

# Monitoring of dama gazelles on Takolokouzet massif

*Field Report*

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November 2021

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SAHARA CONSERVATION FUND

Abdoul Razack MOUSSA ZABEIROU  
Project officer





## Acknowledgements

We would like to thank the Niger Wildlife authorities and the Management Unit of the Aïr and Ténéré National Natural Reserve (ATNNR) for their support and the participation of their agents during field mission.

Thank you to Rufford for their trust and financial support, making the implementation of these activities possible.

Finally, we want to thank Moussa Elze, our community guard and guide, who accompanies us in our work and during each mission, and who plays an important role for the conservation of the dama gazelles in the (ATNNR).

## Participants

Abdoul Razack Moussa Zabeirou (SCF Project Officer)

Ahmed Oumarou (SCF Driver)

Abdoul Razakou Abdou Mahamadou (SCF Intern)

Moussa Elze (Community guard from Azanyaress)

Mourtala Saley (RNNAT Management unit head officer)

Soufianou (RNNAT Management unit officer)

Abbagaya Balil (RNNAT Management unit officer)



*Illustration 1: Picture of the participants*

## Introduction

The ATNNR is one of the largest protected areas in Africa, covering 7.7 million ha. It includes several overlapping reserves designations including UNESCO World Heritage Site, Biosphere Reserve (Aïr et Ténéré), Ramsar Site (Gueltas et Oasis de l'Aïr) and an Important Bird and Biodiversity Area. It covers both the eastern half of the Aïr Mountains and the western sections of the Ténéré desert. The reserve boasts an outstanding variety of landscapes, plant species and wild animals.

However, the ATNNR has been on the list of World Heritage sites in Danger since 1992, due to the rebellion episodes in the area between 1992 and 2008, which considerably disrupted wildlife resources.

Due its inaccessibility, the Mount Takolokouzet, located within the ATNNR, became one of the last refuges for wildlife, including for dama gazelles (*Nanger dama dama*), one of the most threatened antelopes on earth. .

A project funded by the African World Heritage Fund and the Sahara Conservation Fund (SCF) supports since 2017 conservation efforts carried out in the region. The objective is to be able to remove ATNNR from the list of World Heritage Properties in Danger in which it has been placed for more than two (2) decades.

Since 2017, SCF has been working to improve the knowledge on one of the last remaining dama gazelle populations, leading conservation and monitoring activities combining the use of camera traps and field missions.

This latest mission was carried out from November 3 to 12, 2021, in close collaboration with the wildlife authorities and the Regional Directorate of the Environment of Agadez and supported by ATNNR Management Unit officers and a community guards as a guide.

## Objectives

This report aims at presenting the work done and results achieved during the latest dama gazelle field-monitoring mission, led in November 2021 in the ATNNR.

More specifically this mission aimed at:

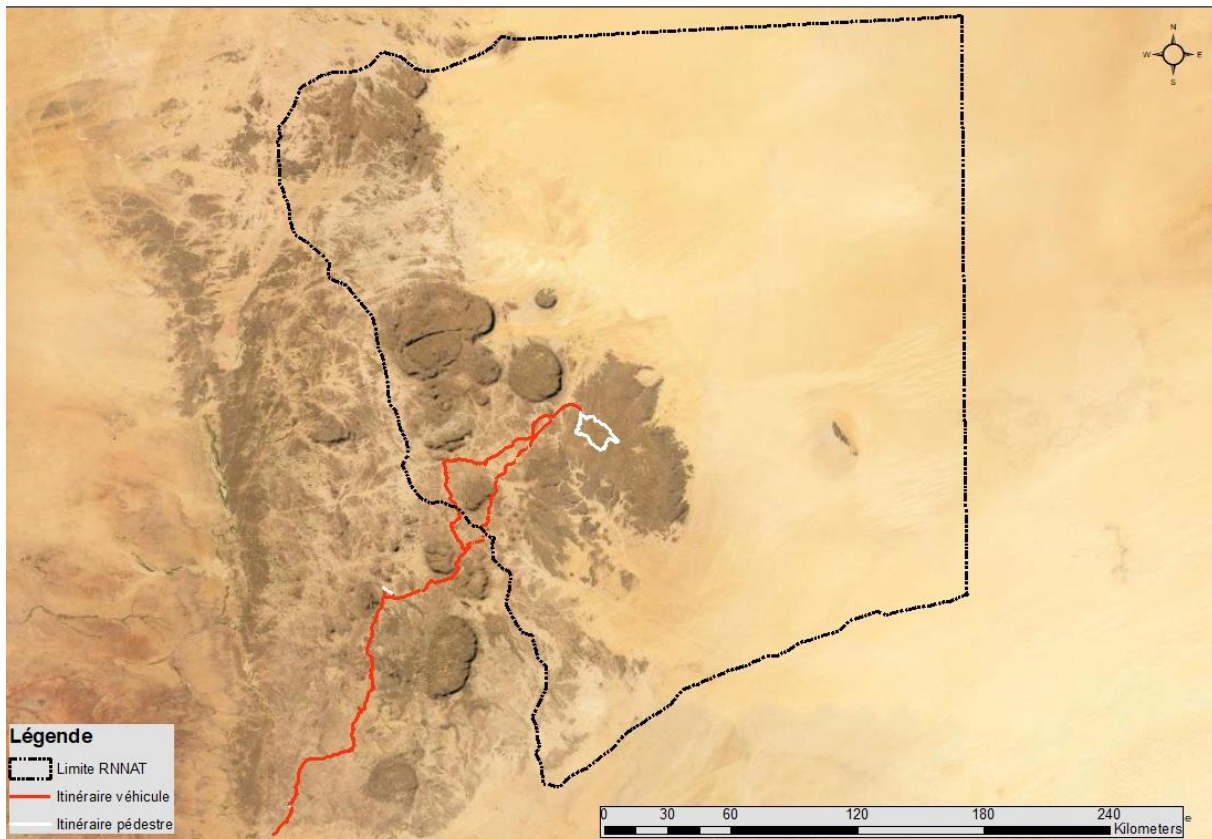
- Collecting data on the population of dama gazelles on the Takolokouzet massif, through direct and indirect observations;
- Monitoring all encountered fauna species ;
- Recording the threats and signs of anthropic pressure on and around the Takolokouzet massif ;
- Initiating a study on the human dimension and the perception of local communities of wildlife in general and dama gazelles in particular;
- Meeting and discussing with the community guards recruited by SCF.

## 1. Itinerary

In order to achieve the objectives, set, the field mission was organized as follows:

- Niamey- Agadez : For SCF team ;
- Iférouane-Agadez : For the ATNNR Management Unit ;
- Agadez - Azanyaress : For the whole team ;
- Ascent on the Takoloukouzet mount (hiking): Four (4) people (SCF, UGAP).

All travels, except on the Takoloukouzet massif, were done by car or plane. The itinerary followed by the mission from Agadez is shown on the map below.



*Illustration 2: Itinerary followed during the mission*

## 2. Ecological monitoring

Due to the inaccessibility of Mount Takolokouzet, the ecological monitoring mission was done on foot, with camels for the transportation of luggage and equipment.

All observations of fauna, flora, domestic livestock and human activities were recorded with the Cybertracker ©.

It is important to note that the Takolokouzet massif is mountainous and steep, making wildlife sighting relatively difficult.





*Illustration 3: The team during the field monitoring on the Takolokouzet massif*

### **2.2.1 Fauna**

#### **Dama gazelle**

During this mission, seven (7) dama gazelles were recorded during three (3) direct observations. The groups were composed as follows:

- 1 One (1) male and two (2) females ;
- 2 Two (2) females and one (1) young ;
- 3 One (1) solitary male surrounded by the tracks of a female.



*Illustration 4: Direct observations of dama gazelles*

This is the biggest number of dama gazelle observed since 2018. Considering the group compositions, these observations are promising, proving that the numbers and distributions of dama gazelles within this population are favorable for the reproduction of the species.

Several indirect observations were also made: In total, footprints and feces were found at eight different locations. Feces were collected for analysis.



