



Gadabedji Biosphere Reserve
Giraffe post-translocation monitoring
January 2020



Abdoul Razack Moussa Zabeirou
Project officer GCF-SCF/Niger

ACKNOWLEDGEMENTS

We would like to thank the Nigerien Wildlife Authorities for their valuable support and for the permission to undertake the work. Particularly, we would like to thank the wildlife authorities' members and rangers. Importantly, we would like to thank IUCN-SOS and European Commission, Born Free Foundation, Ivan Carters Wildlife Conservation Alliance, Saint Louis Zoo, Sahara Conservation Fund, Rufford Small Grant, and GCF for their valuable financial support to the programme.

INTRODUCTION

Located in the Sahelo-Saharan transition zone, the Gadabédji Biosphere Reserve (GBR) covers an area of 1,423,625 ha. In order to ensure the long-term conservation of the West African giraffe (*Giraffa camelopardalis peralta*), the first-ever translocation of West African giraffe was carried out in November - December 2018. During this operation, eight (8) subadult individuals (5 females and 3 males) were captured in Kouré, part of the 'Giraffe Zone' approximately 80 km east of Niamey and translocated approximately 800 km to the GBR in the North Maradi Region, Niger. This conservation translocation was undertaken in accordance with the National Giraffe Conservation Strategy and Action Plan developed by the Ministry of Environment in October 2015, and the subsequent feasibility study undertaken specifically for this translocation of giraffe.

Following the translocation of the giraffe to GBR, two (2) local community ecoguards were recruited by the Giraffe Conservation Foundation (GCF) to ensure close monitoring of the giraffe alongside four (4) ecoguards recruited by the Niger Fauna Corridors Project. Specifically, the monitoring seeks to:

- Regularly monitor the health and social dynamic status of the translocated giraffe.
- Understand their spatial ecology (movements, habitat use, etc.).
- Ongoing education and awareness in the greater GBR community.

Inform and raise awareness among the local populations about the presence of giraffe in the area.

This report presents the key monthly giraffe monitoring data carried out by the ecoguards during January 2020 – following the targeted training, implementation of new methods and introduction of new tools to support this activity with the support of the IUCN SoS European Union project to GCF. Over time, the analysed monitoring data will help provide recommendations on how best to improve the management of the reserve and to conserve this newly reintroduced species.

MATERIALS AND METHODS

The equipment used during the monitoring includes:

- Three (3) motorcycles.

- Two (2) GPS Garmin InReach+ (N.B. during monitoring surveys, GPS coordinates are recorded every 10 minutes and tracks are automatically stored).
- Two (2) Cybertracker handheld devices.

During the data collection, the following methods was used by the ecoguards:

- Everyday members of the ecoguards crisscross the GBR valleys where they anticipate the giraffe to be within the reserve.
- Communicate regularly with the local human population around GBR about the presence of giraffe in their area.
- Inform and raise awareness about giraffe in the local human population around GBR.

RESULTS

During January 2020, the GBR ecoguards travelled approximately 1 395 km during the monitoring surveys at an average of 46,5 km per day. During this period, they were able to ascertain a large number of GPS positions, habitats and observed different behaviours of the giraffe. At such high resolution, it is possible to start assessing their forage behaviour (which plant species are browsed) and their physical condition (health).

In January 2020 we observed that the giraffe predominantly remained within the GBR. However, two movements out of the GBR to the:

- south of the reserve approximately 25 km (8 giraffe – 5 females and 3 male)
- south of the reserve approximately 40 km (8 giraffe – 5 females and 3 male))

It is likely that these movements were facilitated by seeking better access to forage. the south from the Reserve is an area covered with *Faidherbia Albida* where the giraffes were found. Ecoguards had to bring them back to the Reserve.

Some interesting behaviours observed by the ecoguards during January 2020 include:

- The giraffe started drinking water from the farmers wells.
- During the whole month the giraffe visited the Filio pond only once since they started to drink water from the wells.
- Fighting (necking) between males when reunited after spending few days
- The giraffe had stayed together for the whole month as one group.
- Most commonly foraged species: *Balanites aegyptiaca*, *Bauhinia rufescens*, *Bosnia senegalensis*, *Casia italica*, *Citrullus colocynthis*, *Faidherbia albida*, *Guera senegalensis*, *Maerua crassifolia*, *Pilostigma reticulatum*, *Sclerocarya birrea*, *Senegalia senegal*, *V. ehrenbergiana*, *V. tortillis radiana*, *Vachellia nilotica*, *Ziziphus mauritiana*.

NB: It should be noted that giraffe have a preference for *Z. mauritiana* and *F. albida*, and *acacia seyal*, *acacia radiana* which coincides with the flowering period. whilst the least liked are *B. aegyptiaca* and *V. nilotica*.

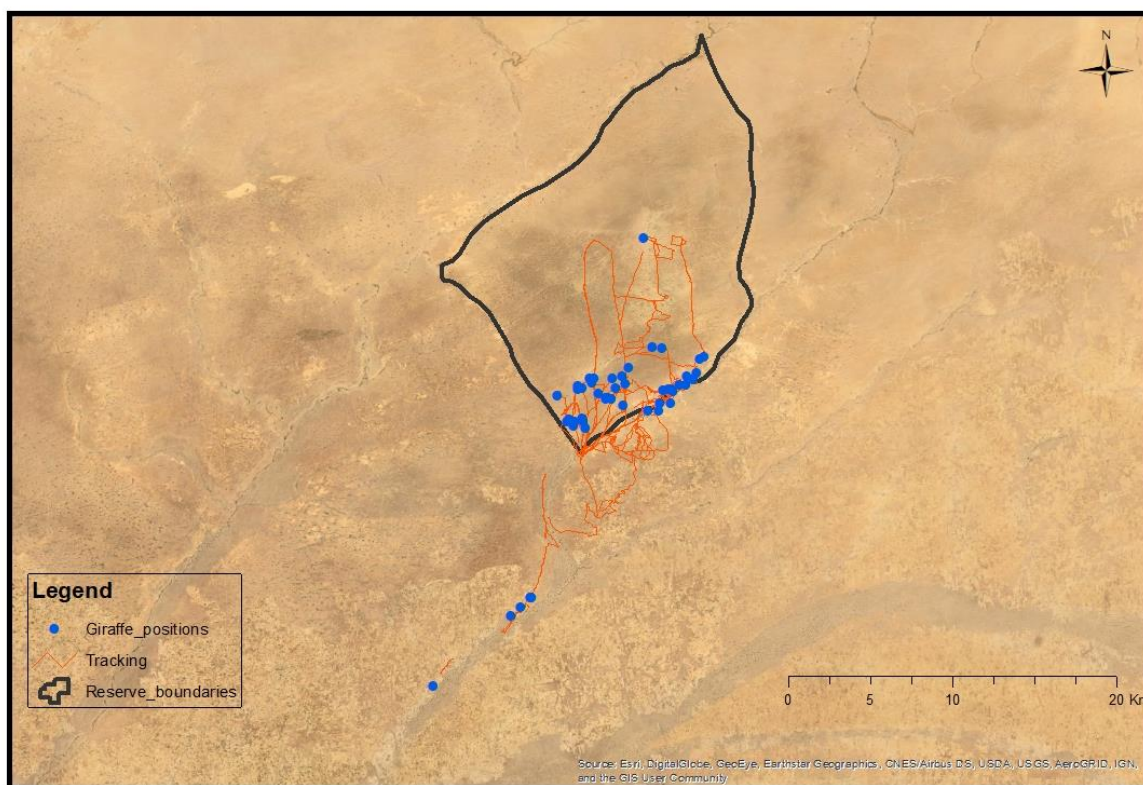


Figure: Giraffe locations and survey track during the January 2020 monitoring in Gadabedji Biosphere Reserve.

This above map and below table show the distributions of the giraffe during a monitoring in January 2020.

Number	Date	Time	Longitude	Latitude	Ecoguard Name	No. of giraffe
1	01/01/2020	17:59:23	7,250166667	15,04433833	Torodo	8
2	01/01/2020	18:07:56	7,244838333	15,04709333	Torodo	8
3	02/01/2020	09:11:35	7,255873333	15,06254833	Torodo	8
4	02/01/2020	12:51:22	7,260048333	15,06405333	Torodo	8
5	03/01/2020	10:02:30	7,222865	15,072385	Torodo	8
6	03/01/2020	14:11:47	7,237461667	15,04015833	Barka	8
7	03/01/2020	18:25:28	7,227976667	15,03609167	Barka	8
8	04/01/2020	18:34:26	7,173158333	15,02852667	Barka	8
9	05/01/2020	06:58:09	7,173165	15,02721667	Barka	8
10	05/01/2020	12:04:17	7,178185	15,02703833	Ahmed	8
11	05/01/2020	14:50:33	7,151841667	15,01051	Ahmed	8
12	05/01/2020	17:42:00	7,138756667	15,00729833	Ahmed	8
13	07/01/2020	10:19:39	7,148441667	15,03580833	Barka	8
14	08/01/2020	11:57:33	7,148441667	15,03580833	Barka	8
15	08/01/2020	17:36:40	7,148441667	15,03580833	Barka	8

