

wildlife feeding, national park policy and visitor practice: promoting responsible wildlife interaction

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ABSTRACT

This paper is the second of a series of three papers that addresses the issue of wildlife feeding in protected areas and provides a model programme for educating visitors on appropriate human – wildlife interactions.

The supplementary feeding of wildlife in national parks and other protected areas is an activity that is sought by many visitors. The adoption of a proactive approach on behalf of land management agencies will provide a role model for appropriate human – wildlife interactions and promote wildlife conservation on and off protected areas. This can only be achieved through education programmes that promote sustainable wildlife feeding practices.

INTRODUCTION

As the first paper in this series highlighted, wildlife feeding is a sensitive and complex issue. However, the activity of wildlife feeding is a firmly established practice and a popular tourist attraction at many locations. It is often supported by the sale of birdseed or other food items, and mementos such as photographs and souvenirs by privately owned or commercial operations located at, adjacent to, or near feeding locations.

The impacts caused by this activity have not been controlled or managed to any great extent in the past. In general, protected area management agencies discourage wildlife feeding while commercial enterprises and some private landholders encourage it. As a result, polarized views have developed, raising concerns as to the best method to deal with the resultant issues.

While a distinction needs to be drawn between the feeding of wildlife that are considered 'friendly' (eg. many kinds of parrots, wallaby's, possums, etc.), wildlife that are considered 'aggressive' (eg. kookaburra's, currawongs, etc.), and wildlife that are considered 'dangerous' (eg. cassowaries, dingoes, goannas, etc), the reality is, the supplementary feeding of wildlife is a long standing, wide-spread practice, undertaken by well meaning people (Stanley 1995). A proactive approach that accepts the desire of some people to interact directly with wildlife is required to promote the health and well-being of all wildlife. This will only be achieved through appropriate education strategies that promote sustainable human – wildlife interactions.

This does not, however, limit the use of education and if necessary regulation, to discourage people from feeding wildlife that have the potential to become aggressive or likely to cause serious harm to the people feeding, bystanders or others. In some instances, regulation is necessary to ensure wildlife remain 'wild' and the 'good intentions' of people do not create a situation where human – wildlife interactions cause injury or death to either party. As the political and social outcry generally means that the wildlife in question is likely to suffer some punitive measure (eg. culling of dingoes on Fraser Island).

CHANGING PEOPLE'S ATTITUDES AND BEHAVIOUR

The polarized views held by many people with regards to the supplementary feeding of wildlife are reflected by their attitudes and behaviours on this issue. People are either 'for' or 'against' wildlife feeding. To promote change, and encourage sustainable human – wildlife interactions will require, in some cases, the restructuring of a person's knowledge base.

Research has revealed that past experiences influence people's attitudes, attitudes influence the way a person behaves towards learning and their relationship with the environment (Pearce & Moscardo 1988; Mackay 1994). Lerbinger (1972), Bettinghaus (1973) and Slater (1992) also agree that expressed behaviour is the result of attitude. To produce an attitude-behaviour change involves the alteration of people's beliefs, values and perceptions (Pearce & Moscardo 1988). To be effective, appropriate wildlife feeding education programs will need to break down these barriers. This will involve restructuring participant's cognitive makeup: how they deal with and organise incoming information, and their receptiveness to this information to promote change.

To influence attitude and behaviour change in participants our best approach may be to utilise the most effective communication strategies available when presenting appropriate wildlife feeding programs. Mackay (1994) suggests that while talking is one of the easiest communication methods, it may not be the best way to approach the situation of persuasion. While there are no foolproof strategies for influencing programme participants, Mackay puts forward that we should be open and honest in our approach and aim for some degree of cooperation.

A final consideration for land managers is that programme participants will be "information misers" (Pearce & Moscardo 1988). If a situation is familiar or expected, participants will generally pay little attention. For example, how often have you driven to work along the same route, when one day you notice a building, a feature or road you had never seen before? Participants will pay little attention to things that are routine. However, if the situation is unexpected, unfamiliar and perceived as being relevant, they will process the information in detail. The implication for land managers is that the informational content of sustainable human – wildlife programs should be presented in such a way as to encourage "mindful processing", creating appropriate attitudes and behaviours.

