



Sandscript

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Back in the Sabel



Our guest editor, John Grettenberger, is happily back in the Sabel.

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The all-too-brief Sahelian wet season brings with it an ephemeral abundance of plants and a fleeting glimpse of some truly beautiful wildflowers (Photos: John Newby/SCF).

gists and conservationists this may seem to be an onerous task, it is a critical part of working successfully in Africa, something to which SCF pays a lot of attention.

In some ways, I found things had not changed that much since my time in Africa many years ago. However, some things had, most notably the availability of communications technology, cell phone coverage, Internet access, and especially the ability to communicate in real time via satellite while in the field (see back page). These advances greatly facilitate our work as well as improving the day to day living of Chadians.

Coming back to the Sahel, I would have expected it to be Niger, where I'd been a Peace Corps Volunteer in the 1980s for over 4 years, working with addax, dama and dorcas gazelles in the Air & Ténéré National Nature Reserve. However, after 25 years in endangered species work with the U.S. Fish & Wildlife Service, I had the opportunity of joining SCF on a mission to Chad and I jumped at the chance.

I wasn't disappointed with my decision. I'd arrived with John Newby and Tim Wachter a few days ahead of the rest of the team, as I was interested in participating in the various meetings with government officials SCF had planned as part of their conservation work in Chad. While to some biolo-

Rimé-Ouadi Achim Game Reserve that oryx might well use in the future. The amount and quality of data being collected as part of these surveys is truly impressive. All large mammal, bustard, raptor and stork observations are recorded through a program called Cybertracker, which provides a precise location for the observation. The data gathered for dorcas gazelle also allow population estimates to be derived for the area surveyed. While assisting with observing mammals, I also gathered data on birds. This is entered into *eBird*, a publicly accessible database developed by the Cornell Ornithology Laboratory.

The first part of our trip focused on selecting the site for the planned scimitar-horned oryx reintroduction and evaluating the issues related to construction of the facility, getting oryx to the site and maintaining them. After much discussion by the multidisciplinary team and completing tasks, such as confirming the length of the runway in the nearby town of Biltine and conducting rangeland and vegetation evaluations, a site was selected. However, much work remains to be done before the arrival of the oryx, tentatively set for October 2015.

The next portion of the mission was a wildlife and habitat survey of a part of the Ouadi

What I came away with from the mission is how well SCF grasps the needs for effective conservation. I learned with USFWS that successful conservation is a marriage of sound science, effective communication and good relationships. The solid science that SCF conducts is evident in the many reports on their website. However, SCF is also establishing relationships and communicating with everyone from the many nomads we contacted in the field, to the Minister of the Environment, and even the President of Chad, who supports SCF's work. All this maximizes the likelihood of success of such complex projects as the oryx reintroduction.



Richly-coloured dama gazelle on the stony plateau of the Takolokouzet Massif in the Air Mountains of Niger (Photo: Thomas Rabeil/SCF/UNESCO)

Dama distribution: filling the gaps

Together with its partners, SCF continues to spearhead efforts to conserve the last, wild remnants of the critically endangered dama gazelle in its few remaining strongholds in Chad and Niger. Apart from focusing efforts on the known populations of Termit in Niger, and the Manga and Ouadi Haddad in Chad, we have also been recently successful in confirming the presence of smaller, hitherto unconfirmed populations across this species' highly fragmented range. In a wild population numbering fewer than 300 individuals, the extra animals our surveys turn up is far from insignificant.

In June this year, an SCF-supported UNESCO mission to the Aïr & Ténéré National Nature Reserve in Niger confirmed the continued presence of damas in this imperiled World Heritage site. Surveys conducted during the 1980's gave a population estimate of some 150-200 animals but due to civil unrest no serious survey work on damas has been carried out for well over a decade.

On the basis of information

gleaned from local guides, a 4-day foot and camel trek was undertaken by SCF staffer, Thomas Rabeil, across the Takolokouzet massif (photo top right), where pasture can be found and wildlife can pass discretely and safely between the headwaters of a number of wadis that have their sources up here.

Once up on the plateau, the team found fresh tracks and saw a total of 9 dama gazelles, including a group of 7 with an immature (see main photo). Fresh fecal samples were collected for genetic analysis.

With this initial information in hand it is now important to follow through with further surveys to properly assess the abundance and distribution of this the most northerly of the known remaining dama populations and formulate a conservation plan. The Nigerien wildlife department is keen to install a grid of camera traps under the supervision of our local guides. As we have discovered from our work in Termit, a well set grid of cameras will not only provide valuable data on dama gazelles but also on a host of other

species sharing this isolated mountain region, such as dorcas gazelle, Barbary sheep, Rüppell's fox, striped hyena, caracal and so on.

Two further pieces of the dama gazelle distribution jigsaw puzzle fell into place in September when we were able to confirm the presence of two isolated groups of damas in Chad. In both cases, information gleaned from locals was of critical importance in locating the animals.

The first group, probably only a handful of animals, confirmed by the presence of fresh tracks (photo bottom right), lives in the far north of the Ouadi Rimé-Ouadi Achim Game Reserve.

The presence of a second and extremely isolated group of damas living in acacia thickets far to the south of their normal range was also confirmed. Unfortunately, the "evidence" was the skin of a recently hunted animal (right center) held under lock and key at the local courthouse. The judge kindly allowed us access to the skin and gave permission for a small sample to be taken for analysis.





Transhumance in Chad (top), herder and child (below), bushfire (bottom) (Photos: John Newby/SCF)

Thinking outside the box

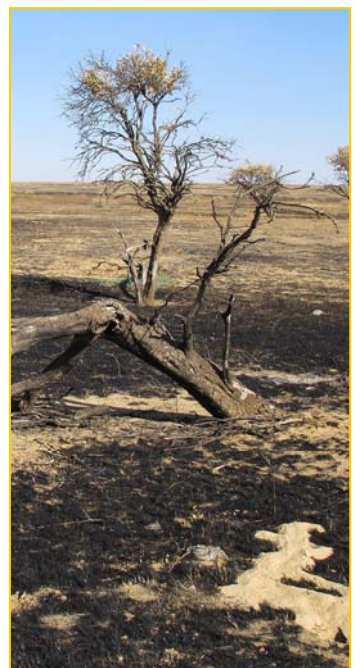
As John Grettenberger so correctly points out in his front page editorial, successful conservation relies on a mixture of sound science, effective communications and good relations. And nowhere is this more important than when planning a large scale reintroduction of a space-hungry species into an environment increasingly dominated by human landuse.

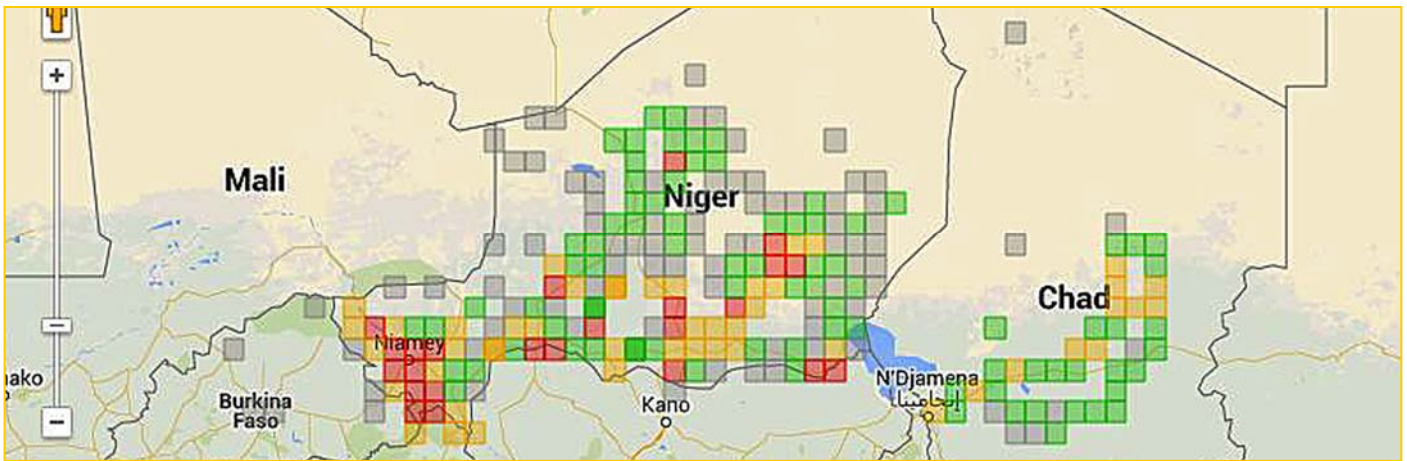
The Chad Oryx Reintroduction Project, funded and implemented by the Chad Government and the Environment Agency of Abu Dhabi (EAD) with help from SCF and its partners, is a pertinent example. Having become extinct in the wild some 30-40 years ago, only the older generation actually recall having seen this majestic antelope. In the meantime, life for the pastoralists that exploit the oryx's former range in the Ouadi Rimé-Ouadi Achim Game Reserve has moved on. People and livestock are more numerous and the formerly waterless rangeland is now dotted here and there with new wells and boreholes sunk to improve access to and use of Chad's vast grasslands.

