especially in larger lakes. Perch begin to feed heavily as they prepare for the colder months

of the year. This aggressive feeding tendency leads to more consistent days of action. I also tend to catch larger perch through this period of the year, as many fish have built up size over the entirety of the summer. The bite can be consistent into October and even November, but I find September to be the tail end of overly consistent opportunities before winter to pursue perch.

Yellow Perch are a unique fish to pursue in Pennsylvania, and due to their distribution throughout Pennsylvania's fisheries, one that anyone can target. Search out areas of habitat that are ideal for perch to reside, as well as structure. Adapt your approach throughout the year as perch change habits. If you choose to keep Yellow Perch, check the current regulations for the body of water you are fishing. Yellow Perch are excellent to eat, especially since perch can be caught in abundance if a large school is located. Pursue Yellow Perch in Pennsylvania, and you will be in for an enjoyable fishing experience. ☑

Cowanesque Lake



by Linda Stager

photos by the author

Tioga County Pennsylvania's largest lake was not always a lake. It was a sleepy, little river working its way through the Cowanesque Valley of northern Pennsylvania. Tiny towns dotted the landscape along the river from the village of Nelson in the west to Lawrenceville in the east. It was a bucolic, little valley of farms and vintage small-town life, a place of old ways and old traditions.

But, sometimes, things must change out of necessity. In June, 1972, the great floods occurred and forced massive change. Hurricane Agnes arrived over a course of several days and not only devastated much of the Cowanesque Valley and Tioga County, it devastated the entire state of Pennsylvania. The tiny Cowanesque River flows into the Tioga River and later into the Susquehanna River in New York, where it eventually flows by Wilkes-Barre, Luzerne County, and Harrisburg, Dauphin County, before entering the Chesapeake Bay.

After Hurricane Agnes, change was a necessity. Out of the subsequent flood response plan was the creation of the Tioga Reservoir in 1973 and the Cowanesque Dam in 1980. The

latter dam created Cowanesque Lake (pronounced Cow-a-nes'-kee), Tioga County's largest single lake, a 1,085-acre surface area impoundment of water along the original eastern section of the Cowanesque Valley.

From total destruction came the creation of a premier recreational destination, bringing visitors from a wide area to camp, hike, boat, swim, water ski, picnic, hunt, and fish.

The Cowanesque Lake project is owned and run by the United States Army Corps of Engineers. The dam is a rock and fill embankment almost $\frac{3}{4}$ -mile long and 151 feet high. A 4.2-mile lake varying in depth from mud flat to up to 60 feet deep forms behind the dam. Almost 17 miles of shoreline give plenty of opportunity to visitors to access the water for recreation.

A campground on the north shore includes 86 family sites (52 sites are full hook-up), 24 group camping sites, and 16 primitive, wooded hike-in camping sites. The Tompkins Campground also has its own boat launch. The campground is open from mid-May to mid-September every year.

Two public boat launches on the south shore of Cowanesque Lake are available as well as multiple picnic pavilions. A grass beach, concrete-base swim area with bathhouse, and a seasonal concession stand are also here. Frequently, kayaks may be rented at the concession.

A 4-mile walking path, the Moccasin Trail, follows the shoreline near the old Nelson village site. The 2019 Pennsylvania Trail of the Year, the 327 mile long Mid State

Trail, passes through the area on its way from the northern border of Pennsylvania to Maryland.

But, the main draw for many is the fishing on the lake. The lake population is diverse and the fish are big.

Fish from shore? Sure. Fish from a boat? Of course. And, the lake does not require high-tech gear. Many fish from shore with a bobber and line.

The Stiner family, Tioga County, loves fishing the big waters of Cowanesque Lake. Jan Stiner and teenage son Colegan spent many hours on the water here. Jan loves talking about one of his favorite lakes.

"Some of the biggest hybrid Striped Bass in Tioga County call Cowanesque Lake home," said Stiner.

Then, Stiner laughs, "The early morning anglers...they love the Black Crappies at Cowanesque Lake. The anglers call the fish 'license plates'. We measure crappies on our arm from fingertip to elbow. If they reach your elbow, the fish are a license plate," said Stiner.

"Those crappies stop biting like a light bulb turns off when the sun comes up," said Stiner. By then, it is time to fish for perch and bass. By dusk it is back to the various fish species that like low-light conditions.

Fishing continues through the night. Bowfishing is increasing in popularity at Cowanesque Lake, and there may be 20 boats on the lake some nights through the midnight hour. Common Carp are pursued by boats lit up with an elaborate array of lights, and the big fish are ultimately shot with an arrow attached to specialized fishing line spooled on a reel mounted to a bow.

But, that is not all that awaits anglers at Cowanesque Lake. Elusive species like Walleyes and tiger muskellunge



Sunrise over Cowanesque Lake.

also lurk here. "People come from all over to troll for the coveted tiger muskellunge that live here," said Stiner. The 'fish of a thousand casts,' as referred to by Stiner, draw anglers from several states to try to catch "that one, boat-puller musky."

No wonder anglers love Cowanesque Lake.

Whether visitors want to spend the day or the week, Cowanesque Lake offers wholesome recreational fun and big fish for anglers.

From the flooded disaster of the early 1970's to the fantastic recreational opportunities of 2021, this is the place to visit—if you dream of monster fish and a good time. ☐



Cowanesque Dam, Tioga County

2021 FISHING LICENSES

LICENSE YEAR

Annual licenses are valid from Dec. 1, 2020, through Dec. 31, 2021. WHILE FISHING, your license must be upon your person and provided upon the request of an officer.



Code	Type of Fishing License or Permit	Age	Cost*
101	Resident (Annual)	16-64	\$22.97
104	Senior Resident (Annual)	65 & up	\$11.97
105	Senior Resident (Lifetime)	65 & up	\$51.97
108	1-Day Resident (not valid March 15-April 30)	16 & up	\$11.97
102	Non-Resident (Annual)	16 & up	\$52.97
113	Non-Resident PA Student (Annual)	16 & up	\$22.97
106	1-Day Tourist **(not valid March 15-April 30)	16 & up	\$26.97
103	3-Day Tourist	16 & up	\$26.97
107	7-Day Tourist	16 & up	\$34.97
110	Voluntary Youth Fishing License (Annual)	Less than 16	\$2.97
109	Mentored Youth Permit	Less than 16	\$0.00
150	Trout Permit	16 & up	\$9.97
033	3-Year Senior Lifetime Trout Permit	65 & up	\$25.97
053	5-Year Senior Lifetime Trout Permit	65 & up	\$41.97
063	10-Year Senior Lifetime Trout Permit	65 & up	\$81.97
151	Lake Erie Permit	16 & up	\$9.97
152	Combination Trout Lake Erie Permit	16 & up	\$15.97
136	Alternate Display Annual Fishing License Button	Any Age	\$10.00

* Includes issuing agent fee of \$1.00 and \$0.97 PALS transaction fee. Excludes the 109 Mentored Youth Permit.

** Includes Trout and Lake Erie permits, not valid March 15-April 30.

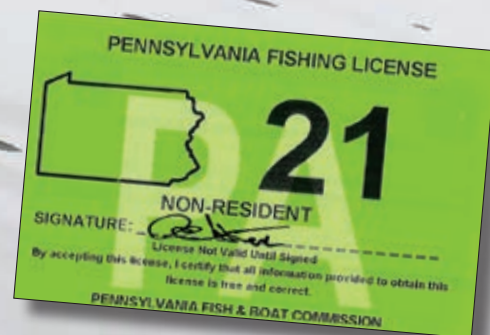
2021 MULTI-YEAR FISHING LICENSES

Code	Type of Fishing License or Permit	Age	Cost*
150	1-Year Trout Permit	16 & up	\$9.97
151	1-Year Lake Erie Permit	16 & up	\$9.97
152	1-Year Combo Trout Lake Erie Permit	16 & up	\$15.97
030	3-Year Resident	16-64	\$64.97
031	3-Year Non-Resident	16 & up	\$154.97
032	3-Year Senior Resident	65 & up	\$31.97
033	3-Year Trout Permit	16 & up	\$25.97
034	3-Year Lake Erie Permit	16 & up	\$25.97
035	3-Year Combo Trout Lake Erie Permit	16 & up	\$43.97
050	5-Year Resident	16-64	\$106.97
051	5-Year Non-Resident	16 & up	\$256.97
052	5-Year Senior Resident	65 & up	\$51.97
053	5-Year Trout Permit	16 & up	\$41.97
054	5-Year Lake Erie Permit	16 & up	\$41.97
055	5-Year Combo Trout Lake Erie Permit	16 & up	\$71.97
060	10-Year Resident	16 & up	\$211.97
061	10-Year Non-Resident	16 & up	\$511.97
063	10-Year Trout Permit	16 & up	\$81.97
064	10-Year Lake Erie Permit	16 & up	\$81.97
065	10-Year Combo Trout Lake Erie Permit	16 & up	\$141.97

* Includes issuing agent fee of \$1.00 and \$0.97 PALS transaction fee.

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Penn College Human Services and Restorative Justice Students Kayak Rose Valley Lake



Photos - Cindy Matzel (Pennsylvania College of Technology)

by Rob Cooley

A group of Pennsylvania College of Technology Human Services and Restorative Justice students are taking a unique course this May, Outdoor Recreation as a Therapeutic Tool (HSJ330), taught by Dr. Rob Cooley, associate professor of anthropology/environmental science. The goal of the class is to provide future human service professionals (therapists, counselors, corrections, etc.) with experience using activities like boating and fishing in nontraditional, therapeutic ways for a diverse range of client needs. Class activities include structured team building and challenge activities as well as recreational activities like hiking, bicycling, kayaking, and fishing. It is not just “play,” but more like “play with purpose.” Students learn how to take an activity that seems like recreation and then use it to structure therapeutic discussions and activities afterwards amongst the participants.

Any angler would agree that enjoying Pennsylvania lakes and streams is good for the soul. Increasingly, human services and restorative justice professionals are turning to this age-old wisdom to benefit nontraditional, therapeutic uses.

Dr. Cooley challenged his students to kayak and explore Rose Valley Lake, Lycoming County, a 389-acre impoundment owned by the Commonwealth of Pennsylvania and managed by the Pennsylvania Fish and Boat Commission (PFBC). He wanted this diverse class, largely female, to personally experience the enjoyment of kayaking. He is planning a fishing trip for them later in the class to achieve a similar outcome but through a different activity. Many of them have not fished much before, either.



