

# Antelope Specialist Group

I.U.C.N.



S.S.C.

## GNUSLETTER

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### ASG NEWS AND NOTICES

#### IUCN to Pay for Publication of the Antelope Survey, Parts I & II

IUCN has procured funds for printing and publishing Parts One (East and North-east Africa) and Two (Southern and South-central Africa) of the Antelope Survey and Action Plan. The good news was announced by Simon Stuart, SSC Species Programme Officer, in a letter dated 27 Aug 1986 to Rod East, Compiler and Editor of the survey.

#### Kudos for Rod

It is also gratifying to see that Rod's efforts as Compiler and Editor of the Antelope Survey are bringing him the recognition he deserves. In addition to oft-repeated comments about his "phenomenal work output", the quality of this output has made an impression. Commenting on Rod's account of the Sudan, for instance, the two principal sources of information had this to say:

"I think you have done a great job, one that will be of much use to people working in these areas in the future. We look forward to seeing the rest of Africa in due course!" (Chris Hillman, in lit 3/1/86).

"Well done - I think that you've done a marvelous job of collecting and summarizing the information on the Sudan. As Chris says, I think that it will be a very useful document for both research and conservation work in years to come" (John Fryxall, in lit 3/21/86).

The 44-page (including 8 tables and 4 figures) "Summary of Status of Antelopes in East and Northeast Africa and Regional Action Plan for Antelope Conservation" that Rod circulated among SSC members and IUCN officers for comment, has in the words of Simon Stuart (op cit) also "received nothing but praise from people who have seen it. Bob Scott looked through it just before he retired (at the end of last month) and was very impressed."

Jeffrey Sayer, Senior Programme Adviser on Tropical Forest Conservation and ASG member, wrote (8/28/86), "... The draft plan is excellent and will indeed result in improved conservation action in the field. The theme-based officers such as myself in IUCN's headquarters depend very much on action plans such as yours for the development of our programmes... Although we cannot immediately make funds available to implement the recommendations of an action plan, you can rest assured that they will be taken into consideration in the proposals that we make to our bilateral aid-supporters... My general conclusion is that the Antelope Action Plan does indeed

represent a very useful contribution to the development of WWF and IUCN programmes in Africa."

#### Keeping up the Good Work

As the efforts of Rod East and all other contributors to the Antelope Survey finally begin to bear fruit, the main thing now is to maintain and increase the momentum that has been generated. We are advancing toward our goal, but much more information from many different countries must be gathered before the Antelope Survey can be completed. Rod needs all the help he can get to finish Parts II-IV.

#### A Shortage of Information for the Gnusletter

While preparing reports for the Antelope Survey is far more important than supplying information for the Gnusletter, I would like to point out that a small minority of ASG members is providing most of the news that appears therein. Observant readers will have noted that a small nucleus of people is providing information quite regularly. Thanks to them, it is possible to give frequent updates on developments in countries such as Ethiopia, Algeria, Morocco, Niger, Senegal, Botswana, South Africa, and Rajasthan. But there are many other countries where antelopes roam, about or from which I seldom or never receive any correspondence. For the sake of maintaining communication among the members of our specialist group, as well as for the sake of making the Gnusletter more informative and influential, I hereby ask each ASG member to send me news relevant to antelope conservation at least once and preferably twice a year.

Gnusletter subscribers and anyone else who wishes to provide information about antelopes are also urged to write letters, send reports, reprints, newspaper clippings, etc. to the Editor.

#### A Specialist Group on Introductions

In a letter (7/15/86 to Dr. Vericad, see below under Morocco and Senegal), Simon Stuart reports that a Specialist Group on Introductions is in process of formation.

