



Sandscript

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Disaster in the desert

The large mammal fauna of the Sahara has been declining for around 150 years, a decline that accelerated with the arrival of powerful modern firearms and 4WD vehicles, and more lately, quad bikes and motorcycles.

In the past 2-3 decades, this decline has become precipitous, as sudden as it is shocking in its extent.

The scimitar-horned oryx became Extinct in the Wild in the late 1980s. The one remaining population of addax that was considered viable has recently been dispersed (see page 2) and dama gazelle only survive in four very small and isolated subpopulations. Remaining numbers of both species are likely to be less than 100 and both are perilously close to extinction in the wild. Slender-horned gazelle is currently known at just two sites in Algeria and Tunisia, with no reports since 2007 from its former strongholds in Egypt, and is not so far behind in the queue for possible extinction. Only the resilient and adaptable little dorcas gazelle maintains a widespread presence in the region. All that is left are tiny and vulnerable fragments of wild populations that together amount to a tiny proportion — around 1% for addax and dama gazelle — of ranges that once covered several million square kilometres.

While some steps have been taken to redress the situation through releases in Morocco, Senegal and Tunisia, none of these is yet considered fully 'reintroduced' because the animals are in small fenced sites and may receive supplementary food and water. The proposed reintroduction of scimitar-horned oryx to the wild in the Ouadi Rimé-Ouadi Achim Game Reserve in Chad will mark a big step up once it is realized. But the hard truth is that reintroduction of antelopes into the wild is not feasible over most of the region in the short or medium term because of the lack of protection from poaching. An associated concern is that of changed expectations: the longer antelopes and other large mammals are only kept inside fences, the greater the risk that this situation becomes seen as the norm.

The current situation is a tragedy not just for the region, but represents the near-total loss of a unique aspect of global biodiversity: that is, large herds of nomadic antelopes adapted to ranging over one of the world's most extreme environments, with all the evolutionary potential that implies for adaptation to future climate change.

Captive populations in zoos, private collections and Texas ranches of all species, except slender-horned gazelle, are large enough to prevent their total extinction but are not very

diverse genetically. However, most of us will likely agree that though valuable, these ex-situ populations plus a few in-situ fragments and fenced populations do not represent an adequate future.

So what is the vision for the large wildlife of the Sahara and how can it be attained? Some options may seem clear: safeguarding the few wild populations; not losing the genetic diversity remaining in the wild — which is known to be wider than currently represented in the captive populations; supporting all ongoing and planned releases; building up 'world herds' to provide adequate stock for reintroductions; changing attitudes in favour of valuing antelopes and biodiversity as part of the national and regional heritage.

Decisions on priorities among these and many other choices, and allocating the time and resources to be invested in the different activities are urgently needed and should be taken collectively by all stakeholders, including governments and the private sector, either by means of a high level 'Sahara summit' meeting or planning sessions focused on the individual species.

David Mallon
Co-Chair IUCN/SSC Antelope
Specialist Group

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The future of children like these depends as never before on our ability to preserve the natural world for the benefit of those people who depend most directly on its resources and their conservation.



Poached dorcas gazelles and addax in the Termit & Tin Toumma National Nature Reserve (Photos: John Newby/SCF)

Addax update

Fieldwork just carried out in and around Niger's Termit & Tin Toumma National Nature Reserve has brought its share of good news and bad. The good news is the observation of fresh addax tracks, indicating the presence of at least 25 adults and 3 calves. The bad news is the continued poaching of wildlife by soldiers in charge of protecting oil workers, with grisly remains of slaughtered dorcas gazelles and addax found in temporary camps both inside and outside the reserve. On the reserve's eastern edge, where herders had reported seeing addax during the wet season, very good patches of vegetation are present but no sign of addax was recorded.

