Hunting and Trading in the Nigerian Chimpanzee (*Pan troglodytes vellerosus*) in Gashaka-Mambilla Region, Nigeria ¹Ogunjemite, B. G. and ²Ashimi, T.A.

Abstract

The study was conducted to determine the extent of hunting and trading on the Nigerian chimpanzee (Pan troglodytes vellerosus) in the Gashaka-Mambilla region, Nigeria. A total of 231 respondents selected using random sampling technique were sampled in 27 towns and villages of six local Government areas in Taraba and Adamawa states. Data were analysed using descriptive statistics. The result showed that hunting and trading in chimpanzees is an organized enterprise in the region. Chimpanzees were sourced mainly from the Gashaka-Gumti National Park. Price of live Baby chimpanzee goes for about ¥10, 000.00, while big animal fetched between ¥ 15,000.00 - ¥ 30,000.00. The marketing of chimpanzees is not usually an open activity as about 36.4% of the respondents reported the marketing to be in the night, 8.7% reported it to be by day, 19.9 % reported it to be by both time periods. Means of transporting chimpanzees for sale were most often by trekking 40.7 %, motor bike 35.1%, commercial vehicles 7.4% and horses and donkeys 3.9%. Chimpanzees' hunting and trade are carried out all the seasons round. The major chimpanzee markets identified are located in Maihulla, Gembu, Wukari and Bali within the region. Hunting and trading in chimpanzees constitute one of the greatest threats to chimpanzee conservation in the Gashaka-Mambilla region. Efforts are needed in the area of protection and awareness of conservation benefit to the local people of the region to be able to combat this menace.

Introduction

Bushmeat and pet trade are often by-products of hunting. Commercial exploitation of bushmeat has reached a crisis situation in Africa leading to the formation of the Bushmeat Crisis Task Force (BCTF) with the vision of eliminating the unsustainable, illegal, bushmeat trade. Sustainable commercial exploitation of natural resources requires that levels of off-take be lower than the rate of production. This is rarely the situation with bush-meat enterprise in any part of West Africa. Over exploitation of wildlife resources leads to impoverishment of local people through the destruction of wildlife habitats, wildlife based economy, environmental degradation and loss of biodiversity.

Virtually all species of wildlife whether mammals, birds. reptiles or invertebrates serve as sources of bushmeat, however the non-human primates and the ungulates are the majority in forest environments (Ayeni and Mdaihli, 2003; Madzou and Ebanega, 2006). Chimpanzees and other non-human primates were rarely hunted in the region of Gashaka-Mambilla in the past (Dunn 1999; Fowler et. al., 2006). The situation seems to have changed drastically with the arrival of more immigrants into the region; hunting has taken a new and drastic dimension (Ogunjemite and Ashimi, 2007). Although, the Nigerian chimpanzee (Pan troglodytes vellerosus) had been declared flagship species by Fauna

International (FFI, 2006) to be most specially protected, hunting of this animal still goes on unabated. Chimpanzees are hunted for bushmeat in many parts of its ranges across Nigeria and Cameroon (Ayeni and Mdaihli, 2003). The animal is hunted for many other reasons bordering on rituals, mystics and traditional medicines (Agbelusi *et. al.*, 2000). The killing of chimpanzee appears to confer special honor and status on hunters who kill them, because they earn respect among their peers to have killed an animal with special spiritual influence.

The belief in chimpanzee as "totem", that is animal into which human beings could transform is also common in many localities in the forest zones of Nigeria (Ogunjemite, 1998; Ayeni and Mdaihili, 2003). In many instances the animal is sort after in some areas because it is an acceptable alternative to human sacrifices in rituals involving money making "lukudi" and quest for fames (Afolayan, 1987; Ogunjemite, 1998). Chimpanzees are captured live for sale as pet animals, for exports and laboratory research animals. Cases of transferring live animals across the Nigeria/Cameroon border had been reported (Fowler et. al., 2006). The numbers involved may not be known, nevertheless, for a single animal to be captured live, many may have been wasted.

troglodytes vellerosus) had been declared The study on hunting and trading in flagship species by Fauna and Flora chimpanzees in the region of Gashaka-¹Department of Ecotourism and Wildlife Management, Federal University of Technology, Akure, Nigeria. ogunjemite@yahoo.com Mambilla was carried out with the aim of determining the extent of the activity and establishing the means by which it is carried out in order to domesticate chimpanzee conservation in the region.