### REGIONAL RUNDOWN AFRICA

#### Niger: Scimitar-horned Oryx and Addax

In a recent letter (8/21/86) to Alan Rost, Keeper of the scimitar-horned oryx (Oryx dammah) studbook, John Newby made some interesting points about the distribution and reproduction of this vanishing antelope:

"I think that most scientists would agree that the Sahel is in fact a distinct biographic zone and although sequentially transitional between the Sahara and the savanna, is large enough and distinct enough (climate, flora, fauna) to warrant proper status. Nonetheless, the scimitar oryx is certainly an inhabitant of the sahelo-saharan transitional zone or ecotone between the true desert and the true Sahel.

"Reproduction: My observations from Chad show that oryx calves can be seen in every month of the year but there are very marked peaks at 8-10 month intervals. The more desert-loving species (addax) or those gazelles adapted to a desert regime (dama, dorcas) show a marked annual periodicity in birth dates - usually with a peak at the end of the hot season and a much greater one from September to December."

The question is, can/does this species still survive in the wild? John writes: "With regards to an update on the status of the scimitar-horned oryx, it is definitely a case of no news being bad news. I have heard absolutely nothing for about a year - no tracks, no sightings, no rumours. Numbers if any are obviously critically low.

I head off to the Termit area in October and hope at least to glean something.

"By and large, the wet season has both this year and last been good, with masses of pasture in the sahelian zone and even further north. Following the catastrophic decline in livestock numbers in 1983-84, the pastures are void of stock and any wildlife that's left to exploit them should be doing well."

These improved conditions do not extend into the more arid habitat frequented by addax. John continues, "Things are not so good for the addax though and unless we get rain this month, the Air/Tenere will remain dry for the 6th consecutive year. Last year the addax did benefit from some spotty rainfall and desert pasture but we need much more than just that to regenerate the drought-stricken perennials that are the addax's hot-season mainstays."

Clearly the time is coming, if it has not already arrived, when the only realistic hope that these and other endangered antelopes of the region can stage a comeback will depend on captive-breeding/reintroductions. As in the case of the Arabian oryx, the best hope of success would probably be through reintroduction of stock raised within their former range. John Newby writes:

"You mention an oryx ranch project in the Studbook. It might be an idea to include the need for an African-based captive breeding programme for oryx and other sahelo-saharan wildlife. I have been playing with this idea for a number of years and I still think that a regional breeding centre in Niger would be a good idea. The main trouble is of course the funding but I think that we ought seriously to make an effort to raise the funds for a short-term consultancy to put together a firm proposal for submission to the major donors. Any ideas? In discussions with zoo keepers it is apparent that keeping large herds of scimitars in captivity is expensive, especially when heated winter quarters are essential. It would be a travesty if zoos were to start culling unwanted animals in captivity when the species is all but extinct in the wild."

#### Morocco: Gazelle Introductions

In the last issue of the Gnusletter, Chris Logger's findings on the distribution and conservation status of the three Moroccan gazelles were summarized. He has since sent the promised copy of the report he wrote for the Red Data Book. The following excerpts round out the information contained in the previous Gnusletter:

##### Gazella dorcas

"Subspecies - According to Panouse (Les Mammifères du Maroc, 1957), three subspecies exist in Morocco: Gazella dorcas massaesyala in the Moroccan Oriental, G. d. dorcas on the Saharan side of the Atlas Mountains in Tafilalet and the Oued Draa and Zagora, and G. d. neglecta in the Saharan Occidental near Zemmour. The subspecific status of the indigenous gazelles at Sidi Chiker is not known but I have collected available skulls.

"Morocco's dorcas gazelles are nearly extirpated from the Atlantic side of the Atlas Mountains. Only three populations remain: about 60 animals live on 500 ha at King Hassan II's reserve near Bouznika, about 25 live in the Mamora forest north of Rabat, and about 180 animals live on a 2000 ha Eaux et Forêts reserve and a few small forests plantations near Sidi Chiker (Chichaoua map). The populations at the King's ranch and in the Mamora forest are not indigenous but are genetic melanges from different places in Morocco.

"In the Moroccan Oriental, South Presaharan and the South Atlantic zones, and in the area south of the Oued Draa, dorcas reports are more numerous, though the animals are not common."

Protection - "Fully protected since 1968 (I think this is the last year of a season record in Eaux et Forêts' yearly synopses), gazelles are still being hunted and trapped illegally. Eaux et Forêts cannot control the poaching which, along with habitat destruction due to overgrazing, are the greatest threats north of the Oued Draa. South of the Oued Draa the situation is unknown, although military hunting coupled with the drought are probably decreasing numbers."

Gazella dama

"Little information exists on dama gazelles in Morocco: that which does limits their distribution to south of the Oued Draa. Two recent reports may be of dama gazelles. One came from the Oued Draa, Tata District, indicating two species of gazelles, a "small" one, and a "large" one which may be dama, though the chance is slim.

"While in Tata on an expedition supported by the Frankfurt Zoological Society, Scott Posner and I visited with 4 elderly men, formerly nomads, from a nearby village. The topic turned to wildlife formerly existing in the area and one man mentioned he had seen "mhorr" gazelles, the Arabic name for dama, while he was in the Hammada area between Zagora and Tindouf. He placed the date between the late 1970s and 1980s.

"Another report came from Eaux et Forêts, Oued Eddahab (Rio de Oro), mentioning two species of gazelles living where there is water and acacia trees; accurate information is unavailable due to the military situation. Past records documented only dorcas and dama in that area.

Protection - "They are fully protected, though no information is available on past seasons, if there were any.

Captive animals - "The only captive stock originating from Morocco are those at the Estación Experimental des Zones Arides in Almería, Spain."

Gazella cuvieri

"Cuvier's gazelles are concentrated in the more inaccessible mountainous areas of Morocco but their numbers are decreasing...Data points since 1970 delineate 5 separate zones of concentration: the Rif mountains south and west of Nador, the Central Plateau near Oulmes, the eastern High Atlas Mountains near Rich, the western High Atlas Mountains south of Essaouira (Mogador) to the Anti Atlas junction, and the Anti Atlas mountains from Biougra to Goulmime to Foug Zguid. All sightings were of isolated, small groups usually less than 15 animals. Gene flow probably exists only between the western end of the High Atlas Mountains and the High Atlas Mountains groups; the other populations are quite disjunct."

"The highest concentrations are in the Anti Atlas Mountains, away from large population centers, beginning near Biougra and curving around the Presaharan slope to Foug Zguid. Maps containing sightings are Ait Baha, Tiznit, Annzi, Bou Izakarn, Goulmime, Taghjijt, Tata, and Foug Zguid. Foug ef Hissan and Tafrawt contain pre-1980 sightings (Aulagnier and Thevenot, in prep.)."

Protection - "Fully protected, but declining due to poaching and habitat destruction.

Captive Animals - The Temara zoo in Rabat has an adult male and female obtained in 1986 from the Tata area."

"IUCN (Hirsch unpub. 1982 IUCN/WWF report) suggested reintroducing Cuvier's, dorcas, and dama gazelles into the proposed Park Massa between Agadir and Tiznit."

Further information about the above park and proposed introductions is contained in a letter (6/23/86) Hartmut Jungius (now designated as Senior Executive, Conservation Division, WWF International) wrote to J. R. Vericad, Director of the Almería Experimental Station:

"Possibilities for such a cooperation might be developed within the framework of two of our projects, namely Reintroduction of Dama Gazelles to the Banc d'Arguin National Park in Mauritania (Project 1333), and to the proposed Massa National Park in Morocco (Project 3063). The project in Massa seems to be the most promising in view of the keen interest of the Moroccan authorities who also seem to have the necessary funds for constructing the facilities such as enclosures and staff accommodations in the re-introduction area."

Senegal

A. R. Dupuy, Director of National Parks, reports (in lit. 10 July 1986) that the dama gazelles introduced to the Reserve de Gueumbeul from Almería early this year (reported in May Gnusletter) have produced (another?) two fawns, bringing the current number of animals to eight. In late 1986 or early 1987 the next phase of this joint

enterprise between Spain and Senegal will start with the introduction of another eight dama gazelles and eight dorcas gazelles from the Almería Rescue Center for Saharan Wildlife to the Gueumbeul Reserve.

Caveat Introdutor

Michael Woodford, Chairman of the Veterinary Specialist Group (also mentioned in May Gnusletter), recommended taking a cautious approach to these introductions in a letter (dated 6/24/86) to Bob Scott:

"Proposal by the Director, Estación Experimental de Zonas Aridas, Almería, Spain, to send reproductive groups of Gazelles to various North African countries for reintroduction - Thank you for sending me a copy of Dr. Vericad's letter to Dr. Portas. I should like to recommend that should SSC wish to become involved in the above proposal it is of great importance that the site of the proposed reintroduction be thoroughly checked for ecological suitability and that this evaluation should include an examination of the veterinary implications both to the animals to be introduced and to the resident fauna (wild and domestic).

"The technique of introduction is also very important and the assistance of members of the Veterinary Specialist Group would be available if required.

"It would be desirable, too, to check the chromosome status of these gazelles before they are released."

Tanzania

I spent five weeks in northern Tanzania during June and July, mainly in the Serengeti and mostly collecting data on the impact of wildebeest-horning on acacia trees. After years of relatively little research activity, the Serengeti Wildlife Research Center is once again a hive of activity, with some 12 different researchers now in residence. This renaissance has come about despite a now-chronic shortage of water, fuel and spares for vehicles, and other logistical problems. While studies of carnivores predominate, there is also one project specifically on antelopes: Martyn Murray, whose impala research in Zimbabwe set new standards for studies of antelope social groups, has undertaken a three-year study of the ecological separation among Serengeti grazing ungulates. After preliminary observations, Martyn has decided to concentrate on the differences in feeding strategies between the three sympatric alcelaphines, wildebeest, hartebeest, and topi.

Poaching in Serengeti N. P. has taken another turn for the worse since I was last there in 1983. The latest of the biannual aerial counts organized by Tony Sinclair (in May) indicates that the Serengeti elephant population has plummeted from 4000 to around 400, within the past five years. Poaching of buffalo and giraffe has intensified to the point where populations of both species are now obviously much reduced. (I haven't yet seen the sample estimates). Eric Rechsteiner, a Swiss wildlife expert with many years experience in the Serengeti, was told by a poacher that these two species are now hunted intensively in the Western Corridor to satisfy the demand for game meat in the surrounding settlements during the off-months (wet season) of the wildebeest migration.

Zaire: Garamba N. P. Aerial Survey

Kes and Fraser Smith, in charge of the IUCN/IZCN Garamba Rehabilitation Project, responded generously to Rod East's request for information about antelopes of Zaire by sending results of two aerial counts of the Garamba. A few excerpts from the 1983 report and covering letter (7/23/86):

"Parc National de la Garamba (P.N.G.) is situated in the north east corner of Zaire, between 29 and 30° E and 3° 40' and 4° 35' N. Its northern boundary is the border with Southern Sudan. Abutting some of the north eastern boundary is an area in Sudan proposed as Lantoto South National Park. In Zaire the Park is completely surrounded by Domaines de Chasse: d'Azandes to the west, Mono-Misa to the east and Gangala to the south, which total roughly twice the size of the Park. Limited settle-

ment and subsistence hunting using traditional weapons are allowed within the Domaines de Chasse.

"The park covers 4,900km<sup>2</sup> and was gazetted in March 1938 as the third Park of the then Belgian Congo, with the primary aim of protecting the white rhinoceros (Ceratotherium simum cottoni) and the giraffe (Giraffa camelopardalis congoensis) which occurs nowhere else in Zaire. It appears that now this northern white rhino occurs in very few other places in the world. The Park also supports a substantial population of elephant (Loxodonta africana), which appear to be an intergrade between the forest (L. a. cyclotis) and savanna (L. a. africana) types, with rather more forest characteristics. It holds a very large population of buffalo, with clearly distinct individuals of the Central African form of the Cape buffalo (Syncerus caffer aequinoctialis) and the Dwarf Red Forest buffalo (S. c. nanus) in mixed groups. There is a wide variety of other species, including Roan antelope (Hippotragus equinus), Lelwel's hartebeest (Alcelaphus buselaphus lelweli), many spotted hyaena (Crocuta crocuta), lion (Panthera leo) and leopard (Panthera pardus). Bird life is most spectacular and varied, particularly since the Park is on an interface between savanna and forest habitats, East, West and Central African species and on migration routes. The only African elephant Training School in Africa is situated there, at Gangala-na-Bodio, one of the Headquarters sites, where it moved in 1927. The Park is now internationally recognised as a World Heritage Site."

"We did another dry season count in the Park in April this year. I do not have the final figures with confidence limits at present, but the preliminary figures for antelopes are as follows. (This was a 10% systematic transect survey at 350 ft agl as before, so the figures for smaller species in particular are minimal only.)

Kob	6092	Oribi	202	
Waterbuck	1180	Roan	34	
Hartebeeste	1596	Buffalo	15039	(Do you count Bovinae in your group?)
Reedbuck	315			

We don't have much information on antelope elsewhere in Haut Zaire. There is not much information available! A lot of the forest and guinea savanna has been heavily poached. Bongo are numerous enough further west and south west for them to be relatively easy hunting for safari hunters. There are conflicting reports about Derby's eland, but it's doubtful whether there are many, if any."

#### Zimbabwe: Wilson's Duiker Survey

In letters dated 7/17 and 8/8/86, Vivian Wilson had this news of his 10-Year Duiker Survey:

"My duiker survey is progressing in leaps and bounds and I am now almost full-time on the project. I have just returned from South Africa where I spent a few weeks in Natal and the Cape where I was looking at Blue duiker habitats. The Tsitsikama forests are wonderful and I got a lot of data from that area.

"I am off again next week back to Natal where with the Natal Parks Board and the University of Natal we will be capturing several dozen blue duiker and red duiker. The animals will be radio collared, marked and released and I hope to measure and weigh every animal captured.

"In November/December I will be in Kenya/Uganda and in January/February 1987 Barry (my son) and I will be in the Central African Republic.

"In April we'll be in Niger and later in the year we hope to spend several months in Liberia.

"Quite a few people have suggested that I update my duiker booklet and that the economic value of duiker meat should be included in the survey. A new booklet (No.2) is now being prepared which will also be printed and the document has been sent to Dr. John Hanks of WWF for approval by WWF/IUCN."

South Africa

A Reliable Method for Detecting Malignant Catarrhal Fever (MCF) in Wildebeest

In the May Gnusletter (p. 8), a ban on the translocation of wildebeest in South Africa was reported, because "no completely reliable way is known to detect carriers of the disease," which is endemic in both species of Connochaetes. Werner P. Heuschele, D.V.M., Ph.D., Director of Research at the San Diego Zoo, responded as follows (in lit. 6/26/86):

"I have been conducting extensive research on malignant catarrhal fever (MCF) for the past 4½ years. Based upon our findings (reported in several enclosed reprints), we believe serologic screening of wildebeest for MCF virus neutralizing antibodies provides a reliable means of identifying MCF virus carriers, and conversely, animals free of this infection. We have been using this test effectively in the control of MCF by exclusion of seropositive carriers, and have recommended that the US Department of Agriculture officially require all Connochaetes to be tested before allowing their importation into US zoos, before interstate movement for exchange between zoos, or placement on US game ranches.

"I wanted to make this point because MCF indeed is a serious disease threat to many domestic and exotic ruminant species that might be exposed on game ranches and zoos to carrier wildebeest, or sheep and goat carriers. Testing and exclusion of serologically positive carriers is the only present way to prevent this disease."

With the hope that the procedures developed by Dr. Heuschele and his colleagues may provide the reliable test for screening South African wildebeest and lead to lifting of the current ban, the 11 reprints he sent are being forwarded to ASG member Michael Keep, Veterinarian of Natal Parks, whose report on the subject was quoted in the May Gnusletter.