16	09/01/2020	09:11:24	7,187385	15,04731167	Barka	8
17	09/01/2020	17:14:04	7,223206667	15,03470667	Barka	8
18	10/01/2020	08:19:30	7,178913333	15,0457	Barka	8
19	11/01/2020	12:42:54	7,089786667	14,83580833	Ahmed	8
20	11/01/2020	18:09:47	7,106708333	14,85209167	Ahmed	8
21	11/01/2020	18:11:19	7,10701	14,85236667	Ahmed	8
22	11/01/2020	18:11:48	7,107063333	14,85234833	Ahmed	8
23	12/01/2020	09:16:27	7,02089	14,77380167	Ahmed	8
24	12/01/2020	14:44:09	7,098185	14,84325167	Ahmed	8
25	13/01/2020	09:22:07	7,141146667	15,00936833	Ahmed	8
26	13/01/2020	09:23:00	7,141146667	15,00936833	Ahmed	8
27	14/01/2020	10:18:40	7,206506667	15,16870833	Ahmed	8
28	15/01/2020	09:08:53	7,214021667	15,07338833	Torodi	8
29	15/01/2020	15:11:29	7,231743333	15,03422	Torodi	8
30	16/01/2020	06:51:50	7,229985	15,035735	Torodi	8
31	16/01/2020	16:43:01	7,230168333	15,02322333	Torodi	8
32	17/01/2020	07:15:19	7,21042	15,01684667	Torodi	8
33	17/01/2020	10:48:15	7,190036667	15,04046833	Torodi	8
34	17/01/2020	16:55:10	7,182041667	15,03728333	Torodi	8
35	18/01/2020	07:04:09	7,160721667	15,04124167	Torodi	8
36	18/01/2020	15:10:47	7,148325	15,03842833	Barka	8
37	18/01/2020	15:56:27	7,152528333	15,03687	Barka	8
38	19/01/2020	08:15:04	7,166281667	15,03216833	Barka	8
39	19/01/2020	17:26:08	7,188481667	15,02144	Barka	8
40	20/01/2020	08:20:05	7,153166667	15,007005	Barka	8
41	20/01/2020	11:21:44	7,145813333	15,00751333	Barka	8
42	20/01/2020	15:42:04	7,155235	15,00126167	Barka	8
43	21/01/2020	07:51:40	7,130483333	15,03053167	Barka	8
44	21/01/2020	13:22:39	7,162346667	15,04541667	Barka	8
45	21/01/2020	17:16:40	7,14417	15,00378667	Barka	8
46	22/01/2020	08:02:06	7,15919	15,04521667	Barka	8
47	23/01/2020	07:38:08	7,192995	15,05529167	Torodi	8
48	23/01/2020	17:20:37	7,220133333	15,01691333	Torodi	8
49	24/01/2020	07:32:37	7,253333333	15,05002833	Torodi	8
50	24/01/2020	12:20:49	7,244058333	15,03991833	Torodi	8
51	24/01/2020	18:22:14	7,220711667	15,023585	Torodi	8
52	25/01/2020	17:13:59	7,174571667	15,028345	Torodi	8

Table: Recorded distribution of giraffe observed in the Gadabedji Biosphere Reserve in January 2020.

INFORMATION AND AWARENESS RAISING

In addition to the local monitoring, the ecoguards conduct ongoing information and awareness campaigns aimed at the local population in and around the GBR. The community are made aware of the peaceful nature of giraffe and their ability to coexist not only with domestic animals but also humans. The population is regularly made aware of the need to disturb the giraffe excessively, and importantly asked to collaborate with the managers and ecoguards of the Protected Area to better protect the species.

ECOGUARDS TRAINING AND DATA COLLECTING

At the end of January, the ecoguards were trained on how to identify giraffes with the photo albums. and they named them in the mutual agreement. The names were then added to the CyberTracker sequence used for the daily giraffe monitoring. Ecoguards were also provided by the new CrossCall device for the data collection and by the binoculars.



Gadabedji Biosphere Reserve
Giraffe post-translocation monitoring
February 2020



Abdoul Razack Moussa Zabeirou

Project Officer GCF-SCF/Niger

ACKNOWLEDGEMENTS

We would like to thank the Nigerien Wildlife Authorities for their valuable support and for the permission to undertake the work. Particularly, we would like to thank the wildlife authorities' members and rangers. Importantly, we would like to thank IUCN-SOS and European Commission, Born Free Foundation, Ivan Carter Wildlife Conservation Alliance, Saint Louis Zoo, Sahara Conservation Fund, Rufford Small Grant, and GCF for their valuable financial support to the programme.

INTRODUCTION

Located in the Sahelo-Saharan transition zone, the Gadabédji Biosphere Reserve (GBR) covers an area of 1,423,625 ha. In order to ensure the long-term conservation of the West African giraffe (*Giraffa camelopardalis peralta*), the first-ever translocation of West African giraffe was carried out in November - December 2018. During this operation, eight (8) subadult individuals (5 females and 3 males) were captured in Kouré, part of the 'Giraffe Zone' approximately 80 km east of Niamey and translocated approximately 800 km to the GBR in the North Maradi Region, Niger. This conservation translocation was undertaken in accordance with the National Giraffe Conservation Strategy and Action Plan developed by the Ministry of Environment in October 2015, and the subsequent feasibility study undertaken specifically for this translocation of giraffe.

Following the translocation of the giraffe to GBR, two (2) local community ecoguards were recruited by the Giraffe Conservation Foundation (GCF) to ensure close monitoring of the giraffe alongside four (4) ecoguards recruited by the Niger Fauna Corridors Project. Specifically, the monitoring seeks to:

- Regularly monitor the health and social dynamic status of the translocated giraffe.
- Understand their spatial ecology (movements, habitat use, etc.).
- Ongoing education and awareness in the greater GBR community.

Inform and raise awareness among the local populations about the presence of giraffe in the area.

This report presents the key monthly giraffe monitoring data carried out by the ecoguards during January 2020 – following the targeted training, implementation of new methods and introduction of new tools to support this activity with the support of the IUCN SoS European Union project to GCF. Over time, the analysed monitoring data will help provide recommendations on how best to improve the management of the reserve and to conserve this newly reintroduced species.

MATERIALS AND METHODS

The equipment used during the monitoring includes:

- Three (3) motorcycles.

- Two (2) GPS Garmin InReach+ (N.B. during monitoring surveys, GPS coordinates are recorded every 10 minutes and tracks are automatically stored).
- Two (2) Cybertracker handheld devices.

During the data collection, the following methods was used by the ecoguards:

- Everyday members of the ecoguards crisscross the GBR valleys where they anticipate the giraffe to be within the reserve.
- Communicate regularly with the local human population around GBR about the presence of giraffe in their area.
- Inform and raise awareness about giraffe in the local human population around GBR.

RESULTS

During February 2020, the GBR ecoguards travelled approximately 1,432 km during the monitoring surveys at an average of 50 km per day. During this period, they were able to ascertain a large number of GPS positions, habitats and observed different behaviours of the giraffe. At such high resolution, it is possible to start assessing their forage behaviour (which plant species are browsed) and their physical condition (health).

In February 2020 we observed that the giraffe predominantly remained within the GBR. However, one movement out of the GBR was recorded:

Western side of reserve approximately 60 km (2 giraffe – 1 female: Munido and 1 male: Kader) and the ecoguards pushed them back to the GBR.

Some interesting behaviours observed by the ecoguards during February 2020 include:

- Giraffe preferring *Vachellia* (formerly *Acacia*) *seyal*, *V. radiana* and *V. ehrenbergiana* as it is their current flowering period.
- Giraffe drinking at the village waterpoints.
- The presence of domestic livestock does not prevent the giraffe from coming to the waterpoints and cohabiting with them.
- Giraffe left the reserve (into the periphery) and came back themselves without the intervention of the ecoguards.
- Giraffe appear unstressed and are used to cohabiting with the local population.
- Fighting (necking) between males observed.



Figure1: Giraffe browsing *Vachellia* spp.



Figure 2: Giraffe drinking from waterpoint

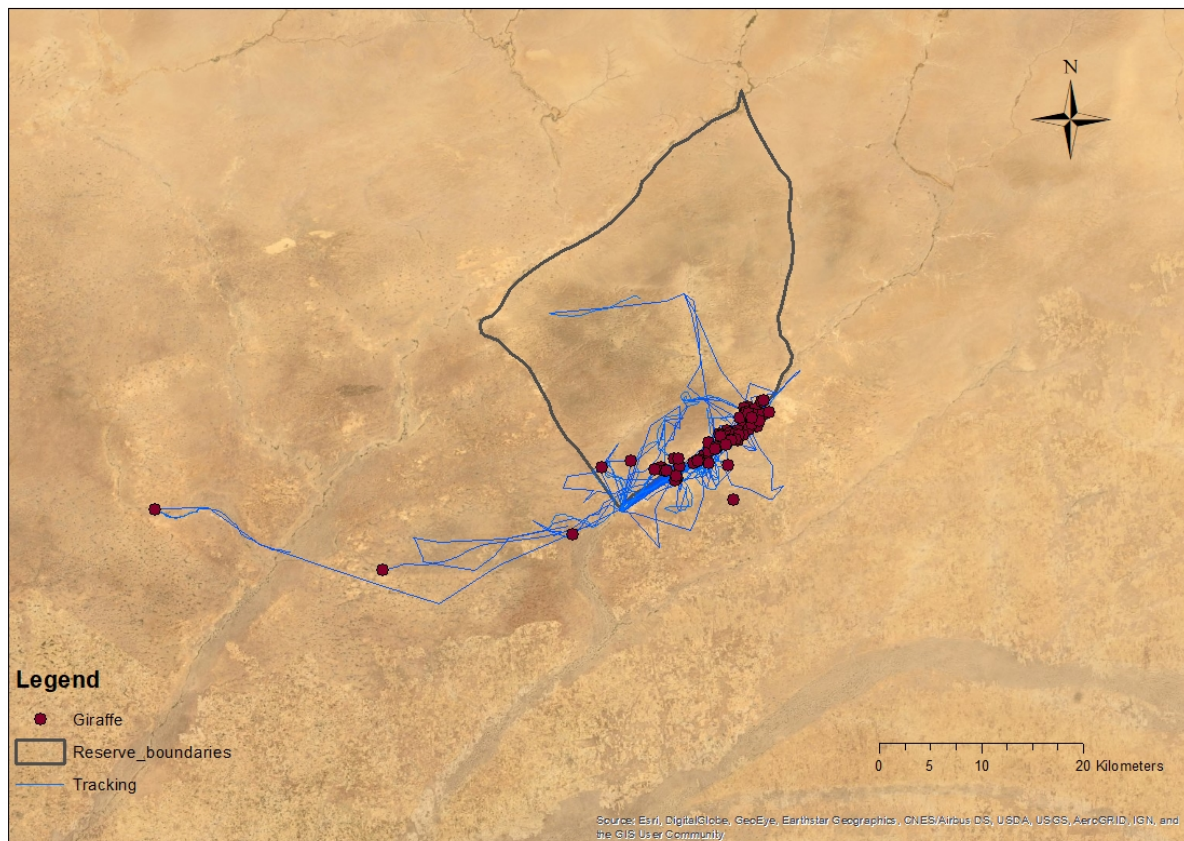


Figure 3: Giraffe locations and survey track during the February 2020 monitoring in Gadabedji Biosphere Reserve and surroundings.

