

Sahelo-Saharan Antelopes

Status and Perspectives

Edited by the Royal Belgian Institute of Natural Sciences
With the collaboration of
SCF - SSIG



Report on the conservation status of
the six Sahelo-Saharan Antelopes

CMS SSA Concerted Action
2006



Convention on Migratory Species



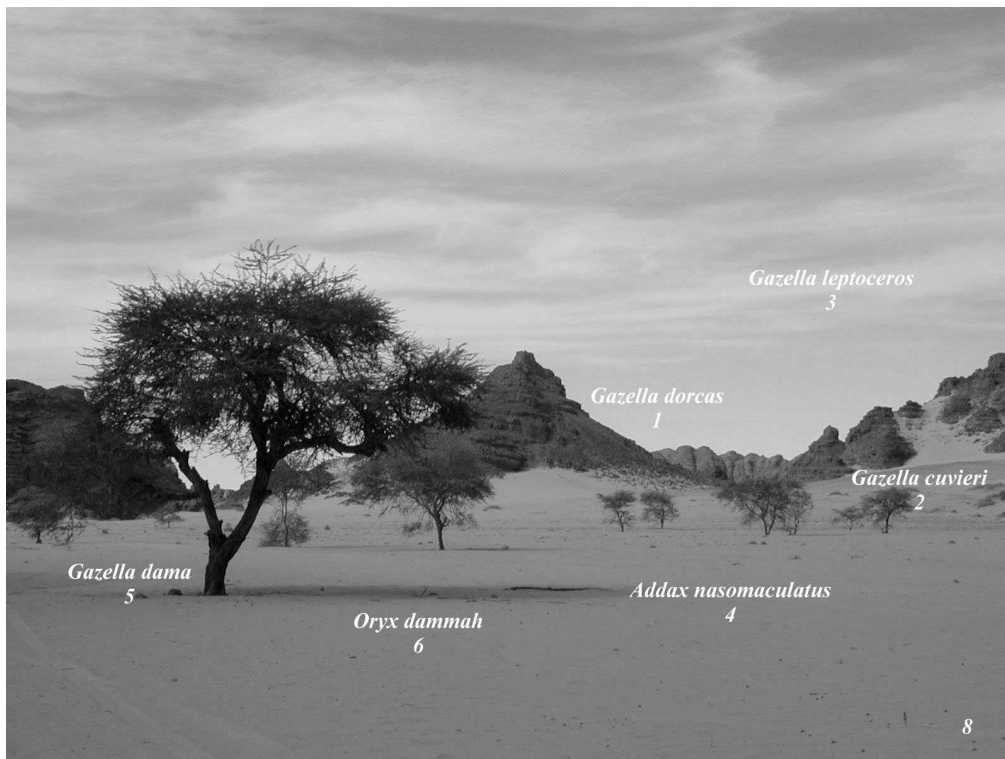
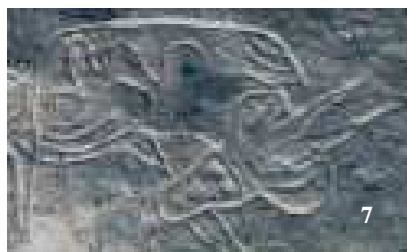
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A french translation is available.



© Niger. 1. John Newby (SCF); 2. Bou-Kornine - Tunisia. Roseline C. Beudels-Jamar de Bolsée (IRScNB); 3. Tunisia. Koen De Smet (Aminal); 4. Souss-Massa NP. Fatima Oumzai (Service Forestier - Morocco); 5. North Ferlo. Abdelkader Jebali (MNH); 6. Souss-Massa NP. Marie-Odile Beudels (IRScNB); 7 & 8. Engraved *Addax nasomaculatus* - Tin Teghert. Tassili N'Ajjer National Park. Algeria. Marie-Odile Beudels (IRScNB).

**Foreword by Mr Hama Arba Diallo, Executive Secretary,
United Nations Convention to Combat Desertification**

The General Assembly of the United Nations, aware of the challenges facing the international community with regard to the management of arid ecosystems, has proclaimed 2006 «International Year of Deserts and Desertification». This decision underlines the major importance given by the UN to this problem and its wish to emphasize the unique importance of deserts as a fragile ecosystem, as well as the process by which arid and fragile soils lose their ability to provide sustenance and well-being for humankind.

