

OPERATION SAHEL GIRAFFE

**Translocation and post-translocation monitoring of
West African giraffe from Koure to Gadabedji
Biosphere Reserve, Niger**

December 2018



@giraffe_conservation



@giraffeconservationfoundation



@Save_Giraffe



The world's last remaining population of West African giraffe (*Giraffa camelopardalis peralta*), a subspecies of the Northern giraffe (*G. camelopardalis*), has historically been restricted to the 'Giraffe Zone' in the Republic of Niger, an area approximately 60km south-east of the capital Niamey. Even though the 'Giraffe Zone' is not formally protected, it forms part of the W Transboundary Biosphere Reserve, covering more than 1,700 km². These West African giraffe are an isolated population and the closest population of giraffe are Kordofan giraffe (*G. c. antiquorum*) living more than 2,000km away in northern Cameroon and southern Chad.

After a year of discussions, planning and raising the necessary support, *Operation Sahel Giraffe* commenced in early November 2018. Eight giraffe were individually captured in the 'Giraffe Zone' and transferred to a holding pen (boma), where they were kept for more than three weeks to prepare them for the long journey to Gadabedji Biosphere Reserve (BR). The eight giraffe were transported in two groups of four individuals, an arduous journey for both the giraffe and the team, before their successful releases in late November and early December in Gadabedji BR.

Giraffe became locally extinct in the Gadabedji BR area approximately 50 years ago due to drought and illegal hunting. Since 2013 Niger's Wildlife Authority, with support from the Niger Fauna Corridor Project/UNDP, has worked diligently towards restoring the region's wildlife and their habitat. The re-introduction of giraffe further enriches the reserve's biodiversity and contribute to increasing community development and support in the region.

The Giraffe Conservation Foundation (GCF) and the Sahara Conservation Fund (SCF) have worked collaboratively alongside Niger's Ministry of Environment and local communities since 2005, supporting the conservation science and management of West African giraffe in Niger to secure their future. Since the late 2000s, Africa's first-ever National Giraffe Conservation Strategy has guided giraffe conservation efforts in the country. Re-introducing West African giraffe into safe areas within their historical range is a key component of the National Strategy, which is expected to benefit both local communities and wildlife equally. This new founding population in Gadabedji BR is a critical first step towards the reserve's development as a flagship wildlife reserve in Niger.

Operation Sahel Giraffe was coordinated by GCF with the support of SCF to assist Niger's Ministry of Environment and the Niger Fauna Corridor Project/UNDP in undertaking the translocation. Below is an account of activities that were undertaken during the entire operation including preparation for the giraffe's arrival in Gadebedji BR, pre and post translocation and during the actual translocation.





Figure 1: Last remaining population of West African giraffe occurs in Kouré in Niger. The first-ever translocation of West African giraffe was undertaken in November/December 2018 to re-introduction giraffe into Gadabedji Biosphere Reserve, Niger.



Preparation for the translocation in the Gadabedji BR:

24-25 November

- The local Gadabedji BR management team arranged for the building of a temporary boma in the core area of the reserve and digging of a ramp to release the giraffe safely.

26 November

- The local Gadabedji BR management finalised the ramp to release the translocated giraffe into a boma before releasing them with the support of GCF team.
- The local Gadabedji BR management coordinated the clearing of 75% of the translocation route along the sandy track with support from the GCF team.



Figure 2: Giraffe boma in Kouré.

First translocation from Koure to Gadabedji BR:

25 November

- The first four giraffe were isolated in the boma (first section) at 9:30am and shortly after entered the translocation truck.
- At 10:15am the translocation truck left the boma.
- The translocation truck filled up with fuel at Dosso town around midday.
- First stop: the translocation truck stopped at Dogondoutchi town at 4:30pm to feed the giraffe (fresh *Faidherbia albida* branches and melons) and continued its journey at 7pm.
- Second stop: the translocation truck stopped at Binni Konne town at 11pm to feed the giraffe (melons) and continued its journey at 2am (26 November).



Figure 3: Feeding the giraffe in the boma, Kouré.