Nicole Smulligan, a Pennsylvania College of Technology Human Services and Restorative Justice student from Schuylkill County, gets ready to take her kayak out on the lake.

Kayaks and gear for this experience were provided as a result of a collaboration between Cooley at Penn College and Jae Ellison, director of Lycoming College’s Outdoor Leadership and Education (OLE) Program. OLE made

the experience possible for Penn College by generously sharing Mr. Ellison's time, a trailer full of kayaks, and all the necessary paddling gear.

Some of the Penn College students were experienced; others were novices. Cooley and Ellison provided close supervision and guidance from start to finish. First, Ellison provided an introduction to paddling technique, safety, and equipment, and helped each student into their boats. Once on the water, Ellison led the group while Cooley followed, helping guide the student paddlers, providing tips, techniques, wildlife observations, and encouragement. They both helped the students get in and out of their boats safely as well. Not a single person had a surprise splash in the lake.

The goals for the activity were simple—learn how to paddle safely and effectively, observe the natural world, and consider the benefits for such an activity in a therapeutic context. Also, they had to consider how kayaking may help someone's recovery from whatever trauma they have experienced or challenge(s) they face.

The day was perfect weather—calm, deep blue sky, spring wildflowers along the shoreline, bullfrogs croaking, songbirds singing, puffy clouds reflecting in sharp detail on the mirror-smooth water. The views were stunning. The students were fascinated with the aquatic life. "It is like looking into an aquarium," said one of the students.

The reactions were overwhelmingly positive. In the end, nine students benefited from a PFBC resource in an entirely unconventional way. Each student learned how to use paddling to understand oneself and how to use the experience to help others work through the challenges they face in an adventurous, creative way. Cooley overheard many of the students discussing going back and continuing their involvement in kayaking and Pennsylvania's water resources.

Below are some quotes that summarize the transformational impact that this deceptively simple kayak trip had for the students in this class.

"Being a part of some new experiences or fears for some people and being there to support them is amazing. With



Kai Marshall, a Pennsylvania College of Technology Human Services and Restorative Justice student from Schuylkill County, carries the paddles down to the water.

our group of individuals, we have mostly women, but they all shined through and loved every minute of it. I know I did. This was a team effort, and we all did so well to support one another," said Payge Hess.

"I would say yes, it was a challenge for me because of my fear for water. If it was not for Dr. Cooley or my fellow classmates, I would have hated the experience altogether. With their constant support and pushing me through my time of need, I actually enjoyed the experience," said Cody Englehart.

"He said he was shaking when he first began kayaking, and by the end, he said he had lost his shake and actually found a little tiny sliver deep down that enjoyed the experience. I was super proud of him and super happy to be someone to help him through a day that he more than likely will reflect on for the rest of his life. This was a great example of how that trip may transform people, fears, and relationships between people for the better," said Krystle Richardson.

"This was peaceful for me to see the fish, turtles, and the lily pads. The lily pads were in the ugliest part of the water but seemed to be so convenient for the frogs. Just like Human Services, we are present during the worst part of someone's life, but we are there for people's convenience," said Nicole Smulligan.

"There is something about just being on the water that is so calming to me and brings me that instant stress relief that everyone needs," said Devon Wasson. ☐



Dr. Rob Cooley, associate professor of anthropology/environmental science; Brad Grenoble; Jae Ellison, director of Lycoming College's Outdoor Leadership and Education Program; Payge Hess; Krystle Richardson; Nicole Smulligan; Kai Marshall; Devon Wasson; Colin Browne; and Cody Englehart.



HTLureCo

by Alex Zidock Jr. photos by the author

It is about following their hearts one generation after another. George Keller's love for saltwater fishing 35 years ago spawned a venture that would grow into a successful family business in New York. Four years ago, his son Clint Keller, now the owner of Heads and Tails Lure Company (HTLureCo), followed his heart and his girlfriend Holly to her hometown of Sayre, Bradford County, where the lead-based fishing lure business has continued to rise to new heights.

"My father loved saltwater fishing, and 35 years ago, he used an old hand-held mold to make sinkers he took offshore fishing," said Keller. "One day, the boat captain asked Dad if he could make sinkers for him, and it has been off to the races ever since."

Keller said the small town of Sayre is a great place to live and work. They found space in The Enterprise Center, a small business incubator site whose mission is to create jobs through the development and support of new enterprises in the region. "They help small businesses get started. It is a little cheaper rent when you first move in, and they tier you up to market value. We just leased an additional 4,500 square feet of space for our 12 full-time people, because we are looking to expand and hire more," said Keller.

With Holly as an integral part of the business, "We will do a little over 5 million pieces this year. Most all are lead-based and



Clint Keller, owner, HTLureCo, with one of the largest and smallest lures his company produces. Many lures are sold on their website, but they also manufacture lead fishing products for several national retailers.



Lures are first powder coated. Then, a variety of airbrush patterns are applied. Special paint is baked on for durability.

range in size from 1/8-ounce panfishing and ice fishing jigs up to 64-ounce saltwater lures," said Keller. Total production is about evenly split, 50/50 freshwater and saltwater. "Most popular, the ball jig, is traditional. It is freshwater; it is saltwater; it is Walleye and bass; it is all types of fishing; and they start at 1/4-ounce and go up to 6-ounces," said Keller.

"Dad is a go-getter," said Keller. "Dad believed if you can make sinkers, you can make jig heads, and if you can make jig heads, you can make bucktails. It was never-ending development. There are so many opportunities, so many possibilities of shapes and sizes, and then, you start adding color combinations, and it is an endless industry," said Keller. HTLureCo currently has about 5,000 SKUs.

When his father started the fishing sinker business, scrap lead was plentiful, and that is what he used in those early days. Currently, the company's lures are made from pure lead directly from a smelter.

One person places hooks and eyes in the mold, and another person puts the mold into a spin casting machine. Molten metal is poured into the machine, and in a few minutes, the final product is dumped from the mold, cooled, and sent for finishing. Some product goes to the paint area. "Lures are hung on our paint racks. Then, they go into our powder coat

booth where each receives a spray of powder. The powder sticks because of static electricity. The lures go into an oven to cure the paint. Then, the lures go to our airbrush booth, where they all start getting multi-colors with special paint. There is a proprietary process to get liquid paint to stick to a powder coat," said Keller.

"The largest jigs at 64 ounces, which is 4-pounds, are primarily used for striper fishing in the ocean. While we do not make many jigs for the freshwater bass angler, we do make some spinnerbait heads. We make a lot of jigs for trout and Walleye anglers, and we also tie a lot of bucktail jigs. Our bucktail jigs are very popular, and they use only natural bucktails, a lot of feathers, and some flash in the process," said Keller.

"We can make any type and size of jig, because we make our molds here. Some lures start with an idea or drawing, entered into a CAD program, and printed out on our 3-D printer. When we have a customer who has a design, and we receive the file, we can print the pieces out, and those pieces become masters in making a production mold," said Keller.

"We use so many hooks that it is challenging to stay with one brand. With the industry so strong this past year, hook manufacturers had a difficult time keeping up," said Keller. He has about 200,000 hooks in stock right now for their own online products and probably another 100,000 from another retailer to produce products for them.

"We also produce lures for a lot of other retailers around the country. There are some pretty big names on pegs (in retail outlets) around the country who take our product, package it, and sell it under their brand name." He smiles and adds, "While we are not in any retail stores under our name, we are in all of the major retail stores under other brand names," said Keller.

"We make all of our products here. And, we are seeing a trend in the industry to coming back to being made in America. We picked up a few substantial companies that were overseas, and now, they are again USA-based today, which is good to see," said Keller.

Growth is what Keller sees for the future. "We are in a solid growth pattern right now, and for the next couple years, that is what we will continue to do. We are about 12 strong right now, and I would like to see 20 to 25 of us here every day making products." ☐



Molds are custom made in-house. Designs are first drawn in a CAD machine. Then, produced in a 3-D printer to make a master mold.

HTLureCo

www.htlureco.com

www.bucktailures.com



Three Methods to Deliver Your Summertime Walleye Spinner Rigs

by Ross Robertson

photos by the author

Kids getting out of school and wearing shorts seems to signal the start of the hot summer Walleye bite. During this warm water period, a wide array of lure types work, but few are as versatile and effective during all conditions as the spinner rig. Those of us who have taken a few more trips around the sun may refer to them as a crawler harness. Regardless, spinner rigs can be used on a plethora of delivery systems to match the mood, depth, and

locations of Walleyes. Here are three must-have delivery systems when you hit the water this summer.

Bottom bouncer

A bottom bouncer is not an expensive or fancy looking piece of gear. However, bottom bouncers work. Originally developed by fishing guides in North Dakota and South Dakota, bottom bouncers work well for fishing near the bottom, thanks to the long wire arm. A little bit of irony is that the bottom bouncer is not supposed to bounce bottom. Instead, the wire arm should occasionally just touch bottom to ensure you are in close proximity.

To make sure you are not dragging bottom or seconds away from getting snagged, keep your line angle at a

45-degree angle as it enters the water while drifting or trolling. If the line angle is less, it will take too much line to hit bottom. If you were trolling and performed a turn, this extra line out would cause it to drag across bottom as well. Inversely, too little line out and the bouncer will be vertical. This will either cause the rig to not be near bottom, or in many cases, causes the spinner rig to not spin or have a natural look.

To achieve this 45-degree angle, simply increase or decrease the weight of the bottom bouncer for the given speed and depth you are in. A handful of sizes from 1- to 4-ounces will cover a majority of circumstances you will encounter.

