

House Finch Conjunctivitis

If you notice house finches at your bird feeder with crusty, watery, or infected-looking eyes, you are not alone. A new condition called house finch conjunctivitis, first discovered during the winter of 1993-94, is spreading through the eastern United States. Symptoms of the disease, which mainly affects house finches, include scabby, swollen, runny, cloudy-looking, or glassy eyes, mucous oozing from the nostrils, and an upper respiratory infection. Some sick birds recover, whereas others become blind and die of starvation or fall prey to cats and hawks.

How will I know if birds at my feeder have this disease?

Any of the conditions listed at left probably indicates house finch conjunctivitis. Although many different bacteria, fungi, viruses, and parasites can cause eye inflammation and disease, lab tests have confirmed that this conjunctivitis outbreak is caused by *Mycoplasma gallisepticum*, a well-known bacterium.

What does *Mycoplasma gallisepticum* do to birds?

Mycoplasma gallisepticum (MG) infection was formerly confined to domestic birds such as chickens and turkeys. Recently, this disease may have evolved into a new strain that affects house finches and possibly other songbirds. Symptoms in domestic birds are very similar to those in house finches, and include cloudy eyes, swollen sinuses, sticky nasal mucus, coughing, sneezing, and labored breathing. Domestic birds that are MG-positive spread the disease to each other through exhaled respiratory droplets and in their feces, or to their young during egg formation. This

method of transmission may have serious implications for wild birds, because the disease could persist from generation to generation and become firmly established in eastern house finch populations. At this time, however, no one knows if



house finches are affected by MG in the same way that poultry are.

What happens to infected house finches?

The disease usually infects one eye first and then spreads to both. Sick finches may appear mangy-looking, lethargic, disoriented, or weak, and are often alone at feeders. Severely ill birds may not fly at all, and often remain on the ground pecking at seeds dropped from the feeder above. Finches with partial vision loss may fly into bird feeders and windows, or allow bird-watchers to get close. The infection apparently causes some discomfort, since diseased birds frequently wipe

their eyes on branches and bird feeders, possibly contributing to the spread of the disease.

Which wild birds are affected by house finch conjunctivitis?

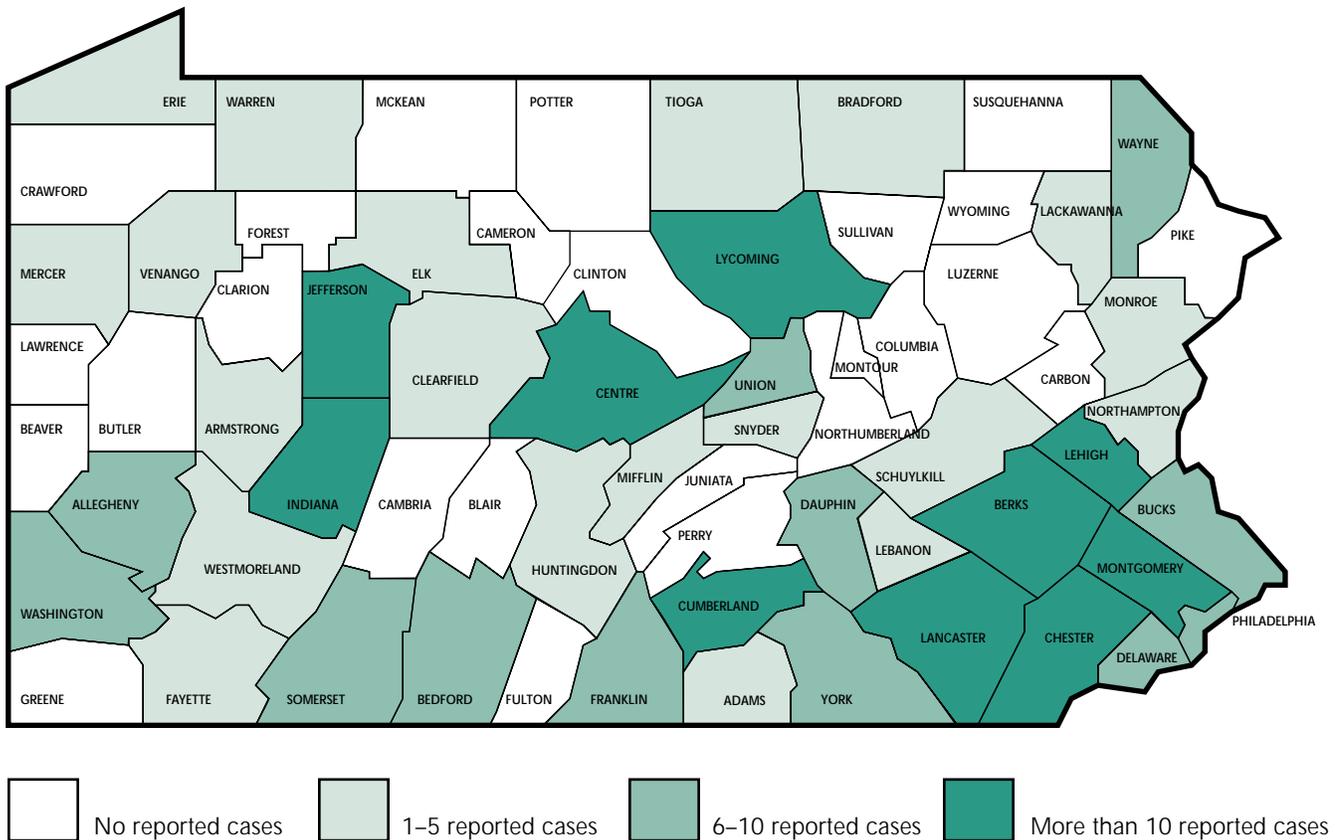
As its name implies, this new condition is limited mostly to house finches. Reports of house finch conjunctivitis symptoms among other common feeder birds such as chickadees, titmice, and sparrows have surfaced, but these cases are rare and have not been tested in the laboratory. Studies at the Cornell Laboratory of Ornithology concluded that other songbirds are rarely affected by

this new strain of MG. Humans and other mammals will not catch conjunctivitis from contact with sick birds because MG is an exclusively avian disease.

Why is the house finch particularly susceptible to this disease?

No one knows why house finches are more likely to contract this disease than other birds. The house finch, a native of the western United States, was introduced to the eastern United States in 1940 when a New York city pet store owner released illegally held finches to avoid prosecution. Within forty years,

Distribution of house finch conjunctivitis in Pennsylvania, 1994-95



this group of finches bred, multiplied, and established itself throughout the eastern United States. The marvelous adaptability of the house finch and its varied habitat requirements enhanced its rapid colonization of the East. Inbreeding and reduced genetic diversity resulting from the small number of individuals that started the eastern population, however, may make these finches less resistant to new diseases than other species. Researchers speculate that finches first may have been exposed to the disease in poultry yards where they foraged for food.

Throughout what areas has house finch conjunctivitis spread?

Through phone calls to state wildlife agencies, university animal disease labs, Cornell's Project FeederWatch, and Pennsylvania's extension wildlife specialist, house finch conjunctivitis has been reported in forty-three Pennsylvania counties (see map). Although diseased finches were not reported in all counties, MG has been detected in house finches statewide, as the map indicates. The disease also is present throughout most Eastern states and is spreading west, south, and north.

What can I do to prevent the spread of the disease?

Researchers do not know how house finch conjunctivitis is spread from one individual to another, which makes it difficult to provide specific recommendations for reducing the risk of disease. In poultry, the infection can be spread through the air. If this also is true for finches, little can be done to reduce disease transmission except to avoid practices such as bird feeding that bring together large numbers of finches in a small area. If infected house finches are frequenting your feeder, you could stop feeding. This actually could increase the

occurrence of MG, however, because sick finches will travel to other areas, taking the disease with them.

The best way to reduce the potential spread of MG and other feeder-bird diseases is to adhere to the following guidelines:

- Clean feeders and bird baths on a regular basis with a 10 percent bleach solution.
- Avoid using moldy seed, and keep the ground area around the feeder as clean as possible. During the summer, rake the area to remove accumulated seeds beneath the feeder. During the winter, shovel fresh snow over the area.
- Use nonporous plastic, metal, or glass feeders that are easy to clean, and provide ample feeder space to reduce crowding.
- Keep platform feeders clean and put out only the amount of seed that birds can consume within a day or two.

Finally, don't wait until sick birds are present to implement these precautions.

What should I do if I find dead birds at my feeder?

Dispose of dead birds by burying them or wrapping them in plastic bags and placing them in the trash. Wear gloves, because even though *Mycoplasma gallisepticum* is not transmissible to mammals, several other feeder bird diseases are. Wash hands, clothes, and boots after handling birds or dirty feeders. Once you have removed the dead birds, clean and disinfect the feeder and move it to another part of the yard. Sweep up old seeds and droppings and fill the feeder with fresh seeds. These practices will reduce the likelihood that healthy birds will become infected from contact with feces or contaminated seed.

Can I help sick birds in any way?

Although well-meaning individuals might want to take in and try to cure diseased finches, this practice is not recommended. It is illegal to possess wild birds without proper Pennsylvania Game Commission permits, and wildlife rehabilitators have had only limited success in treating house finch conjunctivitis. Studies have shown that some birds can recover on their own, so it is better to leave sick finches alone and focus instead on preventing further spread of the disease through the previously mentioned practices.

Will the house finch disappear from the eastern United States?

It is highly unlikely. Although the disease occurs throughout the range of the eastern house finch, reports of sick birds indicate that only a small percentage of the flock shows signs of infection. Even though MG may become established in wild finch populations, the excellent adaptability of the house finch that established it as an eastern breeding bird probably will ensure its continued presence at our feeders and in our towns.

Since house finches and purple finches look alike, how can I tell them apart?

House finches often are confused with purple finches, although the birds' habitat requirements are different. House finches live in a variety of habitats, especially in urban areas, and nest in both evergreens and manufactured structures. Purple finches are found in coniferous or mixed woodlands, parks, and orchards.

Distinguishing the two species is not difficult to the trained eye, but may be confusing to the beginning bird-watcher. The male purple finch is robust, and appears to have an overall raspberry stain, whereas the male house finch is more slender, with its red breast clearly set off from its streaked underparts. The male house finch has faint white wing bars and a conspicuously streaked belly and flank, while the male purple finch has pinkish wing bars and an unstreaked belly and flanks. Female house finches have an overall dusky appearance, with the breast streaking blending into a dark background. Female purple finches have prominent dark streaking on a whitish belly and a white line above each eye. Both male and female purple finches have conspicuous brown patches behind their eyes, while house finches lack this distinctive feature. Even though these two birds are closely related, the conjunctivitis-like *Mycoplasma* infection seems to affect mainly the house finch. ■

Prepared by Regina R. Allen, wildlife and
fisheries science program, and Margaret C.
Brittingham, associate professor of wildlife
resources

Acknowledgments

Data on the occurrence and spread of house finch conjunctivitis were provided by the Cornell Laboratory of Ornithology and the Pennsylvania Game Commission. Partial funding for this fact sheet was provided by Pennsylvania's Wild Resource Conservation Fund.

Illustration Credit

■ *Jeffery Mathison*: house finches at feeder

PENNSTATE



College of Agricultural Sciences
Cooperative Extension

This publication is available from the Publications Distribution Center, The Pennsylvania State University, 112 Agricultural Administration Building, University Park, PA 16802. For information telephone (814) 865-6713.

Penn State College of Agricultural Sciences research, extension, and resident education programs are funded in part by Pennsylvania counties, the Commonwealth of Pennsylvania, and the U.S. Department of Agriculture.

Where trade names appear, no discrimination is intended, and no endorsement by Penn State Cooperative Extension is implied.

Issued in furtherance of Cooperative Extension Work, Acts of Congress May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture and the Pennsylvania Legislature. T. R. Alter, Director of Cooperative Extension, The Pennsylvania State University.

This publication is available in alternative media on request.

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. The Pennsylvania State University does not discriminate against any person because of age, ancestry, color, disability or handicap, national origin, race, religious creed, sex, sexual orientation, or veteran status. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 201 Willard Building, University Park, PA 16802-2801: Tel. (814) 865-4700/V, (814) 863-1150/TTY.