The Convention on the Conservation of Migratory Species of Wild Animals (CMS) is keen to participate in this effort to raise public awareness about the alarming decrease in migratory species and their habitats, due to several factors, both natural and man-made. In so doing, it aims to improve the status of these species through conservation and the promotion of sustainable development in those strategic regions where this still seems possible to achieve.

This CMS initiative can play a major role in the fight against desertification, thus fully corresponding to the objectives of the celebration of the International Year of Deserts and Desertification. It also testifies to the close cooperation between the CMS and the United Nations Convention to Combat Desertification (CCD) in the framework of the joint programme that the two UN Conventions are committed to implementing in order to help conserve biodiversity in the arid zone and thus contribute towards reaching the millennium goal for sustainable development.

The CMS, which has been actively involved for over a decade in the conservation of biodiversity in arid zones, thus contributes towards a reduction in the loss of biological diversity (target for 2010 target) and the fight against poverty (target for 2015), as adopted in 2002 at the Johannesburg Summit on Sustainable Development.

The present publication, devoted to the status of large Saharan mammals, a symbolic natural resource of the vast arid zones of Africa, is proof of such a commitment. This report, prepared by a group of eminent experts, will certainly help to increase awareness among the international community of the importance of the symbolic species of antelopes of the Sahara and the Sahel and their current situation.

It will also serve as a basis for scientific work that will improve their situation, while helping the local population, interested in the survival of these ecologically valuable species, to better understand the problems resulting from desertification. Stakeholders involved in conservation and in the fight against desertification, among governments and civil society, at national, regional and international levels, will find here precious information which can be used to promote the protection of this unique legacy of the arid and desert areas of the globe.

It is both a pleasure and a duty for CCD to ensure the widest possible distribution for this publication, particularly among decision-makers, but also among the youth of the countries affected by desertification. The translation of this document into the languages of the region will also be an important way of ensuring wide distribution among the populations concerned.



Mr. Diallo
Executive Secretary

**UNCCD
Secretariat**



Hama Arba Diallo,
Executive Secretary of the UNCCD

A handwritten signature in black ink, consisting of stylized initials and a surname, positioned to the right of the printed name.

Foreword by Mr Robert Hepworth

Arid lands, whilst containing relatively few species, harbour a number of highly emblematic, remarkably adapted species. Particularly charismatic are the large mammals, often forced to undertake large movements or atypical migrations following the highly ephemeral and widely dispersed resources on which they rely.

As result of increasing pressure on the biodiversity of the African region of Sahara and Sahel, the six antelope species covered by this report are now either probably extinct (*Oryx dammah*) or seriously threatened (*Addax nasomaculatus*, *Gazella dama*, *Gazella leptoceros*, *Gazella cuvieri* and *Gazella dorcas*) by human activities such as increasing uncontrolled poaching and overgrazing factors, all made worse by successive droughts during the 1970s and 1980s.

Since 1994, CMS has been leading a major international action in order to mitigate and if possible reverse these losses in the 14 range states: Algeria, Burkina Faso, Chad, Egypt, Ethiopia, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal, Sudan and Tunisia. In 1998, CMS and all the Range States developed a Sahelo-Saharan Antelopes Action Plan, referred to as the Djerba Action Plan. On the basis of this action plan, a 4 years regional implementation project was co-financed between the French “Fond Français pour l’Environnement Mondial”(FFEM) and CMS (see below update on SSA CMS/FFEM Project). In November 2005, during its 8th Conference of Parties, CMS announced the creation of a WSSD Partnership for Sahelo-Saharan Antelopes, comprising CMS, African Parks Conservation (AP), and the Sahara Conservation Fund (SCF). CMS are now drawing up plans to extend the Partnership formally to include Range states, major donors such as the Government of France, and other key stakeholders including the UN Convention to Combat Desertification (UNCCD), IRSNB and others.

In this publication, CMS have brought together the work of all those who have played a key role in the Sahelo-Saharan programme to date, to present an accurate and detailed picture of the taxonomy, biology, conservation status, threats, legislation, conservation and research activities in relation to each of the six species. The overall picture presented is highly challenging: out of the 55 country populations identified, 53 probably fall into the categories of extinct in the wild, endangered, threatened or vulnerable.

