Pennsylvania Fish & Boat Commission



















2018 Annual Report



The mission of the Pennsylvania Fish & Boat Commission is to protect, conserve and enhance the Commonwealth's aquatic resources, and provide fishing and boating opportunities.

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2018 Annual Report..

Executive Director's Message

by Timothy D. Schaeffer

On behalf of the Pennsylvania Fish and Boat Commission's (PFBC) staff and Board of Commissioners, it is my pleasure to present the agency's 2018 Annual Report. The year was just about over when I was honored to return to the PFBC as the new Executive Director on November 13, so the credit for everything you see in this report goes to the hard-working employees of the agency who were already here.

To introduce myself to House and Senate members and their staff, I thought it would be helpful to briefly share the following excerpts from the first column I wrote for our *Pennsylvania Angler & Boater* magazine to explain how I will approach the position. For those legislators and staff with whom I have worked before, I mean it when I say that I am the same guy, just with a different job.

As a bit of background, I worked at the PFBC from April 2008 until December 2017 before leaving to serve at the Pennsylvania Department of Environmental Protection (DEP). When people asked why I went to work at DEP and why I returned to the PFBC, the answer is the same —to make the biggest difference possible in the conservation of Pennsylvania's natural resources.



Pennsylvania Fish & Boat Commission Executive Director Tim Schaeffer

That is my reason for getting into this field in the first place, and the chance to serve the Commonwealth in my current capacity is a once-in-a-lifetime opportunity to join a team of talented, dedicated professionals and volunteers who believe in the agency's mission to protect, conserve and enhance aquatic resources, and provide fishing and boating opportunities.

Some of the hallmarks of a good mission statement are that it is concise, easy to remember and captures the essence of the agency. Ours certainly meets those criteria, and we implement it while keeping the "Resource First". Thank you to the Board of Commissioners for entrusting me with the implementation of that mission.

During the interview process, I was asked about my vision for the future of the PFBC. I will repeat what I told the Commissioners. It can be broken down into complementary categories: one is related to its employees and another is connected to how the agency serves the resources and people with whom it interacts.

The ultimate success of the PFBC—and of any organization—lies in the strength of its workforce. My vision is of staff members who possess expertise in their respective fields, are equipped with the financial resources and tools to carry out their jobs, have a clear direction about the priorities of the organization, and who feel they are valued by the agency. I envision and am committed to a culture in which they feel motivated to come to work every day.

Thank you to the PFBC's staff for everything they do and for the opportunity to return as a member of their team. They work diligently both in the public eye and behind the scenes, and it is a real privilege to be working alongside them to identify and advance the agency's conservation, recreation and public safety priorities on behalf of Pennsylvania's anglers, boaters and aquatic resources.

On the outside, I see other agencies, legislators, sportsmen's and conservation groups, citizens, and businesses looking to the PFBC as a trusted source for science-based data about the aquatic resources it serves. I envision fish, reptiles and amphibians being protected by data-driven decisions and first-rate Waterways Conservation Officers (WCOs) and Deputy Waterways Conservation Officers (DWCOs) who enforce natural resource laws and continue to be leaders in aquatic resource conservation, water rescue and boating safety. I see anglers and boaters relying on, and recognizing the role of, the PFBC in providing quality recreational experiences that are supported by nationally-recognized fishing and boating opportunities and well-maintained infrastructure.

These visions are connected and will result in the continuation of an independent PFBC that is relevant, respected and sustainable. There are few partners and relationships more important to advancing our mission than those with the legislature. I genuinely value and look forward to working with the House and Senate to advance common priorities statewide and in individual legislative districts.



I took this photo of my twin sons Erik and Kurt a few summers ago. The smiles on their faces and the setting on the Susquehanna River are constant reminders about the timeless value and importance of the agency's mission to protect, conserve and enhance aquatic resources, and provide fishing and boating opportunities.



Founded in 1866, the Pennsylvania Fish and Boat Commission is charged with protecting, conserving and enhancing the Commonwealth's aquatic resources. This includes waterways, fish, reptile and amphibian communities and habitats of game and non-game species. From stocking fish and monitoring the health of waterways, to patrolling lakes and restoring habitats, the Commission's employees strive to protect, conserve, and manage the resource.

High-quality streams, clean water and good habitat ensure that we can carry out the rest of the Commission's mission, to provide recreational fishing and boating opportunities for both Pennsylvanians and out-of-state visitors.

The "Resource First" management philosophy ensures that staff will make scientifically-informed decisions based on long-term conservation of aquatic resources. Resource First also sets the foundation for the agency's strategic plan.

The PFBC is governed by a Board of Commissioners whose 10 members are appointed by the Governor with the advice and consent of the majority of the Pennsylvania State Senate. Commissioners serve terms of four years. Eight Commissioners are selected based on districts, and two Commissioners, representing boating interests, have an at-large, statewide appointment. The Executive Director, who serves as Chief Executive Officer and Chief WCO, leads agency operations. The PFBC staff includes about 380 full-time employees.

Pennsylvania Fish & Boat Commission's Board of Commissioners



North Apollo



Donald K. Anderson, Meyersdale



William C. Brock, St. Marys



G. Warren Elliott, Chambersburg



Norman R. Gavlick, Kingston



Former Commissioner Leonard L. Lichvar was recognized for 12 years of service. Lichvar, who served from 2006-2018 as District 4 Commissioner, received a commemorative print at the October 2018 meeting. Pictured are (left to right) Lichvar and President Eric C. Hussar.



Eric C. Hussar. Lewisburg



Richard S. Kauffman, Leesport



Edward P. Mascharka III, Erie



Retirement of Former Executive Director Arway

John Arway retired after 38 years with the Commission, the final eight years of which were spent as Executive Director. Arway was presented a set of framed, Bravo Zulu nautical signal flags, meaning "well done" by President Eric C. Hussar on behalf of the board. On November 2, Arway spent his final day of work assisting with a habitat improvement project along Bobs Creek, Bedford

County. The event brought his career full circle, as the project took place near the same location at which Arway spent his first day with PFBC as a semi-skilled laborer in 1980.

"I am proud to be part of a generation that can rightfully say that we have more waters to fish today than when we were children," Arway wrote in his final "Straight Talk" column in the November/December 2018 issue of Pennsylvania Angler & Boater magazine.

Dozens of friends and colleagues past and present attended a retirement celebration for Arway on November 17 in Centre County.



Arway along Bobs Creek, Bedford County and pictured with his grandchildren.

Following the Strategic Plan

In 2018, the agency continued to implement goals of the established strategic plan that follows the SMART format, meaning that they are Specific, Measurable, Action-oriented, Realistic and Time-bound. Those goals and the text of this report are organized within the following four major priority issue categories:

• Funding: Revenues are insufficient to support the Commission's current levels of programs and services and meet increasing fixed, variable and mandatory personnel costs.

• Conservation: Current and increasing threats to our aquatic resources demand the Commission provide high-quality services to ensure essential resource management and protection and improved fishing.

• Recreation: Other leisure and recreational activities are competing with fishing and boating for people's time.

• Internal Resources: The Commission must consistently make investments in itself to maintain its infrastructure, staff, and programs and their respective relevance.

This annual report is organized under the headings of the strategic plan. For a complete copy of the strategic plan, and for quarterly reports with more detail than the summary provided in this report, visit **www.fishandboat.com**.

FUNDING

Goal 1A: Implement a Spending Reallocation Plan within which the Commission does not spend more than it generates in revenue each fiscal year and maintains agency administrative and support services necessary to deliver programs and services.

Fiscal Responsibility for Pennsylvania Anglers and Boaters

The PFBC is one of the nation's oldest and most effective conservation agencies. The PFBC is an independent state government agency responsible for protecting and managing Pennsylvania's fishery resources and regulating recreational fishing and boating on Pennsylvania's waters. The agency's mission is "to protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities."

Statutory authority to carry out this mission appears in the Fish and Boat Code of 1980 [Title 30, Pa. Consolidated Statutes] with fishing and boating regulations set forth in Title 58 of the Pennsylvania Code. By addressing these goals, the agency's activities help meet the recreational needs of over 4 million anglers and boaters in Pennsylvania.

In 2018, the PFBC sold 765,983 fishing licenses and 555,199 fishing permits. Accordingly, fishing has a tremendous positive impact on Pennsylvania's economy. According to the U.S. Fish and Wildlife Service's (USFWS's) 2016 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, recreational fishing generates an estimated annual economic benefit of \$46.1 billion. The 2011 National Survey of Fishing, Hunting and Wildlife-Associated Recreation report estimates that Pennsylvania generates more than \$721 million in retail sales and wages, supports over 5,602 fishing jobs, and contributes more than \$37.2 million in state and local tax revenues.

Pennsylvania's diverse water resources include Lake Erie, small impoundments, large reservoirs, rivers and streams. These waters also provide many recreational opportunities for the people who boat in Pennsylvania each year. During 2018, 306,412 boats were registered in Pennsylvania. According to the 2016 National Marine Manufacturers Association study, it estimates that the total annual economic impact of recreational boating in Pennsylvania is \$3.1 billion and creates 16,766 jobs.

The efforts of the PFBC and the programs and services that it delivers are the basis for deriving these Commonwealth benefits. To continue these benefits, reinvestment in the underlying fishing and boating programs and infrastructure that support these programs are not only appropriate but necessary. By taking steps to successfully implement its strategic plan and by applying budgetary monitoring controls on operations, the PFBC will meet its mission of service to the anglers, boaters and other aquatic resource users of Pennsylvania.

The PFBC has taken the necessary steps to maintain appropriate fund balances to meet minimum operational needs. This minimum threshold balance level for each Fund has been calculated to ensure that the PFBC can sustain operations during periods of negative cash flows and has sufficient reserves to maintain critical program funding in the event a major revenue source is severely diminished or lost. However, to maintain program integrity, and to provide expected levels of service long term, the PFBC will require new or additional revenues in the future.

Consistent with the long-established user pays/user benefits model of funding fish and wildlife conservation, fees from fishing licenses and associated permits comprise the largest portion of revenue—nearly 70 percent—for the PFBC. While the Commission is also actively trying to diversify its funding base, the core revenue stream of license and permit sales are expected to continue to be fundamental to the agency's ability to fulfill its mission.

