Wildlife health What we've learned

We are becoming increasingly aware of the risks of garden bird feeding. **Kate Risely** outlines the latest report from the Garden Wildlife Health project which summarises current disease risks.

A NEW REVIEW

The benefits of feeding wild birds are well known; supplementary food helps our much-loved birds to survive and breed. Contact with garden wildlife is also recognised as important to human wellbeing, given our increasingly urbanised lifestyles. However, feeding birds can increase the opportunities for diseases to spread. The Garden Wildlife Health partnership (GWH) has been collecting reports of wildlife disease for many years, and has recently published a review paper summarising our current knowledge of disease risks.

MOST COMMON DISEASES

Trichomonosis is a disease of the throat caused by a parasite, transmitted via saliva, which affects birds' ability to feed. It is most often diagnosed in Greenfinches and Chaffinches, though it has been found in most seed-eating birds that visit feeders. This disease causes mortality year-round, though with a peak in late summer (August/September). It has long been found in pigeons and birds of prey, but was first seen in finches in this country in 2005. We don't know exactly how finch trichomonosis arose,



but it seems likely that this was originally due to 'spillover' transmissions from pigeons to finches, perhaps at bird feeders, and has since been maintained by finch-to-finch transmission.

As a direct result of trichomonosis, the Greenfinch population has declined from a peak of approximately 4.3 million in 2006 down to approximately 1.5 million pairs in 2016, and this has led to the British race of Greenfinch being red-listed as a Bird of Conservation Concern.

Avian pox can cause large skin growths, and has been seen in House Sparrows, Starlings, Woodpigeons and Dunnocks, with a seasonal peak in August/September. It is caused by a virus that can remain in the environment for months, for example on feeders, and can also be transmitted directly between birds, and by mosquitoes. In 2006 a strain emerged in south-east England that particularly affects Great Tits, which has since spread north and west across England and Wales. In the 10 years up to 2005, populations of Great Tits were increasing; however, since then they have decreased significantly in southern England, but not in northern England or Scotland where this disease is still scarce. This suggests that the declines could be partly driven by avian pox, though other factors are also likely to be important.

There is much that is still unknown about the disease transmission risks of different types of feeders.

Salmonellosis cases typically peak in the cold winter months, with seed-eating finches and House Sparrows most commonly affected. Transmission is via droppings, and the bacteria are capable of surviving for months in the environment. However, the number of incidents has declined in recent years, which could be due to birds developing immunity, or perhaps due to reduced Greenfinch numbers reducing disease spread. It does not appear that this disease occurs at a scale sufficient to cause widespread population declines in this country.

Aflatoxins are produced by fungi that can grow on peanuts and other bird foods, particularly in warm damp conditions. They have a range of effects, including immune system suppression. These toxins have been found in the livers of House Sparrows and Greenfinches, though their source, and the effect on wild bird health, are currently unknown.

RISK FACTORS

In general, disease risks are increased when large numbers of birds congregate together, particularly those that wouldn't normally come into close contact in the wild, and if feeder hygiene is poor.

Birds using garden feeders may be attracted from a much wider area, and finch trichomonosis has highlighted the importance of garden feeders in the transmission of diseases that can affect populations, as well as wild bird welfare. However, there is much that is still unknown about the risks of different types of feeders; for example, horizontal feeding surfaces may increase the transmission risk of trichomonosis, where saliva and regurgitated food from infected birds can easily contaminate fresh food. By contrast, hanging feeders may increase contact rates via perches or mesh, and facilitate Avian Pox transmission. More information is needed on how different feeders and cleaning regimes affect transmission rates, as well as how the quality of food affects bird condition, and how much of wild birds' diet consists of supplementary food.

We advise:

- Offering a **variety of foods** from reputable sources.
- **Feeding in moderation** (i.e. only putting out an amount of food that will be consumed while fresh, within one or two days).
- Regularly **cleaning and disinfecting** bird feeders and tables, and removing old, wet food and droppings.
- Occasionally **moving feeders to different parts of the garden**, to avoid build up of droppings and waste food.
- Using feeders with designs that prevent food becoming moist or contaminated with droppings, and that allow easy cleaning.
- **Storing food appropriately** (dry, with no rodent access).

DEALING WITH AN OUTBREAK

If you see sick or dead birds in your garden, please report these sightings to **Garden Wildlife Health**. Based on the information provided, the vets will provide information on the possible cause and make recommendations for disease control where appropriate.

When disease outbreaks occur, we recommend that **feeding** is **stopped** for 2–4 weeks to encourage birds to disperse and reduce the risks of further transmission.



Find out more

Report sightings of sick or dead wildlife, and download factsheets on identifying and preventing wildlife diseases: www.gardenwildlifehealth.org.

Read the review paper: Lawson B, Robinson RA, Toms MP, Risely K, MacDonald S, Cunningham AA. 2018 Health hazards to wild birds and risk factors associated with anthropogenic food provisioning. *Phil. Trans. R. Soc. B.* 20170091. http://dx.doi.org/10.1098/rstb.2017.0091

Garden Wildlife Health (GWH) is a collaborative project between the Zoological Society of London (ZSL), BTO, Froglife and the RSPB.

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