

# IMPACT REPORT

2024 – 2025



## Sahara Wildlife Recovery Center

## Background

Since 1989, zoos have been having conversations about how to reverse the tide of extinction in the Sahelo-Saharan region for species like the scimitar-horned oryx, the addax and others that were still found in relative abundance in zoos and private collections. Collectively, we knew how to breed them and care for them, but we lacked the experience and means to identify promising sites for potential restoration of these animals to the wild. In 1998, these conversations came to a head at the Bamberger Ranch in Texas, a private facility that at that time held a large portion of the scimitar-horned oryx for this species' Species Survival Plan. The ranch's owner, David Bamberger, agreed to host the AZA Antelope Taxon Advisory Group (TAG) meeting that year. John Newby, then the head of World Wildlife Fund's Africa Programs office, had just come from the first Convention on Migratory Species (CMS) meeting devoted to developing an action plan to address the silent crisis of extinction of Sahelo-Saharan species. With that in mind, he was invited to speak at this Antelope TAG meeting.

John had 30 years of experience working in conservation in Niger and Chad. He laid out a vision as to how zoos with breeding populations of key Sahelo-Saharan

wildlife could contribute to raising awareness, provide animals for rewilding, and provide support (both technical and financial) for conservation efforts in the field. After John's presentation, Dave Bamberger voiced a compelling call to action for everyone in the room: If not the people in the room today, who else do we really believe will step forward to take action before these species vanish forever?

"If not us, then who?"

This became the rallying cry that launched the Sahelo-Saharan wildlife conservation movement within the AZA and beyond. It led first to the creation of the Sahelo-Saharan Interest Group (SSIG) that was made up of zoo scientists, field biologists, members of CMS and range state representatives. The SSIG created a forum where like-minded wildlife experts could share their knowledge and seek collaborations to amplify their conservation impact in the region. Within three years of launching the SSIG, its membership was frequently approached by range states to take on conservation programs. This led to our realization that we needed a more formal entity, one that can sign Memoranda of Understanding, contracts and agreements with range states and funding agencies in order to fulfill these





requests. In order for zoos to effect change in the region, we needed to collaborate with an NGO capable of carrying out the necessary field research and conservation action that would lead to change. Such an NGO did not yet exist.

In 2004, with the establishment of the Saint Louis Zoo WildCare Institute, the Zoo was able to make a significant investment in the start-up costs to create such an entity, funding that led to cultivation of additional zoos as supporters. Out of this, Sahara Conservation Foundation (now Sahara Conservation) was born, the first NGO devoted exclusively to wildlife conservation in the Sahara and its border with the short, dry grasslands of the Sahel. Its first CEO, John Newby (7th from left in back row), became the voice for Saharan wildlife conservation.

Bill Houston, who wrote much of this introduction (picture below), served as the voice of this Center until his retirement in 2024. Also in 2024, Tim Woodfine became the third CEO of Sahara Conservation (picture above 8th from left in back row), and Lisa Kelley, PhD, became the second Director of this center.



## Location and Focal Species

The Center scope is to address the silent crisis of extinction underway in the Sahara Desert and its transitional zone, the short, dry grasslands of the Sahel, particularly in Chad and Niger (Figure 1).

Three priority programs of the Center represent just three of the species that are critically at risk of extinction in the region:

- » Addax antelope, whose population was less than 100 in the wild when last assessed for the IUCN Red List of Threatened Species in 2016.
- » Dama gazelle, whose population estimates are also less than 100 in the wild.
- » North African red-necked ostrich, the biggest bird on the planet, which is now extirpated from 95% of its former range.

However, the iconic success story of the scimitar-horned oryx is indicative of what can happen when a talented and tenacious team places priority on the recovery of a species over a sustained period of time.





Figure 1.

Sahara Conservation, which was once solely located in the United States with the Saint Louis Zoo as its financial headquarters, has expanded to form additional legal entities and offices in France, Chad and Niger (Figure 1)

## Recognition

### Published Conservation Strategies

- » Dama gazelle (*Nanger dama*) Conservation Strategy 2019-2028: 5-year Review and Update
- » [French only] Feuille de route pour la conservation de la gazelle dama (*Nanger dama*) dans la Réserve Naturelle Nationale de l’Air et du Ténéré 2024 – 2033

### Publications

- » Gnusletter – Scimitar-horned Oryx special issue – October 2024
- » [French only] Ouadi Rimé – Ouadi Achim Management Plan - October 2024

### Notable Media (magazine articles)

- » Travel Africa – August 2024
- » Rewilding Southern Africa – November 2024
- » Terre Sauvage – March 2025





## Scimitar-horned oryx:

### Building off of the past years' successes

In 2023, we announced the remarkable achievement of the IUCN reassessment of the scimitar-horned oryx downlisting from Extinct in the Wild to Endangered with over 600 individuals now roaming the landscape of Ouadi Rimé – Ouadi Achim (OROAFR) Faunal Reserve in Chad. One of the most ambitious wildlife conservation efforts ever accomplished, the project methods have helped inform parallel projects for the Critically Endangered addax and dama gazelle. From its earliest years of development, the Saint Louis Zoo has had multiple roles in the events that led to the success of the project. In addition to Bill's leadership as Board Vice-Chair, the WildCare Institute has provided key financial support for both core operations as well as funding for the project since 2004.

