



**WILDLIFE CONSERVATION SOCIETY
CROSS RIVER NATIONAL PARK (OKWANGWO DIVISION)
QUARTERLY REPORT: JULY-SEPTEMBER, 2017**



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October 4, 2017**

Summary

This report summarizes results of anti-poaching and wildlife monitoring patrols conducted by Cross River National Park (CRNP) rangers from July to September 2017 in Okwangwo with WCS providing technical and logistical support. A total of 12 patrols were completed during this period. The patrols covered a total distance of 520 kilometers over 81 patrol-days (512 man-days), and focused on the Boshi Extension area of the Park. There were no patrols in the Okwa Hills area where the Okwangwo community continued to deny rangers access. Two hunting camps and 73 wire snares were destroyed. One adult male chimpanzee was sighted during this period, and a total of 17 great ape nest sites were recorded (7 gorilla, 8 chimpanzee, and 2 unidentified). Other primates were also sighted including red-eared monkey, Mona monkey and putty-nosed monkey. Primates were sighted 57 times in total during these patrols. Other mammals sighted included African civet, mongoose, and blue duiker.

Introduction

Created in 1991 and managed by the Nigeria National Parks Service, Cross River National Park consists of two separate divisions: Oban and Okwangwo. Covering an area of about 640 km², the Okwangwo Division was established from an amalgamation of four former forest reserves and elevations range from 150 m to around 1,700 m. As a result of years of uncontrolled hunting the density of large mammals in Okwangwo is very low and at least two primate species are now considered to be extinct: the crowned guenon (*Cercopithecus pogonias*) and the grey-cheeked mangabey (*Lophocebus albigena*). In addition to hunting a major unresolved problem is the presence of three large enclaved villages within the park. Two enclaves were created to accommodate these villages when the area was established as the Okwangwo Forest Reserve in 1930. However, since that time the villages have increased greatly in size and large areas of forest have been cleared for farmland. The expansion of these farmlands threatens to sever the park into 2 two halves – isolating the gorillas within the Boshi Extension from those in the rest of Okwangwo and Takamanda National Park (TNP) in Cameroon. With technical assistance from the North Carolina Zoo, WCS established a CyberTracker-based monitoring project in Okwangwo in 2011 with funding from the Great Ape Conservation Fund of the US Fish and Wildlife Service, the Great Apes Program of the Arcus Foundation and others. The main objectives of this project are to strengthen existing law enforcement efforts by increasing the frequency, duration, coverage and efficacy of anti-poaching patrols and to monitor wildlife, human sign and the effectiveness of ranger patrols. A key feature of the project is strengthening transboundary conservation between Okwangwo and the adjacent TNP. This report summarizes patrol data for the period from July to September 2017. It does not include information on conservation education or community conservation work at the site. Information on livelihoods, conservation education or community conservation works can be found in the WCS quarterly reports from Okwangwo which are available online at <https://nigeria.wcs.org/>.

Methods

Four 8 days patrols were completed each month by two teams of 6 rangers. The two teams patrolled different areas simultaneously and searched all areas known or suspected to be targeted by hunters. All wire snares and expended cartridges found were removed and all hunting camps encountered were destroyed. Data were collected and analyzed with SMART which automatically records GPS coordinates for every observation.

Results

A total of 12 patrols were completed this quarter. The patrols lasted for 81 patrol days (512 man-days) and covered a total distance of 519.9 kilometers (Figure 1; Table 1).

Figure 1a. Patrol tracklogs and km walked per grid cell for the period July to September 2017. Darker red color indicates areas of more intense patrol coverage.

