

Best Practice Guidelines for Commercial Wild Bird Feeding Practices on Private Land

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The need for guidelines

A great deal of enjoyment is gained by enticing wild birds into our environment. Along with the privilege of interacting with wild birds comes a responsibility to ensure their health is maintained. It is becoming more important for management to assess their practices and associated impacts, and implement strategies to ameliorate negative impacts. Maintaining the birds and their environment will ensure that the use of this resource is sustainable and can continue to be enjoyed for years to come.

Wildlife tourism operators are increasingly being asked to practice holistic management of the interactions between their visitors and wildlife. This is being driven by government regulations, guiding organisations, visitor expectations and in some cases it is prompted by self regulation by operators.

Current concerns relative to commercial wild bird feeding practices

- **Feed type**
 - Possible nutritional imbalances and related effects.
- **Frequency**
 - High degree of variation in the quantity and timing of feed offered subject to daily and seasonal fluctuations in visitor numbers.

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- **Limited controls over feeding activity**
 - Without supervision people can take the seed onto neighbouring properties. Movement of participants can expose them and the birds to increased risk. In addition, negative interactions on neighbouring properties can create tension between neighbours.
 - Possible damage to neighbouring property's infrastructure, and localised environmental degradation.
 - Litter.
 - Incidental species (those which are not the target of the feeding activity, e.g. brush turkeys) have access to feed and waste, this can result in an increase in abundance of undesirable species.
 - Loss of less dominant species.
 - Potential for negative interactions between wildlife and participants, for example children screaming or kicking at the birds, or participants sustaining bites or scratches.
- **Hygiene**
 - Potential for disease transfer between the birds, participants and staff at the feeding area.
- **Need for environmental education**
 - Some activities operate without interpretive information to offer participants the opportunity to learn more about the birds. Feeding wildlife has the benefit of increasing the possibility of having an encounter with the target species. If harnessed, this can have conservation benefits.
 - Whilst benefits to the visitors can be identified, there is little benefit to the birds or the environment. Visitors do not seem to be aware of the implications of their actions relevant to risks or negative environmental impacts.
- **Change in wildlife behaviour**
 - Dependency on supplementary food, particularly for juveniles.
 - Alteration of species movement patterns.

- Habituation – if birds become too familiar or comfortable with the presence of humans they may fail to exercise their natural instinctive behaviours, such as response to danger.

By applying the guidelines for best practice and associated recommendations, concerns about the sustainability of feeding practices will be addressed by:

- improving the quality of feed offered,
- providing feed with an appropriate nutrient balance for the target species,
- reducing the quantity of feed offered,
- improving feed management,
- setting feeding times that reflect the target species natural foraging times,
- introducing hygiene requirements,
- implementing risk management,
- implementing management controls,
- providing information to assist the development of an Activity Plan and supporting Interpretive program, and
- providing information to assist the development of a monitoring and evaluation program.

Operators do not make a great deal of money from this type of activity. Often a lack of resources is a constraint to implementing management changes. It will be important for partnerships to be formed to achieve outcomes that might be beneficial for all interested parties. This may involve contributions from government organisations, conservation groups, organisations that are seeking opportunities to support conservation projects (even when applicable to privately owned land), participants, the wider community, academics and other operators experiencing similar problems. Contributions could take the form of funding, knowledge, time or support.

CURRENT LEGISLATIVE REQUIREMENTS IN QUEENSLAND

Subject to an amendment of the *Nature Conservation Regulation 1994* in March 2004, operators undertaking a commercial activity that involves interaction with (common) wildlife, in Queensland will now be required to apply for a “Commercial Activity Licence – Wildlife Interaction”.

The aim of the legislation is to:

- manage risks, both known and potential on and adjacent to Parks;
- have management of the activity ensure it's sustainability, and
- for the operator to take responsibility for interactions that occur as part of the activity encouraged by them.