On our recent trip to Chad, one of the top agenda items was communications and outreach to the reserve's herders and whenever we had the opportunity—and there were many occasions—our little caravan stopped to talk and explain why we were there and to outline our plans for bringing back the oryx. Without exception the reaction of these most hospitable of people was positive. Although few had actually seen an oryx, all had heard about this iconic species and were keen to see it back in Chad. Over tea and bowls of delicious, freshly pulled camel's milk discussions centred not only on wildlife but also the concerns of the local people. Apart from restoring the reserve's wildlife, the EAD project also intends to help the local people address some of their more direct concerns, especially in areas of mutual interest. One very big issue raised by all, including the local administration, is bushfires. Each year wildfire causes significant damage to grazing resources, destroying thousands of square kilometres of annual grassland. A carelessly thrown cigarette or match, or

an unattended or badly extinguished fire can turn tinder-dry pasture into a blazing inferno in a matter of seconds. Once ignited it may take several days before the fire either burns itself out or is brought under control. Here there are no fire engines or helicopters to drop water, just a few old vehicles and raw manpower that needs to be trucked in often from more than a hundred miles away.

We don't have the solutions yet but we do know this is a problem we can address with the people and in doing so make a real contribution to their daily lives. We hear lots of talk about incentives to conserve and the role that wildlife can play in this. Extremely rare desert species pose significant challenges to general thinking about sustainable offtake and ecotourism. This doesn't mean conservation projects can't help with social development, just that we need to think outside the box to come up with viable solutions that benefit both local communities and wildlife interests alike.





Above: WABDaB screen capture; below: village weaver (Ulf Lieiden), rufous-crowned roller (Tim Wacher), cinnamon-breasted rock bunting (Ulf Lieiden)

West African Bird DataBase

The West African Bird DataBase—WABDaB—is a unique, open-access, not-for-profit, bilingual (English and French), on-line database that permits the uploading and viewing of geo-referenced bird records and images from West Africa. It is also a unique tool for furthering knowledge, and promoting bird conservation.

Thanks to a huge volunteer programming effort, the database originally came on-line in 2010 as the Niger Bird Database. Its immense value for other West African nations was immediately recognized and as of 15 October 2014 the site was expanded to include Chad and Burkina Faso. The database currently holds over 50,000 records, including almost 3,000 provided by SCF for the new Chad section and many others for Niger.

Over 500 bird species have so far been recorded, together with more than 1,700 images of 355 of them. If you ever wondered where *precisely* in the Sahel a certain bird species might be seen, at what time of year and whether it breeds there then WABDaB is the

place to go to find out. Providing information more detailed than any bird guide, the database records the numbers of bird sightings per country, descriptions of local bird races, and any social or cultural linkages there may be to a particular species. Data is geo-referenced and displayed by quarter degree squares of which 196 in Niger, 44 in Chad and 5 in Burkina currently contain data (see above image).