This above map and below table show the distributions of the giraffe during a monitoring in February 2020.

Number	Date	Time	Longitude	Latitude	Ecoguard Name	Engine	No. Giraffe	Male	Female
1	01/02/2020	07:51:02	7,27110866	15,05185492	Ahmed	Moto	8	3	5
2	01/02/2020	09:17:33	7,24530488	15,04812897	Ahmed	Moto	8	3	5
3	01/02/2020	15:45:30	7,25173463	15,04356789	Ahmed	Moto	8	3	5
4	01/02/2020	17:44:12	7,25901146	15,05188614	Ahmed	Moto	8	3	5

Number	Date	Time	Longitude	Latitude	Ecoguard Name	Engine	No. Giraffe	Male	Female
5	02/02/2020	07:38:21	7,26314371	15,06868316	Ahmed	Moto	8	3	5
6	02/02/2020	09:13:09	7,2598194	15,06773815	Ahmed	Moto	8	3	5
7	02/02/2020	11:02:22	7,26569818	15,06087365	Ahmed	Moto	8	3	5
8	02/02/2020	15:57:48	7,27024963	15,05771595	Ahmed	Moto	8	3	5
9	03/02/2020	08:26:21	7,24760498	15,0463885	Ahmed	Moto	8	3	5
10	03/02/2020	10:50:27	7,23859255	15,04478611	Ahmed	Moto	8	3	5
11	03/02/2020	13:03:18	7,24023454	15,0434009	Ahmed	Moto	8	3	5
12	03/02/2020	13:07:28	7,24021925	15,04337386	Torodi	Moto	8	3	5
13	03/02/2020	17:45:29	7,24062496	15,04010679	Torodi	Moto	8	3	5
14	04/02/2020	07:44:00	7,20285988	15,01675803	Torodi	Moto	8	3	5
15	04/02/2020	15:58:00	7,20143363	15,00651928	Torodi	Moto	8	3	5
16	04/02/2020	17:17:37	7,19904405	15,00405967	Torodi	Moto	8	3	5
17	05/02/2020	08:08:12	7,19833784	15,02310752	Torodi	Moto	8	3	5
18	05/02/2020	10:24:49	7,18650728	15,01536035	Torodi	Moto	8	3	5
19	05/02/2020	10:55:20	7,19023832	15,01241252	Torodi	Moto	8	3	5
20	05/02/2020	11:19:25	7,1916469	15,01259467	Torodi	Moto	8	3	5
21	05/02/2020	17:19:00	7,20041901	15,00783425	Torodi	Moto	8	3	5
22	06/02/2020	08:51:36	7,13480871	15,01592139	Torodi	Moto	8	3	5
23	06/02/2020	12:48:20	7,15990739	15,02101559	Torodi	Moto	8	3	5
24	06/02/2020	18:00:03	7,20190896	15,02298081	Torodi	Moto	8	3	5
25	07/02/2020	08:42:49	7,21738075	15,02043556	Torodi	Moto	8	3	5
26	07/02/2020	16:43:19	7,22658292	15,02320223	Barka	Moto	8	3	5
27	08/02/2020	07:30:44	7,22518594	15,02577453	Barka	Moto	8	3	5
28	08/02/2020	12:37:15	7,25100311	14,98680421	Barka	Moto	8	3	5
29	08/02/2020	17:21:39	7,22882101	15,01971277	Barka	Moto	6	2	4
30	09/02/2020	17:16:35	6,74020115	14,9784331	Barka	Moto	2	1	1
31	10/02/2020	06:58:33	6,94105697	14,92568753	Barka	Moto	2	1	1
32	10/02/2020	15:02:05	7,25516752	15,04616891	Barka	Moto	6	2	4
33	10/02/2020	17:16:32	7,10853286	14,95636412	Barka	Moto	8	1	1
34	11/02/2020	13:58:31	7,24041847	15,04376809	Barka	Moto	2	1	1
35	11/02/2020	17:16:03	7,2697262	15,06687212	Barka	Moto	6	2	4
36	11/02/2020	17:17:40	7,26972528	15,0668559	Ahmed	Moto	8	2	4
37	12/02/2020	08:34:25	7,26699539	15,0565991	Ahmed	Moto	8	3	5
38	12/02/2020	12:44:58	7,26625242	15,0531441	Ahmed	Moto	8	3	5
39	12/02/2020	15:20:03	7,27139876	15,05727202	Ahmed	Moto	8	3	5
40	12/02/2020	15:20:22	7,27143349	15,05728439	Ahmed	Moto	8	3	5
41	13/02/2020	08:55:16	7,25436441	15,04782882	Ahmed	Moto	8	3	5
42	13/02/2020	15:55:33	7,27117947	15,05188928	Ahmed	Moto	8	3	5
43	13/02/2020	15:55:52	7,27119352	15,05187822	Ahmed	Moto	8	3	5
45	14/02/2020	08:32:43	7,24818414	15,04367693	Ahmed	Moto	8	3	5
46	14/02/2020	10:30:25	7,24076362	15,03811952	Ahmed	Moto	8	3	5
47	14/02/2020	12:39:35	7,23554631	15,03356913	Ahmed	Moto	8	3	5
48	14/02/2020	14:33:37	7,23285602	15,03332557	Ahmed	Moto	8	3	5
49	14/02/2020	16:30:55	7,22835698	15,03004729	Ahmed	Moto	8	3	5
50	15/02/2020	10:38:53	7,26146922	15,06412269	Ahmed	Moto	8	3	5
51	15/02/2020	10:39:12	7,26153516	15,06416342	Ahmed	Moto	8	3	5
52	15/02/2020	12:18:48	7,26188545	15,06405143	Torodi	Moto	8	3	5
53	15/02/2020	17:06:05	7,26885758	15,06230087	Torodi	Moto	8	3	5
54	16/02/2020	07:51:11	7,27560612	15,07330367	Torodi	Moto	8	3	5
55	16/02/2020	12:03:33	7,25636447	15,05939135	Torodi	Moto	8	3	5
56	16/02/2020	18:31:02	7,2640217	15,04940864	Torodi	Moto	8	3	5

Number	Date	Time	Longitude	Latitude	Ecoguard Name	Engine	No. Giraffe	Male	Female
57	17/02/2020	07:16:28	7,26854106	15,05783357	Torodi	Moto	8	3	5
58	17/02/2020	18:39:01	7,24576731	15,01780719	Torodi	Moto	8	3	5
59	18/02/2020	07:32:58	7,23602993	15,03409159	Torodi	Moto	8	3	5
60	18/02/2020	11:20:15	7,23520935	15,03287357	Torodi	Moto	8	3	5
61	18/02/2020	17:25:52	7,2529099	15,0445098	Torodi	Moto	8	3	5
62	19/02/2020	06:49:41	7,25420997	15,03911878	Torodi	Moto	8	3	5
63	19/02/2020	12:27:07	7,22887426	15,03734439	Barka	Moto	8	3	5
64	19/02/2020	16:21:08	7,22046612	15,02200635	Barka	Moto	8	3	5
65	19/02/2020	18:00:25	7,21592091	15,01907517	Barka	Moto	8	3	5
66	20/02/2020	07:55:23	7,21957751	15,02159761	Barka	Moto	8	3	5
67	20/02/2020	12:21:50	7,23551758	15,03387105	Barka	Moto	8	3	5
68	20/02/2020	16:27:09	7,24568038	15,03991835	Barka	Moto	8	3	5
69	20/02/2020	18:05:39	7,25953311	15,04461906	Barka	Moto	8	3	5
70	21/02/2020	07:54:08	7,27701061	15,07457242	Barka	Moto	8	3	5
80	21/02/2020	16:55:01	7,27659368	15,06250494	Barka	Moto	8	3	5
81	21/02/2020	18:17:40	7,26708982	15,05416693	Barka	Moto	8	3	5
82	22/02/2020	07:32:10	7,2732763	15,05616085	Barka	Moto	8	3	5
83	22/02/2020	15:13:06	7,23973628	15,04280818	Barka	Moto	8	3	5
84	22/02/2020	18:24:58	7,23435619	15,03158305	Barka	Moto	8	3	5
85	23/02/2020	10:33:28	7,18119586	15,01365205	Barka	Moto	8	3	5
86	23/02/2020	10:33:57	7,18111385	15,01374309	Barka	Moto	8	3	5
87	24/02/2020	09:34:07	7,26384954	15,06306504	Ahmed	Moto	8	3	4
88	24/02/2020	17:01:44	7,26720813	15,05958083	Ahmed	Moto	8	3	4
89	26/02/2020	09:25:42	7,2529634	15,04517457	Ahmed	Moto	8	3	5
90	26/02/2020	09:26:08	7,25295293	15,04516187	Ahmed	Moto	8	3	5
91	26/02/2020	15:50:39	7,25518763	15,04399096	Ahmed	Moto	8	3	5
92	27/02/2020	08:38:25	7,2526036	15,04078123	Ahmed	Moto	8	3	5
93	27/02/2020	15:01:16	7,24908077	15,03934323	Torodi	Moto	8	3	5
94	28/02/2020	07:02:05	7,24438505	15,03531752	Torodi	Moto	8	3	5
95	28/02/2020	16:24:41	7,2816472	15,06424923	Torodi	Moto	8	3	5

Table: Recorded distribution of giraffe observed in the Gadabedji Biosphere Reserve in February 2020.