Some more specific details of the legislation are listed as follows:

- applies to particular interactions with protected animals,
- required to control and monitor particular interactions – for the health, safety and wellbeing of animals and humans,
- it can only be issued for interactions with common animals,
- interactions are limited to an approved interaction plan for that species,
- penalties to be applied for interactions that are not part of the approved interaction plan,
- requirement to keep written reports relevant to the approved activities, this information must include problems or concerns relevant to the activity including illness or injury to the animals, aggressive incidents and complaints made by any people involved or affected by the activity (the report must be kept secure and be available for inspection by a conservation officer), and
- provide for consultation requirements, i.e. how the problems or concerns were identified and resolved.

A comprehensive Interaction Plan must accompany the licence application.

(For operators in other states, please refer to your governing state organization for current legislative requirements.)

Guidelines for Best Practice: Wild Bird Feeding on Private Land

These guidelines aim to improve current wild bird feeding practices for the benefit of the birds and their environment, the participants, bystanders who may or may not support the activity, the operator and their staff, and the management of neighbouring properties.

Feed

- When a supplementary diet is offered to wild birds, provide a clean (free from fungus and infections), quality feed that is nutritionally balanced for the target species.

(The term feed is used to make the distinction between animal feed and human food. Human foodstuffs are not suitable for birds consumption.)

Seed vs. Pellets

- Appropriate feeds for supplementary feeding of Crimson Rosellas and King Parrots are clean, high quality parrot pellets (select one with a higher fat content, some may not be suitable) or an appropriate seed mix with added nutrients. (Pellets generally have a better nutritional balance, however they do have other limitations to their use, appropriate storage is essential.)

<i>Feed in use at Bunya Mountain Getaway – Trill Cockatiel Food prepared by Golden Cob</i>
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For other species it is recommended that you contact a specialised avian veterinarian, to discuss options for feed. If you would like to discuss feed types please contact Michelle.

Feed Management

- Protect feed from contamination and deterioration by storing in airtight containers, in a cool, dry place.
- Check feed regularly for contamination. If contamination has occurred, discard the affected supply.
- Use feeders appropriate for the target species that ensure there is no risk of feed becoming contaminated by droppings, and that limit waste falling to the ground.

Quantity

- Limit bird feeding time to a 15 minute interval per session.

Frequency

- Offer feed either once a day in the afternoon; or twice per day, once in the morning and again in the afternoon (15 minutes per session).
- If there are no participants, there is no need to place feed out for the birds (considering that they have a smorgasbord available in National Parks or nearby bushlands.)

Water

- Water does not need to be provided at the feeding sessions.

(If choosing to provide water, it is very important to ensure strict hygiene management is maintained. Water containers must be cleaned, disinfected and rinsed thoroughly before refilling, at least twice per week.)

Hygiene Requirements

- Conduct a site assessment and evaluation to identify the site's suitability to meet hygiene requirements and where site hardening (modifications) might be required.
- Maintain a high level of site, equipment, personal and participant hygiene.
 - After each session collect waste from the feeding site and dispose of appropriately. Clean, disinfect and dry all feeding equipment, then store ready for use.
 - In the afternoon collect and dispose of waste, then hose down the surrounding vegetation and thoroughly clean and disinfect the area.
 - Ensure attending staff member and participants wash their hands before and after the activity. (Gloves could be offered to participants for further hygiene protection.)
- Utilise biodegradable products for implementing hygiene requirements. Ensure appropriate use and storage of cleaning equipment and chemicals.
- Utilise stainless steel feeding equipment (such as bowls or feeders) to allow for effective cleaning.
- Ensure cleaning equipment utilised at the site is not used for any other purpose.

