



BUREAU OF FRESHWATER FISHERIES MONTHLY REPORT



June 16, 2022 – July 15, 2024

Shawn Crouse, Chief
Craig Lemon, Superintendent
Edward Conley, Superintendent

Christopher Smith, Principal Fisheries Biologist
Ross Shramko, Principal Fisheries Biologist

Dominick Mercurio, Crew Supervisor Bldg. Maintenance
Tyler Tresslar, Crew Supervisor, WMAO
Nicholas Healy, Crew Supervisor, WMAO
Brad Duckworth, Crew Supervisor, WW

Scott Collenburg, Sr. Fisheries Biologist
Eric Boehm, Sr. Fisheries Biologist
Justin Rozema, Assistant Biologist

Thomas Bissonnette, Technician I
Charles Sedor, Technician II
Kyle Civalier, Technician II
Nick Ruberto, Technician II
Doug Cutler, Technician II

Matthew Gadek, Sr. Wildlife Worker
Shaun Young, Sr. Wildlife Worker
Chris Sherwood, Sr. Wildlife Worker
Andrew Hutnik, Wildlife Worker
Travis Nitko, Wildlife Worker
Lynsey Bell, Wildlife Worker
Thomas Goetschkes, Wildlife Worker
Brooke Wakefoose, Wildlife Worker

Steve Jeffries, Repairer

Ross StCerny- Agency Representative Trainee

Seasonals: James Bates, Gerald Bender, Abby Bronicio, Chris Cohen, Luke Diglio, Robert Huth, Michael Kays, Samantha Lavan, Kendall Morgan, Sarah Kyryczenko, Karl Lightner, Erin McLean, Matt Moury, Nick Moury, Andrew Ruiz, Jesse Tyther, Scott Ward, and Cheryl Weeks

FISHERIES MANAGEMENT

Brook Trout Restoration Efforts on NJ Trout Production Streams Project - In June of 2023 Bureau of Freshwater Fisheries biologists began a multi-year Brook Trout restoration study. In New Jersey, competition from Brown Trout, along with other habitat stresses (increased temperature and land use impacts), has severely reduced Brook Trout populations throughout their range. This reduction has likely been happening since Brown Trout were first stocked in the state in 1908. However, it is unknown exactly how long it takes for Brown Trout, along with other habitat stressors, to outcompete and displace Brook Trout. This study aims to determine the cost and feasibility of aiding Brook Trout populations by conducting manual removals of Brown Trout through backpack electrofishing. This study also aims to determine how long Brook Trout populations can withstand and hold back Brown Trout recolonization under different environmental conditions. This knowledge will inform trout biologists if manual Brown Trout removals to restore Brook Trout populations is a viable management tool and if it can and should be implemented on a greater scale in the future. It is commonly considered by trout biologists from other states that Brook Trout have a greater ability to fend off Brown Trout (keep them at low numbers or from establishing entirely) when habitat conditions are optimal for Brook Trout.

Staff selected 2 small *Trout Production* streams to begin this study in 2023 and added Turkey Brook, located in Morris County, in 2024. On June 24th, 25th, 26th and 27th, crews began removal of Brown Trout in the nearly 1.8 mile stretch of Turkey Brook. (Collenburg/Shramko/Diglio, F-48-R)

Ireland Brook (Middlesex) – This tributary flows through East Brunswick Township and into Farrington Lake. It is classified as *Non-Trout* and is stocked with Rainbow Trout in the spring as part of NJFW's trout stocking program. A general fisheries survey was last conducted on Ireland Brook in 2003 at an upstream location (downstream of Fresh Ponds Rd.). However, in 2007, during a survey by NJDEP's Bureau of Freshwater and Biological Monitoring, 5 Brook Trout were captured in a survey conducted on July 9th. Reports of Rainbow Trout being seen in this section were reported in the summertime as well. This backpack electrofishing survey on July 9th, 2024, was conducted to confirm the potential holdover capacity of trout in this section and to potentially upgrade the classification of the stream to *Trout Maintenance*. However, no trout species were encountered during the survey. Additional work may be worth conducting to determine if there are trout present up or downstream in a different section of Ireland Brook. The day before conducting the survey, while scouting, a stocked Rainbow Trout was captured (by hand), below Riva Avenue by NJFW crew. The Rainbow Trout sustained an injury from a bird strike and did not survive. An additional note is that a NJFW crew documented a Bluespotted Sunfish scouting in the winter of 2024 in the same location, but none were encountered in this survey. (Collenburg, F-48-R)

