

TRICHOMONOSIS

Other names: Trichomoniasis, Canker, Frounce



CAUSE

Trichomonosis (also known as trichomoniasis) is an infectious disease caused by the microscopic parasite *Trichomonas gallinae*. It is a well documented illness in many bird species, primarily pigeons and doves (commonly known as canker) and raptors (commonly known as frounce), but also in various species of passerine birds, particularly finches. The parasite inhabits the upper digestive tract, mainly the crop and esophagus, but it may also infect the liver, lungs, air sacs, internal lining of the body, pancreas and bones and sinuses of the skull.

SIGNIFICANCE

Since 2005, increased mortality due to trichomonosis has been observed in the United Kingdom in greenfinches and chaffinches, which has caused significant declines in the populations of these bird species. Trichomonosis was first documented in wild birds in Atlantic Canada in 2007, and it has been encountered regularly in the purple finch and American goldfinch populations in the region since that time. The reason for the emergence of trichomonosis in finches is uncertain, although there is some evidence that backyard bird feeding and watering might be involved in the transmission of the disease.

RISK TO HUMAN AND DOMESTIC ANIMAL HEALTH

Trichomonas gallinae is a parasite of birds and does not pose a health threat to humans or other mammals such as dogs and cats. Captive poultry and pet birds could be infected with the parasite.

TRANSMISSION

Food or water contaminated with recently regurgitated saliva or droppings from an individual infected with *Trichomonas gallinae* can expose uninfected birds to the parasite and lead to potential transmission of the disease. Transmission of infection between birds can also occur when infected adults feed nestlings by regurgitating food. Raptors acquire the disease when consuming infected birds as prey. Although under most conditions the parasite is not viable in the environment for long, bird feeders and baths are thought to be potential sites of transmission.

CLINICAL SIGNS

Trichomonosis causes severe damage to the tissues of the mouth, throat, crop and esophagus and affected birds may drool saliva, regurgitate food, have difficulty in swallowing food and water, demonstrate laboured breathing and/or have a swollen neck or throat. In addition to showing signs of general illness (i.e., lethargy, poor flight ability and fluffed up feathers), affected finches are frequently observed to have matted wet plumage around the face and beak, presumably due to regurgitation. Affected birds are also commonly very thin as the damage to the tissues of the throat and esophagus makes eating and drinking painful and difficult.

CANADIAN WILDLIFE HEALTH COOPERATIVE

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MANAGEMENT AND PREVENTION

Because bird feeders and baths are thought to be potential sites of transmission of trichomonosis, the following precautions are recommended to avoid spread of the disease and to keep birds healthy:

- During a known outbreak of trichomonosis, bird feeders and artificial water sources should remain out of use until the end of the known transmission period. For trichomonosis, that would be after the first prolonged cold weather and frost of the winter. During the summer months there is plenty of natural food and water available for birds.
- Clean your bird feeders and baths regularly. A weak solution of domestic bleach (10% sodium hypochlorite) should be used to disinfect feeders and baths. Feeders should be rinsed well and dried before re-use.
- Only use bird feeders that prevent the seed from getting wet. Bird seed that is exposed to rain and becomes wet is a more suitable environment for the potential survival of the parasite.
- Do not use table feeders. Sick birds sitting directly on bird seed are more likely to contaminate it with *Trichomonas gallinae*.
- Report any sick or dead birds to the Canadian Wildlife Health Cooperative. Find your closest regional centre at: http://www.cwhc-rcsf.ca/

Birds can carry other diseases transmissible to humans and pets (for example *Salmonella, Campylobacter* and *E.coli* bacteria). Therefore, routine cleaning and disinfection of bird feeders and baths will reduce the risk of any infections being passed on to people or their pets.

- Brushes and equipment used to clean bird feeders and baths should not be used for any other purpose. Keep them outside and away from food preparation areas.
- Wear rubber gloves when cleaning feeders and thoroughly wash hands and forearms afterwards with soap and water, especially before eating and drinking.
- Avoid handling sick or dead birds directly with bare hands. Wear gloves or cover your hands with a plastic bag to collect a specimen for examination or contact your local wildlife department to retrieve specimens from your property.

SUGGESTED READING

- United Kingdom's <u>Garden Bird Health Initiative Program</u>.
- CWHC-RCSF Trichomonosis Surveillance Page.
- McBurney S, Kelly-Clark WK, Forzán MJ, Vanderstichel R, Teather K, Greenwood SJ (2017): Persistence of *Trichomonas gallinae* in Birdseed. **Avian Dis. 61(3):311-315**.
- Forzán MJ, Vanderstichel R, Melekhovets YF, McBurney S (2010): Trichomoniasis in finches from the Canadian Maritime provinces An emerging disease. **Can. Vet. J. 51(4):391-396**.