# WILDLIFE CONSERVATION SOCIETY MBE MOUNTAINS CYBERTRACKER PATROLS QUARTERLY REPORT: JULY-SEPTEMBER, 2014



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# Summary

From June 30 to September 28 2014, a total of 36 CyberTracker-based patrols were completed in 183 patrol days covering a total distance of 1,121 kilometres in 1,422 hours. Another 30 days were patrolled without CyberTracker resulting from either Cyber unit malfunctioning or heavy down pour. A total of 41 great ape nest sites were recorded during the reporting period. 23 of these were identified as gorilla and 12 as chimpanzee. 6 great ape nest sites could not be identified to species. The largest gorilla nest site contained 11 nests; the largest for chimpanzee contained 13 nests. Gorillas were sighted twice, four on each occasion. Chimpanzees were also sighted twice. Though no hunter was encountered during the reporting period, signs of hunting including 383 wire snares, 3 hunting camp (dismantled), and 27 used cartridges were recorded.

**Methods** Thirty six patrols were completed by three teams operating a shift system. Three CyberTrackers were used to collect data. A few patrols were disrupted by heavy rains during the period. The patrols concentrated in areas known to have high levels of human activity based on previous patrols and information gathered in villages.

### Results

Thirty six patrols were completed in a total of 213 patrol days (including 183 patrol days when data was collected using CyberTracker and 30 patrol days without CyberTracker due to technical faults with PDAs) from July 1 to September 28, 2014. During the 183 days when CyberTracker was used a distance of 1,121 km was covered in 1422 hours. The results presented in this report are based on data recorded during these 183 days.

Month	No. of patrols	No. of patrol days <sup>1</sup>	Distance (km)	Time
				(hours)
July	12	71	396	555
August	12	70	361	448
Sept.	12	72	364	419
Total	36	213	1,121	1,422

 Table 1: Patrol effort by month (July – Sept., 2014)

<sup>1</sup>183 patrol days were completed using CyberTracker; 30 without CyberTracker due to problems with PDAs.

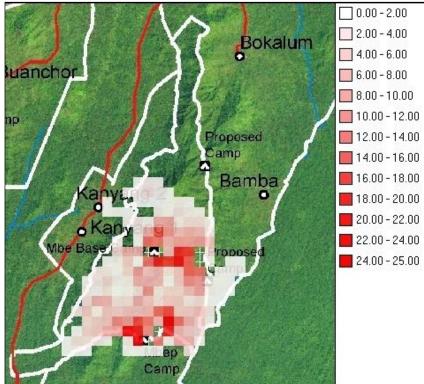


Figure 1: Patrol effort (July–September 2014). Deeper colour represents higher patrol effort.

# Great ape observations

A total of 23 gorilla nest sites, 12 chimpanzee nest sites, and 6 unidentified great ape nest sites were recorded. The largest gorilla nest site recorded contained 12 nests (Table 2). Gorillas were sighted on two occasions (4 individuals in each group) and chimpanzees were sighted in two different occasions by eco-guards during this period (Table 2).

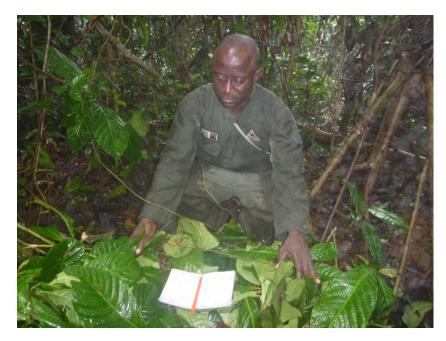


Photo 1. Observing a fresh Cross River gorilla nest in Mbe Mountains.