26 November

- Third stop: the translocation truck stopped between Madaoua and Gidan Roudji towns at 6am to feed the giraffe (fresh *F. albida* branches) and continued its journey at 8am
- Fourth stop: the translocation truck stopped approx. 10km south of Dokoro town at midday to feed the giraffe (fresh *F. albida* branches) and continued its journey at 4:30pm
- Fifth stop: the translocation truck stopped at the Dokoro - Gadabedji junction turn off on laterite (gravel) from Dakoro town at 7pm to meet the local Gadabedji BR management team. It continued its journey at 7:30pm.
- Sixth stop: the translocation truck stopped along the sandy track to Gadabedji village at 10:30pm to feed the giraffe (fresh *F. albida* branches and melons) and continued its journey at 1:30am (27 December).

27 November

- The translocation truck passed through the Gadabedji village at 7:30am
- The translocation truck arrived at the boma release site at 5am and the team waited for sunrise at 6:30am.
- At 8:30am the translocation truck was parked at the boma and everything was prepared for a secure release of the giraffe.
- The first group of four giraffe were safely released at 9:30am.



Figure 4: Reversing of the translocation truck into the ramp at Gadabedji Biosphere Reserve before releasing the giraffe.

Second translocation from Koure to Gadabedji BR:

29 November

- The last four giraffe were isolated in the first section of the boma at 8:30am and entered the translocation truck at 9:30am.
- At 10am the translocation truck left the boma.
- The translocation truck filled up with fuel at Dosso town
- First stop: the translocation truck stopped at Dogondoutchi town at 4:30pm to feed the giraffe (fresh *F. albida* branches) and continued its journey at 6pm.
- Second stop: the translocation truck stopped at Binni Konne town at 10pm to feed the giraffe (melons and *F. albida* pods) and continued its journey at 1:15am (30 November).

30 November

- Third stop: the translocation truck stopped at Zouboire town (approx. 20km south of Dokoro junction) at 6am to feed the giraffe (fresh *F. albida* branches) and continued its journey at 8:15am.
- Fourth stop: the translocation truck stopped approx. 10km south of Dokoro town at 11:15am to meet three Ministers who came to visit the release site and see the giraffe. The truck continued its journey at 12 midday.
- The translocation truck filled up with fuel at Dakoro town.
- Fifth stop: the translocation truck stopped between Dokoro town and Gadabedji junction turn off on laterite (gravel) at 2pm to feed the giraffe (fresh *F. albida* branches) and continued its journey at 4:10pm.
- Sixth stop: the translocation truck stopped on the sandy track to Gadabedji village at 9:15pm to feed the giraffe (melons and *F. albida* pods) and left the overnight rest area at 3:30am (1 December).



1 December

- The translocation truck arrived at the boma release site at 5am, where the team waited until sunrise at 6:30am.
- At sunrise the translocation truck was parked at the boma and everything was prepared for a secure release of the giraffe.
- The second group of giraffe were safely released at 7:30am (Figure 4)

Post-translocation monitoring

Following the release of the giraffe, the animals were monitored to ensure their safety and track their health. Below is a day-by-day brief account of observations of the first three weeks post-translocations.

