

# IMPACT REPORT

2023–2024



Photo by Sean Viljoen

## Center for Saharan Wildlife Recovery

## Background

The overarching approach of the Saharan Wildlife Recovery Center, part of the Saint Louis Zoo WildCare Institute, has been to bring attention to the plight of Sahelo-Saharan wildlife, and to develop and sustain a vehicle through which zoos, wildlife conservation organizations and other aid agencies can collaborate to bring consistent and meaningful conservation action to the region. The Center tries to address the silent crisis of extinction underway in the Sahara Desert and its transitional zone into the short, dry grasslands of the Sahel. The extinction of the scimitar-horned oryx in the wild over three decades ago is emblematic of this crisis. A host of unique species exquisitely adapted to the Sahara are at risk of extinction.

Examples include:

- » Addax antelope, whose population was less than 100 in the wild when last assessed for the IUCN Red List of Threatened Species in 2016
- » North African red-necked ostrich, the biggest bird on the planet
- » Lappet-faced, Rüppell's and Egyptian vultures
- » Saharan cheetah
- » West African giraffe, found exclusively in Niger
- » Sudan and Nubian bustards

In the early years, the Zoo as part of a registered not-for-profit known today as Sahara Conservation, was involved in projects throughout the Sahelo-Sahara Zone of North and West Africa including Mali, Tunisia, Algeria, Niger, Senegal and Chad.

Some of these projects included:

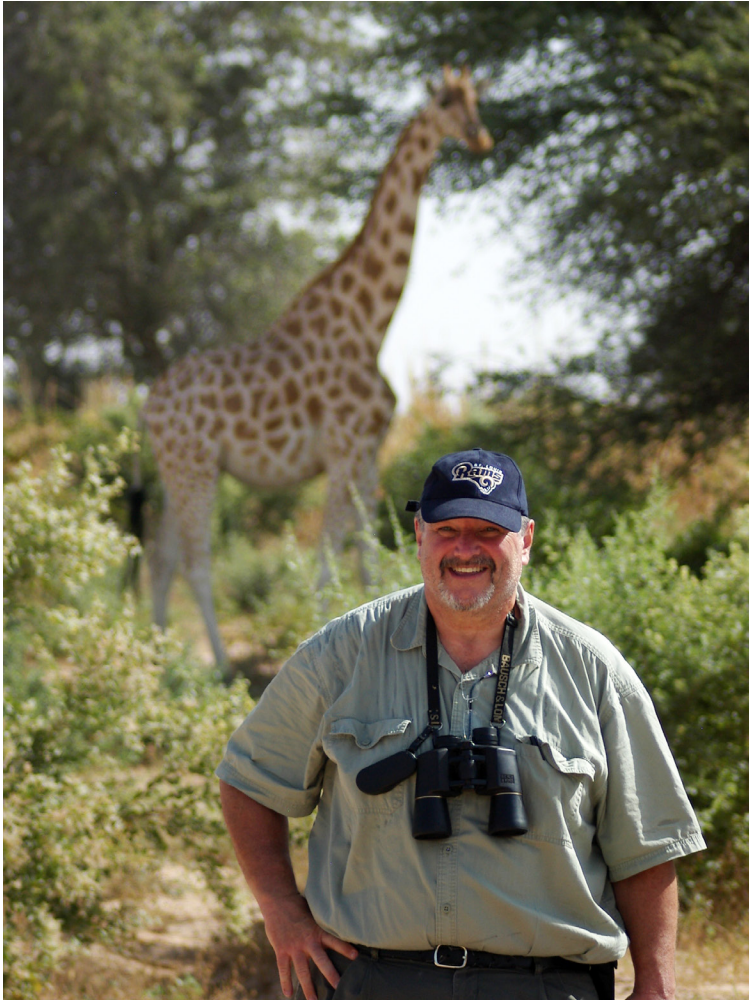
- » The repatriation of addax and scimitar-horned oryx to fenced reserves in Tunisia, using animals in human care in American and European zoos and aquaria

- » Wildlife surveys in Niger, in order to make the case for the creation of the largest protected area in Africa: the Termit & Tin Touma National Nature Reserve (TTNNR: roughly the size of Indiana)
- » The development of the facility and management planning for the North African Ostrich Recovery Center in Kellé, Niger
- » The initial planning workshop for the restoration of the formerly extinct-in-the-wild scimitar oryx

Additionally, through the Zoo's WildCare Institute grants, the Zoo helped finance projects such as:

- » Surveys to monitor the presence and abundance of several vulture species in Niger, which led to a country-wide campaign on television and radio to underscore their importance and the need to protect them from illegal hunting for the traditional medicine markets
- » A survey in Algeria to look at the presence, abundance, ecology and threats to survival for the Saharan cheetah
- » Support for the ongoing protection of the elephants in Mali, the only elephants left in the Sahelo-Saharan zone
- » A survey to support the planning to translocate West African giraffe to Niger's Gadabedji Faunal Reserve, to establish a second population of this endangered subspecies found only in Niger

Today, project scope is focused in Chad and Niger with offices in both countries. In addition, 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 in France, Chad and Niger. Bill Houston, retired General Curator of the Saint Louis Zoo and former director of this Center, remains on the board of Sahara Conservation.



## Center Theory of Change

Written by Bill Houston, Retired General Curator, Saint Louis Zoo; and Board Member of Sahara Conservation

The theory of change for the Saharan Wildlife Recovery Center, in its most basic form, is reminiscent of the central idea expressed in the movie “Field of Dreams”: “If you build it, they will come.”

Since 1989, zoos accredited by the Association of Zoos and Aquariums (AZA) 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.

Simply put, we needed to lay the track and build the train before we could get range states and other agencies, organizations and zoos to jump aboard to support

conservation action in the Sahara. Jeffrey Bonner, Ph.D., who was at the time our Dana Brown Dana Brown President & CEO of the Saint Louis Zoo, recognized this from the outset and made 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, SCF was born, the first NGO devoted exclusively to wildlife conservation in the Sahara and its border with the short, dry grasslands of the Sahel. SCF had found an underserved niche in conservation and its first CEO, John Newby, became the “voice for Saharan wildlife conservation.”

In retrospect, the Saharan Wildlife Recovery Center’s theory of change looks something like this:

- ↳ The Silent Crisis of Extinction underway needs to be made known
  - ↳ Zoos worldwide, with an audience of over 750 million people/year, can raise awareness
    - ↳ Zoos also have significant populations of key Saharan species that could be restored to the wild
      - ↳ A vehicle is needed to channel this awareness-raising and animal availability into field action
        - ↳ With zoo support, SCF launches and builds credibility as the voice for Saharan wildlife
          - ↳ With zoo support, SCF pilots projects that draw larger donors’ interest
            - ↳ The resurgence of key wildlife populations sparks donor interest in further projects

## Extinction Reversed?



## 2023 Historic win for the Scimitar-horned oryx

The year 2023 ended with a remarkable achievement for Sahara Conservation. Decades after having been declared “Extinct in the Wild,” the scimitar-horned oryx was reclassified as Endangered by the IUCN. This milestone was achieved through the reintroduction of 285 founding individuals in the Ouadi Rimé – Ouadi Achim Faunal Reserve (OROAFR) in Chad, where now over 600 oryx roam. The reintroduction effort in the reserve began in 2016, with 500 calves born on the reserve. 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 provided key financial support for both core operations as well as funding for the project. This enabled a level of financial stability so that the focus could be less about fundraising for core support and more focused on the risky project at hand.



Photo by: Sean Viljoen

## Providing critical care support to safeguard the welfare of North African ostrich breeding flock in Kellé, Niger

In addition to providing core support for general operations, this Center supports three species recovery programs. The first of which is the Ostrich Recovery and Breeding Center in Kellé, Niger.

The North African ostrich is the largest existing bird on the planet. Once prevalent throughout the Sahelo-Sahara, it has now been extirpated across 95% of its former range. A primary cause for the species’ decline came from hunting pressures for both food and feathers, as well as the unsustainable collection of its eggs. Political instability has exasperated hunting pressures.

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.

The Saint Louis Zoo WildCare Institute was fortunate to receive a generous donation in 2018, which provided enough funding for the installation and commission in facility upgrades of the Ostrich Breeding Center’s facility in 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 2023, there are now 49 ostriches in this managed program, with six chicks from two different sites successfully transferred to the group in Kellé as part of the national population management plan.

In addition, this project employs eight caretakers from the area. In 2023 alone, 743 people visited Kellé, including over 100 school children. As fresh vegetables are also produced on site, Kellé not only serves as a source of fresh food for the ostriches but also for the local community. Fresh produce is not otherwise widely available in the area.

