Knowledge of Nigeria Wildlife Conservation Laws Among Staff of Gashaka Gumti National Park, Nigeria

Rimamnyang Umaru ✉ iD
*Department of Biological Sciences, Faculty of Pure and Applied Sciences,
Federal University Wukari, Taraba State, Nigeria*

Winifred Isemobhita Abhulimen Ronald iD
*Department of Biological Sciences, Faculty of Pure and Applied Sciences,
Federal University Wukari, Taraba State, Nigeria*

Andesiye Iliya iD
*Department of Biological Sciences, Faculty of Pure and Applied Sciences,
Federal University Wukari, Taraba State, Nigeria*

Tafida Mohammed Aminu iD
Department of Biological Sciences, Federal University Wukari, Taraba State, Nigeria

Abstract:

One of the key resources in effective management of National Parks is the knowledge base of the park staff. There is however little or no documented information about park official's knowledge of the laws they uphold in Nigeria. This study assessed the knowledge base of Nigeria wildlife laws among park officials in Gashaka Gumti National Park (GGNP), Nigeria. Simple random sampling was used to administer structured questionnaire to 45 staff in the Head Office at Serti (HOS) and 140 staff in Main Park at Gashaka Gumti. Data were analysed using descriptive statistics. Majority (97.8%) had heard about wildlife laws and 136 (97.1%) understood the contents of the law. Majority 139(99.2%) knew the decree responsible for the establishment of national parks; however, a few could not distinctively identify the activities that constitute offences under this law. Majoriy (118 out of 185) rarely read the law in the park but by practice understood what constitutes offences in the park except for a few. For effective park management, proper orientation, education, training and re-training on the wildlife laws should be organized for the park officials at regular intervals.

Keywords: *Nigerian wildlife law, Gashaka Gumti National Park(GGNP), Head Office in Serti(HOS).*

Introduction

According to Federal Ministry of Environment (FME) (2010), Nigeria is rich in flora and fauna resources. There are over 22,000 vertebrate and invertebrate species, including about 20,000 insects, 1,000 birds, 1000 fishes, 247 mammals and 123 reptiles species; and about 7, 895 plant species. All these animal and plant species occur in different numbers within the country's vegetation that range from the mangrove along the coast in the south to the sahel in the north (FME, 2010). Many human activities are seen to be threats to the existence of the flora and fauna

resources in Nigeria (Olatunbosun, 2013) and the world at large. These constitute continuous pressure being exerted on forest resources causing fragmentation and degradation of wild animal habitats (Ijeomah, *et al* 2012). There is therefore an urgent need for biodiversity conservation.

National parks have become widely used means of protecting wildlife habits in developing countries, for the conservation of fauna and flora resources. According to the International Union for the Conservation of Nature (IUCN) (2019), it is a large natural or near natural areas set aside to protect large-scale ecological processes, along with the complement of species and ecosystems characteristic of the area, which also provide a foundation for environmentally and culturally compatible spiritual, scientific, educational, recreational and visitor opportunities. More so, the highest competent legal authority of the country has taken steps to eliminate exploitation or occupation in the whole area and to enforce effectively the respect of ecological, geomorphologic, or scientific features which have led to its establishment (IUCN, 2019). Currently, there are 7 National parks in Nigeria spanning across the six geo-political zones of the country. They are Chad Basin, Gashaka Gumti, Kainji Lake, Kamuku National, Cross River, Old Oyo, and Okomu National Parks. The total area of land under these parks is about 2.4 million hectares (National Park Service (NPS), 2018). They were formally forest and game reserves first established in the early 1900s (FME, 2001). The National Parks supports more than 1340 species of animals among which is 274 species of mammals, making it the 8th highest in Africa (NPS, 2018). Knowledge refers to familiarity, awareness or understanding of someone or something such as facts, information, descriptions or skills, which is acquired through experience or education by perceiving, discovering or learning. There are several ways to describe cases of knowledge, namely; acquaintance, competence and recognition of information as being correct (Ichikawa & Steup, 2018).