Three-way rig

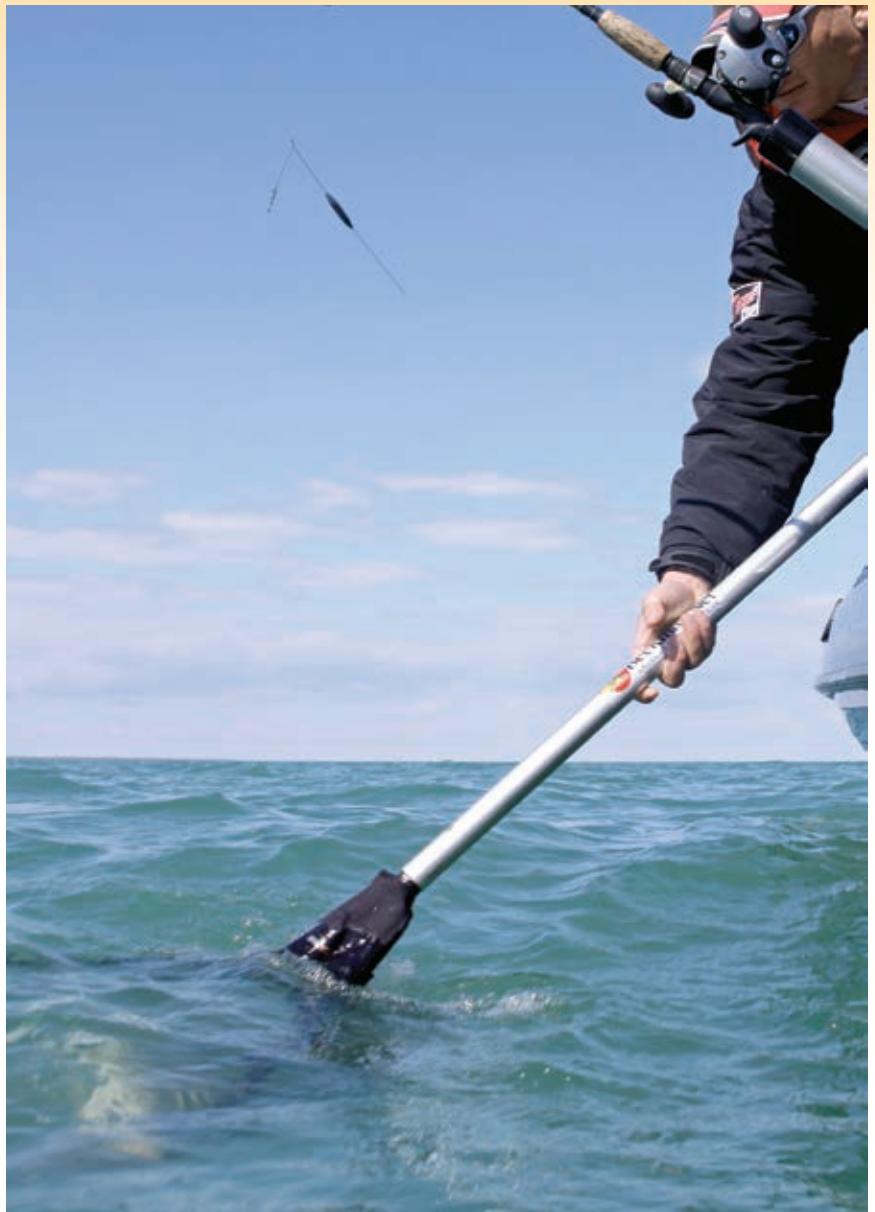
Also known as the Wolf River Rig to veteran anglers, the three-way rig is designed to fish on or near the bottom with one major difference from a bottom bouncer. A three-way rig sinker is meant to drag on the bottom. Do not be afraid to use a heavy weight.

The rig consists of a three-way swivel with one line going to the rod, one to the lure, and one to a dropper line. Leader lines can be as long as a rod length or as short as a few feet when snags or zebra mussels are an issue. The dropper line can also vary from very short to 4 feet. Make the dropper line out of monofilament line, cutting it to make it shorter or adding a new piece when fishing farther off the bottom. This makes adjustments and control fishing the bottom easy. Use a dropper line of lighter line than both the leader and main line. If you snag, you will only lose your sinker and not the entire rig.

When a fish hits, you can drop back slack to “feed” the fish and give it a few seconds to get it. This simple trick will get extra bites and better hook fish. This is possible because the weight stays in place and the rig collapses with the fish feeling no weight.

Bead chain sinker

Much like the three-way rig and bottom bouncer, the bead chain sinker has been used for generations. Unlike the previously mentioned delivery systems, it is best to use as light of a weight as possible. This allows for a more natural presentation and makes it easier to control your depth. Traditionally, bead chains are used to drift or troll over open water, but it can also be used to fish near bottom, particularly when used in conjunction with planer boards to spread out lines away from the boat.



Bringing a Walleye to the boat after using a bottom bouncer. Bottom bouncers work well for fishing near the bottom, thanks to the long wire arm.

When not being fished on bottom, depth control may be the most difficult aspect of bead chain sinkers. A good rule of thumb is that the ratio of depth is 2:1 at 1 mile per hour (mph) with a 1-ounce sinker. As an example, if you are trolling or drifting at roughly 1 mph with a 1-ounce sinker with 40-feet of line out, you will achieve 20-feet of lure depth.

Bead chain sinker weight to speed rule

- 1 mph = 1 ounce
- 1.5 mph = 2 ounces
- 2 mph = 3 ounces

There are certainly more than three ways to fish a spinner rig, but when summer arrives, bottom bouncers, three-way rigs, and bead chain sinkers are three surefire ways to put more Walleyes in the boat. ☑



photos-Darr Black

Rigging Live Bait for Panfish

by Marilyn Black

Using a variety of live bait presentations will encourage feisty panfish to grab your hook and hold onto the hook longer, giving you an edge in attracting and landing your catch.

Select the hook size in relation to the mouth size of your target species. When seeking a Black Crappie, Green Sunfish, Rock Bass, White Crappie, or Yellow Perch, hook sizes #6 or #4 will suit the task. Hook sizes #10 and #8 are better for Bluegills and Pumpkinseeds, because those species have much smaller mouths.

Do not be overwhelmed with different styles of hooks. A long shank, light wire Aberdeen hook or jigheads in sizes $\frac{1}{64}$ -ounce, $\frac{1}{32}$ -ounce, or $\frac{1}{16}$ -ounce are recommended. Also, small “hackle ants” are very popular when tipped with maggots and fished 18- to 20-inches behind a bobber.

Rigging possibilities

The first style of rigging that comes to mind is the traditional bobber, and you probably pictured it in red and white. A fixed float positioned upline between 2 feet and 3 feet above your bait-loaded hook is typically portrayed to introduce a beginner to shoreline fishing. It is also an effective combination for anglers of all ages, as long as you do not overload it with too many splitshots (one or two should suffice). The added weight will make it easier for casting what would otherwise be a very light bait and float.

When using a float in deeper water, a slip float is recommended. Positioning a sliding bead and pre-tied stop knot determines the upper and lower limits of your bait depth.

With a jighead, live bait may be fished by itself on the jig or in conjunction with soft plastic. Soft plastic on a jig provides extra attraction as well as keeping live bait positioned on the hook. A jig tipped with live bait may be cast and retrieved or fished below a bobber.

When seeking panfish in water deeper than 10 feet, my favorite presentation is a drop shot rig which puts the bait several feet off the bottom. Drop shotting is a vertical fishing technique, where you lower the rig to the bottom and hold the rod steady while keeping the line tight. A drop shot rig is assembled, so a bell sinker between $\frac{1}{4}$ - and $\frac{1}{2}$ -ounce is below the hook, attached by a snap swivel to your line. One or two hooks have already been attached between 1- and 6-feet above the sinker.

Tips with live bait

While panfish will eat almost any natural bait and gathering bait can be fun, most anglers are not going to take the time to collect bait. Instead, they buy what is available at bait shops.



A sample of well-hooked live bait.

We will concentrate on live bait you can readily obtain year-round, starting with the universal nightcrawler. You do not need to put an entire nightcrawler on your hook; pull or cut it into 1- or 2-inch pieces. To attach a nightcrawler to the hook, thread the piece onto the hook, leaving some dangling, so it wiggles in the water. Do not roll the worm into a ball. Remember, you want the panfish to take the bait and hook.

Minnows, including Fathead Minnows and Emerald Shiners, are favorites of crappies, perch, Green Sunfish, and Rock Bass. There is more than one way to rig a minnow. Depending on the action you want the minnow to impart, hook the prey through its lips, lightly through its back between the dorsal fin and tail (for more active swimming under a bobber), or upside down (for erratic movement).

Maggots are my go-to bait when fishing for sunfish, with or without a float. One or two maggots may be added to the tip of a jighead or used to add smell to a plastic trailer on a jig. Since a maggot is shorter than ½-inch, pierce the maggot mid-body and string a couple on the rounded portion of the hook.

Perch and sunfish also like a single waxworm on a small hook or small jig. Waxworms are slightly fatter and longer than maggots. Puncture it near its center, letting both ends dangle. This technique is often

used when ice fishing, but it is also effective during the open water months.

In the summer, Bluegills and Pumpkinseeds love mealworms. Load just one mealworm on a drop shot rig by putting the hook through its body near the head, allowing the rest to swing. Then, drop it on a deep point or ledge. You will not have to wait long for a strike. ☐



Notice the small dimensions of the mouths on both the Pumpkinseed (top) and Bluegill (bottom).

Fishing for Flint



by Marshall Nych

photos by the author

To my active son Noah, soon to reach 6 years of adventure-packed life, only one outdoor pursuit rivals fishing with Dad. The suitable springtime substitute is a lesser known hobby referred to as arrowhead hunting. Not surprisingly, the two pastimes share more than simply being outside. First, success is often indicated with an unmistakable glister—be it the colorful flash of a trout or the unique luster of knapped flint. Also, both share a close proximity to water, because the Native Americans depended on water for hydration, travel, forage, and fish.

Unearthed from our family farm are scores of fishing memories and dozens of artifacts along a small branch of Neshannock Creek, which meanders peacefully through our land as it rejuvenates a set of farm ponds then continues its journey downstream. The creek is a lifeblood, a fluid network of veins flowing and pumping. Just as it once quenched the thirst of the Native Americans, it now hydrates our fertile soil. More than drink, its waters offer

*Like a flashing fish,
a flint arrowhead
sparkles in the sun.*



sustenance in the form of fish finning through its cool, shaded pools and game traversing its stony shores.

Mirroring tribes of Native Americans who skillfully foraged its banks, now modern families take to the waters to honor the timeless tradition of fishing. In deep reverence of the Native American's artful methods, such as spear, fish traps, and bow and arrow, today's tools differ. Modern anglers typically rely on rod and reel, though bowfishing is gaining popularity.

