MUSEUMS

Dispatches from the Sahara Desert: Looking back on a trip to a land of dinosaurs, and all we gained

By Paul Sereno For the Tribune Mar 24, 2023 at 5:00 am



A skeleton of the dinosaur Suchomimus is displayed during a ceremony at the La Flamme de la Paix (Flame of Peace), a monument at a remote desert locale outside the city of Agadez in Niger. (Mike Hettwer / HANDOUT)

New dinosaurs by the dozen fill two large shipping containers poised to depart Niger for Africa's coast and then travel by ship across the Atlantic destined for my Fossil Lab at the University of Chicago, where a process of cleaning and recomposing bones over the coming years will unveil a menagerie of new species. The fossils were collected during a fall 2022 expedition and later will return to Niger, home to the richest fossil beds in Africa.

So, is naming new species and dutifully returning a nation's patrimony the end goal of this science adventure? I almost abandoned paleontology at the start of my career, struggling to see how paleo research and discovery could positively impact human lives.

But fossil science, I came to understand, can be a prelude to meaningful social impact. The profound significance of Niger's heritage has not been realized, because there are no museum halls for the many tons of fossils and human artifacts unearthed, nor training programs for curators or museum staff. In this setting, fragile remains repatriated in crates will inevitably fall into neglect or worse. At stake here is more than just decades of paleontology work, but rather the safeguarding and celebration of world-class heritage that could positively reframe a country's narrative.

Two urban centers are key to a large-scale initiative regarding Niger's ancient patrimony — Niamey, the southern capital, and Agadez, a growing oasis town within the Sahara some 560 miles north. In the past, both have benefited from significant national and international tourism.

Niamey is split by the famed waterway of West Africa, the Niger River. Lying midstream is an uninhabited wetlands island, home to diverse birds, bats and hippos, and floored by granitic boulders that date back billions of years to the birth of the African continent. Called Isle Gaweye, this natural treasure provides an anchor to the Kennedy Bridge, which in 1970 provided the first transit way to join each side of the capital.

Agadez, the regional capital of the north, oversees a parched, rugged landscape larger than France, home to a unique Saharan eco-reserve and the source of nearly all predynastic archaeological and paleontological heritage. Over the last millennium, distinctive nomadic and semi-nomadic cultures have crisscrossed this desert biome, with Agadez as its central crossroads.

Speaking to lead architects at the Chicago office of Stantec, an international company with architectural projects around the world, I said, "I need the world's first zero-energy natural history museums, because the host country Niger doesn't produce significant energy. These museums must withstand extreme heat, fierce wind, occasional dust storms and annual flooding, and building materials should incorporate lots of local clay brick and tile."

I launched NigerHeritage, an international collaboration bringing together my firsthand knowledge of Niger's ancient treasures, Stantec's savvy, and diverse voices from Niamey and Agadez, including national and regional leaders, a sultan, mayor and university rector, museum scholars and administrators and aspiring archaeologists. Our aim was to sketch the outlines for two inspiring zero-energy museums that overcome all of the hurdles cited above.

For Niamey, the sketches led to draft plans for a *Musée du Fleuve* (Museum of the River) on pylons off the Kennedy Bridge, its narrative beginning with the rocks that bore witness to the formation of Africa. Under an energy-absorbing canopy, a sequence of halls present episodes from Africa's dinosaur era, its resilient stone age Saharans, and finally the natural wonders and fragility of the Niger River ecosystem. Serving as a gateway to an Isle Gaweye eco-reserve, this museum in planning has garnered international architectural praise and awards.



A rendering of the proposed Musée du Désert Vivant (Museum of the Living Desert) for the city of Agadez in Niger. (Stantec / HANDOUT)

For Agadez, we drafted plans for a zero-energy *Musée du Désert Vivant* (Museum of the Living Desert) to highlight the region's enduring cultural legacy as well as its remarkable fossils. Inspired by the centrality of water to life, the museum rises within a reflecting pool surrounded by a tiled plaza bordered by classrooms and artisan workshops. The timeline of its narrative, the reverse of that in Niamey, starts with halls devoted to the geo- and ethnographic setting of the region, followed by halls capturing prehistoric life in a Green Sahara and scenes from the dinosaur era.

High-profile museum projects that celebrate Niger's world-class heritage would elevate national pride, educate and impact every citizen, encourage civilian development in key cities and resuscitate tourism. These projects, a top priority for Niger's President Mohamed Bazoum, also jibe with all highlighted themes in President Joe Biden's sub-Saharan strategy — fostering openness, enhancing regional stability and representation, promoting economic opportunity, and conserving ecosystems and natural resources —

and is aligned with United Nations declarations promoting the rights of indigenous peoples.

The Tribune has followed the progress of University of Chicago professor Paul Sereno and his team over several months on an expedition in Niger in Africa. For more information, also see Africa's Lost World at paulsereno.uchicago.edu and www.nigerheritage.org.

- Meet Paul Sereno, the Indiana Jones of paleontology (published Sept. 18, 2022).
- Launching a sojourn to uncover Africa's past but first a wait in Agadez (published Sept. 25, 2022)
- Dispatches from the Sahara: Exploring Gadoufaoua, known as 'the place where camels fear to go' (published Oct. 18, 2022)
- Dispatches from the Sahara: Unearthing Africa's giants and an ancient calamity (published Nov. 9, 2022)
- Dispatches from the Sahara Desert: Discovering dinosaurs adrift in seas of sand (published Jan. 6)