Antelope Specialist Group

I.U.C.N. S.S.C.

GNUSLETTER

May, 1985

Edited by R. D. Estes, Chairman 5 Granite St., Peterborough NH 03458, USA

TO THE MEMORY OF HAROLD J. COOLIDGE, A CONSERVATIONIST WHO NEVER STOPPED TRYING

This issue of the Gnusletter is dedicated to Hal Coolidge, who died on 15 February, 1985. Among all his other contributions to international conservation, the fact that Hal was instrumental in the creation of the Antelope Specialist Group, in 1978, might well be overlooked. He also nominated me as Chairman (I hope it won't be held against him.)

Twenty years earlier, Hal persuaded me to defer my plans to study African wildlife in order to participate in a two-year wildlife survey of Burma. His recommendation helped persuade Konrad Lorenz to let me study at the Max-Planck-Institut before going to Burma, an experience which decided me to seek a PhD in ethology. Thus I can personally testify to Hal's unflagging dedication to international conservation, his effectiveness in promoting specific projects and finding people to carry them out, and his continuing support and encouragement over the years.

Sometimes the prospects of saving any considerable part of the earth's flora and fauna from destruction by our species appear so hopeless that conservation efforts seem foredoomed to failure. But Harold Coolidge has amply demonstrated that persistence is rewarded, even against apparently overwhelming odds. If the rest of us care enough about the world's natural heritage, then we too will never stop trying.

ASIA

Oman

Mark Stanley Price has completed Antelope Inventory Reports on the three species that occur in Oman. Below are a summary and excerpts from his reports.

ARABIAN ORYX
Oryx leucoryx

In the December, 1984 Gnusletter, Richard Fitter reported the release in April, 1984 of a second herd of 10-11 animals in Jiddat-al-Harasis, where the first herd of 10 oryx was released in January, 1982. As of last December, a total of 26 oryx were ranging free in Oman, and Mark wrote (4 March 1985), "The oryx are doing well, with a large crop of calves this winter. However, there has been no rain in the desert since August, 1983, and the oryx are all receiving supplementary feed. But with the spring weather it is obvious that they want to be off and grazing again."

"The oryx occupies a wide range of sandy and stony deserts, but basically flat terrain. It grazes on annual and perennial grasses, and also browses on herbs when abundant after rain. It does not browse tree foliage, though seed pods of *Acacia tortilis* are an important seasonal food.

"The reintroduced population shows strong and long-term bonds between individuals, which results in cohesive herds. Such a social unit will have equal numbers of males and females. Herds are likely to number 8-20 animals. Historical reports of larger herds were probably of temporary aggregations. Movements are highly nomadic, especially in response to rain. Once in an area of good grazing a herd will stay in it until its quality deteriorates or standing crop declines. Then exploration starts again. Old haunts are revisited to check on the grazing. On a larger scale, seasonal movements in Oman were probably northwest to southeast, with the shadeless dune country being used in winter, and the animals retreating southwards in summer to obtain shade and a climate ameliorated by the Indian Ocean's proximity.

"There is currently a trend in the reintroduced population towards dropping calves in the winter and spring months, when females can lactate without drinking, if necessary.

"The oryx is totally protected throughout the Sultanate; the relevant law has not been broken since the reintroduction and is unlikely to be, due to the severity of the consequences. The range of the reintroduced population is not in any protected area, but the Jiddat-al-Harasis is an area of prime consideration in the present national Protected Area feasibility study.

"The population is under constant observation and its performance is monitored by Dr. M. R. Stanley Price and staff of the White Oryx Project.

"The present level of monitoring and protection must be sustained while oryx numbers increase to the level of a viable population. At the same time the project's role in the general development of the area must continue."

ARABIAN OR MOUNTAIN GAZELLE
Gazella gazella cora

"A gazelle of stony deserts, whether on footslopes and in mountain ranges... or on flat stony plains such as Jiddat-al-Harasis. A very selective feeder on ground-level herbs, with a catholic diet, or on tree browse, especially *Acacia tortilis*, *A. ehrenbergiana* and *prospopis cineraria*. Feeding behavior includes standing on hind-legs to reach higher browse. In the desert, the gazelles are not highly mobile,

but move between areas of better-than-average food. Patches of light woodland have gazelles permanently. Following rain the gazelles occupy ridges where herb growth dries off first and there is less perennial browse.

"Groups consist basically of an adult male and females with one or two successive young... Bachelor male groups occur in good habitat/areas of higher density. Adult males are territorial and mark by squat-defecating at regularly used sites. Group composition fluctuates rapidly through a day, and single females or groups can be seen with no adult male in the vicinity. A group usually totals 2-8; groups of 13-15 are seen occasionally but are probably short-term aggregations. Under good conditions, a female will calve every six months, so that young can be produced in each month of the year. From the behavior of adult males, a peak in mating occurs in late October producing a crop of calves in late spring-early summer, although shade temperatures in May can exceed 40°C.

