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## Status and conservation of the north and west african cheetah

Anne Marie Drieux<sup>1,2</sup> and Françoise Claro<sup>1,2</sup>

- 1- Société Zoologique de Paris (SZP), France
  - 2- Laboratoire de Conservation des Espèces Animales, Muséum National d'Histoire Naturelle (MNHN), Paris, France
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### Introduction

The status of the cheetah is poorly known in North, West and Central Africa, while in South and East Africa, it is more documented even if few data are available outside the main east African wildlife parks and natural reserves. In 1998, the world population was estimated between 9 to 12.000 individuals, mainly distributed in South and East Africa (Marker, 1998). Residual populations are reported in Algeria, Iran and Niger, but more information is urgently needed on the precise status of the cheetahs in North Central and West Africa.

### Saharian cheetah program

In 2000, the Zoological Society of Paris has decided to set up a program on the status and conservation of the Saharian cheetah, which is considered as critically endangered. The goals of this program are to perform field surveys in Mali, Niger, Lybia and Algeria, to study the various aspects of its ecology, morphology and genetics, and to propose and implement a conservation and education program for the saharian cheetah in these regions.

With the support of the zoo of Doué-la-Fontaine, the SZP, represented by AM Drieux, attended the information workshop Status and needs for conservation of lions in West and central Africa, Limbé, Cameroun, in June 2001. The workshop was organized by the African Lion Working Group, an expert group affiliated with the IUCN/SSC Conservation Breeding Specialist Group and the IUCN/SSC Cat Specialist Group, and supported by the Dutch Foundation Zoos help, the IUCN regional offices, the CES. Leiden University, Netherlands and the Limbe Botanical Garden. This meeting led to the establishment of a network of scientists and volunteers involved in the conservation of felids of the Sahelo Saharan areas. AM Drieux initiated a survey, by the means of a questionnaire sent to African local experts, in order to collect as much informations as possible on the status of the cheetah in North, West and Central African and Arabian countries.

### Research

A collaboration between the MNHN and the IRD (Institut de Recherches pour le Développement) led to the first field research activities in Niger in March 2002, and a molecular genetic study of the intraspecific variation of the cheetah is ongoing at the Museum of Paris.

The goals of the field session of 9-23 March 2002 in Niger were :

- to collect records of the occurrence of Saharian cheetah in Niger
- to initiate preliminary investigations in the Termit area

Interviews of officers of the Ministry of Environment in Niger and of the National Natural Reserve of the Aïr Ténéré indicate that cheetahs and offspring are regularly observed in this area.

In Termit, Toubou nomads report cheetah as not rare.

In this area, our activities consisted of :

- the observation of suitable biotope and preys for cheetahs
- looking out for signs of occurrence of cheetah
- interviews with nomads

### Results of the field session

Termit mountains consist of volcanic rock and sand, and spread on about 100 km x 30 km with a maximal altitude of 710 m. They comprise a lot of corridors with vegetation . Several wells are available to nomads. With our Toubou guide we went in search of signs of occurrence of cheetah in sites where cheetahs had been observed or met by nomads. We observed several caves from a distance and could approach one old cheetah shelter, where cheetahs are protected from the sunshine during the day. Our research of prints was compromised by a sand wind, which lasted several days. Nevertheless, fresh prints could be observed at one occasion, before disappearing in the wind. We found feces, which could not be attributed with certitude to cheetah. Mountains offer a good visibility of what happens in corridors , where dorcas gazelles feed , and nomads report that cheetahs hunt in these corridors where gazelles may be wedged. Several potential preys occur in this area : in particular numerous dorcas gazelles, hares and mufions, which are unfortunately subject to poaching.

Other predators are jackals, which are the main livestock predators and striped hyenas.

Anthopisation is intensive and nomads breed sheep, goats and dromedaries.

Since meetings with cheetahs are reported by the nomads, it is not clear whether this subspecies, considered to be shy, is disturbed by human activities. Nomads think that cheetahs eat occasionally their livestock and some cheetahs are found killed when poisoning campaigns are organized.

Further investigation is needed in order to evaluate the human pressure on cheetahs in this area and the status of this population. This is the reason why a more intensive survey is planed next October-November in Niger with a team including an ethno zoologist specialised in Toubou culture. Activities will also include the sampling of cheetah scats for diet study and genetics.

### Genetic investigations

In order to investigate the intraspecific diversity in *Acinonyx jubatus*, genetic investigations are ongoing at the Muséum National d'Histoire Naturelle of Paris. 22 samples have been so far obtained from North, West, East and South Africa and 65 further samples are on the way from various countries in Northern Africa. Expected results are the characterization of phenotypic and genotypic specificities, with consequences for taxonomy and management of subspecies in captivity, as well as information on the inbreeding depletion on small populations of cheetahs.

### Results of the survey with questionnaires

The goal of the questionnaire was to collect data about cheetahs for the period 1990-2000, on the main following items for each country contacted :

Status, distribution and evolution of populations of cheetahs, legal status, management, predation, recommendations for local conservation.

27 countries were contacted and investigations could not be carried out with several countries where political situation is unstable. 22 replies gave limited information. In Algeria, 3 populations are reported and localized. In Egypt and Libya, indirect observations are reported. Cheetah occur in Benin, Burkina Faso, Niger in the W National park and in Cameroun. In North Niger, signs of occurrence are reported in Air Tenere , Termit and Djado area, as well as in Chad. In Djibouti, Somalia and Ethiopia, intensive traffic is reported. About 1000 cheetahs are occurring in Kenya. Concerning the Arabian Peninsula, private captive collections are recorded in Saudi Arabia and in the United Arab Emirates, where traffic is also reported. Oman and Yemen report the occurrence of cheetahs at their common border.

There is a downward tendency in the evolution of the number of direct or indirect observations of cheetahs, of which the future remains questionable.

### Conclusion

It is important to investigate the number of viable populations of cheetahs still existing, in particular in North and West Africa. Coordination of efforts must continue through networking and setting the right priorities. To help the cheetah to survive include encouraging support for the development of regional programs and field surveys in North, West and Central Africa is needed.

The SZP will continue its efforts in collaboration with the MNHN and IRD in Niger, and is planning further field work in Libya and Algeria.

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### References

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