

AFI MOUNTAIN WILDLIFE SANCTUARY

CYBERTRACKER PATROL QUARTERLY REPORT:

OCTOBER-DECEMBER 2013



Bassey, Emmanuel

WCS Afi CyberTracker Project Coordinator

Summary

Six CyberTracker patrols were completed during the last quarter of 2013 covering a total distance of 250 kilometers in 44 patrol days (349 hours). The patrols focused on the northeastern and southwestern sectors of the sanctuary. Hunting with wire snares was the predominant human activity observed. Logging within the sanctuary was recorded for the first in the last three years. One poacher was apprehended and his hunting gear confiscated. Ten gunshots were heard, while 126 active wire snares and 23 expended cartridges were removed. Seven new farms were recorded, most of them located close to the sanctuary boundary. Two gorilla nest sites and three unidentified great ape nest sites were recorded. There were no gorilla sightings, but a chimpanzee was sighted once. Mona monkeys were sighted on 12 occasions while drills and white-nosed monkeys where sighted once and three times respectively. Rare pictures of a silver-back Cross River gorilla, Nigeria-Cameroon chimpanzee and drill were captured on a camera trap placed in the sanctuary by WCS. Other species of wildlife were also captured on the camera trap. Also during the period, Afi rangers joined their counterparts in the Mbe Mountains and Cross River National Park in a ranger training organized by WCS. The training was conducted by Conservation Outcomes and lasted 36 days from November to December 2013.

Methods

Anti-poaching patrols were conducted by two teams consisting six members each. To increase effectiveness, information provided by informants in villages was used to plan patrols, directing effort to areas identified as hunting "hotspots". Two teams patrolled agreed areas concurrently, spending 5-9 nights per patrol. To effectively clear each patrolled area of wire snares and hunting camps, as well as apprehend any poachers encountered, the "sweep" method was used, sporadically changing patrol formation from 'Single Line' to 'Extended Line'. Data were collected using CyberTracker units which also recorded GPS coordinates for observations. Data were analyzed using CyberTracker software and Excel.

Results and discussion

Due to a shortage of staff, fewer patrols were done during this quarter than in previous ones, with no patrols throughout the month of November. In November and part of December, most of the Afi rangers were away participating in a ranger training organized by WCS. However, 6 intensive antipoaching patrols were carried out over 44 days covering a total distance of 250 kilometers in 349 hours. The areas covered and patrol dates are presented in Figure 1 and Table 1 below. It is worthy to note that because of the method used in this quarter's patrols the total distance covered during the patrol may have been underestimated. Lack of adequate supervision may also have affected patrol effort in terms of distance covered as the CyberTracker project coordinator was away overseeing ranger training.

During the quarter, WCS completed renovation of a ranger office-cum-senior staff quarters at Boje with funds from Berggorilla. All the existing 14 rangers and 5 additional rangers newly posted Afi Mountain Wildlife Sanctuary were trained by 'Conservation Outcome' on modern patrol techniques, hunting camp attack, ambush techniques, first aid administration, drill and physical fitness. The training lasted 36 days from November to December 2013.

Patrol Effort

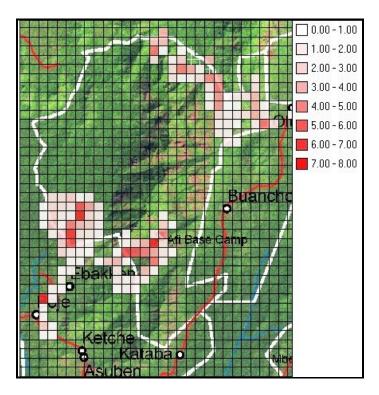


Figure 1: Patrol effort. Grid cells with brighter red color and white + sign represent areas with high patrol effort (distance covered; see scale).

Table 1: Areas covered	patrol during the period	October to December 2103
	pution during the period	

Patrol	No of patrol days	Dates	Locations
1	9	14-24/10/13	Esekwe/Olum axis
2	8	15-24/10/13	Base camp/Ketche axis
3	8	10 -18/12/13	Esekwe camp axis
4	8	10 -21/12/13	Base camp / Boje lowland axis
5	6	26 -31/12/13	Esekwe/Buanchor axis
6	5	26 - 31/12/13	Boje/Njua lowland axis

Law enforcement

During the quarter, one poacher, Mr. Ofre Osang from Buanchor community was apprehended on December 30 along Esekwe/Buanchor trail axis in the sanctuary. The rangers, led by George Mgbang were however, not able to hand over the culprit to the police due to logistical problems. More so, they could not contact any senior officer for assistance. During the quarter only two hunting camps were encountered and were dismantled.

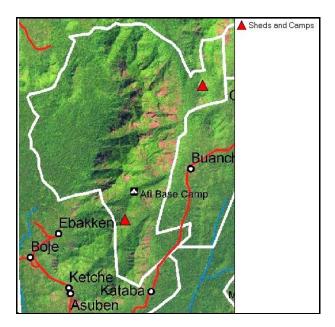


Figure 2: Locations of hunting camps destroyed during patrols from October to December 2013.