The PFBC continues to seek legislation in the Pennsylvania General Assembly that would either give the Commission the ability to set its own fees or increase fishing license fees and boat registration fees incrementally over several years, which last occurred in 2005. A modest fee increase would help alleviate the Commission's fiscal challenges and allow the agency to continue providing anglers and boaters with exceptional programs and services for the foreseeable future.

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Goal 1B: Increase revenues.

Addition of Voluntary Permits

In July 2018, proposals were endorsed by Commissioners creating several voluntary permits designed to support key fishing-related programs.

Because voluntary permits would not be required to fish or entitle the holders to any additional privileges, the permits did not need to be established formally either by legislation or regulation. The voluntary permits are as follows: Bass, Musky, Wild Trout and Enhanced Waters, and Habitat/Waterways Conservation. In December 2018, the permits were made available for purchase through the Pennsylvania Automated Licensing Service (PALS) licensing system in 1-year, 3-year, 5-year and 10-year increments.

As revenues are collected from the sales of voluntary permits, projects qualified to receive funding will be identified. Additionally, the Commission began evaluating which other funding sources may be paired with voluntary license revenues to advance projects, such as settlements from pollution cases or other restricted funds.

Evaluation and Update of Fees

Commissioners voted to approve permit fee increases for Scientific Collectors' Permits and permit fees for Triploid Grass Carp, Snapping Turtles, Venomous Snakes and Organized Reptile and Amphibian Hunts. Approved increases are from \$5 to \$30 depending on the permit. Some of these permits have not been increased since 2008.

The Board also approved an increase in the fee for the cutting and removal of firewood from Commission properties to \$50 per standard rough cord. The previous fee of \$10 was established in 1984 and did not reflect the current market value.

Commissioners approved a pair of increases to one-time, nonrefundable fees paid to the Commission by applicants seeking to become issuing agents for PALS. The fee was raised from \$150 to \$250, marking the first increase to the fee since it was established in 2006. The fee for applicants wishing to become an issuing agent for temporary boat registrations was raised from \$100 to \$250, the first adjustment to the fee since 2001.

2019 License Button



The PFBC returned to a basic, singlecolored license button that went on sale on December 1, 2018. The collectible orange buttons are available for \$10 each, a \$5 increase over previous years, and can be purchased through the PFBC's online store (The Outdoor Shop), PFBC regional offices and the network of more than 700 license issuing agents.

Individuals must purchase an annual or multi-year resident, non-resident, senior resident, or senior lifetime fishing license to purchase a license button. Children 15 and younger can also purchase a button if they first buy a voluntary youth license for \$1.

More than 23,000 buttons were purchased in 2018.

2018 Fishing License & Permit	Types
December 1, 2017 - December 31, 2018	Units Sold
1-Day Labor Day Resident	331
1-Day Labor Day Tourist	174
1-Day Resident	3,589
1-Day Tourist	4,933
10-Year Non-Resident	26
10-Year Resident	1,432
3-Day Tourist	24,717
3-Year Non-Resident	396
3-Year Resident	11,111
3-Year Senior Resident	369
5-Year Non-Resident	92
5-Year Resident	5,669
5-Year Senior Resident	62
7-Day Tourist	7,457
PA Resident National Guard/Reserve	202
Senior Lifetime	15,132
Non-Resident	41,095
POW Resident Annual	1
POW Resident Lifetime	0
Reduced Disabled Veteran	479
Resident	617,816
Senior Resident	22,746
Voluntary Youth	8,154
3-Year Combination Lake Erie & Trout/ Salmon Stamp Permit	1,980
3-Year Lake Erie Permit	195
3-Year Trout/Salmon Stamp Permit	7,001
5-Year Combination Lake Erie &	1,291
Trout/Salmon Stamp Permit	
5-Year Lake Erie Permit	52
5-Year Trout/Salmon Stamp Permit	3,547
10-Year Combination Lake Erie & Trout/ Salmon Stamp Permit	437
10-Year Lake Erie Permit	15
10-Year Trout/Salmon Stamp Permit	833
Combination Lake Erie & Trout/Salmon Stamp Permit	71,386
Lake Erie Permit	22,943
Trout/Salmon Stamp Permit	440,717
3-Year Senior Trout/Salmon Stamp Permit	2,567
5-Year Senior Trout/Salmon Stamp Permit	1,489
10-Year Senior Trout/Salmon Stamp Permit	746
Total Licenses & Permits	1,321,182

Cover Price Established for the *Pennsylvania Fishing Summary*

At its July meeting, Commissioners established a cover price for the printed version of the annual *Pennsylvania Fishing Summary*. The \$3 fee is designed to offset the cost of printing and distributing the publication, which had traditionally been available to license buyers free of charge. An identical, digital version of the *2019 Pennsylvania Fishing Summary*, including advertisements and coupons, can be viewed, downloaded and printed for free at **www.fishinpa.com**. Complete fishing rules and regulations are also available on the free FishBoatPA mobile app. Copies of the *2019 Pennsylvania Fishing Summary* were printed and distributed to retail license agents, who will receive \$1 for each book sold through the PALS system. Agents can order more printed books based on demand.

Spring, Summer and Fall Giveaways

The PFBC partnered with several retail and tourism partners throughout 2018 to sponsor fishing related prize giveaways.

- **Spring into Fishing:** From April 13-May 18, the PFBC along with "The Rest of PA," a consortia of local tourism entities, Bass Pro Shops in Harrisburg, and Bethlehem-based ArtsQuest gave away a two-day getaway package, Penn State-themed fishing kayak and two concert tickets to see Brantley Gilbert at Musikfest. Winners were Phillip Fielding (kayak), Waymart, Wayne County; Bruce Parkhurst (trip), Tionesta, Forest County; and James Hanlon (concert), Malvern, Chester County.
- Days of Summer: From June 1-August 20, the PFBC partnered with "The Rest of PA" and Bass Pro Shops in Harrisburg to sponsor a giveaway that includes a two-day getaway package and a fishing kayak. Winners were Fred Hait, Mechanicsburg, Cumberland County; and Aaron Gray, Pittsburgh, Allegheny County.
- Fall into Fishing: From August 31-November 16, the PFBC collaborated with "The Rest of PA," "VisitErie" and Bass Pro Shops in Harrisburg to sponsor two fall fishing giveaways. One giveaway included a weekend getaway that promoted the regions covered by the Columbia Montour Visitors Bureau, Endless Mountains Visitors Bureau, Susquehanna River Valley Visitors Bureau and Visit Potter-Tioga organization. A separate getaway was specific to the greater Erie region. There were two kayak giveaways. Winners were Alvin Weaver, Jr. ("The Rest of PA" trip), Mount Joy, Lancaster County; Kevin Meiser ("The Rest of PA" kayak), Freeburg, Snyder County; Randy Boyer ("VisitErie" trip), Locust Gap, Northumberland County; and Stephen Laschon ("VisitErie" kayak), Canonsburg, Washington County.

Reeling in the College Football Crowds

To promote the seasonal giveaways, PFBC staff set up an exhibit outside of Beaver Stadium for all Penn State home games and outside Heinz Field for all University of Pittsburgh 2018 home football games. This practice, ongoing since 2016, has provided the PFBC with the opportunity to interact with hundreds of thousands of fans and potential customers in central and western Pennsylvania.

The PFBC staff sold fishing licenses, distributed promotional materials and answered questions related to fishing and boating.

Earlier in the year, PFBC staff also interacted with tens of thousands of fans in the concourses of Penn State's Bryce Jordan Center during home basketball and hockey games.





CONSERVATION

Largemouth Bass Virus Study Published

In March 2018, a study done in collaboration with Michigan State University, and funded by Pennsylvania Sea Grant and DEP, that demonstrated the ability for Largemouth Bass Virus (LMBV) to affect juvenile Smallmouth Bass was published in the journal BMC Veterinary Research. Until this time, LMBV was not known to affect Smallmouth Bass; they were simply thought to be a carrier. The exposure of young-of-year Smallmouth Bass to LMBV in the laboratory resulted in fish showing signs of disease similar to those seen in the wild by agency biologists since 2005. Further, laboratory experiments demonstrated that when fish were exposed to LMBV and other stressors, like the common bacterial pathogen columnaris, the affects were additive and mortality was higher than one of the factors alone.

This finding helps to resolve some of the outstanding questions that other identified factors failed to address and suggests that LMBV was a key factor, along with other stressors, in prolonged mortality events observed at the Susquehanna River from 2005 to present. Recent reductions in disease-related mortality of young-of-year Smallmouth Bass have led to increased angler recruitment and a more abundant and stable Smallmouth Bass population in the middle Susquehanna and lower Juniata rivers.

While 2018 river population surveys were encouraging, PFBC biologists will continue to work to understand emerging issues that affect the overall health of Smallmouth Bass, as well as any ecological or human health implications that need to be understood as the ramifications may be equally if not more important.

The PFBC continues to support an impairment listing for the Susquehanna River (and any other body of water) where data would indicate that water quality criteria are not being met. The PFBC looks forward to carefully reviewing and commenting as necessary on the next list of impaired waters submitted to Environmental Protection Agency.

Dunkard Creek Pollution Reassessment and Recovery Update

In September 2009, a significant number of fish (estimated 42,997), freshwater mussel species (estimated 15,382, including the state and federally endangered Snuffbox) and mudpuppies (estimated 6,447) were killed by a pollution event that spanned over 30 miles of Dunkard Creek along the Pennsylvania and West Virginia border. PFBC staff completed the biological damage assessment in the Pennsylvania portion of Dunkard Creek. Nearly six years later, the PFBC and CONSOL/Murray Mines reached a \$2.5 million settlement for damages to natural resources.

The PFBC developed a restoration and recovery plan for assessing Dunkard Creek. Fish diversity has shown positive signs of recovery since the kill with over 40 fish taxa documented; however, several large river forms were missing, including Gizzard Shad, Quillback, and Flathead Catfish. Sport fish surveys revealed a resurgent Smallmouth Bass population but a depressed Rock Bass population. Due to low numbers and absence respectively, recommendations were made to stock Rock Bass and Flathead Catfish into Dunkard Creek. Flathead Catfish are the primary host for the state endangered Pistolgrip mussel.