Fumerton (2008) defined the acquaintance knowledge as a certain degree of skill or ability to recognize something upon re-encounter with a degree of accuracy. It has been suggested that, those managing protected areas often lack the adequate resources needed to effectively manage and enforce park rules and regulations (Jones *et al.*, 2018; McCarthy *et al*, 2018). One of the key resources in this regard is the level of awareness and knowledge base of the park managers. This will definitely impact conservation efforts. The Nigerian National Park Service (NNPS) is responsible for the management and regulation of use of the national parks, to preserve and conserve Nigeria's heritage particularly the flora and fauna, their habitats and the unique sceneries they provide. It seeks to meet the hopes and aspiration of Nigerians in preserving and protecting the natural heritage and the cultural relics that are in them for generations to come (NPS, 2018). In recognition of the need to protect Nigeria's biological and natural resources in National Parks, a number of legislations have been put in place. Of most relevance to national parks is the National Park Service Act of Decree No. 36, 1979, revised in 1999. Generally, wildlife laws in Nigeria which has its origin from the old western Nigeria wild animal preservation law of 1916 (Ayeni, 1992; Ayodele & Lameed, 1999) and were promulgated to implement the convention on international trade in endangered species of flora and fauna (CITES). The existing wildlife laws in Nigeria are The wild animal preservation law of 1916 {covered areas for protection (CAP) 132}, The wild animal law of 1963, The wild animal law of 1965, Wild animal preservation law 1970, The wild animal law amendment edict of 1975, Wild animal law of 1978, Kainji Lake National Park decree no. 46 of 1979, Endangered species decree of 1985 now CAP. E9, Laws of the Federation of Nigeria (L.F.N), 2010 and National Park decree no. 46 of 1999 now National Park Service Act CAP N65 Laws of the Federation of Nigeria 2004 (Ayeni, 1992).

These laws are instrumental to sustainable wildlife management as it sets the parameters for protection and use of wild animals (Morgera, 2011). Park officials are saddled with the

responsibility of upholding the content of these laws in national parks. It is important that park staff, who are responsible for the protection of the parks' wild resources, be knowledgeable about the laws that concern the park and the wild resources it holds. Park officials especially park ranger were formerly poachers or rural dwellers of host communities who were employed as a form of alternative source of livelihood, having little or no formal education. It is important to properly orientate and educate them on the existing conservation wildlife laws. An extensive search of the literature revealed that there are little or no documented information about park official's knowledge of the laws. This study therefore assessed the knowledge of Nigerian wildlife conservation laws among parks officials in Gashaka Gumti Park (GNNP).