PROMOTING SUSTAINABLE HUMAN - WILDLIFE INTERACTIONS

Beaty and Sansom (1995), state that there is a philosophical conflict between the management intent of national parks and wildlife feeding, as the cardinal principle of management of these areas is to “provide to the greatest extent, for the permanent preservation of the area’s natural condition and the protection of the area’s cultural resources and values”. However, a more liberal interpretation of this provision would conclude that wildlife feeding was acceptable, as it would contribute to the protection of the area’s natural amenity by encouraging wildlife, which would otherwise leave in search of food, to remain. Many people view, that the protection of nature, should not be constrained by narrow interpretations of legislation!

It should also be acknowledge, however, that the promotion of sustainable wildlife feeding should not be encouraged by all land management agencies or on all protected areas. If a protected area does not have a wildlife feeding issue, then there is no need to promote appropriate wildlife feeding practices. Sustainable human – wildlife education programs should be reserved for those protected areas where wildlife feeding is an issue and current wildlife feeding activity needs to be addressed to promote appropriate wildlife feeding practices.

Develop a feeding area and regime that promotes responsible practice

The preservation of natural values and the conservation of wildlife are primary management obligations for controlling human activities on many protected areas. The development and promotion of sustainable human – wildlife interactions must reflect these values. A single identified site is preferable to numerous sites where people can interact with wildlife. This will allow the activity to be properly managed for sustainability. Poorly managed and maintained feeding sites will reflect poorly on the agency and its efforts to promote sustainable human – wildlife interactions.

While it is recommended that a purpose-built feeding area is constructed to identify the location where feeding in the protected area is allowed, subsequent maintenance and upkeep of the site may be prohibitive in terms of resources available. However, a preferred site where wildlife feeding may occur should be identified, and all other sites discouraged. It is also recommended that wildlife should only be feed at times outside of their normal feeding times and done on an irregular basis. This is to promote that feeding should be supplementary and not a substitute to their normal feeding requirements and practices. Conducting feeding sessions on an irregular basis will lessen the likelihood of wildlife becoming conditioned and reliant on supplementary feeding regimes.

Develop supporting interpretive material

The development of appropriate interpretive material is necessary to promote sustainable human – wildlife interactions and provide take home information for programme participants. The interpretive material should:

- inform the public of the potential detrimental effects of wildlife feeding;
- promote responsible wildlife feeding (eg. correct diet, irregular times to decrease likelihood of dependency, not feeding aggressive or dangerous species etc);
- discourage the supplementary feeding of wildlife in areas where natural food is abundant;
- discourage the supplementary feeding of wildlife in protected areas where feeding is not an established practice already.
- direct the feeding of wildlife away from roadways, car parks and other areas that are unsafe.

Develop an appropriate education programme

Sustainable wildlife feeding education aims to create an awareness of responsible wildlife feeding regimes that promote the health and psychological well-being of target wildlife. Done correctly, sustainable wildlife feeding education can play an important role in providing experiences that contribute to wildlife conservation efforts on and off park. This can be achieved by incorporating environmental objectives that address the key concepts of awareness, knowledge, attitudes, skills and participation (UNESCO-UNEP 1978) (Table 1).

Table 1: **Key environmental concepts for sustainable wildlife feeding regimes**
(source: adapted from UNESCO-UNEP 1978:3)

Awareness:	by encouraging participants to acquire sensitivity and appreciation of the wildlife they wish to interact with through first hand experiences.
Knowledge:	by encouraging participants to gain experience and understanding of the nutritional requirements of wildlife they wish to interact with.
Attitudes:	by encouraging participants to acquire values and feelings of concern for the health and well-being of wildlife on and off parks through structured learning experiences.
Skills:	by encouraging participants to acquire the skills for developing methods for minimising ill-health dependency through inappropriate wildlife feeding practices.
Participation:	by providing participants with the opportunity to act constructively for the health and well-being of wildlife during present and future wildlife feeding activities.

So let each of us, put away our fears and scepticisms and take a proactive and responsible approach to a divided situation before the social, political and ecological implications of this

debate become to distorted to solve. This is the only way we can provide visitors to natural areas with the long-term commitment to act constructively for the environment.