Although the information gleaned by the reserve's rangers was very useful, we are still a long way from confirming our suspicion and hope that Tin Toumma's remaining addax are still around but highly scattered into small, isolated groups across a vast desert territory almost the size of Belgium. As expected, what addax tracks that were recorded were found not too far from the network of transects traced some seven years ago to monitor the addax population in a large area of good

habitat with excellent grazing and as importantly, little or no human disturbance. Fortunately, there are still many areas like this, which are no longer impacted by oil activities, for now at least, and where green pasture is present thanks to the ample rainfall of the last three years. If there are addax in the vicinity, there is hope they will find these quiet spots.

Only a global overview and survey of the reserve and its immediate periphery will provide the information needed to identify suitable addax habitat and disturbance-free corridors to permit connectivity between the different patches and hopefully their wildlife. This should also include surveys of neighbouring Chad, where small numbers of addax still exist in the Eguey region north of Lake Chad. With generous support from a variety of sources, including the SOS Save Our Species fund, Saint Louis Zoo and the Nigerien wildlife authorities, an ambitious, combined ground and aerial survey will be carried out in early 2016.

In the meantime, significant efforts are underway to inform and sensitize our local and international partners about the emergency and the

need for urgent action to conserve what still exists. A road map focused on priority actions to conserve the addax has been shared with both the Nigerien and Chadian wildlife authorities, as well as the international conservation community. To gain more support internationally, a major press release is under preparation with our partners from the IUCN Antelope Specialist Group and Marwell Wildlife. Finally, a number of articles on the crisis has been published in the Nigerien press to inform the public at large and to stress the importance of the addax and the immense responsibility that lies with Niger to save this iconic species from extinction in the wild. So far, strong support has been voiced by both politicians and civil society, endorsing our efforts to conserve the addax and all Saharan wildlife. We sincerely hope the Chinese oil operators and the Nigerien armed forces will also join the movement because without their collaboration the survival of Niger's desert wildlife is surely compromised.

*Thomas Rabeil
SCF Regional Program Officer*





San Diego Zoo Global's Mike Mace (l) and Smithsonian's Sara Hallager (r) join Saint Louis Zoo and SCF's Vice Chair Bill Houston to receive the AZA award

ASSOCIATION OF ZOOS & AQUARIUMS

Voices of the Sahara

In September the Association of Zoos and Aquariums (AZA) bestowed one of its highest honors on SCF and its 52 AZA partner zoos (see list on page 4), awarding the 2015 AZA International Conservation Award to their collaborative efforts to give voice to the Sahara's wildlife. Understandably, this AZA award focuses specifically on the contributions of AZA institutions. As both a zoo curator and a member of the SCF board, I am acutely aware and appreciative of the much bigger picture: SCF's success is rooted in strong collaboration with the international zoo community at large.

In 2012 AZA unveiled its vision of a membership collaborating to create a conservation movement. SCF is emblematic of that vision. The Sahelo-Saharan wildlife conservation movement underway today is a direct result of the international zoo community and their partners facing the silent tide of extinction that has been rolling across the Sahara and bordering Sahel, and stepping into an unfilled conservation niche

to do something about it. Through SCF, zoos are making a real difference in a part of the world that has for too long gone overlooked and underfunded by international conservation organizations and aid agencies.

Zoos are uniquely positioned to drive this movement because of our expertise and history with many of the key species: addax, scimitar-horned oryx, cheetah, ostrich, dama gazelle, Cuvier's gazelle, Barbary sheep, fennec and sand cat, to name a few. We have the animals and the husbandry expertise to support reintroduction and restoration where it makes sense to do so. Our collections provide the perfect platform to raise awareness about the plight of these species to millions of visitors. We have access to a wealth of technical expertise and other resources to support fieldwork necessary to understand the challenges in the wild and develop solutions. Through the creation and support of SCF, zoos now have the vehicle through which our combined efforts can be channeled to safeguard

a future for Sahelo-Saharan wildlife. Without leadership within the international zoo community, there would be no SCF, nor its portfolio of conservation projects underway in the Sahelo-Saharan zone of Africa. The largest protected area in all of Africa, Niger's Termit & Tin Tounma National Nature Reserve, would not exist. The gene pool for addax and scimitar-horned oryx repatriated to Tunisia's National Parks would not be as rich. The Saharan race of the red-necked ostrich would have no champions for captive breeding and release in Niger. The true plight of the dama gazelle, one of the world's rarest antelopes, would not be known. The growing chorus of voices speaking for Saharan wildlife is a powerful conservation movement of which zoos can be justifiably proud. Cognizant of so much still left to accomplish, SCF nonetheless pauses to recognize all that zoos have done to answer this challenge: "If not us, then who will speak for Saharan wildlife?"

Bill Houston, SCF Vice Chair



Slender-horned Gazelle calf

© Bert Buxbaum



Addax calves

© Oliver Born



Successful conservation depends on support from local land users and also contributes to their livelihoods and security (Photo: John Newby/SCF)

Thank you one and all!

- * Abilene Zoo
- * Audubon Nature Institute
- * Blank Park Zoo
- * Brevard Zoo
- * Bronx Zoo
- * Buffalo Zoo
- * Busch Gardens
- * Calgary Zoo
- * Chicago Zoological Society-Brookfield Zoo
- * Cincinnati Zoo & Botanical Garden
- * Columbus Zoo
- * Dickerson Park Zoo
- * Disney's Animal Kingdom
- * Erie Zoo
- * Fort Wayne Children's Zoo
- * Fossil Rim Wildlife Center
- * Fresno Chaffee Zoo
- * John Ball Zoo
- * Houston Zoo
- * Kansas City Zoo
- * Lee Richardson Zoo
- * Lehigh Valley Zoo
- * Los Angeles Zoo
- * Milwaukee County Zoo
- * Minnesota Zoo
- * Nashville Zoo
- * North Carolina Zoological Park
- * Omaha's Henry Doorly Zoo
- * Oregon Zoo
- * Philadelphia Zoo
- * Phoenix Zoo
- * Potawatomi Zoo
- * Rolling Hills Zoo
- * Sacramento Zoo
- * Safari West
- * Saint Louis Zoo
- * San Antonio Zoo
- * San Diego Zoo Global
- * San Francisco Zoo
- * Sedgwick County Zoo
- * Smithsonian National Zoological Park
- * Smithsonian Conservation Biology Institute
- * The Living Desert
- * The Wilds
- * Toledo Zoo
- * Tulsa Zoo
- * Utah's Hogle Zoo
- * White Oak Conservation Center
- * Woodland Park Zoo
- * Zoo Atlanta
- * Zoo Boise
- * Zoo Miami
- * Zoo New England





Turboul lake in northeast Chad and Feja's transmitter and leg bands (Photos: John Newby & Ahmat Al Dhaberi)

Storks and ladders

During a recent trip to Chad this November, SCF was contacted by GORIS, a Latvian bird research organisation, seeking help to recover a satellite-tagged black stork. The bird's location had not changed in a number of days and was presumed to be dead.

A quick look at the last known coordinates on Google Earth showed the bird's location to be northeast of our planned destination, the Ouadi Rimé-Ouadi Achim Game Reserve, by some 150 kilometres as the stork flies. The site itself was located in a broad wadi or seasonal watercourse and appeared to be on the edge of a large waterhole that had undergone enlargement to increase its capacity.

This was too good an opportunity to miss and we immediately sent back a message confirming our intention to look for the bird and if possible recover its precious satellite tag and leg bands. Black storks breed mostly in the mature deciduous forests of Eastern Europe, migrating to the eastern side of Africa in the off-season. The stork we were looking for, named Feja, hatched in May this year on the

border between Latvia and Russia.

