

AFRICA'S LOST WORLD



Greetings—

”The *Washington Post* published a [vivid exposé](#) on my ultimate quest —the upcoming *2022 Expedition to Niger*— describing the fossil discoveries that lay cached, the significance these finds have for Africa, and their potential impact for the future of Niger. For 3 months this Fall (September through November), I and my team of 20 will excavate some 25 tons of dinosaurs and ancient humans in the heart of the Sahara, a feat never before attempted.

These fossils add to Africa’s world-class heritage— from the deep past when the continent was isolated and home to many strange dinosaurs and other animals, to a much more recent past in human prehistory when the Sahara was green and teeming with elephants, hippos and crocodiles.

The scientific impact of these discoveries and plans for ground-breaking museums back in Niger are central to the mission of [NigerHeritage](#), a foundation overseeing what will rank as the greatest repatriation of fossils in world history —the return of some 100 tons of fossils I have excavated over 30 years.

The expedition not only engages paleontology and archaeology, but also the fields of geology, desert ecology, geography, and the cultures and languages of subSaharan Africa. Background information is available, A background on all facets of the expedition is [available](#), and you can [follow the expedition online](#) as we travel to Niger, set up camp in the desert, excavate new creatures, and uncover ancient human burials.

This is science at its best —steeped in adventure, rich in discoveries, driven by young scholars, rewriting a continent’s history, and impacting the peoples of a young nation on the move.”

Best regards,



2022 EXPEDITION TO NIGER



An epic desert triathlon awaits Sereno's team

This is high-powered, adventure-packed, cutting-edge science —as close as one will ever get to a real-life Indiana Jones experience —with a leader who can fill those boots and an international team of young scientists aiming to dig up a lost world of African dinosaurs. Paul exudes deep respect and love not only for the Sahara but for its people and the unique fossil heritage he unearths by the ton.

This is Paul's ultimate expedition —to collect some 25 tons of fossils from rocks in the world's largest desert. To survive the elements, he needs to think like a Tuareg nomad. Helping him is an exceptionally motivated team from Chicago, Europe and Niger, including locals from nearby oases. Together they will skirt dunes, locate water, carve rock, and find the means to pull off the paleo expedition of the century.

The ultimate aim? To bring these dinosaurs and other fossils back to new museums in their home country of Niger.

