Garden Wildlife Health

Feeding Garden Birds
Best Practice Guidance

Should I feed the birds in my garden?

More than half of the households in the UK with gardens feed wild birds and it is estimated that the amount of supplementary food provided is enough to feed around 196 million birds every year, almost half of the total number thought to inhabit the UK.

Supplementary feeding can have a range of effects on wild birds, influencing body condition, survival, reproductive success, community structure and even migration behaviour. Feeding wild birds has also been linked to increases in the size of some bird populations in Great Britain, as they make use of this readily available resource. Providing food for garden birds can be an enjoyable and hugely rewarding activity but, given its large scale, it is important to consider its impact.

Dense congregations of different species of birds feeding in the same place day after day may increase the risk of transmitting diseases, some of which can cause severe illness, poor welfare, mortality and even population declines. Feeding poor quality or contaminated food can also put garden birds at further risk of getting sick. Whilst the risks are low, there is a potential for some diseases to be transmitted from wild birds to people (i.e. zoonotic risk) and/or domestic animals. It is therefore important to do all that we can to maximise the benefits and minimise the risks associated with feeding garden birds.

What should I feed the birds in my garden?

An ideal way to provide food for your garden birds is to manage your garden so that it provides a natural source of food. Examples of plants which can provide food for garden birds include teasel, the seeds of which attract goldfinches, and native hawthorn shrubs, the berries of which are popular with blackbirds, redwings and fieldfares. Turning an area of your lawn into a wildflower meadow will help attract higher numbers of invertebrates, which will in turn attract insectivorous birds like robins and dunnocks. Ideas for plants which can provide a natural food source for wild birds can be found on the BTO website and the Wildlife Gardening Forum.

As well as providing natural food sources through wildlife gardening, another option is to buy commercially produced supplementary food. Many types of bird foods are now readily available, from peanuts and sunflower hearts through to mealworms and fat balls. Different food types attract different species of garden birds – see the RSPB website for more information on how to attract insectivorous (invertebrate-eating), granivorous (seed-eating) and other types of birds to your garden. Bear in mind that these products do not provide a nutritionally balanced diet for wild birds but offer a supplement to their natural diet. The quality of these foods can vary, and it is therefore important to purchase feed from reputable suppliers and avoid food which appears dusty (grain dust can cause health problems in birds as well as people).
Here is a basic guide on what and what not to feed your garden birds:

<table>
<thead>
<tr>
<th><strong>What to Feed</strong></th>
<th><strong>What NOT to Feed</strong></th>
</tr>
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<tbody>
<tr>
<td>✓ Bird seed/nut mixes including any of the following:</td>
<td>X Whole peanuts (unless in a mesh feeder)</td>
</tr>
<tr>
<td>- Sunflower Seeds/Hearts</td>
<td>If not in a rigid steel/plastic mesh feeder, peanuts can be taken whole and may cause choking in small birds.</td>
</tr>
<tr>
<td>- Nyjer Seeds</td>
<td>X Soft fats or cooking oils</td>
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<tr>
<td>- Millet</td>
<td>These can become rancid, soil bird’s plumage and should be avoided</td>
</tr>
<tr>
<td>- Flaked Maize</td>
<td>X Dry bread (unless soaked &amp; crumbled first)</td>
</tr>
<tr>
<td>- Peanuts (only if kibbled or offered whole in mesh feeder)</td>
<td>Large chunks of dry bread may pose a choking hazard to small birds. Mouldy bread should also be avoided as this can contain toxins which are harmful to birds.</td>
</tr>
<tr>
<td>- Oats (e.g. pinhead oatmeal)</td>
<td>X Seed, nuts or fat products in nylon mesh bags</td>
</tr>
<tr>
<td>- Wheat</td>
<td>Birds can become entangled and injured in these nylon net bags by their feet, or even by the beak or tongue in species like woodpeckers. This can result in serious injury.</td>
</tr>
<tr>
<td>✓ Fat balls/bars/cakes/suet pellets (in autumn/winter)</td>
<td>X Salty foods</td>
</tr>
<tr>
<td>- Fat-based foods (e.g. suet) provide an energy-rich resource for tits and other birds during the autumn/winter. Be aware that in hot weather some fat products may go soft or spoil, so fat products are more appropriate for the colder months.</td>
<td>Crisps, salted nuts etc. These kinds of foods can cause health problems as birds do not typically consume large quantities of salt in their diet.</td>
</tr>
<tr>
<td>✓ Mealworms (live or dried)</td>
<td>X Desiccated coconut (unless soaked in water first)</td>
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<tr>
<td>- These are protein-rich beetle larvae which can be bought live or in dried form. They are popular with blue tits, robins and other insectivorous birds. During the spring and summer, dried mealworms should be soaked in water to make them easier to eat for nestlings.</td>
<td>Desiccated coconut can expand in the crop or gizzard (stomach) after being eaten, causing health problems.</td>
</tr>
<tr>
<td>✓ Mild, grated cheese</td>
<td>X Dried fruits/legumes (unless soaked in water first)</td>
</tr>
<tr>
<td>- Cheese is a high-energy source of protein and fat, and is popular with wrens, robins and dunnocks.</td>
<td>Dried fruits (e.g. raisins) or legumes (e.g. lentils or split peas) can pose a choking hazard to small birds and may swell after being eaten, causing health issues.</td>
</tr>
<tr>
<td>✓ Fresh or soaked (in water) dry fruits</td>
<td>X Dry dog/cat biscuit (unless soaked in water first)</td>
</tr>
<tr>
<td>- Fresh (e.g. apple, pears) and soaked dried fruits (e.g. sultanas, raisins and currants) are popular with thrushes and blackbirds. N.B. Grapes are toxic to cats and dogs so care should be taken when offering fresh or dried grape products.</td>
<td>Dry pet food is included in some bird seed mixes but poses a choking hazard to small birds and may swell after being eaten.</td>
</tr>
<tr>
<td>✓ Fresh, clean water</td>
<td>X Milk</td>
</tr>
<tr>
<td>- Water in water baths/trays should be changed on a daily basis, especially during the warm summer months.</td>
<td>Birds cannot digest milk so can suffer gastrointestinal problems if it is consumed.</td>
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<tr>
<td></td>
<td>X Water additives</td>
</tr>
<tr>
<td></td>
<td>Do not add anti-freeze (i.e. ethylene glycol) to drinking water or water baths as it is extremely toxic to birds and other animals, including cats and dogs.</td>
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</table>
When should I feed the birds in my garden?

Traditionally, people have been advised to feed their garden birds mainly during the colder winter months, when natural food sources are typically scarce. More recently, however, it has been suggested that birds also experience periods of high energy requirements in the spring, summer and autumn (e.g. egg-laying, feeding young and growing new feathers) so can benefit from supplementary feeding throughout the year, as long as feeding guidelines are followed. For more information on how garden birds can benefit from supplementary feeding in every season, see this poster produced by the Pet Food Manufacturers’ Association and the RSPB website.

How should I feed the birds in my garden?

Supplementary food can be provided in a number of ways and different feeding methods can attract different types of birds. Ground feeders typically attract birds which would naturally feed on the ground such as robins, blackbirds and dunnocks. Hanging feeders, on the other hand, are often preferred by birds which naturally feed in the branches of trees or shrubs such as tits, finches and woodpeckers.

Feeders should be made of materials (e.g. metal, plastic) and be of a design that allows them to be easily dismantled and removed for regular cleaning and disinfection. Where possible, bird feeding stations should also be sheltered from the weather (e.g. waterproof roofing) and tables should be designed with a slope to drain freely.

In gardens where pigeons, doves, greenfinches or chaffinches are known to visit, offering seed on table or ground feeders is not advised due to the increased potential for transmission of trichomonosis as these species are prone to being infected with the parasite that causes this disease. This parasitic disease is transmitted via the saliva of infected birds, which can be present on dropped or regurgitated food, and has caused a decline of around 70% of the British greenfinch population since 2006.