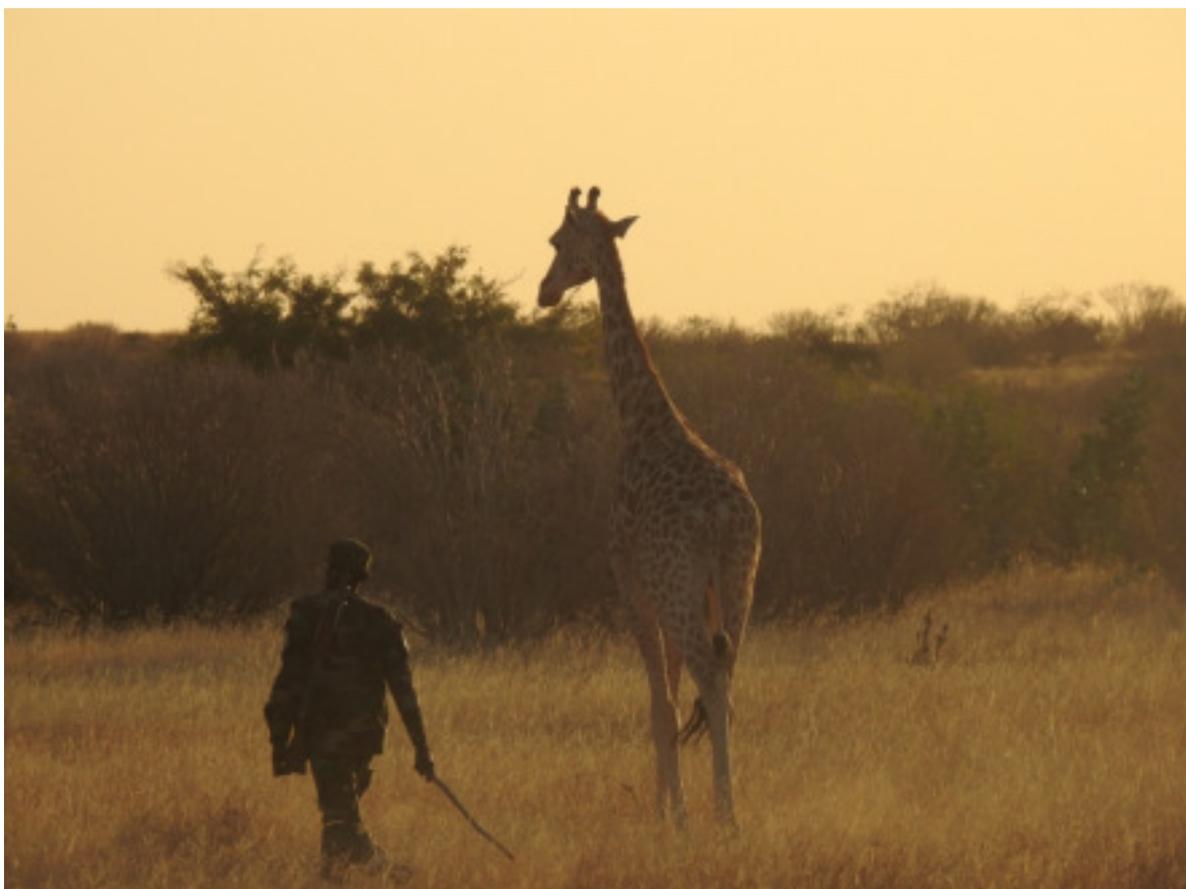


Figure 5: Moving the giraffe back into the Gadabedji Biosphere Reserve.

28 November

- 1pm: solitary male (GDBM2) was observed walking to the north east (N 15⁰09.748', E 007⁰ 0.5210').
- It appeared that the giraffe was herded by two men on a motorbike who had found him outside of the reserve and pushed him towards the direction where other giraffe were spotted.
- 2:11pm: the tracks of two other giraffe (GDBM3 and GDBF5) were observed walking to the north east and out of the reserve (N 15⁰ 12.986' E 007⁰ 03. 809' / N 15⁰ 13. 023' E 007⁰ 04. 480' / N 15⁰ 10.041' E 007⁰ 09.783').
- The small female (GDBF3) was observed outside the reserve (46km west of camp). No GPS coordinates obtained.



1 December

- 7:30am: the second group of four giraffe (GDBM 1, GDBF1 GDBF2, GDBF4) were released into the reserve.
- 5:50pm: we observed solitary male giraffe (GDBM2) near the boma area.
- 7pm: we received information that the four new giraffe (GDBM 1, GDBF1 GDBF2, GDBF4) released in the morning were seen walking passed the Bikaro village at about 2pm (36km from the boma, N 15° 10.167' E 007° 12.895').
- 6-7pm: the local authority of Egade Moktar travelled 30km to informt the Niger Wildlife Authority that the four giraffe were observed far outside the reserve (N 15° 27.155' E 007° 29.674').