Lawrence Brook (trib.)(Unnamed) (Middlesex) – This unnamed tributary to Lawrence Brook originates in North Brunswick Township's Maple Meade and flows south, under Route 130 and eventually drains into the upper end of Farrington Lake. It was never surveyed before and therefore has a default classification of *Non-Trout*. A single backpack electrofishing survey was conducted on 7/8/2024 and captured a variety of fish species. Most species captured are those that we generally consider tolerant to poor water quality conditions (i.e. Creek Chub, White

Sucker, Mosquitofish, Goldfish, Brown and Yellow Bullhead). The classification of the stream confirms it's *Non-Trout* classification. No further work is recommended at this location. (Collenburg, F-48-R)

Trout Brook (Hacklebarney) (Morris) - Trout Brook is a small stream that flows through Hacklebarney State Park and ultimately into the Black River. It is currently classified a *Trout Production (TP)* stream and one of the two streams inside Hacklebarney State Park that is regulated as a *Native Brook Trout Stream*. This tributary was electrofished on 7/2/2024 to assess the wild trout population's structure. Past surveys, from 2015 to 2019, were conducted here and interested in understanding the drivers behind the natural population fluctuations that are notable in Brook Trout populations. This survey was conducted to continue collecting data to help build upon this dataset. Brook Trout are abundant and persistent in this location, and a natural barrier ~100 m downstream of the survey's start point has kept Brown Trout in the downstream section of this brook. Species encountered during this survey included 71 wild Brook Trout, including 8 young-of-the-year. It's possible that heavy rainfall in the winter and spring negatively impacted successful recruitment. (Collenburg, F-48-R)

Lamington (Black) River (Morris) – The headwaters of the Black River originates in Kenvil on the former property of Hercules Powder Company where contaminated soils, sediments, and groundwater were historically documented due to the manufacturing work and discharging of pollutants in the surrounding area. NJDEP has been involved in guiding remediation efforts and has provided the permittee with conditions in regard to antidegradation policies for protection from measurable changes in water quality based on exceptional ecological significance, exceptional recreational significance, exceptional water quality significance or exceptional fisheries resource to protect their aesthetic value and ecological integrity. This would require conducting certain water quality studies to ensure that the conditions of any permit issued would satisfy the antidegradation policy. The current *Non-Trout* designation is a default classification because no survey of the fishery has been conducted in this area. On 7/9/2024 a backpack electrofishing survey was conducted to document the condition of the fishery. The survey documented Redbreast Sunfish, Bluegill, Chain Pickerel, Tessellated Darter, Yellow Bullhead, Channel Catfish, Largemouth Bass, and one young-of-the-year Brook Trout. Documenting a native young-of-the-year Brook Trout in this location supports an upgrade in the classification from *Non-Trout* to *Trout-Production*. No additional work is recommended currently. (Collenburg, F-48-R)

Spruce Run Creek (Hunterdon) – The headwaters of Spruce Run Creek originate in Pleasant Grove and moves through Lebanon Township and flows south along Route 31 before draining into Spruce Run Reservoir. NJFW has surveyed many locations along Spruce Run Creek, but the most upstream location was off Newport Road where wild Brown Trout have been documented. The headwaters of Spruce Run Creek have a number of ponds and lakes, sources of warmwater, which could limit the extent of coldwater species like trout. However, in 2017, a major impoundment, Beisler removed and should improve water quality downstream. As a follow up, a backpack electrofishing survey was conducted on 7/9/2024 and documented a total of 14 wild Brown Trout, including 6 young-of-the-year. This is the most upstream survey conducted on Spruce Run Creek and this confirms the current *Trout-Production* stream

classification. The water temperature at the time of the survey was high, 23.9°C, and is likely due to other small ponds upstream of this location. (Collenburg, F-48-R)

Stone House Brook (Morris) - Stone House Brook is a tributary to the Pequannock River and is the primary outlet for Butler Reservoir at the top of its watershed. It was first surveyed in both 1968 (Near High Street) and 1969 (Near Route 23), with both surveys capturing no trout. Another electrofishing survey occurred downstream of High Street in 2003 following angler reports of catching Brown Trout. This survey was successful in capturing adult and young-of-the-year (YOY) Brown Trout, causing a surface water quality standards (SWQS) classification upgrade from *Non-trout* to *Trout Production* from Valley Road downstream to the confluence of the Pequannock River. In 2007, a secondary survey took place above Valley Road, finding a sparse population of adult and YOY Brown Trout and upgrading the stream's SWQS classification to *Trout Production* upstream of Valley Road up to the Route 23 Bridge. On 7/11/24, an electrofishing survey occurred at each of these two historic locations to monitor the population of wild Brown Trout found within the stream here.

