

Twiga Tracker Initiative: Giraffe Tagging Report

Northwest Conservancies, Namibia

3 -10 August 2023

Background

The Giraffe Conservation Foundation's Northwest Namibia programme focuses on supporting the long-term conservation research efforts of Namibia's desert-dwelling Angolan giraffe (*Giraffa giraffa angolensis*). With only a few millimetres of annual rainfall, northwest Namibia is arid to hyper-arid and the wildlife living here is well adapted to this harsh environment. The Angolan giraffe is a subspecies of the southern giraffe (*G. giraffa*), and they roam the northern Namib Desert in the far northwest of the country. Our study area covers about 30,000 km² in communal conservancies and the wilderness area of the Skeleton Coast National Park.

There are approximately 450 desert-dwelling giraffe in our study area in northwest Namibia. They are dispersed throughout the lower river systems of the Hoanib, Hoarusib and Khumib Rivers and extend north to the Angolan border. Our long-term population monitoring has documented a steady increase in numbers and distribution since the late 1990s. To understand giraffe movements in the area, we have targeted focal individuals for long-term spatial (habitat) use studies. Some of these GPS units have provided data for more than 5 years. This is longest and largest study of such nature to date.

Objective

The objective of this trip was to remove older Savannah Tracking GPS satellite ossi-units, which were nearing the end of their battery life, and replace them with solar charged CERES Trace and GSAT Solar ear tags. In addition to providing quality space-use data, information from these two different units fitted to the same giraffe will drive a valuable comparative study to help us determine which technologies are most appropriate for our Africa-wide conservation science programmes. We also sought to expand the coverage of our telemetry dataset by tagging additional giraffe in the upper Ganamub River area, which is a so far understudied but potentially valuable

corridor for giraffe movements through this hyper-arid environment.

Results

We safely immobilised and (re)tagged five giraffe (three male and two female) with new GPS ear tag units. Two of these giraffe (Ben and Ranger) were first tagged in 2018. The ossi-units and all associated hardware were removed and two new GPS ear tags were fitted to both their ears for comparison. Importantly, their ossicones appeared healthy with no signs of infection or damage caused by the ossi-units. During the trip, we located and visually inspected two additional giraffe with their ossi-units still attached. Both Wrinkle and Present's ossi-units still transmit quality location data and we were satisfied with our visual inspection. There was no need to replace these units yet.

Additionally, we tagged two giraffe that were first identified in the Hoarusib River but now appear to transition between the Hoarusib and the Hoanib Rivers including the upper Ganamub River. Opal, another giraffe was newly tagged. She was last seen in 2021, so studying her movements may guide future population monitoring.

We hope tagging these new tags will provide valuable data on how these giraffe travel between the river systems, and how they socially interact with each other and other individuals.

All important data collected during the trip such as giraffe photos, veterinary data, samples, etc. were added to our database for record keeping and for further analyses.

Acknowledgements

We thank our donors for their financial support, the Namibian Ministry of Environment, Forestry and Tourism, and the Puros and Sesfontein Conservancies for the continued support and collaboration by allowing us to carry out our programme in their respective areas.