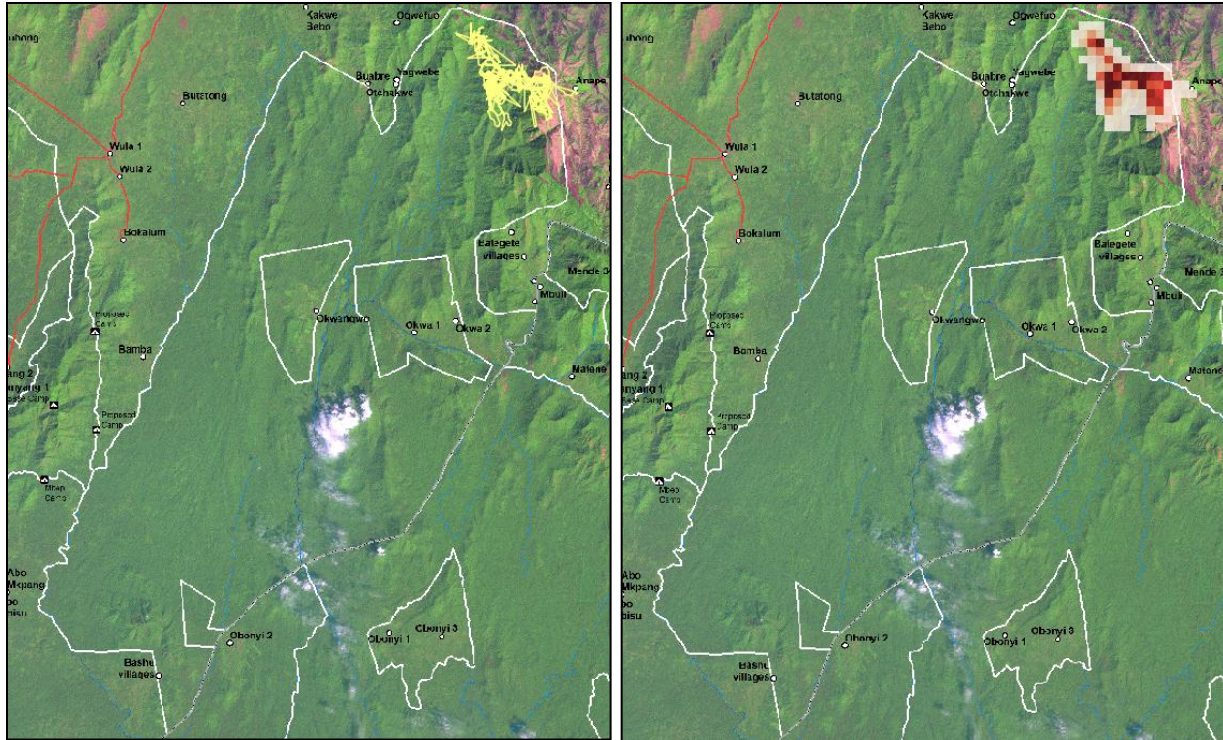


Table 1. Summary of patrol effort for the period July to 2017.

Patrol ID	Number of Patrols	Number of Patrol Days	Distance (km)	Person - Days
CRNP-OK_001	1	8	60.8	48
CRNP-OK_002	1	5	26.8	30
CRNP-OK_003	1	3	23.7	18
CRNP-OK_004	1	7	60.8	42
CRNP-OK_005	1	8	43.3	48
CRNP-OK_006	1	8	46.4	48
CRNP-OK_007	1	5	34.0	35
CRNP-OK_008	1	5	23.0	35
CRNP-OK_009	1	8	46.4	56
CRNP-OK_010	1	8	42.8	48
CRNP-OK_011	1	8	56.6	56
CRNP-OK_012	1	8	55.3	48
Total	12	81	519.9	512