As soon as we reached a suitable jumping off point, Mahamat and Saad Hassan, colleagues from the Chadian wildlife service, and SCF's Director, John Newby, headed north towards the town of Calla Id, the nearest major settlement to the stork's coordinates some 80 kilometres distant. Leaving Calla Id for the east we were able to use a fairly well marked track to help us negotiate the rough and rocky terrain. We were pleased to see the track taking us more or less in the direction we needed to go and in fact the closer we got to our destination the more we realised the track was headed for the small administrative settlement of Turboul. The waterhole we had seen on Google Earth must be near the village even though the village itself, a relatively new development, was not visible on the satellite image.

On arriving in town we headed off to see the administrator to explain our visit and seek his support in finding the bird. Most unexpectedly — Chadians are generally most hospitable — our visit and explanations

were met with total incredulity and solid resistance. Until instructions to the contrary were received from higher up we were wasting our time. In no uncertain terms we were told to go back to where we had come from and that it was completely out of the question to look for the bird even though it was just a tantalizing two kilometres away.

So, in a rather large-scale, real life version of snakes and ladders, we went all the way back to Calla Id to seek the chief administrator's help and permission to continue our quest. Luckily he fully understood the situation and being interested in wildlife was fascinated to learn more of the stork's migration. On the spot he called his colleague in Turboul and the following morning back we went to finish the job.

On arriving at the lake we found a large body of water and quickly learned from the locals that the place was extremely important for them and their camels. We could see many ducks, waders and herons but the exact location of the stork was barred from us by a vast expanse of thigh-deep, gooey

black mud. Luckily Mahamat was able to find a way through and we soon spotted the stork's rotting carcass in shallow water with the satellite transmitter clearly visible on its back.

Back in the village with the bird in hand we were warmly welcomed by the administrator and the numerous villagers that had turned out to see this strange migrant from far away. Feja was only 78 days old when she set off on her epic voyage to Chad across the Mediterranean, Egypt and Sudan, a distance of almost 8000 kilometres. Clearly



she had eventually died of fatigue or hunger. Feja's flight path can be seen on the GORIS website by clicking [here](#).

Sandscript is the regular newsletter of **SCF**, the **Sahara Conservation Fund**.

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Sandscript is edited by John Newby, who can be reached [here](#) with any comments and feedback.



SCF's mission is to conserve the wildlife of the Sahara and bordering Sahelian grasslands.

To implement our mission, we forge partnerships between people, governments, the world zoo and scientific communities, international conventions, non-governmental organizations and donor agencies. A powerful network with a common goal – the conservation of deserts and their unique natural and cultural heritage.

If you would like to know more about our work and how to contribute to our projects, please contact us at scf@saharaconservation.org. We would love to hear from you!

To donate to SCF just scan the QR code below or visit our website by [clicking here](#).



New bird for West Africa

Each September SCF carries out a late wet season wildlife survey somewhere in the Sahel. This year it was Chad and as always special attention was paid to the annual migration of birds from Europe and Asia. Sure enough we spotted thousands of ducks, waders and storks, as well as many smaller birds, such as warblers, flycatchers and wheatears.

One diminutive bird, however, quite literally an “LBJ” or “little brown job”, stood out from all else — a chestnut sparrow. And as we later found out, the sighting was apparently a totally new record for West Africa. SCF colleague, Tim Wachter, of the Zoological Society of London spotted a small group of the birds apparently nesting with other species at a pumping station on the edge of the small village of Eridibe.

We'll know from Eastern Africa, the

sparrow's closest known colonies to Chad are in central Sudan, several hundreds of kilometres away.

Like one of its relatives, the domestic sparrow, the chestnut sparrow appears to be expanding its range in an opportunistic manner. Increased traffic between African countries is certainly helping this though the actual mechanics are as yet poorly known. The domestic sparrow also favours human settlements, especially the growing number of pumping stations, where greenery and a constant source of water facilitate their establishment. So far the sparrows seem unable to extend their range beyond settlements into the wild and it is going to be interesting to see if this remains true under climate change scenarios that currently predict wetter conditions for some parts of the Sahel.



Photo: John Newby/SCF