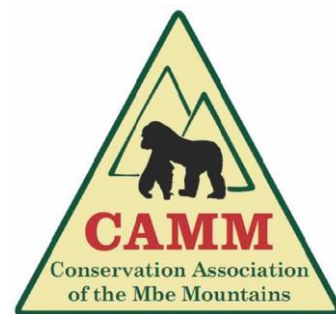


**WILDLIFE CONSERVATION SOCIETY  
MBE MOUNTAINS COMMUNITY WILDLIFE SANCTUARY**

**QUARTERLY REPORT: JULY – SEPTEMBER 2021**



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WCS Nigeria Program

## **Summary**

This report presents the results of law enforcement patrols of the Mbe Mountains by 16 eco-guards from July to September 2021 organized by the Wildlife Conservation Society (WCS). The report also describes activities implemented to raise conservation awareness and improve livelihoods in the local communities. A total of 20 anti-poaching and gorilla monitoring patrols were completed this quarter, covering a total distance of 886 kilometres over 153 patrol days (749 person-days). The patrols apprehended five people for illegal logging, removed 276 wire snares and dismantled one shed used as a base for illegal logging. Other signs of illegal activities observed include 8 gunshots heard and 111 empty shotgun cartridges. In addition to law enforcement, the eco-guards collected data to monitor wildlife abundance and distribution. Great ape observations this quarter include four sightings of chimpanzees, and 15 gorilla and 11 chimpanzee nest sites. Monkeys were sighted 104 times: drill (10 sightings), red-eared monkey (13 sightings), Mona monkey (55 sightings), and putty-nosed monkey (26 sightings).

Activities implemented to raise awareness in the local communities include film shows in eight villages, reaching 1,559 people, four exchange visits between conservation clubs involving 421 students, seven guided field trips, five community meetings and five school visits. One hundred customized notebooks and 60 pens were distributed to conservation club members and teachers in the schools visited to further raise awareness and motivate the students to participate conservation club activities.

Livelihood activities implemented this quarter include distribution of 25,950 cocoa seedlings to 179 farmers in eight communities and support to women's groups to sell their bush mango at the Eke-Aba bush mango market in Ebonyi State where prices are better. WCS also supported the Conservation Association of Mbe Mountains (Camm) to revise its constitution to strengthen the association and ensure its sustainability.

## **Methods**

Three teams of four eco-guards each based at different camps in the sanctuary completed two 7 to 10-days patrols per month, patrolling different sectors of the sanctuary simultaneously. Each month, additional 1-2 short (3 to 5 days) patrols are also organized to close any gaps between the main patrols that hunters could potentially exploit. Patrols followed existing trails, targeting known and suspected hotspots of human activities based on intelligence gathered from the surrounding villages and data from previous patrols. Data were collected using CyberTracker software on handheld computer devices and analyzed in SMART (<http://smartconservationtools.org/>). All offenders encountered apprehended, all wire snares, and hunting camps found were destroyed.