Native Americans employed a variety of fishing techniques. The Delaware Indians residing amidst the Chesapeake Bay shot fish with a bow and arrow aboard dugout canoes. Many Native American tribes trapped fish behind natural dams and caught them with their bare hands. Often, early anglers utilized weirs (wooden

or stone fence-like structures across a stream) to funnel fish into a woven trap basket. Seines were pieced together with spun grass and weighted with stone sinkers. Plant fibers made hand lines, while bone was shaped for hooks. Native Americans in the Great Lakes region often canoed at night and speared fish beneath torchlight.

Though summer with a rod in hand is my son's preferred time of year, a close second would be late spring into early summer with the field at his foot. Like a flashing fish, flint sparkles in the sun, far more precious than gems. The carefully worked rocks patiently wait to tell a story. Whispered words of a people eking out a living only by sensing nature's rhythms.

Last spring, Noah and I worked the plowed field along a knoll advantageously elevated, just where the creek feeds the pond. Intricate serrations of blue and white came to hand as my boy lucked into an impeccable Jack's Reef

point. Brilliantly handcrafted from flint, the spot Noah unearthed the treasure was within sight to where he landed his largest fish—a 21½-inch Largemouth Bass. The pair of pinnacles occurred within weeks of each other. Each event helped Noah sense nature's steady pulse and realize a few more of its countless cycles.

A couple of seasons under his wide-brimmed fishing hat, my boy stumbled into dozens of points piercing the heart of the family farm. I joke that it has something to do with him being closer to the ground. Inside, I know the real reason for perseverant success, like my father and his father, my son, too, is carrying on a tradition. One honoring history, family, and the spirit of fishing.

Artifact hunting tips

Proximity to water is the number one factor of arrowhead success. Ensure the water was historically present. For example, a pond carved out for the interstate would not yield concentrated activity.

One of the first lessons a dutiful scout learns is to camp on high ground. Vantage points, weather, and flood all receive elevated consideration. If pressed for time, more



Noah with a flint arrowhead that he found in a plowed field.

than once I have narrowed in on this topographical feature with great reward.

As a general guideline, walk fields once they have been worked. To increase odds even further, wait for a strong rain to help wash the flint. Opportune fields present themselves as early as March and as late as October. Keep in mind crops and farmers adhere to various schedules.

Gain permission from private landowners. Be respectful of planted crops. It is unlawful to keep artifacts found on State Game Lands, state parks, national forests, and other public properties.

Sometimes, it is a few arrowheads an hour, other times it is a few hours for one arrowhead. Also, prepare for your heart to be broken by broken pieces. On average, I find two or three broken points for every whole projectile.

Combine this waterside adventure with fishing. To the devoted artifact seeker, purchase a fishing license to add fishing memories to your treasures. To the dedicated angler, take moments to appreciate your surroundings and contemplate the history. Buried in the banks, stories surface above the silt and are spoken with a gravelly voice, telling of fish and of flint. ☐

GOVERNOR'S YOUTH COUNCIL for Hunting, Fishing, and Conservation

by Anna Hawkins

Pennsylvania is a beautiful state with many different types of habitats. It is a privilege to be a member of the Governor's Youth Council for Hunting, Fishing, and Conservation. We take care of the ecosystems in Pennsylvania, provide opportunities for people to get outside and interact with nature, and educate others about the best ways to enjoy the outdoors while taking care of the environment.

I joined the Governor's Youth Council for Hunting, Fishing, and Conservation, because I have always been passionate about the environment. I grew up doing a lot of hiking, camping, and boating. Being outside has been a big part of my life. I also like to learn about conserving our natural resources, and the Governor's Youth Council for Hunting, Fishing, and Conservation has been a great opportunity to learn more.

One of our natural resources is water. We use this for drinking, food production, energy generation, transportation, and recreation. Fishing and boating fall under the category of recreation. Throughout the summer, many activities take place by Pennsylvania lakes. Many Pennsylvania residents have picnics, go swimming, and take boats out on the lake.

Last summer, I went kayaking at Lake Redman, York County. I saw a lot of interesting aquatic organisms and birds. Some of the creatures I observed were fingerling catfish, crayfish, herons, and egrets. For more on Lake Redman, go to page 24. It amazes me how much the aquatic habitats in Pennsylvania are teeming with life. That is why I was so concerned when I saw pollution in Lake Redman.



photos-courtesy of Anna Hawkins

Anna Hawkins

While I was kayaking, I cleaned up trash from the lake, but there was still so much more that I was not able to reach. This made me feel disheartened. There are many waterways in Pennsylvania affected by pollution, and it is difficult to find one that is not.

What are some things you can do to fix this? When you go outside, do not litter. It does not matter what part of the state you are in. When precipitation comes down to the earth, it carries with it the things that are on the land. This may include sediments, trash, and pesticides. These get washed into lakes, rivers, and streams.

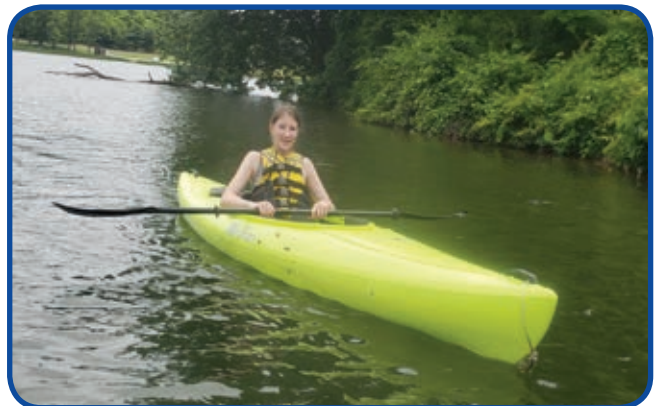
Another thing that you can do is take your trash with you when you leave a park. Many parks have a policy called "carry-in, carry-out." This means that what you bring into the park, you take home with you. This includes water bottles, food, and your unused fishing bait.

If you have a free day and are looking for something to do, boat at a nearby lake, and clean up trash.

We should all do our part to keep Pennsylvania beautiful. So, enjoy the rest of your summer in the outdoors, but remember that each decision you make impacts the environment around you. Let it be a positive impact. ☑



Fingerling catfish found near vegetation at Lake Redman, York County.



Anna Hawkins kayaking.

PILA Y

PENNSYLVANIA FISH & BOAT COMMISSION

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Jump into Lake Ecology



Did you know that Pennsylvania has 76 natural lakes and 2,300 manmade lakes? When **precipitation** occurs, it needs to go somewhere. One place is a lake. A lake is an inland body of water surrounded by land. Lakes are known as **lentic** systems.

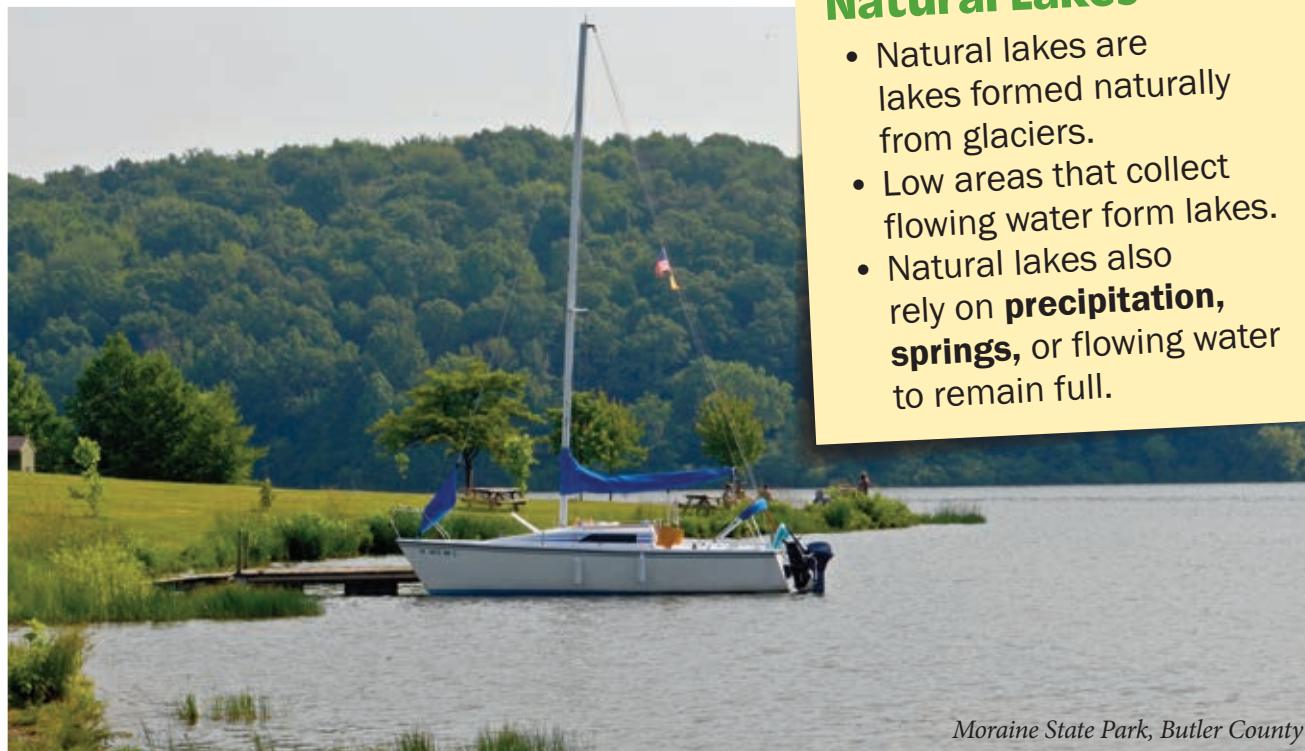
Lakes provide habitat for animals, a source of clean water, and recreation for people. Continue reading to learn more about **lake ecology**, benefits and threats, and how you can help protect lakes.

