

BBRR Sharp-shinned Hawk Project Update

Written by David Mathiason, Raptor Bander

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The BBRR raptor banding team has been pushing forward on our investigation into the observed oral lesions in Sharp-shinned Hawks (*Accipiter striatus*) caused by the capillariid nematode *Eucoleus dispar*. We continue to examine all the sharpies that we trap and are expanding this study to other raptor banding stations around the country as well.

Cedar Grove Ornithological Research Station in Wisconsin partnered with BBRR to examine the birds they caught during their fall migration in both 2020 and 2021.

As the table below shows, banders there witnessed a substantial increase in the percentage of birds displaying signs of this parasite from one year to the next. (Data from Cedar Grove was provided by bander Suzanne Kaehler).

An important feature of this data is hidden though – almost all (25/26) of the birds that displayed these lesions were females. The same unevenness by gender is also true for the birds trapped by BBRR banders, where last spring 76 out of 77 birds with lesions were female.

There are many things that we do not know, and the list of unanswered questions is long. What we have learned is that:

1. This disease is increasing in prevalence
2. The disease is predominantly being seen in females

Moving forward, we are actively encouraging other banding stations across the country to participate in this research. Individuals at the Cape May Raptor Banding Project, in conjunction with the BBRR team, are currently refining their protocol and do have some data from last fall; they will expand their data collection in 2022. We are engaging other researchers from Rochester Institute of Technology and also from Conservation Science Global, Inc.

Dr. Sara Childs-Sanford, from Cornell University, will be continuing her assessment of toxicology exposure this spring. She also will be outfitting some of the birds captured at Braddock Bay with transmitters, so that we can understand their migration patterns.

For a more complete discussion of everything that we are doing, be sure to attend Bird of Prey Days. David Mathiason and Sara Childs-Sanford will be presenting details of this work on Saturday, April 23 at 11:00 am at Braddock Bay Park. Visit our website at www.bbrr.org for more information.



Sharp-shinned Hawk showing oral lesions, a sign of capillaria infection.

Observations of Oral Lesions in SSHA at Cedar Grove Ornithological Research Station, WI		
Oral Lesions	2020	2021
No	200	150
Yes	3 (1.4%)	23 (13.3%)
Total	203	173

Rates of Observed Infection in Female SSHA		
Banding Location	2020	2021
Braddock Bay, NY	33%	42%
Cedar Grove, WI	2%	24%