2 December

- 8am: we visited the Bikaro village where the four giraffe (GDBM 1, GDBF1 GDBF2, GDBF4) were spotted the previous day. The giraffe walked approx. 40km in the first six hours after their release. The local community tried to push the giraffe back towards the reserve but the large female (GDBF1) became slightly aggressive.
- 10:50am: we visited the Egade Moktar village where the four giraffe were seen the previous day. The adults did not know that those were giraffe, only children knew it because they learned about them in school. We continued to follow the tracks north east and stopped approx. 70km from Gadabedji.
- 1pm: four giraffe (GDBM 1, GDBF1 GDBF2, GDBF4) were observed approx. 108km from Gadabedji (N 15° 63085' E 007° 89841').
- The small female (GDBF3) was spotted 15km northwest from Gadabedji in the reserve.
- Two giraffe (GDBM3, GDBF5) were observed drinking close to Bammo village (N 15° 27.155' E 007° 29.674') before returning to the reserve.
- The male (GDBM2) was still around the boma (N 15° 10.167' E 007° 12.895').

3 December

- 8:40am: we were informed that one giraffe was observed walking towards the reserve near the Aminatan mai samari village the previous afternoon.
- 10:30am: three giraffe (GDBM2, GDBM3, GDBF5) were observed and we followed them doing behaviour and forage surveys until 3pm (see Table 1 below).
- Four giraffe (GDBM 1, GDBF1, GDBF2, GDBF4) were reportedly spotted 125km from Gadabedji (N 15° 97406' E 007° 74466'). The Wildlife Authority had started to push them back towards the reserve.

5 December

- The Wildlife Authority staff continued to push three giraffe (GDBM 1, GDBF1, GDBF4) back to the reserve. The other giraffe (GDBF 2) was not found and assumed still out of the reserve.

6 December

- 9:30am: three giraffe (GDBM 1, GDBF1, GDBF4) were now reported back in reserve close to the boma (N 15° 10.167' E 007° 12.895'). Scan and focal samplings of the giraffe were



undertaken.

7 December

- 7pm: three giraffe (GDBM 1, GDBF1, GDBF4) were observed approx. 12km from the place where seen the previous day.

8 December

- 10:45am: three giraffe (GDBM 1, GDBF1, GDBF4) were found approx. 9km from the village (N 15° 11.813' E 007° 15.989'). The female giraffe (GDBF1) was possibly limping. We moved the giraffe back into the central area of the park (approx. 3km).
- 3pm: recorded behaviour of the above giraffe for two hours before moving them further towards the central waterpoint (N 15° 10.614' E 007° 14.952').
- One giraffe (GDBF2) was seen near to a village approx 48km from Gadabeji (N 15° 33868' E 007° 39674')