At the downstream site near High Street, a total of 14 Brown Trout (6 YOY) were captured in 2024. This number is notably less than the 68 Brown Trout (42 YOY) captured during the 2003 survey in the same location. However, this shift can at least partially be explained by the high number of YOY fish, as spawning success and recruitment can be highly variable year-to-year and is often strongly dependent on weather-related conditions. In addition, a large pool just downstream of the 2024 survey area was not sampled but appeared to contain a fair number of Brown Trout due to the low water conditions present. This sample pool is likely to have been sampled in 2003, further explaining the difference in Brown Trout captured. A variety of warmwater species, including Bluegill, Largemouth Bass, and Golden Shiner were also captured, all likely from the multiple impoundments found upstream. In the habitat assessment, scores were fairly similar between surveys (142 in 2003 vs 130 in 2024) suggesting no major shifts in habitat have occurred here.

At the upstream site between Route 23 and Valley Road, no Brown Trout were seen or captured within the survey, which contrasts to the 14 Brown Trout (2 YOY) captured in 2007. Habitat assessments between 2024 and 2007 only varied by 10 points, suggesting minimal shifts in habitat quality have occurred (167 in 2007 vs 157 in 2024). Reviews of historical aerial imagery similarly show no major changes in land use within the watershed. Instantaneous water temperature was recorded at 24.0°C, which is very high and within the lethal limit for prolonged exposure for Brown Trout. This high temperature is likely influenced by the number of impoundments upstream (including Butler Reservoir). Installation of a temperature logger at this location would aid in providing insight into the length of time stream temperatures remain elevated within lethal limits for Brown Trout, and further exploration into coldwater sources within the watershed should occur as downstream temperatures were recorded at slightly cooler (22.4°C). (Rozema, F-48-R)

Stone Tavern Lake (Monmouth) - Assisted with an electrofishing demonstration for the Bureau of Law Enforcement's Intern Program, on 6/24/24 at Stone Tavern Lake. Water clarity was clear from below average rainfall and submerged aquatic vegetation on the bottom, resulting in below

average catch rates. Fish appeared to be holding to the deeper parts of the lakes and unaffected by electrofishing. (Smith)

INVASIVE SPECIES MANAGEMENT (State Funding)

Salem Canal (Salem) – A boat electrofishing survey was conducted at the Salem Canal on 6/28/24 to assess the Northern Snakehead population. A total of 33 snakeheads and 31 Largemouth Bass were collected during the 1.60-hour survey. The largest snakehead collected was 704 mm and weighed 2.89 kg. The population continues to be monitored annually to determine impacts to the bass population. A survey targeting the bass population will be completed in the fall. (Smith)

Menantico Sand Pond (Cumberland) – An angler reported catching a Northern Snakehead in Menantico Sand Pond WMA on 6/29/24. This was the first report of a snakehead in the Maurice River drainage. Due to the recreational importance and the presence of species of special conservation concern within the drainage, an electrofishing survey was conducted on 7/1/24 to confirm the presence of the species. One adult snakehead was collected, that also happened to be guarding fry. The fish and many of the fry were removed from the pond. To mitigate any additional range expansion, the Union Lake fish ladder was closed to prevent upstream migration. Additionally, the Cumberland Pond fish ladder, on the Manumuskin River was also closed. Additional surveys on the Maurice River are planned for later in the summer. (Smith)

Closed the Union Lake and Cumberland Pond fish ladders (on 7/9 and 7/16 respectively) to prevent further expansion of Northern Snakehead within the Maurice River watershed. This was done as a precautionary measure due to snakeheads being recently documented in Menantico Ponds. (Boehm)

