CANADIAN WILDLIFE HEALTH COOPERATIVE

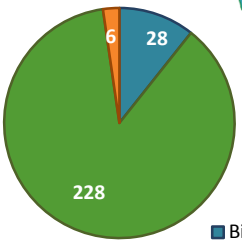
ONTARIO/NUNAVUT REGION

QUARTERLY REVIEW – first quarter 2016

January - March 2016

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

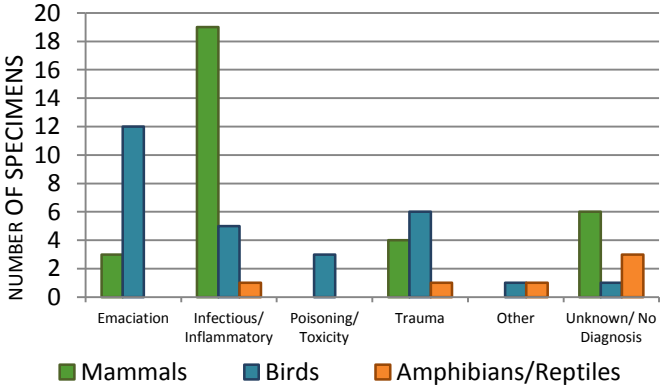
SPECIMEN submission summary



- 262 specimens submitted
- 196/262 for special projects
- 70 calls to CWHC wildlife hotline

CAUSE of death

(excluding 196 special project cases)



SELECTED disease counts

TESTED	POSITIVE	NOTES
AVIAN INFLUENZA VIRUS - DEAD BIRD SURVEILLANCE		
21	0 Matrix Positive 0 H5 Positive 0 H7 Positive	No birds tested positive for AIV.
AVIAN INFLUENZA VIRUS - LIVE BIRD SURVEILLANCE		
144	2 Matrix Positive 0 H5 Positive 2 H7 Positive	All live bird results are from swabs provided from the CWS. An additional bird tested inconclusive for matrix and H7 tests.
WHITE-NOSE SYNDROME		
2	2	2 little brown bats submitted to the CWHC tested positive for White-nose Syndrome by RT-PCR and histology.
CANINE DISTEMPER VIRUS		
17	13	Positives include raccoon (11), fisher (1) and striped skunk (1). Totals do not include special project cases.
PARVOVIRUS		
16	8	All positives were raccoons. Totals do not include special project cases.
BAYLISASCARIS PROCYONIS		
12	2	Totals do not include special project cases.

NOTE: Animals reported represent the data 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 Ontario. Additional testing is performed by other agencies and organizations.

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SNAKE FUNGAL DISEASE found in Ontario, Canada

In mid-March 2015 an adult female eastern foxsnake (*Pantherophis gloydi,* formerly *Elaphe gloydi*) with signs of dermatitis was accidentally disturbed while hibernating at a location close to Lake Erie in Ontario, Canada. The snake was treated in captivity and samples were submitted to the CWHC because the observed lesions were consistent with Snake Fungal Disease. The presence of the fungus *Ophidiomyces ophiodiicola* was confirmed by culturing the fungus as well as by PCR. Snake Fungal Disease was confirmed with histological examination of a full depth skin biopsy. We believe this is the first documented case of Snake Fungal Disease in Canada. The disease has previously been confirmed in 16 U.S. States.

Snake Fungal Disease (SFD) is an emerging disease affecting a variety of snake species in eastern North America, including the northern water snake (*Nerodia sipedon*), eastern racer (*Coluber constrictor*), rat snake (*Pantherophis obsoletus* species complex), timber rattlesnake (*Crotalus horridus*), massasauga (*Sistrurus catenatus*), pygmy rattlesnake (*Sistrurus miliarius*), and milk snake (*Lampropeltis triangulum*) . First noted in 2006, the disease varies in severity but has been associated with significant morbidity and mortality in some cases. This is cause for concern in Ontario, where ten of our seventeen snake species, including the eastern foxsnake, are already provincially listed as species at risk.

To read more, please visit **healthywildlife.ca**

ECHINOCOCCUS MULTILOCULARIS in Southern Ontario

Echinococcus multilocularis is a small tapeworm that can cause fatal infections in people. Wild canids, domestic dogs and less commonly cats act as definitive hosts which harbour the adult stage of *E. multilocularis* in their small intestine. When consumed by a rodent, the intermediate stage of the parasite develops in the liver. The life cycle is completed when a definitive hosts ingests an infected rodent. *Echinococcus multilocularis* had never been diagnosed in Ontario prior to 2012, however, since then there have 4 cases in dogs and 2 in non-human primates.

Humans and domestic dogs can become infected with the intermediate stage of *E. multilocularis* when eggs are ingested. The resultant disease is called alveolar echinococcosis. In humans, alveolar echinococcosis has a high risk of death among cases if left untreated. Domestic dogs are of particular concern since they can become simultaneously infected with both the adult and intermediate stage of the parasite, allowing for potential transmission of infection to humans by shedding of eggs in feces.

Since this is an emerging health issue in Ontario for both dogs as well as humans, a study is being conducted at the Ontario Veterinary College to determine the prevalence of *E. multilocularis,* identify high risk areas or “hot spots” for *E. multilocularis* infection in foxes and coyotes, and to identify risk factors for *E. multilocularis* infection in foxes and coyotes in southern Ontario.