Human Activity

Table 2: Hunting signs recorded in the sanctuary during patrols from October to December 2013.

Signs	Number of observation	Encounter rate/km
Gunshot heard	10	0.04
Wire snares	126	0.50
Empty cartridges	23	0.09
Hunting camps	2	0.01

Wire snare was the main form of hunting in AMWS, majority of which are set on tree branches targeting mainly rock hyraxes and other climbing rodents. Though patrol strategies have been adjusted to curb hunting by being more directed to areas of high hunting activity, arresting hunters has not been very successful, as hunters seem to have devised a means of averting patrol teams, especially hunting at night when rangers have retired for the day. Only when hunters are arrested, prosecuted and adequately punished will others will be deterred.

Table 3: Encounter rate of signs of human activity recorded during patrols from October to December2013.

Activity	No of observations	Encounter rate/km
Hunting	52	0.208
Logging	8	0.032
Farming	7	0.028
Illegal path use	5	0.020
Shed or camp	2	0.008
Cutlass mark	1	0.004
Total	75	0.588

Aside from hunting, logging within the sanctuary is increasing. Eight freshly cut tree stumps were recorded during the quarter. Farming is also a major problem for the long term survival of the Afi gorillas and other wildlife. In addition to the rapid increase in the number farms in the sanctuary, hunters use ownership of farms in the sanctuary as an excuse to hunt in the sanctuary, often claiming to be visiting their farms when encountered.

If the current momentum of anti-poaching patrols is maintained, hunting activity could soon be reduced to a manageable level; but illegal farms in the sanctuary and Afi Forest Reserve need to be addressed now.

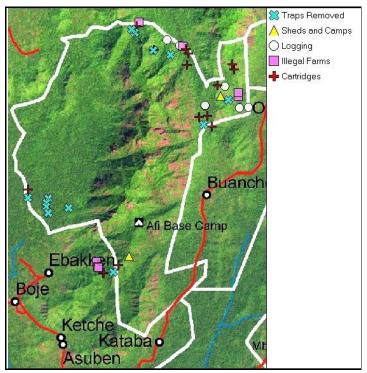


Figure 3: Distribution of all signs of human activity recorded during patrols October to December 2013.

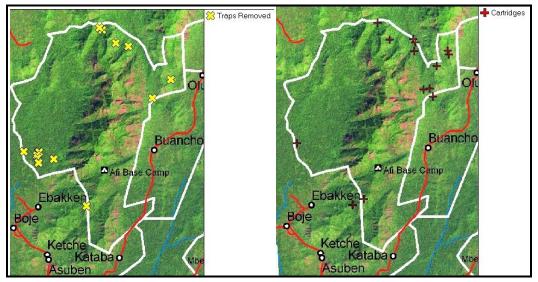


Figure 4: Distribution of all wire snares and expended cartridges found during the patrols

Wildlife observations

Due to high hunting pressure and generally low wildlife abundance, sightings of wildlife are rare in AMWS. However, indirect signs were frequently observed including feeding remains, dung and footprints. Signs of porcupine (*Atherurus africana*) were the most frequently encountered (1.8 signs/km), followed by blue duikers (*Phillantomba monticola*) (0.87signs/km). For primates, Mona and Drill monkey signs were the most frequently encountered (0.56/km and 0.18/km respectively). Encounter rate of gorilla signs was 0.04/km. Only few direct observations of wildlife were made, including 1 sighting of chimpanzee, 12 sightings of Mona monkey, 3 of white-nosed monkey and 1 sighting of drill (a group numbering several individuals). Others were 11 sightings of blue duiker in eight different occasions. Other mammal sightings were 5 groups of mongoose comprising several individuals, 4 hyraxes sighted on three different occasions and 5 porcupines. Other animals sighted include 4 rock fowls.

Great apes: a camera trap placed along the '4 K Trail' captured pictures of gorillas, chimpanzees and drills. Indirect signs of great apes recorded include 2 gorilla, and 3 unidentified great ape nest sites containing 4 and 24 individual nests respectively. Other signs such as chimpanzee vocalization, dung, trails and feeding remains were also recorded.

Date	Latitude	Longitude	Nest site age ¹	Number of nests	Number of ground nest	Number of tree nest	Dung present
10/21/2013	6.3067067	8.9683675	Very old	3	0	3	No
12/30/2013	6.319003	8.9777792	Very old	1	1		No

Table 4: Number and Location of gorilla nest sites recorded in October and December 2013.

¹Fresh (1-3 days), Recent (4-7 days), Old (1-4 weeks), Very old (<u>></u>1month)

Table 5: Unidentified great ape nest sites recorded in October and December 2013.

Date	Latitude	Longitude	Nest site age	Number of nests	Number of ground	Number of tree nest	Dung present
12/28/2013	6.3067078	8.9690797	Very old	2	0	2	No
12/28/2013	6.3070955	8.9668738	Recent	10	0	10	Yes
12/28/2013	6.3058953	8.9582327	Fresh	12	0	12	No

¹Fresh (1-3 days), Recent (4-7 days), Old (1-4 weeks), Very old (<u>></u>1month)

Table 6: Chimpanzee sightings recorded.

