



NEW JERSEY DIVISION OF
Fish and Wildlife

www.njfishandwildlife.com



Office of Fish and Wildlife Health and Forensics

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Clinton Wildlife Health Laboratory

141 Van Syckels Rd, Hampton

- Supports our wildlife health program
 - Disease investigation / necropsy
 - CWD surveillance program
 - Microbiology and histology prep
- Several years ago, equipment was updated for the hire of our wildlife veterinarian

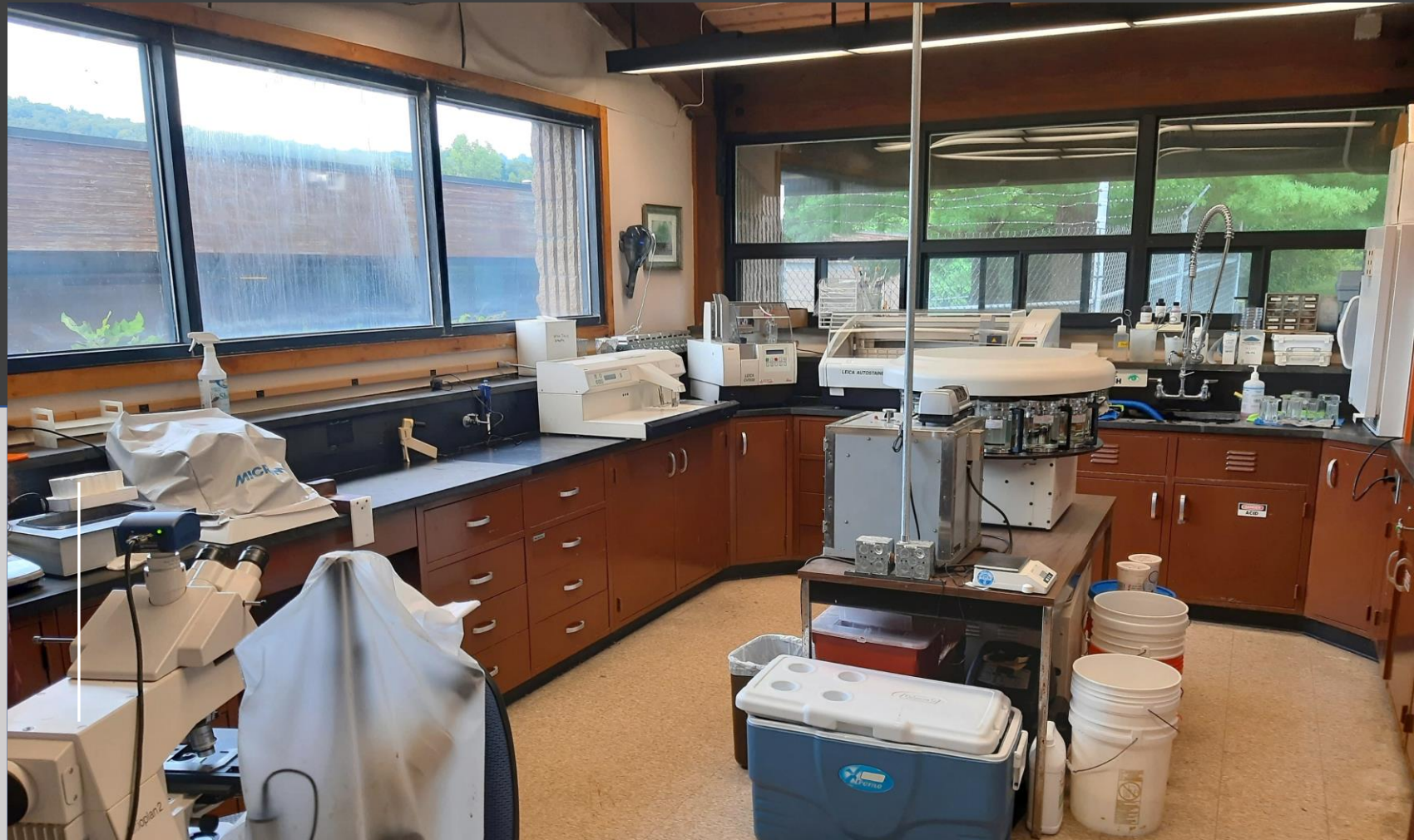


Pittman-Robertson Act



Pequest Aquatic Animal Health Laboratory

- Supports our aquatic animal health program
 - Necropsy
 - Microbiology
 - Histology



NJDA Animal Health Diagnostic Laboratory

- Excellent collaboration between our labs
- Utilize lab resources (molecular biology lab) for fish and wildlife projects
- Additional diagnostic support