Materials and Methods

The Study Area

The Gashaka-Mambilla region (Fig. 1) is located in the north-east outliers of Nigeria, within the Cameroon Highland Ecoregion (Olson et al., 2001). The region lies within latitude $06^{\circ} 25' - 08^{\circ} 13'$ and longitude $09^{\circ} 15'$ -12° 25'. The region is contiguous with Adamawa Massif in Cameroon. The altitude of the environment ranges from about 300m to 2400m above sea level. The region experiences two marked seasons. These seasons are the dry season which is usually from November to March and the rainy season which comes up between April and October. Rainfall is relatively high in the region ranging from about 1200mm in the north to 2000mm in the south. Mean minimum temperature of about 21° C occurs in January during the dry seasons and it coincides with the harmattan period. Mean maximum temperature of about 33° C is recorded on the onset of rainy seasons in early April.

Vegetation in the region varies and is diverse. Information on the vegetation of the region has been reported by Akinsoji (2003), Chapman and Chapman (2001) and Chapman et al. (2004). The lowland rainforest is found in the southern part at the foot of the plateau along the Donga River valley. It is composed of emergent and sub-emergent tree species with tangles of climbers, vines and secondary colonizer. The lowland rainforest is also found at middle altitude with elevations of 300m to about 600m within the park. When they occur along river valley and are found to be extensive, they are referred to as gallery forests. Other parts of the region are dominated by the savanna woodland. The sub-montane and montane forests are found at elevations above 600m in the region but such vegetation types are very small. The montane grass-land is another very important vegetation of the region. It is found at elevations that are at pal with the montane forest. This vegetation is highly favoured for grazing cattle and horses. Grazing activities have seriously disrupted this vegetation type within the park. Ownership of natural pastures derived from this vegetation

formation is becoming subject of serious controversy between the Fulani Herders and the indigenous Mambillan people and often lead to serious crisis in the region.

Different ethnic groups are represented in the Gashaka-Mambilla region. Prominent among these are the Fulani, Hausa, Ndoro, Chambas, Tigun, Jibu, and Jukun. The Fulanis however appear to weld the political power in the region. The cultural history of the region is as diverse as the ethnic grouping and religion has influenced their culture so much. While the people around the Park, Serti and Beli are predominantly Muslims, those on the plateau are mixture of Muslims, Christians and traditional worshipers. The people in the southern forested area are mainly Christians with few of them having animistic religious practices.

Data collection and sampling techniques

The Field survey began in May 2007 and ended in May 2008. The Field work was conducted directly be researchers with the assistance of volunteer guards and game guards who had received initial training in Biological Monitoring Activities. The Nigerian conservation Foundation (NCF) office provided the logistic support (transport, equipment, attendants and guides) that facilitated the work through out the research period.

The survey questionnaire was randomly administered in the six local Government areas of Gashaka, Bali, Kurmi, Sadauna Ganye and Toungo in Taraba and Adamawa States that are considered to be the Chimpanzees' range of the Gashaka-Mambilla region. A total of 27 locations (towns and villages) were sampled in the region (Table 1). Questionnaires were administered by volunteer guards and game guards who had received initial training in Biological Monitoring Activities. Before administering the questionnaires, picture and detailed description of chimpanzees were given to the respondents to be sure that they know the animal in question.

Data Analyses

Analytical tools employed include frequency counts and percentages. Since it was impossible to obtain the actual quantity of animals killed and sold, the proportion of respondents responding to specific activity was used as measure of the activity.

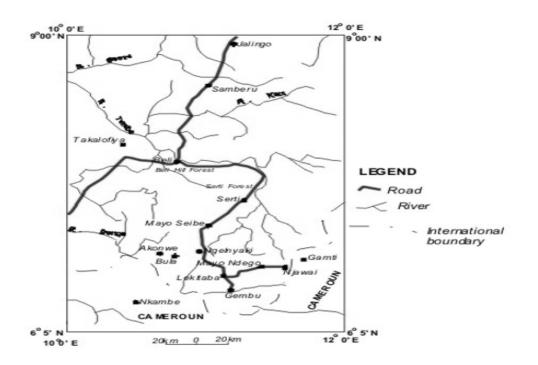


Fig. 1: The Gashaka-Mambillan region showing the sampled sites

Results

The result of this work shows that all the respondents interviewed were aware of the presence of chimpanzees in the Region of Gashaka-Mambilla. Ninety-seven percent (97%) of the respondents are permanent residents (stayed more than five years continuously in their location) in the region, while only 3% are occasional residents. Two hundred and seventeen (217)of the respondents are male while only 14 are female. 189 are married, 31 are single while 11 did not declare their marital status. Not all respondents were willing to declare their tribal affiliation. However ten tribal groups were identified in the sampling. These are Tigun, Ndolo, Kom, Mambilla, Kaka, Baya, Jibawa, Fulani, Hausa and Tiv.