Vocabulary *(Watch for these words!)*

- **Aquatic macroinvertebrates** - animals that spend part or all its life living in water, lack a backbone, and are large enough in size to be seen with your eyes
- **Benthic zone** - lowest layer of the lake including the sediment surface
- **Lake ecology** - study of how aquatic species interact with living and non-living parts of a lake
- **Lentic** - living in still, non-flowing waters
- **Limnetic zone** - open water area of a lake, beyond the littoral zone
- **Littoral zone** - area close to shore where light reaches the bottom and rooted plants grow
- **Phytoplankton** - small, living plants found in water
- **Precipitation** - water that falls from the clouds in the form of rain, snow, sleet, or freezing rain
- **Profundal zone** - deep water of a lake
- **Spring** - a point at which water flows from the underground to the Earth's surface
- **Zooplankton** - small animals drifting in oceans, seas, and bodies of fresh water

Lake Types - How Lakes Form

We are going to look at two main types of lakes found in Pennsylvania—natural lakes and manmade lakes.



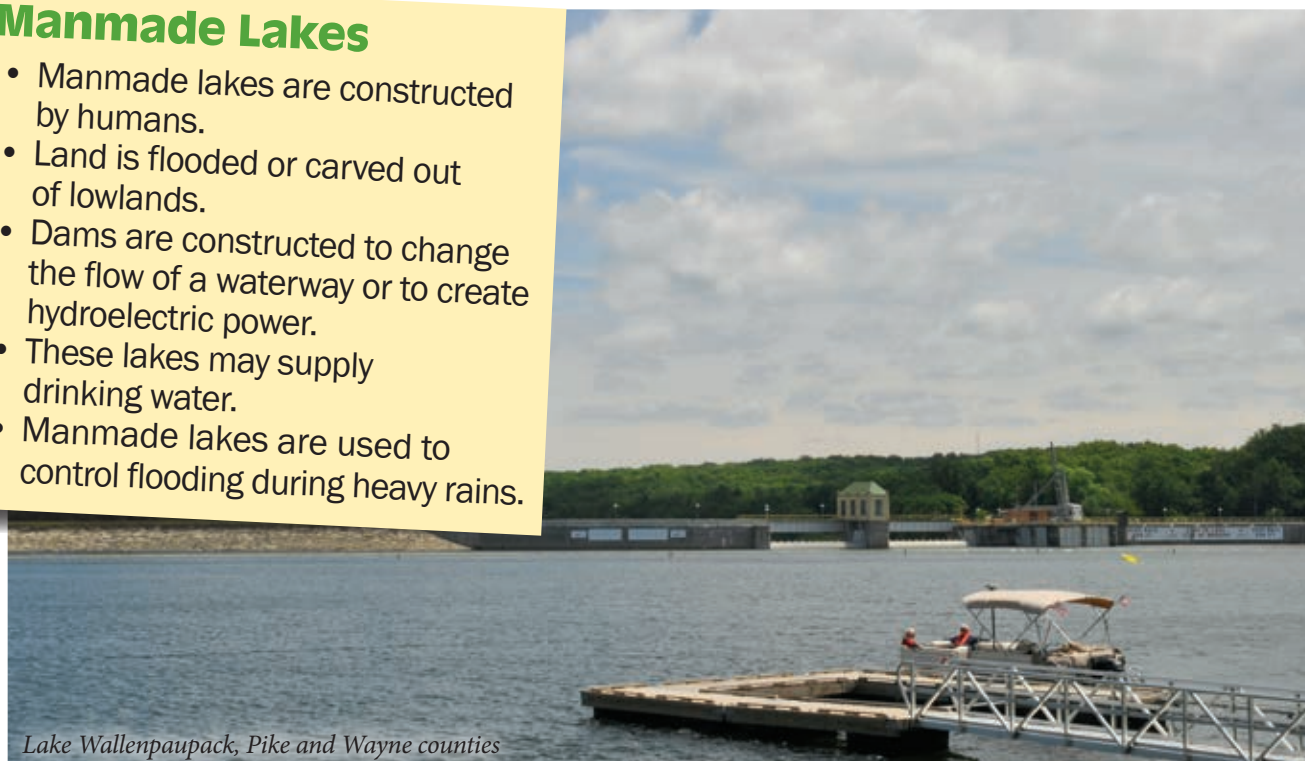
Moraine State Park, Butler County

Natural Lakes

- Natural lakes are lakes formed naturally from glaciers.
- Low areas that collect flowing water form lakes.
- Natural lakes also rely on **precipitation, springs,** or flowing water to remain full.

Manmade Lakes

- Manmade lakes are constructed by humans.
- Land is flooded or carved out of lowlands.
- Dams are constructed to change the flow of a waterway or to create hydroelectric power.
- These lakes may supply drinking water.
- Manmade lakes are used to control flooding during heavy rains.



Lake Wallenpaupack, Pike and Wayne counties

Lake Zones

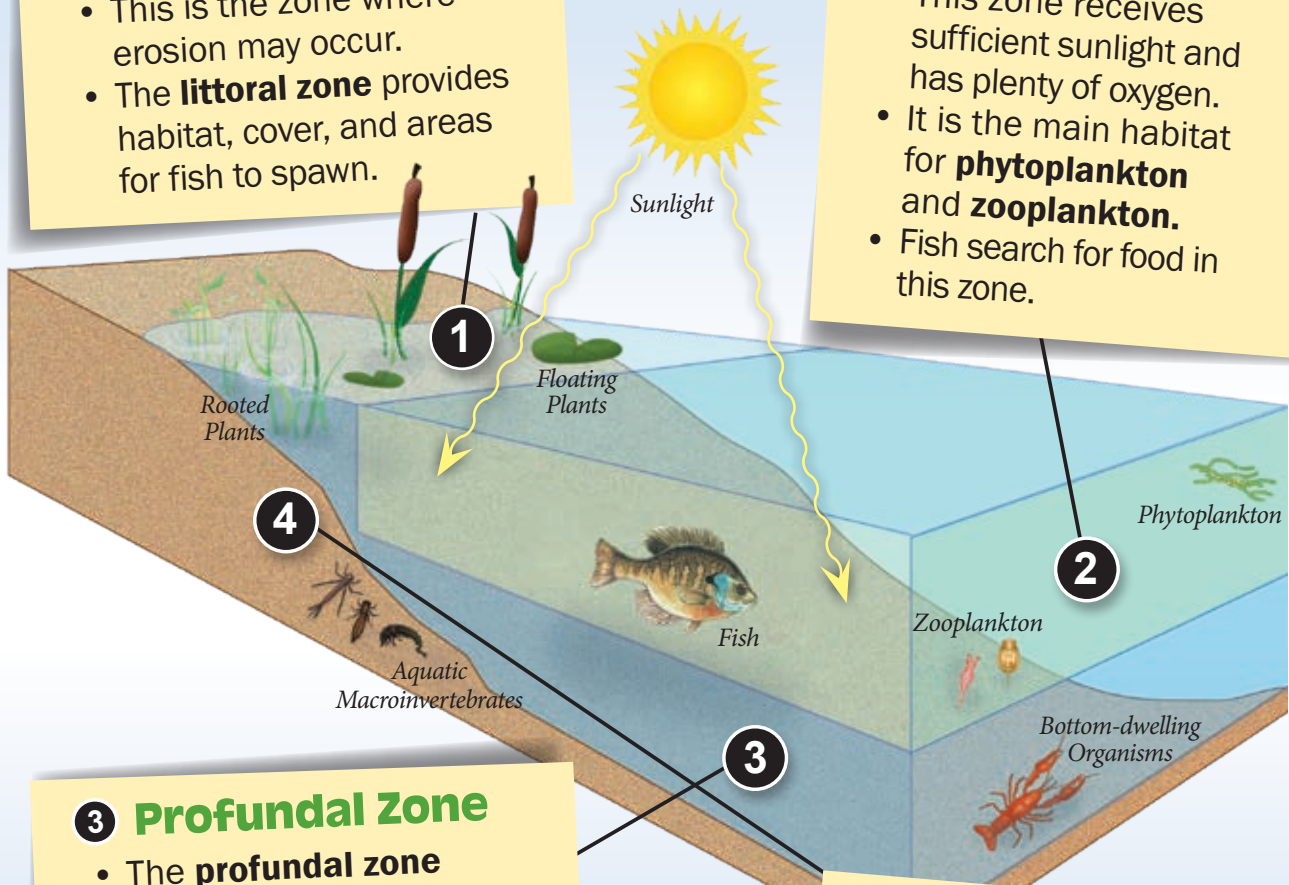
Lakes come in different shapes and sizes. Let's look at the zones found in a lake.

1 Littoral Zone

- Light reaches the bottom of the **littoral zone**.
- Rooted plants may grow in the littoral zone.
- This is the zone where erosion may occur.
- The **littoral zone** provides habitat, cover, and areas for fish to spawn.

2 Limnetic Zone

- The **limnetic zone** is the open water area of a lake, beyond the **littoral zone**.
- This zone receives sufficient sunlight and has plenty of oxygen.
- It is the main habitat for **phytoplankton** and **zooplankton**.
- Fish search for food in this zone.



3 Profundal Zone

- The **profundal zone** is the deep area of a lake where sunlight cannot reach.
- It is vegetation-free.

4 Benthic Zone

- The **benthic zone** is the lowest level or bottom of a lake.
- This zone includes the soil and sediment.
- It includes habitat for some **aquatic macroinvertebrates**.

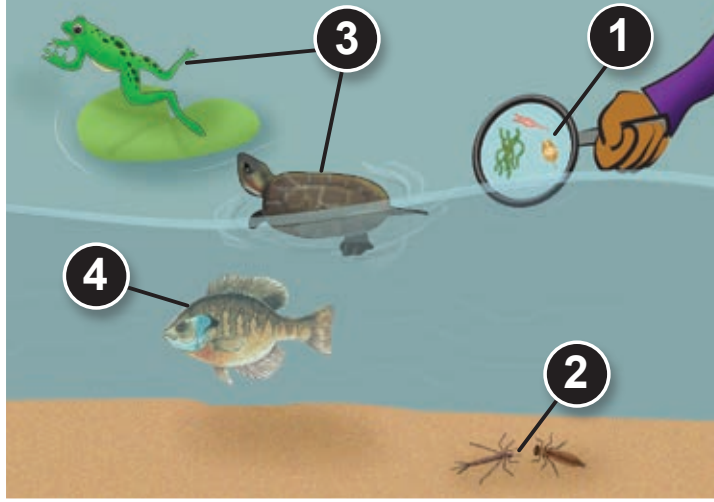
Learn more about plankton and aquatic insects at www.fishandboat.com/LearningCenter/ActivitiesAndEducationPortal/Critters/Pages/default.aspx.

