ETHICS AND THE KILLING OF WILD SENTIENT ANIMALS

Cheryl O’Connor¹, Bruce Warburton¹ and Mark Fisher²

¹Landcare Research, PO Box 69, Lincoln, New Zealand. oconnorc@landcareresearch.co.nz
²Kotare Bioethics, PO Box 2484, Hastings

ABSTRACT: The ethical principles advocated for managing and using domestic and captive animals are increasingly seen as inadequate for guiding the management of wild animals. A growing number of people find it difficult to support vertebrate pest control, particularly because of their negative perceptions of killing. Although there is general acceptance that animals, whether domestic or wild, should be killed as humanely as possible, there is less agreement about whether some animals should be killed at all. In population ecology we know that population size is a balance between reproduction and mortality and that as populations increase, limits are set more often through increasing mortality than reducing reproduction. Here we explore whether such dynamics can be the basis of an ecological ethic, where our actions are determined by ecological, individual animal welfare, and human values.

INTRODUCTION

The way we choose to value and treat the environment, including wild and pest animals, depends on the interactive effects of culture, society’s expectations, our familiarity with animals and their environments, and our understanding of ecological principles. An appreciation of the complexities of ecology, especially, is being lost with increasing urbanisation. A growing number of people have a “Disney” view of animals, which probably drives increasing opposition to lethal vertebrate pest control. As professionals involved in vertebrate pest control we have a responsibility to not only acknowledge the public concerns but also to inform and educate the public of the realities involved in protecting the environment to ensure balanced policies governing vertebrate pest management are implemented. To quote Rollin (2004), “Every profession including medicine, law, agriculture [or pest control] is given freedom by society to pursue its aims. In return society says to the professions, that it does not understand well enough to regulate ‘you regulate yourselves the way we would regulate you if we understood what you did. But we will know if you don’t self-regulate properly, and if this happens then we will regulate you despite our lack of understanding’.” So how should we, the vertebrate pest control profession, regulate ourselves? One approach, explored here, is to develop an ethic to guide our actions.

Unlike farm and pet animals, no obvious “duty of care” applies to wild animals except in a conservation sense of care for populations (Reynolds 2004). Nevertheless society expects that whenever we undertake pest control it should be done as humanely as possible. However, the more challenging issue is whether we should be controlling wild animals - is it right to control one population in order to preserve another (e.g. kill stoats to protect kiwi)?; or to kill sentient animals to protect non-sentient plants (e.g. to kill possums to protect rata)? This paper tries to clarify some of the ethical challenges facing vertebrate pest control in Australasia.

PHILOSOPHICAL APPROACHES

Although there are a plethora of terms and subtle definitions in philosophy, we adopt here three major philosophical approaches to environmental ethics as outlined by Kirkwood
The first is the anthropocentric, or human-centred, ethic based around the value of the environment as it contributes to actual or potential human benefits such as goods, services, and cultural or aesthetic values. There is a further anthropocentric stance based on the premise that humans should avoid harming animals because it engenders callousness in the humans themselves.

The second is the animal rights ethic. Strict animal rights or liberation proponents believe animals must not be exploited regardless of the benefits to humans or the environment (Regan 1992). More commonly this ethic focuses on individual animal welfare which is based on minimising harm, pain or suffering of sentient animals (Singer 1990). Animal welfare is normally about protecting or enhancing the fitness or state of the animal, but in vertebrate pest control animals are often killed – their welfare is deliberately compromised (i.e. it is deprived of life, and its death can be painful).

The third is the biocentric or ecocentric ethic, based on the inherent or intrinsic value of the environment and its constituents (species, populations, or ecosystems). Many of our beliefs and activities in wildlife management are aimed at preserving the environment, as expressed in the lines of Leopold’s (1949) land ethic: “A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise”.

Wildlife species are given moral standing in the biocentric ethic by virtue of their role in natural systems, in the animal right ethic by virtue of their sentience, and by society in general for a multiplicity of reasons (Peterson 2004). It is the conflict between the welfare of individual sentient animals (animal rights ethic) and concern for the ecosystem as a whole (biocentric ethic) that has formed the core conflict for us in wildlife management. Certainly we are not the only ones to find this difficult, with philosophers continuing to debate these issues. For example Marks (1999) recommended we develop an ecocentric ethic in vertebrate pest control that still requires us to consider the welfare of pest species. Although Marks emphasised that this ethic should not ignore the rights of individuals but that they would not be paramount, others, including Eggleston et al. (2003), consider this approach inadequate because it always relegates animal welfare to a secondary concern. Alternatively, Singer (1997) states that the ethic of concern for all sentient beings is the most defensible basis for resolving conflicts between the interest of humans and wild animals. Callicott (1980), however, resolutely opposes this animal liberation ethic because it provides for no discrimination between wild and domestic animals, or between overabundant and rare animals, or between native and exotic animals. Other philosophers debate the conflict between the biocentric and anthropocentric ethical positions. For example, Macer (1998) considers it more ethically acceptable to kill animals for survival of ecosystems than for the pleasure gained from hunting.