The Common Mudpuppy population was assessed in Dunkard Creek and were not found in the affected section, although mudpuppies were found in the Pennsylvania Fork of Dunkard Creek and nearby Browns Creek. Common Mudpuppy trapping in Dunkard Creek in the early spring of 2018 yielded one adult male near the mouth of Shannon Run. This indicates that conditions are favorable for mudpuppies to live in Dunkard Creek and potentially expand their range within the watershed. In the fall of 2018, water sampling was conducted in the affected reaches of Dunkard Creek, as well as tributaries, to determine presence and potential future locations for the mudpuppy.

Intensive freshwater mussel sampling in 2016 found the Aquatic Invasive Species Asiatic Clam as abundant, but only one of 14 native species that formerly occurred here, the Pink Heelsplitter, was observed. This species likely moved into Dunkard Creek from an inoculated fish host that took refuge in one of the small tributaries of Dunkard Creek during the 2009 pollution event or arrived by inoculated host fish stocked by West Virginia's Department of Natural Resources.

A freshwater mussel augmentation pilot study was initiated in the fall of 2016: 11 common mussel species native to the drainage, comprised of approximately 500 individual mussels, were moved from the Allegheny River to five different affected reaches of Dunkard Creek. These translocated mussels were reassessed in the summer of 2017. High survivorship was observed in four of the five study plots, suggesting that the conditions at the four mainstem Dunkard Creek sites were suitable for supporting freshwater mussels.

In the late fall of 2017, 4,000 juvenile Plain Pocketbook, which were propagated and reared by the USFWS's White Sulphur Springs National Fish Hatchery, were stocked into the four mainstem Dunkard Creek sites.

In August 2018, the PFBC Division of Environmental Services staff worked with numerous partners to conduct a mussel salvage for a gas line project known as "Line Q," crossing the Allegheny River near Tidioute, PA. Approximately 15,000 mussels of 10 different mussel species were translocated to the four mainstem Dunkard Creek sites. Future monitoring will assess growth and survival of these mussels.

The PFBC is in the process of repurposing the Union City State Fish Hatchery for mussel propagation, which will help augment and support Dunkard Creek mussel recovery. PFBC staff attended a 2018 mussel propagation training at the USFWS National Conservation Training Center and have visited other mussel propagation facilities to further develop the newly-repurposed PFBC Union City State Fish Hatchery. The hatchery will propagate species not available by salvage and raise state endangered species such as Pistolgrip mussels and Salamander mussels. These Dunkard Creek efforts are likely to complement and support other mussel recovery efforts, such as in the Clarion River.

Lake Erie Acoustic Telemetry Underway

The PFBC is participating in an acoustic telemetry study that tracks fish behavior and migration patterns in the Great Lakes. The Great Lakes Acoustic Telemetry Observation System (GLATOS) is the coordinating organization for this process, with much of the funding provided through the Great Lakes Restoration Initiative (GLRI). A grid system of acoustic receivers is maintained on the bottom of Lake Erie for tracking fish movement throughout the year. Acoustic tags are surgically implanted into various fish species to determine seasonal migration, spawning data, exploitation and natural mortality.

The technology is like an EZ-PASS: when a tagged fish swims past a receiver, the time, date and location are recorded. Receivers are retrieved, and the data is annually uploaded. The PFBC's Lake Erie Research Unit has been collaborating with the United States Geological Survey (USGS), tagging Lake Trout for the last three seasons and assisting in maintaining the receiver grid in Lake Erie.

2018 Annual Report.

In spring 2018, monetary donations were provided by Erie area sportsmen's groups to purchase 20 acoustic tags to better understand Pennsylvania's Walleyes. On April 24, 2018, PFBC fisheries biologists and volunteers captured locally spawning Walleyes, surgically implanted acoustic tags, and released the tagged fish near the capture site off the PFBC's Walnut Creek Access Area. These Walleyes are part of a larger, lake-wide study looking at the contribution of local spawning stocks to the overall population of Walleyes in Lake Erie.

After only two months at large, the PFBC had 3,095 individual detections from our tagged Walleyes. This research will be continued in 2019, when the PFBC will implant an additional 20 acoustic tags into locally spawning Walleyes. The PFBC's Lake Erie Research Unit will continue to work with the USGS on Lake Trout. The acoustic tagging was also expanded to Burbot, which was initiated in Pennsylvania waters in December 2018.

Pennsylvania Amphibian and Reptile Survey

The Pennsylvania Amphibian and Reptile Survey (PARS) is a modern-day, citizen science-driven herpetological atlas and database initiative, encompassing both historical and contemporary data compilation. The program is a joint project with The Mid-Atlantic Center for Herpetology and Conservation (MACHAC) and was launched in June 2013 with funding from the State Wildlife Grants Program of the USFWS.

PARS has been widely hailed as one of the most successful herpetological atlases undertaken by any state and combines the historical methodology of logging observations in a block-and-quad system brought into the 21st century using modern technology. In addition to requiring voucher photographs, recordings or specimens, PARS also collects point data, basic habitat and abiotic information, allowing for the use of high-quality data for environmental review and species conservation management. Pennsylvania is a large state with rugged terrain and remote locations, thus acquisition, compilation and data analysis required for the PARS atlas is anticipated to require 10 years. Ultimately, PARS will



Non-game Permits

Species Impact/PNDI Reviews – 1,905 Scientific Collector Permits/Amendments – 445 Threatened and Endangered (T&E) Species Permits–85 Biological Opinions/T&E Take Permits – 5 Non-game Special Permits – 5 Organized Reptile and Amphibian Hunt Permits – 6

provide a robust baseline for long-term trends analysis of Pennsylvania amphibians and reptiles, particularly with potential declines on regional and global levels from habitat alteration, climate change and pathogens. PARS-Phase 2 was initiated in late December 2017 and is expected to run until 2021.

From January 2018 through December 2018, PARS received 10,997 amphibian and reptile observations from contributors, including PARS records obtained by email observation forms that do not require contributors to register but are also used for the atlas effort. Species of Greatest Conservation Need (SGCN) observations totaled 1,712 (15.6 percent). Registered volunteers for the project total 1,890. All records are processed through a tiered verification system that is more rigorous than those used by museums. Verified records totaled 10,584 during this period. Focal species teams were created for 8-of-13 designated focal species.

The Blue-spotted Salamander was confirmed in three blocks, and PARS efforts have encountered the species in all blocks known prior to the project launch. Kirtland's Snakes surveys occurred at seven sites in three counties and failed to yield any observations of that species. Cope's Gray Treefrogs were encountered at 12 sites in six counties including county records for two counties in eastern Pennsylvania. Green Salamanders were encountered in four blocks, all of which had been previously documented, though two of the sites are new points. Blanding's Turtle surveys occurred in 14 blocks in Erie and Crawford counties with no detections of the species outside of the single known location in Pennsylvania. Surveys for the Mountain Chorus Frog yielded six new blocks for the species, an encouraging sign for a species that was believed extirpated in Pennsylvania until 2008. Western Chorus Frog surveys were conducted in seven blocks within and near the historical collection sites, all of which failed to detect the species.

The Western Chorus Frog increasingly looks like a species that has suffered a major decline and may be extirpated from Pennsylvania. Eastern Mud Salamander surveys were conducted within three blocks containing a drainage of historical occurrence including the few historical collection sites and all failed to detect the species. The Eastern Mud Salamander increasingly looks like a species that may be extirpated from Pennsylvania. Focal species teams for the Eastern Wormsnake, Northern Red-bellied Cooter, Eastern Smooth Earthsnake, Northern Ravine Salamander and Upland Chorus Frog will be launched in 2019.

Unassessed Waters

Under the Unassessed Waters Initiative, the PFBC works with partner organizations to survey waters across Pennsylvania and evaluate the presence and quality of wild trout populations. Qualified colleges and universities, research entities, and conservation organizations examine waters that have not been previously inventoried for wild trout. These partner groups sample previously unassessed waters using the PFBC sampling protocols and are directed to work in watersheds determined to be high priority. The previously unassessed waters found to have wild trout are then proposed to the PFBC for official listing through an open, transparent process and subsequently referred to DEP for enhanced regulatory protection.

In 2018, about 890 waters were surveyed under the Unassessed Waters Initiative. Also, during 2018, the Commission added 396 new waters to the list of wild trout streams, revised the section limits of 8 waters and added 90 stream sections to its Class A Wild Trout Streams list. The PFBC welcomes legislators and industry representatives to join surveys in the field to see how the work is done. Knowing the locations of wild trout streams allows companies to proactively plan around and avoid conflicts with specific waters.

Upper Delaware River Tailwaters and the Joint Fisheries Investigation Plan

The New York City reservoir tailwaters in the upper Delaware River Basin are an increasingly popular destination water for wild trout fishing. Reservoir releases supporting these tailwater fisheries are regulated, as per a 1954 U.S. Supreme Court Decree and subsequent agreements. Most recently, a newly adopted 10-year Flexible Flow Management Plan (FFMP) is the current management mechanism. Information on the biological and angler use characteristics of the tailwaters wild trout fishery is severely outdated and inadequate to support a scientific evaluation of whether declines in the quality of the fishery have occurred and whether changes in management objectives and strategies are warranted in response to current patterns of angler use, trout population dynamics and flow management objectives. In these circumstances, the New York State Department of Environmental Conservation (NYSDEC) and the PFBC have agreed to supporting a Joint Fisheries Investigation Plan (www.dec.ny.gov/outdoor/112782.html).

The Plan identifies the information most urgently needed to form a new fisheries management plan and to set strategies to collaboratively obtain that information over the next three years, 2018-2020. A multi-prong approach was developed to best characterize both biological and social aspects of the Delaware tailwaters trout fishery. Survey efforts are also inclusive of associated coldwater tributary trout populations of the Delaware tailwaters, which are considered as integral contributors to the Delaware tailwaters trout population sustainability. Annual progress reports are anticipated in the spring of each following year, cumulating in a final 3-year assessment (i.e., spring 2021). Based on the results of the studies completed under this investigation Plan, NYSDEC and the PFBC will jointly develop a new fisheries management plan as the next step in the adaptive management of the recreational trout fishery of the Delaware tailwaters.