Life in the Lake

Phytoplankton and aquatic plants begin the food chain in a lake. **Phytoplankton** and aquatic plants get energy from the sun through photosynthesis. **Phytoplankton** and aquatic plants then provide food and nutrients for aquatic animals.

What Lives in This Lake?

- 1 **Phytoplankton** and zooplankton
- 2 **Aquatic macroinvertebrates**
- 3 Reptiles and amphibians
- 4 Fish



Food Chain

Here is an example of how energy flows through a lake food chain.



Learn more about the feeding ecology of aquatic macroinvertebrates:

www.fishandboat.com/LearningCenter/ActivitiesAndEducationPortal/Critters/Documents/feedingfrenzy.pdf

Benefits and Threats

Lake Benefits

- Health benefits to society
- Drinking water
- Irrigation
- Fish and wildlife habitat
- Recreation like fishing and boating
- Floodwater control
- Hydroelectricity
- Beautiful places to explore and watch fish and wildlife



Habitat structures on Lake Nessmuk, Tioga County.

Threats to Lakes

- Humans can impact lake health.
- Vegetation and tree removal on lakes opens up shoreline erosion.
- Aquatic vegetation removal removes nutrient sources and cover for animals.
- Aquatic Invasive Species (AIS) outcompete native species.
- Climate change and weather events impact **lake ecology** and erode lake shorelines.
- Pollution harms lake food chains.

Clean Your Gear!

Before leaving this waterway, check for and remove any aquatic life (plants and animals), mud, and other organic debris.



New Zealand mudsnails are Aquatic Invasive Species (AIS).

Learn more about pollution and water quality at www.fishandboat.com/Transact/AnglerBoater/AnglerBoater2019/Documents/play-04-fall-watercycle.pdf.

Learn more about healthy water in aquatic ecosystems at www.fishandboat.com/LearningCenter/ActivitiesAndEducationPortal/AquaticHabitat/Documents/play-2018-WaterWaterReadAllAboutIt_Allpages.pdf.

How Can YOU Help?

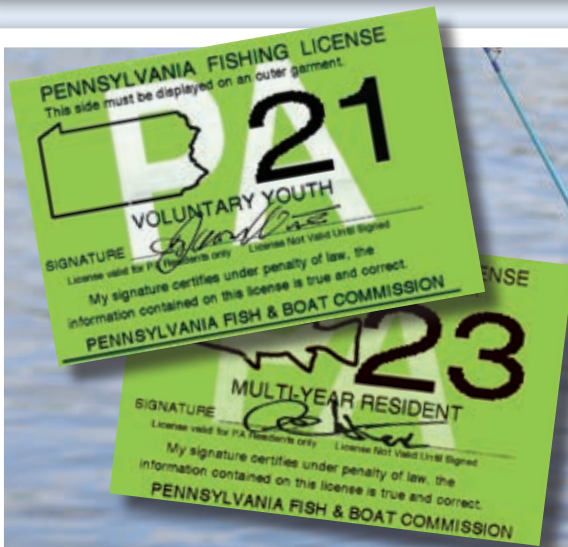
There are many ways to help keep Pennsylvania's lakes healthy.



Prince Gallitzin State Park, Cambria County

Lake Helper

- Purchase a fishing license.
- Follow fishing regulations, including seasons, sizes, and creel limits.
- Support the Pennsylvania Fish and Boat Commission's (PFBC's) efforts to install habitat structures.
- Clean your gear to prevent AIS.
- Leave the lake cleaner than when you arrived.
- Participate in a watershed or roadway cleanup. Learn more at www.keeppabeautiful.org/keep-pennsylvania-beautiful-clean-it.



Sweet Arrow Lake, Schuylkill County

Learn more about Pennsylvania lakes on PFBC's interactive maps at www.fishandboat.com. Click on "Locate" and then "Lakes".

Healthy Lake Activity

After learning about lake ecology, healthy lakes, and food chains, help determine

the food chain in this lake by circling the components of a lake food chain.



Produced by: the Bureau of Outreach,
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Written by: Adam Spangler

Editor: Spring Gearhart

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© Pennsylvania Fish and Boat Commission

- Angler
- Largemouth Bass
- Bluegill
- Aquatic Macroinvertebrates
- Zooplankton
- Phytoplankton
- Sun

Answer Key

The Life History of Smallmouth Bass



photo-Justin Torok

by Carl Haensel

Smallmouth Bass are some of the most popular gamefish in Pennsylvania. Native to the Ohio and Erie watersheds, Smallmouth Bass now live in all areas of Pennsylvania. Knowing more about the life history of Smallmouth Bass and how these fish live, reproduce, and survive provides insight into how and when bass feed, rest, and grow. Observing how its life cycle progresses through the seasons of the year may help focus your time on the water and improve your fishing success.

Springtime awakening

Smallmouth Bass are generally dormant in the winter. As water temperatures warm in the springtime,

Smallmouth Bass start to become active, often in March and April. Bass move into the warmest waters, classically shallow, dark-bottomed bays in lakes and reservoirs. Similar warm areas hold Smallmouth Bass in rivers. Both male and female bass feed as the water warms prior to the spawning season. Minnows and other small baitfish are common prey. Anglers should look for water temperatures to reach past 40 degrees F before Smallmouth Bass become active. Bass will often feed well between 40- and 50-degrees F in the spring. A strong cold snap that pushes water temperatures back into the 30s will usually send Smallmouth Bass back to a wintertime dormancy.

Spawning season

Like other members of the sunfish family, Smallmouth Bass reproduce in the spring. These fish begin to head

to spawning areas when the water temperature reaches 50 degrees F. Males build shallow, circular nests on the bottom of the lake or river using fins and mouths. Fish regularly clear all silt or vegetation from an area, and locations are often readily visible to anglers. Smallmouth Bass guard nests or “beds” from other Smallmouth Bass as well as fish that prey on eggs or young bass. When the water temperature is between 55- and 60-degrees F, female Smallmouth Bass visit nests. Smallmouth Bass often reach maturity and start to spawn at 2- to 3-years of age. The largest female bass also produce the most eggs. While a 12-inch female Smallmouth Bass can produce 2,500 eggs, a 20-inch Smallmouth Bass can produce as many as 45,000 eggs. After eggs are laid, the male bass fertilizes the eggs. The male then monitors the eggs until the young bass hatch and start to disperse into the broader environment. Young Smallmouth Bass that have hatched are small, about ¼-inch in length. By the time these young fish are about 10 days old, bass

are dark, often black in color, and still in the nest. Anglers may not target male bass that are guarding beds during the spring season closed to harvest in Pennsylvania. After spawning, female Smallmouth Bass may rest for a period of time, then feed aggressively to regain weight. This time is a prime time for anglers to find and target fish that are heavily feeding in the spring.

Growing and getting big in the summer

Smallmouth Bass will eat just about anything. When small, fish often eat macroinvertebrates like mayfly and damselfly nymphs. As Smallmouth Bass get larger,



photo-Carl Haensel

This Smallmouth Bass from the Ohio River was feeding aggressively in the early fall in preparation for winter. Fall is a great time to fish for Smallmouth Bass, as these fish focus on large baitfish before cold weather arrives.

minnows, crayfish, and other small prey constitute most of a bass's diet. Smallmouth Bass also eat frogs, salamanders, and even small mammals like mice and voles. Smallmouth Bass grow quickly in the first years of life. From hatching, Smallmouth Bass often reach 3- or 4-inches in length by the end of its first summer. Some young bass in Pennsylvania have encountered challenges in recent seasons. Overly warm water and pathogens, like Largemouth Bass virus, have been factors in large die-offs of young bass in the Susquehanna River and other locations. The issue has been extensively studied by the Pennsylvania Fish and Boat Commission, and continues to be monitored.

Summertime is a great time to catch bass in Pennsylvania. The highest angler catch rates in rivers are in the summertime. By the end of its first three summers, fast growing Smallmouth Bass may exceed 10 inches. As fish get larger and mature, growth slows down significantly. Big bass, those larger than 16 inches, may take a long time to grow. In some locations, 18-inch bass may be 10 years old. Larger bass that grow in infertile waters are even older. The oldest Smallmouth Bass in Pennsylvania may reach over 16 years in age. Catch and release is important to grow big bass since fish take so long to reach top sizes. Handle bass gently. In warm summer waters, Smallmouth Bass may get infections if roughly handled and released. Keep fish in the water as much as possible, and try not to remove the protective slime.



The coloration of Smallmouth Bass is variable. This Smallmouth Bass from Lake Erie exhibits strong vertical bars. Individual fish coloration can change as the fish move from one area to another.

Fall is for feeding

As summertime eases into fall, Smallmouth Bass get even more hungry. Its primary forage—minnows and crayfish—are at the largest sizes of the year, and bass feed aggressively in preparation for winter. Anglers should increase their lure or bait size to match these conditions. In larger waters, it is common to find schools of bass concentrated in areas with strong numbers of baitfish. Bass are sometimes seen pursuing baitfish to the surface of the water, where the baitfish leap out to avoid being eaten. Look for this to occur where shallow flats a few feet deep are adjacent deeper resting areas where bass take cover and can easily ambush schools of prey. Take advantage of this intense feeding behavior, and fish with lures, flies, and bait that closely match the baitfish. In larger reservoirs, the greatest catch rates of Smallmouth Bass come during October at the peak of fall feeding.

Slowing down for winter

Smallmouth Bass in winter are mostly inactive. While other members of the sunfish family are routinely caught through the ice, Smallmouth Bass are less frequently caught in cold water conditions. As water temperatures are near freezing, Smallmouth Bass move to slower water in rivers and deeper areas in lakes. Bass may move long distances to preferred winter locations including many miles in larger river systems. Some anglers find concentrations of Smallmouth Bass before winter in still pools in large rivers. Smallmouth Bass feed little in cold water and through the winter, except in artificially warm locations like near power plants or other discharges that keep the water warm. Try taking water temperatures in these situations to see if you may find active bass in the winter. ☐

The Indestructible Gars

by Rob Criswell

photos by the author

There are several “living fossils” plying Pennsylvania waters, but few are as distinctive and fascinating as the gars. The family Lepisosteidae, which translates to “bony scale,” includes seven species, three of which have been found in Pennsylvania. The largest—the Alligator Gar—occurs in the southern United States and may reach a length to 10 feet and weigh up to 300 pounds.

