

OFFICE OF FISH AND WILDLIFE HEALTH AND FORENSICS

MONTHLY REPORT

September 2024

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FISH AND WILDLIFE HEALTH PROJECT Grant (FW-69-R21)

The Fish and Wildlife Health Project (FW-69-R21) Annual Progress Report was completed and entered into the USFWS TRACS website.

Diagnosis of Diseases in Freshwater Fish (Job F-1)

Pequest Hatchery

Health assessments of 60 trout and 75 trout was conducted on September 6th and September 30th, respectively. Specifically, the kidneys were routinely cultured for bacterial pathogens, whereas kidney tissue was also collected for the detection of *Renibacterium salmoninarum* - the etiology of Bacterial Kidney Disease - using a fluorescent antibody test (FAT). In addition, spleen, kidney, and ovarian fluids were collected for isolation of the common salmonid viral agents. Finally, the heads collected for detection of *Myxobolus cerebralis* - the etiology of whirling disease. The laboratory results are pending.

Orange Reservoir/Rahway Creek Fish Mortality

Update: A return site-visit on September 5th did not reveal a continual mortality in the Orange Reservoir and Rahway Creek. Therefore, the initial mortality event was considered a consequence of poor water quality including a low dissolved oxygen concentration as previously suspected.

The OFWHF responded to a report of a fish die-off in West Orange on August 27th at The Orange Reservoir, and the Rahway River immediately upstream from The Orange Reservoir. Seven live, albeit moribund, bullhead catfish were collected for examination, although examination did not reveal apparent gross lesions suggestive of an infectious etiology, whereas the cause of the fish mortality event was considered to be secondary to poor water quality including a low dissolved oxygen concentration.

Stone House Brook/Butler, New Jersey

On September 12th, the Butler, New Jersey Police Department reported the presence of dead fish in the Stone Hose Brook adjacent to the police station and immediately upstream from the Pequannock River . A site visit by the OFWHF found 3 dead brown trout and the occasional *Lepomis* sp. and fallfish. Personnel from The Bureau of Freshwater Fisheries also visited the site separately on September 12th and collected a few similar fish species including brown trout. Necropsy did not reveal an apparent infectious etiology, whereas the cause of death was a suspected acute exposure to a chemical agent released into the stream.

Branchburg Park Pond/Essex County

CPO Jack Sikora reported a fish mortality event that primarily involved crappies at Branch Brook Park in Essex County on September 18th. A site visit on September 19th revealed an increased abundance of dead crappies and the occasional moribund crappie. Only two (2) moribund fish could be collected; the necropsy did not reveal an apparent infectious etiology, although ancillary tests are pending.

Diagnosis and Research of Diseases in Marine Fish (Job F-2)

There was no field sampling or collecting activity this month, although samples from the Marine Reef Surveys and Ocean Trawls collected this summer were processed for histopathological examination; results are pending.

Wildlife Disease Surveillance and Investigations (Job W-1) and Wildlife Toxicology (Job W-2)

Gull die-offs

On August 27th OFWHF was contacted by Conservation Police regarding 10-15 moribund and dead gulls on a beach at Belleplain State Forest. 8 fresh carcasses were frozen and transported to the Wildlife Pathology Lab on August 28th. The gulls were determined to be juvenile laughing gulls. Mortalities continued for approximately one week and total impacted individuals was ~30-40. Avian Influenza testing was negative.

On September 25th OFWHF was alerted by the public that gulls were dying at Wesley Lake in Asbury Park, Monmouth County. Dr. Connelly responded on-site the following morning and a freshly deceased gull was collected. Necropsy was suggestive of the fungal disease Aspergillosis. Histopathology is pending.

Barred owl

On September 16th OFWHF was contacted by ENSP regarding a recently deceased barred owl that was emaciated and possibly neurologic. Necropsy was performed on September 27th. The bird was severely emaciated and had poor fat stores and musculature. The gall bladder was distended with bile. A toxic etiology is suspected. Histopathology is pending.

UPDATE: Highly Pathogenic Avian Influenza Outbreak

No additional mortalities have been reported in New Jersey since spring 2024.

Deer Health Questions

The OFWHF was contacted for opinions/advice on deer health issues as follows:

- An emaciated doe in Rockaway, Morris County on September 30th.
 - o OFWHF recommended monitoring.
- A deer with suspect fibromas in Hackettstown, Warren County on September 30th.
- A deer with suspect fibromas in Garwood, Union County on September 26th.
- A deer with suspect Bullwinkle syndrome in Montgomery, Somerset County on September 26th.
- A deer foaming at the mouth in Belvidere, Warren County on September 25th.
 - o Deer was euthanized by local PD.
- An emaciated and neurologic buck in Pennington, Mercer County on September 26th.

- OFWHF responded to the property on September 30th and collected samples for CWD testing.
- A deer with a large limb mass in Toms River, Ocean County on September 23rd.
- An emaciated buck in Ramsey, Bergen County on September 20th.
- A doe losing weight in Montclair, Essex County on September 16th.
- A heavily scavenged deer carcass in Woodstown, Salem County on September 13th.
- An emaciated deer sighted via trail camera in Little Egg Harbor, Ocean County on September 12th.
- A deer with suspect “lumpy jaw” in Budd Lake, Morris County on September 11th.
- A neurologic buck which later died in Long Valley, Morris County on September 10th.
 - Dr. Connelly responded on-site and collected samples for CWD and HD testing.
- A dead deer found in water in Westhampton, Burlington County on September 10th.
 - Carcass was highly degraded and unsuitable for HD testing or necropsy.
- A moribund doe in Roxbury, Morris County on September 8th.
 - OFWHF recommended necropsy but the carcass had already been disposed of by the local municipality.
- An emaciated buck in Readington, Hunterdon County on September 6th.
 - NJ Deer Project recommended continued monitoring.
- An emaciated deer in Hackettstown, Warren County on September 3rd.
 - OFWHF forwarded to USDA-WS and recommended euthanasia and CWD testing.
- A fawn with suspect pneumonia on September 3rd in Frenchtown, Hunterdon County on September 3rd.
 - OFWHF recommended monitoring.
- A deer with a possible head or neck injury in Lambertville, Hunterdon County on September 2nd.
- A deer with suspect “lumpy jaw” in Budd Lake, Morris County on September 2nd.

Avian Health Questions

The OFWHF was contacted for opinions/advice on avian health issues as follows:

- a deceased red-tailed hawk found under electrical wires on September 12th in Toms River, Ocean County.
- An emaciated barred owl which later died on September 16th in Cape May County.
 - OFWHF performed a necropsy on September 27th.
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- A gull die-off in Asbury Park, Monmouth County on September 23rd.
 - OFWHF performed a necropsy on September 27th.

Wildlife Health Questions

The OFWHF was contacted for opinions/advice on wildlife health issues as follows:

- 1-2 gray squirrels with lesions/tumors on the face on September 16th.
 - OFWHF recommended monitoring; likely squirrel pox.
- Raccoon mortalities in Wantage, Sussex County on September 27th with rabies negative results.
 - OFWHF recommended canine distemper virus testing.

Non-Project Activities

- Dr. Connelly performed necropsies on 4 eastern box turtles as part of an ENSP release project.
- On September 27th Dr. Connelly performed a forensic necropsy on a bald eagle which had been euthanized after being found in a leghold trap.

Miscellaneous Activities

- Dr. Connelly attended the biweekly NJ Interagency Call on H5N1 on September 5th.
- Dr. Connelly gave an invited presentation to the *Bsal* Task Force Research Working Group on September 9th.
- Dr. Connelly attended the Monthly Animal Health Meeting on September 12th.