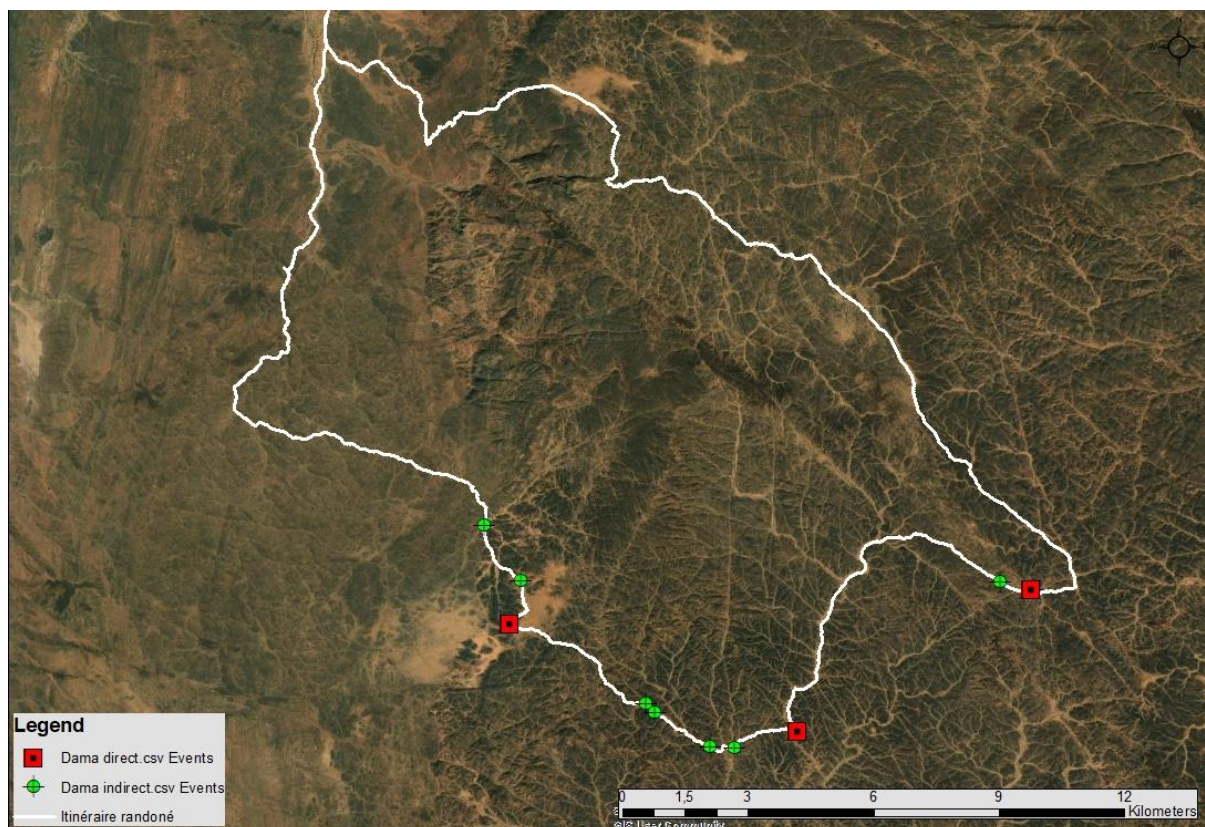


Illustration 5: Direct and indirect observations of dama gazelles on Takolokouzet massif in November 2021

