



Bird Observation & Conservation Australia

Policy paper: Supplementary feeding of wild birds.

March 2010

Background

Supplementary feeding of wild birds is an activity undertaken by many people in private homes and public parks throughout the world. In Australia, households are most likely to target larger insectivorous or carnivorous species such as the Australian Magpie and Laughing Kookaburra by providing meat, bread and foodscraps (O'Leary & Jones, 2006). They also provide seed for a wide variety of parrots and use nectar feeders to attract honeyeaters and lorikeets. In public parks, many people feed bread to a variety of wild waterfowl.

Issues

Despite the widespread popularity of supplementary feeding, its impacts on bird populations and on the motives and interests of people engaged in the activity are largely unknown (Jones & Reynolds, 2008). The accompanying discussion paper examines supplementary feeding from two perspectives: bird ecology and human behaviour. While the impacts of supplementary feeding on birds are not well documented, there is little doubt that it does impact on bird ecology.

Discussion

1. Bird Ecology

Feeding has the potential to impact on almost every aspect of bird ecology. Phenology, breeding success, adult survival, predation rates, disease transmission and species' interactions and distributions may all be affected (Robb *et al.*, 2008) at local and landscape levels. Supplementary bird feeding may alter species distributions by extending the range of species that benefit from feeding or displacing those that do not benefit directly from supplementary feed.

Egg laying: Supplementary feeding has been shown to bring forward egg laying dates in a wide range of species (Jones & Reynolds, 2008; Robb *et al.*, 2008) and in most cases, earlier broods have higher survival rates.

Clutch size and egg quality: The number, quality and size of eggs per clutch may all be affected by supplementary feeding (Robb *et al.*, 2008). The availability of extra feed may increase chick growth rates, shortening the time to fledging and potentially increasing the number of clutches raised per breeding season (Jones & Reynolds, 2008).

Chick survival: Supplementary feeding may affect chick survival indirectly through its impact on parental health, resource use and foraging patterns or directly when supplementary feed is presented to chicks.

Behaviour and species distribution: As food availability is one of the dominant drivers of intra- and inter-specific interactions, supplementary feeding can influence social, territorial and reproductive behaviour in complex ways. It is unlikely to increase species diversity, may lead to an increase in the abundance of territorial and aggressive species and can alter species migration patterns. There is very little empirical evidence for birds developing dependency on supplementary feed.

Predation: Supplementary feeding of bird species that prey on other birds or their chicks/ eggs (eg. corvids) may increase the predation risk for prey species.

Disease transmission: Large numbers of birds congregating around feeding sites may lead to increased transmission of diseases such as *Mycoplasma gallisepticum*, Salmonella, Campylobacter and Psittacosis. Disease transmission will be affected by the type of feeder used, the number of birds visiting the feeder, the location of the feeder and hygiene in the feeding area. An example of this is mass deaths of lorikeets in NSW. The NSW Department of Agriculture found that the lorikeets had died of necrotizing enteritis, a disease caused by clostridial bacteria. This disease is associated with poor hygiene in feeding areas and is exacerbated by inadequate, artificial diets.

Bird health: While Jones *et al.* (2008) note that there have been very few studies of the nutritional and biophysiological influences of food types on wild bird health, provision of nutritionally inappropriate (eg high fat or carbohydrate content) feed may lead to birds becoming too fat or more prone to a range of health disorders. However, there is clear evidence that supplementary feeding of wild waterfowl with bread has a number of detrimental impacts on both bird health (eg increased likelihood of gut problems, nutritional imbalances and susceptibility to a wide range of diseases) and water quality. Many seed bells or seed mixes contain pesticides, fungicides, preservatives and other additives. Wood glue is used to bind seed together in some seed bells

2. Human Behaviour

While proponents of supplementary bird feeding espouse that potential impacts on bird ecology are 'off-set' by the benefits of people developing closer connections with nature, there is little evidence to support the view that this then leads to a broader interest in nature and its conservation (Jones & Reynolds, 2008).

Howard *et al.* (2004) found that the majority of people provide supplementary feed to wild birds because it gives them pleasure to do so. A large number also expressed the view that they were trying to compensate for the environmental damage caused by humans. Most participants perceived that the activity was of direct benefit to the bird species involved.

BOCA POLICY - RECOMMENDATIONS

BOCA does not encourage supplementary feeding of wild birds on the basis that:

- Supplementary feeding can have deleterious impacts on bird health. Supplementary feeding has been associated with increased transmission of diseases at unhygienic feeding stations. The provision of nutritionally inappropriate feed (eg sweetened bread for lorikeets, bread for wild waterfowl, seed treated with pesticides, fungicides and preservatives) can increase the likelihood of gut problems, nutritional imbalances and increased susceptibility to a range of diseases.
- Supplementary feeding may advantage some fed species (including exotic species), leading to increased populations of aggressive, territorial species. It may also disadvantage other species (both fed and unfed) through its impact on bird health, behaviour and ecology.

Home feeding

BOCA encourages people to establish bird friendly gardens that provide habitat for a variety of bird species. Bird friendly gardens incorporate a number of layers of vegetation – trees, shrubs, grasses and herbs – providing nectar, seeds and insects. Bird friendly gardens also provide birds with shelter and nesting sites. Gardens should not be based on plant species that provide for a single feeding group eg. grevilleas and banksias for honeyeaters. BOCA has developed a number of pamphlets to assist people wishing to establish a bird friendly garden.

BOCA recognises that many people regularly feed wild birds and believes that there is a need to educate the public on ways to minimise the risks to birds and humans associated with supplementary feeding. BOCA stresses that birds should not be fed bread. The article, 'Good practice when feeding birds' (Plant, 2008), provides advice on:

- providing nutritionally appropriate, fresh feed;
- sanitary feed storage;
- clean, appropriate feeding equipment;
- how much feed to provide & when;
- hygiene;
- risks for the feeder and the fed;
- dealing with sick or dead birds; and
- bird-friendly backyard gardening.

Feeding in wetlands

BOCA strongly advises against any feeding of birds in the vicinity of wetlands on the basis that it can be deleterious to the health of waterbirds and waterways alike. In particular, the practice of feeding bread to waterfowl can cause gut problems, nutritional imbalances and excessive defecation. Excessive defecation and the presence of uneaten food in water can contribute to contamination and eutrophication of water bodies, and may lead to outbreaks of diseases such as avian botulism.

Provision of water

As most birds need to drink and wash regularly, provision of water is less likely to result in selective pressure on bird populations. A well maintained, hygienic bird bath is also unlikely to contribute to the transmission of disease any more than other, more natural, water sources. BOCA supports the provision of water for birds provided the bird bath:

- Is regularly (and easily) cleaned and replenished with clean water.
- Is located close enough to vegetation so that birds may quickly retreat if threatened but not so close that the vegetation will conceal predators.
- Is shallow enough to avoid drowning with secure, emergent perches that birds can stand on when drinking or preening.
- Is located in a partially shaded spot to reduce evaporation and
- Ideally has a sloping base so that birds can wade in and out of the water.

References

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