



BUREAU OF FRESHWATER FISHERIES MONTHLY REPORT



December 16, 2022 – January 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, WWAO
Nicholas Healy, Crew Supervisor, WMAO

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

Thomas Bissonnette, Technician I
Ron Jacobsen, Technician II
Charles Sedor, Technician II
Kyle Civalier, Technician II
Brad Duckworth, Technician II
Nick Ruberto, Technician II
Doug Cutler, Technician II

Matthew Gadek, Sr. Wildlife Worker
Jonathan Kline, Sr. Wildlife Worker
Shaun Young, Sr. Wildlife Worker
Andrew Hutnik, Wildlife Worker
Travis Nitko, Wildlife Worker
Chris Sherwood, Wildlife Worker

Steve Jeffries, Repairer

Nancy Geiger, Agency Services Rep 3

Seasonals: Gerald Bender, Thomas Goetschkes, Kaitlin Kolakowski, Sarah Kyryczenko, Mike Leshko, Karl Lightner, Brooke Wakefoose, and Cheryl Weeks

FISHERIES MANAGEMENT

GIS Application Development – Worked with staff from the Office of Fish and Wildlife Information Systems to continue to review anadromous fish timing restriction data points and fishing regulations for respective GIS applications. (Boehm and Rozema)

INVASIVE SPECIES MANAGEMENT (State Funding)

Invasive Species Management Plan Development – Joe Bilinski, NJDEP Division of Science and Research presented an overview of the draft invasive species management plan at the Fish and Game Council Meeting on 1/9/24. The Public Comment Period runs from December 8, 2023, to February 6, 2024. The plan was also submitted to the ANSTF for preliminary review (Smith)

TECHNICAL ASSISTANCE

Round Valley Reservoir Fish Habitat Enhancement Project – Collaborating with Round Valley Trout Association, NJ State Parks, and the New Jersey Water Supply Authority to make use of trees that are being cleared from camp site areas within the Round Valley Recreation Area. These trees grew up in the typically submerged area of the reservoir and will be utilized to construct pyramid shaped “crib” structures that forage fish can use for habitat. The Lands Management Review application was reviewed and approved by all project reviewers. Work will take place during a 1-2 day period sometime between late January and March of 2024. (Collenburg)

Assunpink Lake Dredging Feasibility Study – Participated in a meeting on 12/20/23 to review the Assunpink Dredging Feasibility Study with staff and engineers. The project would greatly benefit the resource providing years of increased angler fishing opportunities; however, the project comes with a very lofty price tag that may be cost prohibitive. Additional meetings with staff are necessary before the agency can move forward with the project. (Smith)

Database Management - Significant time was spent entering and validating fisheries datasheets into FishTrack database. (staff)

PEQUEST TROUT HATCHERY (Ed Conley)

Inventory Data

| <u>Stocking Program</u> | <u>Length</u> | <u>Average Daily Length Increase</u> | <u>Conversion</u> |
|------------------------------------|---------------|--|-------------------|
| Spring 2025 RBT (3 months old) | 2.4" | 0.026 | 1.12 |
| Spring 2024 RBT (15 months old) | 9.4" | 0.018 | 1.93 |
| Fall 2024 RBT (15 months old) | 10.0" | 0 .014 | 2.12 |

Flow Rates – December 2023

9.13 inches of precipitation fell during the month of December.

Production Well Pumping Rate Average for December was 6,153 gpm with an average 8.86 million gallons per day pumped during the month.

The potable well pumped 5,135 gallons for the month of December.

Quarterly Water Diversion reports were submitted.

Fish Culture Activities



Inventory on 2025 production stock was completed at this time. Most are currently being fed by hand 8 times a day with some tanks on automated feeders. They are currently on #2 crumbles and 1.5 mm feed. The Nursery tanks were also reset at this time with approximately 560,000 Rainbow Trout. Also, 35,000 2.0" surplus fry was given to Hackettstown Hatchery for forage. Put sides on the tanks in the Nursery building to keep the larger fish from jumping out. Tanks are being cleaned by all shifts. Pictured to the left are 3-month-old Rainbow Trout.

Monthly inventories of the Spring 2024 production stock (48 pools) and the 2024 Fall Program fish (2 pools) were completed during this time. Feed quantities have been adjusted to regulate growth rates to reach our final goal of 10.5 inches for the Spring Stocking. These fish are being fed by the feed truck 4 times a day with 5.0 mm feed. Screens are cleaned twice a day and basins weekly.

Pequest Maintenance

On 01/04/24, we had an inspection of our emergency generators which passed.

TGM Services repaired emergency exit lighting breaker in maintenance building. Also, staff replaced a heating fan motor in one of the bays.

On 01/05/23 we had an in-house CBT Project meeting in which we discussed approved upcoming projects, and funding. We also discussed solar coverings on the raceways. After the meeting we received an updated quote on the last section of the facility to be paved and notified some vendors of the upcoming projects when the money is available.

