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# Threat of a lion population extinction in Waza National Park, North Cameroon

**In this short note we want to publicise recent reports on killing of lions in Waza National Park, northern Cameroon. Population surveys in the 1990s resulted in an estimate of 50–60 lions (Bauer & de Iongh 2005, de Iongh & Bauer 2008). The population was reassessed in 2008 and was estimated to be 14–21 adult individuals (Van Rijssel 2008, Tumenta et al. in press). We fear that this lion population may become extinct very soon if no measures are taken to improve protection in the park.**

As part of a PhD study by Pricelia Tumenta Fobuzie, two collaring operations were conducted in Waza NP: 5–10 May 2007 and 19–23 May 2008. Four lions (two males and two females) were successfully collared with GPS-PLUS collars in May 2007, while in May 2008 one additional male was collared with a GPS-PLUS collar and one female with a GPS-GSM collar. Another female that had a dysfunctional collar was re-collared during this period. A VHF-transmitter system attached to each collar enabled direct detections of the lions in the field through telemetry. GPS locations stored every half hour in a memory were downloaded with a hand held station. Three collared research lions were lost to illegal retaliatory killings during 2008 and 2009; while search efforts for a male lion collared in May 2008 have been unsuccessful.

## **Killing of lion 'Jean Pierre'**

During February 2008, two MSc students, Jet Kok and Jacco van Rijssel, recovered the collar of a male lion named Jean Pierre. The collar was found hanging from a tree in Mourvouna village, approximately 7 km outside the park boundary. Analysis of position data from the collar suggested that the lion had most probably been killed by herders. Children from the village found the collar along a regularly used cattle track, just outside the park boundaries. The collar had been sawn through to remove it from the lion's neck.

## **Killing of lion 'Adam'**

On 29 April 2008 while doing telemetry on the highest inselberg in Waza we received a signal from one of our research lions named Adam. He was collared in May 2007. By fol-

lowing the direction of the signal we found to our dismay the collar of Adam lying on the ground. The collar was brought to our campsite and after downloading and analyzing the data, we concluded that the lion was killed during the night of 4 April 2008. Adam was a member of a group of four animals. Three have been killed in a Nigerian village after taking livestock.

## **Killing of lioness 'Rosie'**

Lioness Rosie, collared in May 2008, also fell into the hands of pastoralists on 12 February 2009. The collar was recovered on 28 May 2009 at the last location, downloaded on 22 May. Positions showed that this lioness was killed well inside the park boundaries (approx. 15 km) in an area frequented by cattle on a daily basis. Rosie had not moved outside the park boundaries since she was collared.

This high frequency of killings suggests a population decline of approximately 6 lions per year or more. Human-livestock pressure has increased tremendously in this period, resulting in frequent human-lion conflicts. To ensure the survival of the lion in Waza NP and in the entire region, management needs to implement effective measures to reduce the pressure from humans and their livestock.

## **Increase in poaching**

Two students who worked in Waza NP from January until June 2009 came across four active poacher campsites with fireplaces (Fig. 1) and equipment such as cooking pots, clothing,

jerricans filled with water, batteries, flashlights and sufficient food to sustain a group of poachers for long periods of time in the park. They also found fresh meat (hanging in trees) and carcasses and dried skins of poached antelope (probably kob *Kobus kob*) at these sites. These active campsites were found hidden in the bushes surrounding Gobe and Gamzemia waterhole and another was found in a thicket in the vicinity of Zeila waterhole. Besides these active campsites, approximately 15 abandoned sites with old fireplaces and garbage were found at Saourware, Zeila, Tchikam, Mbouiet and Talabal. Other traces of human activity in the field i.e. fresh bicycle tracks were also frequently encountered. Poaching also badly affected elephants. Martin Tchamba lost one of his research animals. In another place, a burnt carcass of an elephant was found (Fig. 2).

**Recommendations**

There is an urgent need for the government to step up park protection and surveillance for the lion and other wildlife species by providing the resources needed for such a task. The Waza NP had been for long deficient in the number of eco-guards according to IUCN norms (one guard to 5000 ha of protected area). New eco-guards should step up protection in Waza NP by being physically present at their post to carry out the task for which they were recruited.

Most of the villages bordering the park were resettled from within the park and were supposed to act as a social buffer to illegal activities in the park and its resources. This buffer should be secured by developing strategies that would maximize benefits from lions and other wildlife to local communities through tourism. The lion, like the elephant, is a flagship species that attracts most tourists to Waza NP. A suggestion has been made to put a share of the park fees in a trust fund for community support. The number of tourists was formerly around 6000 per year in the 1990s but has declined to around 4000 in recent years. An awareness campaign on the foraging behaviour of lions and a project to improve bomas should be initiated by the government and relevant NGOs.

**References**

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**Fig. 1.** Poacher campsite inside Waza National Park (Photo H. Visser and L. Muller).

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**Fig. 2.** Burned elephant carcass inside Waza National Park (Photo H. Visser and L. Muller).