Date	Latitude	Longitude	Species	Number of individuals
23/08/2014	6.26425	9.08378	Gorilla	4
27/08/2014	6.24674	9.07437	Gorilla	4
15/07/2014	6.2579183	9.089265	Chimpanzee	14
13/08/2014	6.238636	9.0776282	Chimpanzee	4

Table 2: Great ape sightings (July – September, 2014)

 Table 3: Gorilla nest sites (July – September 2014)

Date	Latitude	Longitude	Total	Nests on the ground	Nests in trees	Age <sup>1</sup> of nest	Dung present
11/07/2014	6.24983	9.06712	Very old	4	2	2	No
11/07/2014	6.24699	9.06791	Old	3	0	1	No
18/07/2014	6.24645	9.07625	Very	11	2	9	No
25/07/2014	6.26044	9.09280	Fresh	6	5	1	No
		9.09280		5	5	0	No
30/07/2014	6.26251		Fresh				
30/07/2014	6.26260	9.07876	Fresh	3	3	0	Yes
30/07/2014	6.26237	9.07861	Fresh	1	1	0	Yes
30/07/2014	6.26232	9.07857	Fresh	8	8	0	Yes
31/07/2014	6.25493	9.06793	Recent	10	10	0	Yes
06/08/2014	6.26058	9.08918	Old	7	2	5	Yes
09/08/2014	6.26252	9.07849	Fresh	7	5	2	Yes
09/08/2014	6.26270	9.07871	Fresh	1	1	0	Yes
09/08/2014	6.26263	9.07886	Recent	1	1	0	No
09/08/2014	6.2628	9.07905	Recent	2	2	0	No
21/08/2014	6.25991	9.07744	Fresh	7	4	3	Yes
21/08/2014	6.26552	9.07928	Fresh	6	6	0	No
28/08/2014	6.26445	9.08060	Fresh	6	3	3	Yes
15/09/2014	6.22392	9.07672	Fresh	1	1	0	Yes
17/09/2014	6.26095	9.09515	Fresh	11	9	2	Yes
18/09/2014	6.23888	9.07445	Fresh	1	1	0	Yes
25/09/2014	6.26076	9.09517	Fresh	9	9	0	No
27/09/2014	6.26277	9.09371	Recent	4	4	0	No
27/09/2014	6.26727	9.09494	Recent	2	2	0	No

<sup>1</sup>Recent=4-7 days, Fresh= 1-3 days, Old=1-4 weeks, Very old >1 month

Date	Latitude	Longitude	Age <sup>1</sup>	Total	Number on the ground	Number on trees	Dung present
10/07/2014	6.25591	9.08434	Fresh	1	0	1	No
29/07/2014	6.23885	9.07278	Fresh	13	0	13	No
06/08/2014	6.25962	9.08873	Fresh	6	0	6	Yes
12/08/2014	6.25482	9.09049	Fresh	9	0	9	No
12/08/2014	6.25455	9.09017	Fresh	7	0	7	No
13/08/2014	6.23887	9.07316	Fresh	11	0	11	No
14/08/2014	6.26615	9.08994	Fresh	5	0	5	Yes
16/08/2014	6.26045	9.09425	Very old	4	0	4	No
06/09/2014	6.23887	9.08641	Old	1	0	1	No
18/09/2014	6.22952	9.07171	Fresh	5	0	5	Yes
19/09/2014	6.24571	9.07322	Fresh	13	0	13	Yes
24/09/2014	6.22399	9.07768	Fresh	2	0	2	Yes

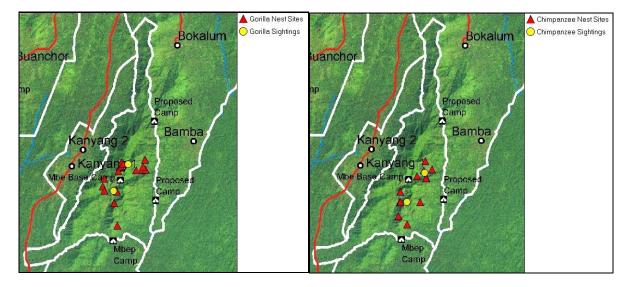
Table 4: Chimpanzee nest sites (July- September 2014)