Recommended site disinfectants

Pharmonia

Avisafe

Risk Management

- Conduct a site assessment and evaluation to identify the site's suitability to provide for risk management to be implemented.
- Prepare the site to ensure risks to participants and birds are minimised. This will involve site hardening and implementing hygiene requirements.
- Use interpretive tools including information sheets, an interpretive presentation and signage to provide information:
 - to the participants to ensure they, and the feed stay within the designated feeding area,
 - about the health and safety risks for the participants and the birds,
 - on how to minimize risks,
 - about suitable behaviour during the activity such as limiting noise levels and sudden movements, and
 - to participants to identify target species and the risks associated with feeding more aggressive species.
- Utilise equipment that limits risks, such as stainless steel bowls that provide for effective cleaning.
- Monitor bird numbers congregating at the site during feeding sessions. If there are too many birds, the risk of the birds becoming stressed will increase. (Adjustments to the feeding activity may be necessary to address this issue.)
- Monitor bird health, conduct quarterly faecal flotation tests (in-conjunction with a veterinarian). Report any sick, injured or dead birds found within the immediate vicinity of the site to the local national park authority or veterinary laboratory and obtain advice on what action is required. Sick or dead birds should be taken to a veterinarian for further investigations in order to determine if there are increased health risks to either birds or participants.
- If serious health risks to the birds or participants are identified, feeding should be stopped for a period of time to allow the birds to disperse, and thereby limit risks of exposure associated with them congregating at the site. (Follow veterinarian's advice.)

- Implement hygiene requirements.
- Ensure that staff (working within the vicinity of the site) utilise personal protective equipment, such as a mask, gloves and goggles when cleaning or mowing.
- Wherever possible take precautions to limit dust generated from the site.
- Instruct staff and participants to advise their Doctor if they become ill, of contact with wild birds.
- Ensure that at least one staff member has a current First Aid Certificate.
- Develop an emergency response plan.
- Maintain records, monitor and evaluate. Make adjustments to practices accordingly.

Diseases that can be transferred from birds to participants / staff
(particularly Psittacosis / Salmonellosis / Campylobacter)

- Provide information regarding the risks of contracting these illnesses, possible symptoms and required treatment.
- Display Public Health Fact Sheets (available via Queensland Health website – other states produce similar leaflets), at the booking office.
- Implement hygiene requirements and risk management.

Operators feeding other species should consult with a specialist avian veterinarian to discuss the possible zoonotic illnesses that are potentially a problem with that species, and what action that may be required to prevent transfer of disease.

Management of sick or dead birds (or associated incidental species)

- Observe the birds coming to the feeding site for signs of being unwell.
- Illness occurs naturally in wild birds. Reasonable judgment should be exercised before intervening and taking action. Any very sick or dead birds that are found within the immediate vicinity of the site should be handled with caution (*refer full details of recommendations*). Take the bird to the local national park authority for advice on what action is required. This may involve taking the bird to a veterinarian for further investigations or to a registered carer.
- Birds that have re-cuperated should be released back at the site.
- Costs for veterinary and carer attention could be built into the price for participation.

The Feeding Activity

- Develop and implement an Activity Plan. Include details of the operation of the activity, resource and cleaning requirements, visitor management controls, the budget, monitoring and record keeping requirements, incident reports and evaluation reports.
- Management controls need to be considered and applied to ensure the feeding activity meets the licence requirements.
- Maintain, monitor and evaluate records to ensure the Activity is achieving its objectives (including wildlife management, customer satisfaction and is financially sustainable – based on current cost).
- Develop a monitoring program that considers information required to evaluate impacts relevant to wildlife management issues.

Interpretation (Education)

- Develop and implement an interpretive program that acts to support changes made to wild bird feeding practices.

An example is provided below.

Consultation

- Regularly consult with interested parties including neighbouring landholders, to discuss problems and successes of the new feeding program. Consider management options and respond accordingly.
- Develop and implement a mechanism that provides for participant feedback. Monitor and evaluate this information regularly, make adjustments where possible.

Supporting Conservation

- Develop and implement mechanisms that ensure the feeding activity has positive outcomes for the birds and the local environment. (This may involve supporting a research project or making a contribution from sales to a relevant conservation program. Wildlife Connect is an initiative that involves operators establishing their own trust to provide funds to help support wildlife management research and conservation objectives of their local area. There are numerous benefits of this type of fund.[‡])

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Whilst care has been taken to investigate the information supporting these guidelines thoroughly, it is acknowledged that monitoring and evaluation of the individual activity will be essential, to ensure practices are adjusted as new information or equipment becomes available.

