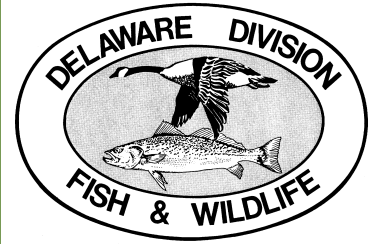


Tournament News



We Bring You Delaware's Great Outdoors
through Science and Service

Fisheries Section Updates

Winter 2017-2018

It's hard to believe that 2017 is gone and the 2018 fishing season is here! It was a super busy year for us and this newsletter will bring you up to speed on bass related activities. Last year we posted the tournament schedule on the Division's Large-mouth Bass page, hopefully this was helpful. The reports we receive yield really useful information (page 4), so please keep sending them. Also, don't forget to submit a permit application. If I can facilitate this in any way, just let me know!

Sincerely,
Edna

<http://de.gov/lmbtourney>



D. Raver

Fisheries Technician Position Filled:

Michael Steiger is now the Fisheries Technician that is working on freshwater and anadromous fish species projects. He's been with the Division for 4 years working primarily on marine projects but he has a strong background in fish pond management, aquatic vegetation control and is an avid angler. I'm really happy he's part of my team! If you see Mike out in the field, stop by and say hello.

Congratulations to members of **Delaware B.A.S.S. Nation** and **Delaware BASS Federation** for receiving the 2017 '**Volunteer of the Year**' award from the Division of Fish and Wildlife. Anglers associated with these two groups have contributed to the Division's freshwater fisheries management program through their service or funds for many years. Their efforts have assisted the Division with reaching project goals related to improving fish habitat and managing the tidal Largemouth Bass recreational fishery. The Division looks forward to a continued partnership with these dedicated stewards!

Representatives from both groups were present at the Division's annual meeting to receive the award. Pictured from left to right: Bobby Smith, Jason Muir, Bob Chango, Dave Saveikis (Division of Fish and Wildlife Director), Jay Wimbrow II, and Ron Horton.



CONTACT INFORMATION:

Tournament Reports

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Tournament permits

- Angela Dula, 302-739-9913
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Fish & Wildlife Enforcement

- New Castle/Kent County
302-739-6139
- Sussex County
302-855-1901

Report Violations

- 302-739-4580
- 1-800-523-3336

24-hour Enforcement Number:

- 1-800-662-8802

Operation Game Theft:

- 1-800-292-3030

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State Pond Sampling 2017

The Division of Fish and Wildlife conducts fish community sampling via electrofishing at 6-8 State-owned ponds per year. Each Pond is sampled about once very five years. Population characteristics of each species are evaluated to determine if there is a balance between the populations. The results of the sampling are compared with the historical values for that pond to detect trends in abundance and condition. Ideally, the fish community will have a moderately dense population of predators (i.e. bass) and adequate prey (sunnies primarily) represented by a variety of size groups. If some size groups are overabundant, competition for resources can lead to poor growth and condition. Gaps in size distribution can indicate variable spawning and recruitment. These factors, along with habitat conditions (water quality, adequate shelter, % aquatic vegetation etc.) and angling pressure are evaluated to determine if management actions (stocking, culling, habitat improvements, size/creel limits, etc.) are necessary.

<u>Pond</u>	<u>Catch Rate: Bass/Hr</u>	<u>*PSD</u>	<u>**RSD-P</u>	<u>#Average Relative Weight</u>	<u>Comments:</u>
Andrews Lake	88.9	46.2	15.4	97.9	Abundant bass population with a good ratio of quality and preferred size fish. Catch rate increased from sampling in 2012 (74.7 bass/hr). The panfish population is diverse and abundant, with a good proportion of Bluegill $\geq 8"$.
Coursey Pond	45.9	44.4	14.8	91.3	Bass catch rates increased from 2012 sampling (34.6 bass/hr) with sub-legal size bass (8-12") the most abundant size group. Bluegill are the most abundant panfish although few are $\geq 7"$. Black Crappie occur in a variety of sizes, but most are $\leq 8"$. The White Perch population declined to a more manageable level.
Ingrams Pond	36.0	62.5	25.0	96.1	A low density bass population. Although 2017 abundance was lower than that observed in 2012 (62.9 bass/hr), the proportion of quality and preferred size bass improved; gaps in size distribution indicated sporadic spawning and recruitment; average relative weight of bass was good overall, but low for several size groups; most panfish species also declined in abundance, with the exception of Yellow Perch.
McGinnis Pond	81.5	83.9	26.8	101.3	The bass population is abundant and declined from 2012 (118.1 bass/hr) to a more manageable level. Bass 12-15" were the most numerous size group and relative weights were good for most. A variety of panfish species occur although abundance of all species decreased since 2012, possibly cropped by the abundant bass population.
Portsville Pond	42.0	70.0	20.0	90.4	Bass abundance declined from 2012 sampling (83.5 bass/hr) but numerous bass were observed 'holding' to open water stumps or out of the reach of sampling gear. The proportion of larger bass ($\geq 15"$) increased markedly and schools of bass fry were observed; the abundance of Bluegill and Black Crappie increased although mean size decreased; Redear Sunfish were fairly abundant including some large individuals ($\geq 8.5"$)
Tussock Pond	40.2	28.6	14.3	98.8	Bass abundance increased since sampling in 2012 (32.5 bass/hr) and numerous schools of bass fry were observed; the population is dominated by 8-12" bass; gaps in size distribution indicate sporadic spawning and recruitment; Bluegill are abundant and should provide good forage; other panfish species (i.e. Black Crappie and Pumpkinseed) were not abundant.

