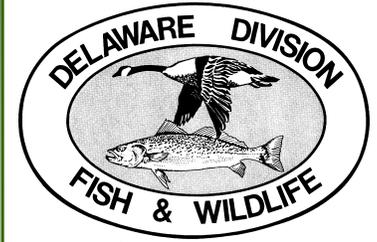


Tournament News



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

Fisheries Section Updates

Spring 2016

We've been working hard to manage bass populations throughout the state and this issue of *Tournament News* summarizes many of our 2015 activities. As you prepare for the 2016 angling season, don't forget to obtain a permit for your tournaments and submit a report of the results. As always, please contact me if you have any interesting observations, concerns or simply want to talk about bass. We hope to get out to more tournaments this year and meet some of you.

Sincerely,
Edna



D. Raver

Check out the new **Largemouth Bass Fishing Tournament Page** at:

<http://de.gov/lmbtourney>

At this webpage you can apply for a tournament permit, submit your report, or report a tagged bass. Past issues of *Tournament News*, information about good bass handling, and a link to Maryland's tournament page is included. We'll be adding to this page as time goes on, so suggestions are welcome. I hope you find it useful!

Cabela's generously donated ten \$50 gift certificates to the Largemouth Bass tagging program in 2015. Congratulations to the following anglers who reported catching a tagged bass and received a gift certificate from our random drawings in December and June:

Adam Harkness
Fernando Ruiz
Frank Arthur

Alan B. Cole
Darrin Tohs
Albert Bell

Alfredo Mendez
John Nichols

Ernest Graybeal
Roger Foraker

Unless you've been traveling recently or otherwise off of the 'grid' you have probably already heard that there is a new state record Largemouth Bass. Andrew 'A.J.' Klein of New Castle caught the record breaking bass at Wagamons Pond on February



20, 2016. The bass was certified by Fish and Wildlife Natural Resources Police Sgt. Troy Trimmer as: 11-pounds 1.6 ounces, 27-inches long, and 20.5-inches in girth. After the certification at Bill's Sport Shop in Lewes, A.J. released her back into the pond to hopefully spawn another year.

Contact Information:

- Tournament reports and tag returns:

Fisheries Biologist:

Edna Stetzar, 302-735-8654;
Edna.Stetzar@state.de.us

Fisheries Technician:

Rebecca Bobola, 302-735-8661;
Rebecca.Bobola@state.de.us

- Tournament permits:

Angela Dula, 302-739-9913

- Fish & Wildlife Enforcement Agents:

New Castle & Kent Counties:
302-739-6139

Sussex County: 302-855-1901

- Report Violations:
302-739-4580 **OR**
1-800-523-3336

24-hour Enforcement Number:
1-800-662-8802

Operation Game Theft :
1-800-292-3030

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Sussex Tech H.S. Fishing Team

Pond Sampling-2014 and 2015

The Division of Fish and Wildlife conducts fish community sampling via electrofishing at 6-8 State-owned ponds per year. 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. Supplemental sampling via seining is often conducted to assess spawning. Ideally, the fish community will have a moderately dense population of predators (i.e. bass) and adequate forage (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.