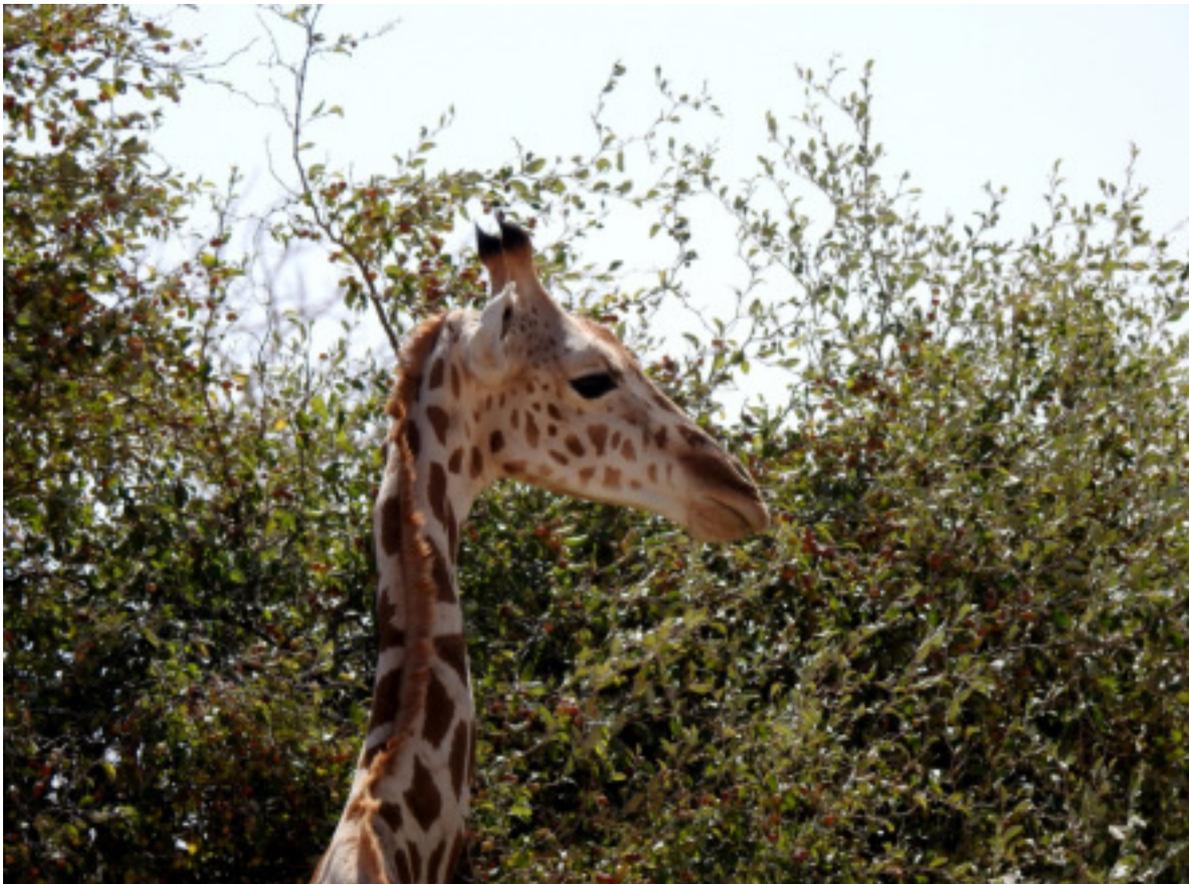


Figure 6: Giraffe browsing on *Ziziphus mauritiana* in the Gadabedji Biosphere Reserve.

9 December

- 9:30am: we observed three giraffe (GDBM 1, GDBF1, GDBF4) near to the boma until 4pm.
- Three giraffe (GDBF2 and two others) were reported to be approx 6km from Gadabedji outside the reserve and pushed back into the reserve.

10 December

- Three giraffe (GDBM 2, GDBM 3, GDBF 5) are reported to be in southwestern part of the reserve near Gadabedji.



11 December

- 12am: we found three giraffe (GDBM2, GDBM3, GDMF5; N 15° 10.614' E 007° 14.952') but their behaviour was unusual. When last seen eight days previously (3 December), I could get close to them, now they were vigilant all afternoon.

12 December

- 11am: two giraffe (GDBM1, GDBF4) were observed until 2pm near the boma (N 15° 38.329' E 007° 54.809'), the big female (GDBF1) had not seen with them since 9 December.
- One giraffe (GDBF1) was observed approx. 110km from the reserve (N 15° 63881' E 007° 91349').

