

YANKARI GAME RESERVE

WCS QUARTERLY REPORT: JULY-SEPTEMBER 2021





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SUMMARY

This report describes law enforcement efforts and SMART-based ranger patrols managed by WCS in Yankari Game Reserve for the period July to September 2021. A total of 1,783 patrol man days (32 patrols) were completed by rangers covering a total distance of 3,630km and as a result nine people (6 hunters and 3 firewood collectors) were arrested during the period. No elephant carcass was reported during the reporting period and no elephant poacher was arrested. Elephant crop raiding cases were reported from Shaffa, Dagudi, Yalwan-Duguri, and Gaji communities. We continue to track the elephants with the aid of the satellite collars put on them to provide better protection and mitigate human elephant conflict issues. Several livestock grazing incidences in the reserve were recorded during the period but no arrests were made as the grazers send in the cattle unaccompanied by humans. Yankari rangers participated in the Wildlife Ranger Challenge organized by Tusk Trust and came 5th (see picture Three joint patrols with the army were completed. Heavy floods greatly impacted patrols during the period which made it impossible to access the southern part of the reserve so vehicles had to go round through Alkaleri and Gombe. Refresher training for the rangers led by Robertson Chigwenembe from Conservation Outcomes is currently ongoing. Covid-19 vaccines were provided to 59 rangers.



Four Yankari rangers practising for the Wildlife Ranger Challenge, August 2021

RESULTS AND DISCUSSION

A total of 32 SMART-based patrols were organized during this period covering a total distance of 3,630 km and 1,783 patrol man-days (see Appendix 1 for more details). Levels of protection *within the areas patrolled* are adequate but some areas of the

reserve were left unprotected (see Map 1 below) during this reporting period due to shortage of funds and firearms to organize more patrols. Although a total of six hunters were arrested, hunting is now opportunistic as hunters only go in for a few hours as their chances of been noticed and arrested is higher. However, current efforts need to be sustained and preferably improved upon. Three joint patrols with the army were completed to boost ranger morale and to assure the surrounding communities of our commitment and partnership with other security agencies to work together and keep Yankari and the surrounding communities safe.

PATROL STRATEGY AND CAMPING PATROL SCHEDULE

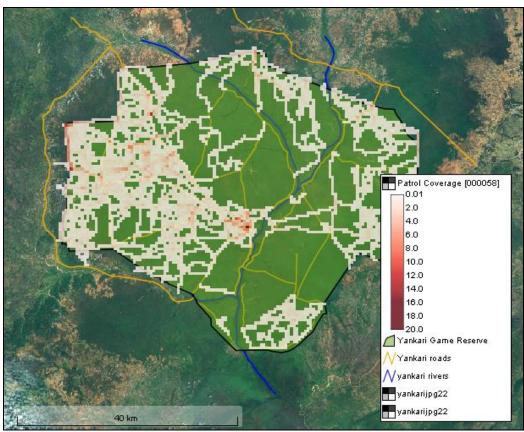
The number of firearms and vehicles available limits the current patrol strategy. Currently, we can only organize four camping patrols each week. Four teams consisting of 6-7 rangers per team were sent out on camping patrol. We improved from seven days patrol that were previously done to eight days so that rangers can spend more time out on patrols and to enable us switch the patrol end and start days weekly. With only limited resources available, the current patrol strategy targets vulnerable areas rather than trying to cover the entire reserve. However, SMART enables us to see which areas of the reserve haven't been patrolled and we ensure that patrols are sent to those areas as well. This strategy has also enabled us to focus more attention on the remaining elephants. There were no fixed camping locations, instead rangers continuously change their location overnight both to increase the area coverage but also to minimize the risk of the camp being discovered by poachers and attacked. Data is collected using handheld computers running CyberTracker software which automatically records GPS coordinates for every observation. Data were analyzed using SMART software. Table 1 below summarizes the patrol data for the period.

