New York State Wildlife Health Program (WHP)

QUARTERLY REPORT



Q4-2024 (OCT - DEC)



The New York State Cooperative Wildlife Health Program (WHP) is a partnership between the DEC Bureau of Wildlife and Cornell University's College of Veterinary Medicine that works to safeguard the long-term health of the wildlife populations of New York.



Department of Environmental Conservation

Sample Size Calculator

合 Home

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Details of your Sample Size Computation
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G Wildlife Population

- 🛓 Sampling Scheme
- Correlation
- 📕 Diagnostic Details
- 😽 Simulation Details

Sample Sizes Needed

🐗 Sample Size Needed

Additional Information

? Tutorials

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

New Online

- Molting Fact Sheet
- Protocols, Pipelines, and Potential When Evaluating New Diagnostic Tools
- Meet Alfie How One Turtle Created a Conservation Connection

Latest Publications

- Real-time quaking-induced conversion (RT-QuIC) is robust for chronic wasting disease detection in white-tailed deer retropharyngeal lymph nodes. Journal of Veterinary Diagnostic Investigation.
- Communicable disease among individuals in a homogenously mixing population dramatically reduces the cost of wildlife disease sampling. Journal of Wildlife Diseases. (in press)

Latest Software

• <u>Sample size calculator for declaring a population</u> <u>free of infectious disease</u>. Cornell University Library eCommons.

New Sample Size App Available

When free-ranging wildlife hosts naturally cluster on the landscape and transfer disease among one another, scientists can leverage that behavior to produce astonishing sample size savings relative to traditional statistical approaches. What does that mean? It means the clustering tendencies in wildlife populations can dramatically reduce the cost of wildlife disease sampling.

We created an easy-to-use, free interactive application that contains scores of tutorials depicting sampling savings in a wide range of disease/wildlife host systems, including mammals, birds, herps, insects, and even marine life.

While the app contains **over 30 example systems** in and around NYS, the interactive app can be applied to any host species on land, in the air, or in the sea-even humans! If hosts cluster and share disease, this app can help.

Try it here: SampleSize App



Brainworm in Moose

Two moose with similar conditions were found within the same week in mid-November. One was a young adult cow unable to stand when approached in Warren County. The second was a bull calf stuck between two rocks and unable stand even after being freed from the rocks in Hamilton County. Both moose were euthanized due to declining condition and inability to stand. Field necropsies were performed by wildlife biologists and samples from both moose, including the heads and organs, were sent to the Wildlife Health Unit in Delmar for examination.

Long thin nematodes were identified on gross examination of both moose brains. These worms were confirmed by parasitologists at Cornell as <u>Parelaphostrongylus tenuis</u> (brainworm). Both moose were unable to stand likely due this parasite causing damage to their spinal cords and brain. In addition to *P. tenuis*, both moose had signs of early infections with <u>Fascioloides magna</u> (giant liver fluke), another parasite that threatens moose health in the Adirondacks.

Visit <u>Moose Population Health</u> for more info on the WHP's ongoing moose research.

Keeping YOU in the loop!

- Interested in getting the "WHP Weekly Case Reports"? Email us at <u>cwhl@cornell.edu</u> 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 <u>cwhl.vet.cornell.edu</u>.



Promoting the health and long-term sustainability of wildlife populations by advancing scientific tools and sharing knowledge to protect and improve the health of native wildlife populations

Cornell Animal Health Diagnostic Center