The overriding philosophy for sustainable wildlife feeding education programs conducted in natural settings should be to learn from nature to protect nature. Not strategies that have the potential to isolate people further. To be effective, sustainable wildlife feeding education needs to promote change in the individual. A three-tiered system is offered (Knapp 1995) (Figure 1). Firstly, information to create an understanding and awareness of wildlife feeding (positive and negative consequences) is given to a novice audience. Secondly, a knowledge of ecological issues is presented and finally, opportunities to act for the betterment of wildlife and wildlife conservation is provided. This process will lead to an attitude and behaviour change.

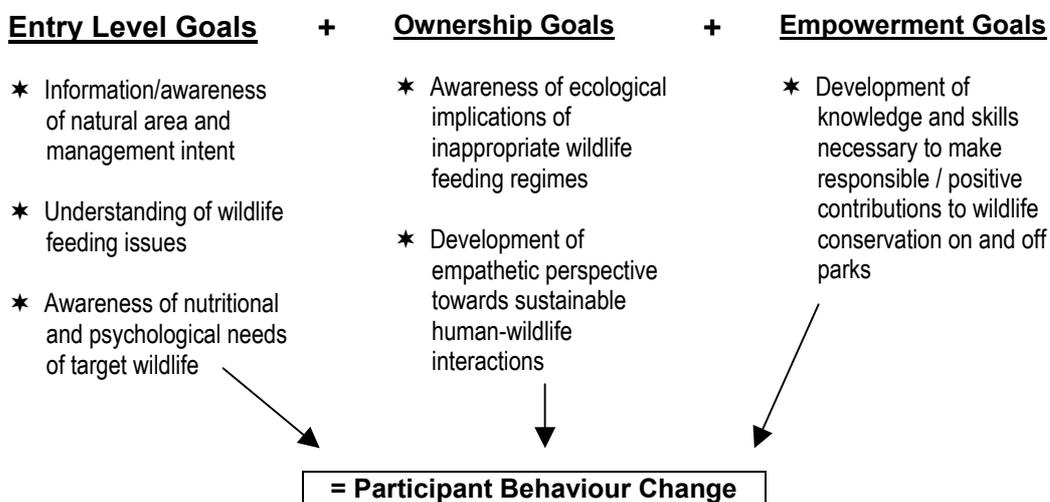


Figure 1: **Sustainable Human- Wildlife Interaction Behaviour Change Model**
(adapted from Knapp 1995:22)

Programme design

Given the above model, the role of a park manager is to communicate messages and meanings to their clients, to show participants how things fit together into the bigger picture. Facts need to be used to support points. However, a programme should not purely apply such information. Sustainable wildlife feeding education should be more relaxed in nature than formal education. To be successful, sustainable wildlife feeding education should incorporate pleasure, relevance, organisation and a take home message (or theme) into the process (Ham 1992).

Sustainable wildlife feeding education should be pleasurable in order to hold participants attention. To be relevant, it must be both meaningful and personal. Meaningful so as to relate to something the participants already know and care about, personal enough to relate to and connect the topic to personalities or past experiences. Education programs should be

organised to reduce confusion, allow ease of understanding and encourage continued interest. It should be like a story, having an introduction, body and conclusion. A theme answers the question “So what?”. This is the message that the participants take away with them after the programme.

In designing a programme to impart information, park managers must also consider how participants learn. Favoured learning styles are termed modalities and an individual will learn, and take in information much easier if presented through “their” modality (Christensen 1994). There are four major modalities: visual, auditory, kinaesthetic and symbolic/abstract. The Auditory modality includes speech, sound, music and song. Visual modality learners enjoy pictures, slides, props, drawings, films, videos and graphics. The kinaesthetic favour dance, gesture, touch, movement or anything that allows physical participation. Finally, the symbolic/abstract modality caters for reading, writing and arithmetic minded participants, incorporated into a programme through writing poems, stories, providing take home information (Christensen 1994). A sustainable wildlife feeding education programme should utilise a number of these styles in any one presentation to cater for all participants.

To assist in the development of positive change, details of appropriate feeding practice, along with an explanation of how, when and where to perform such practices is required. A discussion of the negative consequences of inappropriate feeding practices should also be incorporated into a sustainable wildlife feeding education programme. Park managers should also remember that the informational component of a sustainable wildlife feeding education programme should be presented to encourage “mindful processing”. The informational component should contain variety of repetition to increase memory retention and relate to what the audience already knows.