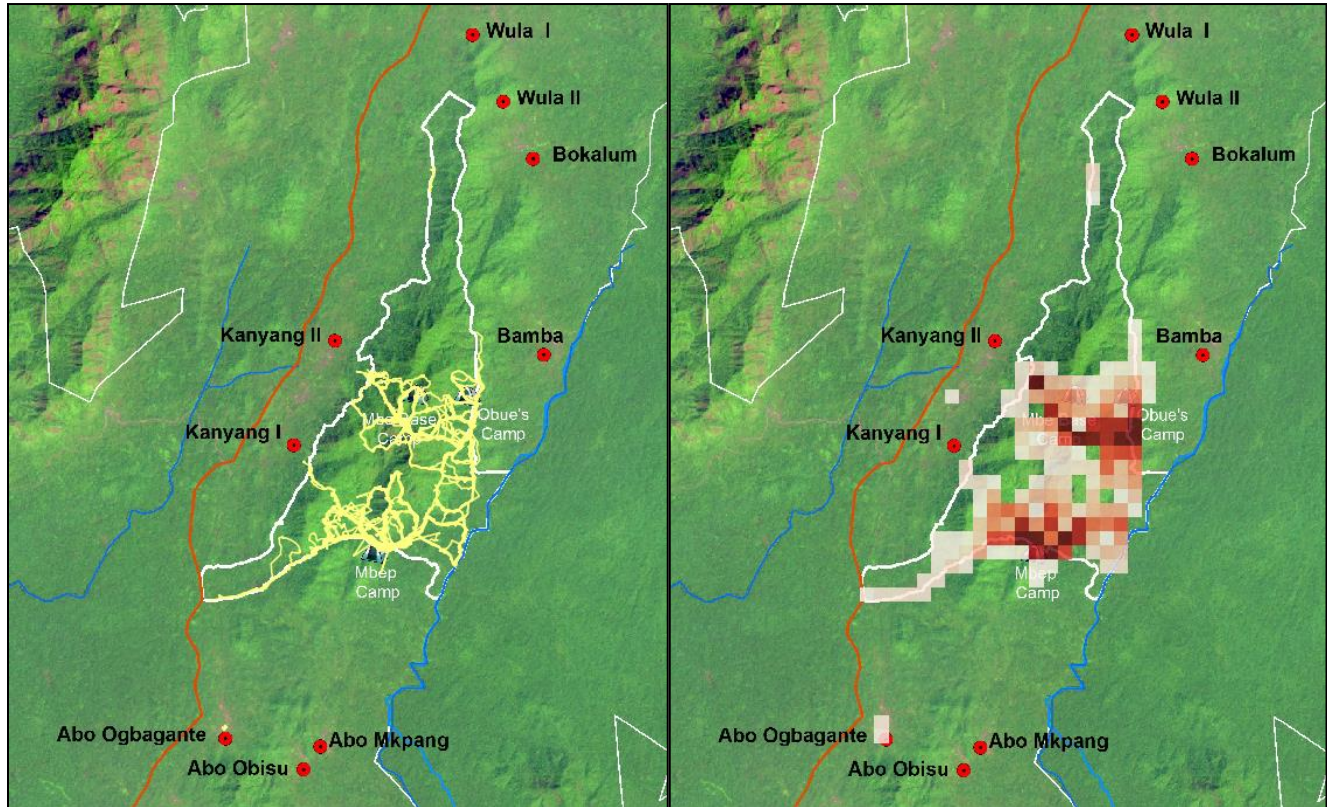


## Results

### 1. Law Enforcement

#### Patrol effort

Twenty anti-poaching patrols were completed this quarter (Table 1; Figure 1; Appendix I) covering a total distance of 886 kilometres over 153 patrol days (749 person-days).



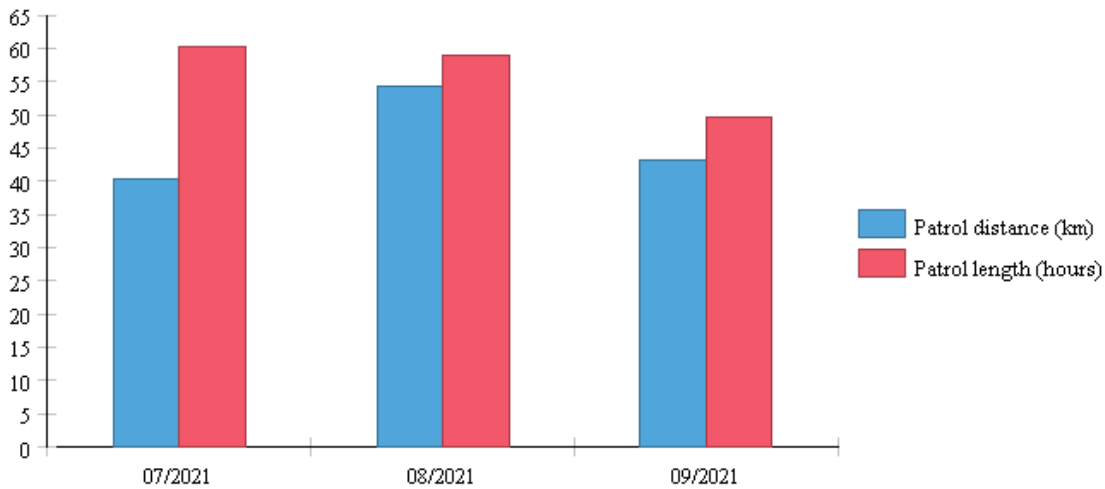
**Figure 1. Patrol tracked-logs and patrol effort per grid cell for the period July to September 2021. (NOTE: Darker red color indicates areas of more intense patrol coverage).**

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

Patrol ID	Number of patrols	Number of days	Distance (km)	Person - days
mbe_mts_000476	1	8	34.7	47
mbe_mts_000477	1	7	50.5	36
mbe_mts_000478	1	8	36.5	36
mbe_mts_000479	1	8	41.0	40
mbe_mts_000480	1	8	45.2	35
mbe_mts_000481	1	8	52.2	40
mbe_mts_000482	1	6	31.3	36
mbe_mts_000483	1	6	31.3	26
mbe_mts_000484	1	10	59.3	68
mbe_mts_000485	1	8	71.1	32

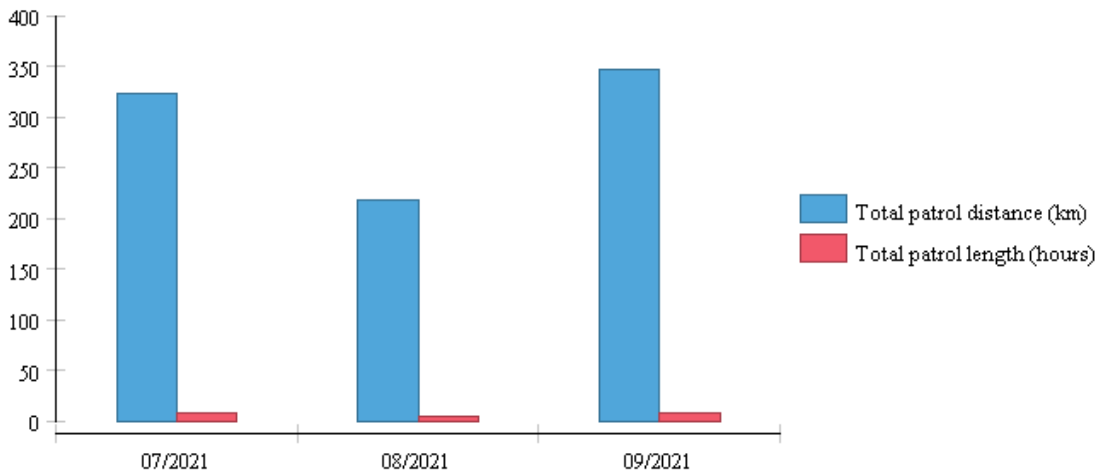
Patrol ID	Number of patrols	Number of days	Distance (km)	Person - days
mbe_mts_000486	1	8	39.5	40
mbe_mts_000487	1	8	47.3	35
mbe_mts_000488	1	8	42.1	40
mbe_mts_000489	1	8	63.0	32
mbe_mts_000490	1	8	48.2	40
mbe_mts_000491	1	8	20.3	42
mbe_mts_000492	1	7	25.4	34
mbe_mts_000493	1	9	64.3	36
mbe_mts_000494	1	6	31.6	24
mbe_mts_000495	1	6	51.3	30
<b>Total</b>	<b>20</b>	<b>153</b>	<b>886.0</b>	<b>749</b>

