



ANIMALS SUBMITTED by region

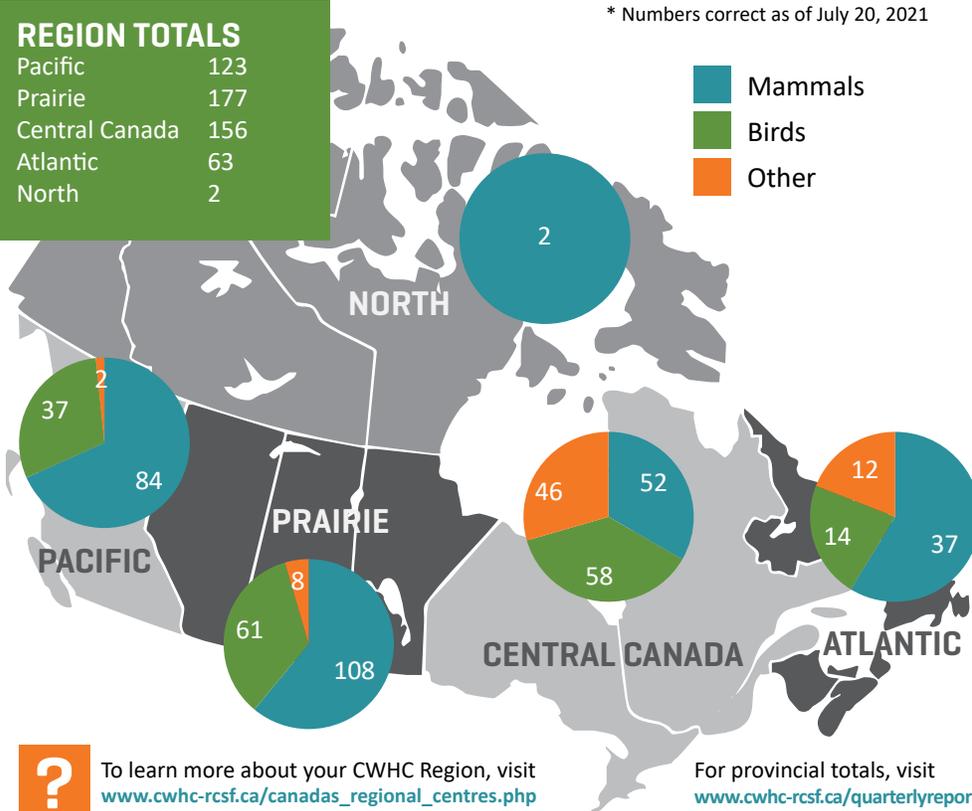
521 ANIMALS TOTAL

* Numbers correct as of July 20, 2021

REGION TOTALS

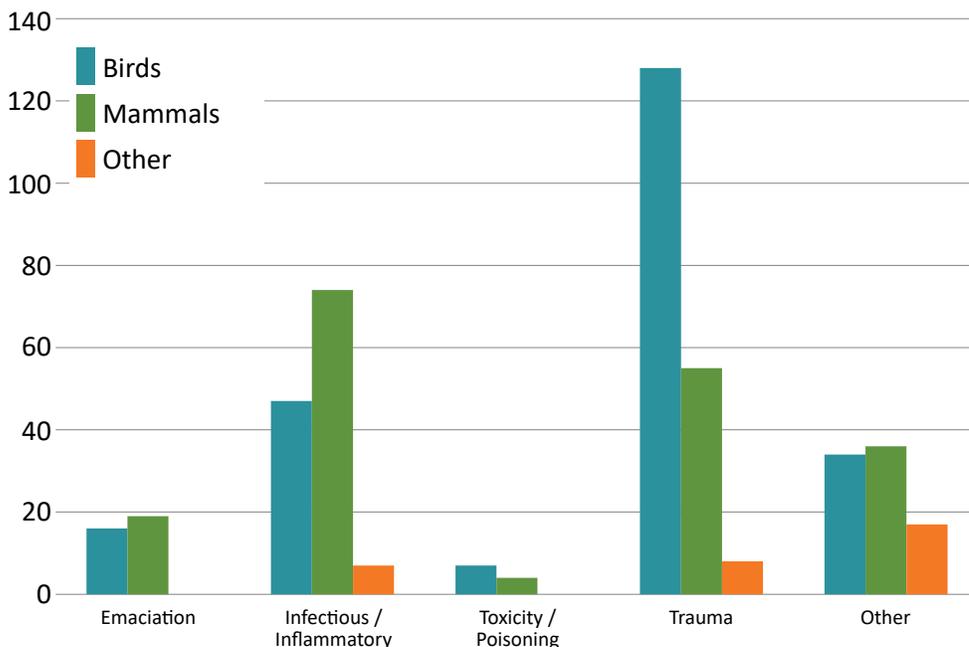
Pacific	123
Prairie	177
Central Canada	156
Atlantic	63
North	2