Pond	Catch Rate: Bass/Hr	*PSD	**RSD-P	#Average Relative Weight	Comments:
Abbotts Pond	11.5	66.7	33.3	98.2	Low density Bass population; 2015 sampling difficult due to excessive hydrilla & low water level; hydrilla management on-going; good # of large Black Crappie and Bluegill;
Blairs Pond	21.3	42.9	0.0	102.7	Balanced fish community although catch rate of bass has decreased; hydrilla management on-going
Concord Pond	39.3	57.1	14.3	107.4	Abundance of 5-7" bass in 2014; good Bluegill & Pickerel populations
Garrisons Lake	15.9	100	66.7	97.1	Low density bass population with high proportion of bass $\geq 15"$; Pumpkinseed more abundant than Bluegill; water level low due to dam repairs
Griffith Lake	16.5	100	37.5	87.5	Bass abundance low; stocked bass in 2015; plan to install habitat structures in 2016
Killens Pond	54.6	65.0	34.5	90.5	Balanced and diverse fish community; large proportion of quality sized ($\geq 12"$) bass
Lums Pond	43.5	52.6	31.6	93.2	Balanced fish community; Striped Bass hybrids stocked in 2014; no adult hybrids caught in 2015
Massey Mill Pond	23.7	75.0	25.0	93.4	Fish community recovering post 2011 drawdown; bass stocked in 2014; good forage population
Trap Pond	40.5	64.3	35.7	92.3	Balanced fish community; fair # of bass $\geq 17"$; Redear Sunfish present
Tubmill Pond	47.1	66.7	0.0	90.1	Bass 12-15" most dominant size group; Pumpkinseed outnumber Bluegill
Raccoon Pond	34.5	77.7	44.4	102.6	Bass 4-8" most abundant size group; variable spawning/recruitment of bass but good condition; Bluegill most abundant species collected; evaluating potential impact of water level fluctuations
Records Pond	33.3	50.0	12.5	101.6	Fish community balanced post 2012 drawdown; Redear sunfish abundant-many $\geq 9"$
Wagamons Pond	44.4	82.6	34.8	94.5	Balanced fish community with large proportion of bass $\geq 12"$; Higher than average proportion of $\geq 8"$ Bluegill; occasional large Redear Sunfish
Waples Pond-East side only	26.8	20.0	20.0	106.5	Bass $\leq 12"$ most abundant size group; adequate forage available; Common Carp abundant

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

****RSD-P:** Relative Stock Distribution-Preferred-the proportion of bass $\geq 15"$; target values for moderate densities of bass are between 10-40

#Average Relative Weight-measure of condition or 'plumpness'; values below 90 indicate issues with density, feeding or other factors

2015 Tidal Largemouth Bass Surveys

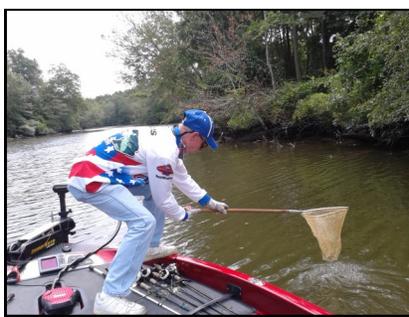
As per the 2005 Tidal Largemouth Bass Management Plan, the Mispillion River and Broadkill River were scheduled for bass population sampling in the fall of 2015. Unfortunately, water conductivity was too high ($>1000\mu\text{S}$) due to salinity levels in the Mispillion River to effectively operate the electrofishing boat, thus sampling was postponed until 2016. Monitoring of the Broadkill River Largemouth Bass population via boat electrofishing revealed a low density population with a high proportion of large bass ($\geq 15''$), variable relative weights, and below average historical abundance. Mark-recapture of bass $\geq 6''$ resulted in a population estimate of 129-614 bass (95% confidence interval). The catch rate (27.2 bass/hr) was one of the lowest in a fifteen year time series. Results indicate that the Broadkill River Largemouth Bass population is trending towards a low density population comprised of a high percentage of legal size and larger fish. Average relative weight of the population indicated good condition, but the variability among length groups indicated issues with density, feeding conditions, or interspecific competition. Fishing pressure could play a role in long-term trends as the Broadkill River is among the top three most popular tidal rivers in the state to freshwater fish, although most anglers practice catch and release. The sampling methods and the sampling area are standardized, but annual variations in environmental factors such as tide stage and amplitude, water clarity, and conductivity can influence catch rates. In addition, bass distribution and movement within the river system is likely variable and influenced by the confluence of marine and freshwater inputs. In general, long-term trends in abundance have remained fairly stable with a few short-term declines, so continued monitoring of this bass population is important to determine if management actions are needed. Evaluation of other factors that can impact bass populations are being considered such as: qualitative or quantitative status of available spawning habitat, land-use changes within the watershed, water quality degradation, increased predation and changes in the forage base.

Stocking Update 2015

Over 2,000 fingerlings (average length $\geq 3''$), which were the progeny of adult Largemouth Bass collected from the Nanticoke River, were stocked into the **Broadkill River** as part of a long-term program to enhance natural reproduction. In an effort to reduce predation and increase survival, most of the fingerlings were released within suitable habitat (such as woody debris, deadfalls, and spatterdock beds) downstream from the boat ramp at the Memorial Park in Milton. Members of the Delaware B.A.S.S. Federation and Just-A-Mere bass angling clubs and volunteers generously assisted with the stocking.



