

A photograph taken from the perspective of someone inside a vehicle, looking out through the open door. The person's legs in blue jeans and a black coiled cable are visible in the foreground. Outside, a sandy desert landscape with sparse, dry grasses is visible. Two Dama Gazelles are running across the sand. The title text is overlaid on a semi-transparent yellow-green banner at the top.

Challenges Associated with Remote Area Capture of Dama Gazelles

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Dama Gazelle (*Nanger dama*)

Manga damas

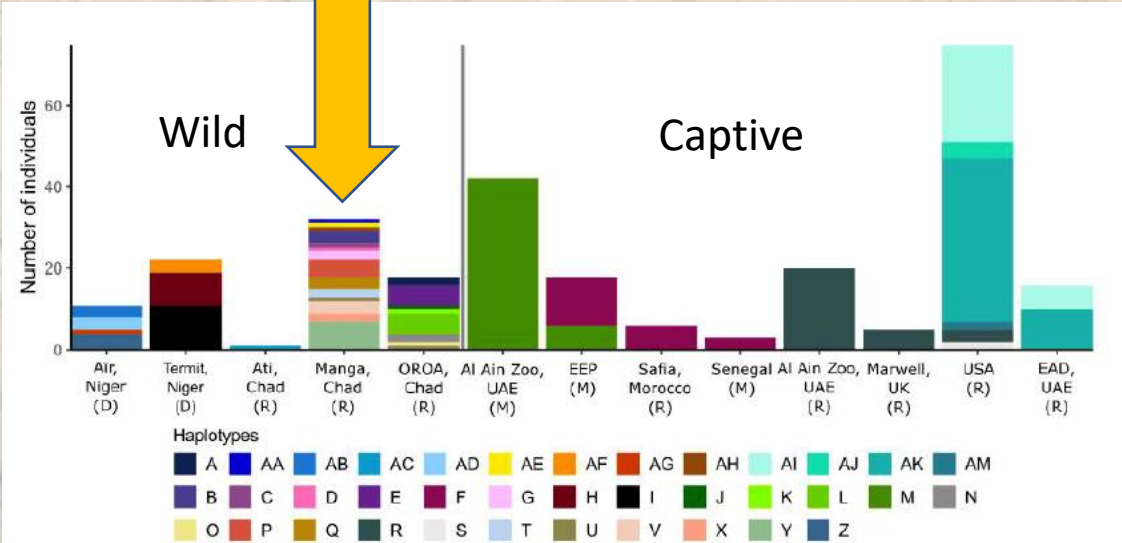
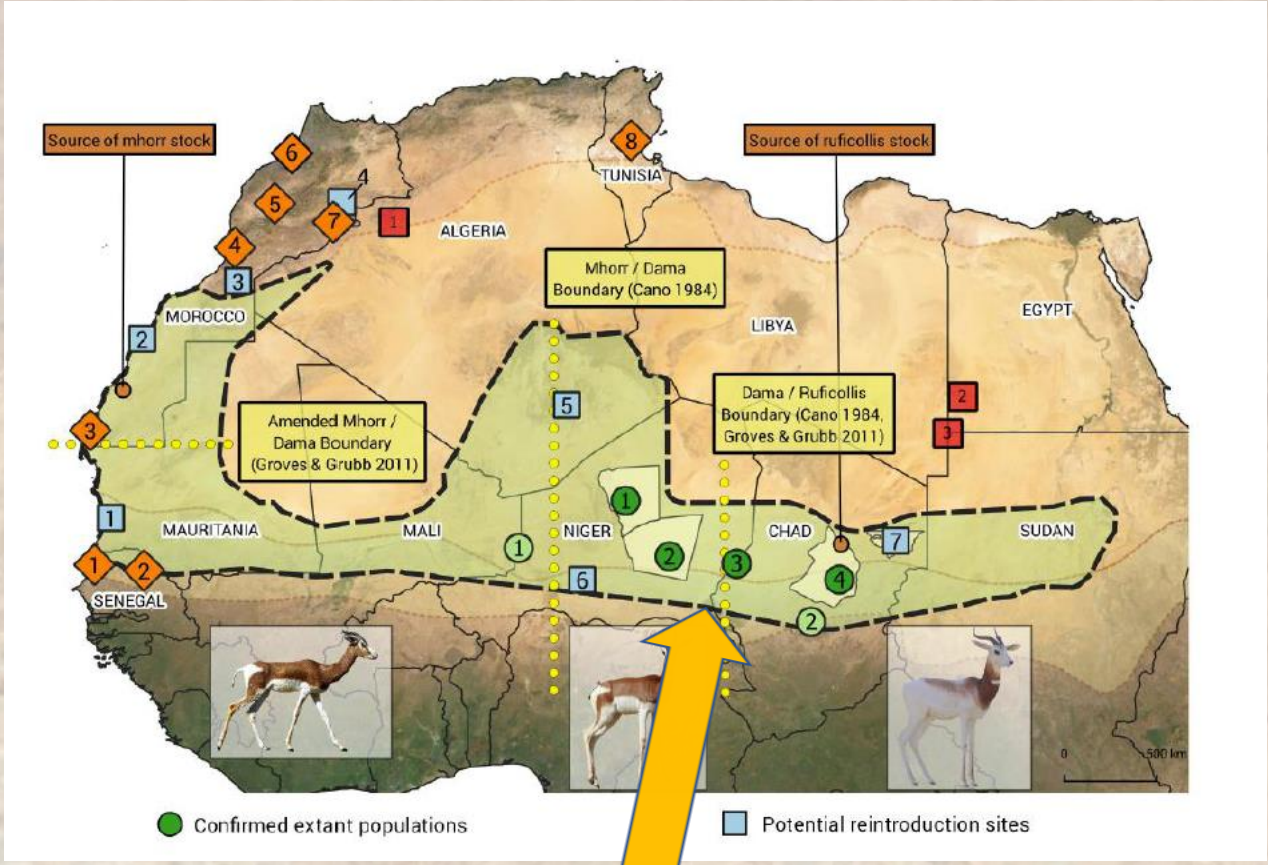