It is easy to see why these ancient fishes have survived relatively unchanged for 100 million years. Gars are torpedo-shaped predators with a virtually impenetrable armor-like covering of ganoid scales that are linked together to form a continuous chain. The elongate snouts bristle with hundreds of needle-like teeth from which escape is nearly impossible. The swim bladder serves as a modified lung, allowing gar to breathe air. In fact, some species obtain 70% to 80% of oxygen from the atmosphere, with most surface breathing occurring at night.

Pennsylvania’s most common species, the silvery Longnose Gar, *Lepisosteus osseus*, is found today in the Ohio River drainage and Lake Erie. It formerly occurred in the lower Susquehanna and Delaware rivers but has not been found there in recent years. Although the world fishing record exceeded 6 feet in length and 50 pounds, most Pennsylvania specimens seldom grow to more than 3 feet.

Even at this size, gars are formidable predators. These fish slowly stalk prey by drifting parallel to the prey, imitating suspended debris, then with a lightning fast sidewise flip of the snout Longnose Gars impale prey. The captive is manipulated, so it can be swallowed headfirst. Adults feed almost exclusively on fish including bullheads, minnows, sunfishes, and Gizzard Shad. Gars are opportunistic feeders, preying on whatever fish is most readily available and catchable.

Gars inhabit warmer lakes, rivers, and large streams, preferring sluggish pools and backwaters. Its air-breathing adaptation allows fish to survive in polluted and oxygen-poor environs. Gars are frequently found amongst dense vegetation, although the Longnose Gar often swims and hunts in swifter currents.

The Spotted Gar, *Lepisosteus oculatus*, a more heavily marked species confined in Pennsylvania to Presque Isle Bay, is found almost exclusively in areas of still water and dense vegetation. Elsewhere, it may be found in backwaters, oxbows, swamps, sloughs, and lakes.

Pennsylvania’s third gar—the Shortnose Gar, *Lepisosteus platostomus*,—has not been seen in Pennsylvania in centuries. In 1820, the venerable naturalist Constantine Rafinesque reported that it occurred “as far as Pittsburgh and in the Allegheny River.” There are no other Pennsylvania records. It occupies habitat similar to that of its long-nosed cousin.

Gars spawn in spring and early summer over beds of vegetation, sandy shoals, and gravel riffles. As many as 60,000 adhesive eggs may be produced by a large female and hatch



Longnose Gar (*Lepisosteus osseus*)



Spotted Gar (*Lepisosteus oculatus*)

ENDANGERED



Shortnose Gar (*Lepisosteus platostomus*)

EXTIRPATED

in 6 to 8 days. Males reach maturity in 3 years, and females in 4- to 9-years.

Over the years, gars have been maligned as trash fish whose voracious feeding habits suppress populations of gamefish. There is little evidence to support this concept. In fact, a study in a Wisconsin lake revealed that even though young-of-year Largemouth Bass were plentiful, gar seldom fed on them. Nevertheless, “rough fish” removal projects in the early 1900s frequently targeted gars.

A growing movement of rough-fish anglers are targeting species that many anglers have long ignored (see www.roughfish.com), including gars. The most productive fishing for gars occurs at night in shallow water, often near the bank, using live shiners, minnows, and suckers. The bait is best suspended with a float or bobber. Since a gar must orient the fish to the headfirst position before swallowing, patience is required to hook one. If the hook is set successfully, be prepared for a savage, thrashing fight.

Gar meat has been described as mild, well-flavored, and with firm, white flesh. Its flavor has been compared to roasted pork, and the meat may be smoked. When fried, it reportedly tastes like a combination of fish and pork chops. In the south, it often serves as a substitute for lobster. It is interesting that despite the palatability of the flesh, the eggs of gars, unlike the roe of sturgeons and other fishes, are poisonous to many animals. Negative reactions have been documented in chickens, cats, dogs, mice, and humans, but other fishes ingest Gar eggs with no apparent ill effects.

Gars are most common in the lock and dam section of the Ohio River, Presque Isle Bay, and around the mouths of Lake Erie tributaries. Anglers looking to hook onto one must bear in mind that only Longnose Gar may be targeted. Due to its small population and limited range, the Shortnose Gar is a protected species by the Pennsylvania Fish and Boat Commission.

The Gar certainly deserves our respect for its tenacity and success over the eons. ☐



Gar ganoid scales

The Challenges of a Woodland Box Turtle

If you have encountered a Woodland Box Turtle, *Terrapene carolina carolina*, you may consider yourself lucky. In the eastern United States, there are reports of Woodland Box Turtles reaching 100 years of age. Unfortunately, too many box turtles only witness the inside of a box rather than the natural world. This has been one of the more commonly kept reptiles that people encounter in their wanderings. It is easy to care for box turtles, and more than a few parents have welcomed Woodland Box Turtles into their homes. However, keeping a Woodland Box Turtle in Pennsylvania has been prohibited since 2007, because we have realized how important each one is to maintaining wild populations.

The Woodland Box Turtle is distinctly recognizable for its colorful (yellow, orange, and brown), high domed shell, or carapace. The shell on its underside, called the plastron, is hinged. It allows the box turtle to close it tightly like a box when threatened by predators. Males are generally larger than females. Woodland Box Turtles are omnivores, meaning turtles eat a variety of plant and animal matter, especially berries, fungus, insects, eggs, and carrion. Box turtles do not reproduce until 5 to 14 years of age. Only a fraction of the eggs that are laid by females (usually in June or July) successfully hatch.

Records from the Pennsylvania Amphibian and Reptile Survey (PARS) —www.paherpsurvey.org— show the Woodland Box Turtle occurs in nearly all of Pennsylvania. Even though it is distributed widely, reports at the population level have been indicating for many years that box turtles are in decline. Woodland Box Turtles face numerous threats, from loss of habitat to development, to predation on nests and hatchlings, being hit on roads, disease, and poaching. Protection for habitats occupied by the Pennsylvania Fish and Boat Commission's (PFBC's) jurisdictional species are strongest for water-dwelling organisms. An upland



Photo - Tom Dice

Woodland Box Turtle, *Terrapene carolina carolina*

habitat generalist like the box turtle lives where most of the development and disturbance legally occurs. Land use planning for connected open spaces and protected tracts will help maintain box turtle populations in the future.

Woodland Box Turtles are our most terrestrial turtle and use a variety of habitat such as deciduous forests, wet or dry meadows, pastures, and shrubby thickets. Many scientists have studied movement patterns in box turtles and have discovered these turtles stay close to a home range, some moving no more than 250 yards over a lifetime. Box turtles tend to hibernate in the same place every year, nest in similar areas, and will even try to get back home if picked up and moved. Many people who find box turtles crossing a road will take the turtles to a habitat that looks “better,” but many of these transplanted turtles never settle in at the new location. Instead, box turtles may end up getting hit on a road trying to travel back home. Because of the close relationship box turtles have with a home territory, turtles that have been in captivity for a long time cannot be released back into the wild. The PFBC frequently hears from people who are trying to find homes for captive box turtles. The Commission tries to get these turtles to educational facilities, so others can learn about box turtles and the need for conservation.

There are several things you can do to help box turtles. Drive carefully. If you stop to help turtles cross a road, make sure you are safe, and move the turtle in the same direction it was traveling. Take pictures and report your sightings to PARS to help maintain good distributional records. Support local land conservation efforts. And, most importantly, leave the turtle in its home, not yours.—Kathy Gipe, PFBC Herpetologist/Nongame Biologist.



Commissioner Richard Lewis (right) presents Robb Miller with a Largemouth Bass print in recognition of his recent retirement as Governor Tom Wolf's Advisor for Hunting, Fishing, and Conservation. Miller served in the same position under Governor Ed Rendell and has been a longtime friend of the Pennsylvania Fish and Boat Commission and advocate for anglers, boaters, and aquatic resources.



photo-courtesy of Commissioner Richard Lewis

Pennsylvania Fish and Boat Commission Staff Recognized

The Pennsylvania Fish and Boat Commission (PFBC) would like to recognize and congratulate several staff on awards received from the Northeast Association of Fish & Wildlife Agencies:

- Amidea Daniel, *Information and Education Professional of the Year*
- Waterways Conservation Officer Rachael L. Thurner-Diaz, *Pennsylvania Conservation Law Enforcement Officer of the Year*
- Diana Day (PFBC) and Cathy Haffner (Pennsylvania Game Commission), *Northeast Section of The Wildlife Society Certificate of Recognition for State Wildlife Action Plan Work*

Open House and Reception Held at Ned Smith Center for Nature & Art

On Saturday, May 15, 2021, the Ned Smith Center for Nature & Art celebrated the 50th anniversary of Pennsylvania's Environmental Rights Amendment with an open house and reception of *THE GREEN AMENDMENT: Celebrating Half a Century of Environmental Rights*. The exhibit features the Pennsylvania Department of Conservation and Natural Resources, Pennsylvania Department of Environmental Protection, Pennsylvania Fish and Boat Commission, and Pennsylvania Game Commission. Former State Senator Franklin Kury attended the event and spoke about his new book, "The Constitutional Question to Save the Planet: The Peoples' Right to a Healthy Environment." For more information, visit www.nedsmithcenter.org. The exhibit will run through mid-August in the Olewine Gallery at the Ned Smith Center.



Former State Senator Kury speaks about his new book, "The Constitutional Question to Save the Planet: The Peoples' Right to a Healthy Environment."

photos-Spring Gearhart



Former State Senator Franklin Kury with guests at the reception.



Visitors enjoy the exhibit at the Ned Smith Center for Nature & Art.

Conococheague Creek, Section 4 Trout Stocking

As featured on the cover, Conococheague Creek, Franklin County, offers early summer trout fishing opportunities for Pennsylvania anglers. On Friday, May 14, an inseason stocking by the Pennsylvania Fish and Boat Commission took place on Section 4. Its proximity to Wilson College makes it easily

accessible for college students and other anglers. Conococheague Creek, Section 4 is part of Pennsylvania's Best Fishing Waters program for "Stocked Trout" (www.PaBestFishing.com). The Commission now offers Non-Resident Pennsylvania Student Licenses. For more information, turn to pages 32 and 33.