INFORMATION AND AWARENESS RAISING

In addition to the local monitoring, the ecoguards conducted ongoing information and awareness campaigns aimed at the local population in and around the GBR. The community are made aware of the peaceful nature of giraffe and their ability to coexist not only with domestic animals but also humans. The population is regularly made aware of the need to disturb the giraffe excessively, and importantly asked to collaborate with the managers and ecoguards of the Protected Area to better protect the species.



Gadabedji Biosphere Reserve
Giraffe post-translocation monitoring

March 2020



Abdoul Razack Moussa Zabeirou

Project Officer GCF-SCF/Niger

ACKNOWLEDGEMENTS

We would like to thank the Nigerien Wildlife Authorities for their valuable support and for the permission to undertake the work. Particularly, we would like to thank the wildlife authorities' members and rangers. Importantly, we would like to thank IUCN-SOS and European Commission, Born Free Foundation, Giraffe Conservation Foundation, Ivan Carter Wildlife Conservation Alliance, Rufford Small Grant, Sahara Conservation Foundation for their valuable financial support to the programme.

INTRODUCTION

Located in the Sahelo-Saharan transition zone, the Gadabedji Biosphere Reserve (GBR) covers an area of 1,423,625 ha. In order to ensure the long-term conservation of the West African giraffe (*Giraffa camelopardalis peralta*), the first-ever translocation of West African giraffe was carried out in November - December 2018. During this operation, eight (8) subadult individuals (5 females and 3 males) were captured in Kouré, part of the 'Giraffe Zone' approximately 80 km east of Niamey and translocated approximately 800 km to the GBR in the North Maradi Region, Niger. This conservation translocation was undertaken in accordance with the National Giraffe Conservation Strategy and Action Plan developed by the Ministry of Environment in October 2015, and the subsequent feasibility study undertaken specifically for this translocation of giraffe.

Following the translocation of the giraffe to GBR, two (2) local community ecoguards (Twiga Walinzi – 'giraffe guards' in Swahili) were recruited by the Giraffe Conservation Foundation (GCF) to ensure close monitoring of the giraffe alongside four (4) ecoguards recruited by the Niger Fauna Corridors Project. Specifically, the monitoring seeks to:

- Regularly monitor the health and social dynamic status of the translocated giraffe.
- Understand their spatial ecology (movements, habitat use, etc.).
- Ongoing education and awareness in the greater GBR community.
- Inform and raise awareness among the local populations about the presence of giraffe in the area.

This report presents the key monthly giraffe monitoring data collected by the ecoguards during March 2020. Over time, the monitoring data will help provide recommendations to improve the management of the reserve and to conserve this newly re-introduced species.

MATERIALS AND METHODS

The equipment used during the monitoring includes:

- Three (3) motorcycles.
- Two (2) GPS Garmin InReach+ (N.B. during monitoring surveys, GPS coordinates are recorded every 10 minutes and tracks are automatically stored).
- Two (2) Cybertracker installed on a rough smartphone (Crosscall Trekker M1).

During the data collection, the following methods were used by the ecoguards:

- Everyday ecoguards cross the GBR valleys where they expect to see the giraffe.
- Communicate regularly with the local communities around GBR about the presence of giraffe in their area.
- Inform and raise awareness about giraffe conservation with the local population around GBR.

RESULTS

During March 2020, the GBR ecoguards travelled approximately 1,485 km during the monitoring surveys at an average of 48 km per day. During this period, they were able to observe and record a large number of GPS positions, habitat use and different behaviours of the giraffe. Thanks to such monitoring, they managed to assess their forage behaviour (which plant species are browsed) and their physical body condition (health).

Some interesting behaviours observed by the ecoguards during March 2020 included:

- Giraffe closely inhabiting same landscape as local people, foraging close to villages and drinking at village waterpoints.
- Giraffe browsed predominantly on *Vachellia* (formerly *Acacia*) *seyal*, *V. radiana* and *V. ehrenbergiana*, as well as *Sclerocarya birrea* which was flowering.
- Giraffe observed drinking at the 'filio' (artificial pond) in the centre of GBR.
- Giraffe utilised both the core area and the periphery without the intervention of the ecoguards. These small movements might be due to the heat and the availability of new forage.
- Fighting (necking) between males (Kader and Djannaré) observed.
- The group split up for some of the month into two groups: 1 male (Barka) and 4 females (Tawa, Kanido, Agaicha and Amulo) and a second group of 2 males (Kader and Djannaré) and 1 female (Munido).
- Mating observed between the female (Munido) and males (Kader and Djannaré).

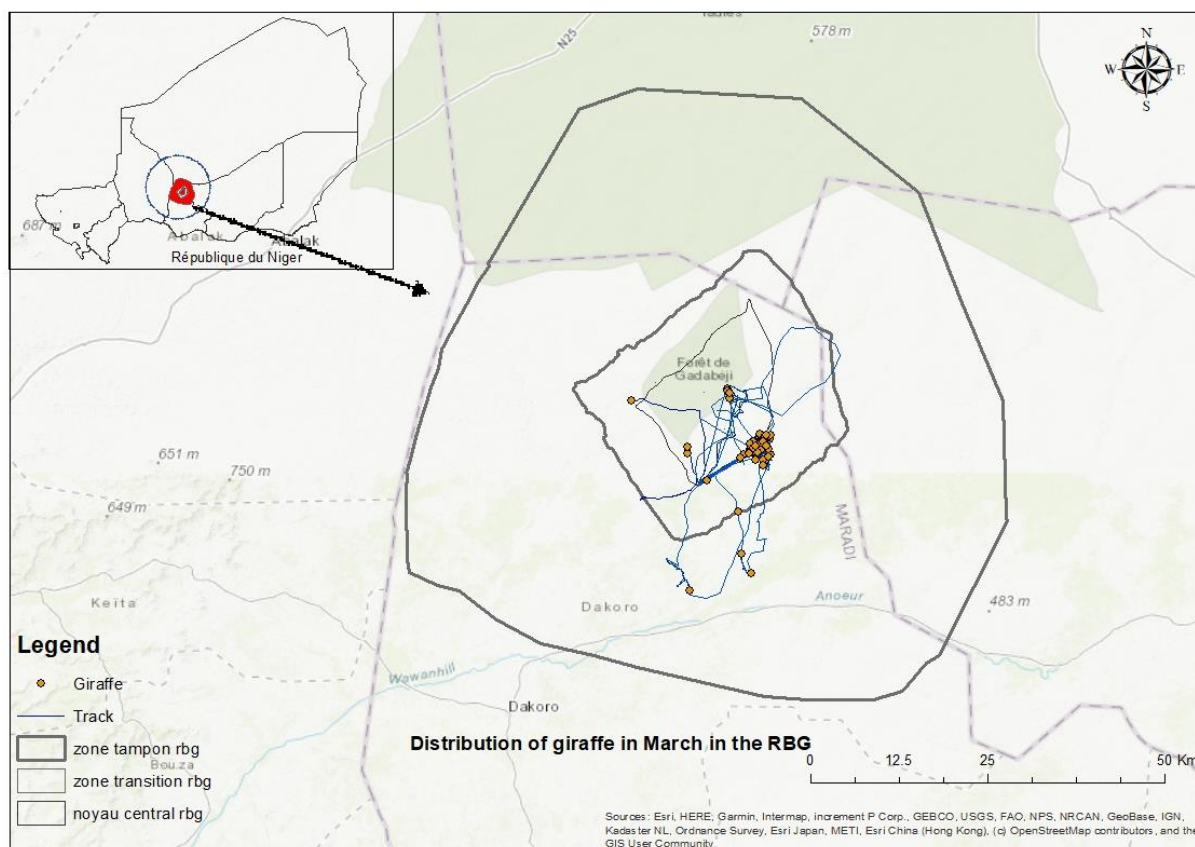


Figure 3: Giraffe locations and monitoring survey track during March 2020 in Gadabedji Biosphere Reserve and surrounds.

This above map and below table show the distribution of the giraffe during March 2020. Importantly, we observed that:

- Giraffe mostly stayed around the south-eastern edge of the central core area of GBR. Although this part of the reserve is inhabited by people, the giraffe prefers this area because of the availability of food and water.
- The blue line shows the tracks followed by the ecogurads when searching or monitoring the giraffe. As showed, they extend their activity to the transition zone when needed, mostly to redirect the giraffe back into the central zone.