Average distance and length of patrols per month

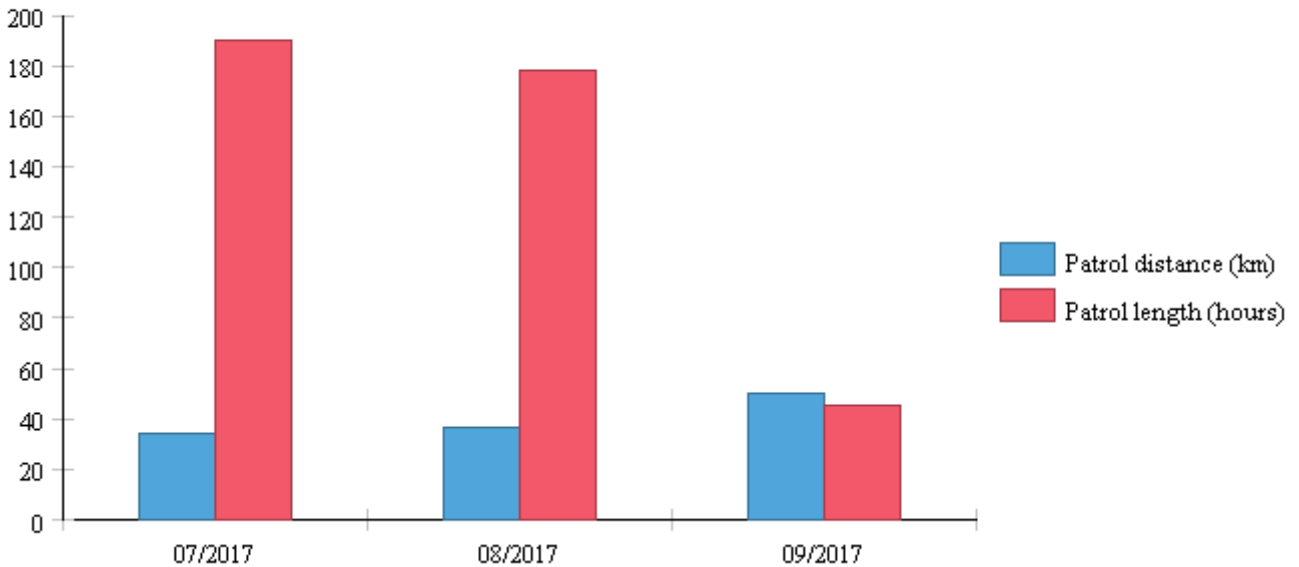


Figure 2. Average distance covered and time taken per patrol per month for the period July 2017 to 2017.

Total patrol distance and length per month

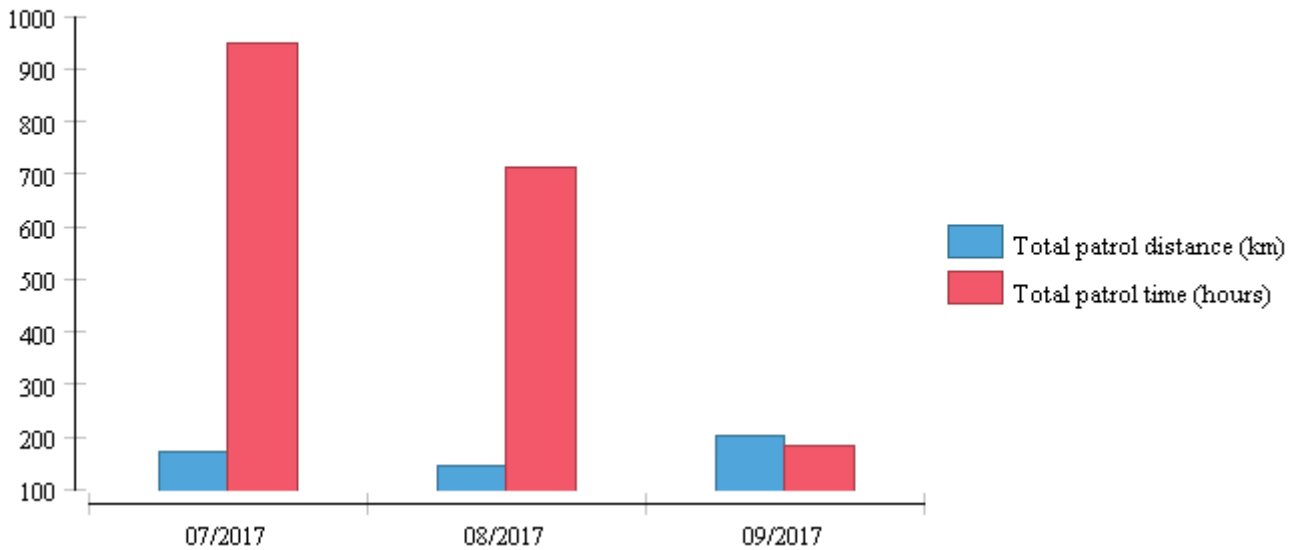


Figure 3. Total patrol distance and time per month for the period July to September 2017.

Law Enforcement

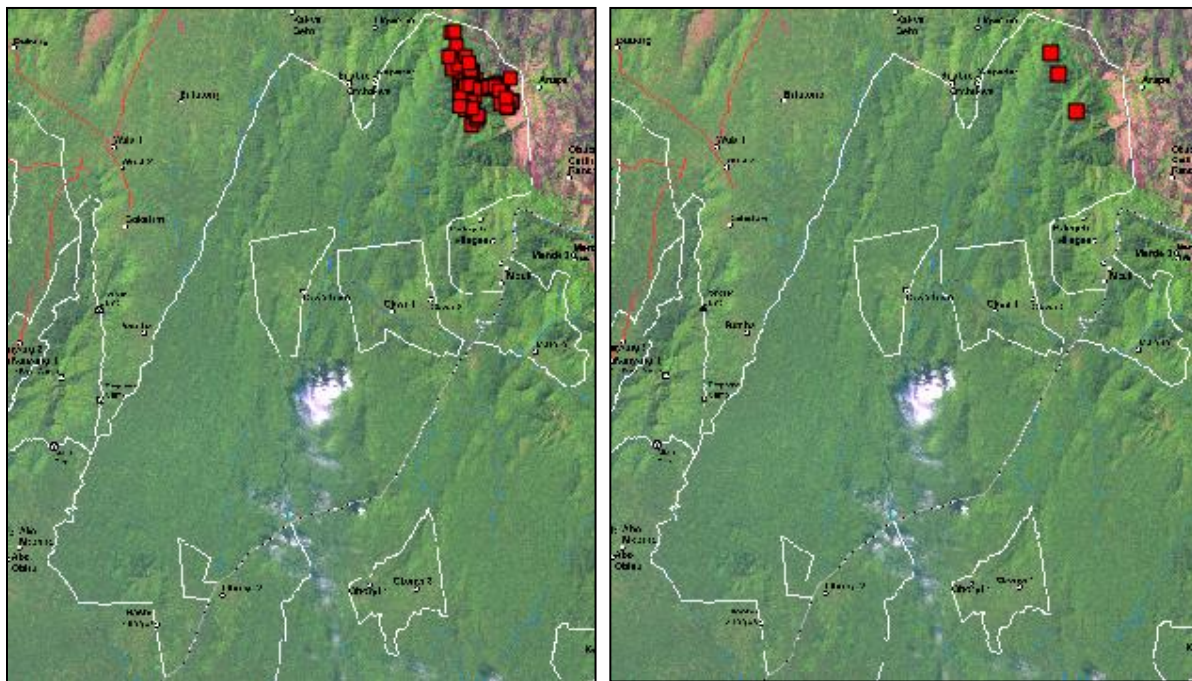
Three hunting camps and 74 active wire snares were destroyed. 53 unset snare wires found in hunting camps were also removed and destroyed (Table 3).

Table 2. Total encounter rates of signs of human activity for the period July to September 2017

Activity	Number of incidents	Encounter rate per km
Human sign*	5	0.010
Shed or camp	3	0.006
Traps, weapons & equipment	108	0.208
Gunshot heard	1	0.002

*Other signs of human activity not listed

Figure 3. Distribution of all signs of human activity recorded during the period July to September 2017



a) Wire snares

b) Empty cartridges



Hunting camps



Gunshots heard

Table 3. Hunting signs recorded for the period July to September 2017

Sign	Number of observations	Encounter rate per km
Gunshots heard	1	0.002
Set wire snares	74	0.142
Unset wire snares	53	0.102
Empty cartridges	3	0.006
Hunting camps	2	0.004

Wildlife Observations

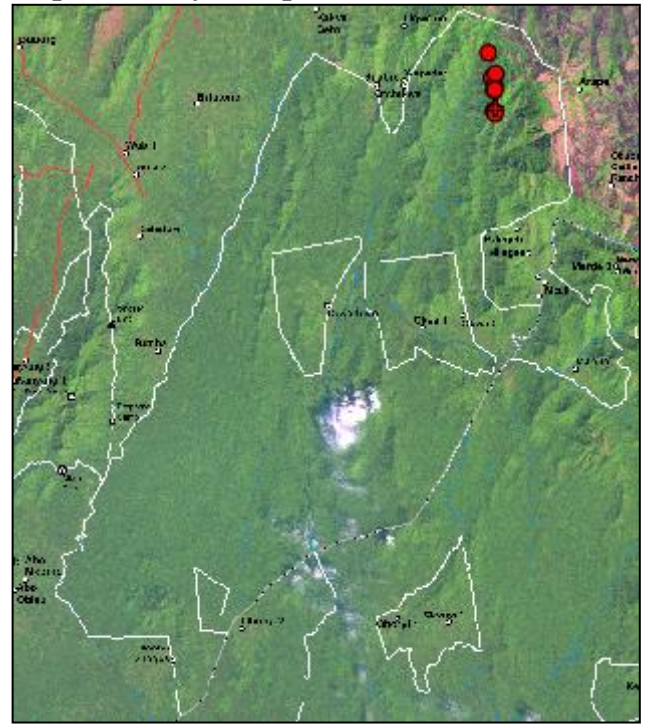
Great Apes

A solitary male chimpanzee was sighted in the month of September. It is very rare to sight great apes in Okwangwo as a result of years of hunting. Seventeen great ape nest sites were also encountered: 7 gorilla, 8 chimpanzee and 2 unidentified (Figure 4).