Most of the information in the database is freely available, although those requiring data for commercial purposes, such as environmental impact assessments, are expected to pay, with the funds generated used to further the database's aims. Information can be extracted per species, location and polygon (protected area or Important Bird Area (IBA)), in the form of records (sortable by day of the year), country maps, seasonal maps, precise location maps, species lists and pictures. Information from WABDaB has been used to improve maps in a recent bird guide for West Africa, in studies of the conservation

status of species from Africa and Eurasia, in the designation of Termit in Niger as an IBA, and in the formulation of various species action plans.

Uploading records requires a simple registration procedure. Contributors can choose to make certain sensitive records 'private', viewable only by themselves and the database administrators. For threatened species, like bustards and cranes, details of occurrence can be made confidential very easily. All incoming records are vetted by experts with local or specialist knowledge.

WABDaB can be accessed at <http://www.wabdab.org> and information on the database can be obtained from its creators Joost Brouwer brouwereac@online.nl or Ulf Lieiden ulf-lieiden@wabdab.org. Funds to support WABDaB's continuing development are sorely needed and so please don't hesitate to contact Joost and Ulf if you can help them. In the future, it is hoped to add further countries and perhaps expand the database to other taxa.





Dense riparian woodland along the banks of Chad's Ouadi Kharma (Photos: John Newby/SCF)

The thin green line

Snaking their way across the largely featureless grasslands of central Chad, some of the more densely-wooded wadis or temporary watercourses that have their origins in the mountains to the east are a truly impressive site to behold. Although only flooding a couple of times a year, the wadis can collect vast quantities of water, creating ideal conditions for a dense but narrow barrier of verdant riparian vegetation that contrasts starkly with the short grass prairies and bare ground on either side.

At a time when desertification is of global concern and talk of planting "Great Green Walls" of trees to hold back an advancing Sahara is common currency, the presence of these luxuriant natural barriers is truly a blessing. Further-

more, they act as incredible repositories of biodiversity, allowing plants and animals normally found in wetter areas to extend their distribution into the heart of the desert. Use of camera traps has brought to light all manner of creatures living in the long, linear and shady environment of the wadis, including aardvark, caracal, honey badger, porcupine and common genet (top right).

Birds, too, find refuge in the wadis' shady interiors, including unlikely species such as guinea fowl, francolins and a host of migrants from Africa and Europe that feed on the abundant insect life.

When rainfall has been sufficient and all the intermediary pockets and channels filled up, water spills out onto

floodplains and terminal pans that mark fossil wadi beds rarely functional today (photo center-right). Visible from far away, these floodplains attract thousands of waterbirds crossing the Sahara on migration, including rarities like the red-necked phalarope pictured below, usually more at home in the Arctic tundra.

Unfortunately, the wadis are under threat from agricultural development, with large areas felled and cleared of their natural vegetation so that sorghum can be planted as the waters recede (bottom photo). How long will it be before such gaps in nature's natural defences are breached by encroaching sands, blocking the flow of water to the detriment of both mankind and wildlife alike?



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

SCF is grateful to John Grettenberger, Thomas Rabeil, Joost Brouwer and Ulf Leiden for the information, articles and images used in this issue.

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](#).



Communicating conservation



In an exciting new development, SCF has joined forces with the Thuraya Satellite Communications Company based in Dubai, to vastly improve our capacity to communicate while in the field. Over the next 6 months, we will benefit from top-of-the-line Thuraya XT handsets, an IP data transmission unit (pictured above left), and a SatSleeve satellite unit for our iPhone. On top of all this, Thuraya will also provide SIM cards and a generous airtime allowance. As many of you will already have seen from the SCF Facebook pages

www.facebook.com/saharcf), the Thuraya equipment has already been put to good use during our recent fieldtrip to Chad. In the picture above right, SCF's Director, John Newby, and colleagues transmit news from Central Chad.

Not only will the equipment significantly enhance our communications outreach but will also allow virtually real time reporting from the field to our sponsors and supporters. Apart from communicating our work, the partnership with Thuraya will also address two other extremely important

aspects of our work in what are often isolated and potentially dangerous locations. Keeping in close contact with our teams on the ground greatly improves coordination and perhaps more importantly creates a safety net should anything go wrong while out of regular contact, such as a vehicle breakdown, a sick person or an accident.

SCF extends its gratitude to Thuraya and to its local partner, Satellite Communication, from where the equipment was handed over.