Lake Erie Sport Fishing Update

The Walleye fishery in Lake Erie was exceptional for the second consecutive year, owing to the strong recruitment of the 2015-year class that occurred throughout the lake. Catch per effort was the second highest in the 22-year time series, second only to that estimated for 2017. Harvest per effort was the highest in the time series owing to the full recruitment of the strong 2015-year class into the fishery as age 3 adults, which comprised the bulk of the harvest, along with smaller numbers of age 4 and older fish. The 2018 catch and harvest rates for Walleyes were three times higher than the long-term average. Walleye fisheries are expected to remain strong for the foreseeable future and should provide increasing numbers of larger fish as the strong 2015 cohort ages. The steelhead tributary fishery was also excellent in 2018, generating the highest catch rates observed since the Lake Erie Cooperative Angler Logbook survey was reinitiated in 2012. The Commission believes the increased size of the PFBC stocked steelhead juveniles has contributed to adult survival, resulting in increasing angler catch rates in recent years.

The Fishes of Pennsylvania

This book is about the fishes of Pennsylvania and was authored by Jay Stauffer of Pennsylvania State University, Rob Criswell, and PFBC Natural Diversity Section Biologist Doug Fischer. An account for each species that occurs in the state includes characters for identification, range (including an up-to-date dot distribution map), biological and ecological information, and a conservation status summary and remarks. Chapters of the book include a history of ichthyology in Pennsylvania, a description of the waterways and fish fauna of the state, basic anatomy, the study of fishes (including collection techniques, characters and methodology for identification, and information on photography and videography), conservation, and sport fishing opportunities in the Commonwealth. The book can be purchased through the Commission's online Outdoor Shop.



RECREATION

Gaun First Catch Center

The Commission piloted the Gaun First Catch Center (GFCC) in 2018. It was made possible through the generosity of the Samuel Gaun estate and operated in partnership with the Recreational Boating and Fishing Foundation (RBFF). The GFCC provided opportunities for participants to learn about fishing or improve existing skills in the Southeast Region's five-county

metro area. It was headquartered out of the USFWS's John Heinz National Wildlife Refuge at Tinicum, Philadelphia.

The pilot started in late May and wrapped up with a "fall blitz" of programs from September to early November. The GFCC delivered 22 meet-ups, 20 angler education programs, 16 introductory programs and provided an exhibit at over 6 different special events. Activities took place across 12 different counties; however, the focus of effort was in Philadelphia County with around 41% of all activities occurring at that location. Around 6,336 participants were reached through the GFCC in 2018.



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Family Fishing Catfish Festival and Mentored Youth Fishing

The Commission provided two Mentored Youth Catfish opportunities in 2018. The first was July 28 and 29 in North Park, Allegheny County, on the Boathouse Pond portion of North Park Lake. The second was August 4 and 5 at the Children's Pond, at Nockamixon State Park. Catfish were stocked for each opportunity, and a Catfish Expo was held at each location. During the expo, visitors interacted with PFBC staff and learned about catfish biology and management, basic angling techniques for catfish, and cleaning and cooking fish.

Mentored Youth Trout Fishing Days Offered to Anglers Again



The 2018 trout season opened March 24 for the Mentored Youth Trout Day program in 18 southeastern counties including Adams, Berks, Bucks, Chester, Cumberland, Dauphin, Delaware, Franklin, Juniata, Lancaster, Lebanon, Lehigh, Montgomery, Northampton, Perry, Philadelphia, Schuylkill and York. A second statewide Mentored Youth Day was held on April 7.

This was the fifth year for the popular program, giving kids and their

adult mentors the opportunity to fish a week before the regional and statewide opening days. Again in 2018, only kids could keep up to two trout on the Mentored Youth Trout Fishing Days. Mentors could fish but were required to return all trout to the water unharmed.

To participate in the program, adult anglers (16 years or older) must have a valid fishing license

and trout permit and be accompanied by a youth. Youth anglers must obtain a free PFBC-issued permit or a Voluntary Youth Fishing License (only \$2.90 including all fees). Both are available at **www.GoneFishingPa.com** or at any of the more than 700 licensing agents across the state.

Spring Family Fishing Festivals

The PFBC held three Family Fishing Festivals in May and three in June. These were educational events designed for families with little or no fishing experience. Participants learned basic fishing skills and had an opportunity to practice those skills during the program. The PFBC waived the fishing license requirement during the program for registered Family Fishing Festival participants 16 and older. The programs were open to all ages including children ages 5 and older.

Festivals were held in each of the PFBC's six geographical regions and included Gifford Pinchot State Park, York County, on May 5, Lake Rowena, Cambria County, on May 12, Nockamixon State Park, Bucks County, on May 19, Bald Eagle State Park, Centre County, on June 9, Presque Isle Sate Park, Erie County, on June 16 and Lackawanna State Park, Lackawanna County, on June 23.

Special Fishing Opportunities Offered on Labor Day



The PFBC again offered two special fishing opportunities to entice adults and kids to fish on Labor Day, September 3, 2018. The first opportunity was a \$1 license for adult residents and non-residents. The license—good for Labor Day only provided an easy and affordable way for everyone to enjoy a special day with family and friends while fishing on the Commonwealth's waters.

The second opportunity was the Mentored Youth Panfish Day. This event provided youth anglers, who have obtained a free Mentored Youth Permit or have purchased a Voluntary Youth Fishing License, an opportunity to fish on 19 Panfish Enhancement lakes. The Panfish Enhancement lakes were chosen as mentored youth fishing opportunities, because the waters

are managed to increase the number and size of fish. Panfish include Bluegills, Pumpkinseeds and Redear Sunfish, which are collectively called sunfish, Black Crappies, White Crappies, and Yellow Perch. As an added incentive, minimum size limits were lifted for kids and their mentors on this day.





Voluntary Youth Fishing License Sales Grow the Next Generation of Anglers

Over 28,000 Voluntary Youth Fishing Licenses and Mentored Youth Permits were issued in 2018. For every Voluntary Youth Fishing License sold, the PFBC receives approximately \$5 in federal revenue from the USFWS Sport Fish Restoration Act program, which provides funds to states based on a formula that includes the number of licenses a state sells. All revenues earned from Voluntary Youth Fishing Licenses are dedicated to youth fishing programs.

To date, the Commission has issued over 120,000 Voluntary Youth Fishing Licenses and Mentored Youth Permits since 2014 as part of its effort to recruit the next generation of Pennsylvania anglers.



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Fish-for-Free Days

The popular annual Fish-for-Free Days were offered again in 2018 on May 27 and July 4. The Fish and Boat Code permits the PFBC to offer two free fishing days a year. The 2018 dates were picked to coincide with Memorial Day and Independence Day weekends when families and friends were already together visiting popular outdoor spots across Pennsylvania.

Fish-for-Free Days allow anyone—residents and non-residents—to legally fish in Pennsylvania without a fishing license. From 12:01 a.m. to 11:59 p.m. on both days, no fishing license is needed to fish in Pennsylvania's waterways. All other fishing regulations apply, including size and creel limits.

Fish-for-Free Days offer an easy, convenient way to introduce friends and family to the sport of fishing or to reconnect someone with the sport at no cost.

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Fishing Tackle Loaner Program

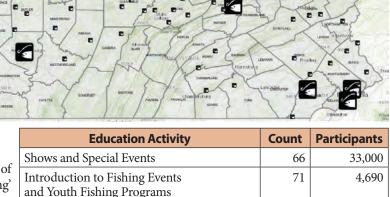
As part of the Commission's effort to increase access to fishing and make the sport more convenient and enjoyable, interested anglers may borrow equipment from dozens of locations

across Pennsylvania. The Fishing Tackle Loaner Program (FTLP) provides partner organizations fishing rods, reels and equipped tackle boxes. The partners loan this equipment to individuals or groups, enabling them to enjoy fishing without having to buy gear themselves. The PFBC purchases the equipment directly from manufacturers at discount pricing.

At the end of 2018, there were 83 FTLP sites located in 43 counties, and they made more than 1,000 loans of equipment in 2018. Current partner organizations include community libraries, state, county and local parks. Organizations with an interest in becoming a FTLP site should send an e-mail to **ra-be@pa.gov**, with FTLP in the subject line. A map of FTLP sites is available at **www.fishandboat.com**.

Hooked on Scouting

The PFBC continued its partnership with the New Birth of Freedom Boy Scout Council's successful 'Hooked on Scouting' program that began in 2017. 'Hooked on Scouting' was previously implemented in southeastern Pennsylvania with great success before expanding to southcentral Pennsylvania. The program exposes more young people to fishing while also recruiting new scouts. Councils receive donations of fishing rods from local businesses, which provide a rod to each new scout. Scouts and their families are invited to participate at a Family Fishing program provided at seven different locations



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Shows and Special Events	66	33,000
Introduction to Fishing Events and Youth Fishing Programs	71	4,690
Family Fishing Programs	82	2,185
Fly Fishing	51	877
Active Fishing Skills Instructors	59	8,089
New Fishing Skills Instructors Certifications	160	n/a
2017-2018 Trout In the Classroom Teachers	355	41,000
Hatchery Tours, other Education Programs	44	7,933

during the fall. These programs are provided by Council members who were trained as PFBC Fishing Skills Instructors.

In the 2018 year, the New Birth of Freedom Boy Scout Council provided approximately 900-950 fishing rods to recruited scouts. Through its seven programs, the Council reached over 372 people (Under 16=200; 18-34=16; 35-64=152; 65 and older=4).

The Council is planning to reprise the 'Hooked On Scouting' campaign in 2019.

STREAM Girls Program

STREAM Girls is a National Trout Unlimited (TU) program that connects Girl Scouts to coldwater resources through study of the resources, the organisms within the resources and enjoyment of those resources (e.g., fly fishing). STREAM is an acronym for Science, Technology, Recreation, Engineering, Art and Mathematics. The program has been piloted in a few states. After successful implementation, National TU and the National Girl Scouts created a STREAM Girls patch and began offering the programs in several more states, including a pilot program in Pennsylvania in 2018.