<sup>1</sup>Recent=4-7 days, Fresh= 1-3 days, Old=1-4 weeks, Very old >1 month

#### Table 5: Unidentified great ape nest sites (July –September 2014)

Date	Latitude	Longitude	Age <sup>1</sup>	Total	Number on	Number	Dung
					the ground	on trees	present
06/08/2014	6.245600	9.068480	Old	1	0	1	No
23/08/2014	6.232990	9.066320	Old	3	0	3	No
03/09/2014	6.271484	9.088243	Old	10	4	6	No
03/09/2014	6.270749	9.087926	Recent	4	1	3	No
05/09/2014	6.271114	9.080933	Very old	2	2	0	No
05/09/2014	6.268447	9.082101	Old	7	1	6	No

<sup>1</sup>Recent=4-7 days, Fresh= 1-3 days, Old=1-4 weeks, Very old >1 month



**Figure 2:** Location of gorilla evidence (July – September 2014)

**Figure 3:** Location of chimpanzee evidence (July –September 2014).

#### Law enforcement

No hunters were encountered during this period. However, indirect evidence of human activities were recorded including 383 active wire snares, 27 used cartridges and 14 gunshots. The wire snares and gunshots were recorded mostly in the peripheral areas (Figure 4). Signs of NTFP collection were recorded mostly in the areas around Bamba and Abo Mkpang. Other human activities observed were three new farms in the Abo Ogbagante, Kanyang I and Kanyang II axes (see Figure 4) and 3 hunters' sheds; one around Ogbagante area in the south western flank; two in the eastern area between linking Mbe with Okwangwo Division of Cross River National Park. However, the high number of wire snares could be attributed to a number of factors to include invasion of the Camp 1 axis which has been left un-patrolled for a long period of time, the frequent trapping expedition in Mbe during every wet season and may be, improved patrol techniques by eco-guards.

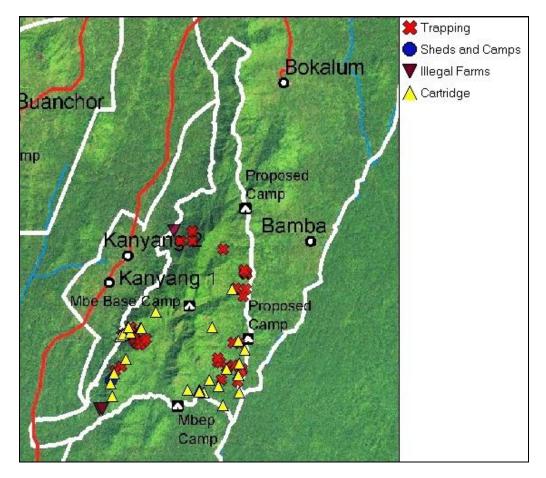


Figure 4: Distribution of human activities recorded during patrols (July – September 2014)

Month	Wire	Hunters	Hunter	Gunshots	Empty
	snares	seen	shed	heard	cartridges
July	69	0	1	6	1
August	165	0	0	4	13
September	149	0	2	4	13
Total	383	0	3	14	27

**Table 6:** Hunting evidence recorded (July – September 2014)

#### WCS – Community relations

WCS is keen to help build the capacity of CAMM to a better standard. Following the recent request made by CAMM for capacity building, WCS has offered to train CAMM management on proposal writing in the coming months. More so, WCS has offered to sponsor two meetings of the Management Committee of CAMM per quarter in addition to four quarterly meetings of the General Assembly of CAMM which WCS has been supporting since 2012. Patrol equipment removed from Obue's Camp by Bamba youths in March 2014 following protests have been returned allowing continuation of patrols in the Bamba area of the Mountains. Also during this period, CAMM held seven separate meetings, dissolved and reconstituted two arms of the association – the Management Committee is now headed by Stephen Tawo from Abo-Mkpang village and the General Assembly by Chief Linus Otu from Kanyang II. However, the management committee has taken a first step in planning with the commencement of the drafting of a-five-year action plan towards the achievement of Mbe goals.