No.	Date	Time	Longitude	Latitude	Altitude	Name	Herd No.	Male	Female
1	01/03/2020	06:41:04	7.26900737	15.05292003	427	Torodi	8	3	5
2	01/03/2020	06:46:41	7.26703251	15.05310958	427	Torodi	8	3	5
3	01/03/2020	13:43:52	7.28929483	15.02570558	474	Torodi	8	3	5
4	01/03/2020	13:56:35	7.28398549	15.02945973	463	Torodi	8	3	5
5	01/03/2020	14:23:46	7.26818528	15.04001178	440	Torodi	8	3	5
6	02/03/2020	08:18:49	7.27188326	15.04806662	432	Torodi	8	3	5
7	02/03/2020	15:19:47	7.27390479	15.06457731	411	Barka	8	3	5
8	02/03/2020	16:58:04	7.28041819	15.05644503	441	Ahmed	8	3	5
9	03/03/2020	08:06:25	7.29754746	15.07004069	451	Barka	8	3	5
10	03/03/2020	16:38:10	7.2791387	15.06656798	434	Barka	8	3	5
11	04/03/2020	06:46:18	7.26610923	15.06171079	438	Barka	8	3	5
12	04/03/2020	17:30:18	7.2822023	15.05316937	432	Barka	8	3	5
13	04/03/2020	18:04:46	7.28324893	15.05582368	444	Barka	8	3	5
14	05/03/2020	11:48:59	7.25974157	14.79811188	418	Barka	8	3	5
15	05/03/2020	15:51:26	7.23974324	14.83753688	448	Barka	8	3	5
16	05/03/2020	18:38:45	7.23458804	14.92324141	424	Barka	8	3	5
17	06/03/2020	08:08:44	7.2448032	15.04049033	455	Barka	8	3	5
18	06/03/2020	16:36:14	7.26443036	15.06103821	446		8	3	5
19	07/03/2020	09:57:28	7.27080228	15.05199564	425	Ahmed	8	3	5
20	07/03/2020	18:13:09	7.27805868	15.0639135	433	Ahmed	8	3	5
21	08/03/2020	09:18:23	7.13504154	14.76267324	408	Ahmed	8	3	5
22	08/03/2020	22:29:36	7.16998956	14.9871277	430	Ahmed	8	3	5
23	09/03/2020	08:29:19	7.12977979	15.04264526	462	Ahmed	8	3	5
24	09/03/2020	16:03:32	7.13000995	15.04225018	467	Ahmed	8	3	5
25	09/03/2020	19:05:22	7.13069723	15.05594928	474	Ahmed	8	3	5
26	10/03/2020	09:11:21	7.21651214	15.15357981	487	Ahmed	8	3	5
27	10/03/2020	17:22:01	7.21094762	15.17432226	475	Torodi	8	3	5
28	11/03/2020	07:08:08	7.21423265	15.1690444	476	Torodi	8	3	5
29	11/03/2020	08:29:27	7.21299947	15.16785722	478	Torodi	8	3	5
30	11/03/2020	16:05:56	7.21183427	15.17019624	477	Torodi	8	3	5

No.	Date	Time	Longitude	Latitude	Altitude	Name	Herd No.	Male	Female
31	12/03/2020	07:08:17	7.21508952	15.1645107	475	Torodi	8	3	5
32	13/03/2020	18:49:35	7.26591997	15.04460483	438	Torodi	8	3	5
33	13/03/2020	18:50:31	7.26591346	15.04460465	437	Torodi	8	3	5
34	14/03/2020	07:07:07	7.25685473	15.05129073	436	Torodi	8	3	5
35	14/03/2020	10:38:34	7.26053255	15.0507521	432	Barka	8	3	5
36	14/03/2020	15:56:59	7.26579632	15.05416514	440	Barka	8	3	5
37	14/03/2020	15:57:25	7.26580474	15.0541403	438	Barka	8	3	5
38	14/03/2020	17:49:56	7.2704728	15.05783464	432	Barka	8	3	5
39	15/03/2020	07:41:53	7.28589275	15.06523848	442	Barka	8	3	5
40	15/03/2020	12:12:45	7.29931365	15.03892784	485	Barka	8	3	5
41	15/03/2020	12:13:25	7.29936794	15.0389826	473	Barka	8	3	5
42	15/03/2020	17:04:13	7.29471554	15.05172809	460	Barka	8	3	5
43	15/03/2020	18:23:05	7.28402272	15.0671166	432	Barka	8	3	5
44	16/03/2020	07:40:09	7.28268661	15.07607084	434	Barka	8	3	5
45	16/03/2020	16:21:24	7.27176744	15.0580508	423	Barka	8	3	5
46	16/03/2020	17:39:26	7.2766355	15.06005217	432	Barka	8	3	5
47	17/03/2020	07:29:21	7.29485138	15.03614447	464	Barka	8	3	5
48	18/03/2020	06:45:39	7.27407591	15.06167001	426	Barka	8	3	5
49	18/03/2020	18:22:23	7.26761629	15.02923648	463	Ahmed	8	3	5
50	19/03/2020	10:00:37	7.23728566	15.03444814	425	Ahmed	8	3	5
51	19/03/2020	17:46:23	7.26092341	15.05512585	440	Ahmed	8	3	5
52	20/03/2020	07:40:52	7.27746504	15.08147278	458	Ahmed	8	3	5
53	20/03/2020	16:34:35	7.29098274	15.0759798	425	Ahmed	8	3	5
54	20/03/2020	16:35:04	7.29098371	15.07591928	434	Ahmed	8	3	5
55	20/03/2020	17:29:22	7.29208661	15.07255714	445	Ahmed	8	3	5
56	21/03/2020	07:41:30	7.27109677	15.0518623	419	Ahmed	8	3	5
57	21/03/2020	09:52:20	7.26536143	15.06561518	442	Ahmed	8	3	5
58	21/03/2020	17:08:29	7.27101986	15.05170831	452	Ahmed	8	3	5
59	22/03/2020	06:41:52	7.29251485	15.07467172	420	Ahmed	8	3	5
60	22/03/2020	16:01:07	7.28650399	15.06966577	428	Torodi	8	3	5

No.	Date	Time	Longitude	Latitude	Altitude	Name	Herd No.	Male	Female
61	22/03/2020	16:01:41	7.28648959	15.06959173	431	Torodi	8	3	5
62	23/03/2020	06:40:35	7.28026839	15.066503	426	Torodi	5	1	4
63	23/03/2020	07:04:12	7.28432184	15.01831108	462	Torodi	3	2	1
64	23/03/2020	09:29:17	7.27659958	15.06486984	424	Torodi	8	3	5
65	23/03/2020	16:58:12	7.28661819	15.07591588	427	Torodi	8	3	5
66	24/03/2020	06:32:57	7.28755169	15.07558959	434	Torodi	8	3	5
67	24/03/2020	16:15:00	7.2791546	15.06412677	426	Torodi	8	3	5
68	25/03/2020	07:10:37	7.27305086	15.04593453	442	Torodi	8	3	5
69	25/03/2020	07:11:41	7.2730662	15.04593216	446	Torodi	8	3	5
70	26/03/2020	06:23:44	7.28409813	15.06725566	432	Torodi	8	3	5
71	26/03/2020	17:00:37	7.29968043	15.08032694	447	Barka	8	3	5
72	26/03/2020	17:53:42	7.29055888	15.08023564	435	Barka	8	3	5
73	27/03/2020	07:02:29	7.27872383	15.04822342	450	Barka	8	3	5
74	27/03/2020	12:25:39	7.01584765	15.14932011	427	Barka	8	3	5
75	27/03/2020	16:17:34	7.2675626	15.04636927	435	Barka	8	3	5
76	27/03/2020	17:57:41	7.27388591	15.04364721	447	Barka	8	3	5
77	28/03/2020	07:39:20	7.29159752	15.0567694	457	Barka	8	3	5
78	29/03/2020	08:50:58	7.25730774	15.06247961	470	Barka	8	3	5
79	29/03/2020	08:51:22	7.25729958	15.06250058	465	Barka	8	3	5
80	29/03/2020	17:29:45	7.26395904	15.0522838	431	Barka	8	3	5
81	29/03/2020	18:54:34	7.26913159	15.05753827	436	Barka	8	3	5
82	30/03/2020	07:33:26	7.25611675	15.04183551	429	Barka	8	3	5

Table: Recorded distribution of giraffe observed in Gadabedji Biosphere Reserve in March 2020.

INFORMATION AND AWARENESS RAISING

The ecoguards continue to raise awareness with the local communities in GBR. Each time the giraffe go to new areas, they inform the traditional rulers, sensitize them more generally on giraffe as well as on their peaceful nature and their ability to coexist not only with domestic animals but also with humans. They are also asked to collaborate and to inform if the giraffe are seen in their localities. This month the ecoguards went specifically to the Maijanruwa village located southeast of GBR.



Gadabedji Biosphere Reserve
Giraffe post-translocation monitoring
April 2020



Abdoul Razack Moussa Zabeirou

Project Officer GCF-SCF/Niger

ACKNOWLEDGEMENTS

We would like to thank the Nigerien Wildlife Authorities for their valuable support and for the permission to undertake the work. Particularly, we would like to thank the wildlife authorities' members and rangers. Importantly, we would like to thank IUCN-SOS and European Commission, Born Free Foundation, Giraffe Conservation Foundation, Ivan Carter Wildlife Conservation Alliance, Rufford Small Grant, and Sahara Conservation Fund for their valuable financial support to the programme.

INTRODUCTION

Located in the Sahelo-Saharan transition zone, the Gadabedji Biosphere Reserve (GBR) covers an area of 1,423,625 ha. In order to ensure the long-term conservation of the West African giraffe (*Giraffa camelopardalis peralta*), the first-ever translocation of West African giraffe was carried out in November - December 2018. During this operation, eight (8) subadult individuals (5 females and 3 males) were captured in Kouré, part of the 'Giraffe Zone' approximately 80 km east of Niamey and translocated approximately 800 km to the GBR in the North Maradi Region, Niger. This conservation translocation was undertaken in accordance with the National Giraffe Conservation Strategy and Action Plan developed by the Ministry of Environment in October 2015, and the subsequent feasibility study undertaken specifically for this translocation of giraffe.