Age distribution

Age distribution of respondent (Table 2) shows that the age group between 31-40 years is the majority constituting 40.3% of the total respondent sampled.

Occupational distribution

Nine primary occupational categories were identified in our sampling (Table 3). Majority are farmers some of whom claim to engage in subsistence hunting. Only 4.8% of the respondents claimed to be primarily hunters **Encounter of respondents with chimpanzees** Majority of the people interviewed have had encounters with chimpanzees in their areas (Table 4). Forty-nine point eight percent (49.8%) of the respondents have seen chimpanzees both live and dead before, 44 2% have seen the animal live, 2% have seen only the dead animal while only 3% have never seen the animal but heard about it.

Frequency of respondents' encounter

Most of the respondents have seen the animal on many occasions (Table 5). 63.6% have seen it more than four times, 21.6 saw it twice, 3 % saw it thrice and only 5.6% saw it only once.

Chimpanzee Trading

Information on the sales of chimpanzees as presented in figure 2 reveals that 52. 8% of the respondents are aware of the trade in chimpanzees in the region. 27.3% are indifferent about the trade and only 19.9 are not aware of such trade.

Price of chimpanzees

Price of live Baby chimps was an average of about #10,000.00, whole big animal may fetch between #15,000.00 and #30,000.00. The general trend is that chimpanzees are sold in parts and the different parts command different prices. The animal is smoked dry before sales.

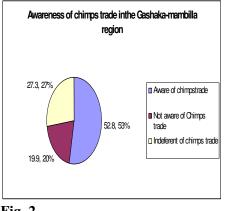


Fig. 2

Sources of chimpanzees

Chimpanzees were observed to be sourced (Figure 3) mainly from the Gashaka-Gumti National Park. About twenty-seven percent (27.3%) of the respondents indicated that the animal were sourced mainly from the park, 18.2% from community forest, 3.9% from Ngel-Nyaki forest, 9.3% from other sources. A total of 42% of the respondents could not ascertain the source of the animal.

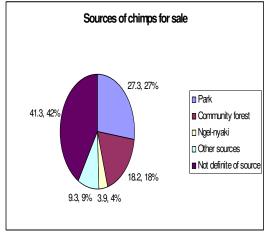


Fig. 3 Time of marketing

The marketing of chimpanzees (Figure 4) is not usually an open activity as about 36.4% the of respondents reported the marketing to be in the night, 8.7% reported it to be by day, 19.9 % reported it to be by both time periods and 35. 35 are unsure of the marketing procedure.

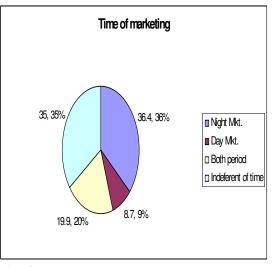


Fig. 4

Means of transportation of chimpanzee "commodity" by the marketers

Means of transportation (Figure 5) were most often by trekking 40.7 %, motor bike 35.1%, commercial vehicles 7.4% and horses and donkeys 3.9%

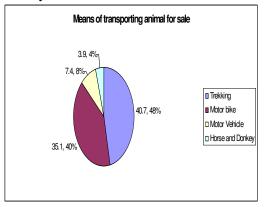


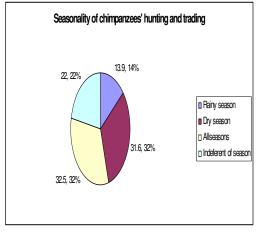
Fig. 5

Dominant interest in chimpanzee trade

Chimpanzees' trade is dominated by men and does not appear to be strictly tribally affiliated. However some distinct groups are still identified. These include the group of people called Mumuye and the Tivs. Also immigration officers and soldiers are commonly seen with live baby chimpanzees in the study area.

Seasonality in chimpanzee Trade

Chimpanzees' hunting and trade are carried out all the seasons round (Figure 6) but it has the peak in the dry season around the park and rain season peak in the forest area of the region.





Major chimpanzee trade route in the region. Yola Adamawa State was identified as major route toward the north while Adipo and Aliede in Benue State was the most important route to the south. About thirty-six percent (36.4%) of the respondents also indicated that chimpanzees were taken across the Cameroon border

Discussion

Hunting and trading in chimpanzees appears to be an organized enterprise in the region of Gashaka – Mambilla. The long view that the animals are protected in the region (Dunn, 1999), Fowler el at., 2006) may no longer be upheld. Certainly, if other animals could not be protected by the rule, Chimpanzee and other non-human primate animals may not be immuned from the activities of poachers. The level of awareness on chimpanzees' trade (Figure 2) in which 53% of the respondents confirming the trade is a proof of the seriousness of the enterprise. Chimpanzee's marketing is carried out within and outside the region.

Most of the animals involved in the trade are obtained from the park (Figure 3). Some of the hunters confessed that it is even easier to obtain animals from the park than fro outside. Animals' concentrations are higher and they appear more patient within the park than outside the park. It appears that some populations within the park are also partially habituated in some locations and do not often run away as fast as those that are outside the park. Moreover, chimpanzees are almost exterminated in many of the forests outside the park. For instant they seem to be locally extinct in the Beli Hill Forest (Ogunjemite and Ashimi, 2008).

The time of the marketing (Figure 4) and mode of transportation (Figure 5) of their "commodity" is also an indication of the organized ways in which the trade is carried out. They use the night cover to carry out the trade so that they may not be easily detected. This is an indication that the people who are involved are conscious of their actions and laws regulating their activities.

Hunting and trading in chimpanzees appears to be seasonal and reach the peak in the dry seasons (Figure 6). Poaching activities and their attendant violence are recorded in the dry season. During this period, the cattle rearers invade the region in large numbers. Farming activities are also at very low level, shifting the attention of the predominantly farming communities of the region such as the Tivs and the Jukuns to adventures. The combined effect of these activities brings about increased hunting pressure within and outside the park. The opinion of Dunn (1999) that enclave people of the park support conservation may now be gradually wearing off since these are the people who play host to some of these invaders, and at times actively support them.

Poaching in the region seems to be assuming a very serious and dangerous dimension. Three incidents similar to the one reported by Chapman et al (2004) on Ngel-Nyaki were recorded in the region during the period of our field survey in this work. In October 2007, a volunteer guard was reported missing in the upper Donga valley forest and was never seen dead or alive till date. On January 24th 2008, Salamu Waziri, one of the foremost chimpanzee trackers was shot dead by purported armed robbers at the southern part of the park. Early in February 2008, a serious clash erupted between the Park Rangers of the northern Gumti Range and some cattle rearers leading to one dead among the cattle rearers. We learnt later that there was counter attack in May 2008 on the park rangers by the cattle rearer leaving two of the rangers dead. These are serious signs of distress in the management of natural resources in the region. All these occurrences point to the fact that poaching has assumed very serious and dangerous dimension in the region and that conservation work is becoming an uphill task in the area. The star of all animals of the region is the chimpanzee, commanding the highest price (sold up to #30,000.00 for an animal) and

poachers are ready to do all they can to satisfy their desire.

Conclusion

Hunting and trading in chimpanzees appear to be an organized enterprise and constitute one of the greatest threats to chimpanzee conservation in the Gashaka-Mambilla region. The situation is assuming very serious and dangerous dimension. It is observed that the quest for this animal and many others is fraught with problems of lawlessness, social disruptions, and environmental destruction in the region. Some parts of the region especially on the plateau montane grassland and toward the farming community around the middle Donga valley areas had been involved in

References

Afolayan T. A. (1987). Man's inhumanity to Nature, the over exploitation of Wildlife Resources *Inaugural Lecture series 3*, FUTA 27 pp.

Agbelusi, E. A., Ogunjemite, B. G. and Owolabi, O. O. (2000). Utilization pattern and conservation of primates in Ondo and Ekiti States, Nigeria. *The Bioprospector*. **2**(1):9-14.

Akinsoji, A. (2003). Phytosociological analysis of moist savanna woodland in Gasaka- Gumti National Pack, Nigeria: a comparison of methods. ROAN, **1**: 1-14

Ayeni J. S. O. and Mdaihli, M. (2003). Wildlife hunting and bush-meat utilization in the Takamanda Forest Reserve areas of South west Province, Cameroon

Chapman HM, Olson M, Trumm D, (2004). An assessment of the changes in the montane forest of Taraba State over the 30 years. Oryx **38** (3), 1-9.

Chapman, J. D. and Chapman, H. M. (2001). The forest flora of Taraba and Adamawa States, Nigeria: an ecological and plant checklist. WWF, DFID and University of Canterbury.