Maskells Mill Pond (Salem) – A daytime boat electrofishing survey was conducted on Maskells Mill Pond on 7/9/24 to assess the fish population for invasive species. A snakehead was reported in the pond earlier this year. There was no evidence of snakeheads present in the pond, however they are likely to occur downstream. The conductivity is rather low in the pond at 81.9 us/cm and catch rates were rather low 25 Largemouth Bass collected in 0.90-hour of electrofishing. No additional actions are needed at this time. The bass population should be re-evaluated in three years to assess the recently stocked young of the year bass. (Smith)

TECHNICAL ASSISTANCE (State Funding)

FISHAir Quest – Met with Princeton University at Rosedale Park on July 15th to plan the field component/data collection for a continuing education program named QUEST which helps guide teachers in giving students the tools to ask the right scientific questions about a problem. The program combines the use of data science with collection of morphological measurements of fish to understand distribution of species. Assistance from NJFW will be provided through a presentation during lecture and guidance in fish collection and measurement in the field. (Collenburg)

Rutgers Pond – A site visit was conducted, on 7/1/24 at the Rutgers Agricultural Research facility in Cream Ridge, Monmouth County to observe a fish salvage that was completed by

Solitude Lake Management. Approximately 500 fish were collected and relocated to Prospertown Lake WMA. (Smith)

FishTrack Database – The current Access database that holds data for the Bureau of Freshwater Fisheries has become a major issue creating inefficiencies in time spent entering, managing, analyzing, and procuring data. This is likely caused by the transfer or querying of large amounts of information from the Garden State Network, Zscaler, and to the offices in Lebanon. Therefore, the backend of the FishTrack Access database was migrated to a Microsoft SQL backend. This should help enhance speed and minimize impact to continuous use amongst users. (Collenburg)

NAACC Assessments – Continued to lead the implementation of NAACC assessments on behalf of the Bureau of Freshwater Fisheries with priorities to assess crossings related to native Brook Trout, other wild trout populations, and fish species soon to be listed as Endangered or Threatened (Bridle Shiner, Ironcolor Shiner, and Slimy Sculpin). This will put the Bureau of Freshwater Fisheries in a position to guide and prioritize management of road/stream crossings that may be barriers to aquatic organism movement. (Collenburg)

Fishing Regulations GIS application - Provided additional review of Fishing Regulations GIS application. (Boehm & Rozema)

Freshwater Fisheries Permits – Reviewed water lowering and fish stocking applications and contacted applicants to obtain necessary information. Reviewed LMRs from a freshwater fisheries perspective for upcoming projects. (Staff)

WMA Fishing Tournament Permits – Issued fishing tournament permits to local fishing organizations. Reports have been steadily coming in with good results reported from Union Lake, Assunpink Lake, and Stone Tavern Lake (Smith).

INFORMATION AND EDUCATION

DEP's Youth Inclusion Initiative (YII) at Wilson Park- On Wednesday, July 10 staff from BFF, ENSP, and Law Enforcement jointly participated in DEP's Youth Inclusion Initiative by hosting programming for 18 youth from both the Ironbound Community Corporation (Newark) and the Boys and Girls Club of Garfield (Garfield) at Wilson Park in Linden Township. BFF staff assisted attendees in pulling seine nets in the pond to capture fish. ENSP staff taught the groups about identifying various non-game species and provided the opportunity to use radio telemetry equipment. Law Enforcement staff taught attendees about the various ways our conservation officers protect our state's resources and utilized mock scenarios to teach attendees how to think like a conservation police officer. Overall, the day was action-packed, and youth were very engaged in all aspects of the day. A second YII day is scheduled at Wilson Park on 7/17/24 for Groundwork Elizabeth (Elizabeth) and United Community Corporation (Newark). (Rozema & Sedor)

PEQUEST TROUT HATCHERY (Ed Conley)

Inventory Data

<u>Stocking Program</u>	<u>Length</u>	<u>Average Daily Increase</u>	<u>Conversion</u>
Spring 2025			
RBT (9 months old)	6.1"	0.016	1.81
Fall 2025			
RBT (9 months old)	6.5"	0.016	1.75
Fall/Winter 2024			
RBT (21 months old)	13.0"	0.020	0.93

Flow Rates – June 2024

2.98 inches of precipitation fell during the month of June.

Production Well Pumping Rate Average for June was 6,488 gpm with an average 9.34 million gallons per day pumped during the month.