Full details to support these guidelines, with accompanying recommendations to achieve improved practices are available on request[§]. This includes information that was considered in the development of the guidelines.

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Interpretive Presentation for a Wild Bird Feeding Activity

(Prepared for case study location - Bunya Mountains Getaway)

The presentation aims to create understanding and appreciation of the birds and their environment, meet conservation objectives and to enhance the visitor's experience

Dialogue

Instructions

Notes

(It is recommended that this be used as a guide to the presentation, the Interpreter should have the opportunity to introduce their own personality, creativity and allow for spontaneity.)

Arrive in time to prepare site and equipment (approximately 15-20 minutes prior to start time). For example, prepare feed and

Meet and greet participants.

Engage in conversation prior to official presentation in order to develop the relationship and build an understanding of participant's previous experience with the activity, expectations and current level of knowledge.

Guide participants to designated feeding area.

Introduction

Whilst interacting with the King Parrots and the Crimson Rosellas is a very enjoyable experience, if we are not careful wild bird feeding can cause serious health problems for the birds and the participants taking part in the activity, and also for bystanders who do or don't participate.

Feeding of the Australian King Parrots and the Crimson Rosellas has been taking place on this private property for over 30 years. It started in the early 70's when a fellow by the name of Joe Walker, who built the kiosk, offered feed to the birds to keep them out of his veggie patch. He like many others since then, enjoyed the opportunity to admire these beautiful birds. It is an opportunity that we want to continue to provide.

In response to concerns for both bird's and participant's health and safety, environmental management concerns and changes to legislation these new feeding practices have been introduced.

Today we will have the opportunity to feed the birds but also to gain an understanding of some of their behaviours and their importance to the ecology of the Bunya Mountains National Park.

Participant Health and Safety Requirements

Before we begin we need to run through some health and safety requirements.

There are a number of diseases which can be transferred from wild birds to humans, the most serious of which is a disease called Psittacosis. Information is available from the General Store. In order for us to limit the risks I have to ask you to wash your hands both before and after feeding the birds.

Is there anyone who hasn't washed their hands already? (*Direct them to the washrooms*)

If you are concerned about getting scratches either on your arms or your head I encourage you to take some gloves and to wear a hat. (*Have selection of clean gloves available.*)

If during the feeding activity a bird lands on your shoulder or your head please gently move the bird onto your hand or encourage it to move away.

These birds can be flighty and easily stressed; loud noises, sudden dramatic movements or potential danger may cause them to leave the site. They will fly to the trees on the neighbouring property and remain silent until the danger has passed. When you hear their contact calls they may soon return to the site to continue feeding. Please know that stressed or frightened birds have been known to cause injuries.

Very young children can sometimes find the activity overwhelming and become distressed, I would ask parents to stay close to them.

There are also a number of diseases which the birds can transfer to each other. To limit the possibility of this occurring we need to keep a space of approximately one meter from the nearest person, you can see the markers on the ground. It is also very important for us to prevent seed from falling to the ground.

You will be given one of these special feeding bowls that will ensure that you have birds come to feed with you. The bowls are designed to limit the waste that can collect on the ground. This is the most important reason for us staying within the designated feeding area. Waste and droppings that collect on the floor expose the birds to a high risk of disease transfer. By feeding over a concrete floor the surface can easily be cleaned and disinfected to ensure hygiene standards are maintained.

Lastly it is very important for the health and wellbeing of the birds that our feeding them does not interfere with their natural foraging behaviour. It is now a requirement of the Nature Conservation Regulations 1994 that this activity be conducted according to a prepared Interaction Plan. This sets limits on how, when and where the birds can be fed.

