

Problem Lion Control Fact Sheet **FOURTH DRAFT**

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Introduction

Populations of lions and other African predators are declining rapidly in most countries, due largely to conflict with humans over livestock losses. Increasing conflict and lion-killing result from habitat loss brought about by ever-growing human and livestock populations which reduce or eliminate lions' natural wild prey. However, lions and other predators can survive in human-dominated landscapes if wild prey persist in adequate numbers, and if people are willing to take modest traditional measures to protect their livestock.

Large predators present unique challenges to conservation outside protected areas, in part because their psychological impact on people is often greater than their actual economic impact; although disease and drought take far more livestock, people react much more strongly to depredation losses. There is great local and international variation in current wildlife policy and law regarding predators throughout Africa, as well as in local ecological and human circumstances. This brief document is an attempt to summarize 'best practices' for dealing with persistent problem lions, minimizing conflict and optimizing lion conservation. It is far beyond our scope to cover all aspects of lion management or all relevant human variables; this is intended as a guide for both practical intervention and for policy development, recognizing that many countries may not currently have the conservation capacity to fully implement these recommendations.

Conservation

Although local circumstance vary, depredation is often most serious where wild prey have been reduced by agricultural development or widespread bushmeat poaching; maintaining wildlife is the best way to save livestock. Killing lions should be avoided whenever possible, in favour of educating livestock owners on better methods of protecting stock from depredation; fortunately, most of those methods are traditional among most African pastoralists. However, there are circumstances where effective conservation and humanitarian considerations require the removal of chronic problem individuals. This document outlines those circumstances, and the most conservative approaches to problem lion control.

In most countries, local or national wildlife authorities are legally tasked with the removal of persistent problem animals but resources often do not permit rapid and efficient response to complaints by rural communities. This failure can lead to resentment by communities and livestock owners, who then take measures on their own. These often involve the use of poison or other indiscriminate forms of predator population reduction which are extremely destructive and must be strongly discouraged. Problem Animal Control (PAC) by trained personnel and precisely targeted at genuine persistent problem lions is far preferable to indiscriminate 'predator control'.

Education and Prevention

The first response of a PAC team should be to educate rural people on appropriate means of protecting livestock and themselves from predators. In most cases, improved livestock management practices can dramatically reduce depredation. Education is cheaper and more effective over the long term than is continual PAC intervention. We would expect people to be more responsive in areas where wildlife contributes to their financial well-being through tourism or hunting; if animals make no contribution to human livelihoods, people have little incentive to protect it. PAC teams should always closely consult local people, involving them in decision-making and in improving local conditions to minimise future problems. Even where inadequate resources may limit practical intervention by conservation agencies, the simple fact that authorities respond to the concerns of people affected by lion depredation often alleviates acute anger over depredation incidents. Involving communities in conservation decision-making is critical for local acceptance, so long as it is understood that blanket removal of predators or other wildlife is not an option.

Most losses to predators can be prevented through good livestock management practices. These include diligent herding during the day, preferably by men rather than children, and herds should be accompanied by dogs to warn of predators. However, domestic dogs pose a disease risk to wild predators, and wherever possible should be vaccinated against rabies and canine distemper. At night, stock should be enclosed in secure bomas or kraals, with strong gates to keep livestock from breaking out when panicked by lions, and to prevent predators from entering. In areas where lions kill people, fences and barriers around houses, along paths to the toilet and general education regarding the dangers of sleeping outside or walking at night may help prevent problems from developing. Again, dogs are very helpful in preventing man-eating.

Definitions

It is essential to have a clear definition of what constitutes a problem animal that needs to be removed. In terms of livestock loss, this can vary in different areas, as land use, conservation priorities and other factors will influence tolerance. At one extreme, in areas with high densities of people and livestock and little wild prey, any lion that comes into the area might be defined as a problem animal. Any lion that causes injury or death to a person should be removed. In areas where tourism is important, higher depredation losses might be tolerated before a lion is deemed to be a problem. In an area where restoration of lions is a paramount goal, considerable livestock loss may be tolerated in the early phases. In each management area, definitions must be set and adhered to, possibly as part of an overall wildlife zoning system in which different zones have different conservation priorities and lion management policies.