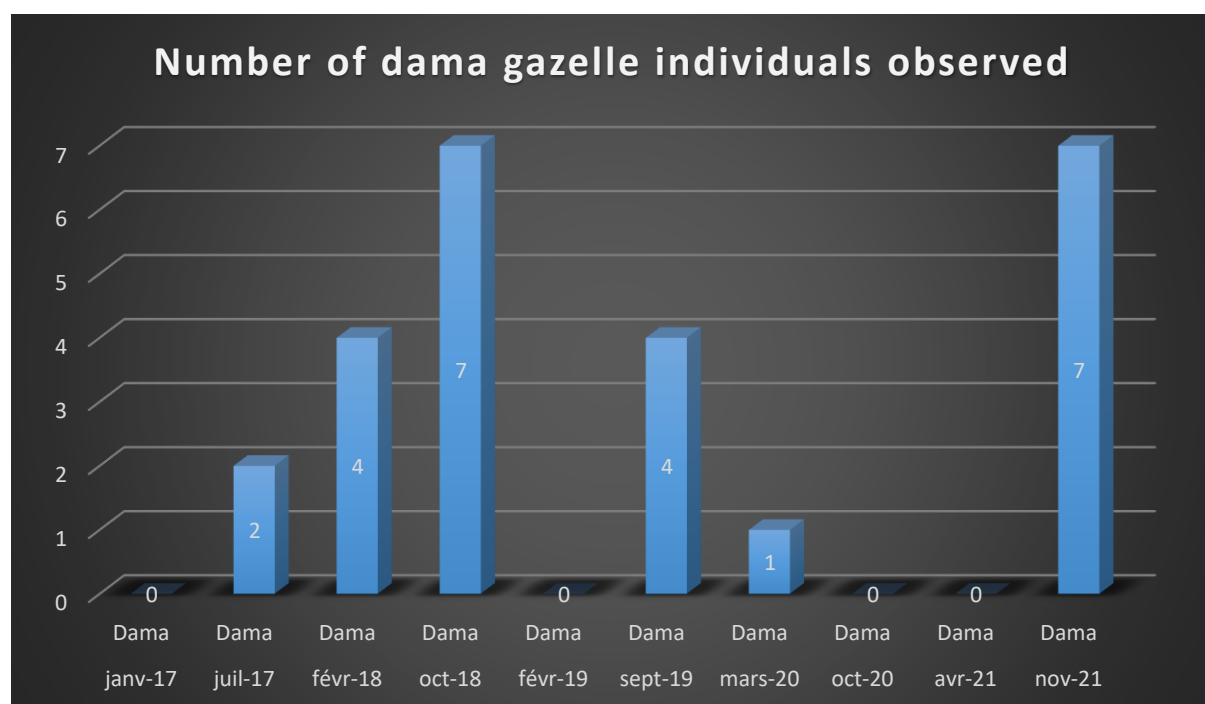


Illustration 6: Summary of direct observations of dama gazelles made since the beginning of monitoring by SCF (2017)