Under the direction of TU, the Girl Scouts In the Heart of PA Council began instructor training in spring of 2018. The first program was held July 27-28, 2018, along the banks of Fishing Creek, Clinton County, at the Lock Haven University's Sieg Conference Center.



Fishing Tackle Loaner Program

Instants

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Eleven Girl Scouts and six leaders/parents attended. Participants learned about watersheds, healthy streams, aquatic organisms, stream flow, habitat, fly tying, fly fishing, art, community and partnerships. Several PFBC instructors from Spring Creek TU assisted with the fishing portion (16 helpers).

Based on the success of the pilot program, two additional STREAM Girls programs are planned for 2019 in southwestern Pennsylvania. The Allegheny Land Trust, Pennswoods West TU's Women Angler's group and Chestnut Ridge TU are partnering to implement the program. In southeast Pennsylvania, Stroud Water Research Center is partnering with several TU chapters to implement the program. In northcentral Pennsylvania, the PFBC and Spring Creek TU will work with local Girl Scout troops to implement the 2nd STREAM Girls program for the area.

Trout In the Classroom

The PFBC continues to grow new opportunities in the Trout In the Classroom (TIC) program. TIC is a joint interdisciplinary program that introduces coldwater conservation education in Pennsylvania schools by raising Brook Trout from eggs to fingerlings. It is a partnership between the PFBC, Pennsylvania Department of Education, Pennsylvania Council of TU, local TU chapters, schools and other local partners.

Each summer, the PFBC provides teachers with curriculum and training. TIC classrooms receive Brook Trout eggs from the PFBC's Benner Spring State Fish Hatchery in the fall, and fingerlings are released in April or May. Teachers use curriculum and materials, as well as a 55-gallon aquarium, to teach about fish ecology and management, and the value of protecting, conserving, and managing coldwater resources. The program helps foster awareness of coldwater conservation in students in grades 3-12 and encourages participation in coldwater resource projects and recreation programs.

The program continues to grow. For the 2017-2018 TIC school year, there were 355 TIC classrooms, representing 282 school districts across Pennsylvania. Nearly 40 percent of all public school districts in Pennsylvania and more than 41,000 students participated in TIC. In total, teachers received 73,000 viable eggs and released 25,000 fingerling Brook Trout. TIC subjects taught throughout the school year included fish ecology, habitat, watersheds, conservation, fish management and more. In 2017-2018, TIC teachers reported nearly 14,000 TIC teaching hours.

Water Rescue Training

The Commission certified 4,241 students through the Water Rescue Program, which meets or exceeds various levels (Awareness, Operations, Technician) of National Fire Protection Association (NFPA) 1670 Standards.

The Commission also conducted three Instructor Trainer Courses that certify individuals to deliver the PFBC Water Rescue Curriculum, so they can provide training to Commonwealth first responders. The Commission has a trained in-state volunteer instructor corps of 185 individuals who provided more than 12,800 hours of training in 2018. The PFBC's Water Rescue program is the largest of its kind in the United States.

The PFBC conducted 12 Swiftwater Volunteer Service Recognition Inspections in partnership with the Pennsylvania State Fire Academy and Pennsylvania Department of Health for Team Typing, bringing the total number of credentialed swiftwater teams in the Commonwealth to 38.

In July 2018, a full scale (FX) Pennsylvania Helicopter Aquatic Rescue Team (PA-HART) Wilderness Search & Rescue (SAR) exercise was conducted in Centre County near Spring Creek Canyon. The exercise consisted of an activation of the PFBC Swiftwater Emergency Response Team (SWERT), Special Medical Response Team (SMRT) and Volunteer Rescue Service Recognition (VRSR) Swiftwater Teams to be moved to an area impacted by a significant natural disaster. Assets and personnel were moved from the Pennsylvania Army National Guard (PAARNG) flight facilities at Fort Indiantown Gap and Johnstown. Training involved the combination of PA-HART, SWERT, SMRT, VRSR Swiftwater Teams, emergency medical and fire/rescue assets to search/rescue/triage/treat and evacuate severely injured victims from a mass casualty event.

The PFBC also participated in the International Association of Water Rescue Professionals Conference held in South Bend, IN, and presented information and instruction on the Commonwealth's Water Rescue Program.

Pennsylvania

Citations – 4,825 Crimes Codes – 54 Warnings for Violations – 32,967 On Board Safety – 27,194 Special Activities – 2,498 Venomous Snake Permits – 1,537 Commercial Snapping Turtle Permits – 31 Boating Safety Education Certificates Issued – 14,719 Water Rescue Certificates – 4,200 Pollutions Investigated – 148 Boating Under the Influence – 51 Lake Erie Commercial Permits –29

Boating Advisory Board

The Boating Advisory Board (BAB) advises the Commission regarding matters relating to boating, including recommendations with respect to proposed boating rules and regulations. The BAB's advice assists the Commission with establishing a boating program that ensures the safe and enjoyable operation of boats.

The BAB met by teleconference in June to discuss modernizing the fee schedule for seasonal boat slip usage at Walnut Creek Marina, Erie County. Based on rental rates at other marinas around Lake Erie with comparable facilities and amenities, the BAB carried a motion to recommend an increase for slip rates beginning in the 2019 season. Current rates were established in 2011.

At its July meeting, PFBC commissioners approved the slip fee increase. Fees for boats 23 feet in length or less were increased from \$725 to \$775 annually in 2019 and will be adjusted to \$800 annually in 2022 moving forward. Fees for boats 24 feet in length and above were increased from \$1,000 to \$1,025 annually.

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Emergency Response

Through an Emergency Management Assistance Compact (EMAC), members of PA-HART deployed to South Carolina to assist in rescue operations in the aftermath of Hurricane Florence. Members assisted local authorities with search and rescue operations before returning to the Commonwealth. The EMAC process allows states that have exhausted local resources to request assistance from other states. The requesting state reimburses expenses for any assets



that are deployed. Through this process affected states can get the help they need and responding states can help their neighbors in a time of crisis.

Pennsylvania has continued its effort providing for the citizens of the Commonwealth with support to the Helicopter Aquatic Rescue Team. In August 2018, the Commonwealth was inundated with rain and Fishing Creek in Benton, PA, suffered catastrophic flooding. PA-HART was activated and successfully rescued 23 individuals, 6 of the 23 were children, and 5 animals.

PA-HART is a joint partnership between PAARNG, the PFBC and Pennsylvania Emergency Management Agency along with civilian rescue specialists. This highly specialized aerial search and rescue team provides an air asset for the Commonwealth of Pennsylvania and the nation to respond to natural and manmade disasters incidents.

Erie Access Improvements

The steelhead fishery in Lake Erie and its tributaries is a popular destination for anglers and generates tremendous economic benefits to the region. Pennsylvania's Fishing and Boating Access Strategy ranks this watershed as the top priority for access improvement statewide. In 2018, the Commission took the following actions to improve public access to this important fishery.

- Approved the purchase of an easement on approximately 3,960 linear feet along Conneaut Creek in Spring Township, Crawford County, for \$50,000. The easement area is located off Fisher Road north of Conneautville, PA.
- Authorized a \$460,943 grant from the Erie Access Improvement Program to the Lake Erie Region Conservancy for the acquisition of two parcels of land located along Elk Creek in Girard Township, Erie County. These properties total approximately 180 acres and provide access to 6,325 linear feet of Elk Creek. The Lake Erie Region Conservancy applied for additional funding for the acquisition through the Pennsylvania Department of Conservation and Natural Resources. The Lake Erie Region Conservancy plans to acquire the property and transfer ownership to the PFBC. The properties are located off of Beckman Road near Interstate 90.
- Approved the fee simple acquisition of an 8.27-acre property with a house and several outbuildings along Crooked Creek in Springfield Township, Erie County, for \$176,500. The property provides access to approximately 1,300 linear feet along Crooked Creek. Once acquired, the Commission plans to subdivide the property and sell approximately 2.0 acres of land that will include the house and outbuildings. The Commission will retain the remaining 6.27 acres of land that includes the Crooked Creek frontage. The property is located at the intersection of Happy Valley Road and Lucas Road near East Springfield, PA.
- Approved the purchase of an easement on approximately 760 linear feet along Elk Creek in Fairview Township, Erie County, for \$11,500. The easement area is located off Luther Road downstream of the Route 98 bridge over Elk Creek.
- Approved the fee simple acquisition of an 8.0-acre property along Conneaut Creek in West Springfield Township, Erie County, for \$24,500. The property provides access to approximately 1,165 linear feet along Conneaut Creek. The property is located off Griffey Road near West Springfield, PA.
- Approved a \$85,000 grant from the Erie Access Improvement Program to North East Township for the design and construction of an Americans with Disabilities Act (ADA) accessible fishing pier on their property near the mouth of Twentymile Creek.
- Approved the purchase of an easement on approximately 4,960 linear feet along Sevenmile Creek in Harborcreek Township, Erie County, for \$105,000. The easement area is located along Sevenmile Creek off Route 5 east of Lawrence Park, PA.
- Approved the purchase of an easement on approximately 2,170 linear feet along Conneaut Creek in Spring Township, Crawford County, for \$30,000. The easement area is located off Tower Road north of Conneautville, PA.
- Approved the fee simple acquisition of two parcels of land totaling 3.59 acres with a house and having frontage along Walnut Creek in Fairview Township, Erie County, for \$560,000. The property provides access to approximately 360 linear feet of frontage on Walnut Creek. The Commission plans on selling the 1.18-acre parcel with the house and will retain the 2.41-acre parcel with the Walnut Creek frontage. The property is located off Manchester Road near Fairview, PA.
- Authorized a \$382,400 grant to the Erie Western Pennsylvania Port Authority to construct a 13-foot ADA accessible fishing platform at the end of the Holland Street Pier. The funding will be used for the final engineering and construction of the 130-foot cantilevered fishing platform. These improvements will complement work that was completed along the west slip of the pier and will make the entire area accessible to anglers including handicapped individuals.

Boating Accidents

Each year, on average, 700 people die in boating-related accidents nationwide. Nearly 80 percent of the victims were not wearing a life jacket.

Last year in Pennsylvania, there were 61 recreational boating accidents that resulted in 14 fatalities. Only three victims were wearing life jackets at the time of the accidents. Eight of the 14 victims were not wearing a life jacket but did have life jackets onboard the boat. Alcohol or drugs was believed to have been a factor in three of the fatal accidents.