These birds have specific nutritional requirements that are met by feeding in the forest. Not only do they eat seeds but to maintain their optimum health they eat a variety of foods including plant material, fruits, berries and nectar from native and introduced trees, shrubs and grasses, and on insects. The Crimson Rosellas will feed on many different insects including caterpillars, moths and termites.

These birds have an important job to do. By eating the seeds from the native plants and redistributing them, they help to regenerate the forest (Birds Queensland 2005).

We will be offering the feed for a 15 minute period. If the birds are alarmed and fly to the safety of the trees, we need to be patient. When the bird's instincts tell them it is safe they will return. But I should add that there is no way of knowing how long this will take.

What we are aiming to do is provide the birds with a healthy snack but not ruin their appetite or interfere with their ecological role in this environment.

(When there are large groups – maximum 30 with 2 lots of 15, with 7-8 minutes each.)

There are two groups of feeders today so once your feed tray is empty please return it for the next person, otherwise we will have a change over after 7 minutes.

The last point I need to make is that we are conducting this activity on Private Land. Beyond this boundary is the National Park. Feeding birds or other wild animals is not permitted outside this area. We are able to conduct this activity under licence with set guidelines. Please do not feed the birds outside of this area.

Does anyone have any questions at this point?

Ok we have the rules out the way - let's have some fun.

The Activity

Please come forward with your feeding ticket to collect your feed bowl; and gloves if you would like some. Then choose your spot.

Hand out feed bowls, guide participants into position and distribute feed. Could ask for an assistant and select one or two of the children to help hand out the bowls and the seed.

(Opportunity for humour – I won't ask you to help me clean and disinfect them after!!)

We need to count the birds that come to feed at the site for our monitoring program, are there any young volunteers who would like to help me count them?

Select two teenagers (if possible) and ask one to count King Parrots and one to count the Crimson Rosellas. Provide a data sheet for the numbers to be recorded on. Could have a small treat to thank them for their help.

Interpreter will need to keep note of time.

The feed that we are using today is **(Selection from Guide to Best Practice)**. The reason we are using this is because **(different for chosen feed e.g. Parrot Pellets – they have been especially formulated to provide all the essential nutrients these birds require / Budgie Mix – is a low fat mix more suitable than parrot mixes)**.

These birds require a balanced diet and plenty of exercise, just like us to ensure they stay healthy. Poor nutrition is the leading cause of bird deaths in the world. If sunflower seeds are in the feed the parrots will selectively feed on these and fill up. This would be similar to us eating a Mars bar for dinner and leaving the meat and veggies for another day, but what if the next day we ate the Mars bar too! Sooner than later we would get very ill.

Unlike in cities and towns, these birds have a smorgasbord of appropriate foods out there in the National Park. Their role in the rejuvenation of the forest by dispersing the seed is very important. If you live in town and would like to attract birds to your garden, there are a number of things you need to consider. These include, planting native plant species which provides a natural diet for a variety of birds and is inexpensive, if you choose to provide feed it is important to select a high quality clean feed that is appropriate for the species you are trying to attract, hygiene requirements are very important and also risk management to ensure you are not putting either yourself or the birds in harms way.

The target species we are feeding here are the Australian King Parrot and the Crimson Rosella. Both of these parrots are generally found in forested, mountain regions of eastern Australia. Whilst these are very much wild birds, as you can see they have become used to being fed here.

During the feeding activity you might also notice some “guard or sentinel” birds that stay in the trees nearby. Both of these parrots are known to forage on the ground. This can expose them to the threat of predation. So the birds work together to ensure their safety. These birds have an average life span of 20 to 25 years.

Who can tell me which is the male and which is the female King Parrot? *Respond.* **Can mention that juveniles look similar to the female.**

Ok this one is a bit trickier, does anyone know which is the male and female Crimson Rosella?