The report identifies the following as major threats to desert antelopes and desert biodiversity conservation in the region : uncontrolled hunting and poaching, made ever easier by the increasing numbers of 4x4 vehicles and modern weapons; the loss of critical habitat to poorly planned development projects, such as drilling of deep boreholes in prime desert habitat, leading to overgrazing and destruction of fragile pastures; agricultural and livestock expansion into desert heartlands; prolonged drought leading to desertification, and civil unrest in the Sahara over the last two decades. It is also worth mentioning the chronic lack of resources for conservation and desert conservation, and a worrying lack of interest in arid lands by a number of key actors in biodiversity conservation, who have become increasingly focused on particular definitions of species richness, such as “biodiversity hotspots”, which tend to exclude regions like the Sahara and the Sahel.

To counter these threats, the report identifies key opportunities for improving the conservation status of antelopes and other biodiversity resources, both *in situ* and *ex situ*, such as the development of effective networks of protected areas, adapted to the specific needs of highly mobile species; effective control of hunting and poaching; carefully planned reintroduction projects; promotion of arid lands; and, development of conservation projects based on their co-ownership with local communities.

I would also emphasise the potential of ecotourism, as exemplified in the recent CMS report on Wildlife Watching funded by TUI*. In the eyes of those privileged to see them in their traditional habitat, the desert antelope species are all dramatically attractive, and they live in a region which is highly valued by tourists for its beauty, culture, history and sense of wilderness.



Robert Hepworth,
Executive Secretary
UNEP/CMS Secretariat

The SSA CMS/FFEM Project and the associated WSSD Partnership are already engaged on a series of activities to support antelopes in Tunisia, Niger, Chad, Senegal, Mauritania and Morocco. This work is scheduled to cover the period 2003 to 2008. Negotiations with donors for a major extension to the project are well advanced.

The native fauna and flora of deserts contribute significantly to combating desertification. Keystone species like the Addax and the Dama Gazelle are essential for the maintenance of biodiversity, ecological processes and productivity in desert ecosystems. Wildlife's role in the livelihoods of desert dwellers can be significant if managed properly. The combination of protection, captive breeding, reintroduction and capacity building can empower people and create incentives for them to protect wildlife, and view it as an important asset of their future.

R G Hepworth

Robert Hepworth
Executive Secretary
UNEP Convention
on Migratory Species

Sahelo-Saharan Antelopes

Status and Perspectives



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Oryx dammah

Addax nasomaculatus

Gazella dama

Gazella leptoceros

Gazella cuvieri

Gazella dorcas



Realized by the Royal Belgian Institute of Natural Sciences



with the collaboration of :



2006



2d edition- revised 2006

The original documents entitled “Conservation Measures for Sahelo-Saharan Antelopes. Action Plan and Status Reports” were published in 1999 by UNEP / CMS and prepared by Roseline C. Beudels-Jamar, Pierre Devillers, Jean Devillers-Terschuren and René-Marie Lafontaine - IRScNB - 1999.

They were based on documents prepared for the Convention on Migratory Species by Pierre Pfeffer (1993b, 1995) and on supporting documents for the action plan on Sahelo-Saharan antelopes adopted by the 4th Conference of the Parties of the Convention, documents that were prepared by Roseline C. Beudels, Martine Bigan, Pierre Devillers and Pierre Pfeffer (1994). The information it contains originates mainly from the global surveys and regional action plans edited by Rod East (1988, 1990), and the fundamental work of Hubert Gillet (1965, 1969) and John E. Newby (1974, 1988, in particular).

This reports were reviewed and updated by Roseline C. Beudels-Jamar, Pierre Devillers, René-Marie Lafontaine and Marie-Odile Beudels, IRScNB, on the basis of recent surveys and of development of conservation efforts.

SCF and SSIG participated in the review, in particular John Newby, Tania Gilbert, François Larmaque, Heiner Engel, Tim Wachter, Mar Cano, Fabrice Cuzin, Abdelkader Jebali, Teresa Abigail and Koen De Smet.

Maurice Ascani participated in the review of the chapter *Addax nasomaculatus*.

Maps: lay-out by Isabelle Bachy, IRScNB.

Marie-Odile Beudels was responsible for the composition, lay-out and finalization of this document.