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• Authorized a \$200,000 grant to the Western Pennsylvania Conservancy to stabilize the streambank and to construct habitat improvements on their property along Elk Creek. The project involves installing a stepped-stone bank bench along 600 feet of the eroding bank to reduce erosion and eight stone deflectors to provide habitat and to realign the stream to the center of the channel. In addition, the stepped-stone bank bench will provide a safe surface for anglers along this section of Elk Creek.

To date, the PFBC has acquired more than 25 miles of public fishing access in the Lake Erie Watershed through easements and land purchases under the Erie Access Improvement Program.

State Fish Hatchery Open Houses

An estimated 3,500 visitors attended the annual Open House at Linesville State Fish Hatchery, Crawford County, on April 7. This popular event is held on the first Saturday in April each year. Commission staff set trap nets for the annual Walleye spawn, explained the spawning process, and demonstrated how to fillet and cook fish. Children practiced their casting skills and created fish-print t-shirts. Displays and exhibits were also set up inside the hatchery.

In 2018, the PFBC expanded its efforts to educate the public about its expansive hatchery system. This included the successful launch of a pilot program, which utilizes hatchery grounds to conduct fishing instruction.

In September, PFBC staff collaborated with local schools and Spring Creek TU Fishing Skills Instructors to offer fishing education programs at PFBC's Bellefonte State Fish Hatchery settling ponds. The location provided easy access, minimal slipping hazard, and ample space for parking and casting lines. In addition, the Bellefonte settling ponds have no liners, and there were trout available on-site that were already slated for stocking. A total of 154 participants attended five programs held over five days geared towards local school students, women, families and veterans. Programs included fly fishing instruction, a Military Family Fishing Day and a Fish

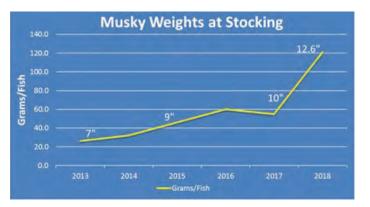


DWCO Michael Hoy presenting a First Fish certificate.

with a WCO event. Over 65 first fish certificates were awarded, and many participants inquired about future programs. Based on the success of the 2018 programs, the PFBC and Spring Creek TU are working on plans to conduct similar and potentially more programs in the fall of 2019.

Fish Production

Fish production and stocking had a great year in 2018. While the heavy rains made it difficult for anglers to fish the creeks, flow rates at hatcheries provided plenty of cool water for trout culture. Hatcheries met their goals and produced nearly 3 million adult trout averaging more than 11 inches and weighing ½ pound for spring fishing and 110,700 big ¾-pound trout for the fall and winter stockings. In addition, 38,500 trophy size trout were stocked in area waters and Keystone Select Stocked Trout Waters for anglers to enjoy. This was also a great year for steelhead and Brown Trout in the Lake Erie area. Returning fish were in high numbers for anglers, and the Linesville State Fish Hatchery stocked hundreds of large brood Brown Trout into Erie tributaries.



The Muskellunge stocking program moved forward with goals of stocking larger yearling Muskellunge in the spring rather than smaller fingerlings in the fall. Muskellunge fingerling sizes have continued to increase over the years due to improved culture and feeding methods, and the PFBC is now producing large yearlings (12" to 14"), which are also much heavier and will have higher survival rates once stocked in lakes and rivers. By focusing on lower numbers of high-quality, large, healthy yearlings, staff hope to achieve greater survival and growth to further improve Muskellunge fisheries. The PFBC is also producing bigger Largemouth Bass to improve their survival as the PFBC restock lakes that have been drained, repaired and refilled. While growing all bass to large sizes would be exciting, it is more efficient to grow high numbers of 1" to 2" fingerlings early in the summer and then use available pond space to rear more large fingerlings later in the year, which require more space and lower densities.

Cooperative Nurseries

Statewide, 144 volunteer sponsoring organizations and educational institutions operate 158 cooperative nurseries that stock nearly 1 million trout each year. Sponsor organizations receive fingerling trout from the PFBC sometime after May, feed and care for the fingerlings at their nurseries, and stock the trout as adults the following spring. The PFBC's Cooperative Nursery Unit (CNU) supports these volunteers in several ways, including coordinating requests and distribution of fingerlings from state fish hatcheries to the local nurseries, conducting routine nursery inspections, responding to nursery emergencies to diagnosing and treating sick fish, conducting regional training seminars, and providing technical guidance on a daily basis.

The cooperative nursery program is credited with supplying approximately 25% of the stocked trout in Pennsylvania. Most sponsors raise trout; however, five sponsors raise tiger muskellunge, Walleyes, Channel Catfish and Largemouth Bass. These fish are raised in various fish culture setups including indoor tanks, recirculating aquaculture systems and earthen ponds.

In 2018, the CNU approved two new cooperative nurseries, the Octorara High School-Octorara Nursery and the Butler Area School District-BMS Fisheries Program Nursery. These educational institutions will raise Rainbow Trout and Channel Catfish, respectively, in recirculating aquaculture systems as part of their educational programs. At the end of the school year, the fish raised will be stocked into local waterways for anglers to enjoy.

On October 19, 2018, the Adams County Fish & Game Association received 10,000 Brook Trout, 10,000 Rainbow Trout and 200 golden rainbow trout fingerlings from the Huntsdale State Fish Hatchery. This marked the first time since 2012 that this cooperative nursery was able to receive fingerling trout. Deteriorating infrastructure, in particular the failing intake pipe used to provide water to the nursery, prevented the Adams County Fish & Game Association from receiving fingerling trout. A partnership was established among Knouse Foods, Adams County Conservation District, Adams County Fish & Game Association and the PFBC to address the infrastructure needs at the nursery. PA Title 58 Oil and Gas Act 13 funds were used to replace the failing intake pipe and update electrical service to the nursery, which allowed for the Adams County Fish & Game Association to receive fingerling trout in 2018. These trout will be stocked for anglers to enjoy in the Adams County area in 2019.

Anadromous Fish Restoration

Each spring the PFBC's Anadromous Fish Restoration Unit (AFRU) cultures and releases millions of American Shad fry in attempts to restore the once prolific shad fisheries to the Commonwealth's rivers. In 2018, some 2.74 million American Shad fry between 20 and 30 days of age were released into the Susquehanna River Basin, with an additional 378,000 being released in the Lehigh and Schuylkill rivers. The AFRU also monitors adult spawning migrations each spring, tracking abundance, passage at fishways and the contribution of hatchery origin shad to the overall population. In 2018, shad passage and monitoring were hindered by prolonged high river flows; however, the 2018 adult abundance survey on the Delaware River was the fourth highest on record (between 1990 and 2018). Evaluation for hatchery contributions to overall river populations showed that hatchery shad comprised 39% of the Susquehanna River stock, 95% of the Schuylkill River stock and 8% of the Lehigh River stock. Despite the relatively low hatchery contribution to the Lehigh and Susquehanna river stocks observed in 2018, there has been no appreciable increase in abundance or population growth documented, further reinforcing the need for continued restoration efforts.

The AFRU also coordinates with several state and federal resource agencies and a hydroelectric company to restore American Eels to the Susquehanna River. In 2018, more than 72,000 American Eel elvers were collected from the Susquehanna River below Conowingo Dam and transported to the Harrisburg area of the river.

Quality Water and Fish Health

The Division of Fish Production Services continued to assist the PFBC's state fish hatcheries on topics such as National Pollutant Discharge Elimination System (NPDES) permit issues, flow data management, fish health and fish marking.

The agency's Water Quality Laboratory (WQL) processed about 4,000 samples last year to keep all PFBC State Fish Hatcheries in compliance with their NPDES permits. The WQL also maintained its annual DEP Lab Accreditation, which permits staff in the WQL to analyze water quality parameters for the PFBC hatcheries.

The Fish Health Unit (FHU) conducted inspections of all the PFBC state fish hatcheries to help maintain high standards of fish health. The FHU has also been involved in the research of Largemouth Bass Virus found in Smallmouth Bass in the Susquehanna River watershed. Staff from the FHU in collaboration with Michigan State University published a paper on March 2, 2018 titled, *Laboratory investigation into the role of largemouth bass virus (Ranavirus, Iridoviridae) in smallmouth bass mortality events in the Pennsylvania rivers.*

INTERNAL RESOURCES

PALS Upgrade

The current PALS has been used to sell fishing and hunting licenses to anglers and hunters for more than 11 years. While the system has worked for the past decade, it is extremely limited in its capabilities and what it offers fishing and hunting enthusiasts. The PFBC and the Pennsylvania Game Commission invested significant amount of time in 2018 on a multi-year upgrade to the Commonwealth's current PALS system.

Once selected, the awarded vendor will upgrade and modernize the license sales process and provide better program and catalog management through the deployment of a modern, configurable, and scalable electronic web based Point of Sale (POS) license sales system that offers program management reports, financial processing, help desk support, agent supply, hardware support, training, system operations, mobile strategy, and application maintenance and support.

The Commissions will replace and upgrade the current electronic-based licensing system with one that uses industry best practices and contemporary and emerging technology. Pennsylvania is one of the top-tier fishing states in the country, but the current legacy

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licensing system is cumbersome and difficult to maintain and support. The new PALS system will be a user-friendly system that will streamline the license application and purchase process for customers, facilitate auditing and reporting for agents, and provide new and dynamic electronic functionality to assist Commission support staff in monitoring license administration. It will also enable the users to manage their accounts, sign-up for e-mails, search the PALS database for licenses and replace lost or damaged licenses.

The data from the PALS system will enable the PFBC to monitor license sales, create strategic business plans based on trend analysis and develop marketing plans based on more accurate customer demographics. The goal is to have the new system fully operational by early 2019.

FishBoatPA Mobile App Popularity Grows

More than 121,000 users have now downloaded the Commission's mobile smartphone application—called FishBoatPA. In 2018, the PFBC again saw growth in the number of users. The FishBoatPA app is available for free on both Google's Play Store and Apple's App Store.