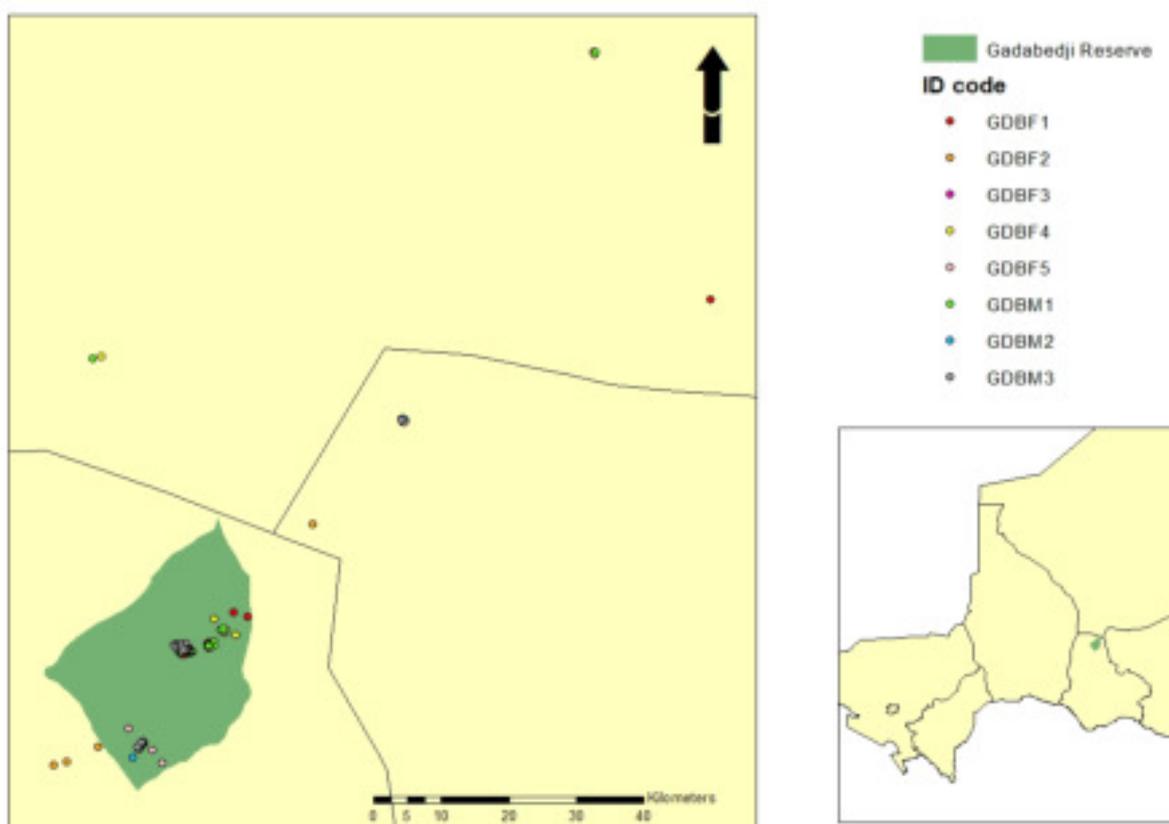


Figure 7: The movement of eight giraffe in the Gadabedji Biosphere Reserve during the first twenty-three days after translocation.

13 December

- 9:20am: two giraffe (GDBM1, GDBF4; N 15° 10.244' E 007° 12.532') were observed and appeared to show unusual behaviour. Despite us staying approx. 100m away and they remained vigilant whilst also trying to run away from us. We observed the giraffe again in the afternoon, and the same reaction was seen.

14 December

- No observations were made in the reserve.
- 1pm: the female giraffe (GDBF1) was moved towards the boma (N 15° 10.167' E 007° 12.895').
- One female giraffe (GDBF 2) was observed approx. 12km outside the reserve (N 15° 00.929 E 007° 02.403) and pushed back to the boma area.

