Attachment 2

Draft definition and key principles for humane vertbrate pest control

Working definition of humane vertebrate pest control

"Humane vertebrate pest control is the development and selection of feasible control programs and techniques that avoid or minimise pain, suffering and distress to target and non-target animals."

In order to achieve acceptable humane vertebrate pest control (HVPC) a number of key principles for pest animal management need to be considered. **These key principles are set out below**.

This working definition applies to both lethal and non-lethal control techniques. A totally humane control method is one where the animal experiences no pain, suffering or distress. In the case of lethal control, humane killing is defined as an immediate and irreversible loss of consciousness followed by cardiac or respiratory arrest and the ultimate loss of brain function. This is difficult to achieve even in very controlled circumstances. Consequently it is often appropriate to use humaneness as a *relative* term: when we talk of relative humaneness we mean causing more or less pain, suffering or distress.

The concept of relative humaneness is important because of the impact it has on practice: every step towards minimising pain, suffering and distress is a step towards a more acceptable and humane practice. The assessment of the humaneness of a particular control technique or practice requires detailed research and consideration of the associated risks and benefits. Different techniques may be more or less humane depending on the target species and the way in which they are applied.

Key principles

Two sets of principles are outlined: three *research and design principles* which set out how to maximise the humaneness of vertebrate pest control programs; and six *implementation principles* to guide the design and execution of such programs.

Research and design principles

- 1 The relative humaneness of all current methods must be assessed in the practical circumstance of their use and the most humane methods that are useable in any given situation must be employed. *This step, conscientiously taken, should lead to an immediate reduction in animal suffering.*
- 2 Active attempts must be made to improve the humaneness of all current methods, not excluded by step 1, that cause significant suffering. *This step should lead to welfare benefits in the medium term*.
- 3 An active research program to develop new more humane methods must be implemented. *This step should achieve improvements in the long term.*

Implementation principles

- 1 The aims or benefits and the harms of each control program must be clear. Control should only be undertaken if the benefits outweigh the harms. Control must definitely be necessary, and the benefits must be clearly identified so that they can be maximised and any anticipated harms minimised. This requires a sound understanding of the impacts of the pest in each case. It must be decided whether the aim is to reduce or avoid impacts or eradicate the pests, as the control method may be different or conflicting in each case.
- 2 *Control should only be undertaken if there is a likelihood that the aims can be achieved.* If the proposed benefits are not achievable the control program cannot be justified. The probability of benefit needs to be assessed and even if the harms are low, control should not be undertaken if the likelihood of benefit is low.
- 3 *The most humane methods that will achieve the control program's aims must be used.* (See research and design principles)
- 4 *The methods that most effectively and feasibly achieve the aims of the control program must be used.* The method must kill the most target pests with the least harm to non-target animals, people and the environment. This means that the methods must be appropriate for the species and the situation. The choice will therefore depend on knowledge of which methods can best achieve the aims with the target-species in their particular locations.
- 5 *The methods must be applied in the best possible way.* This is achieved by good quality control applied to, for example, the manufacture, selection, operation, placement, maintenance and effective use of devices, poisons and other components of each control method.
- 6 Whether or not each control program actually achieved its aim must be assessed. In reality, control programs do not always achieve their aims. Whether or not this is the case must be determined, so that if necessary, methods can be changed to those that are more likely to achieve the desired aims. The real measure of success is whether a pest control program reduces the negative impacts of pests, not merely whether the number of pests is reduced following control.
- 7 Once the desired aims or benefits have been achieved, steps must be taken to maintain the beneficial state. If that were not done, the control program and any suffering it causes would be purposeless.
- 8 Where there is a choice of methods, there needs to be a balance between humaneness, community perception, feasibility, emergency needs and efficacy.