In Chad, young North African ostriches that were introduced to Ouadi Rimé – Ouadi Achim Faunal Reserve in 2020 successfully hatched and raised 10 chicks in 2023. This is the first breeding success for reintroduced Red Necked ostriches in the last 50 years.



Photo by: Mainouna Ibrahim

## Conservation accomplishments for the critically endangered Addax and Dama gazelle

The addax and dama gazelle are two of most endangered ungulates in the world, with estimates of under 100 individuals for both species during the last IUCN assessments.

Through an additional donation from the same anonymous donor who provided funding for the 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 at that time, as it coincided with the pilot release of this species in the 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 their 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. Perhaps even more imperiled than the addax, the third program WildCare Institute funds is for a dama gazelle reintroduction program, also within the OROAFR. As of 2023, there are 29 dama gazelles within the on-site breeding facility. In contrast to the scimitar-horned oryx and addax, this species does not do well in large breeding herds in human care. Therefore, it is even more critical that this reintroduction program succeeds, so that we do not lose this beautiful species altogether.



Photo by: Sean Viljoen

## Voices from the Field: Tim Woodfine, PhD, CEO of Sahara Conservation

A wise friend once told me that success comes from having good people around and then keeping out of their way! It's a good description of my first year as CEO of Sahara Conservation - our high performing, multi-cultural, geographically dispersed team is brimming with talent and consistently delivers, so if it ain't broke, don't fix it! My job has been to listen, learn and figure out how best to support those delivering in the field but otherwise keep a light hand on the tiller. I might occasionally be able to offer some helpful advice born of my longstanding experience as a field conservationist working in Africa and elsewhere, but day to day, our team is on it!

Where I've tried to add value is in helping to identify and manage down the bigger risks to the organization, and to envisage the next steps in Sahara Conservation's evolution. The environmental and geopolitical challenges



Photo by: Tim Woodfine

of working in this overlooked and under-resourced region are significant but the rewards for wildlife, the wider environment and society cannot be overstated.

Reflecting on the last year, a personal highlight has to be seeing herds of reintroduced scimitar-horned oryx moving across the vast arid grasslands of the OROAFR in Chad. These were poignant moments following years of working towards this goal after the species disappeared from the wild. With their distinctive white and rufous pelage and impressive horns arching over their backs, the sight of these animals once again gracing their natural environment was evocative of an earlier age when the species occurred in large numbers across the region, and a hopeful step towards that happening again! OROAFR is remarkable in being an intact Sahelian grassland ecosystem and the only place on Earth where wild scimitar-horned oryx, addax and dama gazelles can be found together.

At the end of April, members of our teams from Chad, Niger and France came together with colleagues from across the region and around the world for the Sahel and Sahara Interest Group (SSIG) meeting in Morocco. This too was a special moment not only because this forum was instrumental in the creation of Sahara Conservation two decades ago, but because it provided an important platform for people who are striving to make a difference. The presentations were also a heartening reflection of progress in the field. Whether safeguarding irreplaceable populations of wildlife in Niger, seeing the scimitar-horned oryx returned to the wild, or enhancing protected area management and commensurate benefits for communities across critical conservation landscapes, these are outcomes that align local and global interests.

It is all a very long way from Sahara Conservation's formation two decades ago when I was one of the founding members of a Board collectively motivated by addressing an unfolding extinction crisis across the region. At that time, we galvanized pledges of support sufficient for six months of operating costs, but despite an uncertain outlook, we took what proved to be an important decision to go for it anyway!

Winding the clock forward to June 2023, Sahara Conservation was in need of new leadership.

With my long-standing understanding of the organization and experience working in the region, I was asked to step in as CEO for what we thought would be an interim period of six months. I have to confess that it wasn't a career plan - I was fully satisfied pursuing other interests while continuing to lend support as a member of the Board. However, naturally motivated to contribute, that six months went well, and with the organization now at a critical stage of growth and transition, I'm here for a while longer!

And that friend who offered those wise words I referred to at the start of this article was another co-founding member of the Board - Bill Houston of the Saint Louis Zoo! Recently retired but thankfully still part of the Sahara Conservation family, Bill has been a constant source of support, inspiration and good humor through the good and through more challenging times! It is true to say that our organization would not have begun or got where we are without Bill's commitment and the support of the Saint Louis Zoo Wildcare Institute's Saharan Wildlife Recovery Center.



Bill Houston, recently retired General Curator of the Saint Louis Zoo, co-founder of Sahara Conservation and Director of the Sahara Wildlife Recovery Center