In this issue of *Sandscript* you’ll read about the culmination of nearly five years of planning to return zoo-born addax and scimitar-horned oryx to national parks in Tunisia. I can’t help but reflect on the power of collaboration and partnership that projects like this represent. All things are possible if enough committed and caring people join forces to make them happen. In the case of the addax and oryx project, it took the combined efforts and resources of forty-six different partners to bring addax to Djebil National Park and oryx to Dghoumes National Park in accordance with Tunisia’s national strategy for wildlife recovery. For my home institution the Saint Louis Zoo and others, SCF has been a conduit for such collaborative efforts, whether they be ostrich recovery in Niger, the protection of addax and other wildlife in the Termit/Tin Toumma region of Niger, or field surveys in places like Algeria, Mali and Chad. Operating in a region of the world all too often overlooked and under-funded by major conservation organizations and aid agencies worldwide, SCF demonstrates the power of raising a chorus of voices to speak for the Sahara’s wildlife. Back in 1998, at the AZA Antelope TAG meeting hosted by J. David Bamberger of the Bamberger Ranch, I, like many others in the American zoo community, had my eyes opened not only to the silent crisis of extinction underway in the Sahara, but also to the opportunities for all of us to get involved and try to make a difference. I still remember David’s challenge to everyone in attendance: “If not the people in this room, then who will speak up for the Sahara’s wildlife?”

The opportunities for each of us to add our voice to the growing chorus on behalf of the Sahara have never been greater thanks to the work of SCF and all of its partners. I urge everyone to get involved and try to make a difference.

On the 8th December 2007, thirteen addax and nine scimitar-horned oryx arrived in Tunisia from captive breeding programmes in the United States and Europe as part of the national plan for the restoration of desert antelope. The collaboration between Tunisia’s Direction Générale de Forêts (DGF), the North American Species Survival Plan and the European Endangered Species Programme also contributes to the broader Convention on Migratory Species (CMS) Action Plan for Sahelo-Saharan Antelopes.
The project, which has taken nearly four years to come to fruition, entailing an enormous amount of preparatory work both in Tunisia and internationally, brought together nearly 50 participating organizations and donors in a truly international effort for conservation (see table below). The recent operation began in earnest at San Diego Zoo where animals selected from US institutions had been collected and looked after for over a year prior to the shipment. Following ground transport to Los Angeles, the US antelope were flown to Luxembourg where their European counterparts were also loaded onto the specially chartered cargo plane. Accompanied by US and European zoo staff, it was a short flight to Tozeur in Tunisia, where the aircraft was met by staff from DGF, CMS and zoos working together on the project.

After transferring the antelope onto waiting trucks, the convoy set off before splitting into two columns with the oryx destined for the nearby Dghoumes National Park, and the addax to Djebil National Park, further to the south. Following individual journey times ranging from 48 hours to nearly 10 days (for an oryx that travelled by sea and land from Ireland to Luxembourg), all animals arrived in great shape to begin a period of quarantine and acclimatization.

The captive bred addax and oryx are helping to found populations in their respective national parks, together with animals translocated from the Bou Hedma National Park earlier in the year (see Sandscript 1). They represent an important genetic input as the project seeks to transfer a significant part of the global gene pools for these species to Tunisia.

Although logistically and
Two wings and a prayer

It was with trepidation that we stood on the landing strip peering into the glare of a bright and breezy November morning. Radio contact with the incoming plane had been established and all eyes were skinned for its arrival. Was the runway long enough? Was it firm enough? Would sandstorms blow away any chance of carrying out the survey? All legitimate concerns that thankfully turned out to be groundless. In the first aerial census of its kind, SCF researchers have just carried out a structured survey of wildlife, vegetation and domestic livestock over 23,000 km² of desert and mountain habitats in the Termit and Tin Toumma regions of Niger. The aerial survey was made possible through partnership with French-based NGO Aviation Sans Frontières (ASF). Also there to help were staff from Niger’s wildlife service and Dr. Tim Wacher of the Zoological Society of London. To complement the work of the team in the air, a ground survey was simultaneously carried out with logistics support from SCF partner Spazi d’Avventura. SCF staffers John Newby, Thomas Rabeil and Abdoulaye Harouna were also joined by Dr. Steve Monfort of the Smithsonian Institution and Mr. Brian Moore, an active SCF supporter (right).

Between the ground and air surveys, over 70 addax were spotted in several groups. Estimates derived from the survey work indicate a population size of around 200 head and is consistent with previous survey work, including a 2005 aerial count carried out by local NGO SOS Faune du Niger. Although wildlife was counted throughout the mission, the prime objective was to look at broad land-use issues as part of the future Termit reserve’s management plan. The project, co-funded by the Niger government, the Convention on Migratory Species, the Fonds français pour l’environnement mondial, the European Union and SCF,

Succulent blooms

Research by SCF is turning up new insights into the addax’s diet and feeding behaviour. During recent fieldwork in Niger, addax were found to be digging up and feeding on the succulent tubers of the handsome parasitic plant,
Ostriches: up close and personal

In November, 2007, ostrich specialists from the United States teamed up with staff from SCF and Niger’s wildlife department to capture and sample ostriches for our captive-breeding and reintroduction project. Thanks to an AZA Conservation Endowment Fund (CEF) grant, together with supplementary support from Saint Louis Zoo and the Smithsonian Institution, Sara Hallager (Smithsonian’s National Zoo), Scott Tidmus (Disney’s Animal Kingdom) and Pete Black (Saint Louis Zoo) were in Niger to collect blood and feather samples. With the help of the Smithsonian’s Center for Conservation and Evolutionary Genetics, the samples will be analyzed to determine the purity of the stock and the degree of kinship between the various birds. The objective is to identify a genetically pure and robust group of founders to start a captive-breeding programme of North African ostriches.