Figure 4. Ape sightings and nest sites recorded for the period July to September 2017.



a) Gorillas



b) Chimpanzees



c) Unidentified apes

Table 4. Number and encounter rate of ape nest sites recorded for the period July to September 2017

Species	Number of nest sites	Encounter rate of nest sites per km
Gorilla	7	0.013
Chimpanzee	8	0.015
Unidentified great ape	2	0.004

Table 5. Nest sites recorded for the period July to September 2017.

Species	Nest site type	Age	Dung present	Number of ground nests	Total number of nests
Chimpanzee	Night	Recent	false	0	2
Chimpanzee	Night	Recent	false	0	6
Chimpanzee	Night	Fresh	false	0	10
Chimpanzee	Night	Recent	false	0	3
Chimpanzee	Night	Old	false	0	3
Chimpanzee	Night	Recent	false	0	4
Chimpanzee	Night	Fresh	false	0	10
Chimpanzee	Night	Fresh	false	3	6
Gorilla	Night	Recent	false	1	1
Gorilla	Night	Fresh	true	3	10
Gorilla	Night	Fresh	true	2	5
Gorilla	Night	Recent	false	2	7
Gorilla	Night	Recent	false	2	5
Gorilla	Night	Fresh	false	5	12
Gorilla	Night	Very old	false	1	1
Unidentified great ape	Night	Old	false	0	4
Unidentified great ape	Night	Recent	false	2	3

Other Wildlife

Primate sightings were relatively high this quarter. Primates (other than chimpanzee) were sighted 56 times with Mona monkey and putty-nosed monkey the most frequently sighted (Table 6). Red-eared monkey was sighted only once. Other animals sighted included African civet, mongoose, and blue duiker. A number of other mammals were also recorded even though not sighted (see Appendix II for encounter rate of all animals recorded). African brush-tailed porcupine, Mona monkey and mongoose were the most frequently recorded (Appendix II).

Table 6. Animal sightings recorded for the period July to September 2017

Species	Scientific name	Number of times sighted
Mona monkey	<i>Cercopithecus mona</i>	29
Preuss's monkey	<i>Allochrocebus preussi preussi</i>	3
Putty-nosed monkey	<i>Cercopithecus nictitans</i>	23
Red-eared monkey	<i>Cercopithecus erythrotis</i>	1
African civet	<i>Civettictis civetta</i>	1
Mongoose	-	6
Blue duiker	<i>Philantomba monticola</i>	5
Other	-	18
Total		86

Other Observations

Since the beginning of this year the Okwangwo community has denied rangers access to the Okwa Hills area of the Park and no patrols have occurred there during this time. The community is denying Park rangers access into the Park to press home their demand for the construction of an access road to the community. With no patrols in the Okwa Hills for such a long time levels of hunting and farm encroachment are likely to have increased significantly. This action by the Okwangwo community appears to have encouraged other communities around the Park, with many communities now threatening to completely withdraw their support for the Park and to take similar action.

Recommendations

1. Efforts should be made to address the Okwangwo issue and the emerging issues with the other communities to prevent a crisis situation.
2. There is need for refresher ranger training for all rangers in Okwangwo to sharpen their skills and raise morale.
3. Park boundaries need to be cleared and demarcated.
4. The Park should consider constituting a special Task Force to include rangers, the police and the military to carry out occasional patrols in areas of the Park know to be “hotspots” of illegal activities to deter offenders.

Acknowledgement

WCS is formally registered in Nigeria through an agreement with the Ministry of Budget and National Planning of the Federal Republic of Nigeria. Support for the protection of Cross River National Park by WCS is made possible through an MOU with the Nigeria National Park Service. We are grateful to the Great Ape Conservation Fund of the United States Fish and Wildlife Service, Arcus Foundation, and CEP for funding support. Dr. Richard Bergl of North Carolina Zoo introduced CyberTracker in Nigeria in 2009 which has now been replaced by SMART, and has provided close technical support for the project since then, refining and improving the system further.