Mammals
Birds
Other



To learn more about your CWHC Region, visit www.cwhc-rcsf.ca/canadas_regional_centres.php
For provincial totals, visit www.cwhc-rcsf.ca/quarterlyreport

CAUSE OF DEATH category



PLEASE NOTE: An additional 290 cases submitted to CWHC in this quarter are still pending cause of death determination; 162 birds, 101 mammals, and 27 other species. 'Other' diagnoses include neoplastic, metabolic, and degenerative diseases as well as those cases where no cause of death could be determined.

SELECTED disease counts

RABIES

Examined	529
Positive	7

WHITE NOSE SYNDROME

Examined	127
Positive	4

AVIAN INFLUENZA

Examined	302
Positive	0

PLEASE NOTE:

The AI viruses detected were of low-pathogenicity and North-American lineage. Both live bird samples and dead animal submissions are included.

SNAKE FUNGAL DISEASE

Examined	5
Positive	0

NEWCASTLE DISEASE

Examined	132
Positive	1

WEST NILE VIRUS

Examined	375
Positive	1

PLEASE NOTE: The cases reported above represent the data that are currently available in the CWHC database and should be considered preliminary. These data do not include all diagnostic testing for the selected pathogens carried out in Canada; additional testing is performed by other agencies and organisations. Examined refers to any candidate species for this disease. Testing is not always performed, unless the disease is suspected during necropsy or histological examination. Numbers are correct as of July 20, 2021.

For more information visit www.cwhc-rcsf.ca/quarterlyreport



HIGHLIGHTS

Testing of Select Wild Mustelids for SARS-CoV-2

The news of the first free-ranging wild animal testing positive for SARS-CoV-2 was a huge concern for all of us who work with wildlife on a daily basis. At CWHC ON/NU we have worked with the Animal Health Laboratory here in Guelph and have instituted specific safety protocols to work with any wild mustelid that we bring into our facility. Luckily for us, we haven't had many suspect cases, but we have tested two mustelids for SARS-CoV-2 to date (under the approval of the Chief Veterinarian for Ontario).

The first mustelid tested was an ermine that was captured in Burlington and brought to a local wildlife rehabilitator. The ermine was found to have signs of respiratory illness, which was concerning for underlying pneumonia. The ermine tested negative for SARS-CoV-2 by PCR and at that point, the body was able to be sent to CWHC ON/NU for post-mortem examination. The post-mortem findings indicated that this ermine had pneumonia, which was most likely secondary to a bacterial infection.

The second case was a mink that was unfortunately killed by a domestic dog. This mink was found in a local hotspot for human COVID-19 infections (Mississauga). Post-mortem findings in this case indicated that the mink had died secondary to trauma (consistent with the history of a dog attack) and there was no evidence of underlying disease. Swabs from this mink were found to be negative for SARS-CoV-2.

These two cases help to highlight how we at CWHC ON/NU are continually working with our partners to respond to emerging infectious diseases that could negatively impact our free-ranging wildlife, domestic animals, and humans. For links to additional information on COVID-19 and wildlife, including our Interim guidance for Wildlife health and SARS-CoV-2 in Canada: Bats, please visit: <http://www.cwhc-rscf.ca/covid-19.php>.