During the 3-week mission, the team crossed the breadth of Niger, visiting 11 different ostrich collections. Samples were collected from 37 ostriches and health checks carried out. To help identify individual birds, micro-chip transponders were also injected. In what can be quite a dangerous and physical undertaking, help from the ostriches’ owners and keepers was exemplary. One of the project’s goals is to develop partnerships with private owners and to share skills and experience for better ostrich management.

Under the able leadership of SCF’s Kelley Bishop, the team also visited the village of Gadabeji, the site selected for establishment of the ostrich breeding centre. Gadabeji is on the edge of a gazetted protected area and the village’s mayor and traditional leaders are keen to see the project happen. Local people see the project as a catalyst for the reserve’s restoration and perhaps other wildlife introduction programmes.

SCF–Algeria

At the kind invitation of its partners in Algeria, SCF’s CEO John Newby spent 3 days in Algiers discussing cooperation with specialists from the Ministry of the Environment, the General Directorate for Forests and other specialized agencies. Following a well attended presentation on SCF’s programme, John Newby and H. E. Cherif Rahmani, Minister of the Environment and President of the World Deserts Foundation signed a memorandum of understanding covering cooperation on wildlife conservation in Algeria.

SCF has already participated in wildlife surveys in Algeria in 2005 and 2007, and with new support through a
Dorcas gazelles return to Senegal

On April 10, 2007, 20 captive-bred Saharawi dorcas gazelles (Gazella dorcas neglecta) were flown from Spain to the Réserve Spéciale de Faune de Guembeul, near St. Louis, Senegal. The gazelles, born in zoos in Spain (Madrid, Barcelona, Nueva de Llanes, Parque Temático del Desierto de Tabernas-Almería, Parque de Rescate de la Fauna Sahariana-Estación Experimental de Zonas Áridas, Almería) and the UK (Marwell Zoological Park), were carefully selected for genetic and demographic qualities from the EEP global captive population. Crated individually, the gazelles were transported by military plane from Almería in Spain to St. Louis. On arrival, they were split into 3 groups. The gazelles will spend some 12-18 months under controlled conditions at Guembeul before being moved to the Réserve de Faune du Ferlo Nord in Senegal’s Sahelian zone. In addition to the donation of gazelles, a number of other actions were carried out, including the construction of an eco-museum, training on the management and conservation of endangered ungulates, and the donation of equipment for field monitoring and first-aid. The Spanish

Water from Stone

Warmest congratulations to SCF supporter and Friend of the Sahara J. David Bamberger (right). For outstanding environmental management on his Texas ranch, David has been awarded the prestigious Texas Parks and Wildlife Department’s Lone Star Land Steward Award. Spanning nearly 40 years, the work of David and his wife Margaret on their 5500 acre Selah Ranch, has been recognized as the largest habitat restoration project on private land in the state of Texas. Restoring natural vegetation has resulted in flowing artesian springs and increased wildlife populations. Combining good agricultural practices with common sense, Selah is a model to local ranchers and landowners alike. David and Margaret now share the ranch and what they have achieved with others through school visits, educational workshops, seminars and field trips.

David’s linkage with Saharan conservation and SCF goes back many years. In the late 80s, he came to Niger as part of a US team helping plan for the reintroduction of Saharan antelopes. The scimitar-horned oryx Species Survival Program owes a huge debt of gratitude to David, who has always made his animals and expertise available to the captive breeding program. David’s commitment was never more evident than when he agreed to host the Association of Zoos and Aquariums’ Antelope Taxon Advisory Group meeting at his ranch in 1998. It was David who brought much of the clarity and sense of purpose to the

“...the love of wilderness is more than a hunger for what is always beyond reach; it is also an expression of loyalty to the earth, the earth which bore us and sustains us, the only home we shall ever know, the only paradise we ever need—if only we had the eyes to see.”

Edward Abbey
The slender-horned gazelle (Gazella leptoceros) is endemic to classic Saharan sand dune habitats. In recent years, this elegant gazelle has only been reported with any degree of certainty from Egypt, Libya, Tunisia and Algeria. Fieldwork funded in part by SCF, ZSL, CMS and FFEM has identified the Great Ergs of Algeria and Tunisia as being particularly important for this species’ conservation. Recent surveys suggest slender-horned gazelles live in small herds of females and associated young. Adult males may also be present but are also seen alone. Local observers in Tunisia and Algeria report that calves are most often encountered in the northern spring months, implying a late autumn breeding season. Like their closest genetic relatives, the Arabian form of sand gazelle and Cuvier’s gazelle, twinning is a regular occurrence.

As other small gazelles they feed selectively on concentrate-rich parts of plants. Herbs, small annuals and shrubs probably provide the bulk of the diet, although grasses and sedges are also likely to be taken.

The slender-horned gazelle is an endangered species. It is also very elusive, making assessment of true status and numbers extremely difficult. Like all the larger wildlife of the Sahara, uncontrolled hunting is seen as one of the major threats to the future of the slender-horned gazelle. Although protected on paper, a general lack of conservation resources means measures are scarcely enforced. The gradual development of protected area management, particularly...