Materials and Methods

Study area

Gashaka – Gumti National Park is situated at the foot of the Mambilla Plateau and covers a land area of about 6,411 km2. It lies between latitude 6º55'N and 8º05'N and longitude 11o13' to 12º11'E. The park was originally gazetted as Gumti, Gashaka and Serti Game sanctuaries by the defunct Northeast Government in the 1970's. The three game sanctuaries were merged and upgraded to a National park by the Nigeria National Park Decree of 26th August, 1991 which was repealed by Decree 46 of 1999. Gashaka – Gumti National Park is a vast land of spectacular wilderness (6,000 km2) in the southeast corner of Taraba State, adjoining the Mambilla Plateau (Figs. 1 and 2).
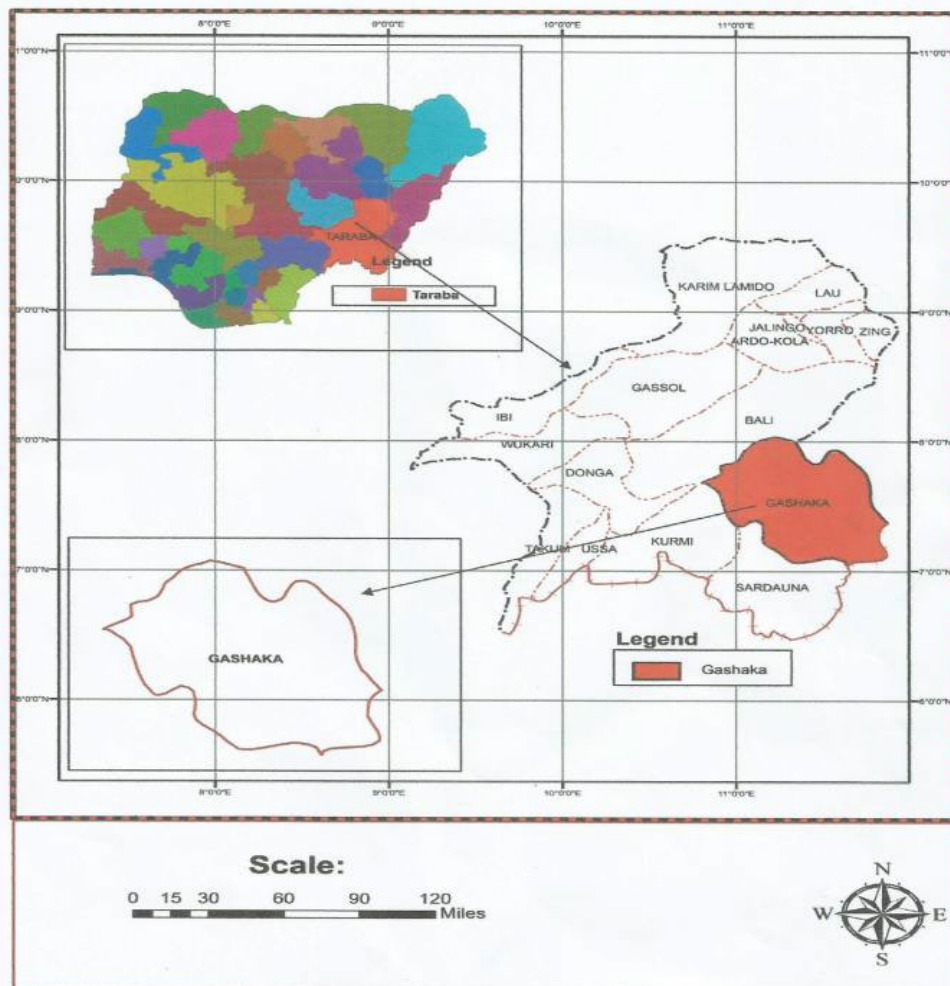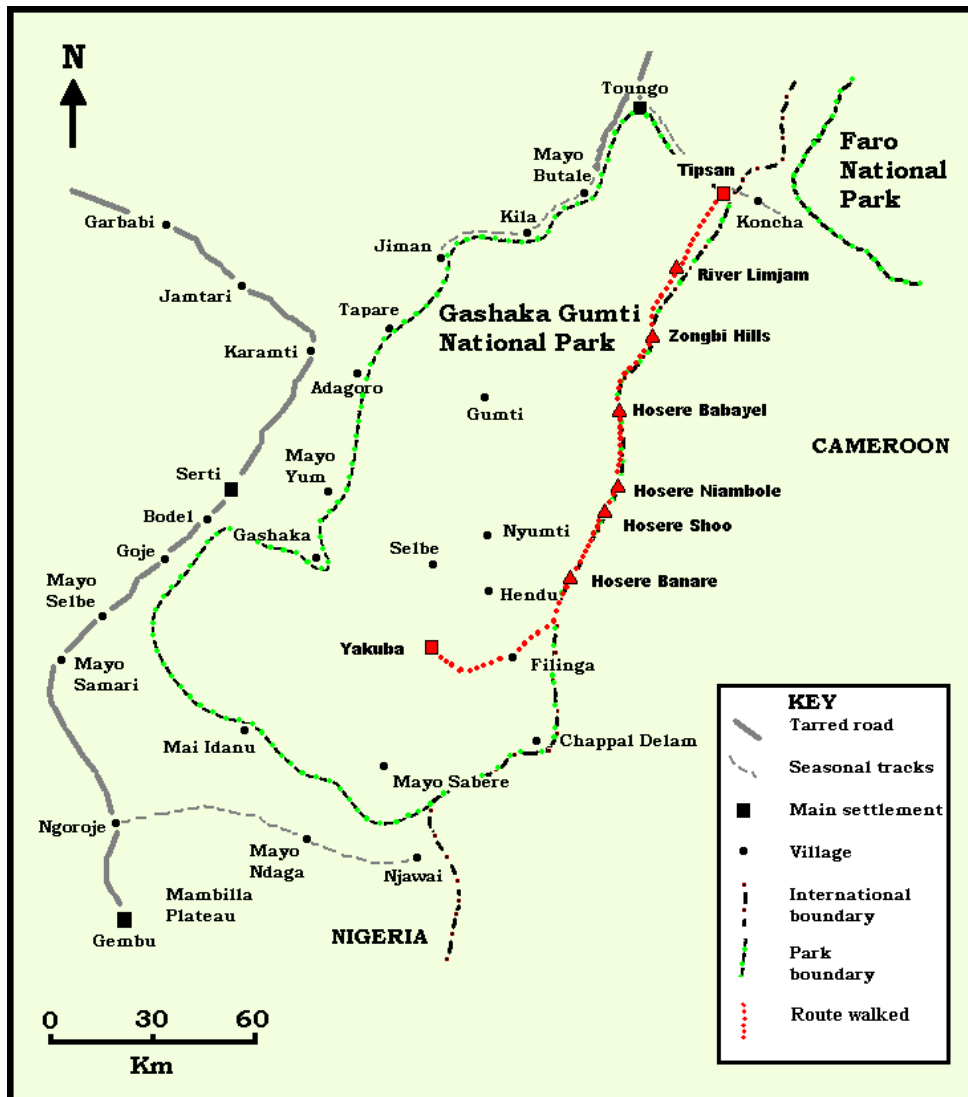