Following the translocation of the giraffe to GBR, two (2) local community ecoguards (Twiga Walinzi – 'giraffe guards' in Swahili) were recruited by the Giraffe Conservation Foundation (GCF) to ensure close monitoring of the giraffe alongside four (4) ecoguards recruited by the Niger Fauna Corridors Project. Specifically, the monitoring seeks to:

- Regularly monitor the health and social dynamic status of the translocated giraffe.
- Understand their spatial ecology (movements, habitat use, etc.).
- Ongoing education and awareness in the greater GBR community.
- Inform and raise awareness among the local populations about the presence of giraffe in the area.

This report presents the key monthly giraffe monitoring data collected by the ecoguards during April 2020. Over the time, the monitoring data will help provide recommendations to improve the management of the reserve and to conserve this newly reintroduced species.

MATERIALS AND METHODS

The equipment used during the monitoring includes:

- Three (3) motorcycles.
- Two (2) GPS Garmin InReach+ (N.B. during monitoring surveys, GPS coordinates are recorded every 10 minutes and tracks are automatically stored).
- Two (2) Cybertracker installed on a rough smartphone (Crosscall Trekker M1).

During the data collection, the following methods were used by the ecoguards:

- Everyday ecoguards cross the GBR valleys where they expect to see the giraffe.
- Communicate regularly with the local communities around GBR about the presence of giraffe in their area.
- Inform and raise awareness about giraffe conservation with the local population around GBR.

RESULTS

During April 2020, the GBR ecoguards travelled approximately 902 km during the monitoring surveys at an average of 30 km per day. During this period, they were able to observe and record a large number of GPS positions, habitat use and different behaviours of the giraffe. Thanks to such monitoring, they managed to assess their forage behaviour (which plant species are browsed) and their physical body condition (health).

In April 2020 we observed that the giraffe predominantly resided within the GBR with only one movement out recorded. Diet and behaviour observations did not differ much from what was observed the previous month:

- Giraffe closely inhabiting same landscape as local people, foraging close to villages and drinking at village waterpoints.
- Giraffe browsed predominantly on *Vachellia* (formerly *Acacia*) *seyal*, *V. radiana* and *V. ehrenbergiana*, as well as *Sclerocarya birrea* which was flowering.
- Giraffe observed drinking at the 'filio' (artificial pond) in the centre of GBR.
- Giraffe left the reserve once on the south side (into the periphery) and came back by themselves without the intervention of the ecoguards. This small movement might be due to the heat and the availability of new forage, in particular *Vachellia*.
- Fighting (necking) between males (Kader and Djannaré) observed.
- Sometimes the group split and the following herd structures were observed: 1 male (Barka) and 4 females (Tawa, Kanido, Agaicha and Amulo); 2 males (Kader and Djannaré) and 2 females (Munido and Tawa); or, 2 males (Kader and Djannaré) and 1 female (Munido).
- Mating observed between the female (Munido) and males (Kader and Djannaré).

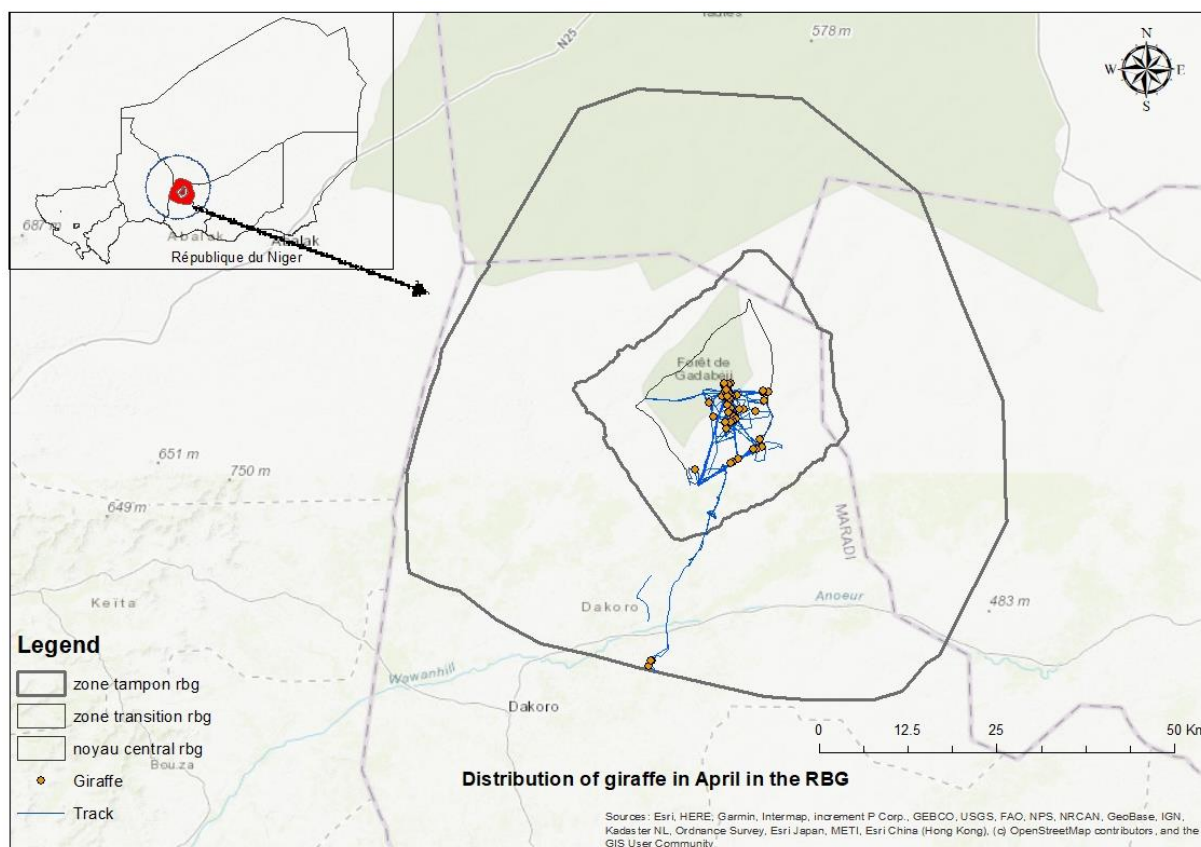


Figure 3: Giraffe locations and monitoring survey track during April 2020 in Gadabedji Biosphere Reserve and surrounds.

This above map and below table show the distribution of the giraffe during April 2020. Importantly, we observed that:

- Giraffe mostly stayed in the central area of GBR. This can be attributed to the high daily temperatures recorded and possibly the quietness of this area.
- The blue line shows the tracks followed by the ecogurads when searching or monitoring the giraffe.

No.	Date	Time	Longitude	Latitude	Altitude	Name	Herd No.	Male	Female
1	02/04/2020	10:30:50	7.27123261	15.05186953	427	Barka	8	3	5
2	02/04/2020	10:35:39	7.27123919	15.05188202	430	Barka	8	3	5
3	02/04/2020	10:37:22	7.27123723	15.0518883	430	Ahmed	8	3	5
4	02/04/2020	15:17:54	7.27115056	15.05182653	430	Ahmed	8	3	5
5	02/04/2020	18:33:11	7.28143684	15.05435145	454	Ahmed	8	3	5
6	02/04/2020	18:33:41	7.28115151	15.05432395	446	Ahmed	8	3	5
7	03/04/2020	08:23:29	7.27119148	15.05187343	435	Ahmed	8	3	5
8	04/04/2020	07:24:01	7.23362039	15.0306529	430	Torodi	8	3	5
9	04/04/2020	19:49:20	7.27690941	15.07064362	430	Torodi	8	3	5
10	05/04/2020	08:14:09	7.22183546	15.02397588	426	Torodi	8	3	5
11	05/04/2020	17:45:43	7.21860978	15.02313013	426	Torodi	8	3	5
12	06/04/2020	14:38:46	7.0504282	14.60918351	446	Torodi	8	3	5
13	06/04/2020	15:58:30	7.04989389	14.60795904	432	Torodi	8	3	5
14	06/04/2020	18:07:11	7.05633254	14.61998341	433	Torodi	8	3	5
15	06/04/2020	18:07:59	7.05595161	14.61998311	414	Torodi	8	3	5
16	07/04/2020	18:44:21	7.14441118	15.00859656	436	Barka	8	3	5
17	08/04/2020	09:38:23	7.26954452	15.12870377	457	Barka	8	3	5
18	08/04/2020	15:42:59	7.24440585	15.13286027	472	Barka	8	3	5
19	08/04/2020	19:08:35	7.20648361	15.16869866	482	Barka	8	3	5
20	09/04/2020	07:28:13	7.21013578	15.17728316	491	Barka	8	3	5
21	09/04/2020	12:56:00	7.21895304	15.18572371	493	Barka	8	3	5
22	09/04/2020	17:59:42	7.21075708	15.1758159	500	Barka	8	3	5
23	10/04/2020	07:24:49	7.21443591	15.16902831	482	Barka	8	3	5
24	10/04/2020	07:25:16	7.2145159	15.16911168	477	Barka	8	3	5
25	10/04/2020	10:23:37	7.21490552	15.1646292	480	Barka	8	3	5
26	10/04/2020	18:17:54	7.21275833	15.16299895	483	Barka	8	3	5
27	10/04/2020	19:13:18	7.20975031	15.15751898	474	Barka	8	3	5
28	11/04/2020	07:17:11	7.21164435	15.15655418	479	Barka	8	3	5
29	11/04/2020	07:36:45	7.20651308	15.16867474	484	Barka	8	3	5
30	11/04/2020	17:25:11	7.20694049	15.16881819	501	Barka	8	3	5
31	11/04/2020	17:26:05	7.20665015	15.16882838	485	Ahmed	8	3	5
32	12/04/2020	10:01:55	7.20063124	15.15842122	482	Ahmed	8	3	5
33	12/04/2020	18:26:55	7.20645151	15.16874247	500	Ahmed	8	3	5
34	12/04/2020	18:27:19	7.20647354	15.16868292	496	Ahmed	8	3	5
35	13/04/2020	12:07:27	7.17347404	15.14517677	492	Ahmed	8	3	5
36	13/04/2020	12:08:24	7.17347966	15.14512531	477	Ahmed	8	3	5
37	14/04/2020	17:47:28	7.20640964	15.16871322	499	Ahmed	8	3	5
38	14/04/2020	17:55:02	7.20649843	15.16870332	489	Ahmed	8	3	5
39	15/04/2020	08:49:15	7.27120887	15.05190378	434		8	3	5
40	15/04/2020	17:01:24	7.21663561	15.15295453	468	Torodi	8	3	5
41	15/04/2020	18:27:27	7.21532499	15.1621354	483	Torodi	8	3	5
42	16/04/2020	07:59:14	7.28541632	15.15043777	463	Torodi	8	3	5
43	16/04/2020	11:28:15	7.28626161	15.16817673	487	Torodi	8	3	5
44	16/04/2020	13:03:31	7.28604276	15.16472173	458	Torodi	8	3	5
45	16/04/2020	17:17:45	7.29562503	15.16807162	451	Torodi	8	3	5
46	17/04/2020	09:04:08	7.21852348	15.13469106	475	Torodi	8	3	5
47	17/04/2020	17:31:17	7.22711553	15.11772553	457	Torodi	8	3	5
48	18/04/2020	07:15:11	7.21342516	15.18329676	482	Torodi	8	3	5
49	18/04/2020	09:15:59	7.20395057	15.1800255	483	Torodi	8	3	5
50	18/04/2020	17:10:48	7.21180896	15.17007576	477	Torodi	8	3	5
51	18/04/2020	19:27:16	7.20533177	15.18293016	487	Torodi	8	3	5

