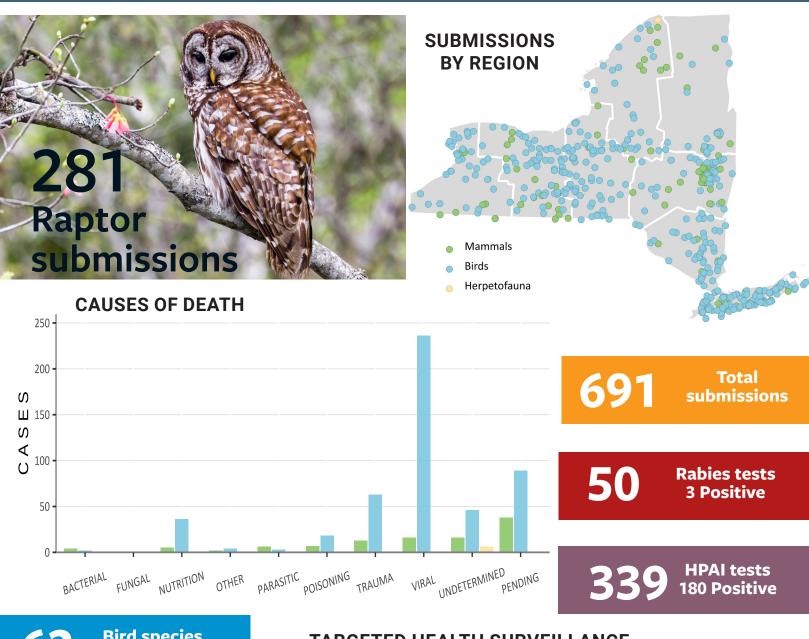


**QUARTERLY REPORT** 

**Q1-2025 (JAN-MAR)** 

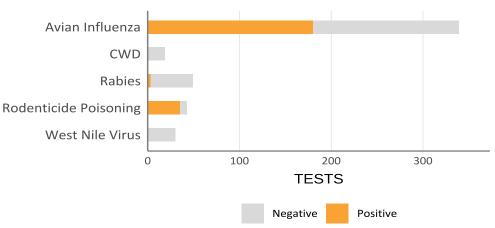


62 Bird species 557 submissions

Herp species 7 submissions

Mammal species 120 submissions

#### TARGETED HEALTH SURVEILLANCE





# Eastern Tiger Salamander Population Surveillance with eDNA

CWHL and DEC Region 1 are continuing their collaboration to expand population monitoring tools for eastern tiger salamanders (*Ambystoma tigrinum*) by developing environmental DNA (eDNA) detection methods. In 2023, the team collected and processed 561 eDNA samples that were used to determine the most sensitive method to collect and amplify tiger salamander eDNA from seasonal breeding pool water.

This year, we're using the methods developed in 2023 to refine the tool for use in future years. We'll use the statistical models developed by <u>Dr. Brenda Hanley</u> to determine the minimum number of eDNA samples to collect at a pond to determine if tiger salamanders are present at the site. In March, <u>Melissa Fadden</u>, <u>Alyssa Kaganer</u>, and <u>Mariel Vandegrift</u> visited Region 1 to help get the field season started.

## Program **happenings** in the **field** and in the **lab**

#### **New Staff**

• Mariel Vandegrift joined the CWHL as the new Wildlife Health Lab Technician, specializing in eDNA and molecular lab techniques.

#### **New Online**

- NBC Nightly News with Jenny Bloodgood & Region 7 bio Christina Hoh in the field sampling for 'Bird Flu'
- CWHL Article: Environmental Contamination and Consumption of Waterfowl
- Facebook Live: Kevin Hynes & the Basics about Highly Pathogenic Avian Influenza (HPAI).

#### In the Field

- Wildlife Health & ECO workshops with Kevin, Krysten & Jenny
- Isoflurane Field training with Dr. Maria Spriggs & Jenny
- Waterfowl sampling for HPAI

#### Latest Publications

- Highly Pathogenic Avian Influenza Virus Exposure and Infection in Free-Ranging Bobcats (Lynx rufus) in New York, USA. J Wildl Disease.
- Management Agencies Can Leverage Animal Social Structure for Wildlife Disease Surveillance. J Wildl Disease.

#### Latest Software

• Sample size calculator - Invesitgating Infectious DIsease

### Under the **scope...**

#### Rodenticide in a muskrat

A muskrat was brought to the <u>Janet L. Swanson Wildlife Hospital</u> after being found in a puddle with bruising at the base of its tail; it died

shortly after admission. The WHP recently detected HPAI in a muskrat and submitted this muskrat for necropsy to rule out HPAI. Necropsy revealed a subdural hemorrhage (blood between the brain and its layer of protective coating), and toxicology testing determined that the animal was positive for Bromadialone, an anticoagulant rodenticide, at a concentration high enough to cause the bleeding.



The cause of death was determined to be anticoagulant rodenticide toxicity. This is an unfortunately common diagnosis in raptors and mesocarnivores, and sometimes also seen in rodents such as squirrels, but this is the first time that our program has made this diagnosis in a muskrat.

Visit Rodenticide Toxicity for more info on the impact of anticoagulant rodenticide on wildlife.

#### Keeping YOU in the loop!

- Interested in getting the "WHP Weekly Case Reports"? Email us at <a href="mailto:cwhl@cornell.edu">cwhl@cornell.edu</a> to get registered & keep up to date on all WHP cases! Access to the case reporting system is available to agency staff.
- Check out the latest WHP disease watch alerts, Wildlife 411, or Lab news impacting wildlife health at cwhl.vet.cornell.edu.