***PSD** Proportional Stock Distribution: the proportion of quality size bass ($\geq 12"$), target values for moderate densities of bass are between 40-70

****RSD-P** Relative Stock Distribution-Preferred: the proportion of preferred size bass ($\geq 15"$), target values for moderate densities are 10-40

#Avg Relative Weight: measure of condition ('plumpness'); target value is ≥ 90 ; values < 90 indicate issues w/density, feeding or other factors

Tidal Largemouth Bass Sampling 2017

In accordance with the Tidal Largemouth Bass Management Plan, the Broadkill and St. Jones River bass populations were evaluated in the fall of 2017 via electrofishing. All bass that were collected were measured, weighed and inspected prior to release. The data was used to assess abundance, condition, and size structure of the populations.

BROADKILL RIVER

The area of the river that is typically electrofished extends from the boat ramp in Milton downstream to the overhead power lines, although the extent of freshwater habitat in this river system varies with precipitation and tide. Extreme high tides during late September delayed sampling into October, but water temperatures remained stable. Abundance, measured as catch per unit of electrofishing effort (CPUE), was 60.3 bass/hour, nearly triple the CPUE from 2016. Abundance was also evaluated via a mark-recapture study of bass $\geq 6"$ (150mm) which revealed an estimated population size of 1,097 bass (with a range of 323-1,994 bass, 95%CI). This was also a marked increase from the 2016 estimate (81 bass with a range of 24-146 bass, 95% CI). The proportion of quality size and preferred size bass were within the target range for a moderately dense population. A range of sizes were observed, but 8-12" bass were the most numerous. Coincidentally, average relative weights for bass in this size group was below 90, indicating potential issues with foraging. This could be a factor of competition within the population but also competition with other species. There is a diverse suite of fish species in this river. The occurrence of Striped Bass (and Striped Mullet) throughout the freshwater section of the river also illustrate the estuarine influence on this bass population.



Bass were marked with a hole punch in the caudal fin to identify recaptures during the mark-recapture study

ST. JONES RIVER

The river is typically electrofished from the bridge over Martin Luther King Jr Blvd (MLKB) in Dover, downstream to the US Route 13 bridge. However, the extent of freshwater habitat in the sampling area varies, and the conductivity/salinity was too high until early November to operate the electrofishing unit. By this time the water temperature dropped to 61°F, although it was still comparable to temperatures during the previous evaluation of the population in 2005. A tagging study was initiated but too few bass were collected to complete it. The CPUE in 2017 (17.4 bass/hour) was quite a bit low compared to that observed in 2005 (52.9 bass/hr). Although abundance was low, the proportion of quality size and preferred size bass was within the target range and average relative weights were good for all size groups. As noted in 2005, the majority of bass were concentrated in the section of the sampling area that occurs immediately upstream of the Route 13 bridge. Very few bass were observed between this area and the bridge at MLKB, despite the preponderance of in-water structure and deadfalls along the bank. Poor water quality (primarily low dissolved oxygen) may play a role in the distribution of bass in the upper section of the sampling area. Because bass occur both upstream and downstream of this area, poor water quality may act as a 'barrier' at times to bass movement between the two sections of the river, but further study is needed.