"Until the 1970's the species was widespread through Oman, except in the sand-seas of the Rub-al-Khali. The gazelle was heavily hunted in Dhofar in the 1960's and 1970's and its presence to the west of the Jiddat-al-Harasis is not certain. Four discrete populations are evident today but individuals or small groups may be found in many other parts of northern Oman. No counts have been made anywhere in Oman. Populations 1, 2, and 3 on the map probably each number around 100, but No. 2 may be larger. The Jiddat-al-Harasis population...is estimated to consist of around 4000 animals. Numbers and range of population No. 2 are certainly increasing. Numbers in population No. 1 may now also be on the increase after heavy persecution until a few years ago. The Jiddat-al-Harasis population increased fast following good rain in 1982-83, and some range expansion was observed. At the Wadi Surin reserve located in the area of population No. 2, a captive breeding population of gazelles is kept. 60-70 animals have been released from this site into the wild over the last five years...

"No systematic study has been made. Behavioral observations are being made on the Jiddat-al-Harasis population around the White Oryx Project camp, where gazelles live at high density and/or better-than-average habitat conditions, and are certainly more sedentary. Researcher: Mrs. Karen Stanley Price.

"On a local scale, the gazelle populations are at satisfactory levels. In other places, illegal hunting, which is promoted by construction of new roads into hitherto inaccessible areas, may be harming the populations and offsetting an increasing conservation awareness and desire to see wild gazelles. All hunting of gazelles, by all means, is prohibited throughout the country. The authorities impose strict penalties on those caught molesting gazelles, and the level of persecution seems light.

"The Jiddat-al-Harasis population is well-protected by a Ranger Force of Harasis beduin. Further public awareness and the employment of rangers in their home areas are the approaches currently used to protect the gazelles of the mountain foothills."

GOITERED GAZELLE OR RHIM
G. subgutturosa marica

"A gazelle of sandy country, with a preference for areas of sand dunes with gravelly, flat plain between them - as found over a large area of southern margin

of true sand seas of Rub-al-Khali. Occasional outcrops of rock and eroded everhangs are important shading sites, as well as the rare shrubs and trees in this habitat.

"No specific information on diet, but it must include a wide range of grasses and, particularly, herbs and shrubs, which appear in profusion between sand dunes following rain, and can remain palatable for several years even in the absence of further rain. Highly nomadic, depending on the location of grazing, but possibly sedentary with large range under good conditions. It seems likely that these gazelles move into areas with better shade in summer. There is a definite tendency to move away from the sands and on to stony deserts of the Jiddat-al-Harasis or broad sandy wadis further west if there is no rain in the north.

"Group size figures are based on a few sightings: usually 2-3 females with any dependent young or a group of females and young with one adult male, totalling 4-7. Aggregations of 30 are reported. Adult males have very large antorbital glands, which in captivity are used to mark grass stems, etc. profusely, and no doubt in the wild males mark an area thus.

"No counts have been made and estimates are impossible because of naturally low densities in a vast area where travel is often difficult. In the last 20 years probably a slight range reduction in the south. Its occurrence in the Wahibah sands needs confirmation. Its numbers are probably stable. No field study has been made.

Status: "Probably threatened. The species is very wary and hunting offtake was probably never great because of its habitat. The greatest threat is now disturbance due to increasing exploration for oil and associated road and pipeline developments through their habitat. This will tend to force the gazelles further into the sand seas.

"All hunting of the species, by any means, is expressly forbidden throughout Oman. This law would undoubtedly be enforced rigorously but the chances of detecting and obtaining adequate evidence in the huge area of habitat are remote.

"There is no national reserve for this species, but a feasibility study for a national reserve network is currently under way, and will be concerned with the conservation status of this gazelle. It is intended to establish a captive breeding population at the Oman Endangered Species Breeding Centre."

G. M. Oza, chairman of the ASG Asian Subgroup, was in Oman in April, 1984 when the second herd of Arabian oryx was released. He has published some of the information on diet and foraging behavior that Mark and Karen Stanley Price, and Mrs. Elizabeth Daly imparted during his stay, in Environmental Conservation (Vol.11:267-269).

Tibet

Having completed his field work on the giant panda this past winter, George Schaller is presently in Tibet making arrangements to carry out a survey of the wildlife of this most interesting and inaccessible country, at the request of the People's Republic of China. The prospects of finding out more about the biology and status of the Tibetan antelopes suddenly look brighter.

AFRICA

Algeria

K. de Smet has written about the subspecies and status of dorcas gazelle (in lit to Mr. Furley, El Ain Zoo, 25 March, 1985):

"I have just come back from a field trip to El Bayad (formerly Ceryville), where I searched for dorcas gazelle and bubale hartebeest. I effectively saw the gazelles who are kept in captivity in that town but all came from south of the Sahara Atlas Mountains and are geographically not high-plateau gazelles.

