

Biosecurity concerns associated with feeding wild birds in Australia

Fact sheet

Introduction

There is significant public interest and enthusiasm for feeding wild birds in Australia.

The majority of government agency advice and regulation discourages the public from feeding wild birds. Non-government bird advocacy groups such as BirdLife Australia¹ and wildlife rehabilitation groups also generally advise the public not to feed wild birds. In contrast, a few members of Australia's scientific community have voiced the opinion that feeding of wild birds by members of the public is beneficial and may be encouraged.

The arguments for and against feeding of wild birds are complex and are not the focus of this document.

This fact sheet focuses on the well-recognised biosecurity concerns, which are best minimised by not feeding wild birds. However, if wild birds are fed by the public, people should be aware of the associated biosecurity risks and should adopt appropriate practices to minimise the risks (Ban de Gouvea Pedroso 2016; McBurney et al. 2017; Lawson et al. 2018).

People may prefer to create a wildlife friendly garden, which may offer the pleasurable benefits of bird and wildlife watching, without the potential risks associated with feeding wild animals.

¹ www.birdsinbackyards.net/feed-or-not-feed-0

Biosecurity concerns associated with feeding wild birds

Every time a wild bird is offered food by a member of the public, there are biosecurity issues that should be considered. These include:

- **Large and unnatural groupings of birds** (and other feeding species), which may result in increased opportunities for transmission of disease. Birds may mingle together in larger groups than they otherwise would in nature, and for longer periods of time. Infectious diseases spread more easily in a crowd, than when one or two individuals come into contact with each other. Additionally, offering food to wild birds may encourage a variety of different species of birds and other animals, which would not normally come into contact with each other, to gather in the area. This may provide opportunities for infectious diseases to spill over from one host species into another (e.g. beak and feather disease - see WHA Fact Sheet²) or to infect a new host species.
- **Physiological stress** in the birds may be increased because of high densities and increased competition for food. These stressors may lower the bird's natural immune system function and make them more susceptible to disease.
- **Accumulation of organic material** (spoiled and wasted food, faeces and urine) may allow proliferation of pathogens (such as faecal bacteria, fungi or viruses) in the local feeding environment. If birds ingest contaminated food, they may ingest high loads of pathogens as well, and may develop disease as a result. In addition, food that is poorly stored or presented can accumulate toxins such as mycotoxin and botulinum toxins, which can be harmful for birds.
- **Unnatural behaviours** - birds may come out to feed at certain times, and in situations, where they wouldn't normally be exposed to the elements, and this may place greater stress on them and predispose them to infection or predation.
- **Increased zoonotic disease risk for humans.** Through their bird feeding activities, members of the public may be exposed to diseases carried by wild birds (e.g. *Chlamydia psittaci*, *E. albertii*, *Salmonella* spp.; see WHA Fact Sheets on these diseases, as well as WHA Fact Sheets "*Zoonoses of Australian wild birds*" and "*Infectious diseases of biosecurity concern in Australian wildlife*").

Recommendations for managing biosecurity if feeding wild birds

Biosecurity risks are best minimised by not feeding wild birds. However, if wild birds are fed by the public, biosecurity risks should be understood and managed.

Good biosecurity helps to keep wildlife, people and domestic animals safe and healthy by minimising the impacts of disease on individual animals and wildlife populations. For general advice about biosecurity and wildlife, see the "National Wildlife Biosecurity Guidelines". The risk of zoonotic disease transfer associated with feeding wild birds is reduced if appropriate biosecurity practices are followed, including personal hygiene and hygiene of the feeding areas.

² www.wildlifehealthaustralia.com.au/FactSheets.aspx

General biosecurity recommendations:

- Birds should be fed infrequently and at different times, so that no set pattern is developed, and so that flocking behaviours and abnormal aggregations are not encouraged.
- Birds should be fed at a station rather than on the ground, to allow cleaning of the site. If birds are fed only very occasionally and feeding locations are rotated, then feeding without a station may be acceptable.
- Feeding should not occur if large flocks (e.g. more than 20 birds) are gathering.
- All food and debris should be carefully removed within a few hours of food being offered (including the areas under and around the food station).
- Feeding stations should be kept scrupulously clean. Stations should be thoroughly cleaned after every feeding event. Cleaning should preferably occur in an outdoor area and may require several steps, such as:
 - Scraping up and disposing of remnant food and other organic material
 - Cleaning the feeding surface with detergent and warm water and rinsing clean. A disinfectant may be necessary; follow the directions on the container.
 - Allowing surfaces to fully dry before food is offered again.
 - Waste material should be carefully disposed of, in a closed bin or pit.
 - Care should be taken not to use excessive scrubbing or high water pressure when cleaning, as this might aerosolise zoonotic pathogens such as *Chlamydia*.
 - Always wash your hands before and after cleaning food and water containers.