Aquatic Animal Health Program

Support for
various Bureaus
in the Division

Freshwater Fisheries

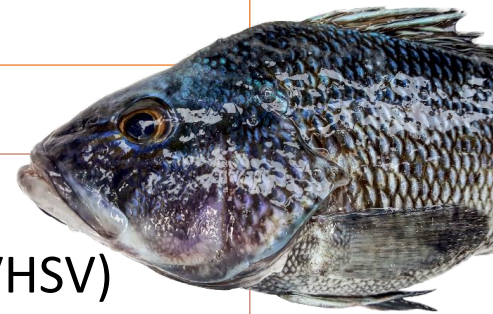
- Overseeing fish health in state hatcheries
- Fish kill investigation

Marine Fisheries

- Surveillance for viruses of concern (VNNV, VHSV)
- Black Sea Bass health project
- River herring health
- Investigation of marine fish disease outbreaks

Shellfisheries

- New program started this year!



Program highlights- Atlantic Menhaden mortality

News

N.J. investigating bacteria blamed for dead fish found in rivers, bays for months

Updated Apr 07, 2021; Posted Apr 07, 2021



This April 2, 2021 photo shows dead menhaden fish on a bank of the Navesink River in Red Bank, N.J. New Jersey's Department of Environmental Protection said on April 6, that they believe a species of the *Vibrio* bacteria is responsible for this and other recent fish kills in the state since November. (AP Photo/Wayne Parry) AP



Front Page News

Bacterium Probable Cause of Local Massive Fish Kills

April 9, 2021



Dead Fish Could Signal Problems for NJ Waterways

April 1, 2021



Numerous dead menhaden, a feeder fish that is a foundation of the marine ecosystem, have washed up on the banks of local waterways. Elizabeth Wulforth

By Elizabeth Wulforth

Clean Ocean Action

Making Waves to Save our Seas, One Blog Post at a Time

Home

COA Website

WEDNESDAY, APRIL 21, 2021

Fish Die-Off Update: COA meets with NJDEP officials

Background information on the ongoing menhaden die-off in the sink and Shrewsbury Rivers, see COA's blog post from April 2, 2021.



ponse to a letter COA sent to Commissioners of the New Jersey Department of Environmental Protection (NJDEP) and NJ Department of Environmental Protection (NJDOH) on April 16, 2021.

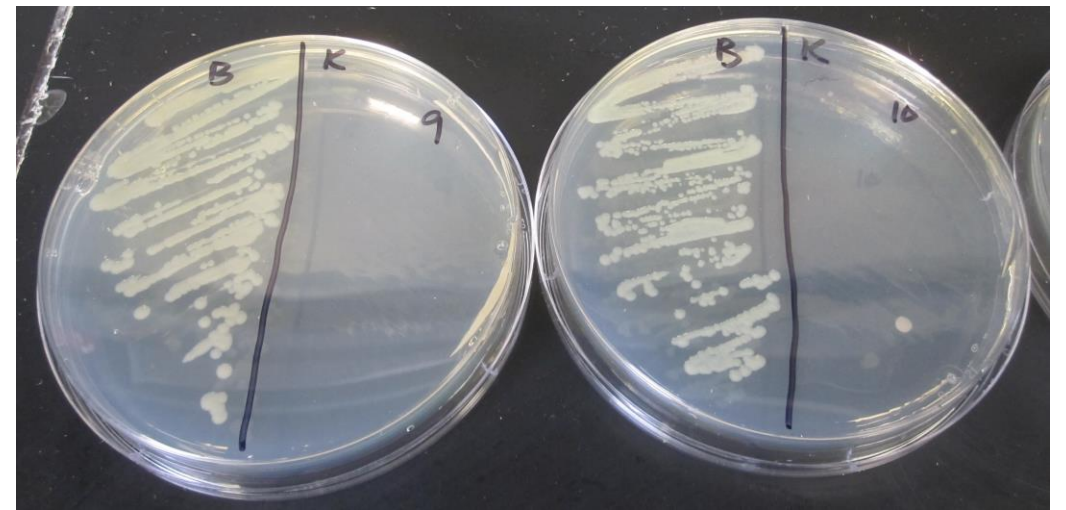
P responded the next day to set up a meeting on April 19, 2021. P assembled all the key program top level directors and lead staff for discussion. Here are some updates from the meeting:

NJDEP confirmed fish bacteria *Vibrio anguillarum* as the cause for this menhaden (aka bunker) die-off.