How often should I feed the birds in my garden?

Bird feeders should only be filled with enough food to last 24-48 hours. Food which is left out for a prolonged period can become stale, allowing mould and pathogens (e.g. bacteria) to build up. Feeders should not be topped up with fresh feed but, instead, any food not eaten within 24-48 hours should be safely disposed of where it cannot be eaten by wildlife and replaced with fresh food. If you notice that there is often food left over after 24-48 hours, then it is advisable to reduce the quantity of food that you provide, so that it matches the number of birds using your feeders.

Where should I feed the birds in my garden?

Ideally, feeders should be placed at several different sites around the garden to minimise the build-up of food waste and bird droppings at any one site. Regularly rotating the locations of your feeders around the garden can further reduce this risk. Offering different types of foods at separate sites can also reduce close contact between species which would not feed together in the wild. For example, mealworms could be offered in one area of the garden, attracting robins and tits, with nyjer seed available in another part of the garden, attracting siskins and goldfinches. This reduces the opportunities for disease spillover between birds of different families.

Feeders should not be placed under overhanging branches or other perches to avoid bird droppings contaminating the area, potentially resulting in the spread of Salmonella bacteria and other pathogens which can be spread via faeces. Feeders should also not be placed near nest boxes or known nesting sites as this may draw potential predators into the area and increase the risk of nest predation. If you also provide food for other animals (e.g. hedgehogs), we recommend positioning bird and hedgehog feeding stations in different parts of the garden, as some pathogens (e.g.
Salmonella can be transmitted between mammals and birds. Finally, it is advised not to position feeders close to windows or greenhouses due to the risk of window collisions.

What can I do to protect my garden birds from cats?

The UK is home to around 8 million domestic cats and this artificially high density of predators is estimated to result in the death of at least 27 million birds each spring and summer. If you own a cat, there are several things you can do to minimise the risk of it harming your local garden birds, the most effective of which is to limit the time your cat spends outdoors during periods of highest risk, such as around dawn and dusk and during the bird breeding season (March-July). There is also some evidence to suggest that regularly playing with your cat and feeding a good quality, high meat protein, low grain diet may reduce its desire to hunt. Other suggestions can be found on the RSPB website.

Whenever possible, feeders should be placed around two meters from dense vegetation. At this distance, cats are unlikely to be able to hide from view close to the feeder, yet birds can reach cover quickly if required.

Does feeding garden birds increase the risk of them getting ill?

As with people, when birds gather in close proximity (e.g. around feeders) diseases can be more easily transmitted between individuals. Feeding stations also see different species coming together which would not naturally feed or mix in close contact. This can lead to species being exposed to pathogens they would otherwise not come across. Larger congregations of birds can also lead to contamination of the feeding station itself, through droppings or saliva.

Feeding poor quality foods may compromise immune function, making birds more susceptible to disease, particularly if the food provided makes up a large proportion of their diet. Foods may also be contaminated with toxins, such as aflatoxins, which can be harmful to birds. Finally, dense congregations of birds competing over supplementary food may experience elevated stress levels, which can cause further immunosuppression.

In light of the above, we recommend following a few simple guidelines when feeding your garden birds to reduce these risks as much as possible and maintain healthy populations of birds in our gardens (see Page 6).

What are the signs of illness in birds that I should look out for?

A sick bird can exhibit a wide variety of symptoms, dependent on the condition they are suffering from. These can range from obvious signs such as a large skin growth due to avian poxvirus infection (as on the wing of the great tit in the photo to the left), through to non-specific signs of being generally unwell, such as fluffed up plumage, lethargy and seeming slow to fly away from people when approached. For more information on how to spot an unwell garden bird, see our Symptom Identifier on the Garden Wildlife Health Website.

What should I do if I see a sick or dead bird in my garden?