**Average distance and length of patrols per month**



**Figure 2. Average distance covered and time taken per patrol per month for the period July to September 2021.**

**Total patrol distance and length per month**



**Figure 3. Total patrol distance and time per month for the period July to September 2021.**

The patrols apprehended five people for illegal logging in the sanctuary, removed 276 wire snares, and dismantled a shed used by illegal loggers. Other signs of illegal activities observed include 8 gunshots heard and 111 empty shotgun cartridge shells. The apprehended offenders were reported to CAMM and were fined (see details on Table 2).

**Table 2. Summary of arrests and other law enforcement for the period July to September 2021.**

Leader	Date	Action taken	Home village	Name	Threat	Action taken
Jacob Osang	Sep 17, 2021	Apprehended and reported to CAMM	Wula I (originally from Benue State)	Christopher Isaac	Logging	Fined 50,000 Naira by CAMM
Jacob Osang	Sep 17, 2021	Apprehended and reported to CAMM	Wula I (originally from Benue State)	Felix Declan	Logging	Fined 50,000 Naira by CAMM
Jacob Osang	Sep 17, 2021	Apprehended and reported to CAMM	Wula I (originally from Benue State)	Alex Kuchevae	Logging	Fined 50,000 Naira by CAMM
Jacob Osang	Sep 18, 2021	Apprehended and reported to CAMM	Wula I (originally from Akwa Ibom State)	Otubong Ime	Logging	Fined 50,000 Naira by CAMM
Jacob Osang	Sep 18, 2021	Apprehended and reported to CAMM	Wula I (originally from Akwa Ibom State)	Dickson Andrew	Logging	Fined 50,000 Naira by CAMM

**Table 3. Summary of number of people seen by threat for the period July to September 2021.**

Threat	Number of people seen	Encounter rate per km
Logging	5	0.006

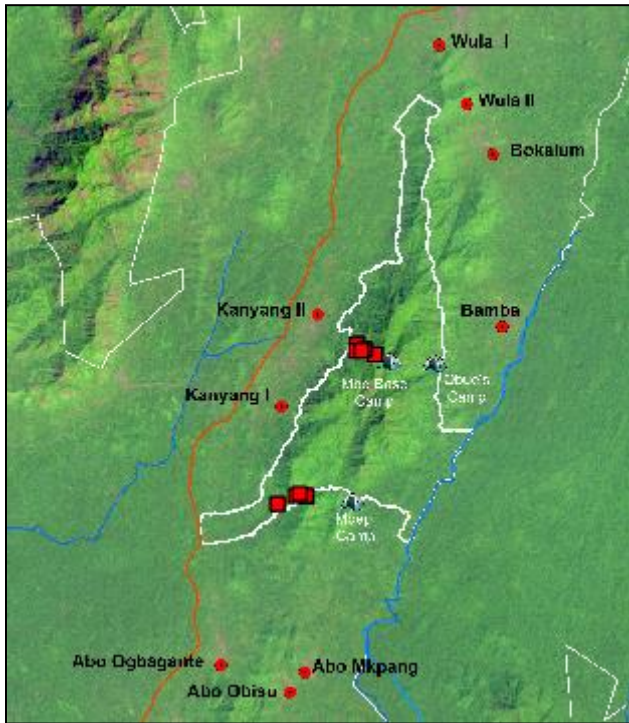
**Table 4. Encounter rate of signs of human activity for the period July to September 2021.**

Activity	# of incidents	Encounter rate/km
Farming and land clearing	2	0.002
Gunshot heard	8	0.009
Human sign	59	0.067
Logging and tree cutting	11	0.012
NTFPs	0	0.000
People seen	2	0.002
Shed	1	0.001
Traps, weapons & equipment	105	0.119
Total	188	0.212

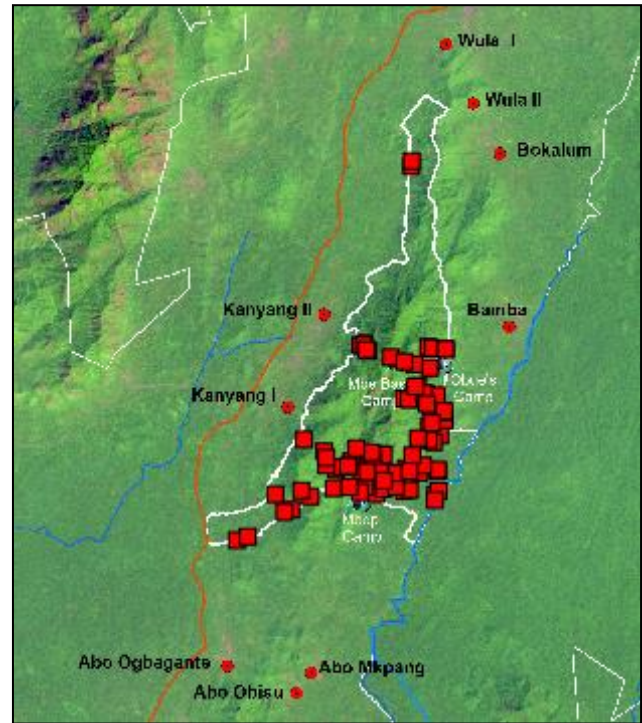
**Table 5. Details of logging activity for the period July to September 2021.**

