

## BASICS

Avian trichomonosis, a contagious disease of the upper digestive tract of birds, is caused by *Trichomonas gallinae*, a single-celled protozoan parasite.

**ALL BIRD SPECIES** are susceptible to infection, but pigeons and doves, especially mourning doves, are the main species affected. Raptors, finches, and house sparrows are also commonly infected.

*T. gallinae* is **TRANSMITTED** to birds through food or water contaminated by the saliva or feces from infected birds. Adult pigeons and doves transmit the infection to their young through regurgitated food and to each other during beak-to-beak courtship behavior.

Birds can become infected at contaminated bird feeders and birdbaths. Raptors become infected by preying on infected birds.

*T. gallinae* typically infects the mouth and esophagus of a bird causing inflammation and ulceration. **CLINICAL SIGNS** include lethargy, fluffed-up feathers, and difficulty swallowing or breathing. Drooling and regurgitation of food may be seen causing wetting of feathers around the beak.

In young birds, the infection is **OFTEN FATAL**, resulting from starvation or suffocation due to blockage of the esophagus or trachea by masses of dead tissue.

**DIAGNOSIS** of trichomonosis is made by clinical signs, presence of yellow-white cheese-like masses in the mouth and esophagus, and identification of the organism by microscopy or PCR.

**TREATMENT** involves administration of oral drugs, so it is impractical in wild birds.

*T. gallinae* does not infect humans or other mammals.



**MASS  
MORTALITY &  
POPULATION  
DECLINE**

**DIRECT  
CONTACT &  
INGESTION**

**PIGEONS,  
DOVES,  
RAPTORS &  
FINCHES**



## DETAILS

*T. gallinae* was introduced to North America in the early 1600s by settlers from France who brought infected pigeons and doves to Nova Scotia.

**SPECIES AFFECTED** In pigeons and doves, trichomonosis is known as canker; in raptors, the disease is called frounce.

Trichomonosis has been linked to population declines of European turtle doves and the extinction of the North American passenger pigeon. In the summer of 2005, outbreaks of trichomonosis in greenfinches and chaffinches in Great Britain occurred, resulting in mass mortalities and population declines. Outbreaks in finches have spread across Europe.

Trichomonosis was first documented in bald eagles in New York in 1977.

**TRANSMISSION** Trichomonosis is most frequent in late spring, summer, and fall as the parasite is passed from parent to offspring or through courtship behaviors.

Domestic poultry may become infected by drinking water or eating feed contaminated by infected pigeons.

In doves and pigeons, most adults are subclinical carriers of the parasite, and clinical disease is seen most often in young birds.

Strains of *T. gallinae* vary in their ability to cause clinical disease. Virulent strains of the parasite cause severe inflammation, ulceration, and accumulation of masses of dead tissue in the mouth and esophagus. Death from starvation or suffocation may occur in days to weeks. Infection with less virulent strains or recovery from mild infection may confer immunity.

**PRECAUTIONS AND PREVENTION** Because trichomonosis has the potential to cause mass mortality events, prevention is important. Regular cleaning and disinfection of bird feeders and baths with 10% bleach will kill the parasite and help control other pathogens.

*T. gallinae* cannot survive for long periods outside the host in dry environments.

A young house sparrow with some of the clinical signs of *T. gallinae*, including fluffed-up feathers and lethargy.