Staff Development

The PFBC continued to offer useful training opportunities to its staff. Some trainings were conducted in-house, and some

used experts from outside the agency. Training topics included supervisory development, sexual harassment, labor relations, employee performance reviews, hiring process, State Employees Assistance Program, drug free workplace, CPR, first aid and fitness for duty. Special training sessions were dedicated to specific groups of staff including hatchery foremen and managers and law enforcement supervisors and managers.

Leadership Development

The Commission again took advantage of leadership development opportunities offered to state government employees by the Office of Administration. Brian Niewinski, from the

Bureau of Hatcheries, graduated from the Commonwealth's Leadership Development Program. Gisele Klimovsky, from the Bureau of Outreach, Education and Marketing, graduated from the Commonwealth's Emerging Leaders program.

Both programs require a commitment on the part of the employee and their supervisor to invest the necessary time and attention to get the most out of the training to help develop the staff member's skill set and prepare them for new challenges.

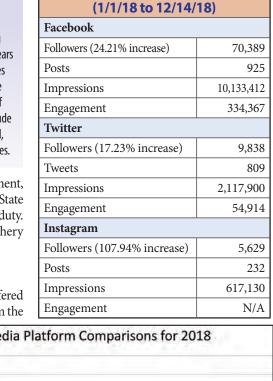
Recognition and Awards

The Commission maintained its commitment to acknowledge the exemplary work done by its staff and volunteers. In addition to congratulating employees on

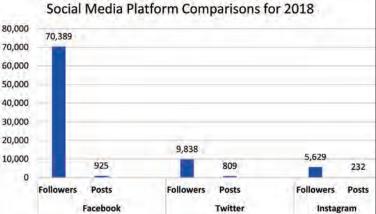
years of service to the agency and offering anyone the opportunity to praise an employee though the Fishing Hole, the Commission formally recognized several individuals in 2018. The following are some of the people and programs who received commendation in the past year.

Wave of Excellence Award

The Wave of Excellence award is an opportunity for PFBC employees to nominate one of their own for extraordinary workplace contributions. This award is for employees who have gone above and beyond the call of duty in performing their work or who have provided extraordinary customer service Among the many features on social media were videos and photos from hatcheries showing how the PFBC spawns, rears and stocks various species of fish. The PFBC YouTube channel contains most of these videos, which include some on trout, steelhead, Muskellunge and Walleyes.



Social Media 2018





Pictured are (left to right) Commissioner Rocco S. Ali, Valerie Groetzinger, former Executive Director John A. Arway and Colonel Corey L. Britcher.



Pictured are (left to right) Commissioner Rocco S. Ali, former Executive Director John A. Arway, WCO Tolbert's parents, Richard and Verity Tolbert, Scott Fedei and Colonel Corey L. Britcher.

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for the good of the agency. Winners of the award in 2018 were Val Groetzinger, Bureau of Administration, and WCO Brook Tolbert, Bureau of Law Enforcement, who was presented the award posthumously after losing his battle with cancer. Tolbert was also the Commission's 2012 Waterways Conservation Officer of the Year.

Law Enforcement Awards

In 2018, the Commission recognized several officers for their outstanding work. WCO Jacob Bennett received the Bureau of Law Enforcement's Top Gun award for his boating-under-theinfluence enforcement efforts on the Susquehanna River and Northcentral Region. WCO Troy Merrell was recognized with the Greiner Award for his environmental work in the Southeast Region. Pictured are (left to right) WCO Matt Raetsch was awarded with the North Commissioner Rocco S. Ali, WCO East Conservation Law Enforcement Association's Merrell and former Executive Director Officer of the Year award for his well-rounded John A. Arway. efforts within the Southwest Region.





Pictured are (left to right) Commissioner Rocco S. Ali, WCO Raetsch and former Executive Director John A. Arway.

The Commission also recognized several officers for their lifesaving efforts throughout the Commonwealth. WCOs Raetsch, Johnson and Morder exemplified the "always ready" spirit of the Bureau of Law Enforcement and should be proud of their efforts.

Dam Safety Improvements

- Beechwood Lake Dam, Tioga County PFBC, in partnership with Natural Resources Conservation Service, completed preliminary geotechnical and hydraulic studies for the dam rehabilitation project.
- Belmont Lake Dam and Lower Woods Dam, Wayne County The consulting engineers have submitted the design development submission, and the project is approximately 60% complete.
- Lower Woods Dam The design of the Lower Woods Rehabilitation project is approximately 95% complete. The Dam Safety Permit was submitted to the DEP's Division of Dam Safety for review.
- Children's Lake, Cumberland County The Department of General Services successfully advertised and awarded the design contract to Ground Technology, Inc. The Children's Lake Rehabilitation Project design commenced in October 2018.
- Donegal Lake Dam, Westmoreland County The Department of General Services successfully bid and awarded the construction contract to KC Construction Company. Construction of the Donegal Lake Rehabilitation Project commenced in September 2018 and is anticipated to be complete in fall 2019.
- Kahle Lake, Clarion and Venango counties PFBC engineering staff continued to monitor seepage in the auxiliary spillway while maintaining the reservoir at a reduced pool elevation. Engineering staff obtained permits for the installation of boat launch ramp extensions.
- Kyle Lake Dam, Jefferson County The Department of General Services successfully bid and awarded the construction contract to KC Construction Company. Construction of the Kyle Lake Rehabilitation Project commenced in October 2018 and is anticipated to be complete in fall 2019.
- Meadow Grounds Lake Dam, Fulton County Dam Safety Permit was submitted to DEP for approval. DEP conducted technical review and submitted questions and comments. Staff assisted the Friends of Meadow Grounds lake in the development of plans and specifications for a new ADA accessible fishing pier, boarding dock and launch ramp.
- Minsi Lake Dam, Northampton County The Department of General Services successfully bid and awarded the construction contract to KC Construction Company. The Minsi Lake Rehabilitation Project commenced in December 2018 and is anticipated to be complete in fall 2019.
- · Somerset Lake Dam, Somerset County Dam Safety Permit was submitted to DEP for approval. DEP conducted technical review and submitted questions and comments.
- Tamarack A&B Dams, Crawford County Thomas Construction Company worked through winter 2018 to substantially complete the Tamarack Lake Rehabilitation Project in December 2018. The project was managed by the Department of General Services and inspected by the GAI Consultants Inc. Refilling of the reservoir will commence upon completion of the project in spring 2019.
- White Oak Pond Dam and Miller Pond Dam, Wayne County Consulting engineers completed topographic surveying, geotechnical drilling and began design of the new dam structures. The design of the new structures are approximately 30% complete. Construction staff repaired a bulge in a section of a stone masonry wall on the downstream slope of the dam in December 2018.
- High Point Lake Dam, Somerset County Engineering staff submitted permitting drawings and specifications to the DEP Division of Dam Safety for the installation of new aluminum stoplogs and a new stainless-steel sluice gate within the dam's control tower. In consultation with Ground Technology, Inc., engineering staff completed an auxiliary spillway integrity evaluation of the spillway concrete slabs and crushed stone underdrain system.

2018 Annual Report.

- Hunters Lake Dam, Sullivan County In consultation with Gannet Fleming, engineering staff completed a dam embankment stability
 analysis of the dam's earthen embankment.
- Stevens Lake Dam, Carbon County In consultation with Michael Baker International, engineering staff completed a hydraulic and hydrologic analysis, and improved the downstream inundation maps.
- Fords Lake Dam, Lackawanna County In consultation with Michael Baker International, engineering staff completed a hydraulic and hydrologic analysis, and improved the downstream inundation maps.

Access Area and Marina Improvements

- Frenchville Access Area, Clearfield County PFBC engineering and construction staff completed the design, permitting and construction of an improved entrance road, boat launch ramp and parking lot. This project will improve access to the West Branch of the Susquehanna River.
- Northeast Marina, Erie County Engineering and construction staff completed the design, construction and installation of an effluent waste water monitoring system. The new system will help monitor the quality of the waste water to ensure it complies with the facility NPDES waste water discharge permit.
- Colyer Lake, Centre County Engineering and construction staff are currently constructing a water quality improvement project that will treat Colyer Lake influent water. This project will increase the overall water quality within the lake and make for a better lake fishery.

Hatcheries and Facilities

- Pleasant Mount State Fish Hatchery, Wayne County Carpentry Staff successfully replaced numerous existing single pane windows with new double pane energy efficient windows in the visitor's center. This project will improve the overall energy efficiency of the building.
- Hunstdale State Fish Hatchery, Cumberland County In cooperation with the Department of General Services Job Ordered Contractor, the existing deteriorated corrugated metal pipes that conveyed water under Lebo Road were replaced with reinforced concrete pipes.
- Linesville State Fish Hatchery, Crawford County Engineering and electricians began the construction of an electrical improvement project that will include the replacement of existing overhead electrical lines with an underground service line. The project also includes the in-kind replacement of exiting electrical infrastructure that support critical water supply systems.
- Reynoldsdale State Fish Hatchery, Bedford County Engineering and construction staff successfully installed an improved wye strainer to replace an existing strainer that had become ineffective. The project will increase the efficiency of raceway cleaning operations and improve hatchery staff safety.

Bristol Dock Project Honored with National Award

A project funded through the federal Boating Infrastructure Grant (BIG) program administered by the PFBC has been named an 'Outstanding Project' by the States Organization for Boating Access (SOBA).

At its recent conference held in Duluth, Minnesota, SOBA recognized Bristol Borough, Bucks County, for its grant-funded addition of transient day-docks along its riverfront. The pair of floating concrete docks completed in 2017 provide a safe and convenient mooring area for operators of large boats on the Delaware River who wish to tie-up and visit the shops, restaurants and attractions in historic downtown Bristol. The docks can accommodate up to 25 boats at a time.

A total of \$1,592,000 of the \$3 million project was awarded through a Tier 2 BIG grant in 2013, following a highly competitive process in which Bristol contended against other boating infrastructure projects across the country. The federal grant program is administered in Pennsylvania by the PFBC in cooperation with the United States Department of Interior's Fish and Wildlife Service.

The BIG program provides grants for transient moorage (tie-ups) serving recreational motorboats 26 feet and longer. Grants may be awarded to public and private operators of open-to-the-public boating facilities, municipal and state agencies, and other government entities.