NJDEP has been monitoring these die-offs for years, but this is the most severe mortality event in recent memory. This on-going event is also particularly notable because it is caused by a

Atlantic Menhaden mortality

- Chronic mortality- monitored from end of March to May
- Collected samples in three time points
- Evaluated 44 fish with histology and bacteriology
- Mortality caused by the bacterium *Vibrio anguillarum* causing neurologic disease
- Further studying this bacterium (genetics and pathogenicity) in collaboration with USGS and USDA



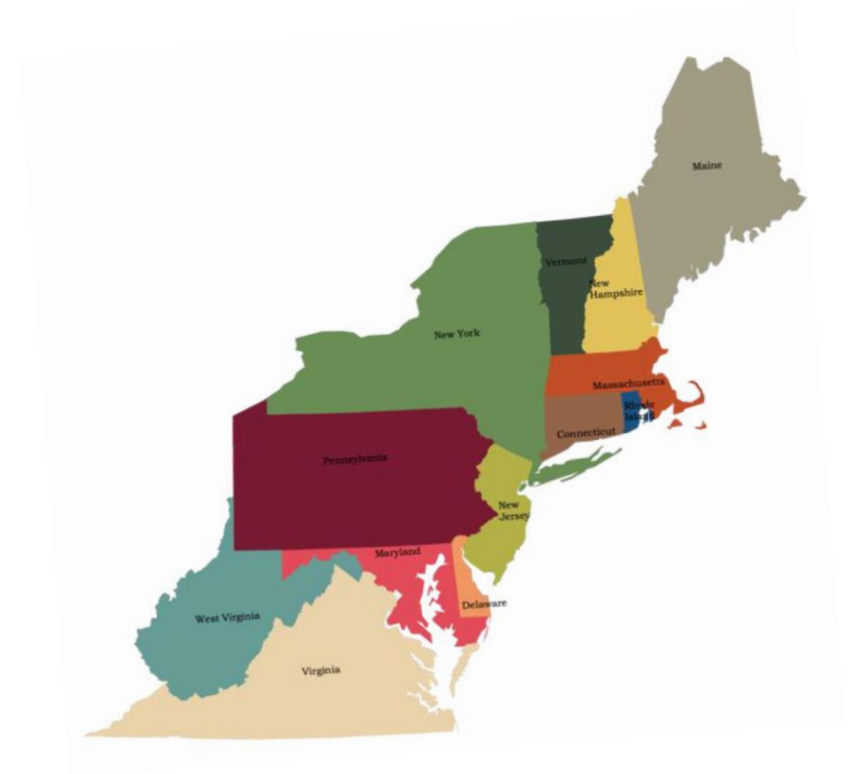
Shellfisheries- Disease surveillance in oysters and hard clams

- Enhanced pathogen surveillance in coastal NJ
- Support Bureau in providing data on pathogen prevalence
- Support a safe and sustainable shellfish industry in the state
- Better support the bureau in evaluating real disease risks to wild and farmed shellfish
- Acquired funding from USDA APHIS-Veterinary Services to support this



Other aquatic animal health efforts

- Chair of the Northeast Fish Health Committee
 - Committee to coordinate on regional fish health issues
 - Guidance for fish health management regionally
- Project Manager for updating the AFS FHS Blue Book
 - Providing updates to aquatic animal health diagnostic testing
 - Creating new chapters for underrepresented species



Terrestrial Wildlife Program Highlights

Chronic Wasting Disease

Newcastle Disease Virus found
in a cormorant (a first in NJ)

Ongoing songbird mortality
event

Chronic Wasting Disease Surveillance

- 705 hunter harvested deer were sampled
- 53% were does; 47% bucks
- Top 3 DMZs sampled: Zone 12 (127 samples), Zone 8 (101 samples) and Zone 10 (48 samples)
- 8 additional sick deer were also sampled
- All samples were negative – NJ continues to be CWD free

Virulent Newcastle Disease Virus

- Wildlife rehabilitation facility received a double crested cormorant with a drooping wing. No trauma was found, Newcastle was suspected
- Confirmed by the National Veterinary Services Lab
- First time found in NJ
- Cormorants are a known carrier of vND, and most bird species are susceptible. Chickens are considered the most susceptible species.
- This disease is highly contagious and is transmitted among susceptible birds through feces, body fluids, exhaled air and eggs of infected birds and can be present in all body tissues.
- Follow up testing in collaboration with the NJ Department of Agriculture and USDA APHIS found no additional positive birds

Songbird Mortality Event

- Mid-May wildlife health professionals in Washington DC, Virginia and West Virginia began getting calls about sick fledgling and hatchling songbirds
- Late June into July – NJ started getting reports
- Majority have been blue jays but also starlings, grackles, cardinals and robins
- No adult birds have been impacted



Songbird Morality Event

- Case reports are decreasing in all impacted states
- All the common causes have been ruled out now labs are performing genomics as well as investigating the possibility of it being related to the 17-year cicada emergence
- No definitive cause as of yet
- Does not appear to impact humans or pets or other wildlife