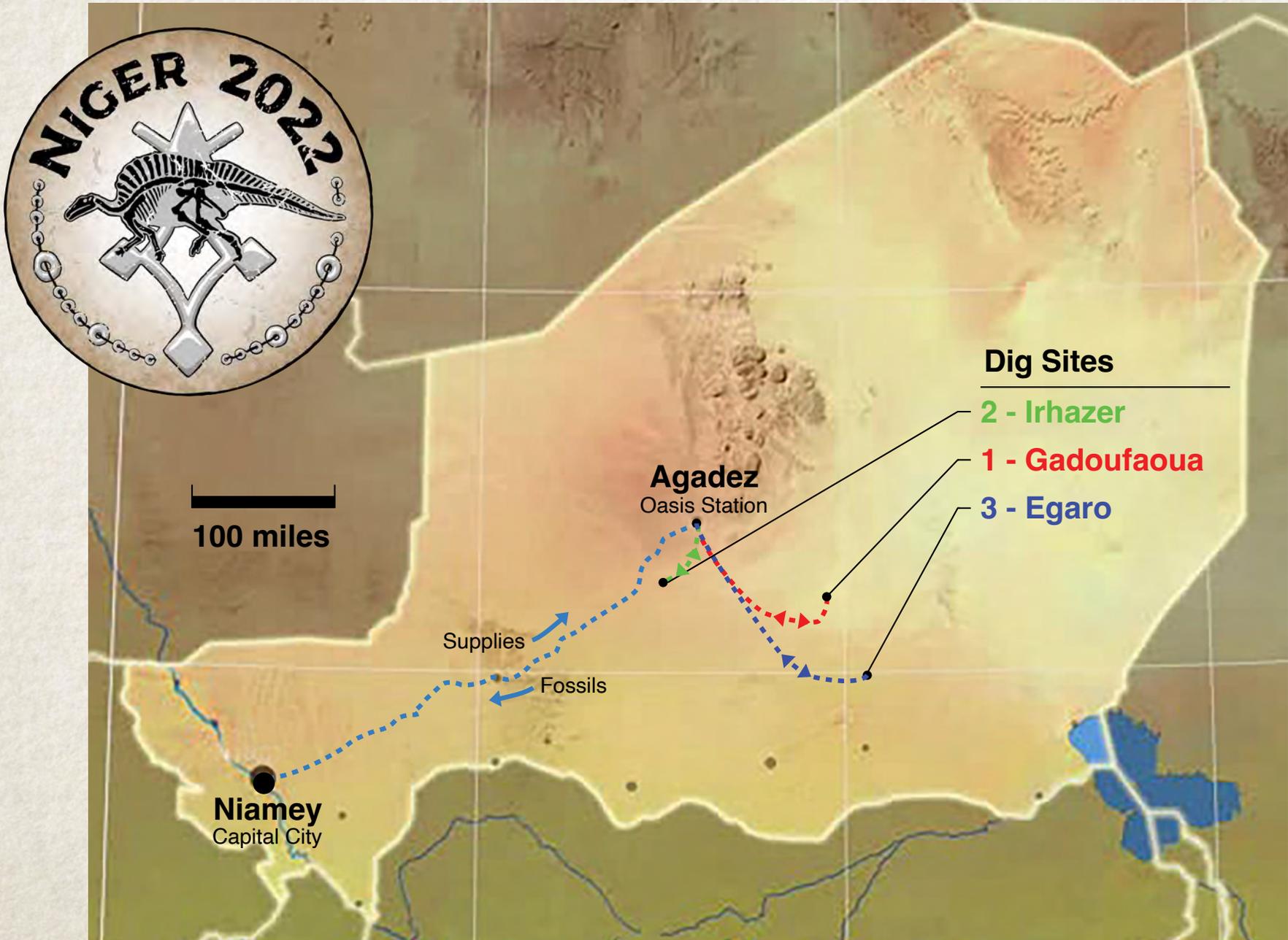
AIMS

- Unearth fossils in major areas (Irhazer, Gadoufaoua, Égaro)
- Explore and prospect Égaro
- Zircon-sample for dates in 5 horizons
- Collect Africa's first microsite (bonebed)
- Document sauropod trackways with 'heeled' prints

CHALLENGES

- Truck supplies/fossils 700 miles to and from Agadez
- Rock-saw bone-packed microsite into slabs
- Deploying desert-worthy trucks for multi-ton field jackets
- Manage food & water for team of 25, guard of 50 persons
- Secure import/export documents/sea containers

EXPEDITION MAP



TEAM

Language Key (Capital-fluent, lowercase-basic)

F = French	A = Arabic	G = German
E = English	S = Spanish	V = Valencian
H = Hausa	C = Catalan	Fa = Farsi
T = Tamasheq	I = Italian	Ch = Chinese



Paul Sereno (E, F)

Over some 30 years, Paul's adventures in the Sahara have unearthed a menagerie of creatures new to science and an ancient people that lived when the desert was green.



Minata Algalher (F, T, E)

Born in the Aïr highlands north of Agadez, Minata dives into the expeditions as a natural part of her eventual career, as her country's first museologist trained in the preservation of ancient heritage.



Dan Vidal (S, E, F)

A long-necked dinosaur guru seasoned by field work in Europe and the Sahara, Spanish paleontologist Dan has expertise at reconstructing skeletons using stereophotogrammetry and CT-imaging.



Boubé Adamou (F, H, e)

Archaeologist at IRSH (Institut des Recherches des Sciences Humaines) in Niger, Dr. Adamou is an expert in cultural and natural heritage preservation and protection.



Stephanie Baumgart (E, s, g)

As adept in the field as she is in the micro-CT room or hospital scanning ward, University of Chicago paleontology postdoc Stephanie brings her extensive work on the flesh and bone of living species to the reconstruction of extinct relatives.



Grace Broderick (E, f, ch)

A paleontology student at the University of Bristol whose experience in fossil labs started when she was 12 and whose current research uses CT scans of fossils to reconstruct and understand the how extinct species move.



Alhassane Dindine dit "Bido" (F, T, A, e)

A Saharan guide supreme based in Agadez, Bido's desert know-how and eyes have allowed us to beat the odds and return after each expedition alive and triumphant.



Mawli Dayak (F, T, A, E)

Son of the revered Tuareg freedom fighter, Mano Dayak, Mawli continues his father's legacy, celebrating Niger's vibrant cultures and championing efforts to develop two world-class museums to display Niger's rich patrimony.



Francesc “Paco” Gascó (C, S, E, i)

Spanish paleontology professor and host of the dinosaur-themed podcast, Dino Busters, who moonlights as a professional bodybuilder.



Noelia Sánchez Fontela (S, E)

With prowess in fossil excavations and paleontological research, Noelia channels her love of dinosaurs to inspire students as an educator and facilitator with the non-profit “Science Without Borders.”