Cooperation with Local EMS Agencies at High Point Lake Dam

In September, the PFBC in cooperation with county and local emergency officials announced successful efforts to remediate a partial failure at the High Point Lake Dam, Somerset County. On September 4, the PFBC discovered excessive discharge coming from the dam's principal spillway structure, which was later determined to be the result of broken stoplogs within the control tower. Initial concerns over the safety of downstream residents prompted the issuance of an emergency action plan through the Somerset County Emergency Management Agency (EMA) and a 24/7 monitoring of the dam by PFBC engineers. It was quickly determined that while excess water was exiting the dam, it was exiting as designed through a designated discharge pipe, and there was never any imminent threat of flooding in downstream waterways including Glade Run, McClintock Run and the Casselman River.

News releases were issued frequently by PFBC communications staff and distributed to the regional media to keep the public informed. On September 24, a diver placed a steel bulkhead over the dam's principal spillway intake pipe to prevent excess water from exiting the dam, and discharge was rerouted to the dam's auxiliary spillway. Equipment and support during this process was provided by Somerset County EMA, Cambria County EMA and Fayette County EMA. Through these partnerships, initial repairs to the dam were able to be performed with minimal drawdown of the lake, and the lake remained open to public fishing and boating. A full repair of the dam is expected to be completed in 2019.

Fiscal Year 2017-2018 Report

as of November 30, 2018 (unaudited)

EXPENDITURES

Fish Fund

Personnel	\$26,518,757
Operating	\$9,549,132
Fixed Assets	\$717,196
Grants	\$837,841
Fish Fund Total	\$37,622,926

Boat Fund

Personnel	\$9,900,993
Operating	\$3,199,558
Fixed Assets	\$1,023,658
Grants	\$226,329
Boat Fund Total	\$14,350,538

Fish Fund & Boat Fund Total

Personnel	\$36,419,750
Operating	\$12,748,690
Fixed Assets	\$1,740,854
Grants	\$1,064,170
Fish & Boat Fund Total	\$51,973,464

Fiscal Year 2017-2018 Report

as of December 31, 2018 (unaudited)

REVENUE

Fish Fund	
Licenses & Fees	\$25,789,437
Fines & Penalties	\$363,532
Miscellaneous	\$4,013,457
Federal & State Grants	\$7,892,918
Fish Fund Total	\$38,059,344

Boat Fund

Licenses & Fees	\$8,107,191
Fines & Penalties	\$260,624
Miscellaneous ⁽¹⁾	\$3,657,592
Federal & State Grants	\$5,354,576
Boat Fund Total	\$17,379,983

Fish Fund & Boat Fund Total

Licenses & Fees	\$33,896,628
Fines & Penalties	\$624,156
Miscellaneous	\$7,671,049
Federal & State Grants	\$13,247,494
Fish & Boat Fund Total	\$55,439,327

⁽¹⁾ Fiscal year 2017-18 Boat Fund revenue adjusted by \$2,475,677 to reflect the receipt of the 2017-18 state liquid fuels taxes paid into the boat fund that were actually received during the 2016-17 fiscal year.

Trout Stocked and Distributed to Cooperative Nurseries

Trout Species	Lifestage	Amount
Brook Trout	Adult	621,710
	Fingerling	79,000
	Fingerling to Coops.	244,300
Brown Trout	Adult	1,020,417
	Fingerling	281,585
	Fingerling to Coops.	270,000
Rainbow Trout	Adult	1,451,936
	Fingerling	423,335
	Fingerling to Coops.	320,545
Golden Rainbow Trout	Adult	9,920
	Fingerling to Coops.	9,947
Total Trout Species		4,732,695

2018 Cooperative Nursery 50 Year Award Certificates

- Blain Sportsmen Association
- Community Fish & Game Association
- Millerstown Sportsmen Association
- Shippensburg Fly Fishing Club

Warmwater/Coolwater Fish Production and Stocking

SpeciesLitestageAmountAmerican ShadFry2,641,518Black CrappieFingerling20,400BluegillFingerling40,386Brown BullheadFingerling27,600Brown Trout - ErieYearling27,155Chain PickerelFingerling2,758Channel CatfishFingerling160,530Channel CatfishYearling2,600Fathead MinnowAdult39,998Golden ShinerFingerling16,050Lake TroutFingerling16,050Lake TroutYearling5,046Largemouth BassFingerling5,694MuskellungeFingerling2,770Rainbow Trout-SteelheadYearling3,575Northern PikeFingerling2,770Rainbow Trout-SteelheadYearling31,149Striped BassFingerling31,238Tiger MuskellungeFingerling31,238Tiger MuskellungeFingerling75WalleyeFingerling1,139,358White CrappieFingerling1,139,358White CrappieFingerling22,200	Grand Total of all Species		50,420,527
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	Species	Lifestage	Amount

2018 Website Statistics

Top Ten Pages by Page View

- 1. Home Page=73,286
- 2. Trout Stocking Schedules=72,911
- 3. Buy a License=30,110
- 4. Trout Season Overview=19,609
- 5. Register/Title a Boat=17,153
- 6. Gone Fishing PA=15,570
- 7. Best Fishing Waters=13,061
- 8. FAQ - Fishing Licenses=10,876
- Trout PA Fishes=10,595 9.
- 10. Fishing Regulations=9,575

Total Web Page Visits 2,180,681

Web Page Visits by State

Pennsylvania=1,539,774 New York=117,603 District of Columbia=98,794 New Jersey=83,094 Ohio=45,430 Michigan=34,309 Maryland=26,750 Virginia=24,007 Florida=13,327 California=11,629



Region Offices

Online Summary Book: www.fishinpa.com

To purchase fishing licenses online: www.GoneFishingPa.com



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

FOR MORE INFORMATION:

HEADQUARTERS-HARRISBURG CENTRE REGION OFFICE 1601 Elmerton Avenue P.O. Box 67000 Harrisburg, PA 17106 Phone: (717) 705-7800 Hours: 8:00 a.m. - 4:00 p.m. Monday through Friday

www.fishandboat.com

WEBSITE:

595 East Rolling Ridge Drive Bellefonte, PA 16823 Phone: (814) 359-5124 Hours: 8:00 a.m. - 4:00 p.m. Monday through Friday

BOATING SAFETY EDUCATION COURSES Phone: (888) 723-4741

FISHING LICENSES: Phone: (877) 707-4085

BOAT REGISTRATION/TITLING: Phone: (866) 262-8734

PUBLICATIONS: Phone: (717) 705-7835

REGION OFFICES: LAW ENFORCEMENT/EDUCATION

Contact Law Enforcement for information about regulations and fishing and boating opportunities. Contact Education for information about fishing and boating programs and boating safety education.

NORTHWEST REGION 11528 SH 98, Meadville, PA 16335 Outreach & Education: Law Enforcement: (814) 337-0444 (814) 336-2426 Fax (814) 337-0579 Fax (814) 337-0579 Counties: Butler, Clarion, Crawford, Erie, Forest, Lawrence, Mercer, Venango, Warren

SOUTHWEST REGION

236 Lake Road, Somerset, PA 15501 Law Enforcement: **Outreach & Education:** (814) 445-8974 (814) 443-9841 Fax (814) 445-3497 Fax (814) 445-3497 Counties: Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland

NORTHCENTRAL REGION

595 East Rolling Ridge Drive Bellefonte, PA 16823 Law Enforcement: Outreach & Education: (814) 359-5250 (814) 359-5127 Fax (814) 359-5254 Fax (814) 359-5153 Counties: Cameron, Centre, Clearfield, Clinton, Elk, Jefferson, Lycoming, McKean, Montour, Northumberland, Potter, Snyder, Tioga, Union

SOUTHCENTRAL REGION

1704 Pine Road, Newville, PA 17241 Outreach & Education: Law Enforcement: (717) 486-7087 (717) 486-7352 Fax (717) 486-8227 Fax (717) 486-8227 Counties: Adams, Bedford, Blair, Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lebanon, Mifflin, Perry, York

NORTHEAST REGION

5566 Main Road, Sweet Valley, PA 18656 Law Enforcement: **Outreach & Education:** (570) 477-5717 (570) 477-2206 (570) 477-3221 Fax (570) 477-3221 Counties: Bradford, Carbon, Columbia, Lackawanna, Luzerne, Monroe, Pike, Sullivan, Susquehanna, Wayne, Wyoming

SOUTHEAST REGION

P.O. Box 9, Elm, PA 17521 Law Enforcement: Outreach & Education: (215) 968-3631 (717) 626-0228 (717) 626-0486 Fax (215) 968-1610 Counties: Berks, Bucks, Chester, Delaware, Lancaster, Lehigh, Montgomery, Northampton, Philadelphia, Schuylkill

Office hours from 8:00 a.m. to 4:00 p.m., Monday through Friday

STATE FISH HATCHERIES

BELLEFONTE*

1115 Spring Creek Road Bellefonte, PA 16823 (814) 355-3371

CORRY*

13365 Route 6 Corry, PA 16407 (814) 664-2122

FAIRVIEW 2000 Lohrer Road

Fairview, PA 16415 (814) 474-1514

BENNER SPRING 1735 Shiloh Road State College, PA 16801 (814) 355-4837

HUNTSDALE* 195 Lebo Road Carlisle, PA 17013

(717) 486-3419

LINESVILLE* 13300 Hartstown Road Linesville, PA 16424 (814) 683-4451

OSWAYO* 96 State Route 244 East Coudersport, PA 16915 (814) 698-2102

PLEASANT GAP* 450 Robinson Lane Bellefonte, PA 16823 (814) 359-5132

PLEASANT MOUNT* 229 Great Bend Turnpike Pleasant Mount, PA 18453 (570) 448-2101

* Includes visitor center. Visitors are welcome from 8:00 a.m. to 3:30 p.m. daily. Groups should make advance arrangements.

REYNOLDSDALE* 162 Fish Hatchery Road New Paris, PA 15554 (814) 839-2211 TIONESTA*

172 Fish Hatchery Lane Tionesta, PA 16353 (814) 755-3524

TYLERSVILLE 43 Hatchery Lane Loganton, PA 17747 (570) 725-3965

UNION CITY 9450 Route 6 Union City, PA 16438 (814) 438-2222

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