On 1/10/24, Portasoft of Morris County came out for a site visit to determine UV domestic unit design for the system for the location. Determined that some additional equipment will be needed for reporting.

Core Mechanical is still in the process of making recommended Trane upgrades on chiller system pending some asbestos abatement they found on some piping.

Miscellaneous Activities

Agency Services Representative, Nancy Geiger retired on January 1st, 2024, after working for the Pequest Hatchery for almost 8 years.

Went through resumes for hourly workers in preparation of interviews later in January.

Staff prepped snowplows and cleaned up from a winter storm on 01/05/24 and 01/06/24 that dumped about 6 inches of heavy wet snow on the hatchery.

Completed 2023 Aqua culture census on 01/12/2024.

Hackettstown State Fish Hatchery (Craig Lemon)

Intensive Culture (Inventory)

| <u>Species</u> | <u># Fish</u> | <u>Avg.”</u> |
|-----------------------|----------------------|---------------------|
| Landlocked Salmon | 3,200 | 6.2” |
| Muskellunge | 3,750 | 10.0” |
| Largemouth Bass | 2,000 | 6.6” |
| Largemouth Bass | 2,000 | 4.7” |
| Hybrid Striped Bass | 1,500 | 4.7” |
| Mosquitofish | 50,000 | 1.0” |

Stocking Totals (December 16 – January 15)

No Stocking During This Period.

Intensive Culture

Landlocked Salmon

Currently culturing 3,200 fish about 6.2” in two 2,000-gallon tanks. Staff are cleaning and feeding them daily.

Muskellunge

Currently culturing 3,750 10.0” fingerlings in two 2,000-gallon rectangular tanks. They are being fed live forage fish.

Hybrid Striped Bass

Currently culturing 1,500 4.7” fingerlings in two 350-gallon circular tank. The 80°F recirculation system was shut down, so they are in 52°F spring water.

Mosquitofish

Currently culturing approximately 50,000 Gambusia in three 1,000-gallon tanks.

Largemouth Bass

Currently culturing two different lots of bass. Both lots are about 2,000 fish each. The bigger fish are a lot of fish that came from NJ on site broodfish and were converted here on site and the second lot of smaller fish were purchased from Arkansas. Both lots of being fed a dry diet and are doing great. They will be part of a pilot stocking program.

Intensive Production Work

We are currently pumping 750 gpm of 52°F spring water. Staff shut down the 68 and 80°F recirculation systems for the winter.

Extensive Culture

Largemouth Bass/Smallmouth Bass

The adult Largemouth and Smallmouth ponds have all been harvested and the broodfish were returned to their wintering ponds.

Channel Catfish

All broodstock catfish are in pond 90. Pond 74 has 600 two-and-a-half-year-olds.

Hybrid Striped Bass

Staff moved 1,290 ten-inch Hybrid Stripers out of the Intensive Rearing Building on 4/5/23 to Pond 77. These fish were sampled several times throughout the season, but they did not reach their target size of 16 inches. They will be overwintered in Pond 77 again.

Information & Education

Provided information and photos for four GoFishFriday's posts 136-139. 1,840 likes, 69 comments, and 48 shares. Answered as many questions as possible on these posts

Purchasing and Budget

Completing purchases for the 2023 season. Working with Sarah to get as many vendors as possible to prepare their DPA paperwork for upcoming 2024 purchases.

Intensive Culture System Shutdown

Both the 68- and 80°F recirculation systems were shut down for the winter. Boilers, pumps, UV filters, drum screen filters, and the biofilter were cleaned and shut off. Oxygen injection towers were turned off. Staff have been flushing the drum filters and biofilters twice weekly.

Winterize Vehicles, Equipment, and Buildings

Over the past few weeks staff have been winterizing all trucks, boats & motors, mowers, tractors, heavy equipment, and buildings. Snowplows have all been hooked up and tested. Equipment has been shifted around to areas where it will stay for the winter. We are enjoying our new garage as we seem to have almost enough space now to get things indoors under roofs.

Retirements

Congrats to Nancy Geiger and Ron Jacobsen on their recent retirements. Thanks for all the hard work and dedication to the agency and the hatcheries. Hopefully you can find the time to stop back and visit us. Enjoy!

Flooding and Snowstorms

The hatchery has had to deal with over 12 inches of rain during this period, plus two snowstorms. Two of the rain events were 3.5 and 4 inches of rain and forced staff to open the floodgates on Trout Brook. The gates clogged during both events with logs, but staff did a great job manipulating water levels and working them through. Thanks for the after-hours time worked by hatchery staff!

Hatchery Pond Work

The Pond 53 dike blew out alongside the outlet structure and water levels dropped a few feet overnight. Staff scrambled the following morning to net and move the Largemouth Bass broodfish next door to Pond 50. The pond is empty now and the damage will be assessed come Springtime. Staff filled Ponds 82-84 with water to try and kill off terrestrial vegetation that has taken over after leaving them empty for two years.