Robert Laroche (E, F)

With a keen interest in evolution ever since his visit to the Galapagos Islands, Robert has studied fish biology and evolution and now looks forward to digging into the ancient past.



Erin Fitzgerald (E, f)

Master preparator, mold-maker, artist, exhibit and field manager, Erin applies her skills in the desert, in the lab, and on display to bring fossils back to life.



Arturo Gamonal (S, E)

Field paleontologist who focuses his career on the preservation and promotion of the paleontological heritage of Spain, Arturo finds any opportunity to share his love of all things paleo with others.



Ana Lázaro (S, E)

Pursuing Masters research in fossil whales, Ana is an impressive field excavator who maintains her strength training with a strenuous powerlifting regime.



Jahan Ramezani (E, Fa)

Teller of deep time, Jahan hunts for volcanic crystals at dinosaur dig sites that reveal clues about geologic age, when analyzed back in the laboratory.



Charles “Chuck” Beightol (E, h)

Paleontologist from the University of Washington whose day job is working as Biologist and Natural Resources Manager for the National Park services.



Vincent Reneleau (F, E)

Adept at excavating massive dinosaur skeletons in the field and fossil preparation, casting and molding, 3D printing and photogrammetry in the lab, Vincent is a jack of all trades in the paleo-world.



Filippo Bertozzo (E, I, f)

Inspired by the majestic *Ouranosaurus* dinosaur, Filippo pursued a career in paleontology and has become an expert in this extraordinary, sail-backed creature.



Álvaro Simarro (S, E, f)

From Don Quixote's land, this Manchego/Spanish paleontologist is a hunter of the predatory theropod dinosaurs, Alvaro studies the teeth and footprints of this fearsome group.



María Ciudad Real (S, E, v)

Maria specializes in bringing dinosaurs back to life through the cutting edge technologies of CT scans and 3D reconstruction. On the side, to fuel her passion, Maria loves to bake cheesecakes.



Rachel Vautrin (F, E)

Fascinated in particular by the diversity of crocodylians in deep time, Rachel has spent many years excavating dinosaurs, crocodiles and other fossils in the north of France.



Alex Demers-Potvin (E, F, s)

Expert in understanding ancient plant and animal ecosystems, Alex has discovered scores of new species including a Cretaceous mantis from Northern Canada.



Alejandro Granados (E, S)

A seasoned field excavator and Land Rover enthusiast, Alejandro studies fossil sites to understand how death and burial happened.



Peter Felix-Henningsen (E, G)

Expert at unraveling the desert landscape history, Peter solves mysteries of ancient Saharan environments using geological formations, paleo-soils and lake sediment.

UNVEILING AFRICA'S HERITAGE

AFRICA'S LOST WORLD



Brand new dinosaurs - a digging raptor, a reptilian armadillo, a sail-backed predator and new long-necked behemoths come to life as the newest stars in [Africa's Lost World](#). Along with crocs of every kind, flying reptiles, and ferocious fish - remarkable creatures that once inhabited the continent are revealed on the expedition and brought back to life in the [Fossil Lab at the University of Chicago](#).



HISTORICAL CONTEXT

BACKGROUND

Vast expanses of the Sahara are composed of fossil-rich rocks. In the 1950s, Albert de Lapparent, a French paleontologist and priest, found dinosaur bones in Niger. In the 1960s, his student Philippe Taquet discovered the sail-backed duckbill *Ouranosaurus* (“brave lizard”). Many fossils were left behind, given their weight and remote location.

Tuareg nomads have lived in the desert for centuries. Their modern aspirations are told by musicians, poets, and legendary author-activists like Mano Dayak.



HISTORICAL CHARACTERS



Albert de Lapparent

An intrepid mid 20th century explorer of the Sahara and elsewhere, French paleontologist-priest Albert de Lapparent was the first to reveal Niger’s fossil potential.



Philippe Taquet

Pioneer in Niger after its independence in 1960, French paleontologist Philippe Taquet recognized Africa’s richest fossil beds in a region he called Gadoufaoua.



Mano Dayak

Born in the Air highlands, Mano was a famous freedom fighter and author who led the Tuareg Rebellion in the 1990s and allowed Sereno’s teams to work unhindered in the desert.

SERENO’S GROWING MENAGERIE

Paul’s large-scale expeditions, the first in 1993, opened a new chapter of Saharan exploration, with fossil discoveries by the ton that are painting a picture of a lost world of bizarre dinosaurs, monstrous crocs, flying reptiles and huge predatory fish.

ANCIENT PEOPLE OF THE GREEN SAHARA



Dinosaur fossils are found in the rocks flooring the Sahara Desert. However, buried beneath some of the dunes, are much more recent fossils of ancient humans.