Protecting yourself:

- Everyone involved in bird feeding should follow excellent personal hygiene including washing hands with soap and water and drying hands, immediately before and after any involvement in bird feeding activities and prior to any activities such as eating, drinking, food preparation or smoking. Disposable gloves may need to be worn, especially if there are open cuts or wounds on the hands³.
- Appropriate hygiene practices will help to reduce zoonotic risk if pathogens are transferred by the faecal-oral route but may not be effective in reducing risk in zoonotic pathogens transferred by other means. For example, the zoonotic pathogen *Chlamydia psittaci* is acquired by inhalation, and the risk may be increased during cleaning of infected feeding surfaces unless correct cleaning and biosecurity practices are followed⁴.
- Members of the public should be aware of their own health profile and disease risk and adapt their activities accordingly. Members of the public are encouraged to seek further information and advice regarding these issues from their doctor or public health unit before undertaking activities associated with feeding wild birds.
- Immunosuppressed, young or elderly people should avoid close contact with wild birds, in particular avoiding those activities that might expose them to high pathogen loads, such as cleaning feeding stations or being close to groups or gatherings of birds. Consideration should be given to wearing a suitable face mask if there is a known increased risk of zoonotic disease in the bird population or if the person is known to be at increased risk of infectious disease³.

³ www.worksafe.qld.gov.au/injury-prevention-safety/hazardous-exposures/biological-hazards/diseases-from-animals/work-with-bird-and-bat-droppings

⁴ www.health.nsw.gov.au/Infectious/factsheets/Pages/psittacosis.aspx

- People feeding birds should be aware of, and respond appropriately to, public health or animal biosecurity messages about disease outbreaks in birds in your local area, and strictly follow guidelines during an outbreak, including, for example, to stop feeding all birds.

Other risks and concerns (not primarily biosecurity related):

Although not directly related to biosecurity concerns, there are other health concerns related to public feeding of wild birds in Australia. These include:

- **Nutritional issues** - if too much of the wrong sort of food is eaten by birds. This might include becoming overweight, or baby carnivorous birds developing weak, deformed bones and fractures (metabolic bone disease) if they or their parents are fed by humans, or other diseases caused by consumption of inappropriate food.
- Risks of **traumatic injury and predation** - if birds are distracted from normal predator approach, or other external risk-avoidance behaviour, by the attractions of food. Predators such as cats may have easier access to birds at feeding stations. Birds may have increased risk of injury, such as flying into windows, if feeding stations are not located in a safe environment.
- An increase in feral and pest species feeding on left-over food (or predating birds) or an increase in aggressive bird species, with a resultant reduction in more timid species.
- Increase and spread of weeds to new locations.
- Long-term dependence on human-provided food and water sources.

Reporting concerns

If you see any unusual signs of disease or deaths in wildlife, you can report them to:

- your state/territory WHA Coordinator (see www.wildlifehealthaustralia.com.au/DiseaseIncidents/ReportanIncident.aspx)
- the 24 hour Emergency Animal Disease Watch Hotline on 1800 675 888
- your local veterinarian
- your state/ territory Department of Primary Industries or Agriculture.

Conclusions

Although feeding wild birds can bring pleasure to members of the public and has potential to promote well-being in wild birds, there will always be biosecurity concerns associated with these practices. These concerns can best be minimised by not feeding wild birds. Creating a wildlife-friendly garden may be a suitable alternative that allows people to watch birds, and other native animals, around their home. Those who choose to feed birds should be aware of the risks and understand what measures to take to minimise these risks. They should incorporate appropriate biosecurity practices into their feeding routine and should also be aware of the human health considerations. Members of the public are encouraged to seek further information and advice regarding these issues from their doctor or public health unit before undertaking activities associated with feeding wild birds.

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References and further reading

More information on the principles and application of biosecurity when interacting with Australian wildlife (including wild birds) can be found in the “**National Wildlife Biosecurity Guidelines**” www.wildlifehealthaustralia.com.au/Portals/0/Documents/ProgramProjects/National_Wildlife_Biosecurity_Guidelines.PDF (Wildlife Health Australia 2018). See also the range of WHA Fact Sheets (www.wildlifehealthaustralia.com.au/FactSheets.aspx) discussing diseases of wild Australian birds, zoonotic diseases of Australian wild birds, and diseases of biosecurity concern in Australian wildlife.

BirdLife Australia has information on feeding “Birds in Backyards” see “Creating Place - To feed or not to feed?” www.birdsinbackyards.net/feed-or-not-feed-0

Your state or territory **Department of Environment or Agriculture** may have information on hygienic feeding of wild birds.

Information is also available from the **British Trust for Ornithology (BTO)** website www.bto.org/volunteer-surveys/gbw/gardens-wildlife/garden-birds/feeding/hygiene including a brochure on hygiene when feeding birds www.bto.org/sites/default/files/u23/downloads/pdfs/hygiene%20leaflet_final_2014_web_version.pdf.

Ban de Gouvea Pedroso S (2016) Feeding wild birds in Australia: Risks and mitigation strategies. WHA.

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. *Philosophical Transactions of the Royal Society B: Biological Sciences* **373**, 20170091.

McBurney S, Stephen C, Jefferson D, Zimmer P (2017) Strategies to Prevent and Control Bird-Feeder Associated Diseases and Threats. Canada. Available at http://www.cwhc-rcsf.ca/docs/technical_reports/CWHC%20Bird-Feeder%20Strategy.pdf.

Wildlife Health Australia (2018) National Wildlife Biosecurity Guidelines. (DAWR/ WHA: Sydney NSW). Available at https://www.wildlifehealthaustralia.com.au/Portals/0/Documents/ProgramProjects/National_Wildlife_Biosecurity_Guidelines.PDF [Accessed 2 February 2019].

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