Bob Baker with Just-A Mere



Jim Fields with DE B.A.S.S.



Samantha Stetzar-DFW Volunteer

Over 6,200 fingerlings were stocked into the **Nanticoke River** system within suitable habitat at: the Nanticoke River Marina, the canoe launch near the Nanticoke Hospital, in 'Bethel Hole', and at Phillips Landing. Although fewer fingerlings were produced in 2015 at the aquaculture facility, growth was good and a proportion of fingerlings were $>4''$ when stocked.

Division sampling of **Griffith Lake** in the spring of 2015 revealed that spawning and recruitment of Largemouth Bass was highly variable. Catch rates were very low, thus over 500 bass of various sizes were stocked in the fall in an effort to restore balance. Efforts are also underway to improve availability of spawning habitat.

Small Fishing Ponds-Youth/Family

by Rebecca Bobola

Did you know Delaware offers freshwater fishing opportunities that don't require a boat? There are nine Small Ponds across the state offering fishing piers and or shore access for anglers of all ages. Catchable size sportfish have been stocked in each of the ponds since the beginning of the Small Ponds Program in 1994. All Delaware Small Ponds are Catch and Release Only. Newton Pond in Greenwood, Delaware is the only Small Pond that gets stocked with trout. Memorial Pond most recently was stocked with 23 Largemouth Bass averaging 14" in length. All of the Small Ponds are



Rebecca with a quality sized bass

monitored on a regular basis for population health and water quality parameters. Several of our ponds were experiencing pH levels lower than desired for healthy fish populations. In the winter of 2014-2015 six ponds received lime applications which have successfully returned the pH to more desirable levels. Creating habitat is another method the Division uses to manage for healthy, balanced populations in these ponds. Evergreen trees were installed in the New Castle County and Kent County Small Ponds in January 2016 to add additional habitat for small fish to seek shelter. If you are interested in additional information such as species in each pond or directions, please contact Rebecca Bobola using the contact information on the cover page or visiting the Division's website at: <http://de.gov/smallponds>.

Nanticoke River Atlantic Sturgeon Research

by Ian Park

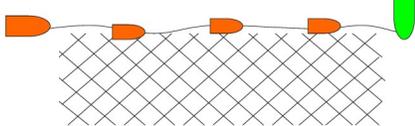
STURGEON GILL NETTING

Marshyhope Creek, Broad Creek and Nanticoke River



Slow down and protect your motor...

Please go around the green buoys



The Delaware Division of Fish and Wildlife in conjunction with Maryland Department of Natural Resources will be deploying anchor gill nets in the Nanticoke River system in an attempt to capture Atlantic Sturgeon. This sampling will most likely occur from August through November. Atlantic Sturgeon are a federally listed endangered species and have been documented making a fall migration into the region. Scientists are trying to determine if this migration is a spawning event and if there is successful reproduction. Several gill nets will be deployed in an area at one time and biologists will try and remain with the nets to the best of their ability. The gill nets are anchored to the bottom, however due to the size of Atlantic Sturgeon the nets are quite large and can stretch the entire water column. The nets will have orange floats along the top of the net, which may be under water, and green floats marking either end of the net. **We ask that you please slow down as you pass the nets and pass the nets on the outside of the green float.** Thank you for your cooperation and if you have any questions please contact Ian Park, 302-735-8663 or Ian.Park@state.de.us.

Look for this sign posted at several access areas in the Nanticoke River system

A big thank you to the Sussex Technical High School Fishing Team (and Delaware B.A.S.S. Nation) for providing the Division with tournament caught bass on April 25, 2015. Twenty adult bass from the tournament were suitable as brood stock for the Division's Tidal Largemouth Bass Enhancement Program. The bass were taken to an aquaculture facility to spawn and then returned to the Nanticoke River. Once the fingerlings attained an average length of 3" at the facility they were stocked into the river to supplement natural reproduction.

Photo credit: J. Muir



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