Few people realize that prior to the building of the Egyptian pyramids, the Sahara Desert was “green,” dotted with lakes teeming with 6-foot perch, hippos and crocs, and home, most surprisingly, to human settlements. Paul discovered a stunning [archaeological site called Gobero](#) that preserves an expansive human graveyard and thousands of artifacts that document ancient humans that lived from 10,000 to 5,000 years ago.

Two successive cultures (Kiffian, Tenerean) thrived for millennia as hunter-gatherers living lakeside and hunting wildlife, catching fish and avoiding crocodiles and hippos.

The most famous burial, some 5,700 years old, involves three skeletons—a mother holding the hands of two children. Like Niger’s paleontological record, Gobero is unique in its importance for documenting human cultures during the African Humid Period prior to the building of the Egyptian pyramids.

Paul and team have worked for years reconstructing the appearance and lifestyle of these ancient peoples.

The Sahara Desert is home to many [living desert cultures and peoples](#), among them the nomadic and semi-nomadic Tuareg, Toubou and Fulani.



AFRICA'S MASTERPIECE MUSEUMS



After 30 years of exploration and 100 tons of fossils discovered, Paul is determined to find a permanent home to protect and share the world-class archaeological and paleontological patrimony of Niger. Launching the [NigerHeritage Foundation](#), Paul and a team from Niger have designed award-winning plans for two groundbreaking, zero-energy museums, one located in the middle of the Niger River in the capital **Niamey** and the other in the desert oasis **Agadez**, crossroads of the Sahara. Check out videos of the [Niamey](#) and [Agadez](#) museum projects.

[More info on Museum of the River - Niamey](#)



[More info on Museum of the Living Desert - Agadez](#)



BIO - PAUL SERENO



Paul Sereno, Professor at the University of Chicago and National Geographic Explorer, travels to remote locales resurrecting gargantuan beasts and ancient humans. Paul discovered the earliest dinosaurs in Argentina's Andes and a menagerie of giants from the Sahara, including the 40-foot long croc monster dubbed "SuperCroc".

Paul's 'Machu Picchu' is a vast ancient human graveyard in the heart of the Sahara. From a time before the Egyptian pyramids, when the Sahara was green.

Penning stories for *National Geographic* magazine and featured alongside Harrison Ford in *People* magazine's "50 Most Beautiful People," Paul is the "Living Indiana Jones" right down to his amazing Fossil Lab at the University of Chicago. Named "Teacher of the Year" by the *Chicago Tribune*, his scholarship on over 100 papers earned the highest award from his alma mater, Columbia University, and his outreach efforts won a medal from former President Obama.

Paul, writer for *National Geographic*, TED speaker and frequent media personality, has been the subject of, and content advisor for, **15 documentaries** for cable (NGC, TLC), public (PBS, NOVA), and network television (NBC special) and creator of many multimedia exhibitions.

MEDIA RESOURCES

2018	<i>Preserving an Ancient Heritage</i> (PodCast)	2001	<i>SuperCroc</i> (NGC-NBC)
2015	<i>The Infinite Monkey Cage</i> , USA Tour (BBC)		<i>SuperCroc</i> (National Geographic)
2014	<i>Bigger than T. rex</i> (NOVA-NGT)	1999	<i>Africa's Dinosaur Giants</i> (NGT)
	<i>Bigger than T. rex</i> (cover-National Geographic)	1998	<i>Dinosaur Fever</i> (NGT)
2013	<i>Skeletons of the Sahara</i> (NOVA-NGT)	1998	<i>Colossal Claw</i> (NGT)
	<i>Lost Tribes of the Green Sahara</i> (cover-NG Mag)	1996	<i>Flesh on the Bones</i> (TLC)
2009	<i>Bizarre Dinos</i> (NGC)		<i>Africa's Dinosaur Castaways</i> (NG Mag)
2009	<i>When Crocs Ate Dinosaurs</i> (NGC)	1995	<i>African Graveyard II</i> (TLC)
	<i>Strange Crocs of the Sahara</i> (NG Mag)	1995	<i>African Graveyard I</i> (TLC)
	<i>Death Trap in the Gobi</i> (NG Mag)	1994	<i>Skeletons in the Sand</i> (PBS)
2007	<i>PaleoWorlds</i> (Google Campus)	1993	<i>The Next Generation</i> (PBS)
2006	<i>Sky Monsters</i> (NGC)	1992	<i>Fragments of Time</i> (PBS)
2005	<i>TED presentation</i> (Monterrey)	1991	<i>At the Forefront</i> (PBS)