Type of logging evidence	Action taken - items	Age of sign	Number of cut pieces	Number of logs	Tree species
Stump	Seen only	Fresh	---	---	Other
Cut pieces	Seen only	Fresh	70	---	Iroko
Cut pieces	Seen only	Fresh	61	---	Unknown
Logs	Seen only	Fresh	---	1	Other
Cut pieces	Destroyed	Fresh	100	---	Unknown
Stump	Seen only	Fresh	---	---	Unknown
Cut pieces	Confiscated	Fresh	---	---	Unknown
Cut pieces	Destroyed	Fresh	---	---	Other
Stump	Seen only	Fresh	---	---	Other
Cut pieces	Seen only	Fresh	63	---	Unknown
Logs	Confiscated	Fresh	---	3	Unknown
Cut pieces	Confiscated	Fresh	60	---	Other
Logs	Confiscated	Fresh	---	1	Other

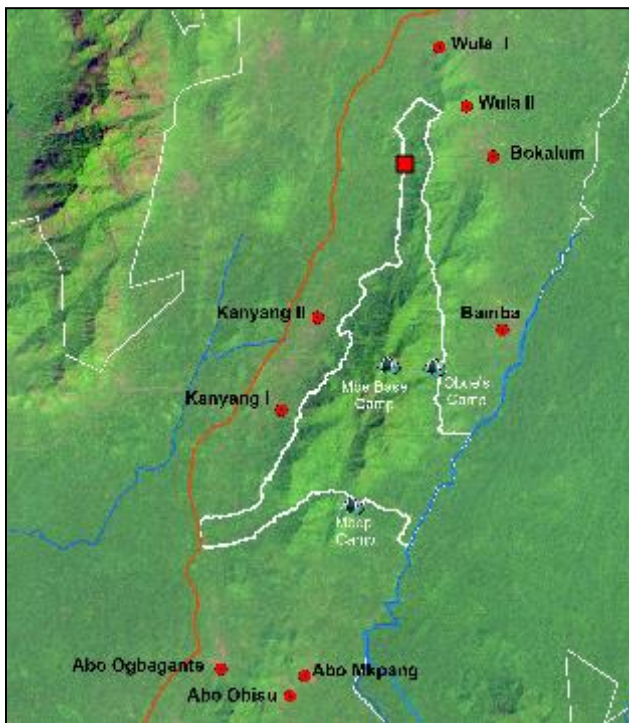




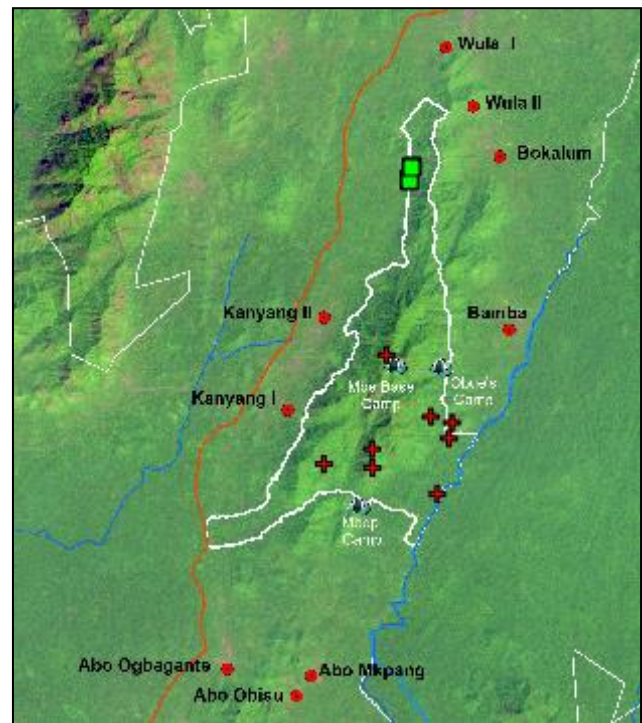
a) Wire snares



b) Empty cartridges



c) Shed



d) Gunshots heard in crosses, and logging in squares,

**Figure 4. Distribution of all signs of human activity recorded during patrols for the period July to September 2021.**

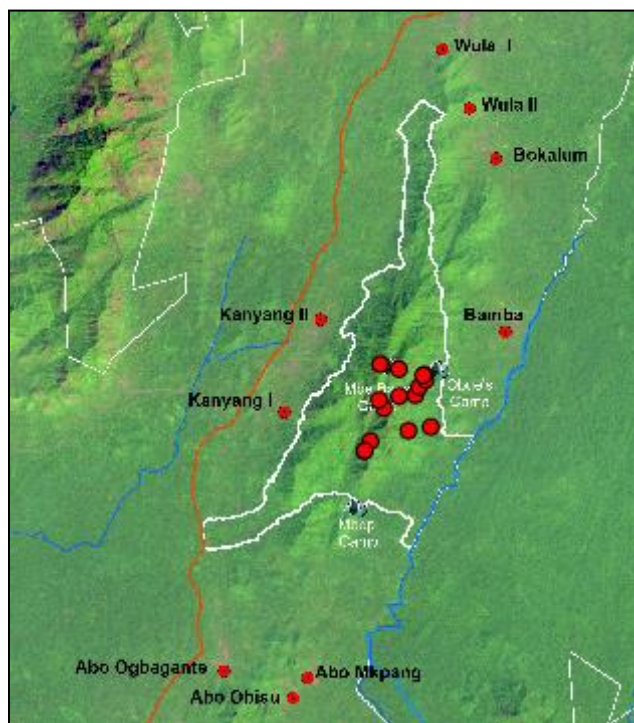
**Table 6. Hunting signs recorded for the period July to September 2021.**