Photo 2: Bamba youths returned patrol equipment removed from Obue's camp.

Among actions listed in the draft action plan developed by CAMM are: 1. improvement of security on the mountains to protect the forest resource, 2 permanent boundary demarcation, 3 Legal gazettement of the Mbe Mountains as a community wildlife sanctuary, 4 building the capacity of CAMM to manage the Mbe Mountains, 5 development of a management plan, 6 development of eco-tourism in the Mbe Mountains (including potentially, gorilla habituation).

In another development, the chairman of Boki local government council Hon. Abubakar Ewa has pledged his support to CAMM towards the conservation of Mbe Mountains. The chairman made the pledge through his Special Assistant on Tourism Mr. Godfred Takon in a CAMM management committee meeting held at Wula 1 on Saturday 23<sup>rd</sup> August 2014. He states that the Boki local government council is willing to partner with CAMM and may be any other necessary agency in providing adequate security on the Mbe Mountains. However, CAMM management committee have been given the mandate to broker a meeting between the Boki Council and CAMM apex body board of trustees for further discussions on the collaboration efforts between the two bodies.

# Challenges

- 1. Increasing farm encroachment especially in the northern sector.
- 2. Overgrown boundaries hinder effective law enforcement.
- 3. Heavy rains during the wet seasons disrupt patrols.

#### Recommendations

- 1. The technical capacity of CAMM to manage the Mbe Mountains remains low. Support should be provided to build the capacity of CAMM. CAMM should develop appropriate measures to improve enforcement of sanctions on offenders.
- 2. CAMM should make greater effort to eliminate illegal farms with the protected area. Efforts should be made towards retracing, clearing and permanent marking of the boundary.

# Appendices

Date	Sighting count	Patrols days	Distance covered (km)	Time taken (hours)	Start time	Stop time
07/07/2014	120	2	11.68774	13.0152	09:29:13	16:04:47
08/07/2014	15	2	0.68195	12.6597	07:45:43	14:06:15
09/07/2014	191	2	16.76235	17.3674	07:54:08	16:46:13
10/07/2014	148	2	17.59611	16.8375	08:07:59	16:42:18
11/07/2014	203	3	20.24527	20.1577	09:27:42	16:28:43
12/07/2014	174	3	24.25933	21.0189	08:10:50	15:16:52
14/07/2014	167	2	19.90393	17.0833	07:56:34	16:44:54
15/07/2014	119	3	17.62497	19.0802	08:00:35	14:25:21
16/07/2014	277	3	26.50214	24.8238	08:03:38	16:33:13
17/07/2014	80	3	11.12625	17.2733	07:55:02	13:43:08
18/07/2014	226	4	28.87491	37.7961	08:24:55	18:01:23
19/07/2014	151	4	20.94071	27.9673	08:31:31	15:15:18
21/07/2014	64	2	12.52445	105.4101	09:35:49	13:40:08
22/07/2014	136	2	16.02491	17.6849	07:52:53	16:47:04
23/07/2014	187	2	18.92824	16.3174	08:02:06	16:33:47
24/07/2014	13	2	4.98541	9.3644	08:06:22	12:49:27
25/07/2014	112	2	16.98069	16.648	08:07:01	16:33:55
26/07/2014	92	2	11.32957	16.9105	07:58:05	16:30:24
28/07/2014	186	3	15.39175	25.6848	08:22:27	17:00:38
29/07/2014	256	3	18.69181	24.2262	08:11:03	16:18:32
30/07/2014	138	3	13.38262	14.9665	08:51:37	14:13:28
31/07/2014	250	3	23.29869	22.9088	08:04:54	15:51:19
01/08/2014	126	2	14.98711	18.7608	08:43:46	17:14:23
02/08/2014	136	2	13.09448	20.7644	05:34:28	16:03:12
04/08/2014	9	3	0.81895	3.8631	10:21:52	11:39:08
05/08/2014	101	3	4.88585	10.5207	09:26:28	15:37:20
06/08/2014	200	3	21.43922	24.1318	08:07:57	16:15:39
07/08/2014	120	3	13.73445	15.7746	07:57:00	13:16:00
08/08/2014	152	3	19.31234	25.2795	08:02:19	16:29:08
09/08/2014	254	3	26.07327	25.0206	08:12:00	16:36:17
11/08/2014	177	3	18.07415	22.6286	08:44:16	16:24:01
12/08/2014	180	3	22.79402	23.5523	08:09:49	16:07:23
13/08/2014	222	3	18.53377	25.1998	08:15:06	16:40:52
14/08/2014	167	3	18.00672	19.3659	08:13:09	16:49:14
15/08/2014	187	3	20.81924	24.3523	07:58:51	16:09:17
16/08/2014	227	3	21.6562	23.4515	08:13:40	16:05:46
18/08/2014	192	2	11.89698	13.7578	08:06:36	15:04:47
19/08/2014	75	2	6.23505	8.6206	09:40:43	14:13:49
20/08/2014	281	3	22.42348	25.6845	08:08:57	17:05:26
21/08/2014	128	2	11.95401	17.5556	07:45:21	16:34:10