In December of 2024, 50 more scimitar-horned oryx were successfully released in the reserve, with local dignitaries from the Ouaddai and Batha provinces participating in the project. Despite these encouraging numbers, exceptionally harsh weather conditions appear to have impacted wildlife in the OROAFR. Early in 2025, Q4 line transect ground surveys of key species in the reserve were undertaken to assess herd numbers of key faunal species.

Analysis of survey data at the reserve suggests that the unusually extended period of extreme heat during the 2024 dry season may have reduced wild ungulate populations by 25-30% in OROAFR. Nevertheless, populations of addax, dama gazelles and scimitar-horned oryx remain resilient with body conditions of these animals looking greatly improved.





## Dama Gazelle Program and Monitoring Mission

There are two priority programs for the recovery of the Dama gazelle: 1) a targeted reintroduction program within the Ouadi Rimé – Ouadi Achim Faunal Reserve in Chad (OROAFR), and 2) a monitoring mission and community engagement program in and around Aïr and Ténéré National Nature Reserve in Niger.

*Chad: Ouadi Rimé – Ouadi Achim Faunal Reserve.*

With less than 100 dama gazelle in the wild, a breeding and reintroduction program was initiated within the OROAFR in 2020. The founding population consisted of five translocated individuals from the Manga region in Chad, five individuals provided by the Environment Agency of Abu Dhabi, and five individuals already ranging in OROAFR who entered the breeding area on their own. This population has experienced modest growth, with three individuals released in OROAFR last year that have since integrated with the wild population. At the close of 2024, there were 32 individuals in two groups in the breeding facility; 16 representing the Manga genes, and 16 representing the Abu Dhabi genes.

Dama gazelles released from the captive breeding facilities in OROAFR and monitored with ear-tags survived the prolonged extreme heat of the 2024 dry season and were in good condition by April 2025. In contrast, three dama gazelles fitted with satellite tags did not survive. Given the impact of the last year on wild dama gazelles, the value of the captive breeding group is all the more significant.

Lessons learned thus far in this reintroduction effort include the importance of monitoring with ear tags, rather than collars, and the timing of release for this delicate species.

*Niger: Aïr and Ténéré National Nature Reserve*

In 2023, the Sahara Conservation team recorded the largest number of dama gazelles seen in the Aïr and Ténéré National Nature Reserve in Niger over the last 10 years of regular monitoring. Monitoring efforts include camera trap images and working in collaboration with the protected area management unit and other local stakeholders.



In the 2024 survey, there were no direct observations of dama gazelles but numerous tracks were found.

In addition to the surveys, a new action plan for the conservation of dama gazelles in the Aïr and Ténéré National Nature Reserve is being prepared following a stakeholder meeting in the nearby oasis town of Iférouane. The meeting consisted of representatives from local communities, wildlife authorities, and representatives from Sahara Conservation. This will be a comprehensive plan that will include fresh approaches to ecological restoration, revitalizing protected area management and strengthening community participation.





In this region of the world, the human population also struggles for daily needs. Early on, listening to the needs and wants of the indigenous people was recognized as a core component of wildlife conservation in the region, and in 2009, Sahara Conservation partnered with Education et Santé sans Frontières (ESAFRO), a non-profit dedicated to basic health care needs, to assist in providing medical needs and basic necessities for remote and nomadic communities in Niger. In late November and early December, the Dama Gazelle Extended Community Engagement Program assisted 310 people for dental needs, while a mobile healthcare mission provided healthcare consultations for 199 people. Five people (two young children and three women) were referred for further treatment and support in the town of Timia in Northern Niger. To date, this program has included 50 medical missions, directly treating over 13,000 community members.



## North African Ostrich Program

Once prevalent throughout the Sahara Sahel, the North African ostrich has now been extirpated across 95% of its former range. Major contributors to this decline have included hunting pressure for both food and feathers, as well as the unsustainable collection of its eggs. Political instability has exacerbated unsustainable hunting.

In 2008, a partnership was formed between Sahara Conservation, a local Nigerian wildlife organization known as CERNK, the Saint Louis Zoo WildCare Institute and the AZA Struthioniformes Taxon Advisory Group to maximize zoo expertise in species recovery and management. The result of this partnership resulted in an ostrich recovery and breeding plan in Niger.

Ten years later, a generous donation given to the WildCare Institute provided enough funding for the installation and commission in facility upgrades of the Ostrich Recovery and Breeding Center in Kellé, Niger. Upgrades included creating reliable solar-generated electricity, a VSAT communications link with internet access, and a new well, which provided a much needed source of water for the area. This infrastructure was critical to the success of the program.