Dunn, A. (1999). Gashaka Gumti National Park: *A Guide Book*, NCF, NNP and WWF 80 pp.

FFI (Fauna and Flora International). (2006). What is a flagship species? <u>http://www</u>. fauna-flora.org Assessed on 4th July 2007.

several communal clashes among the different ethnic groups and these have led to the proliferation of arms and ammunitions thereby aiding hunting. Contrary to the talk about sustainable utilization of forest and wildlife, it has become obvious that the present exploitation and consumption of "Bush meat", chimpanzee inclusive and other natural resources in the region is anything but sustainable. There is the need to investigate further the uses of the "chimps' commodity" and the people behind the trade. More efforts are needed in the area of protection and awareness of conservation benefit to the local people of the region to be able to combat this menace.

Fowler, A., Nyangai, G., McNamana, A, Adanu, J. and Sommer, V. (2006). Conservation status of primates in eastern Nigeria's Taraba State, with special reference to chimpanzees. Gashaka Primate Project: a compilation of report No 7 Jan – Oct 2006. Pp 9- 57.

Madzou, Y. C. and Ebanega, M. O. (2006). Wild game and its use in the tropical environment, Cameroon. Nature & Faune, Vol. **21**, Issue 1, 2006: 18 - 33

Ogunjemite, B. G. and Ashimi, T. A. (2008). The chimpanzees of Gashaka-Mambilla Region, Nigeria. Status Survey and Conservation Action Plan. Draft Report to NCF/WWF 165pp.

Ogunjemite, B.G. (1998). A preliminary survey of the primates of Ondo and Ekiti States. M.Tech Thesis, Federal University of Technology, Akure. 65pp.

Olson, D. M., Dinerstein, E., Wikramanayake E. D., Burgess, N. D., Powel, G. V. N., Underwood, E. C., D'Amico, J. A., Itoua, I, Strand, H. E., Morrison, J. C., Loucks, C. J, Allnutt, T. F, Ricketts, T. H., Kura, Y., Lamoreux, J. F, Eettengel, W. W, Hedao, P, Kassem, K. R, (2001).Terrestrial ecoregion of the worlds: a new map of life on earth. Bioscience, **51**, 933-938.

	Local Govt. Area	Specific location	Number sampled
1	Toungo	Toungo	9
2		Mayo Butali	7
3	Gumti	Gumti	8
4		Adagoro	9
5		Tapare	5
6		Lagaso	6
7	Bali	Bali	12
8		Mahulla	5
9		Garbabi	9
10	Gashaka	Serti	10
11		Gashaka	14
12		Goje	8
13		Bodel	12
14		Karamti	12
15		Gayam	4
16		Sakin Ruwa	3
17		Mayo Selbe	7
18	Saduna	Njawai	11
19		Donjawai	5
20		Mayo Ndaga	13
21		Yelwa	9
22		Maisamari	7
23		Kogi Saliu	6
24	Krumin	Buru	13
25		Akwabe	15
26		Afrobe	11
27		Sabo	9
Total			231

Table 1: Location and number of respondents sampled in the Gashaka-Mambilla region

Table 2: Age group distribution of respondents in the region of Gashaka-Mambilla

Age (years)	Frequency	Percentage
≤ 20	-	-
21 - 30	54	23.4
31 - 40	93	40.3
41 - 50	49	22.2
51 - 60	25	10.8
$61 \ge$	10	4.3

Occupation	Frequency	Percentage
Farmers	142	61.5
Teachers	5	2.2
Applicants	10	4.3
Hunter	11	4.8
Politician	8	3.5
Driver	20	8.6
Butcher	5	2.2
Motorbike rider (Ashaba)	16	6.9
Village head	14	6.0
Total	231	100

Table 3: Occupational distribution of respondents in the Gashaka-Mambilla region

Table 4: Distribution of respondents by knowledge about chimpanzees in the Gashaka-Mambilla region

Type of encounter	Frequency	Percentage	
Seen live animal only	115	49.8	
Seen dead animal only	6	2.5	
Seen both live and dead	102	44.2	
Not seen at all but heard of	8	3.5	
	231	100	

Table 5: Levels of respondents encounter with chimpanzee in the Gashaka-Mambilla region

Level of encounter	Frequency	Percentage
Seen only once	13	5.6
Seen twice	50	21.4
Seen thrice	13	5.2
Seen four times and above	147	63.6
Not seen at all	8	3.5
Total	231	100