No.	Date	Time	Longitude	Latitude	Altitude	Name	Herd No.	Male	Female
52	18/04/2020	19:41:42	7.2048197	15.18485655	482	Torodi	8	3	5
53	19/04/2020	07:37:57	7.23060161	15.16135023	486	Torodi	8	3	5
54	19/04/2020	10:49:44	7.23521741	15.13215737	465	Barka	8	3	5
55	20/04/2020	07:24:27	7.20649402	15.16870382	478	Barka	8	3	5
56	20/04/2020	11:26:42	7.21232949	15.15860878	473	Barka	8	3	5
57	20/04/2020	19:00:50	7.21190313	15.1413226	476	Barka	8	3	5
58	21/04/2020	07:41:51	7.22541285	15.12022721	472	Barka	8	3	5
59	21/04/2020	17:55:53	7.22566452	15.11617208	467	Barka	8	3	5
60	21/04/2020	18:59:43	7.22879681	15.11274665	491	Barka	8	3	5
61	22/04/2020	08:55:40	7.28477516	15.16855749	489	Barka	8	3	5
62	22/04/2020	08:56:45	7.28454031	15.16886817	480	Barka	8	3	5
63	22/04/2020	19:02:54	7.21449252	15.1645406	524	Barka	8	3	5
64	23/04/2020	07:20:30	7.22061337	15.15846798	536	Barka	8	3	5
65	23/04/2020	18:28:58	7.20650941	15.16867833	483	Ahmed	8	3	5
66	26/04/2020	09:09:09	7.20649206	15.16865608	483	Ahmed	4	1	3
67	26/04/2020	09:10:01	7.20649198	15.16865557	483	Ahmed	4	1	3
68	26/04/2020	17:07:53	7.20640199	15.16865774	483	Ahmed	8	3	5
69	27/04/2020	17:12:01	7.22265292	15.10918016	464	Torodi	8	3	5
70	28/04/2020	07:26:29	7.21809079	15.10568519	462	Torodi	4	2	2
71	28/04/2020	10:23:09	7.18337004	15.11709054	477	Torodi	8	3	5
72	28/04/2020	10:43:09	7.21012538	15.09318471	461	Torodi	7	2	5
73	29/04/2020	07:01:17	7.21471984	15.16526103	479	Torodi	5	1	4
74	29/04/2020	07:40:33	7.21336219	15.12585345	471	Torodi	4	2	2
75	29/04/2020	07:49:30	7.21750005	15.15476415	470	Torodi	5	1	4
76	29/04/2020	16:33:47	7.20774853	15.10565395	481	Torodi	3	2	1
77	29/04/2020	17:33:18	7.21747448	15.15290785	469	Torodi	5	1	4
78	30/04/2020	07:21:03	7.21662306	15.15340539	448	Torodi	5	1	4
79	30/04/2020	09:46:40	7.21217045	15.15784702	472	Torodi	5	1	4
80	30/04/2020	17:38:22	7.26447071	15.05189148	426	Torodi	3	2	1
81	30/04/2020	18:18:18	7.20996381	15.17179021	477	Torodi	5	1	4

Table: Recorded distribution of giraffe observed in the Gadabedji Biosphere Reserve in April 2020.

INFORMATION AND AWARENESS RAISING

The ecoguards continue to raise awareness with the local communities in GBR. Each time the giraffe go to new areas, they inform the traditional rulers, sensitize them more generally on giraffe as well as on their peaceful nature and their ability to coexist not only with domestic animals but also with humans. They are also asked to collaborate and to inform if the giraffe are seen in their localities.

Gadabedji Biosphere Reserve
Giraffe post-translocation monitoring
May 2020



Abdoul Razack Moussa Zabeirou
Project Officer GCF-SCF/Niger

ACKNOWLEDGEMENTS

We would like to thank the Nigerien Wildlife Authorities for their valuable support and for the permission to undertake the work. Particularly, we would like to thank the wildlife authorities' members and rangers. Importantly, we would like to thank IUCN-SOS and European Commission, Born Free Foundation, Giraffe Conservation Foundation, Ivan Carter Wildlife Conservation Alliance, Rufford Small Grant, and Sahara Conservation Fund for their valuable financial support to the programme.

INTRODUCTION

Located in the Sahelo-Saharan transition zone, the Gadabedji Biosphere Reserve (GBR) covers an area of 1,423,625 ha. In order to ensure the long-term conservation of the West African giraffe (*Giraffa camelopardalis peralta*), the first-ever translocation of West African giraffe was carried out in November - December 2018. During this operation, eight (8) subadult individuals (5 females and 3 males) were captured in Kouré, part of the 'Giraffe Zone' approximately 80 km east of Niamey and translocated approximately 800 km to the GBR in the North Maradi Region, Niger. This conservation translocation was undertaken in accordance with the National Giraffe Conservation Strategy and Action Plan developed by the Ministry of Environment in October 2015, and the subsequent feasibility study undertaken specifically for this translocation of giraffe.

Following the translocation of the giraffe to GBR, two (2) local community ecoguards (Twiga Walinzi – 'giraffe guards' in Swahili) were recruited by the Giraffe Conservation Foundation (GCF) to ensure close monitoring of the giraffe alongside four (4) ecoguards recruited by the Niger Fauna Corridors Project. Specifically, the monitoring seeks to:

- Regularly monitor the health and social dynamic status of the translocated giraffe.
- Understand their spatial ecology (movements, habitat use, etc.).
- Ongoing education and awareness in the greater GBR community.
- Inform and raise awareness among the local populations about the presence of giraffe in the area.

This report presents the key monthly giraffe monitoring data collected by the ecoguards in May 2020. Over the time, the monitoring data will help provide recommendations to improve the management of the reserve and to conserve this newly reintroduced species.

MATERIALS AND METHODS

The equipment used during the monitoring includes:

- Three (3) motorcycles.
- Two (2) GPS Garmin InReach+ (N.B. during monitoring surveys, GPS coordinates are recorded every 10 minutes and tracks are automatically stored).

- Two (2) Cybertracker installed on a rough smartphone (Crosscall Trekker M1).

During the data collection, the following methods were used by the ecoguards:

- Everyday ecoguards cross the GBR valleys where they expect to see the giraffe.
- Communicate regularly with the local communities around GBR about the presence of giraffe in their area.
- Inform and raise awareness about giraffe conservation with the local population around GBR.

RESULTS

In May 2020, the GBR ecoguards travelled approximately 780 km during the monitoring surveys with an average of 25 km per day. During this period, they were able to observe and record a large number of GPS positions, habitat use and different behaviours of the giraffe. Thanks to such monitoring, they managed to assess their forage behaviour (which plant species are browsed) and their physical body condition (health).

In May 2020 we observed that the giraffe predominantly resided within the GBR with only one movement out recorded. Diet and behaviour observations did not differ much from what was observed the previous month:

- For the first time the giraffe had stayed within the reserve and its periphery and no exits outside of the reserve were recorded.
- During most of the time the giraffe had remained in two groups, one group with 1 male (Barka) and 4 females (Tawa, Kanido, Agaicha and Amulo) was in the central core of the reserve and the other (2 males Kader and Djannaré and 1 female Munido) in the southeast of the reserve near the village of Zigulta.
- Those within the reserve drink from the pond of Filio (artificial pond) and the others from waterpoints.
- The ecoguards tried to group the two groups together but after a while the group split in two again.
- Regarding the diet no change were observed compared to the species browsed in the previous month. They feed predominantly on *Vachellia* (formerly *Acacia*) *seyal*, *V. radiana* and *V. ehrenbergiana*, as well as *Sclerocarya birrea* which was flowering.