Figure 9. Control region haplotypes identified in wild (n=84) and captive (n=163) populations of dama gazelle (RZSS/WildGenes).



Only 4 confirmed extant populations:

- Air Mountains, Niger
- Termit, Niger
- Ouadi Rimé – Ouadi Achim (OROA), Chad
- Manga, Chad

Ouadi Rime – Ouadi Achim Reserve

- Located in the center of the Republic of Chad
- Largest reserve in Chad and one of the largest reserves in the world
 - 30,100 square miles (78,000 sq km)
 - Equivalent to the size of Scotland



Ouadi Rime – Ouadi Achim Faunal Reserve



Wild release site for scimitar horned oryx and addax populations
Home to a resident wild dama gazelle population

Oryx Base Camp



Manga Region

- Region in northwestern Chad
 - Huge area with very scattered small population of damas
 - ~15-20 animals
 - >6000 km²
 - Significant political upheaval in this region
 - No wildlife protection
 - Minimal infrastructure



First Challenge - Infrastructure



Our future camp site

Photo credit: Adam Eyres



The nearby village of Salal

Photo credit: Julie Swenson



Our camp set up

Photo credit: Julie Swenson

First Challenge - Infrastructure



Photo credit: Justin Chuven



Photo credit: Adam Eyres

Dinner by lantern light, provided by SVS

Several large trucks had to bring additional supplies, including panels for a temporary boma and enough fuel for the helicopter and fixed wing plane.

Moving Animals in OROA



Wild
capture of
scimitar
horned oryx
and addax



Dart truck then
approached for
darting.