If you observe a sick or dead garden bird, please report it to the Garden Wildlife Health (GWH) project via our website. If you find a bird which appears to have died recently, please report this to us as soon as possible so that the GWH vets can get in touch with you to discuss the possibility of submitting the carcass for post-mortem examination. Our website also provides the option to include photographs of the affected bird(s). The information
we glean from these reports and investigations helps us to understand the diseases affecting British garden birds, enabling us to offer tailored advice on potential diagnoses and the best way to proceed.

If you see a bird in your garden which appears sick or injured and you are concerned about its welfare, you can contact your local veterinary surgeon, the RSPCA (SSPCA in Scotland) or your local wildlife rescue centre for advice (to find a wildlife rescue centre near you, visit the British Wildlife Rehabilitation Council website). Unfortunately, by the time garden birds are unwell enough to be caught by hand, their prognosis is very poor and it is unlikely that they will recover. It is not an option to treat birds in the wild as administration of the correct dose of medication to affected birds is not possible. As well as being ineffective and potentially hazardous to non-target wildlife, use of antibiotics in this way carries the risk of developing antibiotic-resistant bacteria.

What should I do if there is an outbreak of disease in my garden birds?

If you think there may be a disease outbreak affecting your garden birds, please report it to Garden Wildlife Health. The GWH vets will get back to you with tailored advice on the potential causes, where possible, what you can do to mitigate the outbreak and safeguard the health of your garden birds.

If you have observed multiple sick or dead birds in your garden, it may be advisable to stop feeding for a period of at least 2-4 weeks. This encourages the birds in your garden to disperse, reducing the rate of disease transmission. There are often concerns that this might have a negative impact on garden birds which may have become reliant on the food provided. Research suggests, however, that supplementary food only makes up a small proportion of the diet of wild birds and therefore they are unlikely to suffer any ill effects from the temporary removal of feeders.

After a period of 2-4 weeks since you last saw any sign of ill health in your garden birds, food can be gradually reintroduced. Take particular care with the food types that attract the species of bird that have been affected by disease so that they make a gradual return to your garden (e.g. sunflower seeds and finches after an outbreak of trichomonosis). During this period, birds using the feeders should be closely monitored and, if you see further signs of ill health, feeding should be held back for another 2-4 weeks. If the issue continues to recur, it is advisable to stop feeding for a longer period (e.g. 3-6 months).

Can diseases which affect garden birds also cause ill health in humans or pets?

While the risks are low, garden birds can carry a number of disease-causing agents which have the potential to cause ill health in humans and pets, such as *Chlamydia psittaci*, *Salmonella spp.*, and *Escherichia albertii*. Transmission is most likely to occur via direct contact with infected birds or their droppings.

To minimise this risk, we recommend following sensible hygiene precautions as a routine measure when feeding garden birds and handling bird feeders and tables. Avoid handling sick or dead birds directly by using disposable gloves or handling carcasses through an inverted plastic bag. Following these rules will help avoid the risk of any infection transmitting to people and help safeguard the birds in your garden against disease. See “What can I do to reduce the risk of disease for the birds in my garden?” below for more information.

To minimise the risk of pets being exposed, do not allow them to play with or eat sick or dead wildlife.
What can I do to reduce the risk of disease for the birds in my garden?

1. Keep feeding stations and bird baths clean.
   ✓ Bird feeders, tables and baths should be regularly cleaned and disinfected (e.g. weekly) to avoid build-up of food waste and bird droppings.
   ✓ Suitable disinfectants that can be used include a weak solution of domestic bleach (5% sodium hypochlorite) and other specially designed commercial products, diluted according to the instructions on the bottle.
   ✓ Before disinfecting feeders, dampen surfaces with water to reduce the chance of breathing in dry dust or aerosolised material and wash off any dirt or debris as this will neutralise the disinfectant and reduce its effectiveness.
   ✓ After disinfecting feeders, tables and baths, rinse them thoroughly with fresh water and allow them to air dry before re-filling.
   ✓ Regularly sweep/clean areas beneath feeders to prevent waste food and/or droppings from accumulating which may increase disease transmission and attract wild rodents. If you are concerned about having rats in your garden, see the BTO website for advice.
   ✓ Brushes and cleaning equipment for bird feeders, tables and baths should not be used for other purposes and should be kept and used outside only, 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 or drinking.