PATROL EFFORT

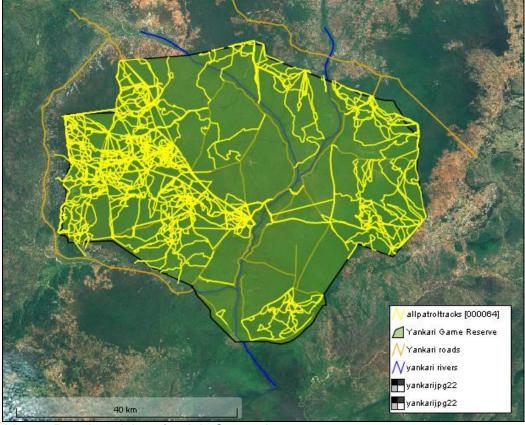
In *Map 1*, the darker red part of the grid map indicates areas that have been more frequently patrolled, the grey portions represent areas that were less patrolled while the un-shaded parts of the grid represents areas that were not patrolled during the reporting period.

Table 1. Summary of patrol effort for the period July to September 2021

No of Patrols	Distance (km)	Hours	No of Days	Patrol Man Days
32	3,630	2,449	241	1,783



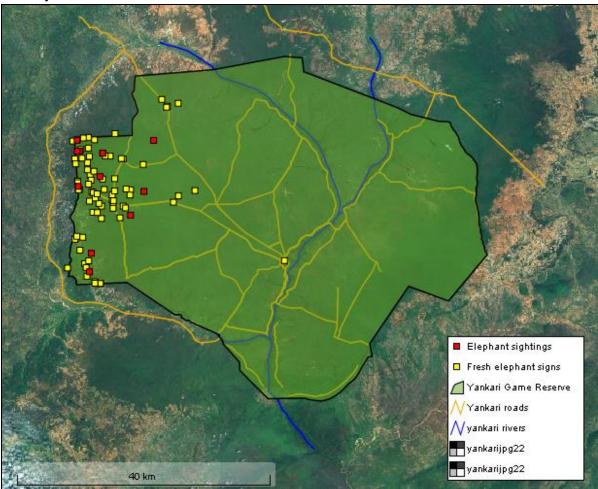
Map 1: Patrol effort in km walked per grid cell for July-September 2021. Darker red colour indicates areas of more intense patrol coverage.



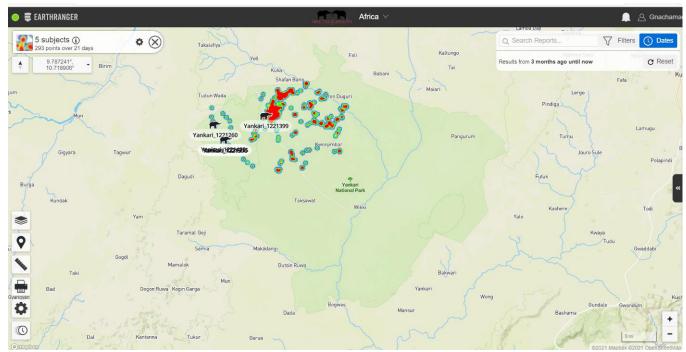
Map 2: Patrol track logs for July-September 2021

ELEPHANT CONSERVATION

Fresh (1-3 days old) elephant sign and elephant sighting was recorded in the reserve during ranger patrols, see Map 3 below. Crop raiding by elephants was reported from Shaffa, Dagudi, Yalwan-Duguri, and Gaji communities. Rangers were sent to the areas concerned, although typically elephants raid crops overnight and by the time the rangers arrive the following morning the elephants have already left and returned to the reserve. We continue to track the elephants with the aid of the satellite collars put on them to provide close protection and mitigate human wildlife conflict issues. Data from the collars on the heat map 4 below shows that collared elephants stayed in the NN part of the reserve this period as compare to the last quarter where they spent more time in the NW similar thing they did around this season last year. This is likely because the rains are over and there is not any much water for them in the NW part of the reserve but there is water in the NN and NE part of the reserve. The heat map is very informative since it is able to show us where the elephants have spent more or less time over the period. Collared elephants did not go to other parts of the reserve during the period although there is one fresh sign recorded by ranger patrols in the central part of the reserve, which is likely from a herd that is not collared.



Map 3: Elephant Activities Recorded by All Ranger Patrols July-September 2021



Map 4: Heat Map for Elephant Movement from Satellite Collar Data July-September 2021

LION CONSERVATION

No fresh lion sign was reported by ranger patrols during the period and no roaring was heard either. Camera traps in the reserve were destroyed by heavy floods but new ones have been purchased and are currently being shipped to Nigeria. Lion collaring is planned for the dry season in 2022 and the collars have already been purchased.

ALL OTHER MAMMAL SIGHTINGS

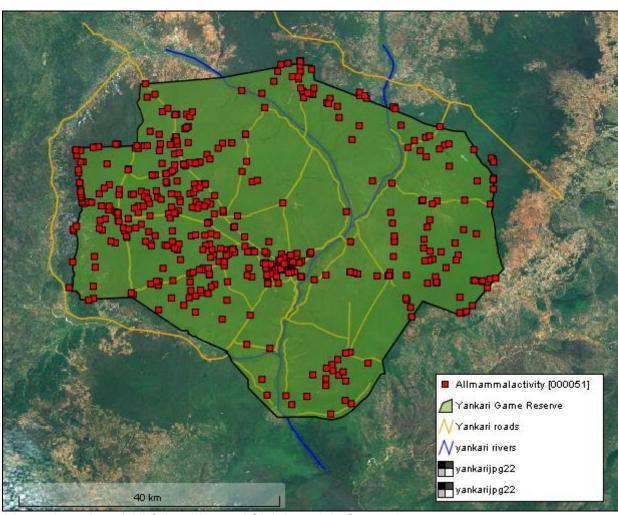
Various other large mammals were sighted within the reserve (see Map 5 below) including hippos, baboons, waterbuck, roan antelope, buffalo, hartebeest, patas monkey, tantalus monkey, bushbuck and warthog.



Hartebeest, August 2021



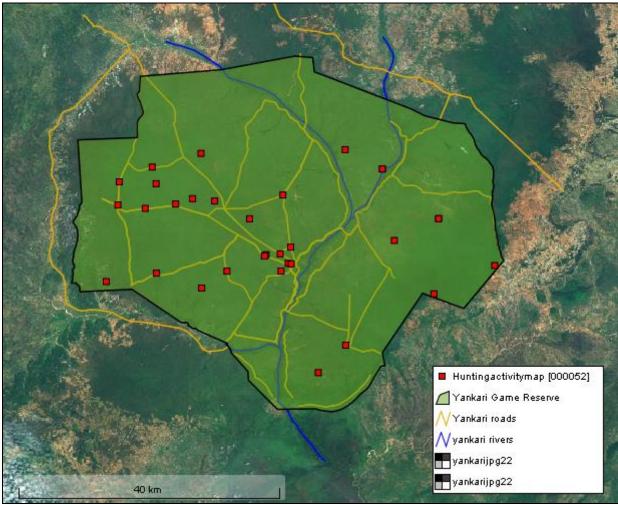
Roan antelope, August 2021



Map 5: Location of All Other Mammal Sightings July-September 2021

HUNTING EVIDENCE

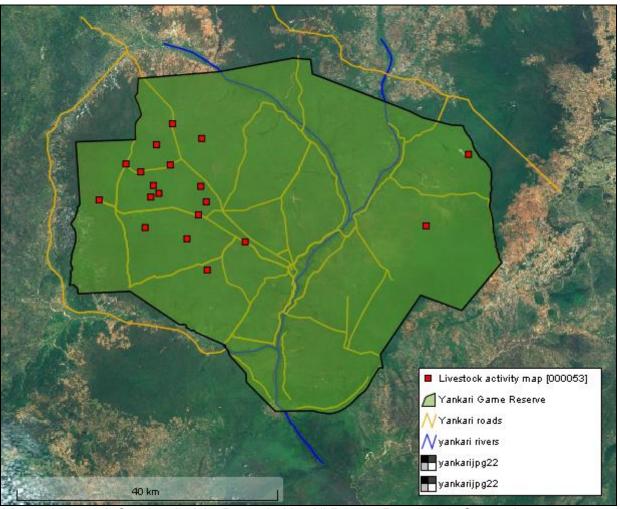
Although six hunters were arrested during the period, hunting pressure has significantly been reduced in the reserve. The hunters now only hunt opportunistic and are afraid of staying for long periods hunting in the reserve. Continuous ranger training and the provision of allowances, bonuses, food rations, kits and equipment has built the morale of the rangers. Additionally, the importance of intelligence from local communities cannot be overemphasized. Unfortunately, the outdated wildlife law does not provide sufficient deterrence to offenders. We are working closely with the government to revise the wildlife law to provide tougher punishment that will serve as deterrent. Hunting signs recorded this period are shown in Map 6 below.



Map 6: Hunting Activity Recorded by All Ranger Patrols July-September 2021

LIVESTOCK GRAZING

Nineteen livestock grazing activities in the reserve were recorded during the period (see map 7 below). The rate of livestock grazing in the reserve has reduced overtime because rangers have dominated the reserve with continuous patrols, constant supervision and zero tolerance to corruption.



Map 7: Livestock Grazing Activity Recorded by All Ranger Patrols July-September 2021

RANGER TRAINING

Important refresher ranger training by 'Conservation Outcomes' was started. This has been an ongoing strategy to ensure that the rangers remain fit and updated. The refresher training was separated into two groups (each group will train for three weeks) so that patrols were maintained during the period. The ranger training focused on renewing their practical skills, including weapons handling and safety, drill, ambush techniques, patrol techniques, arrest techniques, physical fitness, information gathering and informant networks, marksmanship, first aid, field deployment, human rights, safeguards, and code of conduct.



Rangers practising drill during the training, September 2021



Outdoor lectures during the refresher training, September 2021

CHALLENGES FACED

- Outdated wildlife law and the lack of deterrent. The Yankari protection law is outdated and penalties need strengthening to act as a deterrent.
- Lack of Payment of Counterpart funding by the Bauchi State Government (BASG). WCS has not received any counterpart funding from the BASG for over four years.
- **Firearms.** The firearms that the rangers use are old and require replacement.
- Elephant crop raiding and human-elephant conflict (HEC) is a growing problem around Yankari.
- Lack of proper real time communication between the ranger teams on patrol
 and the operations room. Since the mast on which our antenna for the VHF radio
 system was knocked down by heavy winds in 2019, proper communication
 between ranger teams on patrol and the operations room has become difficult.
 The new radio system will be installed in December 2021.

RECOMMENDATIONS

- 1. Revise the wildlife law.
- 2. Bauchi State should provide some financial support to augment WCS's efforts so that Yankari can be better protected.
- 3. Pilot projects such as beehive fences and watchtowers to help address the issue of HEC.
- 4. Acquire new firearms for rangers.
- 5. Buy additional patrol vehicles.
- 6. Provide additional livelihood support to the communities.

ACKNOWLEDGEMENTS

We are grateful to the Elephant Crisis Fund, the United States Fish and Wildlife Service, Lion Recovery Fund, Tusk Trust, North Carolina Zoo, Omaha Zoo, Indianapolis Zoo, the Illegal Wildlife Trade Challenge Fund (DEFRA), and the A.P. Leventis Conservation Foundation for their support.

Appendix 1: Nine Arrests Made and Court Outcome July-September 2021

Date	Name	Location	Offence and exhibit	Village	Outcome
10/07/21	1. Hassan Abdullahi 2. Yahaya Samaila 3. Dan Azumi	Bultu	Arrested for hunting in the reserve with a Dane gun, 1 knife, smoked hartebeest, 2 little crocodile skins, charms, 5 pieces of fish, 6 sacks cutlass, 3 cooking pots, torchlight	Kwala	Sent six months in jail
17/08/21	4. Abdullahi Musa 5. Rabiu Ibrahim	Farar- Kasa	Arrested for hunting in the reserve with smoked hartebeest, 1 knife, 1 cutlass, hoe, smoked civet, 2 torchlights, and food items	Rimi	Sent six months in jail
19/08/21	6. Rilwanu Adamu 7. Abdullahi Shehu 8. Moahmmed Ruwa	Dimis	Arrested for removing firewood for commercial purpose with 3 motorcycles, 3 axes, and firewood	Dimis	Sent one month in jail
23/09/21	9. Babangida Shayibu	Tungan- Kiyashi	Arrested for hunting in the reserve with 2 Dane guns, smoked roan antelope (27kg), 1 axe,1 knife, and food items	Wolakerol	Sent six months in jail