Sign	# of observations	Encounter rate/km
Gunshots heard	8	0.009
Set wire snares	276	0.311
Empty cartridges	111	0.125
Hunting camps	0	0.000
Total	395	0.446

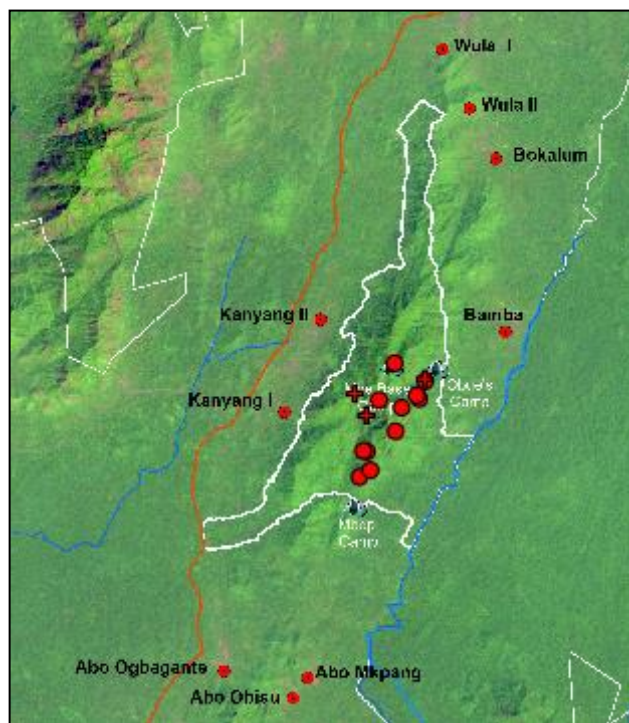
## Wildlife Observations

### *Great apes*

This quarter chimpanzees were sighted on four occasions (Table 7) and 26 ape nest sites were observed: 15 gorilla and 11 chimpanzee (Table 8). The largest nest site recorded contained 15 nests (Table 9).



a) Gorillas



b) Chimpanzees

**Figure 5. Ape sightings and nest sites recorded for the period July to September 2021. (NOTE: Nest sites shown as circles, sightings shown as crosses).**

**Table 7. Ape sightings recorded for the period July to September 2021.**

Date	Species	Number age/sex unknown	Total
Sep 10, 2021	Chimpanzee	7	7
Aug 22, 2021	Chimpanzee	5	5
Aug 22, 2021	Chimpanzee	5	5
Jul 28, 2021	Chimpanzee	11	11

**Table 8. Number and encounter rate of nest sites recorded for the period July to September 2021.**

Species	Number of nest sites	Encounter rate of nest sites per km
Chimpanzee	11	0.012
Gorilla	15	0.017
Total	26	0.029

**Table 9. Nest sites recorded for the period July to September 2021.**

Species	Nest site type	Dung present	Age of sign	Number of ground nests	Total number of nests
Chimpanzee	Night nest(s)	true	Fresh	3	6
Chimpanzee	Night nest(s)	false	Recent	0	15
Chimpanzee	Night nest(s)	false	Recent	4	11
Chimpanzee	Night nest(s)	false	Recent	0	9
Chimpanzee	Night nest(s)	false	Recent	0	12
Chimpanzee	Night nest(s)	false	Old	0	5
Chimpanzee	Night nest(s)	false	Fresh	2	6
Chimpanzee	Night nest(s)	false	Recent	0	4
Chimpanzee	Night nest(s)	false	Recent	0	12
Chimpanzee	Night nest(s)	false	Fresh	0	9
Chimpanzee	Night nest(s)	false	Fresh	0	9
Gorilla	Night nest(s)	false	Old	5	5
Gorilla	Unknown	false	Fresh	1	1
Gorilla	Night nest(s)	true	Fresh	1	1
Gorilla	Night nest(s)	false	Fresh	6	6
Gorilla	Day nest(s)	false	Fresh	1	1
Gorilla	Night nest(s)	true	Fresh	5	7
Gorilla	Night nest(s)	true	Fresh	7	7
Gorilla	Night nest(s)	true	Fresh	2	15
Gorilla	Night nest(s)	false	Fresh	2	4
Gorilla	Night nest(s)	false	Fresh	2	2
Gorilla	Night nest(s)	false	Recent	3	8
Gorilla	Night nest(s)	false	Fresh	1	1
Gorilla	Night nest(s)	false	Fresh	5	5
Gorilla	Night nest(s)	false	Recent	4	4
Gorilla	Night nest(s)	true	Fresh	3	4

**Monkey sightings**

Monkeys were sighted a total of 104 times (Figure 6; Table 10): drill (10 sightings), red-eared monkey (13 sightings), Mona monkey (55 sightings), and putty-nosed monkey (26 sightings).



