

CALLING ALL RAPTOR BANDERS

Monitoring a Recently Discovered Parasitic Disease in Migrating Sharp-shinned Hawks

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WHAT IS THE PROBLEM?



Banders with Braddock Bay Raptor Research have been documenting **caseous oral lesions** in Sharp-shinned Hawks (*Accipiter striatus*) migrating through Rochester, New York, USA for the past three springs

A Sharp-shinned Hawk with grade three oral lesions



A capillariid nematode egg

Genetic sequencing revealed the cause of these lesions to be a newly discovered manifestation of infection by ***Eucoleus dispar***, a capillariid nematode parasite (Childs-Sanford et al. 2019)

RATE OF INFECTION

% Female Sharp-shinned Hawks with Lesions

	2020	2021	2022
Braddock Bay, New York (Spring)	33% n=110	42% n=180	53% n=176
Cedar Grove, Wisconsin (Fall)	2% n=115	24% n=96	X

< 2% (n=237) of male Sharp-shinned Hawks checked across the two stations from 2020-2022 had lesions

SCORING



Grade 0



Grade 1



Grade 2



Grade 3



Grade 4



Grade 5

Illustrations by Melissa Mance-Coniglio

WHO IS MONITORING?



A map of North America with pins at raptor banding stations conducting standardized monitoring for capillaria infection

ONGOING QUESTIONS

Does the disease influence survivorship or recruitment?

Will the rate of infection keep increasing?

Will the geographic scope of infection increase?

Are infected hawks immunocompromised?

Why have so few males had oral lesions?

Will other species develop symptoms?

HOW TO GET INVOLVED

Contact David Mathiason at banding@bbrr.org

For more information visit www.bbrr.org/sharp-shinned-hawk-project/