Investigation

Before reaching a decision to remove a problem lion, PAC professionals should investigate the circumstances of livestock loss to assess what might be done short of killing a lion. Education on improved livestock husbandry is helpful where people have the motivation to tolerate wildlife. Predators are often blamed for disease or drought deaths, especially if carcasses are subsequently fed upon by scavengers; the PAC team

should be able to distinguish between depredation of live animals and scavenging of dead ones, and to identify the offending species. A low level of depredation loss is probably unavoidable where lions and livestock cohabit: livestock which stumble onto sleeping lions by day may be taken, and some lions will occasionally take stock from bomas at night without becoming habitual problem animals. In all cases where investigation shows that individual lions have attacked a person the lions should be removed at the first opportunity no matter what the circumstances of the attack. Investigation and removal should be followed by education to minimize future problems.

Elimination

A decision to remove a lion should only be made when there is evidence that people are doing their part to avoid depredation, and that an individual lion meets the definition of a problem animal set for the area.

Every effort should be made to kill only known problem animals. If good trackers are available, the best method is to track a problem lion from its kill the next morning and shoot it. However, lion hunting requires advanced hunting and shooting skills and must never be attempted by the inexperienced. Appropriate heavy calibre firearms should be used. Wounded lions are extremely dangerous; if one escapes, every effort must be made to track it down and kill it.

As lions normally return to finish a carcass the night after it was killed, a PAC team can also 'sit up' in a hide (blind) by the carcass, and shoot the lion that returns to it; these are normally the offending individuals. To avoid wounding, a spotlight should be switched on when lions are heard to feed on the bait. All personnel should be well trained in anatomy, shot placement and quick, accurate shooting by spotlight.

Alternatively, a trap can be set using last night's carcass as bait. However, trapping has several disadvantages:

- Compared to shooting, traps are not selective –nontarget animals are frequently caught.
- In cage traps as usually constructed, cats frequently badly damage their claws and teeth, making it problematical (and unethical) to release nontargets such as young lions or leopards. Only traps constructed to prevent damage and allow ready release of non-targets should be used.
- Gin traps, if not used with great care and checked at least every morning, cause serious wounding and suffering. Foot snares are humane, but also must be monitored closely. With both types of foothold traps, large nontargets (e.g. hyenas, leopards, young lions, even domestic dogs) must be darted to remove them from the trap. Darting requires the necessary training, drugs, and equipment.

Translocation

Although widely used, translocation of trapped problem predators is almost never justifiable because it usually leads to prolonged suffering and slow death. Lions, leopards and hyenas are highly territorial; strangers newly released into occupied habitat

are chased or killed by residents. They try to find their way home, often taking livestock along the way. They have usually been caught in cage traps and have damaged their claws and teeth while trying to escape, making them less able to hunt and defend themselves; most translocated predators die slowly and badly.

Translocation is only justifiable when animals are moved into vacant habitat that have no residents of the same species and where humans will no longer kill them (i.e. newly created reserves). In those rare cases, newly released animals must be radio collared and closely monitored. Translocation should not be undertaken if there are not adequate financial and logistical resources to allow proper monitoring. Translocation is not an option for lions that have killed or injured people.

Poison

Poison should never be used under any circumstance! Poisoning is extremely destructive, killing whole prides and all other species that may eat the bait. Although poison may currently be legal in some countries, it should be universally outlawed, all infractions vigorously investigated, and offenders subject to heavy penalties.

Record-keeping and Research

We still have a great deal to learn about effective PAC, and local situations may present unusual circumstances. It is essential that good records be kept of all complaints and interventions, including details of the complaints, the results of investigations, details of any interventions performed, and whenever possible, follow-up monitoring of results. Records should be kept in a uniform format which should be standardized across all lion range states. A central database of all PAC activities would allow continent-wide analysis of circumstances, interventions and results, resulting in the development of more effective response.

The African Lion Working Group

The African Lion Working Group is happy to provide more information on these topics, including relevant papers and articles that go into much greater detail than is possible here.

Fig. 1. The decision process to determine the management actions to resolve Human-lion conflict.