FEATURED project

INVESTIGATION OF *SARCOCYSTIS* SPP. INFECTION IN FREE-RANGING AMERICAN BLACK BEARS AND GRIZZLY BEARS IN BC

Background: *Sarcocystis* spp. are protozoan parasites of a diversity of hosts including bears, and can cause a variety of lesions. It is unclear whether *sarcocystosis* is a widespread concern for free-ranging bear populations. This study aimed to characterize the presence and lesions associated with *Sarcocystis* spp. in British Columbia free-ranging bears submitted to the provincial diagnostic lab.

Methods: From 2007 to 2019, we retrospectively assessed 118 submitted bear cases to the BC provincial diagnostic lab. We examined 102 free-ranging black bears and grizzly bears post mortem for *sarcocystosis*, using histopathology and molecular diagnostics.

Results: *Sarcocystosis* was confirmed in 41 of 102 free-ranging bears, distributed widely across BC. Forty percent of free-ranging bear cases submitted were positive for *Sarcocystis* spp. on histopathology and/or DNA sequencing, primarily *Sarcocystis canis*. Yearlings were at greater risk of *sarcocystosis* and only cubs of the year died of *sarcocystosis*.

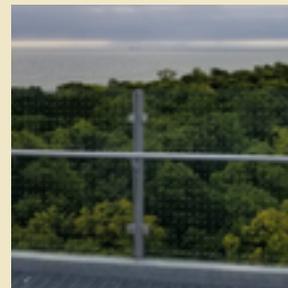
Significance: This is the first report of fatal *sarcocystosis* in free-ranging black bears. Hepatitis was observed most commonly, with encephalitis and myositis often seen in conjunction. *S. canis* was the main etiologic agent, although in rare cases, there was co-infection with *Sarcocystis felis*-like sp., *Toxoplasma gondii*, or *Cystoisospora*-like sp. Overall *sarcocystosis* is a prevalent disease in wild BC bears, but less common as a cause of death. Age was found to be a significant risk factor for *Sarcocystis* infection. This work highlights that *sarcocystosis* may be a disease of greater importance than previously recognized and may have wildlife health and conservation implications, especially for younger bears. Future research is critical to understanding the epidemiology and significance of this disease.

WILDLIFE HEALTH tracker



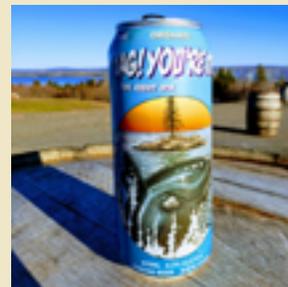
Confirmed Case of WNS in Northern Manitoba

White Nose Syndrome has been confirmed in four Little Brown Bats (*Myotis lucifugus*) found near Cranberry Portage, Manitoba.



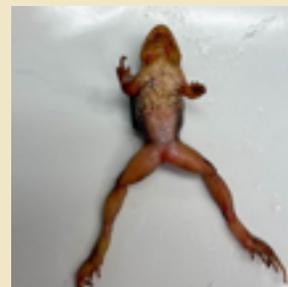
Bird mortalities caused by collisions with clear glass deck railings

Most people are aware of the dangers of windows to birds, but all too often we forget about other architectural uses of glass, such as glass railings.



Colla'beer'ation and Conservation!

Recently the CWHC Atlantic region was awarded \$2500 to contribute to their work in helping save the endangered North Atlantic right whale.



Chytridiomycosis in a free-ranging chorus frog in Quebec

A chorus frog found in Boucherville (Montreal's south shore) at the end of April presented weakness and incoordination of the pelvic limbs.

For more information, click the image, or visit www.cwhc-rscf.ca/quarterlyreport

CREATING A WORLD
THAT IS SAFE AND SUSTAINABLE
FOR WILDLIFE AND SOCIETY