Date	Latitude	Longitude	Total sighted
10/21/2013	6.3057398	8.9586958	1

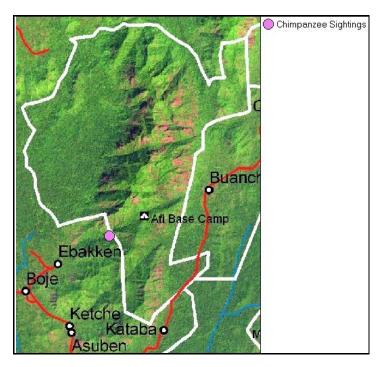


Figure 5: Chimpanzee sighting location

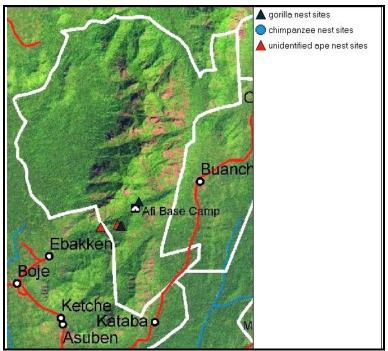


Figure 6: Distribution of ape nest sites

Progress

WCS has successfully trained the Afi Mountain Wildlife Sanctuary rangers on modern patrol techniques. It is hoped that with the training law enforcement ranger performance will improve and the sanctuary better protected. WCS has also completed the renovation of the hitherto dilapidated Afi Mountain Wildlife Sanctuary office-cum-senior officer's quarters in Boje. The first ever close-up of a silverback Cross River gorilla in the AMWS was obtained courtesy of WCS camera trap mounted in Afi Mountain Wildlife Sanctuary.

Challenges: The inability to pay community rangers arrears of allowances owed them is affecting their attitude to walk and making management of the Afi CyberTracker project difficult.

Recommendations

- 1. A standard arrest procedure needs to be developed to make arrest easier and effective.
- 2. The issue of illegal farms in the sanctuary should be addressed without further delay.
- 3. First aid kit should be provided for patrol teams.
- 4. Effort should be made to pay arrears of allowances owed to community rangers as incentive for better performance.

Data	No of	Patrol	Distance	Time taken	Start	Stop
Date	observations	days	covered (km)	(hr)	time	time
10/15/2013	17	1	4	7	8:10:10	14:58:29
10/16/2013	33	2	7	15	8:30:28	15:55:36
10/17/2013	75	2	13	16	7:38:19	15:53:58
10/18/2013	77	2	12	16	7:44:19	15:36:10
10/19/2013	133	2	13	14	8:10:25	15:10:32
10/20/2013	64	2	12	14	7:14:13	14:20:32
10/21/2013	78	2	13	14	9:12:14	13:40:12
10/22/2013	65	2	10	13	8:19:27	13:29:50
10/23/2013	1	1	1	4	20:42:11	23:24:48
10/24/2013	58	1	9	7	7:59:42	15:03:00
12/10/2013	44	1	5	8	7:33:25	16:01:42
12/11/2013	13	1	5	8	8:03:05	16:12:08
12/12/2013	114	2	12	14	8:11:27	15:23:56
12/13/2013	94	2	14	15	8:08:58	15:41:04
12/14/2013	107	2	15	15	7:57:40	15:27:45
12/15/2013	89	2	11	15	7:51:55	15:07:16
12/16/2013	92	2	10	14	8:39:25	15:46:59
12/17/2013	56	2	14	12	7:53:00	13:59:05
12/18/2013	52	1	13	35	8:25:11	14:49:39
12/20/2013	25	1	8	8	8:17:46	16:16:16
12/26/2013	62	2	8	14	8:27:15	15:38:11
12/27/2013	95	2	11	16	7:23:52	15:13:34
12/28/2013	68	2	9	16	7:10:36	15:25:10
12/29/2013	61	2	9	16	7:55:16	15:50:19
12/30/2013	47	2	11	16	7:38:59	15:27:05
12/31/2013	21	1	2	6	7:41:04	13:17:59
	1641	44	250	349	8:50:03	15:34:53

Appendix 1. Patrol effort statistics

Appendix 2: Signs of wildlife encountered

Species	No of Observations	Encounter Rate/km
Porcupine	458	1.832
Blue duiker	218	0.872
Mona monkey	140	0.560
Pangolin	83	0.332
Bush pig-Red river hog	60	0.237
Large duiker	48	0.192
Bay duiker	47	0.188
Drill	47	0.188
Mongoose	44	0.176
Unidentified monkey	31	0.124
Hyrax	28	0.112
White nosed monkey	22	0.088
Yellow back duiker	19	0.076
Red duiker	18	0.072
Gorilla	11	0.044
Buffalo	10	0.039
Unidentified duiker	7	0.028
Medium duiker	4	0.016
Unidentified great ape	4	0.016
Chimpanzee	3	0.012
Genet	3	0.012
Unidentified small mammal	3	0.012
African civet	2	0.008
Cane rat (grasscutter)	2	0.008
Red eared monkey	1	0.004
Small duiker	1	0.004
Unidentified cat	1	0.004
Unidentified large mammal	1	0.004
	1316	5.259