Figure 1. Location Map Gashaka

Figure 2. Map of Gashaka Gumti National Park

The Park, like any other Park, was established as a protected area for the purpose of nature conservation, recreation, ecotourism, scientific and medical research, and to promote art, craft and other cultural values of the indigenous people of the immediate environment. The Park is an outstanding tourist landmark in Taraba State. Its unique position is underlined by the fact that it is not only the largest of all the eight national parks in the country, but it is the most diverse in terms of species in the whole of West Africa, harboring such rare animals like the colobus monkey and warthogs, including buffalo, roam antelope, chimpanzee, hippopotamus, hyena, giant forest hog, lion and leopard. Its vast expanse of land contains river valleys and peaks that are suitable to holiday makers. The park is crisscrossed by many rivers (notably rivers Kam, Gashaka, Yim and Gam-Gam) which, among other ecological functions, act as reservoirs of diversity. Visitors to this secluded region will find no roads here, but only a small number of footpaths snaking through the wooded mountains in the direction of Republic of Cameroon. Visitors to the Gashaka-Gumti National Park would be able to take pleasure in the flourishing forests, the extensive sweeping grasslands, the fresh highland plateaus, the Rocky Mountains, rich wildlife and the captivating ethnic cultures. The climate of the park ranges from tropical to humid at different times of the year. The ethnic groups in the area

