REINFORCEMENT OF THE NANGER DAMA MHORR POPULATION IN SENEGAL

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Dama gazelle (*Nanger dama*) is a species of ungulate distributed along the Sahelo-Saharan Africa, from Western Sahara to Sudan. Being the largest gazelle species, its graceful looks and spectacular antlers, mostly in males,...

... made it particularly attractive for hunting, especially during the first half of the twentieth century, which has undoubtedly contributed to its extinction in nature.
It is a species with clinal geographic variation. The westernmost phenotype is *Nanger dama mhorr*. Its distribution coincides more or less with the oceanic and sub-oceanic Atlantic Sahara.

Although some authors reported its presence in the Sahelian zone of Senegal in the late XVIII\textsuperscript{th} century, others have suggested the possibility that in this country it was a visitor during the dry season.
In 1984 a reintroduction project of *Nanger dama mhorr* was carried out in Senegal from the Estación Experimental de Zonas Áridas – CSIC. Seven specimens were taken from Almería to the Fauna Reserve in Guembeul. The population grew steadily to reach a population size of 57 animals in 2003. But due to unknown causes, the population declined dramatically in recent years. According to own observations, the population size in 2011 only reached about 7-10 individuals.

In January 2003, nine individuals (2 males:7 females) were translocated from Guembeul to the Wildlife Reserve of North Ferlo; translocation was driven by the desire of the Senegalese authorities of National Parks Department to restore wildlife in their country. Until 2005 only one birth took place. Until now it seems to have been virtually no increase in the population.
In 1999 a reintroduction project took place with *Oryx dama* in Gueumbeul. In 2003, 8 individuals were translocated to Ferlo. Both populations appear to be growing, albeit slowly, and births occur each year as normal.

In 2007 took place a project to reintroduce dorcas gazelle (*G. dorcas neglecta*) in Guembeul. In 2009 a reinforcement of the population took place. In 2009 23 individuals were translocated to Ferlo. The dorcas gazelle population is successfully increasing in size at both Reserves.
GENERAL: To reinforce the reintroduced mohor gazelle population in Senegal...

... once we had made a previous diagnosys on why this population has not increase in size as much as it was expected; mostly if we compare with it has happened in other reintroduced species such as the S-H Oryx.

Research as a previous step for reinforcement
Phases of the project (I)

First Phase: (Dec 2010 - Nov 2011)  
On going

• To study the charge capacity of the reserves (Guembeul & Ferlo Nord)

• To study the likely infections (parasites)

• To analyze the genetic variability of the populations

• To build enclosures for breeding
Phases of the project (II)
Second Phase: Dec 2011-Nov 2012

• Study of habitat selection

• Training technitians (field work & vet)

• Selecting animals to be released from the EEP

• Transport the animals to Senegal
Phases of the project (III)

Third Phase: (Dec 2012 - Nov 2013)

• Monitoring released individuals

• Post-released parasitic analyses

• Genetic analyses of individuals born in Senegal
Some preliminary results

1. Habitat structure might explain population decrease in Guembeul

Tree cover, *Opuntia* cover and grass height seem to explain the relative abundance of Mohor gazelle at Guembeul.

*Moreno & Sane (in prep)*
Plot 10, 2003

Western Guembeul

Plot 10, 2011
Some preliminary results

2.- Two enclosures have already been built at Guembeul (July 2011)
Next step: Choosing animals

EAZA Institutions housing Mohor gazelles within its EEP

Back to Senegal
Thanks for their help, support wonderful food and tea, and also for sharing with us a lot of fun!!!
We also thank people in Katané; although there are no results yet, we hope they will come soon.