Largemouth Bass Contaminant and Pathogen Testing 2017

Forensics grade monitoring of water, sediment, and fish in the Nanticoke River system was conducted by staff with DNREC's Watershed Assessment Section to test for contaminants such as PCBs, dioxin, and mercury. The Division of Fish and Wildlife assisted with the project by collecting 25 Largemouth Bass from various locations within the river system to establish fish consumption advisories for the river (contaminant results will be available in the spring of 2018). These same fish were utilized for routine Largemouth Bass Virus (LMBV) testing. Test results revealed that 15% of the bass were positive for LMBV. Similar findings have been noted in Maryland waters, including the Choptank River where most bass tested positive. The majority of bass can live with LMBV and not exhibit symptoms or become ill, however, stress can trigger the disease. No fish kills have been attributed to LMBV in DE waters and no evidence exists that LMBV has caused long-term problems or impacts to the fishery, although this is still being studied. To prevent potential effects from the virus, it is important for anglers to clean their live wells, boats, and equipment after each fishing excursion. LMBV is a naturally occurring virus that has not been detected in warm-blooded animals, including humans. The majority of LMBV positive fish have no visible signs and research has shown infected fish can be safely handled and eaten if cooked properly, but as with any fish species, dead or dying fish should not be consumed. At present, there is no known cure or measures that can be taken to eradicate the disease in the wild, thus preventing the spread of this virus is key. More information is available in a fact sheet put together by Bassmasters, at: <https://www.bassmaster.com/news/largemouth-bass-virus-lmbv-fact-sheet>

2016 Tournament Activity

Reports were received for 91% of the Largemouth Bass tournaments that were scheduled for 2016. Tournament activity in 2016 was higher than the long-term average with a combined non-tidal and tidal water total of 97 events and 11,811 angling hours. Increased tournament activity has been a trend in recent years. The Nanticoke River system was the most popular location for bass tournaments with 31 events and 6,466 angling hours reported. Lums Pond, Millsboro Pond, Chipman Pond, Killens Pond and Trap Pond were the most popular non-tidal tournament locations based on the number of tournaments. Mean weight (lbs) of bass weighed-in during tournaments was calculated by location and season. Mean weights were highest at Garrisons Lake (2.74 lbs), Millsboro Pond (2.31 lbs), Lums Pond (2.03) and Records Pond (2.03). The largest tournament-caught bass was from Lums Pond (7.45 lbs). Twenty-four bass over 5 lbs were caught with the majority from Millsboro Pond (n=6), Trap Pond (n=5), Garrisons Lake (n=4), and Lums Pond (n=4). Reported immediate mortality of tournament caught bass was low overall (0.97%), however, mortality data was not provided in all of the tournament reports. Reported immediate mortality was highest during the summer for tournaments held in tidal waters (2.05%). Data collected from the 2016 tournament fishing season was useful for identifying areas that received the most fishing pressure, demonstrating the value of healthy bass populations to tournament anglers, and highlighting the need for continued active management of Delaware's ponds and tidal freshwater areas.

2018 Angler Mail and Creel Surveys

Every five years the Division of Fish and Wildlife conducts a mail survey of anglers that freshwater fish in Delaware. A percentage of resident and non-resident anglers will receive a survey in the mail in the fall of 2018 inquiring about their 2018 catch and effort in Delaware's freshwater fishing areas. If you receive a survey please fill it out and send it back. The Division will also be conducting random on-site creel surveys throughout the year in freshwater areas to validate the mail survey and to obtain additional information. We really value the information that we receive and are looking forward to meeting anglers and chatting about their fishing experiences.

Important Tournament Procedure Notes

➔ It is illegal in Delaware to stock public ponds without a permit (a permit specific to stocking) from the Director of the Division of Fish and Wildlife. This law applies to fishing tournaments held at multiple pond locations. Regardless of where the weigh-in is held, bass must be released at the pond in which they were caught. The only bass that should be released at the pond where the weigh-in is held, are the bass caught at that particular pond. The goal is to have balanced bass populations and this type of random, unauthorized stocking can have negative impacts on the populations.

➔ Many Tournament organizers smartly incorporate the use of weigh bags to hold bass while anglers wait to weigh-in. This reduces stress and helps to maintain the slime coat which could contribute to post-tournament survivability if used correctly. I've been to tournaments where the weigh bags were used but **no water** was put in them! This completely defeats the purpose—so please take the time to put some river /pond water into the bag!

Kudos to Tidal Patterns Bass Club

A HUGE thank you to **TIDAL PATTERNS** for allowing the Division to collect bass that were caught during their April 9, 2017 tournament on Broad Creek. The bass were in great shape and were used as brood stock for the fingerling stocking program. After spawning at the aquaculture facility at Delaware State University (DSU) they were released back into Broad Creek.

Fingerlings in nursery pond at DSU



Pond Mapping Tool and Mobile App

Coming Soon! The Division's Public Pond Page at: <http://de.gov/pondbook> is being updated with an interactive mapping tool that allows users to more easily locate the freshwater fishing ponds that occur throughout the state. Updated bathymetry data, fish community information, and access will be available for each pond. The page also includes links to additional information, such as species identification and species catch data. The site should be 'live' before spring.



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