The three philosophical approaches each give different insights. The anthropocentric (people), the animal rights (animals), and the biocentric (environment). In vertebrate pest control programmes, it is suggested that all three stances are important because the interest of the people, animals and the environment are inextricably linked. However how much weight should be given to each of these components? In this contribution, we begin the development of a pest control ethic by suggesting that the animal rights ethic is currently given too much weight and we use population biology to argue that this weighting can, and should be significantly reduced.
ROLE OF POPULATION BIOLOGY

Vertebrate pest populations are generally characterised by having relatively high reproductive rates, but as populations increase towards maximal levels population density is regulated usually by a sequence of: (1) increased mortality rate of immatures; (2) increase in age of first reproduction; (3) reduction in reproductive rate of adult females; (4) increase in mortality rate of adults (Eberhardt 2002). Consequently many vertebrate pest populations have high numbers of individuals dying, as part of the natural process of population regulation. For example, annual mortality rate of juveniles can range from 7 to 89% and similarly for adults (Sibly et al. 1997; Table 1).

Table 1 Examples of annual juvenile and adult mortality rates (from 1 Sibly et al. 1997, 2 Efford 2000, 3 M. Efford pers. comm.)

<table>
<thead>
<tr>
<th>Species</th>
<th>Juvenile mortality (%)</th>
<th>Adult mortality (%)</th>
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<tbody>
<tr>
<td>Feral cat (<em>Felis catus</em>) 1</td>
<td>73</td>
<td>43</td>
</tr>
<tr>
<td>Himalayan tahr (<em>Hemitragus jemlahicus</em>) 1</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>Red deer (<em>Cervus elaphus</em>) 1</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Feral pig (<em>Sus scrofa</em>) 1</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>Fox. (<em>Vulpes sp.</em>) 1</td>
<td>80</td>
<td>45</td>
</tr>
<tr>
<td>Brushtail possum (<em>Trichosurus vulpecula</em>) 2</td>
<td>-</td>
<td>45</td>
</tr>
<tr>
<td>House mouse (<em>Mus musculus</em>) 3</td>
<td>&gt;90</td>
<td>&gt;90</td>
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Therefore, although the animal rights ethic morally condemns pain and death it is irreconcilably at odds with the ecological facts of wildlife population dynamics (Callicott 2003). Given that high mortality rates can result from natural processes, is killing then morally unacceptable? Singer (1997) introduces the concept of self-awareness, suggesting that most animals don’t see themselves existing over time or having a future. Further, for most non-social animals there is little evidence that the death of an adult individual has an effect on other animals in the population (an exception is if a female adult is killed when she has surviving dependant young). Therefore, as long as animals are killed humanely we suggest their death does not pose an unacceptable ethical challenge because it is an essential, ecological process. However, some would argue this stance is a naturalistic fallacy (i.e. IS does not imply OUGHT). Moreover, if fewer individuals are killed from the control, over the long-term, than if natural regulation was allowed to occur, then there may be an ethical benefit from pest control (Varner 1994).

We believe that the vast majority of wildlife managers agree killing must be done humanely. However, because we recognise that none of the current methods are totally or consistently effective, there is an ethical cost of pest control. The size of this ethical cost depends on whether it is measured against an ideal of instantaneous death, as for farm animals, or some lesser requirement (e.g. compared with natural deaths; Warburton & Choquenot 1999).

Although we have provided arguments to support pest control (killing), we believe such actions can only be justified if the outcome of the control achieves the pre-determined environmental, animal or human health goals. Control must only be undertaken if key strategic principles can be adhered to (Littin et al. 2004). Killing if done humanely can have little ethical cost. Therefore if such pest control achieves the desired benefits, we believe killing individual pests is ethical acceptable. Ineffective pest control that realizes none of the benefits from removing pest animals, but incurs ethical costs of killing, therefore must be considered ethically unacceptable.
ETHICAL BALANCE

We believe there is a need for a balance between biocentric, animal rights, and anthropocentric ethics. The issue of vertebrate pest control is not merely a conflict between a human-centred ethic and an animal rights ethic, it is a triangular debate in which human interests, a biocentric ethic, and an ethic of concern for all sentient beings must play a role (Singer 1997). Similarly, Norton et al. (1995, cited in Kirkwood 2000) advocated a pluralistic approach with the acceptance of both environmentalism and concern for the individuals, recommending a shift in emphasis from one to the other depending on the situation.

We believe that a supporting ethic for vertebrate pest control should have less emphasis on the animal rights ethic and a better balance between the biocentric and anthropocentric ethics. Finding a balance between these two ethical positions requires finding the balance between the intrinsic value of the environment and human centred interests. Once this balance is achieved what management is required can be identified and any resulting pest control would therefore be ethically justified (with the caveat that pest control is done humanely).

To develop a sound basis for vertebrate pest control a four-step process needs to be implemented:
1. Precisely define an agreed (between ecologists and society) management goal (in precise and concrete terms explaining why wildlife is being managed and what it will achieve: Caughley 1988)
2. Implement appropriate control strategies that ensure goal is achieved.
3. Use humane methods/tactics to achieve the strategies.
4. Measure the outcome to ensure goal has been achieved.

Step 1 is likely to pose the greatest challenge, and currently is often poorly done, as it will be determined from a biocentric and anthropocentric ethical balance. We believe that only if these four steps are successfully implemented will vertebrate pest control be ethically acceptable in the future. Those involved in vertebrate pest control have to begin questioning their assumptions about the environment, animals and people which shape what we and others take to be acceptable in killing animals. This contribution is the first step in examining our beliefs.

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REFERENCES