APPENDICES

Appendix 2: 32 Camping Patrols Completed July-September 2021

No	Area patrol	Patrol Start	Patrol End	Patrol Man Days
1.	Saltlick A, Shaman, Maikogo, Mainamaji	11/07/21	18/07/21	48
2.	Faliyaram, Kalban, Kuka	11/07/21	18/07/21	40
3.	Buri, Pali, Shaushau, Yalo	11/07/21	18/07/21	48
4.	Shaman, Maikwankwani, Dagudi, Kwaffa	11/07/21	18/07/21	56
5.	Nata'ala, Buri, Jibrin Nayaya, Kalban	19/07/21	26/08/21	56
6.	Kuturun Kuka, Pali, Dogon-Kurmi, Jada	19/07/21	03/08/21	40
7.	Dagudi, Shaman, Jibrin Nayaya, Bakin Dutse	27/07/21	11/08/21	64
8.	Garangaran, Jada, Wolakerol, Libline, Mainamaji	27/07/21	11/08/21	56
9.	Dagudi, Buri, Gaji, Kwaffa	04/08/21	11/08/21	64
10.	Shaman, Jibrin Nayaya, Kuka, Duguri	04/08/21	11/08/21	56
11.	Mainamaji, Buri, Libji	04/08/21	11/08/21	64
12.	Mainamaji, Ruwan-Rogo, Kwala, Malla, Giwa, Wolakerol, Jada, Pali	12/08/21	19/08/21	64
13.	Faliyaram, Shaman, Dimis, Gobur, Garangaran	12/08/21	19/08/21	56
14.	Yalwan Duguri, Dagudi, Kwaffa, Shaman	12/08/21	19/08/21	64
15.	Shaushau, Jada, Malla, Jibrin-Nayaya	20/08/21	27/08/21	64
16.	Dagudi, Shaman, Duguri, Jan-Dutse	20/08/21	27/08/21	56
17.	Kuturun Kuks, Tonglong, Nata'ala, Duguri	20/08/21	27/08/21	64
18.	Dagudi, Shaman, Kalban, Garangaran	28/08/21	04/09/21	64
19.	Bogwas, Tungulum, Gale, Kwala, Shaushau	28/08/21	04/09/21	64

20.	Shaman, Jibrin-Nayaya, Dagudi, Goron-Dutse	28/08/21	04/09/21	64
21.	Mainamaji, Ruwan-Rogo, Kwala, Malla, Giwa, Wolakerol, Jada, Pali	05/09/21	12/09/21	64
22.	Faliyaram, Shaman, Dimis, Gobur, Garangaran	05/09/21	12/09/21	64
23.	Yalwan Duguri, Dagudi, Kwaffa, Shaman	05/09/21	12/09/21	64
24.	Jada, Malla, Jibrin-Nayaya, Shaushau	05/09/21	12/09/21	56
25.	Yelwan-Duguri, Shaman, Duguri, Jan-Dutse	13/09/21	20/09/21	64
26.	Kuturun Kuks, Tonglong, Nata'ala, Duguri	13/09/21	20/09/21	64
27.	Dagudi, Shaman, Kalban, Garangaran	13/09/21	20/09/21	56
28.	Rimi, Bogwas, Tungulum, Gale, Kwala, Shaushau	21/09/21	24/09/21	28
29.	Shaman, Jibrin-Nayaya, Dagudi, Goron-Dutse	21/09/21	24/09/21	32
30.	Duguri, Sky, Shaman, Debigi	21/09/21	24/09/21	32
31.	Mainamaji, Kuka, Debigi, Buri	26/09/21	03/10/21	64
32.	Guruntum, Wolakerol, Jada, Pali	26/09/21	03/10/21	64