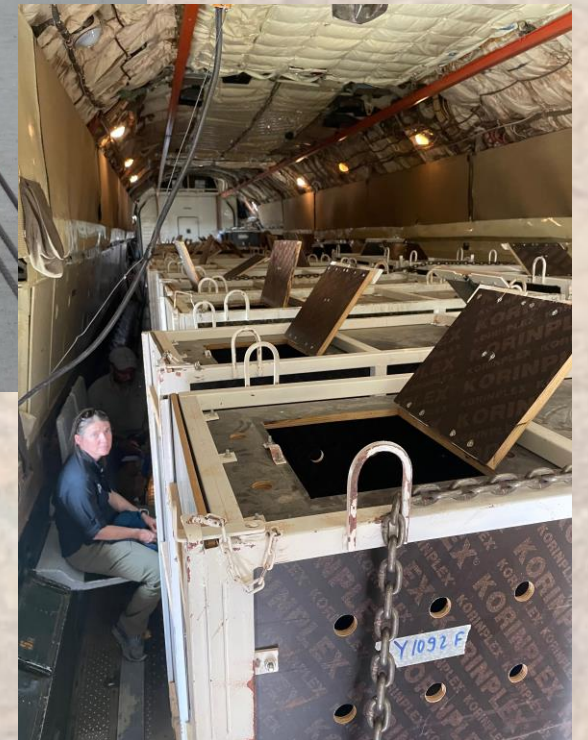
Luckily these
animals are used to
being monitored by
Sahara

Conservation so
they were not
terribly nervous
about the trucks.



Crated Hoofstock

- Benefits:
 - Small dark environment encourages calm behavior
 - Minimal risk of injury to the animal
 - Can be trucked or flown to their destination





Wild Capture of Damas

Pole snaring of giraffe

Only documented wild capture was in 1967 when animals were considered “fairly common”

Captured via pole snare from a moving vehicle

Wild Capture of Damas



- Texas exotic game ranches:
 - Est 1500 damas
 - Capture techniques:
 - Darting from vehicles
 - Capture pens
 - Net gunning
 - Darting from helicopter

Helicopter Darting

Photo credit: Adam Eyres



Airbus Squirrel, flown by TropicAir, Pilot: Hoho Andrew

The helicopter was a particularly important but difficult part of this project to organize

There were no helicopters of an appropriate size available in Chad.

This one had been flown in from Kenya and happened to be in Chad in between two tourist trips.

Anesthesia

Initial Anesthesia:

Thiafentanil

Azaperone

Ketamine



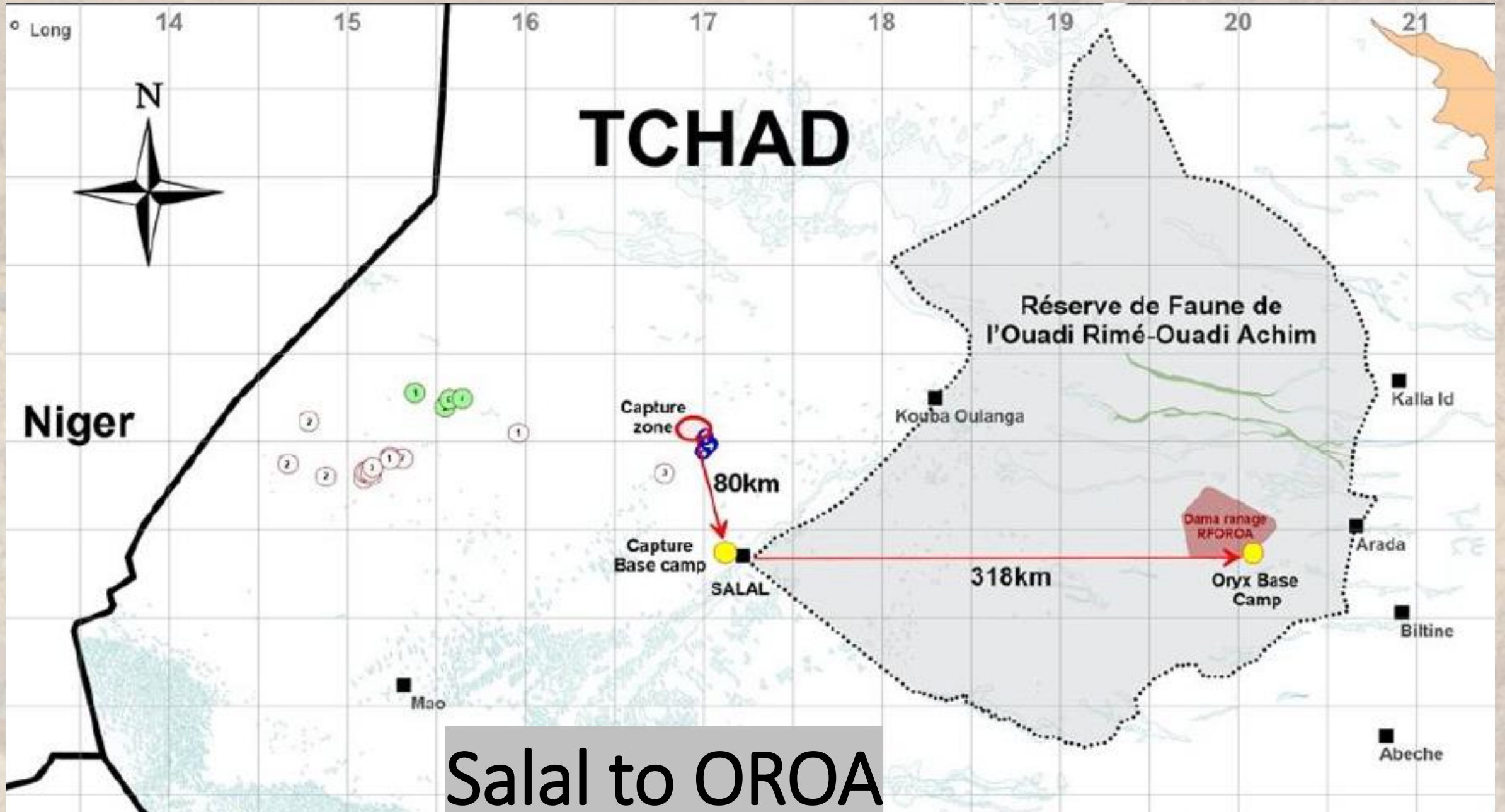
FASTEN SEATBELTS

FASTEN SEATBELTS

DARTING DAMA







MAF Cessna 182 flown by MAF, Pilot: Phil Henderson



Photo credit: Tim Wachter

Airbus Squirrel, flown by TropicAir, Pilot: Hoho Andrew



Photo credit: Adam Eyres

How to transport damas in country: Small aircraft issues



Photo credit: John Newby

Marking out
the airstrip
outside
Salal



Photo credit: John Newby

Sedation Trial

- Preplanning:
 - Sedation testing performed at Fossil Rim
 - Immobilized one of our females and mimicked the situation in the Manga
 - Were able to confirm adequate doses for chemical restraint that would last 4-5 hours



Field Sedation

- Sedation for transport
 - Given once crated:
 - Long acting sedation (onset in 8-12 hours):
 - Zuclopenthixol
 - Given when loaded onto plane / helicopter:
 - Immediate acting sedation (onset in minutes) as needed:
 - Haloperidol
 - Midazolam

Placed jugular
IV catheter



Photo credit: John Newby

Placed hobbles,
blindfold,
ear plugs



Photo credit: John Newby



Ecology Specialists



Photo credit: Mike Maslanka

Veterinary Capture Specialists



Photo credit: Charlotte Moueix

Photo credit: Justin Chuven



Pilots



Photo credit: Adam Eyres

Photo credit: Justin Chuven



Tracking Specialists

Photo credit: Tim Wachter



Sedated dama gazelle in transport

Husbandry Specialists



Photo credit: John Newby

Photo credit: John Newby

Photo credit: Adam Eyres



Logistics Specialists



Photo credit: John Newby



Government Representatives

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Photo credit: John Newby