CMS Concerted Action on the Sahelo-Saharan Antelopes

The Sahelo-Saharan Antelope (ASS) Program of the Convention for Migratory Species (CMS) aims to rehabilitate the world's most threatened group of large mammals, namely the one which inhabits the Sahelo-Saharan region, in order to foster both the conservation of the world's natural heritage and the sustainable development of the area. The Program was initially proposed by the Scientific Council of the Convention, and then adopted by the Conference of the Parties in 1994. It has become one of the main activities, out of some ten similar programs, managed by the Convention as Concerted Action Plans. The Scientific Council has set up an international working group which includes delegates from the Range States, other national experts, and representatives of several NGOs, in order to ensure the good management of the Action Plan.

The Sahelo-Saharan Antelope Plan was adopted in 1998, both by the Conference of the Parties to the CMS, and by all the range States of the species, at a meeting in Djerba, Tunisia. The CMS Action Plan has four main objectives: the setting up of the institutional, regulatory and human resources which would allow to preserve and restore the key Sahelo-Saharan biodiversity elements, in particular the large ungulates; the conservation of natural residual habitats or the rehabilitation of potential habitats in areas previously occupied by the large ungulates; the direct involvement of local communities in all the activities arising out of the project and its results; increasing awareness among these groups about the benefits of conservation and rehabilitation of wild animals as a development factor, the building foundations for the development of ecotourism in the Sahelo-Saharan region, and, in time, the rational management and sustainable use of the natural resources thus restored.

The CMS/FFEM Project “Sahelo-Saharan Antelopes”

In order to implement this Action Plan, a regional ASS CMS/FFEM project, co-financed by FFEM (Fonds Français pour l'Environnement Mondial) and the CMS, was launched for the period 2003-2008. The ASS CMS/FFEM project is specifically centered on establishing the presence and precise status, of the different species of Sahelo-Saharan ungulates in their potential distribution ranges; monitoring these populations; identifying favorable habitats; setting up networks of protected areas, managed so as to foster the objectives of conservation and rehabilitation of the large Saharan species; reintroducing ungulate populations from existing captive stocks (Tunisia), or from breeding groups in zoological institutions; the initial development of ecotourism by integrating protected areas and wild animals into already existing tourist itineraries, in particular in Tunisia and Niger; and support to local communities to obtain their full engagement in monitoring and managing stable antelopes populations.

The ASS CMS/FFEM project covers seven of the fourteen Range States of the species for which the Concerted Action Plan was set up: Chad, Mali, Mauritania, Morocco, Niger, Senegal, and Tunisia. The project activities are particularly relevant in Tunisia and Niger with additional support for Chad, which is, together with Niger, one of the key countries where the remaining Sahelo-Saharan ungulate populations are largest. The project work also promotes national capacity building in aspects related to inventory techniques; monitoring natural or reintroduced antelope populations; capture, transport, breeding and reintroduction of Saharan ungulates; and the development of Action Plans for the management of protected areas.

The CMS program also involves the development and management of a database which will hold all key information on Sahelo-Saharan ungulates, their conservation status, natural environment and the conditions for their restoration. The data will be available on line, for the benefit of international organizations, national agencies responsible for nature conservation and sustainable development, NGOs, and the scientific community at large.

The action of the CMS in favor of biodiversity in the arid zones, and in particular in the Sahelo-Saharan area, is built on a network of partnerships, both with national and international institutions and with local associates. Besides the Convention on the Conservation of Migratory Species of Wild Animals (CMS), the main partners for Concerted Action for the Sahelo-Saharan ungulates are: the French Ministry for Ecology and Sustainable Development (MEDD), the FFEM, the Institut Royal des Sciences Naturelles de Belgique (IRSNB), the Sahara Conservation Fund (SCF), the Museum National d'Histoire naturelle, the Office National de la Chasse et de la Faune Sauvage (ONCFS), the African Parks Foundation (AFP), , all the administrations of the protected areas, forests and natural resources of the Range States for the species, situated in or around the Sahara desert, the Flemish Region of Belgium, the Sahelo-Saharan Interest Group (SSIG), and the World Conservation Union (IUCN). Later in 2006, it is hoped to register a WSSD Partnership for Sahelo-Saharan antelopes.

The European Union plans to contribute to the restoration of the Sahelo-Saharan biodiversity through a collaborative project with CMS in Nigeria and Chad.



Oryx dammah. Engraving. Niger © John Newby

Illustrations of the six species: J.Smit, in Sclater & Thomas. 1899. The book of Antelopes.1899.