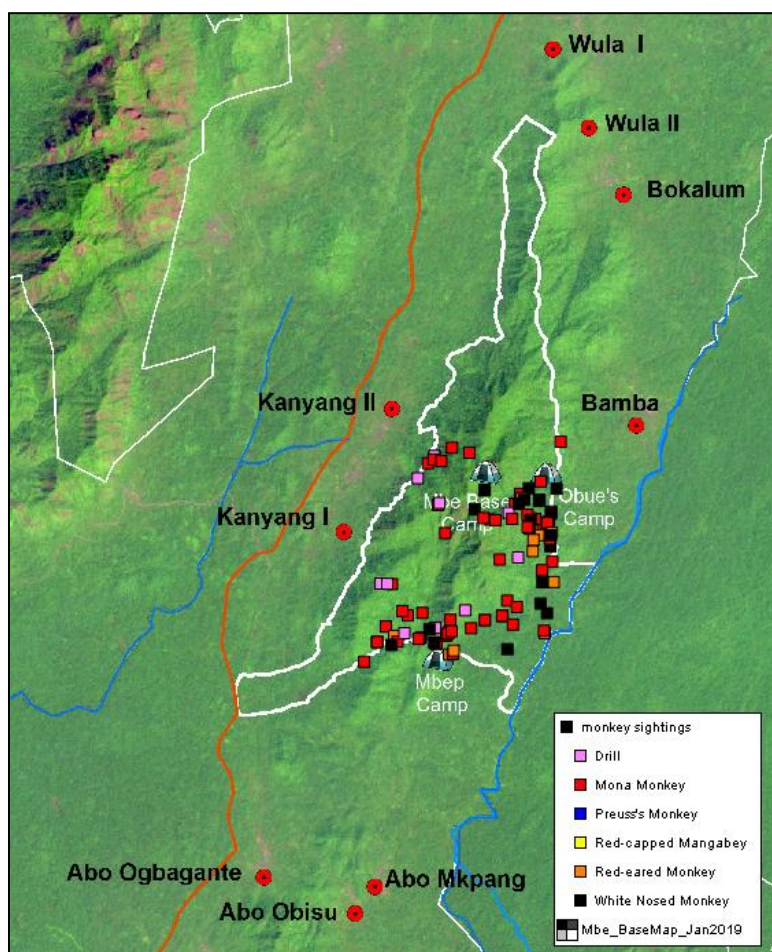


Figure 6. Monkey sightings recorded for the period July to September 2021.

Table 10. Number and encounter rate of monkey species observed during patrols for the period July to September 2021.

Species	Number of observations	Encounter rate
Drill	10	0.011
Mona monkey	55	0.062
Red-eared monkey	13	0.015
Putty-nosed monkey	26	0.029
Total	104	0.117

### Other Wildlife

Other large mammals recorded this quarter include African forest elephant (*Loxodonta cyclotis*), forest buffalo (*Syncerus caffer*), red river hog (*Potamochoerus porcus*), water chevrotain (*Hyemoschus aquaticus*), and yellow-backed duiker (*Cephalophus silvicultor*). See Appendix II for full list of species recorded. Non-primates sighted include duikers, red river hog, hyrax, cusimanse, squirrels and bats.

## 2. Conservation Education and Awareness

### Exchange Visits

WCS organized four exchange visits this quarter involving a total of 421 students in eight schools around the Mbe Mountains (Table 11). The aim of the exchange visits aim was to facilitate exchange of knowledge of conservation, ideas and experience between students in the different schools through stories, conservation games, quiz competition and drama.

**Table 11: Schools Exchange Visits in Mbe July to September 2021**

Date	School(s)	Site	# of students
15/7/2021	Community Secondary School Bokalum and Community Secondary School Bamba	Mbe	106
15/7/2021	Secondary Commercial School Abo Ogbagante and Christ the King Secondary School Abo Mkpang	Mbe	115
22/9/2021	Marietta Nursery and Primary School Abo Ogbagante and Primary School Abo Obisu	Mbe	87
28/9/2021	Dowell International Academy Kanyang and St. John The Baptist Model School Wula	Mbe	113
Total			421



Photo 1. Exchange visit between Secondary School Abo Ogbagante and Christ the King College Abo Mkpang

## Field trips

Field trips are an effective way to connect young people to nature, often offering experiences that inspire people to value nature and support wildlife conservation. During this reporting period, WCS organized seven guided field trips for 178 students led by 10 tutors from different schools in Mbe (Table 12). The field trips provided the students and pupils the opportunity to learn about the rainforest, threats to wildlife, and ongoing efforts to save endangered species from extinction. WCS field staff shared their knowledge and experiences with the students during the field trips.

**Table 12: Field trips organized for students in Mbe July to September 2021**

Date	School(s)	Site	# pupils/students
13/7/2021	Buantsebe Secondary School Wula	Mbe	25
22/7/2021	Christ the King College Abo Mkpang	Mbe	24
16/8/2021	Community Secondary School Bokalum	Mbe	26
18/8/2021	Community Secondary School Bamba	Mbe	25
21/8/2021	Secondary Commercial School Abo Ogbagante	Mbe	23
28/9/2021	Dowell Intellect Academy Kanyang I	Mbe	30
29/9/2021	Government Primary School Kanyang I	Mbe	25
Total			178



Photo 2. Field trip with pupils of Dowell Intellect Academy Kanyang to Okwangwo Division of Cross River National Park



### School Visits

WCS education team visited five schools around Mbe during the reporting period. Activities implemented include lessons, quiz and conservation games (Table 13). Puppets were also used to demonstrate different aspects of animal behavior. A total of 60 pens and 100 customized notebooks were distributed to conservation club members and teachers who participated in the conservation awareness activities during the visits.

**Table 13. Schools visited in Mbe July to September 2021**

<b>Dates</b>	<b>Name of school visited</b>	<b>Site</b>	<b># of items distributed</b>
15/7/2021	Community Secondary School Bokalum	Mbe	20 notebooks
15/8/2021	Community Secondary School Bamba	Mbe	50 notebooks
28/9/2021	Government Primary School Kanyang	Mbe	30 pen
28/9/2021	Government Secondary School Kanyang	Mbe	30 notebooks
28/9/2021	Dowell Intellectuals Academy Kanyang	Mbe	30 pens
Total			160

### Film Shows

WCS organized film presentations in eight Mbe villages to raise awareness on issues of wildlife conservation reaching a total of 1,559 people (Table 14). The films are used to create awareness on matters concerning the environment and encourage behavioral change within the local population. The films usually highlight the negative impact of human activities such as farm encroachment, logging, bush burning, water poisoning for fishing and hunting for bushmeat on biodiversity.

**Table 14: Villages visited in Mbe for film presentation and estimated number of viewers**

<b>Date</b>	<b>Community</b>	<b>Site</b>	<b>Attendance</b>
20/7/2021	Abo Mkpang	Mbe	116
21/7/2021	Bokalum	Mbe	92
24/7/2021	Bamba	Mbe	100
25/7/2021	Wula Mgbaeshou	Mbe	170
11/8/2021	Bokalum	Mbe	151
14/8/2021	Kanyang II	Mbe	128
28/8/2021	Abo Obisu	Mbe	107
30/8/2021	Abo Ogbagante	Mbe	300
15/9/2021	Abo Mkpang	Mbe	141
16/9/2021	Abo Obisu	Mbe	108
17/9/2021	Kanyang I	Mbe	146
Total			1,559

## Community Meetings

Five community meetings were organized this quarter (Table 15), attended by a total of 124 people including chiefs, men, women, and youth. The meetings discussed threats to Mbe including hunting, farm encroachment, illegal logging and unsustainable harvesting of non-timber forest products. The ongoing high rate of illegal logging was highlighted in all the meetings.

**Table 15. Number of villages visited and attendance**

Date	Community	Site	Attendance
11/8/2021	Bokalum	Mbe	54
14/8/2021	Kanyang	Mbe	27
28/8/2021	Abo Obisu	Mbe	12
15/9/2021	Abo Mkpang	Mbe	19
17/9/2021	Kanyang I	Mbe	12
Total			124

## World Gorilla Day

WCS used the occasion of World Gorilla Day to create awareness about the conservation status of the Cross River gorilla and seek support from stakeholders for their protection. Schoolchildren and teachers from different schools and community members were brought together to celebrate World Gorilla Day with rallies in Kanyang and Wula, display of banners, placards, and handbills. The celebration was wrapped up with a symposium at Buentsebe Secondary School Wula with CAMM officials, schoolteachers, students and community members.



Photo 3. Photo showing schoolchildren with placards to mark 2021 World Gorilla Day.

## 2. Livelihood Support

The WCS livelihood program in the Cross River landscape focuses on improving the sustainability of cocoa production and the harvesting of non-timber forest products such as bush mango (*Irvingia* spp). This quarter WCS distributed 25,950 improved cocoa seedlings (from the Cocoa research Institute of Nigeria) to 179 farmers in eight communities around Mbe to replant existing old farms that have become less productive. All benefiting farmers signed a conservation contract agreeing to not clear new forest for farming or encroach the protected area. All farms supported were mapped for monitoring to ensure compliance with the terms of conservation contract. In addition, WCS assisted women's groups around Mbe to sell their bush mango at the Eke-Aba bush mango market in Ebonyi State at higher prices.

### Support to CAMM

WCS supported and facilitated a number of meetings of CAMM including general assembly meeting on September 25, 2021 at CAMM headquarters at Bamba. Important issues deliberated at the meeting include the adoption of the revised CAMM constitution, benefit sharing formula for CAMM and the conflict between Kanyang I and II and CAMM that led to the withdrawal of the two Kanyang villages from CAMM for several months.



Photo 4. CAMM General Assembly meeting at Bamba September 2021



**Acknowledgements**

WCS is formally registered in Nigeria with the Ministry of Budget and National Planning of the Federal Republic of Nigeria. We are immensely grateful to the Great Ape Conservation Fund of the United States Fish and Wildlife Service. We are also grateful to all other donors who supported our work in the Mbe Mountains in 2021 including Darwin Initiative, Rainforest Trust, Critical Ecosystem Partnership Fund (CEPF), Palmyre Zoo, Cleveland Metroparks Zoo, JRS Biodiversity Foundation, and Berggorilla and Regenwald Direkthilfe. WCS is also grateful for the long-term collaboration and support from the Conservation Association of the Mbe Mountains (CMM). WCS acknowledges the key role played by the Ministry of Climate Change and Forestry and the Cross River State Forestry Commission who is the legal custodian of all forests and wildlife in Cross River State

**Appendix I. Patrol effort statistics July to September 2021.**

<b>Date</b>	<b>Number of patrols</b>	<b>Distance (km)</b>	<b>Number of hours</b>	<b>Number of rangers</b>
2021-07-02	3	16.7	23.1	16
2021-07-03	3	9.7	26.0	15
2021-07-04	3	21.2	32.4	15
2021-07-05	3	8.3	16.3	15
2021-07-06	3	18.0	29.1	15
2021-07-07	3	20.0	33.3	15
2021-07-08	3	12.6	29.6	15
2021-07-09	3	13.8	15.4	14
2021-07-13	3	5.8	8.9	11
2021-07-14	3	13.9	16.1	11
2021-07-15	3	6.1	9.1	11
2021-07-16	3	11.1	16.1	11
2021-07-17	3	11.7	13.3	12
2021-07-18	3	10.4	13.4	12
2021-07-19	3	15.7	15.1	12
2021-07-20	4	17.0	21.0	15
2021-07-21	2	6.0	8.8	7
2021-07-22	2	7.5	9.8	7
2021-07-23	2	1.7	13.1	7
2021-07-24	3	19.9	17.8	16
2021-07-25	3	20.0	24.4	16
2021-07-26	3	20.5	25.0	15
2021-07-27	3	17.4	23.2	15
2021-07-28	2	11.9	15.7	10
2021-07-29	2	5.9	26.7	10
2021-08-05	1	6.0	4.5	7
2021-08-06	1	4.7	4.7	6
2021-08-07	1	9.5	9.2	6
2021-08-08	1	6.6	7.7	7
2021-08-09	1	8.1	8.4	7
2021-08-10	1	7.0	6.9	7
2021-08-11	1	1.0	4.2	7
2021-08-12	1	7.8	4.0	7
2021-08-13	1	2.3	4.9	7
2021-08-14	1	6.6	7.0	7
2021-08-21	3	15.8	13.4	14
2021-08-22	3	21.1	20.3	14
2021-08-23	3	20.5	24.6	14
2021-08-24	3	28.0	24.2	13
2021-08-25	3	18.1	24.0	13
2021-08-26	3	21.3	24.3	12
2021-08-27	3	18.1	24.7	14
2021-08-28	3	15.1	18.7	13
2021-09-03	3	14.7	12.9	14
2021-09-04	3	28.6	24.3	14
2021-09-05	3	23.6	24.4	14
2021-09-06	3	18.4	20.8	14
2021-09-07	3	17.7	24.5	14
2021-09-08	3	14.8	25.2	14
2021-09-09	3	20.6	23.1	13
2021-09-10	3	14.9	18.2	14