2. Provide good quality, fresh food.
   ✓ Wherever possible, try to provide natural food sources through wildlife gardening.
   ✓ Buy fresh food from reputable sources and in quantities which will be used within a relatively short period (e.g. 3 months) or before the best-before date if stated.
   ✓ Store food in a sealed container in a cool, dry place with minimal temperature variation to avoid condensation which can encourage mould growth and mycotoxins.
   ✓ Ensure the container is secure to prevent rodents from accessing the food.
   ✓ Remove any uneaten food after 24-48 hours and do not repeatedly re-fill feeders on top of old food.
   ✓ Dispose of uneaten food as waste, not into parts of the garden (e.g. compost heap) where wildlife may still feed on it.
   ✓ Vary food types provided according to season e.g. fat products in autumn/winter (see When should I feed the birds in my garden? above).

3. Rotate the position of your feeders around the garden.
   ✓ If your garden size and design allow, have several sites where feeders can be positioned and rotate feeder location between these regularly (e.g. weekly) to reduce build-up of waste material in any one area.
   ✓ Offer different food types (e.g. seed and nuts, fruit, mealworms) at separate sites to reduce birds with different diets (e.g. seed-feeding, insectivorous) feeding together in close contact.

4. If you see a sick or dead bird, report it to Garden Wildlife Health.
   ✓ Report any sightings of sick or dead garden birds to the Garden Wildlife Health project by visiting www.gardenwildlifehealth.org and clicking on the “Report Online” tab. If you do not have access to the internet, you can call our team on 0207 4496685.
   ✓ Our online Symptom Identifier is a useful tool to help identify signs of sickness in birds and is available on our website.
   ✓ Different diseases have contrasting routes of transmission (e.g. via saliva, droppings, insect bites and physical contact between birds) and the GWH vets will offer tailored guidance where possible.
   ✓ In some cases, we will advise stopping feeding for a period of at least 2-4 weeks to encourage birds to disperse and reduce disease transmission.
Further information

Garden Wildlife Health Symptom Identifier and Disease Factsheet Library
https://www.gardenwildlifehealth.org/garden-wildlife/

Canadian Wildlife Health Cooperative. Strategies to prevent and control bird feeder associated diseases and threats.
www.cwhc-rcsf.ca/docs/fact_sheets/Bird_Feeder_Strategies_Trifold.pdf

RSPB. Creating a wildlife-friendly garden.

RSPB. Safe food for birds.

BTO. Garden birds: to feed or not to feed?
www.bto.org/community/blog/garden-birds-feed-or-not-feed

BTO Gardenwatch. How to help the wildlife in your garden.


Scientific Publications


**Acknowledgements**

Funding for the GWH project comes in part from Defra, the Welsh Government and the Animal and Plant Health Agency (APHA) Diseases of Wildlife Scheme (DoWS) [http://apha.defra.gov.uk/vet-gateway/surveillance/seg/wildlife.htm](http://apha.defra.gov.uk/vet-gateway/surveillance/seg/wildlife.htm); and from the Esme Fairbairn Foundation, the Banister Charitable Trust and the Universities Federation for Animal Welfare.

With thanks to the following for the provision of the photographs in these guidelines: Roy Norris (long-tailed tit, blue tit and robin); Jill Pakenham (greenfinch and great tit on fat ball feeder); Amy Lewis (goldfinch); Liz Cutting (great tit with avian pox lesion) and the RSPB (goldfinches in meadow and great tits on feeder).

**Disclaimer**

These guidelines were produced by Garden Wildlife Health (GWH) for information purposes only. The GWH will not be liable for any loss, damage, cost or expense incurred in or arising by reason of any person relying on information in this fact sheet.

**Date of last update:** April 2021