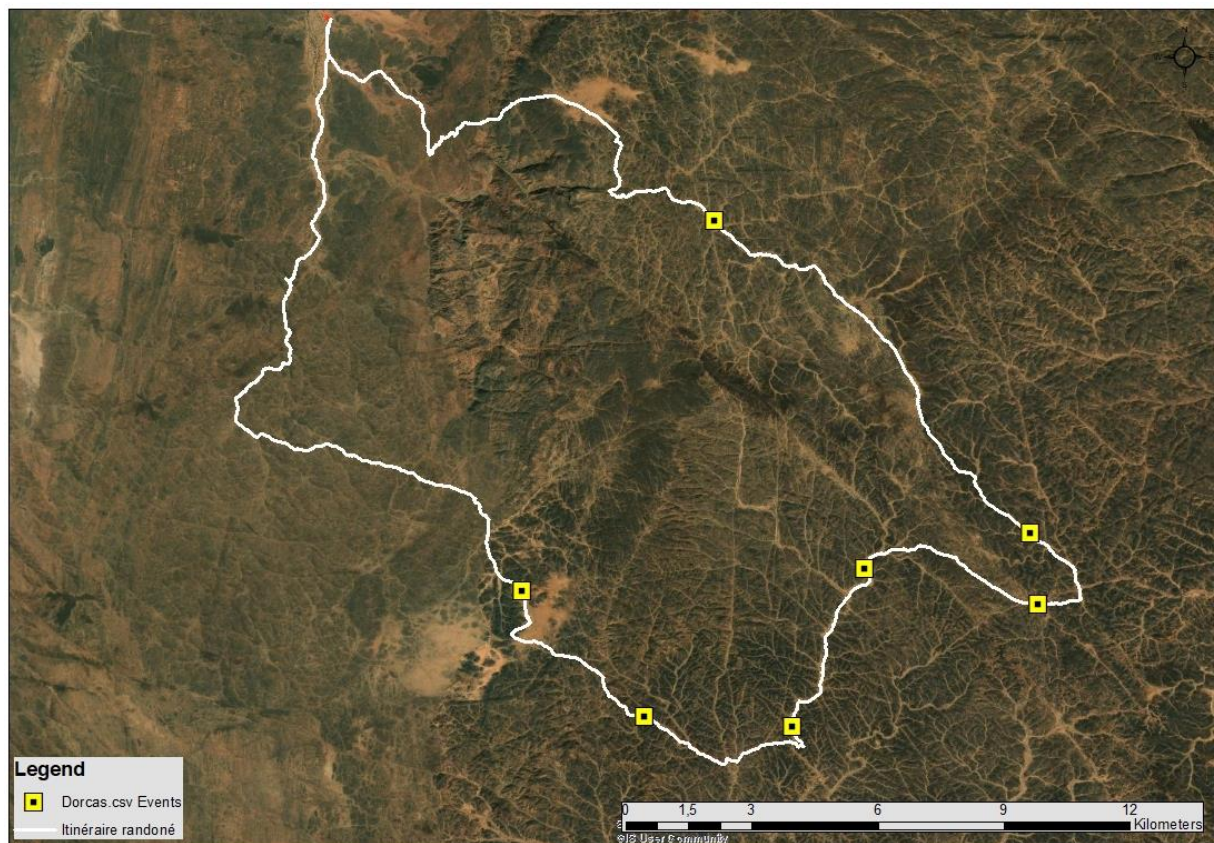
### Gazelle Dorcas

Seventeenth dorcas gazelles were counted during this mission, spread out in five (5) groups. In average, there were three (3) individuals per group and a mileage index of abundance (IKA) of 2.8%.





*Illustration 7 : Direct observation of dorcas gazelle*



*Illustration 8: Summary of the dorcas gazelle sightings made in November on Takolokouzet massif*

It is important to note that the majority of direct or indirect observations of gazelles, all species included, were made in the southeastern part of the massif.



### **Barbary sheep**

A group of six (6) Barbary sheep was observed during the mission. Usually, only solitary individuals or pairs of Barbary sheep are observed; Therefore, since the beginning of the monitoring in 2017, this is the largest herd ever observed.



*Illustration 9: Sighting of a group of six (6) Barbary sheep*

### **2.2.2 Habitat**

Habitat evaluation points were carried out during this mission, i.e. general evaluations of the habitat and its state of degradation or conservation. The result was rather satisfactory given that no destruction was noted, not even wood cutting, a relatively frequent practice in the area.

### **2.2.3 Anthropic activities**

The search for gold and the set-up of illegal gold processing sites in the ATNNR and on Mount Takoloukouzet constitute a real danger for wildlife in general and for the dama gazelle in particular. Similarly, to previous missions, there were signs of both. Anthropogenic activities seem to be increasing in intensity in the area, causing greater disturbance.

### **2.2.4 Poaching**

A case of poaching on dorcas gazelle was noted and many motorcycle tracks were observed on the massif.





*Illustration 10: Carcass of a poached dorcas gazelle (left) and motorcycle tracks observed on the Takolokouzet massif (right)*

### **3. Study on human dimension**

In order to improve the knowledge on one of the last populations of dama gazelle in Niger and understand the ATNNR local community awareness on the specie, a protocol to study human dimension was designed. A student, native of the area, was contracted to conduct questionnaires with local communities. The questionnaires were structured in several parts and focused on the general knowledge on the species, its conservation status, threats, the benefits this species can provide, and the conservation measures in place.

During this mission in November 2021, a pilot phase was initiated and several questionnaires were administered. In total, 34 participants were interviewed. The people surveyed were nomads, living in the periphery or inside the reserve. Two municipalities (Timia and Iferouane) were targeted for this study. As recommended by the methodology, the sampling was random, mixing people from different gender and age group. At least 100 interviews will be further realized to complete the study.



*Illustration 11: Student conducting interviews in Timia*



## **Conclusion**

The ATNNR and the Takolokouzet massif in particular, are full of exceptional values in terms of landscapes and wildlife wealth. The results obtained during this last mission are positive. The numbers of dama gazelles and Barbary sheep observed are the highest since the beginning of the monitoring initiated by SCF in 2017. Additionally, they suggest that this dama population may be viable.

Unfortunately, the ATNNR and its fauna are threatened by gold panning activities and many indications of anthropic activities and poaching have been noted during this year.

Therefore, we recommend that the government and partners put in place an emergency plan to secure important areas such as the Takouloukozet massif.

With a strong collaboration of local communities and a reinforcement of the surveillance of the massif, we have every reason to hope to save the dama gazelles in this region (which constitutes one of the last three wild metapopulations).