Sierra Gearhart, Saint Francis University nursing student, stocks trout into Conococheague Creek, near Wilson College.



photos-Spring Gearhart

Emily Kuhn, a Communications student at Elizabethtown College, dumps a bucket of trout into Conococheague Creek, Section 4, one of Pennsylvania's Best Fishing Waters for "Stocked Trout."

New State Record Yellow Perch Recorded

The Pennsylvania Fish and Boat Commission (PFBC) announced a new state record Yellow Perch.

On the afternoon of April 9, 2021, angler Kirk Rudzinski, Erie, departed East Avenue Boat Ramp along with friend Sam Troup, also of Erie, to enjoy a few hours of fishing on Lake Erie. The friends traveled 4 to 5 miles east to the area of the Sunoco Cribs, where they anchored in sight of the high-rise building at the Brevillier Village community.

Rudzinski was targeting Yellow Perch using live Emerald Shiners as bait on a casting rod fitted with 10-pound-test braided line with an 8-pound-test monofilament leader and a pair of size 4 hooks.

At approximately 7:21 p.m., Rudzinski felt the bite of a lifetime.

The large perch was securely hooked in the upper lip, and after a 2-minute fight, Troup netted the fish and brought it aboard the boat.

Rudzinski knew right away the fish was the largest he had ever caught.

The scale aboard his boat malfunctioned, so he did not immediately know the correct weight of the fish. While he considered ending the fishing

trip immediately to take the fish to a certified scale, he and Troup decided to put the fish on ice while they continued to fish until sunset. At approximately 9:15 p.m., Rudzinski and Troup arrived at East End Angler, a bait and tackle shop owned by Rudzinski, which also has a certified scale.

The scale weight of the Yellow Perch was 2.98 pounds. In accordance with the Pennsylvania State-Record Fish Rules and Application, the weight is rounded up to the nearest ounce, making the weight 3 pounds, 0 ounces, exceeding the current state record by 2 ounces. The length of the fish was 16 $\frac{7}{8}$ inches, with a girth of 14 inches. State record fish are judged only by weight and must exceed the previous state record by at least 2 ounces. The previous state record Yellow Perch caught in Presque Isle Bay in 2016 weighed 2 pounds, 14 ounces and was also caught by an angler from Erie County.

Rudzinski kept the fish on ice until the following day, when Waterways Conservation Officer Matthew J. Visosky arrived at East End Angler to verify the species, weight, and review photographs that were taken throughout the initial weigh-in. In addition to a witnessed weigh-in and PFBC in-person inspection, Rudzinski completed an official state-record fish application including color photographs, which was reviewed by PFBC Fisheries and Bureau of Law Enforcement officials and confirmed.

Rudzinski plans to have the State Record Yellow Perch commemorated through taxidermy and will display the mount at East End Angler for the enjoyment of others.

A list of current Pennsylvania State Record Fish, official rules, and an application can be found at www.fishandboat.com.



photo-courtesy of Kirk Rudzinski

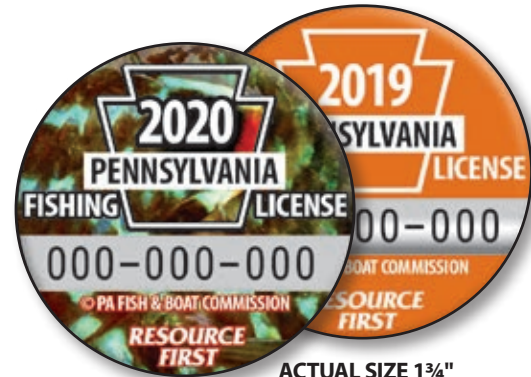
Kirk Rudzinski

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077	3-Year Voluntary Bass Permit	Any	\$31.97
081	5-Year Voluntary Bass Permit	Any	\$51.97
085	10-Year Voluntary Bass Permit	Any	\$101.97
071	Voluntary Musky Permit	Any	\$11.97
075	3-Year Voluntary Musky Permit	Any	\$31.97
079	5-Year Voluntary Musky Permit	Any	\$51.97
083	10-Year Voluntary Musky Permit	Any	\$101.97
070	Voluntary Habitat/Waterways Conservation Permit	Any	\$11.97
074	3-Year Voluntary Habitat/Waterways Conservation Permit	Any	\$31.97
078	5-Year Voluntary Habitat/Waterways Conservation Permit	Any	\$51.97
082	10-Year Voluntary Habitat/Waterways Conservation Permit	Any	\$101.97
072	Voluntary Wild Trout & Enhanced Waters Permit	Any	\$26.97
076	3-Year Voluntary Wild Trout & Enhanced Waters Permit	Any	\$76.97
080	5-Year Voluntary Wild Trout & Enhanced Waters Permit	Any	\$126.97
084	10-Year Voluntary Wild Trout & Enhanced Waters Permit	Any	\$251.97

* Includes issuing agent fee of \$1.00 and \$0.97 PALS transaction fee.

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E PA Fishes Book (172 pages)	\$14.34	_____
F "Wear It!" Safety Whistle	\$10.22	_____
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Angler's Notebook

by Jerry Bush



photo-Jerry Bush

Many bass anglers set the hook too quickly when using topwater lures. A quick hookset is understandable when a big bass voraciously attacks a visible lure. However, the bass may seem hooked, but a yank that is too quick pulls the points from the firm membranes of the bass's inner mouth, and the hook instead penetrates soft, outer tissue. When the bass jumps or pulls an underwater, acrobatic movement, the hook pulls free from the weak tissue. The angler may think that the bass "spit the hook," but it may not have been secured in the first place. Though a difficult discipline to develop, anglers will land more bass after learning to set the hook only after a topwater lure disappears and the weight of the fish is felt.

Most trout pulled from oxygen-depleted water, 70 degrees F and warmer, will not survive long after being released. Pennsylvania's summer fly rod enthusiasts should turn their attention instead to warmwater species. Bass, Bluegills, Pumpkinseeds, and crappies are plentiful gamefish. These gamefish will attack many of the same dry flies used for trout, as well as certain nymphs and streamers. The fight is as exhilarating as any provided by trout. For a special treat, coax a carp to accept a leech or worm imitation. Shorter than average, olive, Woolly Buggers work well. A hooked carp will convince any fly fishing enthusiast to add these powerful fighters to their list of favorites.

Have you ever arrived home and discovered an important item was left on the creek bank, dock, or the ground where your vehicle had been parked? Write your name and phone

number on equipment with a permanent marker. Drop a business card or homemade identification card into your day pack or vest. Adhere address labels to equipment. Then, cover the address label with transparent packaging tape to provide longer lasting protection. If you are uneasy about providing full contact information, include only a phone number or e-mail address.

The most important aspect of trolling is that your line and lure move through the water without being continually retrieved to the angler. It is feasible to troll for fish while paddling or drifting a kayak or canoe. It may take more effort, but it will produce fish. If manually paddling, a strong rod holder is a must to secure the rod and direct the line away from the vessel. Trolling with a light, manually-paddled vessel is quieter. Walleyes, which often move to the side of passing motorboats, often hold near a paddlecraft moving silently above them.

Bare feet and an exposed torso for paddling anglers presents several health and safety risks. Reflections from the water cause extra risk of sunburn to exposed skin. Extended health problems from sun exposure may cause lifelong concerns. In the excitement of fishing or paddling to a hotspot, hooks and lures may be disregarded. Even a small, single hook laying on the floor of a manually paddled vessel could prove troublesome if the paddler slides a bare foot across it while entering or exiting the vessel.

Fishin' from the Kitchen

Warm Catfish Salad with Fresh Mango and Mango Vinaigrette

by Wayne Phillips

Here is a delightful salad filled with the flavors of catfish, mango, and radish, held together with zingy mango vinaigrette.

Mango vinaigrette ingredients:

- 1 cup diced mango
- 1 Tbsp. honey
- ¼ cup extra virgin olive oil
- ¼ cup water
- 1 fresh lemon, juiced

Ingredients for four servings:

- 4 6-ounce boneless, skinless pieces of catfish fillets
- 8 mushrooms, thinly sliced
- 2 mangoes, peeled
- Lettuce, washed and dried
- Salt and black pepper to taste
- 8 radishes, thinly sliced
- 2 Tbsp. canola oil

Procedure

Place the vinaigrette ingredients into an immersion blender cup and blend until smooth. Strain through a strainer. Adjust the amount of juice, honey, and water if needed. After seasoning

with salt and black pepper, grill or pan fry the catfish fillets in canola oil. Allow the fillets to cool and break into pieces. After washing and drying, tear lettuce into bite-sized pieces. Place lettuce in a salad bowl, season with salt and black pepper, and toss with mango vinaigrette. Add mango, radishes, and mushrooms to the lettuce and toss again. Arrange on plates and scatter catfish pieces on top. Drizzle with mango dressing over top.

Serve

Serve with a crusty roll.

Tips

Make sure the catfish is not too hot or it will wilt the lettuce. Add thinly sliced red onion to the salad. There are many different lettuces you can use in this salad. Iceberg and romaine offer crunch. Mixed greens, arugula, Boston, and romaine offer added flavor. Choose the lettuce your family enjoys the most. Mixing different lettuces together makes the salad more interesting.



photo-Wayne Phillips

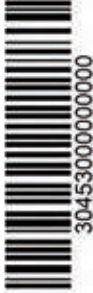
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CAST & CAUGHT



Stella Stroup, age 9, caught and released this 18-inch Largemouth Bass while fishing in Snyder County.

For the "Cast & Caught" column, send only prints (no larger than 8"x10") and a completed "Model Release form" available at www.fishandboat.com/Transact/AnglerBoater. Include a self-addressed, stamped envelope if you want your photograph returned. Persons aboard boats must be wearing properly fitted and buckled life jackets. Mail to: Editor, *Pennsylvania Angler & Boater*, P.O. Box 67000, Harrisburg, PA 17106-7000



TAKE ME FISHING



Matthew Shaw, age 12, caught and released this 18-inch Largemouth Bass while fishing on a private pond near Hughesville, Lycoming County.



Glenn Nielsen, Harrisburg, caught this 16-inch Brook Trout while fishing Ontelaunee Creek, Lehigh County.



Dan Morey, Erie, caught this 40-inch Northern Pike after casting a spoon from his kayak while fishing Presque Isle Bay, Erie County.



Gianna Cingolani, age 5, caught and released her first Largemouth Bass while fishing Lake Perez, Huntingdon County.