Appendix I. Patrol effort statistics July to September 2017

Date	Number of Patrols	Distance (km)	Number of Hours	Number of Rangers
2017-07-12	2	8.8	54.0	12
2017-07-13	2	19.3	53.7	12
2017-07-14	2	13.7	53.2	12
2017-07-15	2	18.0	62.9	12
2017-07-16	2	5.3	72.0	12
2017-07-17	2	3.6	72.0	12
2017-07-18	2	12.6	72.0	12
2017-07-19	2	14.2	61.2	12
2017-07-24	2	7.7	37.1	12
2017-07-25	2	8.5	32.4	12
2017-07-26	2	14.0	35.4	12
2017-07-27	1	13.6	36.2	6
2017-07-28	1	15.0	34.0	6
2017-07-29	1	7.2	30.5	6
2017-07-30	1	10.5	27.7	6
2017-08-14	2	15.2	34.2	12
2017-08-15	2	9.1	29.4	12
2017-08-16	2	8.1	31.5	12
2017-08-17	2	22.5	32.9	12
2017-08-18	2	6.6	41.0	12
2017-08-19	2	10.8	41.8	12
2017-08-20	2	8.0	30.4	12
2017-08-21	2	9.5	30.3	12
2017-08-22	2	13.1	27.1	12
2017-08-23	2	13.1	29.3	12
2017-08-24	2	16.8	32.0	12
2017-08-25	2	6.7	27.4	12
2017-08-26	2	7.3	13.6	12
2017-09-09	2	11.0	6.6	13
2017-09-10	2	8.4	8.2	13
2017-09-11	2	7.9	6.9	13
2017-09-12	2	12.6	9.6	13
2017-09-13	2	11.3	12.3	13
2017-09-14	2	13.8	13.4	13
2017-09-15	2	12.2	13.7	13
2017-09-16	2	12.1	7.1	13
2017-09-21	2	12.6	11.7	13
2017-09-22	2	11.0	11.9	13
2017-09-23	2	17.4	12.3	13
2017-09-24	2	12.3	9.7	13
2017-09-25	2	15.7	13.1	13
2017-09-26	2	16.5	10.9	13
2017-09-27	2	13.8	19.0	13
2017-09-28	2	12.5	15.2	13

Appendix II. Encounter rate of wildlife species observed during patrols July to September 2017. Species not encountered during patrols are not shown.

Common name	Scientific name	Encounter rate per km
Unidentified monkey	-	0.419
Brush-tailed porcupine	<i>Atherurus africanus</i>	0.337
Mona monkey	<i>Cercopithecus mona</i>	0.212
Mongoose	<i>Crossarchus sp</i>	0.113
Putty-nosed monkey	<i>Cercopithecus nictitans</i>	0.090
Blue duiker	<i>Philantomba monticola</i>	0.073
Unidentified great ape	-	0.058
Unidentified large duiker	-	0.050
Nigeria-Cameroon chimpanzee	<i>Pan troglodytes ellioti</i>	0.046
Yellow-backed duiker	<i>Cephalophus silvicultor</i>	0.044
Unidentified medium duiker	-	0.021
Red river hog	<i>Potamochoerus porcus</i>	0.021
Cross River gorilla	<i>Gorilla gorilla diehli</i>	0.013
Drill	<i>Mandrillus leucophaeus</i>	0.012
Palm civet	<i>Nandinia binotata</i>	0.010
Unidentified small duiker	-	0.010
Cane rat	<i>Thryonomys swinderianus</i>	0.008
African civet	<i>Civettictis civetta</i>	0.008
Tree pangolin	<i>Phataginus tricuspis</i>	0.006
Bay duiker	<i>Cephalophus dorsalis</i>	0.006

Appendix III. Ranger work time for the period July to September 2017.

Name	Number of Patrols	Number of Patrol Days	Number of Patrol Hours	Patrol Distance (km)
Abel Ita Akpu	6	48	416.9	259.9
Ajom Oru Oru	6	89	1474.1	310.1
Anthony Okim Mbeh	1	8	28.3	46.4
Augustine Yaya Abang	2	16	88.4	103.0
Bassey Effim Ajom	1	8	60.1	56.6
Edet Etim Ekpor	6	43	388.7	290.7
Emmanson Irom	1	8	36.1	42.8
Emmanuel Bassey	4	29	152.4	183.4
Ernest Achura Anwah	1	8	41.7	46.4
Essien Eyo Ekpenyong	1	8	28.3	46.4
Francis Akor Muyorkem	6	88	1455.9	229.1
Ijenga Aidam Aidam	6	42	382.0	267.9
Jerome Anya Anya	4	26	140.8	150.6
John Osang Bisong	1	8	43.6	55.3
Joseph Agbor Agbor	6	80	1412.3	173.9
Kingsley Otu Osang	4	29	153.3	175.4
Martin Ekun	2	16	101.7	103.0
Moses Gabriel Egbe	1	8	43.6	55.3
Napoleon Bebia Mkpe	2	13	231.5	34.9
Patrick Bassey Usang	1	6	32.2	49.6
Spencer Kecho Kecho	5	34	342.2	163.4