As of 2024, the managed population has grown to 51 birds. In addition, to help inform breeding recommendations moving forward, genetic analyses were conducted both within the breeding facility and across other locations. These results re-affirmed that the population at the Center consists entirely of genetically



distinct North African ostriches. Identified hybridized sub-species from other locations will not be included in the conservation breeding program.

In addition, a reintroduction site within Aïr and Ténéré National Nature Reserve has also been identified and discussions are underway to assess the feasibility of taking a reintroduction initiative forward. Sahara Conservation is simultaneously seeking to increase the number of birds held in the enclosures at the Gadabedji Biosphere Reserve in central Niger ahead of intended releases in that location.

## Addax Program

Through a second donation from the same anonymous donor who provided funding for the North African ostriches, the WildCare Institute was able to provide further funding towards the addax reintroduction program in 2019. The timing of this donation was especially critical, as it coincided with the pilot release of this species in the Ouadi Rimé – Ouadi Achim Faunal Reserve (OROAFR) in Chad.

This project was able to occur, with consent from The Environmental Agency - Abu Dhabi (EAD) in the United Arab Emirates (UAE), at the Oryx Base Camp near the reserve. The methodology used for the addax reintroduction was modeled off of the success of the scimitar-horned oryx project. The first release occurred in 2020.

To date, there have been five reintroductions of addax to the OROAFR, with now over 150 addax roaming the landscape. This is larger than the number that was assessed by the IUCN Red List of Threatened Species when this program first began. In addition, 10 addax have also been reintroduced to the Ennedi Natural and Cultural Reserve, which is northeast of OROAFR. This was done through a collaborative effort between Sahara Conservation and African Parks Network, with a goal to reestablish addax across its former range in Chad.





## Stories from the Field

### When Fire Retreats, Life Advances

My name is Moustapha Matalama Mahamat, and I work as a field officer in the Batha region for Sahara Conservation in Chad. For the past year, I've been working closely with local communities across the vast and arid landscapes of the Ouadi Rimé–Ouadi Achim Faunal Reserve. Every day, I witness firsthand the profound impact our conservation efforts can have on people's lives.



One moment has stayed with me above all: my encounter with Fatima Allazam. This brave woman from the Misserié Walad Tourki tribe is a camel and sheep breeder. She lives in Khibebich, near the Michegué waterhole, in the Ouadi Djadid area of the Batha region. In 2020, a bushfire ravaged her grazing lands. Her fodder reserves were reduced to ashes, and she lost twelve camels. Fatima was devastated.

Bushfires pose a serious threat, not only to the fragile ecosystems of the region but also to the safety and livelihoods of nomadic communities. To protect wildlife, vegetation, and people from these fires, Sahara Conservation teams work every year to open and maintain firebreaks.



When I spoke with Fatima again recently, her face was different. There was a light in her eyes, a sense of relief. She told me about the firebreaks we had created. These plowed strips of land, which interrupt the spread of fire, have completely changed her life. Fires no longer rage like they once did. Her animals are safe. Her fodder is preserved. And most importantly, she feels secure.

She shared something I hadn't considered: thanks to the firebreaks, she now avoids the bites of scorpions and venomous snakes, which are common in the area. The cleared ground makes it easier to spot and steer clear of danger. "Before, I used to sleep in fear. Now, I sleep," she told me.

Bushfires are a silent enemy. Here, they destroy everything, grazing land, livestock, and hope. But today, we are fighting back with a real strategy. What I love most about my work is seeing the tangible difference we make. We're not just protecting wildlife or landscapes, we're supporting human lives, restoring hope and dignity to those who have lost so much. In this dusty expanse, every fire we stop is a victory. And every smile we help bring back, like Fatima's, reminds me why I'm here. I'm proud of what we're accomplishing.

-Moustapha Matalama Mahamat





## Plans for the Future:

Under a new agreement with Education et Santé sans Frontière (ESAFRO), healthcare missions will be initiated in the Ouadi Rimé – Ouadi Achim Faunal Reserve to support remote communities with little access to these services. This model was developed based on the ongoing successful collaboration with ESAFRO healthcare missions in Niger.

In addition, through funding support by a Saint Louis Zoo WildCare Institute Field Research for Conservation grant, Sahara Conservation and Gembloux Agro-Bio Tech will work in collaboration to

plan an AI-assisted aerial inventory to estimate livestock numbers. The impetus behind this project stems from concern of the increased presence of livestock in a core area of the Ouadi Rimé – Ouadi Achim Faunal Reserve and the potential threats of disease transmission and competition for grasslands with the critically endangered species that inhabit this reserve. The goals of the survey are not only to document livestock patterns through a reproducible, rapid method for regular ecological monitoring, but also to enhance adaptive management, community dialogue, and conservation decisions relating to reserve management.

## Partners:

