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House Finch "Eye" Disease

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A newly-recognized disease that causes swollen eyelids and weepy eyes in house finches was confirmed in Nebraska in 1996 and has been observed as far west as McCook. Other symptoms of this emerging disease include wet, matted feathers around the eyelids and face, weight loss, fluffed feathers, inactivity, loss of sight, and eventual death in some affected birds.

This disease, caused by a strain of the bacteria-like organism *Mycoplasma gallisepticum*, was first observed in several mid-Atlantic and eastern states in 1994. It has now spread to Canada, all of the eastern and Midwestern United States, and as far west as Texas, but has not been reported in Colorado.

Species Affected

This disease does not affect people, cats, dogs or other mammals, and the house finch appears to be the primary host. Natural infections, however, have been confirmed in a few American goldfinches, and one report indicates that two young blue jays developed the disease after being placed in a cage previously occupied by infected house finches. Another strain of mycoplasma causes respiratory disease in domestic poultry. In laboratory situations, chickens can become infected with the finch strain of mycoplasma, but may not develop the same illness as the house finch. No naturally occurring cross-infection has been reported between house finches and poultry.

House finches historically were found in the western United States, including western parts of Nebraska. They were introduced to the east coast in the late 1930s and early 1940s and have since spread westward throughout most eastern states and, recently, eastern Nebraska. One theory on why they are so susceptible to this disease relates to possible decreased genetic resistance in the small group from which the eastern population developed. As with most diseases, it is likely that this disease will eventually run its course and a more resistant house finch population will result.

American goldfinches are found throughout Nebraska and their overall level of risk to this disease is unknown. One concern is the potential spread of this disease from house finches to goldfinches or other native bird species, especially at feeding stations or at wildlife rehabilitation centers where these species come together. Management recommendations for feeding stations are indicated below.

Transmission — How It Is Spread

Mycoplasmas are typically transmitted by direct or close contact between affected and unaffected animals. In

general, mycoplasmas do not live long outside their hosts. They may, however, survive for brief periods in secretions from the nostrils, mouth, and eyes, an important point to consider in bird feeder selection (see "Make feeders safe"). Whether this organism can be transmitted to young house finches through the reproductive tract to eggs is unknown, but it has been found that other mycoplasmas can be transmitted this way in poultry.

Prevention — What You Can Do

There are no sure ways of preventing or treating this illness in wild, free-ranging birds. Research shows that although medications may suppress symptoms, birds may not be cured. Thus, treatment or rehabilitation should not be attempted for birds with mycoplasmosis. Such rehabilitated birds could remain infectious and become persistent carriers of the disease.

Feeding stations cause unnatural concentrations of birds and thus increase the potential for transfer of disease from one bird to another. A watchful eye and good judgment will often prevent disease problems before they occur.

Below are guidelines on what to do at bird feeding stations to prevent the occurrence and spread of a variety of diseases, including finch eye disease. These guidelines are based on steps developed by the U.S. Fish and Wildlife Service, National Wildlife Health Research Center in Madison, Wisconsin.

- **Give the birds plenty of space.** Provide ample numbers of feeders and place feeders at varying heights and distances so the birds do not crowd themselves. Large platform feeders are probably the best for spreading birds out, but barn-shaped hopper feeders, which protect the seeds from the weather, also work well.
- **Make feeders safe.** Tubular or other feeders that require birds to reach their head or bill through a hole to retrieve seed are discouraged if eye disease is present. Infectious secretions from the eyes and nostrils left on the feeders can be easily picked up by the next bird feeding in the same location. Tubular thistle seed feeders are probably not as likely to spread the disease because the hole is small enough that only the tip of the bill is inserted.

In addition, feeders and bird baths should have no sharp points or edges on which the birds might cut themselves. Cuts may allow infectious organisms to enter. Avoid galvanized containers because they may leach harmful amounts of metals, especially zinc, into the water.

- **Clean up wastes.** Keep the feeder area clean of droppings and a build-up of wasted seeds and hulls. Excess seeds or hulls on the ground may become moldy, and some sunflower hulls may interfere with grass or flower growth. A convenient way to clean up is to use a shop- or garage-type vacuum cleaner, but a broom or rake also works well.
- **Keep feeders and bird baths clean.** Clean and disinfect feeders regularly, about once per month. If sick birds are observed, clean and disinfect more often, about once per week. Bird baths should be cleaned often enough to keep the water fresh, which might be daily or weekly depending on use and weather conditions. After equipment is cleaned, disinfect with a solution of one part liquid chlorine household bleach to nine parts warm water. One option is to immerse feeders completely in the solution for two to three minutes, then allow to air dry. Rinse bird baths thoroughly before refilling.
- **Use fresh food.** Moldy or spoiled food should be discarded and the containers disinfected. Store food in a cool dry place in containers that are insect and rodent proof.
- **When sick birds are observed.** If obviously sick birds are observed at feeders, it is generally best to take the feeders down for a week to 10 days. Some judgement is needed on whether temporarily

removing feeders will actually help stop the disease. This approach probably will be most effective during cold weather and when other feeding stations are not close by.

Because birds use a variety of food sources, removing feeders will not adversely affect other birds except possibly during severe winter extremes such as several days below zero. Birds may be slow in returning to stations when feeding is resumed.

- **Spread the word.** Because birds commonly move among feeders in a neighborhood, talk with your neighbors who feed birds so they are aware and can take the same precautions as you. The most effective prevention program will be in communities where all neighbors cooperate in unison concerning bird bath and feeder management.

Bird Feeding and Disease

The above points are guidelines to help with questions or concerns about disease at bird feeders, especially the recent and noticeable "eye" disease in house finches. Other diseases that can infect birds that typically use bird feeders include: *Salmonellosis*, a common bacterial disease that birds may get from ingesting food or water contaminated by infected droppings; *Trichomoniasis*, a Protozoan parasitic infection that affects mostly pigeons and doves and can be spread when birds consume contaminated food or water; *Aspergillosis*, caused by a fungus that grows on damp feed and in the debris beneath feeders; and *Avian Pox*, a viral infection that causes wartlike growths, usually on the head and legs, and is normally spread by biting insects or through breaks in the skin. Although the potential for disease does exist, being alert and using reasonable care will prevent most problems.

If mycoplasmosis is observed in house finches in western portions of the state, in species other than house finches, or in any other unusual circumstance, please report the observation to your local Cooperative Extension office, any Nebraska Game and Parks Commission District Office, or to Dr. Eva Wallner-Pendleton at 402-472-1434. These reports will be used to track the spread and status of the disease in Nebraska.

Bird observation and feeding is an increasingly popular, educational and fun activity for families, groups, and individuals. Wild bird enthusiasts and people who feed birds have helped considerably in tracking the introduced population of house finches and the development and spread of mycoplasmosis. Consider keeping a few notes in a backyard journal about what happens at your feeders. Your observations become a lasting record that will show change over time and may help tailor landscape or feeding programs in future years. Additional information can be found in NebGuides on Backyard Wildlife, Feeding Birds (G83-669), and Tips for Success (G97-1332).

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