The Crimson Rosella is known to have very little sexual dimorphism which means, they do not show clear differences in their plumage. The male Crimson Rosellas are generally longer and heavier, their plumage is a little brighter in colour, they have a more pronounced forehead and a noticeably larger beak. **Can mention that juveniles are similar but also have some green plumage, in the first year they will be predominantly green, the second year predominantly red, then they gain full adult plumage.**

A distinguishing feature of Rosellas is their cheek patches. As you can see these Rosellas have blue cheek patches.

For the birds there are a number of ways they would know the difference between males and females but one of them may be because they see each other very differently to how we see them. Bird's eyes work differently to ours and they are able to see UV light reflections. They see different colours and levels of brightness to us. It is suggested that this may influence their orientation, foraging and signaling.

A usual day for these birds after waking up at their roost, involves some "gentle" stretching followed by some wing-flapping and preening before departing at sunrise to begin foraging and social activities. In the middle of the day they take a rest in the inner foliage of shrubs or trees. Then they continue foraging and social interaction in the afternoon, before returning to their roost at dusk. Crimson Rosellas generally move about during the day in pairs and King Parrots are known to band together in pairs or small groups.

Whilst these birds are not considered nomadic they do have seasonal movements throughout their range.

Both these birds nest in hollows. If you look up when you are out on the tracks you might be lucky enough to see one of these birds entering or leaving their hollow in the breeding season which generally begins in spring and ends around January. The entrance to the hollow can be very high, with the base being up to 12 meters down.

One of the problems that have been associated with the feeding activity in the past has been feeding of the non-target species such as brush turkeys, the red browed finches, red necked wallabies, and aggressive birds such as the pied currawongs. Feeding of these species can cause serious illness, even death as the food that we are offering is not part of their normal diet. There are also impacts on the broader environment such as those caused by the swell of the brush turkey population at this site. The brush turkeys have a habit of scratching the leaf litter to build their nests and to locate food, this results in a notable decline of the ground cover and other degradation.

Feeding the more aggressive birds can lead to them inviting themselves to your picnic. Some of these birds have caused harm to visitors and have had to be relocated. Please remember that we are taking part in a controlled feeding activity here and feeding outside this area is not permitted due to the impacts and dangers that can be associated with feeding wildlife.

Watch timing of presentation.

Ok that's our time up for the feeding session today. Could you please return the bowls?

Conclusion

Please remember we are right next door to the National Park and there is an abundance of natural foods here that birds need to feed on for their health and that of the forest. If we want to continue feeding the birds it is very important to let them continue with their natural foraging behaviour to ensure they get a balanced diet. So a little snack of an appropriate high quality feed is recommended. It is essential that we don't harm the birds by feeding them too many Mars Bars!!

On behalf of Bunya Mountains Getaway. I would like to thank you for joining me to feed the birds today. We hope that you have enjoyed your time with these beautiful birds.

Does anyone have any questions regarding the new feeding practices, the birds or any of the other issues we have talked about?

In the general store, we have a visitor comment book and feedback sheets if anyone would like to make comments about your experience today.

Be available for a short period following the activity for informal conversations.

Provides an opportunity for informal feedback and further relationship building to add to the experience.

Once a Conservation Program had been developed it would be essential to include this information in the presentation.

Clean Up

Maintain Records

Adapted from “Wild bird feeding activities on private property (adjacent to National Park areas) - Towards Best Practice. Case study: Bunya Mountains Getaway, operating adjacent to Bunya Mountains National Park” by Michelle Plant of the University of Queensland.

*Michelle** is a member of WTA and is currently conducting a study with the University of Queensland to evaluate the modified wild bird feeding practices (based on these guidelines,) at Bunya Mountains Getaway. She also works as a consultant with Wildlife Interactions to assist operators both with environmental management for wildlife tourism activities, and to meet licencing and permit requirements.*

Another project currently under development is Wildlife Connect – a research and support initiative. One of the aims of this project is to encourage wildlife tourism operators to establish their own fund to help support local wildlife management research and conservation objectives. Michelle strongly believes in building partnerships to connect operators and interested parties (such as academics and parks management) in their efforts to achieve common goals.

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