#### Series: 4-004/2

#### MANAGING PREDATION BY LEOPARD – PREVENTIVE METHODS

Traditional livestock management strategies are relatively effective in livestock from leopards. protecting especially when different methods are used in combination or on a rotation basis to prevent predators from becoming accustomed to specific methods. Because each farm or farming area can have a unique set of circumstances that will influence predators and farming and husbandry practices, methods that are effective in one area may not be as effective in another area.

The choice of which methods to use when, or in combination with which other method(s), should be based on the circumstances at that point in time.

On livestock farms, the following options can be considered:

#### Fencing

Most types of fencing (including game fences) will not deter a leopard.

Electric fencing (especially around lambing or calving camps) can effectively keep leopards out if the fence is constructed according to the following specifications (see figure):

- 2.5 m high, with 17 smooth wire strands
- 9 electrified wires (7.5 mm diameter), of which:
  - The first (trip wire) is positioned 10 cm high and 50 cm from the fence
  - The next 5 wires positioned at 10 cm, 30 cm, 50 cm, 70 cm and 140 cm
  - The next 2 on long (225 mm) offset brackets at heights of 170 cm and 200 cm
  - The top electric wire with an average electrical current of 6 000 V at a height of 2.5 m



# Illustration of electric fence designed to deter leopards.

#### Disadvantages

- Very expensive and only an option if the benefits of erecting such a fence outweigh the costs of predation in the long run.
- These fences also restrict the movements of, and can kill, useful animals, such as small game and other animals that play an essential role in the ecosystem.
- Regularly patrolling the fences and clearing either side of the fence of objects that may cause short circuits is labour-intensive and time-consuming.

#### Kraaling

Kraaling livestock at night in predatorproof enclosures close to areas with high human activity (for example, within 30 m of the homestead) can effectively prevent predation by leopards.

# Disadvantages

- Trampling of veld, and resulting soil erosion and reduced grazing capacity
- Parasites and diseases are transmitted more easily
- In the case of sheep, production of inferior-quality wool

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# Synchronised breeding seasons

Leopards prefer medium-sized prey, up to the size of young calves (up to the age of about 3 months). Limiting the availability of vulnerable livestock (young calves, for example) to a specific time of year means that such livestock are not available to leopards year-round but only during a short period (one or two seasons) of the year.

# Selective grazing or rotational grazing systems

Areas with dense vegetation and mountainous areas allow leopards to stalk and kill their prey. Keeping pregnant and calving cows and young calves away from these areas with high predation risk can limit livestock predation due to leopards.

Preventing livestock from grazing certain areas during periods of higher predation risk can also improve the quality of grazing.

# Herders and Livestock Guarding Dogs

Can be used to:

- Effectively chase predators away from the herd or flock;
- protect livestock while grazing far away from areas of high human activity and at water points;
- guide livestock away from areas with higher predation risk, such as the borders of nature reserves

#### Disadvantages

- Expensive
- Reliable and competent herders are scarce
- Training guard dogs requires patience, persistence and understanding
- Not useful on wildlife ranches

# Deterrents - noise, light and scent

Objects which generate noises, lights or smells may only be effective for short

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Inspiring excellence. Transforming lives. periods because predators can get used to them. Such devices may also be very expensive, and some may only be effective in relatively small areas.

The situation is different on game ranches and in communal farming areas, and approaches to reduce predation by leopards will differ somewhat. Depending on the social, financial and ecological situation, the following may be considered on game ranches and communal areas:

# On Game ranches

- Consolidating small game ranches into bigger conservancies because the impact of leopards can be higher on smaller ranches, but also to improve ecological management.
- Stocking game species indigenous to the area and species best adapted to the specific habitats on a particular game ranch may limit leopard predation, because species not adapted to the environmental conditions in that area may be more vulnerable to leopard predation. Rare game can be protected against leopards in predator proof enclosures.

# In communal areas

- Rotational grazing can reduce the need to graze livestock far away from the households during the dry season
- Where this is not possible, communal kraals and sleeping huts for nighttime herders in areas where livestockgraze during the dry season
- Synchronising breeding seasons during the wet season
- Because leopards generally avoid areas with high levels of human activity, construct artificial water points close to villages

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Consult your local DFFE (Environmental Affairs) or DALRRD (Department of Agriculture) office for legal aspects regarding



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