The following background information about MCF, gleaned from Dr. Heuschele's papers, may be of general interest to readers of this newsletter.

Malignant catarrhal fever is a sporadic, highly fatal (90-95%) disease of cattle and various other wild ruminants, characterized by fever, profuse nasal discharge (hence Snotsiekte), leukopenia, ophthalmitis, corneal opacity, lymphadenopathy, and mucosal erosions of the upper digestive tract.

The disease is caused by a herpes virus originating from alcelaphine antelopes, which was first isolated in 1960 by Walter Plowright of the Kenya Veterinary Services from the tonsil of a wildebeest calf. Following several focal epidemics of MCF in cattle and captive wild ruminants in U.S., Europe, and Asia, a serological survey for MCF antibodies turned up a high prevalence of antibodies in all the Alcelaphini, in Hippotragini (Oryx gazella, O. dammah, and Addax), and in both wild and domestic sheep and goats. In addition, MCF viruses have been isolated from asymptomatic greater kudu, Indian gaur, nilgai, and several species of deer.

For the disease to be transmitted, there must be an excretion of cell-free virus. While in the cell the virus is found associated with neutralizing antibodies. The shedding of free virus occurs primarily in nasal and ocular secretions and in the feces of wildebeest calves up to 4 months old, but has also been isolated from nasal secretions of stressed, corticosteroid-treated adult wildebeest. Transmission to cattle or other susceptible species may occur by inhalation of cell-free virus in infectious aerosol droplets, ingestion of feed or water contaminated with infectious secretions or feces, or possibly mechanically by arthropods. Previously the opinion of Masai, who may lose up to 7% of their cattle to MCF during and following the wildebeest calving season, was accepted that the disease was transmitted through contact with fetal fluids or placentas, or hair shed by young calves.

"Interestingly enough, MCF-diseased cattle seemingly shed only cell-associated virus; thus transmission between cattle is considered rare or non-existent.

The only outbreaks of MCF among susceptible species have occurred in association with wildebeest, sheep or goats. There is epidemiologic evidence that domestic sheep may also be reservoirs of MCF-causing virus; however, a sheep-associated virus has yet

to be isolated, so it remains to be seen whether the virus they transmit (also mainly after lambing) is identical to or only related to the alcelaphine herpesvirus-1.

#### Swaziland

Jeremy Anderson, Deputy Director for Research of the Bophuthatswana National Parks, has been posted to the Swazi homeland of Kangwane to start three new parks (in lit. 6/26/86). One, containing 120,000 ha, "has a fair oribi population and also Pelea and mountain reedbuck...The reserve which is most exciting is Songimwelo, which runs from 7000 to 1000 ft., Vaal ribbok to red duiker! One is next to Kruger - good sable country. I'll reintroduce nyala in the other one."

At the conclusion of his note, Jeremy notes that a few land mines have been found in the area. On my trip through the parks of South Africa and Namibia, I noted the presence here and there of armored vehicles, which are used to patrol dirt roads where land mines may be planted. Add guerrilla activity to the list of hazards with which wildlife researchers have to cope in this part of the world.

But the danger of being blown up or shot is at least as great in other parts of Africa (not to mention the Middle East!): civil war, rebellions, or tribal warfare in Southern Sudan, parts of Ethiopia, northern Uganda, Mozambique, Angola, etc.; by gangs of well-armed poachers in e.g. northern Kenya and even the northwestern part of Serengeti N. P.

#### Adding to the IUCN Directory of Afrotropical Protected Areas

Here is your chance to do something to save a beautiful stretch of African forest that is presently unprotected and in danger of destruction. The IUCN Tropical Forests Programme is seeking to identify all forests of significant conservation interest that are not on the enclosed list of protected forests. Just follow the instructions and fill out the attached form sheets. A covering letter from George Frame, Research Fellow with the Tropical Forests Programme, explains the project in some detail.