

OFFICE OF FISH AND WILDLIFE HEALTH AND FORENSICS

MONTHLY REPORT

December 2023

Joseph M. Groff, VMD, PhD, Research Scientist 2

FISH AND WILDLIFE HEALTH PROJECT (FW-69-R20)

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

Fish Health Inspection of the Pequest Trout Hatchery

The annual Fish Health Inspection of 150 rainbow trout at the Pequest Hatchery was conducted on November 14. Kidneys from 150 fish 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 and kidney were collected from 150 fish for isolation of the common salmonid viral agents. Finally, the heads from 60 fish were collected for detection of *Myxobolus cerebralis* - the etiology of whirling disease. The laboratory results are pending.

Update: The fish were negative for *Myxobolus cerebralis* - the etiology of whirling disease. There was also no evidence of the various bacterial or viral pathogens of concern in the fish that were examined. However, *Vibrio anguillarum* was isolated from the kidneys of 5 fish and identified by the NJ Animal Health Laboratory. Since *V. anguillarum* is a known pathogen of salmonids, the genomes of these isolates will be sequenced by the NJ Animal Health Lab to determine the relatedness of these isolates to other *V. anguillarum* variants.

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

Non-Project Activities

Tautog Morbidity & Mortality, James J. Howard Marine Sciences Laboratory, NOAA, Sandy Hook, NJ

Ten healthy tautog broodstock from the James J. Howard Marine Sciences Lab were submitted to the OFWHF and necropsied on December 6. Tissues were collected in formalin for microscopic examination, and frozen to be used for viral isolation and molecular diagnostics in the future if necessary.

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

CWD Surveillance

CWD surveillance in the northern region was completed in December.

Deer from Sandyston Township, Sussex County

A fawn with neurological signs and prolonged recumbency prior to death on December 13 was collected by the OFWHF on December 14 and necropsied on December 15. There were mild lesions of the hooves and muzzle suggestive of EHD. The deer was negative for rabies and testing for EHD by the Southeastern Cooperative Disease Study (SCWCDS) is pending.

Deer Health Questions

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

- a deer that was incarcerated in vegetation prior to death in Colts Neck on December 5;
- a deer that was lethargic with apparent diarrhea and dispatched by a hunter in Hewitt, NJ on December 6;
- a deer with an injured hind right leg in Morristown, NJ on December 15; and
- a deer with apparent severe mange in Middlesex County on December 15.

Miscellaneous Activities

- Dr. Groff attended the monthly **Animal Health Meeting** on December 14.