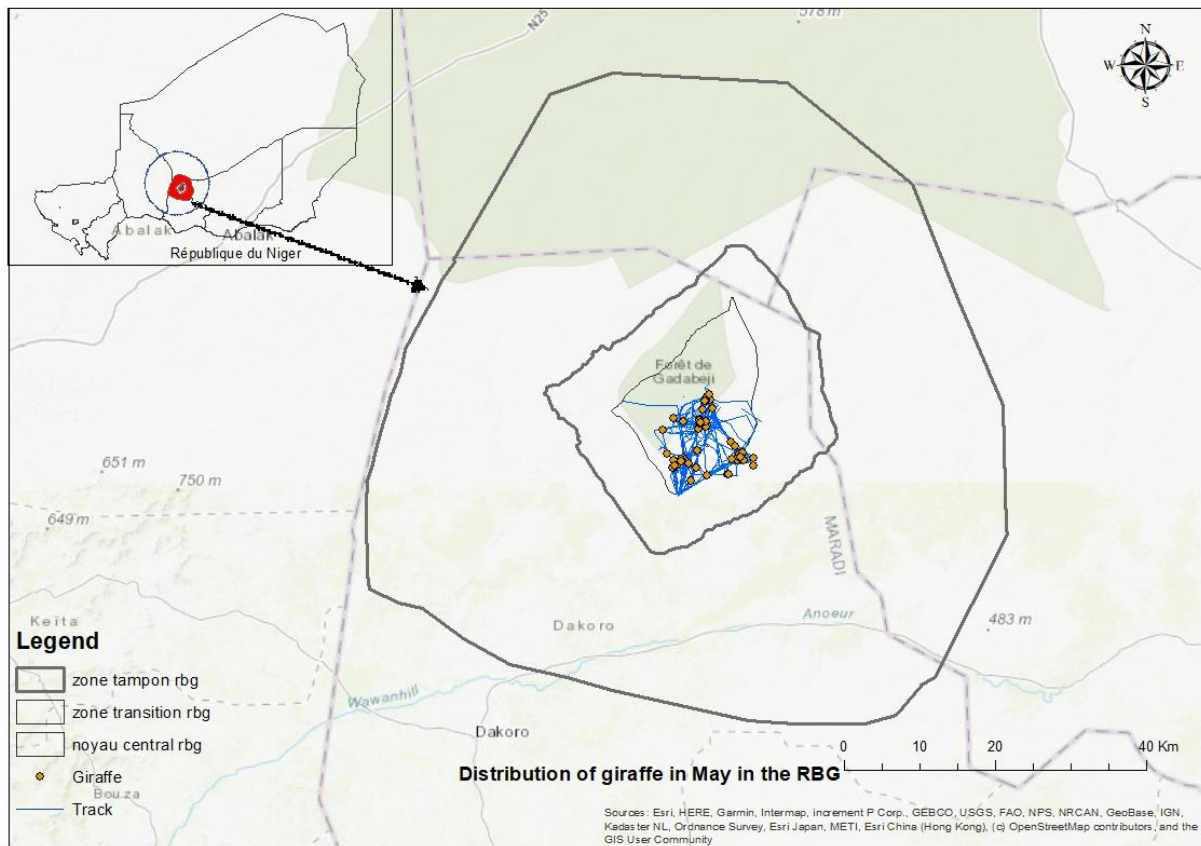


Figure 3: Giraffe locations and monitoring survey track in May 2020 in Gadabedji Biosphere Reserve and surroundings.

This above map and below table show the distribution of the giraffe during May 2020. Importantly, we observed that:

- Giraffe were stayed in the central area of GBR. This can most probably be attributed to the availability of forage as it is the flowering period.
- The blue line shows the tracks followed by the ecogurads when searching or monitoring the giraffe.

No.	Date	Time	Longitude	Latitude	Altitude	Name	Herd No.	Male	Femelle
1	01/05/2020	16:53:16	7.26532726	15.04430328	431	Torodi	3	2	1
2	01/05/2020	16:53:51	7.26533849	15.04431763	431	Torodi	3	2	1
3	02/05/2020	06:56:19	7.21376904	15.16137245	477	Barka	5	1	4
4	02/05/2020	08:31:19	7.25491537	15.0465434	427	Barka	3	2	1
5	03/05/2020	07:18:25	7.21791248	15.14455146	477	Barka	5	1	4
6	03/05/2020	09:22:23	7.24700704	15.01825517	443	Barka	3	2	1
7	03/05/2020	18:33:16	7.26732723	15.05232861	430	Barka	3	2	1
8	03/05/2020	18:33:43	7.26734416	15.05232896	437	Barka	3	2	1
9	04/05/2020	10:35:29	7.16285828	15.12008116	470	Barka	5	1	4
10	04/05/2020	18:30:51	7.2712168	15.05190912	431	Barka	3	2	1
11	08/05/2020	18:10:46	7.25237498	15.08043284	481	Ahmed	5	1	4
12	08/05/2020	18:38:31	7.29650431	15.03422578	475	Ahmed	3	2	1
13	09/05/2020	08:10:56	7.27121582	15.05189077	428	Ahmed	3	2	1
14	09/05/2020	10:37:30	7.20742213	15.16709742	492	Ahmed	5	1	4
15	09/05/2020	18:53:19	7.26044684	15.07170129	478	Torodi	3	2	1
16	09/05/2020	19:38:08	7.21143366	15.17024337	473	Torodi	5	1	4
17	10/05/2020	07:35:05	7.1959489	15.11713458	471	Torodi	5	1	4
18	10/05/2020	09:08:56	7.26964072	15.05691781	429	Torodi	3	2	1
19	10/05/2020	16:47:06	7.19032049	15.10596754	476	Torodi	5	1	4
20	11/05/2020	07:53:16	7.14301654	15.12647568	457	Torodi	5	1	4
21	11/05/2020	10:19:05	7.24910118	15.01749092	446	Torodi	3	2	1
22	12/05/2020	07:21:06	7.19771625	15.11670459	487	Torodi	5	1	4
23	12/05/2020	09:11:53	7.27647408	15.05917765	431	Torodi	3	2	1
24	12/05/2020	19:12:40	7.2781886	15.04410303	440	Torodi	3	2	1
25	13/05/2020	07:02:46	7.29745145	15.04841712	473	Torodi	3	2	1
26	13/05/2020	07:03:13	7.29712258	15.04841449	466	Torodi	4	3	1
27	13/05/2020	08:10:48	7.19871109	15.14167539	481	Torodi	5	1	4
28	14/05/2020	07:34:09	7.20735406	15.11230922	471	Barka	5	1	4
29	14/05/2020	09:07:59	7.27121198	15.05188068	429	Barka	3	2	1
30	14/05/2020	12:23:19	7.20593666	15.1101268	476	Barka	8	3	5
31	15/05/2020	07:24:09	7.19747382	15.11754923	478	Barka	8	3	5
32	16/05/2020	07:48:42	7.20513472	15.11902418	464	Barka	8	3	5
33	16/05/2020	16:54:32	7.19310099	15.11575802	475	Barka	8	3	5
34	17/05/2020	07:35:50	7.19542291	15.11493416	484	Barka	3	1	2
35	17/05/2020	18:29:20	7.16151027	15.04918929	433	Barka	3	2	3
36	21/05/2020	15:33:14	7.19323969	15.12301028	488	Torodi	8	3	5
37	21/05/2020	19:11:57	7.20613492	15.15823103	477	Torodi	8	3	5
38	22/05/2020	18:51:47	7.18976331	15.06396021	455	Torodi	8	3	5
39	22/05/2020	18:52:13	7.18978687	15.063976	452	Torodi	8	3	5
40	23/05/2020	07:15:48	7.15786935	15.04722305	435	Torodi	8	3	5
41	23/05/2020	07:16:15	7.15785073	15.04723414	436	Torodi	8	3	5
42	23/05/2020	13:43:00	7.14921406	15.0354076	427	Torodi	8	3	5
43	23/05/2020	16:56:06	7.14389061	15.03157353	436	Torodi	8	3	5
44	23/05/2020	19:00:53	7.14236691	15.03013638	449	Torodi	8	3	5
45	24/05/2020	07:01:54	7.15816526	15.04404148	430	Torodi	8	3	5
46	24/05/2020	18:54:18	7.17316013	15.03925681	445	Torodi	8	3	5
47	24/05/2020	18:54:39	7.17315189	15.03921414	450	Torodi	8	3	5
48	25/05/2020	07:06:51	7.17669456	15.00530882	429	Torodi	8	3	5

49	25/05/2020	07:07:15	7.17665266	15.00528607	435	Torodi	8	3	5
50	25/05/2020	11:13:21	7.18805121	15.03084008	444	Barka	8	3	5
51	25/05/2020	17:33:56	7.20768629	15.01609073	360	Barka	8	3	5
52	26/05/2020	10:00:04	7.14448616	15.0447439	453	Barka	8	3	5
53	27/05/2020	08:15:22	7.13046497	15.05679368	476	Barka	6	2	4
54	27/05/2020	10:02:14	7.20375797	15.15932427	486	Barka	2	1	1
55	28/05/2020	08:20:50	7.12381417	15.1023645	458	Barka	6	2	4
56	29/05/2020	08:21:18	7.19251988	15.12051954	493	Barka	8	3	5
57	30/05/2020	12:03:34	7.14675639	15.03493517	435	Ahmed	6	2	4
58	30/05/2020	17:47:09	7.19486451	15.11734571	482	Ahmed	2	1	1

Table: Recorded distribution of giraffe observed in the Gadabedji Biosphere Reserve in May 2020.