Appendix 1: Patrol effort, July – September 2014

22/08/2014         100         2         10.4262         15.7182         06:33:09         16:31:21           23/08/2014         138         2         12.99461         17.2769         07:53:39         16:35:20           25/08/2014         60         2         4.24678         6.4259         10:46:07         13:58:57           26/08/2014         138         2         15.1897         15.5681         08:09:03         15:57:13           27/08/2014         212         2         15.54381         17.5942         07:42:56         16:35:25           28/08/2014         127         2         13.73686         17.0473         08:10:54         17:14:43           29/08/2014         123         2         15.42531         16:6563         08:00:03         16:30:23           01/09/2014         62         2         4.82082         9.2782         07:48:05         15:29:22           02/09/2014         87         2         14.1586         17.9895         08:00:53         17:02:57           03/09/2014         126         2         18.07989         15.5602         08:27:58         16:39:00           06/09/2014         131         2         23.4858         19.1475         08:03:59	22/00/2014	100	2	10 4000	15 7400	00.20.00	16.24.04
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18/09/2014160313.8122117.151608:03:5713:48:2219/09/2014229322.3101627.153108:42:0417:48:3220/09/2014262325.5852623.349708:14:5516:10:0822/09/2014173215.307713.760008:48:0516:17:2223/09/2014203217.6777218.312207:32:3417:11:0124/09/2014170213.1891615.461607:49:5815:45:1925/09/2014157213.5591415.183308:00:2115:41:5626/09/201462311.5437912.184809:21:3013:26:2527/09/2014238322.34726.409108:01:3217:00:53	16/09/2014	93	3	7.94647	12.2229	07:42:32	11:48:12
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20/09/2014262325.5852623.349708:14:5516:10:0822/09/2014173215.307713.760008:48:0516:17:2223/09/2014203217.6777218.312207:32:3417:11:0124/09/2014170213.1891615.461607:49:5815:45:1925/09/2014157213.5591415.183308:00:2115:41:5626/09/201462311.5437912.184809:21:3013:26:2527/09/2014238322.34726.409108:01:3217:00:53	18/09/2014	160	3	13.81221	17.1516	08:03:57	13:48:22
22/09/2014173215.307713.760008:48:0516:17:2223/09/2014203217.6777218.312207:32:3417:11:0124/09/2014170213.1891615.461607:49:5815:45:1925/09/2014157213.5591415.183308:00:2115:41:5626/09/201462311.5437912.184809:21:3013:26:2527/09/2014238322.34726.409108:01:3217:00:53	19/09/2014	229	3	22.31016	27.1531	08:42:04	17:48:32
23/09/2014203217.6777218.312207:32:3417:11:0124/09/2014170213.1891615.461607:49:5815:45:1925/09/2014157213.5591415.183308:00:2115:41:5626/09/201462311.5437912.184809:21:3013:26:2527/09/2014238322.34726.409108:01:3217:00:53	20/09/2014	262	3	25.58526	23.3497	08:14:55	16:10:08
24/09/2014170213.1891615.461607:49:5815:45:1925/09/2014157213.5591415.183308:00:2115:41:5626/09/201462311.5437912.184809:21:3013:26:2527/09/2014238322.34726.409108:01:3217:00:53	22/09/2014	173	2	15.3077	13.7600	08:48:05	16:17:22
25/09/2014157213.5591415.183308:00:2115:41:5626/09/201462311.5437912.184809:21:3013:26:2527/09/2014238322.34726.409108:01:3217:00:53	23/09/2014	203	2	17.67772	18.3122	07:32:34	17:11:01
26/09/201462311.5437912.184809:21:3013:26:2527/09/2014238322.34726.409108:01:3217:00:53	24/09/2014	170	2	13.18916	15.4616	07:49:58	15:45:19
27/09/2014 238 3 22.347 26.4091 08:01:32 17:00:53	25/09/2014	157	2	13.55914	15.1833	08:00:21	15:41:56
	26/09/2014	62	3	11.54379	12.1848	09:21:30	13:26:25
Total 10960 183* 1121 1422	27/09/2014	238	3	22.347	26.4091	08:01:32	17:00:53
	Total	10960	183*	1121	1422		