The potable well pumped 31,864 gallons for the month of June.

Fish Culture Activities

The inventory was completed on the Spring 2025 production and feed quantities have been adjusted to regulate growth rates to reach our final goals for stocking. These fish are being fed by the feed truck 4 times a day with 3.0 mm feed. Screens are cleaned twice a day and basins weekly.

The fish for the 2025 Fall Program fish were inventoried. Feed quantities have been adjusted to regulate growth rates to reach our final goals for stocking. These fish are being fed by the feed truck 4 times a day with 3.0 mm feed as well.

The 2024 Fall/Winter Program fish stock (Pictured to the right) were also inventoried at this time. Feed quantities have been adjusted to regulate growth rates to reach our final goals for



stocking. These fish are being fed by the feed truck 4 times a day with 5.0 mm feed.

Staff are starting to prepare the equipment used for the Summer/Fall sort in which all the 2024 production fish will be sorted using fish pumps and trucks throughout the hatchery raceway system starting 7/22/24. Staff are performing routine maintenance around the facility.

Pequest Maintenance

The evening of 6/26/24 we had a quick power outage caused by severe thunderstorms that went through the area and brought down several trees and limbs. When power was restored a couple of wells needed to be reset as well as the alarm panel. A power fluctuation happened early AM the next day setting alarms off again. Well #1 had to be reset again and the alarm panel was also reset. Repairs were made on Well #1 variable drive to replace a couple of electrical contacts. Additional parts were ordered to have on hand for the future.

Portasoft made some changes to programming and cleaned bulbs and quartz sleeves on the new UV domestic system on 6/21/24 and 6/24/24, but we are still having continued issues with the new unit. They may try adding a carbon filter to check for organics. We sent an email to DEP Water Supply requesting a 3-month extension to rectify the issues before going on-line.

CBT funding for Phase 3 of Pequest was approved for \$368,232.70. The contractor was notified and is tentatively scheduled to begin 07/18/24. Measurements were also taken with Jason Freeborn for the write-up of the CBT tank replacement project in the Nursery building during this time.

Staff spent time cleaning up down trees and branches on the well roads, TCA road, and the sluice way after a few severe thunderstorms during the month. Staff also replaced outside alarm horn after it failed during a power outage.

Miscellaneous Activities

New full-time Wildlife Workers Thomas Goetschkes and Lynsey Bell received 06/29/24 start dates. Welcome aboard!

Supplied information regarding electrical meters and heating fuel tanks to the Ryan Gergely of the Division of Climate Change Mitigation and Monitoring, Bureau of Climate Change & Clean Energy. This information will be used for Lead by Example efforts.

07/09/24, we gave a Youth Inclusion Initiative tour of the Pequest Hatchery to CHO 1 - Northern Region, which was Ironbound Community Corporation from Newark and the Girls and Boys Club of Garfield. The tours went well. Once done with the hatchery tour, they went fishing with Information and Education staff in the pond.

Hackettstown State Fish Hatchery (Craig Lemon)

Intensive Culture (Inventory)

<u>Species</u>	<u># Fish</u>	<u>Avg.”</u>
Landlocked Salmon	3,200	8.0”
Muskellunge	30,000	2.0”
Northern Pike	9,686	6.8”
Tiger Muskellunge	2,808	6.0”
Largemouth Bass	10,000	1.5”
Channel Catfish	100,000	0.8”

Stocking Totals (May 16 – June 15)

<u>Date</u>	<u>Species</u>	<u>Location</u>	<u>#Fish</u>	<u>Pounds</u>	<u>Length</u>
5/16	Np	Deal Lake	4,371	122	5.0”
5/31	Np	Budd Lake	2,100	91.2	5.8”
6/3	Np	Spruce Run Reservoir	6,461	421	6.7”
6/5	Np	Farrington Lake	2,902	186	6.6”
6/7	Np	Pompton River	2,472	161	6.7”
6/7	Np	Passaic River	3,061	200	6.7”
6/11	Np	Virginia DNR	796	54.8	6.8”
6/12	Np	Pompton Lake	3,076	170	6.3”
5/23	Tm	Delaware River Pburg	3,261	66	4.8”
6/6	Tm	Manasquan Reservoir	1,200	415	12.0”
5/29	Wa	Swartswood Lake	7904	6.64	1.5”
5/29	Wa	Lake Hopatcong	36,603	25	1.5”
5/30	Wa	Lake Hopatcong	8,520	8.52	1.5”
5/30	Wa	Delaware River-Belvidere	34,230	34.2	1.5”
5/30	Wa	Canistear Reservoir	5,600	5.6	1.5”
5/30	Wa	Greenwood Lake	30,720	28	1.5”
5/30	Wa	Monksville Reservoir	8,080	20	1.5”
5/31	Wa	Delaware River-Belvidere	25,000	25	1.5”
6/4	Lmb	Merrill Creek Reservoir	10,000	5	1.0”
6/11	Lmb	Assunpink Lake	11,350	2.8	1.0”
6/11	Lmb	Elmer Lake	5,425	1.3	1.0”

