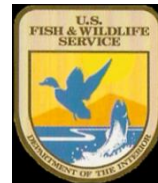




**AFI MOUNTAIN WILDLIFE SANCTUARY
CYBERTRACKER QUARTERLY PATROL REPORT:
JULY-SEPTEMBER 2014**



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Summary

This report presents the results of data collected during twelve CyberTracker-based patrols of Afi Mountain Wildlife Sanctuary (completed during the third quarter of 2014 (July-September) by Cross River State Forestry Commission (CRSFC) rangers and coordinated by the Wildlife Conservation Society (WCS). A total distance of 465 kilometers was covered on foot in 86 patrol days (673 hours). Data were collected using two handheld computers running CyberTracker software. Patrols were focused on reducing hunting in the sanctuary, walking the sanctuary boundaries to locate boundary beacons and collect GPS coordinates to improve existing maps of the sanctuary. Hunting with wire snares was the predominant human activity observed. Logging was also high (especially Ebony logging). No poacher was encountered, but 9 gunshots were heard, and 734 active wire snares and 52 expended cartridges were removed. 2 hunting camps found were dismantled. 9 new farms were recorded while some existing farms were being expanded. For great apes, 6 gorilla nest sites and one gorilla day nest were recorded. No signs of chimpanzee were recorded during this period. Groups of Mona monkeys were sighted on 11 occasions, white-nosed monkeys and drills were sighted 8 and 5 times respectively.

Methods

Anti-poaching patrols were conducted by two teams consisting six members each patrolling different areas of the sanctuary. To increase effectiveness, patrol plans and routes were based on experience and information provided by informants in villages. Two teams patrolled assigned areas concurrently, spending 7-9 nights per patrol. To effectively clear each patrolled area of wire snares and hunting camps, as well as to apprehend any poachers encountered, the “sweep” method was used. Data were collected using handheld computers running CyberTracker software which also recorded GPS coordinates for all observations. Data were analyzed using CyberTracker software and Excel.

Results and Discussion

Heavy rains experienced during the reporting period made patrolling difficult and marginally affected patrol effort in terms of area covered; also the fear of contracting Ebola virus disease from wild animals affected rangers’ morale as they feel unprotected and uninsured. Some communities (Buanchor and Kakwagon Irruan) have placed embargo on hunting, consumption and trading on bushmeat and bats within the communities as a preventive measure to checking the contracting and spreading of the dreaded Ebola virus disease. This is hoped to help reduce hunting pressure on the sanctuary. However, most of the planned patrols were completed. With series of cultural festivals celebrated in July and August in communities around the sanctuary hunting activity was expected to increase, consequently patrol plans were designed to seal off known hunter’s entry and exit trails. In all, 86 intensive anti-poaching patrol days were completed covering a distance of 465 kilometers in 694 hours. Patrol dates and coverage is presented in Table 1 and Figure 1 below.

Law Enforcement

During the quarter, no poacher was encountered in the sanctuary, however, farmers were seen. One Chief Ashijua from Esekwe community and three hired labourers were sent out of the sanctuary as he was opening up new plot of farm. He was reported to his community (Esekwe) and the village council asked him to stop further work on the said plot of land in the sanctuary and warned him never to set

foot in the sanctuary, the community resolve to arrest him or any other person reported to be clearing new farm in the sanctuary.

Patrol Effort in Afi Mountain Wildlife Sanctuary: July-September 2014

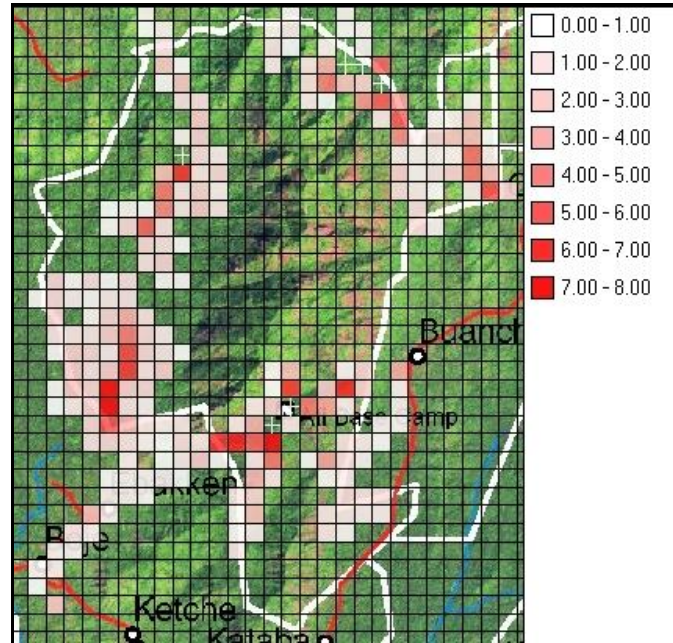


Figure 1: Patrol effort. Grids with brighter red color and + sign represent areas with greater patrol effort (distance covered).

