## **Project Update: December 2011**

The project commenced in February 2011 and is now well established in the local community. Our initial questionnaire interviews are complete (Aim 1) and quarterly follow-up monitoring and scat surveys (Aim 2) are progressing as planned. This report provides a brief overview of project activities and achievements to date.

**Aim 1:** Investigate where, when and why conflict occurs and quantify the reciprocal impact of co-existing people and carnivores.

 So far, initial questionnaire interviews have been conducted with 92 private land owners, responsible for 95 farms (Fig 1). The land area of the farms surveyed equates to 21% of the total study area.

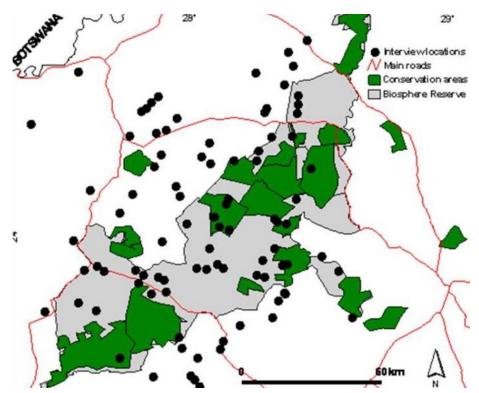


Figure 1. Locations of 95 farms surveyed in and around the Waterberg Biosphere Reserve

The farmers we interviewed reported that carnivores had killed 1.41% of their total stock holdings. Based on those reports, the average rate of financial loss arising from carnivore predation was R1.23 (approximately £0.10) per hectare per year. This is much lower than prevailing perceptions, but may underestimate losses on game farms. Game species are often extensively managed, which makes it more difficult for land owners to count their animals and detect losses.

47% of respondents said they had killed a total of 309 carnivores in the last year (Plate 1), most of which were from species classified as least conservation concern. However, 49 of the

exterminated animals were from threatened species. The situation regarding African wild dogs (Plate 2) is of particular conservation concern. Farmers reported shooting 50 African wild dogs in the last 18 months, out of an estimated maximum population of 150 animals outside protected areas. There have been no previous attempts to measure illegal off-take of wild dogs in South African farmland so we do not yet know whether the species can withstand such intense persecution.



Plate 1. Cheetah skin. Plate 2. African wild dog. © Charl Senekal www.csmwildlifephotography.com

We are currently analysing which human and natural factors influence carnivore predation on livestock and human persecution of carnivores. The results of that analysis will be included in our final project report.

**Aim 2:** Recommend a range of non-lethal anti-predation measures targeted at actual rather than perceived culprits.

Forty five of the farmers we interviewed agreed to participate in the next stage of the project, which involves monitoring predation losses in detail. We have also collected approximately 20 kilograms of carnivore faecal samples. The samples will be analysed by a South African Honours student and a British Masters student in early 2012. This will help to establish which carnivore species are preying on game and livestock. Together with our monitoring data, carnivore dietary information will allow us to recommend appropriate non-lethal anti-predation measures at each of the participating farms.

## Outputs

- Project information is displayed on the Rufford Small Grants Foundation, Endangered Wildlife Trust (EWT), and UNESCO Waterberg Biosphere Reserve web sites.
- Project updates are featured in monthly EWT electronic newsletters.
- An overview of the project aims and activities has been presented to the management teams of three large and locally influential reserves in the study area.
- We have also presented the project at five local land owner meetings.

- Wildlife Ranching South Africa (an influential national organisation) distributed an outline of the project and an invitation to participate to all of their members in Limpopo (the Province where the project operates).
- The project has been formally approved by the Limpopo provincial authority.
- We have released two reports to land owners, giving details of the initial project findings. The Waterberg Conservancy (a local land owner organisation) also distributes our reports to their members and other interested parties.
- Preliminary results were displayed at the South African Wildlife Management Association annual symposium in September 2011.