<u>Date</u>	<u>Species</u>	<u>Location</u>	<u>#Fish</u>	<u>Pounds</u>	<u>Length</u>
6/11	Lmb	Parvin Lake	8,835	2.2	1.0”
6/11	Lmb	Union Lake	50,000	12.2	1.0”
6/11	Lmb	Lake Audrey	11,400	2.8	1.0”
6/11	Lmb	Sunset Lake	8,265	2.0	1.0”
6/11	Lmb	Davis Mill Pond	6,460	1.6	1.0”
6/11	Lmb	Alloway Lake	11,400	2.8	1.0”
6/13	Lmb	Mountain Lake	2,900	6.9	1.8”
6/13	Lmb	Furnace Lake	1,400	3.33	1.8”
6/13	Lmb	Delaware Lake	950	2.26	1.8”

6/13	Lmb	Swartswood Lake	13,025	31	1.8"
6/14	Lmb	Lake Musconetcong	1,850	4.4	1.8"

Lmb -. Largemouth Bass Np – Northern Pike Tm – Tiger Muskellunge
 Wa – Walleye

Intensive Culture

Landlocked Salmon

Currently culturing 3,200 fish about 8.0" in three 2,000-gallon tanks. Staff clean and feed them daily. All fish were clipped, and hand counted into three 2,000-gallon rectangular tanks.

Muskellunge

70,000 eyed Muskie eggs were obtained from the PA Fish & Boat Commission on 4/25. Fry hatched on 5/3 and are being cultured in five 350-gallon circular tanks. Brine shrimping ended and the dry feed conversion rate seems good. Staff are doing inventories currently.

Northern Pike

The pike are doing great this year. Connecticut, Rhode Island, and Virginia all were here to pick up surplus fry/small fingerlings. All production lakes and rivers were stocked between 5/31 – 6/12. A total of 20,072 fingerlings weighing 1,229 pounds were stocked in 6 waters. Currently culturing about 10,000 seven-inch fingerlings in three 2,000-gallon tanks. Staff are sampling and doing inventories a couple of days a week. Assessing feed size and making changes weekly. Provided 60 specimens to Fisheries Pathologist Dr. Groff for fish health inspection.

Tiger Muskellunge

Tiger fingerlings are doing very well. Currently culturing 2,800 six-inch fingerlings in one 2,000-gallon tank. Growth rates are good seems hard to keep enough feed on them. We have stocked surplus fish for the past few weeks and have the production number good for now.

Channel Catfish

The first egg masses of the year were collected from Pond 90 on 5/31. A total of 37 egg masses have been collected to date. Currently culturing 100,000 one-inch fish in four 2,000-gallon tanks. An additional 200,000 surplus fry are growing in two 2,000-gallon tanks. The PA Fish & Boat Commission picked up 100,000 eggs in trade of Muskellunge eggs.

Intensive Production Work

We are currently pumping 780 gpm of 52°F spring water and 280-gpm of 68°F recirculated water, and 150 gpm of 80°F recirculated water. Bumping up 68°F flows to keep up with fish growth. Added external oxygen stones to keep up with DO's in 68°F system. Started the 80°F system on Tuesday 5/21 in prep for Channel Catfish egg take starting in early June. Both the 68- and 80°F system drum filters were repaired by staff.

Extensive Culture

Largemouth Bass/Smallmouth Bass

The three Largemouth Bass fingerling production ponds were harvested with results as follows:

Pond 54 – 100,820 fingerlings	24.59 pounds	4,100 fish/pound
Pond 57 – 19,093 fingerlings	45.46 pounds	420 fish/pound
Pond 18 – 46,927 fingerlings	66.41 pounds	706 fish/pound

Broodstock Lmb are being collected and returned to holding ponds.