Date	Number of patrols	Distance (km)	Number of hours	Number of rangers
2021-09-14	3	13.6	11.0	12
2021-09-15	3	24.9	22.8	13
2021-09-16	3	15.5	20.1	14
2021-09-17	3	18.3	18.5	14
2021-09-18	2	8.6	8.9	13
2021-09-19	3	6.3	10.2	14
2021-09-20	3	11.2	18.7	14
2021-09-21	3	11.6	21.0	14
2021-09-22	1	0.0	5.4	4
2021-09-25	2	10.7	8.5	9
2021-09-26	2	10.5	15.0	9
2021-09-27	2	16.3	16.4	9
2021-09-28	2	17.1	16.5	9
2021-09-29	2	15.2	17.0	9
2021-09-30	2	13.1	13.6	9



**Appendix II. Encounter rate of wildlife species observed during patrols July to September 2021.  
(NOTE: Species not encountered during patrols not shown).**

<b>Species common name</b>	<b>Scientific name</b>	<b># of observations</b>	<b>Encounter rate/km</b>
Red river hog	<i>Potamochoerus porcus</i>	699	0.789
African brush-tailed porcupine	<i>Atherurus africanus</i>	524	0.591
Unidentified monkey	---	348	0.393
Cusimanse	<i>Crossarchus sp</i>	338	0.381
Unidentified small duiker	---	243	0.274
Unidentified medium duiker	---	236	0.266
Mona monkey	<i>Cercopithecus mona</i>	233	0.263
Unidentified large duiker	---	211	0.238
Turaco	---	175	0.198
White-crested hornbill	<i>Tropicranus albocristatus</i>	169	0.191
White-bellied pangolin	<i>Phataginus tricuspi</i>	154	0.174
Crested-guinea fowl	<i>Guttera pucherani</i>	146	0.165
Putty-nosed monkey	<i>Cercopithecus nictitans</i>	131	0.148
Blue duiker	<i>Philantomba monticola</i>	104	0.117
Drill	<i>Mandrillus leucopheus</i>	98	0.111
Nigeria-Cameroon chimpanzee	<i>Pan troglodytes ellioti</i>	84	0.095
Yellow-backed duiker	<i>Cephalophus silvicultor</i>	73	0.082
Unidentified great ape	---	50	0.056
Palm civet	<i>Nandinia binotata</i>	48	0.054
Cross River gorilla	<i>Gorilla gorilla diehli</i>	44	0.050
Grey-necked picathartes	<i>Picathartes oreas</i>	35	0.040
Red-eared monkey	<i>Cercopithecus erythrotis</i>	21	0.024
African forest elephant	<i>Loxodonta cyclotis</i>	18	0.020
Crested-servaline genet	<i>Genetta cristata</i>	14	0.016
Bay duiker	<i>Cephalophus dorsalis</i>	6	0.007
Cane rat	<i>Thryonomys swinderianus</i>	4	0.005
Giant pangolin	<i>Manis gigantea</i>	4	0.005
Ogilby's duiker	<i>Cephalophus ogilbyi</i>	4	0.005
African grey parrot	<i>Psittacus erithacus</i>	3	0.003
African bush buffalo	<i>Syncerus caffer</i>	1	0.001
Water chevrotain	<i>Hyemoschus aquaticus</i>	1	0.001

**Appendix III. Ranger work time for the period July to September 2021.**

<b>Name</b>	<b>Number of patrols</b>	<b>Number of patrol days</b>	<b>Number of patrol hours</b>	<b>Total patrol distance (km)</b>
Abel Bessong	1	6	40.0	31.3
Benedict Osong	7	52	374.1	303.9
Jacob Osang	6	46	300.8	213.1
Jonas Attah	8	60	425.6	354.3
Jude Tawo	8	55	387.2	299.0
Justin Bebiem	8	46	323.0	296.6
Kenneth Obi	7	57	413.3	316.4
Mathias Anishie	1	1	6.0	9.0
Peter Abraham	7	53	382.7	303.3
Peter Ocha	8	62	473.2	391.1
Philip Enyiam	8	51	362.5	276.2
Raymond Ochang	6	50	383.5	324.2
Robinson Afor	9	51	366.9	295.2
Roland Bessong	7	45	299.5	247.6
Stanley Abang	3	21	177.9	111.8
Terry Takeh	8	43	297.4	215.0
Vincent Aganyi	6	50	374.0	287.4