

# A guide to the responsible resolution of raptor conflict on farmland

*This is a guideline, not a wizard's recipe. Always act responsibly, with respect for the environment and for the law.*

## **Some basic raptor conflict prevention principles**

Raptors sometimes cause damage to livestock and their activities can reduce farming profits. But as not all humans are thieves; not all individuals of a predatory species are damage-causing animals, and management should strive for conflict prevention through long-term damage avoidance measures. Controls should only be applied after all prevention techniques have failed; and any control must aim at an individual rather than at extermination of the species. Bad management without consideration of the dynamics of raptor ecology and the environment simply makes matters worse.

Irresponsible, random extermination can lead to a "sink" or vacuum effect in which a farmer empties raptor territories on his farm and thus creates a "vacuum" of available habitat for other individuals of the same species. The result is an ecological imbalance and a farm with a constant influx of unsettled raptors. The best policy from all aspects is to tolerate raptors in the environment and only responsibly deter individuals as and when they cause damage.

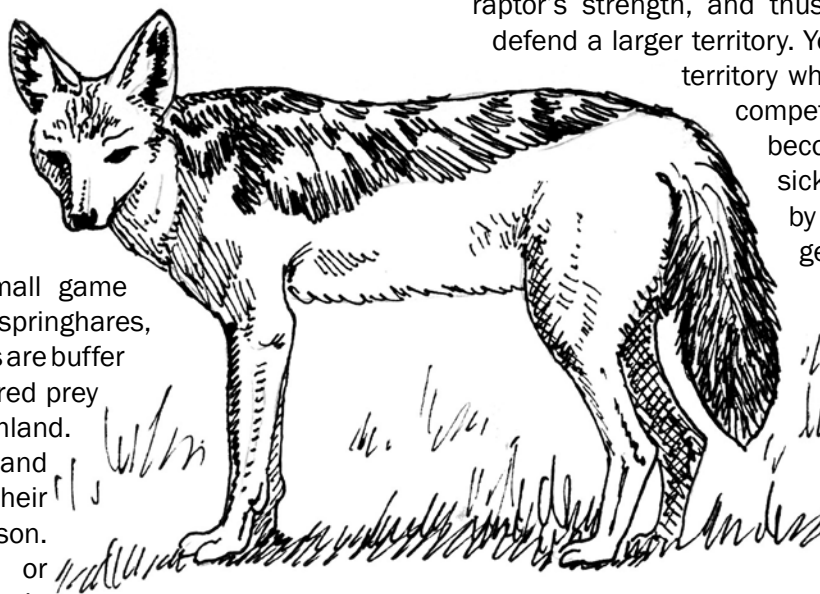
In South African legislation no raptor species are recognised as "problem animals". Some raptors may kill small stock, but their depredations are generally irregular and can usually be restricted to a minimum by proactive preventative farm management.

## **Non-target animals and farmland ecology**

The most noticeable negative effect of the war on predators such as black-backed jackals and caracals by some farmers is the effect on the innocent non-target species such as bat-eared foxes, aardwolves, servals, small mammals, gamebirds and birds of prey. Damage caused by these species is usually minimal and highly irregular or seasonal and certainly does not justify their destruction. Yet one in five farmers in South Africa use farm chemicals illegally by poisoning carcasses or by using illegal poison baits, and this irresponsible practice has very serious secondary environmental poisoning effects.

## **Buffer species**

Small antelopes and small game such as hares, dassies, springhares, guineafowl and gamebirds are buffer species, being the preferred prey animals of raptors on farmland. Many farmers keep game and support small game on their farms for this very reason. Unsustainable hunting or capture of these species in



traps creates food shortages for the predators with the inevitable result that some may resort to killing livestock to survive! Irresponsible or deliberate misuse of chemicals can wipe out a flock of Helmeted Guineafowl overnight and this practice kills up to 470 000 gamebirds and waterfowl a year in South Africa.

## **A free of charge pest control service!**

Birds of prey are sometimes shot because they catch free-ranging chickens, but this is short-sighted because chickens cannot protect themselves and are easy prey. The logical long-term way of protecting poultry is to keep them in a raptor-proof fowl run.

Eagles may occasionally be a problem to small stock farmers and in most instances pragmatic farm management, often just moving the flock, can eliminate the problem altogether. Consider that a pair of Verreaux's (Black) Eagles eat about 360 dassies per year, and those 360 dassies would eat the same amount of vegetation as 22 sheep. By rearing 22 additional sheep, the farmer has more income than he would without the eagles controlling the dassie populations!

Barn Owls are an asset. They raise chicks in an ongoing cycle, so at any given time they may have several chicks of different ages in their nest. In this way a pair and their offspring use about 3000 rodents per annum. Measured in terms of rodent food, that's roughly 10 tons of grain saved rather than becoming spoiled or eaten. For farmers who experience excessive rodent infestations, these figures highlight the importance of choosing a rodenticide product that will not have a negative effect on the owl population!

## **Predator and raptor ecology**

Most raptors are territorial. There are restrictions such as terrain, population densities, competition or food supply which often dictates the size of this territory. A particular raptor's strength, and thus dominance, may allow it to defend a larger territory. Young birds are driven from the territory when the pressure and resulting competition for the food resource becomes too great and, similarly, sick and old birds are displaced by the strong, young emergent generations.