Table 1: Patrol Areas Covered During the Period July-September 2014

<i>Patrol</i>	<i>No of patrol days</i>	<i>Dates</i>	<i>Locations</i>
1	7	17 -24/07/14	Buanchor/Drill Ranch axis
2	7	17 -24/07/14	Olum axis
3	6	28 -07-03/08/14	Katche/Up base camp axis
4	7	28 -07-03/08/14	Epuase axis
5	7	10 -18/08/14	Base camp axis
6	7	10 -18/08/14	Esekwe camp axis
7	7	22-30/08/14	Boje/Njua lowland axis
8	7	22-30/08/14	Kakubok/Nkanya axis
9	8	8 -18/09/14	Base camp axis
10	8	8 -18/09/14	Olum axis
11	8	20-29/09/14	Boje/Njua lowland axis
12	7	21-29/09/14	Esekwe camp axis

Human Activity

Table 2: Hunting signs recorded in the sanctuary during patrols from July-September 2014.

<i>Signs</i>	<i>Number of observations</i>	<i>Encounter rate/km</i>
Gunshots heard	9	0.02
Wire snares	734	1.58
Empty cartridges	52	0.11
Hunting camps	2	0.004

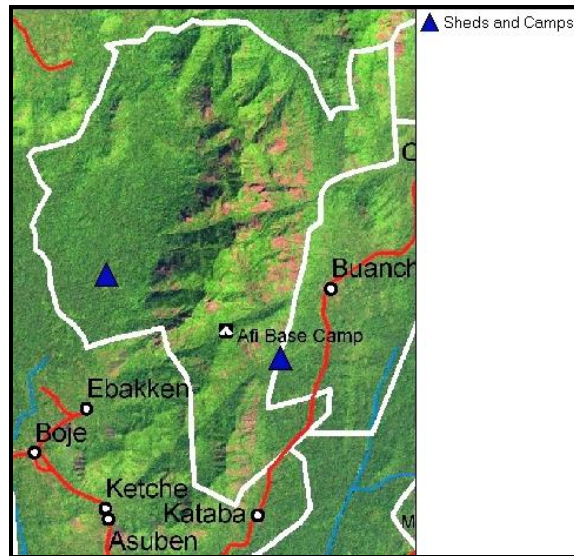


Figure 2: Locations of hunting camps destroyed during patrols from July-September 2014.

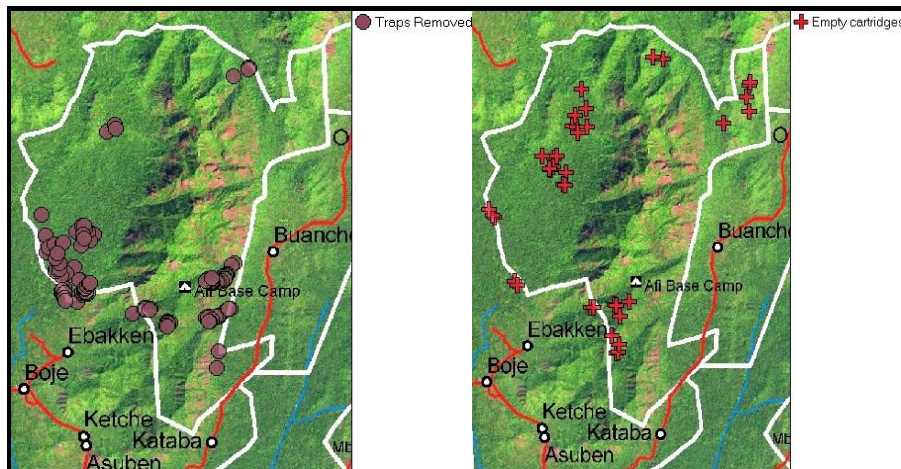


Figure 4: Distribution of all wire snares and expended cartridges found during the patrols

Wire snares was the main form of hunting in AMWS, size of the snare “knot” suggest that large mammals such as duikers and red river hog were targeted. Arresting hunters and trappers has not been very successful, as they seem to have devised a means of averting patrol teams, especially hunting at night when rangers have retired for the day and going in to set traps on the days they know that rangers are off duty.

Aside from hunting, logging within the sanctuary is increasing. 18 freshly cut tree stumps were recorded during the quarter most of which were ebony. Farming is also a major problem for the long term survival of the Afi gorillas and other wildlife.

Table 3: Encounter rate of signs of human activity recorded during patrols from July-September 2014

Activity	No of observations	Encounter rates/km
Hunting	226	0.486
Logging	18	0.039
Farming	9	0.019
Illegal path use	6	0.013
Clearing or burning	5	0.011
Cutlass mark	3	0.006
NTFP Collection	2	0.004
Shed or camp	2	0.004
Fishing	1	0.002
	271	0.579

Support zone communities are getting very frustrated with the inaction of government agencies on illegal farm encroachment and logging in the sanctuary and some communities are already taking laws into their hands. Recently Ebok community in Boje ordered her youth to evacuate woods sawn in the sanctuary by an indigene of Njua community; also the Esekwe community are already taking the lead in stopping new farm encroachment. If the current momentum of anti-poaching patrols is maintained, hunting activity could soon be reduced to a manageable level; but illegal farms and logging in the sanctuary and Afi River Forest Reserve need to be urgently addressed.

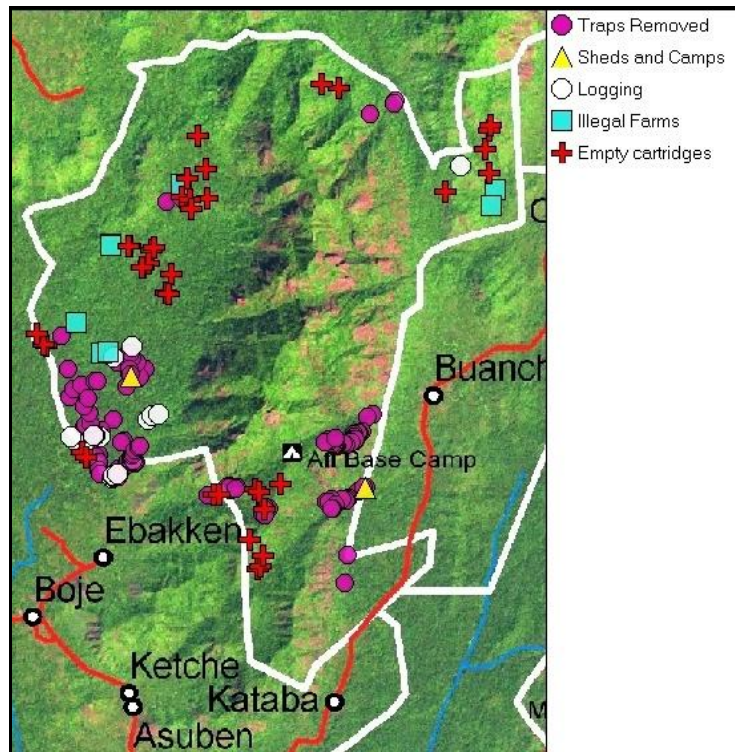


Figure 3: Distribution of all signs of human activity recorded during patrols July-September 2014

Fresh signs of wildlife observed were recorded to express abundance index of wildlife in the sanctuary, indirect signs frequently observed include feeding remains, dung and footprints. Direct sighting of wildlife is not very common in AMWS largely due to years of hunting and neglect. Mona monkey (*Cercopithecus mona*) were sighted in 11 occasions, White-nosed monkey (*Cercopithecus nictitans*) sighted in 8 different locations while Drills (*Mandrillus leucophaeus*) were observed in 5 occasions all in groups numbering between 10-35 individuals. Other wildlife directly sighted include 8 blue duiker (*Philantomba monticola*), 4 hyraxes (*Procavia* sp), 8 groups of mongoose (*Crossarchus platycephalus*) and 1 porcupine (*Atherurus africana*) others are 7 rock fowls (*Picathartes oreas*), 3 monitor lizards and several other small animals, birds and reptiles. Porcupine (*Atherurus africana*) signs were the most frequently encountered (1.26 signs/km), followed by blue duikers (*Philantomba monticola*) at 0.43 signs/km. For primates, Mona (*Cercopithecus mona*) and Drill monkey (*Mandrillus leucophaeus*) signs were the most frequently encountered (0.23/km and 0.13/km respectively). Encounter rate of gorilla (*Gorilla gorilla diehli*) signs was 0.03/km (Appendix 2)

Great apes: there was no great ape sighting during the period. Indirect signs of great apes recorded include 6 gorilla nest sites consisting of 2 fresh nest sites and 2 recent nest sites. Others were fresh dung, trails and feeding remains.

Table 4: Gorilla Nest Sites Recorded July-Sept. 2014

Date	Latitude	Longitude	Altitude	Nest site age	Total nests	Ground nest	Tree nest	Dung present
7/18/2014	6.3034563	8.9855452	236	Very old	1		1	Yes
7/31/2014	6.3182628	8.9770077	762	Fresh	2	1	1	No
8/1/2014	6.3235767	8.976635	929	Recent	5	1	4	Yes
8/1/2014	6.3247168	8.9750888	1021	Fresh	1	1		No
8/1/2014	6.3220612	8.9769802	873	Old	8	3	5	Yes
8/2/2014	6.3169867	8.9701695	-	Recent	3	1	2	Yes

N/B. Fresh (1-3 days), Recent (4-7 Days), Old (1-4 Weeks), Very old (1month-above)

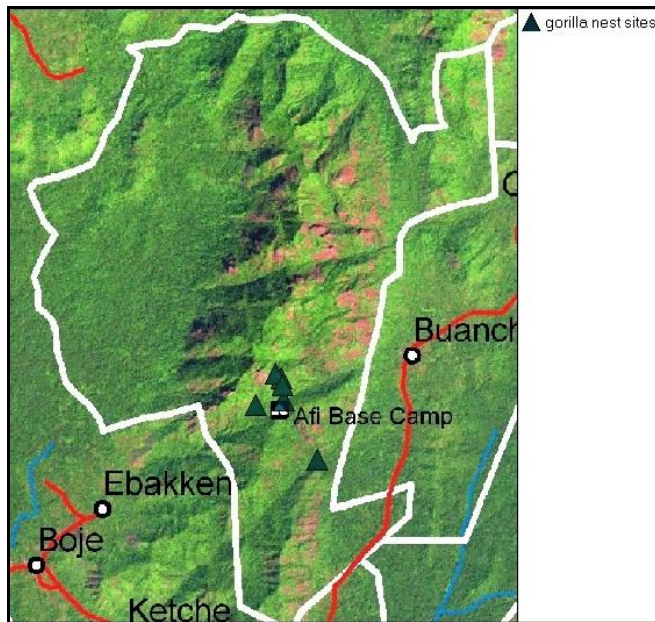


Figure 5: Distribution of Gorilla Nest Sites July-September 2014

Challenges: The non-payment of arrears of allowances owed to community rangers for five months now (May-September 2014) is affecting their attitude to work and making the organization of patrol work difficult. Lack of a functional vehicle for AMWS is a serious hindrance to law enforcement.

Recommendations

1. Arrears of allowance owed community rangers should be paid (5 months: May-September 2014)
2. The issue of illegal farms in the sanctuary should be addressed without further delay.
3. Functional vehicle is needed to facilitate law enforcement and patrol team deployment.
4. Sanctuary boundaries should be cleared and demarcated. Boundary beacons are currently being located by patrol teams.

Appendix 1. Patrol Effort Statistics

Date	No of observations	Patrol days	Distance covered/km	Time taken (hr)	Start time	Stop time
7/17/2014	40	2	8	14	10:04:08	14:24:22
7/18/2014	72	2	6	16	7:56:58	15:52:53
7/19/2014	54	2	9	14	8:27:56	15:25:48
7/20/2014	68	2	10	17	7:59:41	16:24:54
7/21/2014	62	2	9	16	8:14:01	16:12:55
7/22/2014	45	2	9	13	9:00:44	15:32:10
7/23/2014	46	1	6	7	9:02:03	15:58:21
7/24/2014	26	1	6	7	9:40:10	16:42:41
7/27/2014	1	1	4	21	23:19:37	23:19:37
7/28/2014	9	1	9	11	7:10:07	18:01:22
7/29/2014	57	2	14	18	7:17:36	16:24:25
7/30/2014	47	2	14	20	6:46:47	16:43:16
7/31/2014	60	2	9	19	6:39:33	15:59:58
8/1/2014	49	2	7	14	6:55:05	17:15:25
8/2/2014	53	2	9	19	7:19:01	16:44:55
8/3/2014	33	2	8	11	6:57:15	12:36:38
8/11/2014	59	2	10	14	9:25:31	16:20:13
8/12/2014	67	2	9	17	8:07:13	16:25:45
8/13/2014	46	2	16	18	8:08:49	17:05:57
8/14/2014	34	2	10	17	7:54:55	16:18:16
8/15/2014	38	2	8	14	8:25:20	15:12:06
8/16/2014	39	2	10	17	7:45:36	16:14:21
8/17/2014	40	2	11	12	8:24:55	14:38:01
8/23/2014	14	1	6	6	8:51:03	14:45:02
8/24/2014	44	2	13	18	8:17:01	17:09:57
8/25/2014	39	2	15	19	7:15:33	17:00:37
8/26/2014	65	2	15	18	7:38:53	16:27:42
8/27/2014	28	1	12	9	6:21:10	17:03:33
8/28/2014	43	2	5	13	7:57:20	14:12:28
8/29/2014	46	2	8	15	7:55:37	15:37:32
8/30/2014	41	2	19	32	8:05:29	15:27:27
9/9/2014	34	2	7	14	8:40:35	15:39:27
9/10/2014	60	2	12	16	7:57:09	15:44:01
9/11/2014	44	2	8	13	7:41:58	15:20:47
9/12/2014	50	2	9	15	7:34:20	15:01:30
9/15/2014	44	2	6	13	8:26:06	15:08:55
9/16/2014	50	2	11	15	7:49:49	15:14:30
9/17/2014	50	2	12	13	8:11:35	15:36:18
9/18/2014	35	2	10	15	7:22:38	14:52:00
9/21/2014	25	1	6	6	8:42:20	15:07:58
9/22/2014	58	2	9	14	8:12:23	15:06:13
9/23/2014	60	2	11	13	7:37:08	17:27:37
9/24/2014	65	2	13	16	7:12:36	15:12:07
9/25/2014	65	2	14	16	8:40:14	16:47:01
9/26/2014	49	2	12	15	7:20:08	15:23:07
9/27/2014	67	2	14	17	7:53:36	16:47:48
9/28/2014	28	2	2	8	7:45:35	14:54:39
	2149	86	465	694	8:56:17	15:59:19

Appendix 2: Encounter rate of wildlife species observed during patrols July-September 2014

Species/common names	Scientific names	No of observations	Encounter rates/km
Porcupine	<i>Atherurus africanus</i>	586	1.26
Blue duiker	<i>Philantomba monticola</i>	200	0.43
Red river hog	<i>Potamochoerus porcus</i>	146	0.31
Mona monkey	<i>Cercopithecus mona</i>	109	0.23
Large duiker	-	98	0.21
Drill	<i>Mandrillus leucophaeus</i>	59	0.13
Unidentified monkey	-	37	0.08
White nosed monkey	<i>Cercopithecus nictitans</i>	34	0.07
Small duiker	-	33	0.07
Mongoose	<i>Crossarchus platycephalus</i>	29	0.06
Red duiker	<i>Cephalophus sp</i>	19	0.04
Bay duiker	<i>Cephalophus dorsalis</i>	18	0.04
Hyrax	<i>Procavia sp.</i>	18	0.04
Gorilla	<i>Gorilla gorilla diehli</i>	12	0.03
Buffalo	<i>Syncerus caffer</i>	11	0.02
Pangolin	<i>Phataginus tricuspis</i>	11	0.02
Unidentified great ape	-	9	0.02
Cane rat (grasscutter)	<i>Thryonomys sp</i>	7	0.01
Medium duiker	-	7	0.01
Chimpanzee	<i>Pan troglodytes ellioti</i>	6	0.01
Unidentified duiker	-	6	0.01
African civet	<i>Civettictis civetta</i>	4	0.01
Yellow back duiker	<i>Cephalophus silvicultor</i>	4	0.01
		1463	3.13