\*A total of 213 patrol days were completed. The 183 patrols days presented here are those when CyberTracker was used to collect data. Additional 30 patrols days were done without CyberTracker due to technical problems.

Common name	Scientific name	Number of	Encounter rate	
		observation	per km	
Porcupine	Atherurus africanus	1384	1.23373	
Red river hog	Potamochoerus porcus	995	0.88697	
Unidentified duiker	_	961	0.85666	
Squirrel	_	793	0.70690	
Unidentified small mammal	_	657	0.58566	
Blue duiker	Philantomba monticola	554	0.49385	
Unidentified monkey	-	521	0.46443	
Mongoose	-	504	0.44928	
Red duiker	Cephalophus spp.	406	0.36192	
Rock hyrax	Procavia ruficeps	308	0.27456	
Large duiker	-	305	0.27188	
Mona monkey	Cercopithecus mona	245	0.21840	
Small duiker	-	183	0.16313	
Tree pangolin	Phataginus tricuspis	177	0.15778	
Drill	Mandrillus leucophaeus	126	0.11232	
White nosed monkey	Cercopithecus nictitans	118	0.10518	
Unidentified large mammal	-	115	0.10251	
Unidentified great ape	-	108	0.09627	
Medium duiker	-	82	0.07309	
Gorilla	Gorilla gorilla diehli	79	0.07042	
Chimpanzee	Pan troglodytes ellioti	68	0.06061	
Galago	-	47	0.04189	
Red eared monkey	Cercopithecus erythrotis	39	0.03476	
Palm civet	??	27	0.02406	
Bay duiker	Cephalophus dorsalis	22	0.01961	
Unidentified cat	-	22	0.01961	
Flying squirrel	-	18	0.01604	
Genet	Genetta sp	17	0.01515	
Other rat	-	13	0.01158	
Potto	-	10	0.00891	
Cane rat	Thryonomys swinderianus	3	0.00267	
Elephant	Loxodonta africana	3	0.00267	
Other large mammal	-	3	0.00267	
Other small mammal	-	3	0.00267	
Otter	- 1	3	0.00267	
African civet	Civettictis civetta	2	0.00178	
Bush buck	Tragelaphus scriptus	1	0.00089	
Chevrotain	Hyemoschus aquaticus	1	0.00089	

# Appendix 2: Animal Encounter Rates July – September 2014