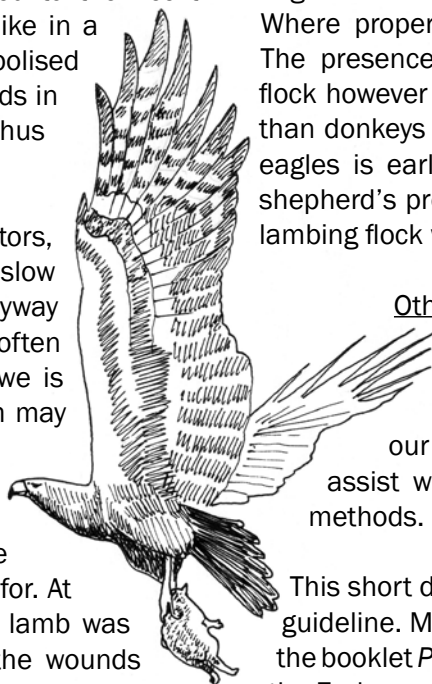
Consider the effects of ecological tampering, such as the indiscriminate killing of a raptor which follows a natural diet whilst maintaining a territory on a small-stock farm. It may be replaced by a young bird, or an old displaced bird which finds lambs easier

to catch than its natural prey. The consequences can be disastrous. As difficult as this may be to accept when one has experienced loss of livestock and income, one should rather aim towards having “friendly” predators and raptors on farms, and one should rather strive to prevent conflict through livestock protection. If the predator and raptor ecology scale is in balance; then small-stock losses should be minimal, or at least within the farmer’s loss acceptance threshold.

When talking of control, one has to realise that this control actually means *management* rather than *extermination* or *eradication*, because our forefathers have been trying to eradicate predators for hundreds of years - without success. Why? We must surely be doing something wrong! We need to look seriously and holistically at predation issues, and manage this conflict by PREVENTION which is proactive.

Did the lamb die before or after birth? Many lambs die before or during birth and are dead on arrival. If the hooves still have soft membranes underneath, it’s clear that the lamb didn’t stand up and walk. If it hasn’t breathed, the lungs will be deep scarlet rather than pink and spongy. Was the lamb healthy and did it drink before death? A healthy lamb should have solid white fat attached to the heart and kidneys. This fat looks red and jelly-like in a starving animal, because this fat is metabolised first. Another sign is the lack of milk or curds in the stomach. If the lamb was stillborn and thus didn’t suckle, these will be absent.

In a natural selection process by predators, the sick and weak are the first targets, so slow and sickly animals which may have died anyway become their targets. Predators will very often take the first lamb of twins, whilst the ewe is still giving birth to its sibling. This problem may be overcome by better management – by preventing desertion of lambs. When determining the cause of death, blood stains and bruising around wounds are probably the most important clues to look for. At death, blood stops flowing. Therefore if a lamb was fed on by a predator after it died then the wounds will not be a bloody mess. Remember that scavengers are attracted to dead and dying animals, so it is a good principle to clean up lambing areas regularly. The fact that a raptor fed at or was seen at a carcass does not necessarily mean that it killed the prey animal. Whatever the case, it is sensible to provide protection to stock during the lambing season when they are most vulnerable to predation.



Successful raptor conflict management should be measured by reduced losses and increased profits, not by numbers of predator skins in the shed or raptors killed.

### Prevention methods

#### Fencing (camps, kraals and night enclosures)

Although expensive, this is a long-term solution. It is, however, only as good as the maintenance and as secure as the weakest point. Gates which are left open make the best fence useless. Similarly, gates which are badly hung serve no purpose at all! The function of the gate is to close the entrance/exit! It is bad practise to bundle small stock during the lambing period since this causes ewes to abandon their lambs and result into greater losses. Predators are prone to attack weak and starving lambs! But this certainly does not mean that ewes and lambs should be unprotected at this time.

#### Guard animals

Several forms of guard animals have been tried with varying degrees of success. These include donkeys, Anatolian guard dogs and others. The principle is that the guard animal is defensive towards the stock, naturally aggressive towards the predators, or both. The use of Anatolian shepherd dogs is effective in many applications internationally. Where properly managed, this method is very effective. The presence of humans in the vicinity of the lambing flock however works better in regard to raptor depredation than donkeys and dogs. The main predation time for large eagles is early-morning, noon-time and late-afternoon. A shepherd’s presence during that time in the vicinity of the lambing flock will prevent depredation by eagles.

#### Other methods

There are many techniques and methods available to assist farmers to reduce livestock losses. You are welcome to contact any of our fieldworkers or associates in your region to assist with and provide information on appropriate methods.

This short document should be seen as an overview and guideline. Much more information is available, such as in the booklet *Predators and Farmers* (available on order from the Endangered Wildlife Trust’s Wildlife Conflict Prevention Group by e mailing [wcp@ewt.org.za](mailto:wcp@ewt.org.za) or by telephoning the Wildlife Conflict Prevention Group at (011) 486-1102).

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### Damage management

The most important part of any raptor damage control effort is this: It is absolutely critical to control emotions, despite losses, to avoid irrational over-reaction. The need for controls should be directly related to the amount of damage and the cost of the control effort should never exceed the value of the loss. But in the first instance, livestock should be protected, and farm management should include Loss Prevention.



For further information about the Endangered Wildlife Trust’s Wildlife Conflict Prevention Group or the Bird of Prey Working Group, please visit the website <http://www.ewt.org.za> and follow the working group links.

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