"However, I have had a look at the dorcas gazelles living in the area south of Brezina and El Abiod Sidi Cheikh. They have become very common now with at least several hundreds, perhaps thousands in this area. South of Brezina one must drive about 100 km before the gazelles become common but at El Abiod Sidi Cheikh where there is a special gendarmerie-brigade against poaching, they come rather near the village. In summer and early autumn when food is rare, they are found in herds of 100-150. I personally saw 32 in just three hours at noon and tracks are very widespread.

"This areais the contact zone between the High Plateau and the pre-desert steppe and Lavauden (1926) shows a map with the distribution of G. dorcas in that zone: he makes no distinction between G. dorcas massaesyla and G. dorcas dorcas. In 1929Joleaud distinguished between G. dorcas massaesyla, G. dorcas dorcas and G. dorcas neglecta and the contact zone should have been around El Abiod Sidi Cheikh.

"There are for the moment in that area two horn forms within the same groups of males: one bent more backwards and coming together and one with the form of a lyre (curved). Lavauden already noted that there were two horn types but he maintained the subspecies classification.

"After this visit I am not sure any more if G. dorcas massaesyla really was or is a distinguishable subspecies. It is perhaps too late to look at this more intensively, but I will recommend to the Algerian authorities to use gazelles from the subsaharan region south of Brezina-El Abiod Sidi Cheikh for reintroduction programmes on the high plateau (Mergueb reserve). I now believe that the subspecies classification is too vague to wait for further conservation and reintroduction programmes any longer."

Niger

The current drought has been as disatrous for African wildlife as for the people. the following is an excerpt from a letter John Newby wrote Dale Tuttle of the Dickerson Zoo Park (3 April, 1985):

"I would just like to bring you up to date with regards to what is going on in the field. Things as you might imagine are not good at all and short of a miracle, we will lose the scimitar-horned oryx in the next couple of years. There is even a chance that it has already gone from the wild.

"I have received no sighting reports of the species in over a year here in Niger. The odd animals that did turn up from time to time will have certainly been driven

out of their uninhabited sub-desert areas by the severe drought that has hit us this year. Already large numbers of dorcas and dama gazelles and ostrich have quit their usual ranges for the marginally better pastures further south. Poaching has increased correspondingly and we have had reports of 100-200 gazelles taken at a time in some zones. If whatever oryx that did still exist between the Air Mountains and the Termit Massif did move south, there is little or no chance of them having survived. The situation is similar to the 1968-73 drought that dealt the original coup de grace to the oryx in the Sahel.

"Chad is still requesting help from IUCN/WWF with their oryx and addax but as I have replied several times already, it is no use us going in unless we can spend time in the field. As you know, the main oryx herds, if any still remain, are situated smack bang in the middle of the no-man's-land that separates the Government forces from the Libyan-backed rebels.

"The next logical steps are firstly a survey of Niger to assess the real situation - and here I would be grateful if you could let me know of where we might be able to obtain funds for this activity - and secondly, the establishment of a captive breeding group of oryx (and other endangered sahelo-saharan spp.) here in Niger. This latter will of course require a hefty financial investment and a long-term commitment to the task."

Zambia

Richard Jeffery, who now works in Kafue National Park, has written an informative account of the antelopes there (in lit 14 Nov. 1985), which was inadvertently left out of the last Gnusletter:

"For your interest, I'll make some very broad observations on the antelopes of Kafue National Park (southern sector).

"Kafue (south) comprises a very broad range of habitat types, including Munga woodland, Kalahari woodland, mopane woodland, miombo woodland, Baikiaea forest and dry deciduous thicket, floodplains and dambos. We also have the man-made Lake Itezhi-Tezhi (370 km^2), which is developing a lakeshore vegetation of some importance to wildlife quite apart from its water supply. We thus have as broad a spectrum of antelope species as perhaps any park in Africa, and certainly the broadest in Zambia. Not surprisingly the gregarious species tend to be rather scattered in groups, depending presumably upon availability of resources, which areas have been recently burned, etc.

"It is noteworthy that KNP appears to be the major stronghold in Zambia of species such as sable and roan antelope, Lichtenstein's hartebeest, all three species being very common indeed. They are remarkably approachable which is good news for the tourist industry. Before the dam was built here, this was probably the most easterly location of the Kafue lechwe subspecies, but alas no longer.

"Of the more cryptic species, we have some well established populations of yellow-backed and blue duikers, and steinbok, these being of interest because they are not commonly seen in Zambia.

"Apart from the above, the more commonly known antelope of Zambia are nearly all represented here in abundance. Exceptions include the klipspringer, despite the fact

that we are in the middle of their Zambian range with ample suitable habitat, and puku which, although present here, are only in small remnant numbers following the construction of the dam. In the northern sector of KNP puku are common.

"As far as I know, by the way, the only ongoing research on antelopes in Zambia is that of Alison Leader-Williams (nee Rosser) who is studying puku. Our series of studies on black and Kafue lechwe are over for the time being unless further funds and personnel are found. We do hope, however, to do a small survey of puku, lechwe (red) and waterbuck in the Busanga swamps/plains of North KNP - reputedly one of the few places where these closely related species co-exist.

*****