The Smallmouth Bass production pond is currently being harvested.

Channel Catfish

The Arkansas Channel Catfish in ponds 16 and 78 are feeding excellent. The first egg masses of the year were collected from Pond 90 on 5/31. This seems like a week or two earlier than normal. A total of 37 egg masses have been collected to date. Air temperatures are heating up into the 90's°F. We are going to keep spawning barrels in for another week to see if spawning activity picks up.

Hybrid Striped Bass

The Hybrid two-year olds are feeding aggressively in Pond 77 now that water temperatures have risen to 75°F. Staff moved this year's holdover fingerlings to Pond 30. They are going to be cultured with Largemouth Bass fingerlings as we do not have pond space to keep them separate. The bass mix in Pond 30 are being fed twice daily and looks like it's going to do great. Keo fish farms in Arkansas shipped six boxes of Hybrid fry via FedEx overnight priority on 6/5. Staff picked up the boxes at 9 am in Budd Lake at the FedEx Center. Staff spent 45 minutes tempering the fry into pond 60 and said they looked good. The pond is being fertilized regularly and dissolved oxygen readings are monitored daily.

Fathead Minnows

500 pounds of minnows were purchased from Keo Fish Farms in Arkansas. Staff split them between Ponds 85 and 5-Acre for spawning. They are being fed daily. Fry are visible along the shorelines. Staff seined each feeding station once. Fry production is off to a slow start.

Walleye

Fry were set up in the 4-Acre Pond from 4/13-4/15. A total of 2400 mls x 215 fry/ml = 516,000 fry. The pond was harvested beginning day 47 on 5/29-5/31. A total of 220,945 fingerlings weighing 2023 pounds were harvested. Staff setup the following fingerlings for Phase II growout:

Pond 31 – 20,260 fish	1000 fish/pound	20.26 pounds
Pond 32 – 19,780 fish	1000 fish/pound	19.78 pounds

Staff seined the minnow ponds once and production was low. Made the decision to drain Pond 83 Golden Shiners to supplement.

Golden Shiners

Shiner fry ponds look great. Lots of fry visible and growing. Pond 83 was harvested and fed to the Phase II Walleyes in Ponds 31 and 32. Pond 82 is being fed daily and will be harvested later in the season and stocked in RVR.

Hatchery Extensive Pond Work

All the extensive ponds have been filled in the West Hatchery. Hot weather water flow adjustments are being done daily. Fry production ponds are being fertilized. Broodstock ponds are being dyed to keep weeds and algae in check. Staff continue working on creating one big pond out of ponds 87a, 87b, and 87c. Staff are using both excavators, bulldozer, dump truck, skid steer, and tractor to remove brush and dirt. They are doing a great job, and we hope to have the pond filled by early fall.

Information & Education

Provided information and photos for five GoFishFriday's posts 155-159. 1,429 likes, 24 comments, and 58 shares. Answered as many questions as possible on these posts. Tyler and Matt participated in the Trenton Fishing Derby at Log Basin Pond in Stacy Park on 6/1. They stocked fish and gave a presentation to participants and stayed for the event to assist with fishing activities. Muskies Inc. Chapter 22 hosted 25 Big Brother/Mentors for a day of fishing instruction and fishing on 6/8. I & E hosted a First Catch Center event for Women on 6/14. I & E's John Carlucci spent a day with staff documenting Channel Catfish egg mass collection in Pond 90 using a drone and camera also taking some underwater videos.

Purchasing and Budget

Working on purchases for the 2024 season. Working with Sarah/Ross to get as many vendors as possible to prepare their DPA paperwork for upcoming purchases. Earlier issues getting PO's, and PV's back from Purchasing/Procurement in Trenton has improved. Working on purchases for fish and fish food. Thanks to the Procurement staff for putting together a couple of online training courses for staff.

CBT/CBTM Projects

Had an initial meeting with Construction Management Specialist to address removal of existing Intensive Recirculation System boilers and installation of new ones. Met with them again to show and discuss issues with crumbling concrete structures connecting Ponds 56 & 57. Working on completing a CBTM project from 2023 involving creating a drainage ditch alongside the new garage.