For school groups, build upon what they have learnt at school. For older groups build upon past experiences. The level of information should be within the moderate to high range. Too little information does not answer all questions and too much leads to confusion. Programme conclusions should be detailed and feedback obtained to evaluate programme success. The information should allow participants to figure out the consequences of their actions for themselves. Further, the information should challenge their present value system. This process will ensure a more permanent change in attitude and behaviour.

Techniques to consider when presenting the information to make it relevant and interesting include vividness and a novel or unexpected situation. The use of analogies, similes and metaphors can relate past participant experiences to the information presented and role playing can put participants directly into the environmental situation.

A model programme

It is important, when planning an education programme to incorporate the information previously presented in this paper including Knapp’s model, the components of attitude,

modalities, the required informational component and techniques to encourage mindful processing. Allowances should also be made for the age group of the participants. The following steps may assist:

1. Develop an appreciation amongst participants of the natural area and wildlife present. Encourage participants to utilise their senses: look, listen, feel, imagine. Encourage them to ask questions, get them involved. Make individuals feel their input and participation is important. Chat with audience, point out special features of the area and why particular wildlife can be found there.
2. Encourage participants to develop a sense of ownership of the natural area and the wildlife present, to feel that it is their park. Provide opportunities for participants to identify wildlife and to pass on wildlife knowledge they hold. Provide additional/anecdotal information about the wildlife in question as necessary. Ensure participants are praised for their efforts.
3. Shock participants by stating that they should enjoy the experience because the wildlife will be dead next week! In other words, play the role of the devil's advocate. Such actions are unexpected and show impacts in a dramatic light. Utilise the moment of shock and surprise to explain the effect of inappropriate feeding regimes and dependency on supplementary feeding. Ask the audience how they feel about contributing to the demise of the wildlife's health and well-being, ask them for details of appropriate behaviour. Such an activity asks participants the question "Are you going to contribute to the loss of our wildlife?". Such a technique is known as 'hot interpretation' (Flenady 1991). (If participants are at that awful "know all" age, an alternative is to play on their emotions in general conversation. This age group are young adults and should be treated as such).

For adults, personal stories about awful sights and experiences which contrast with the nature and environmental integrity of an area also work well. Many people will be able to relate these stories to past experiences. Stories can be real or hypothetical. Think about staging an event that your participants may come across in real life. For example, include a planned encounter with wildlife that are dependent on supplementary feeding, or arrive at a site where mob rule is established! After the event discuss the relevant issues with the group. Ask them also for details of expected behaviour.

4. Provide participants with detailed information of the how, when, and why of appropriate feeding practices. However, avoid straight out provision of information. Make it interesting and fun, but educational. For example, simulate feeding patterns/characteristics of wildlife being feed, hide food amongst flower blossoms, make wildlife work for food. (No such thing as a free meal!).
5. Develop positive attitude schema's, that is, an automatic response to a situation. Utilise role plays and storytelling. Encourage the audience to develop a list of rules they would

be prepared to enter into a contract to support. Pledges and personal promises to the appropriate feeding of wildlife work well with children. For teenagers and adults, other techniques to gain a commitment may be necessary.

6. At the culmination of the sustainable wildlife feeding education programme, reinforce the 'theme' and promote a positive behaviour change. Issue fact sheets on dietary requirements for reinforcement, provide a small sample bag of the food items that the wildlife should be eating as take home information. Always provide participants with opportunities to act for the betterment of the wildlife and wildlife conservation in general.

It takes time and detailed thought to prepare and conduct a well structured minimal impact education programme. Especially for participants of varying age groups and experience. It is also a cyclic process of continual evaluation and redesign, taking the good aspects from each programme and continuing with these while discarding the sections that did not work. Eventually, the perfect programme will develop.

CONCLUSION

In order to instigate conservation measures effectively, it is [sometimes] more beneficial to use persuasive techniques than compulsory procedures (Symes 1987). The challenge for land managers is to provide appropriate opportunities for participants to acquire the skills and knowledge to interact with wildlife in a sustainable manner. This will involve providing education opportunities that challenge existing attitudes and behaviours towards wildlife feeding.



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