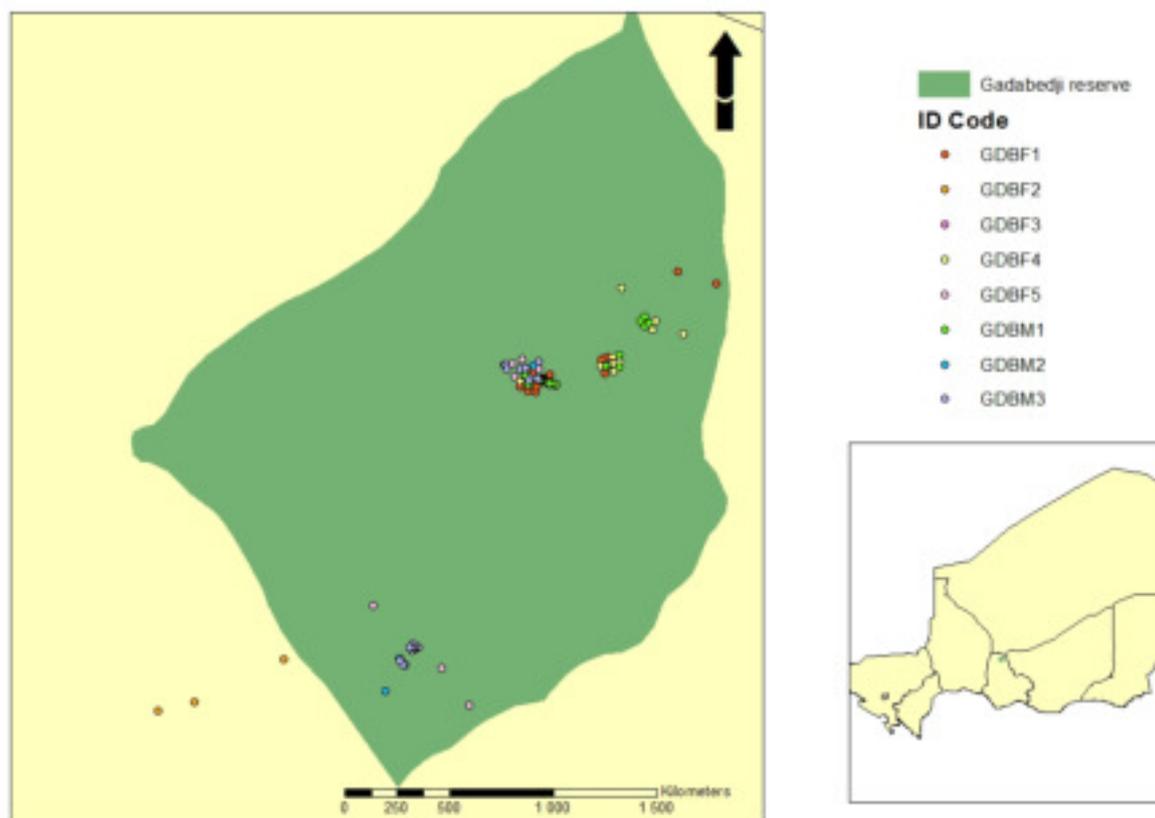


Figure 8: The movement of eight giraffe in the Gadabedji Biosphere Reserve during the first twenty-three days after translocation.

15 December

- 11:20am: two giraffe (GDBF1, GDBF2) were observed (N 15° 10.064 E 007° 13.22) until 4pm.

16 December

- Two giraffe (GDBF1, GDBF2) were spotted on the boma area.

17 December

- 10:30am: two giraffe (GDBF1, GDBF2; N 15° 10.069 E 007° 13.141) were observed and behaviour surveys undertaken.
- 5pm: two giraffe (GDBM1, GDBF4) were observed (N 14° 93892 E 007° 05928) and moved towards the boma area in the late evening.

19 December

- Five giraffe (GDBM1, GDBM2, GDBM3, GDBF4, GDBF5) observed together in the boma area (N 15° 10.167' E 007° 12.895')

20 December

- Two additional giraffe (GDBF1, GDBF2) joined the herd of five giraffe from previous day (19 December) to form a herd of seven giraffe (GDBM1, GDBM2, GDBM3, GDBF4, GDBF5, GDBF1, GDBF2). The giraffe were observed in the release boma area (N 15° 10.167' E 007° 12.895').



Feeding preference:

During the first few weeks in their new home in Gadabedji BR the giraffe were observed feeding on the following species:

Balanites aegyptiaca, *Bauhinia rufescens*, *Faidherbia albida*, *Maerua crassifolia*, *Sclerocarya birrea*, *Senegalia Senegal*, *Vachellia nilotica*, *Vachellia radiana*, and *Ziziphus mauritiana*.

Acknowledgement

Valuable support was provided by Ivan Carter's Wildlife Conservation Alliance, San Diego Zoo Global, Saint Louis Zoo, Born Free and Czech University of Life Sciences Prague. Further field support was provided by Dr Pete Morkel, Dr Philippe Chardonnet, Niger Directorate of Veterinary Services, AVEN team, Cheri Morkel, David O'Connor (San Diego Zoo Global), Dr Liza Dadone (Cheyenne Mountain Zoo), Andrea Bryant, Ivan Carter and Sean Viljoen.

Operation Sahel Giraffe was implemented collaboratively by



This report was compiled by Kateřina Gašparová (Czech University of Life Sciences, Faculty of Tropical AgriScience) and GCF.