are Jibu, Dakka, Ndoro, Tigun, Gbaya, Kuteb, Tiv, Mambilla, Kaka and Fulani in the southern part of the park, while in the northern part or Toungo sector are the Chamba, Kutim Potopore, Fulani, Dakka, Nyamnyam and Kona. The major occupations of the enclave communities are farming, livestock husbandry, vocational jobs, civil service with few hunters and fishermen. They engage in subsistence farming and crops cultivated include maize, groundnut, millet, guinea corn, beans, soya beans, rice, yams, sugar cane, and cassava (Oruonye *et al*, 2017).
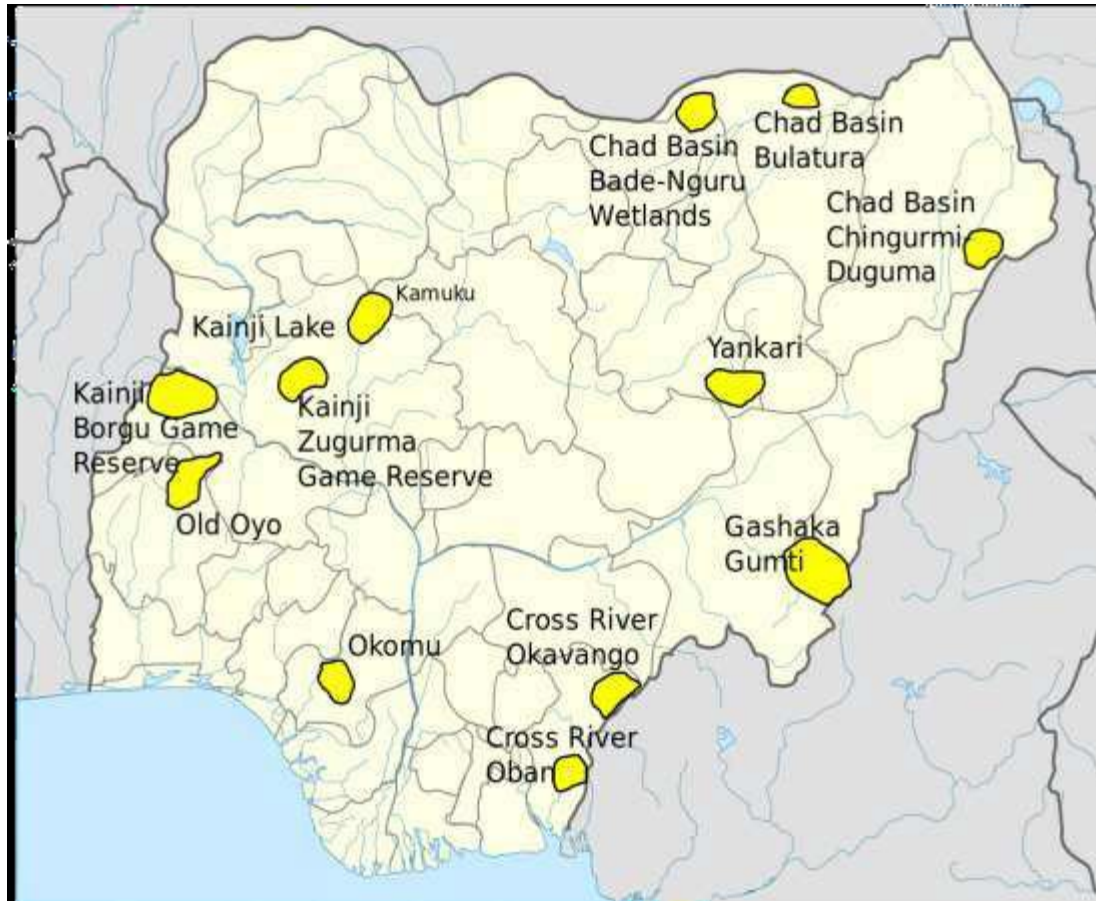

Figure 3. Nigeria Showing the Location and Distribution of National Parks

Data Collection and Analysis

Primary data were collected from officials in both locations using a semi-structured questionnaire, containing close and open-ended questions. The questionnaire covered issues on awareness of Nigeria conservation laws, frequency of studying the laws, knowledge of existing wildlife laws, decree responsible for national park establishment, what constitute offence according to the decree, amount/fine stipulated for killing elephants, the endangered species decree as well as the accompanied schedules. The close-ended questions provided respondents with a range of answers from which they can choose from. The open-ended section gave respondents freedom to provide answers to questions asked as they deemed fit. The park had a total of 269 staff as at 2017 (Oruonye et al, 2017). Using Krejcie and Morgan (1970), a total of 194 respondents were sampled. Of these, 45 from Head Office Serti (HOS) and 140 from Gashaka Gumti National Park (GGNP) in Kwano, a total of 185 questionnaires were responded to and returned for analysis. This study was carried out between July and October

2023. Quantitative data collected in the course of this study were subjected to descriptive statistics which included frequency and percentages using SPSS Version 2.0. Thematic analysis was used in analyzing the qualitative data. Thematic analysis was used in analyzing the qualitative data.

Results

Awareness of Nigeria Wildlife Law among Gashaka Gumti National Park's Staff

The result of the awareness of Nigeria wildlife laws is presented on Table 1. The study indicates that 75.5% and 96.4% of respondents in both location (Head Office of the Park and the main Park) have heard of wildlife laws and affirmed the existence of wildlife laws in Nigeria respectively. Likewise, 77.7% and 97.8% claimed to have the awareness of park laws in Nigeria. 91.1% and 98.5% claimed to have been informed about wildlife laws after employment in National Park. 93.3% and 99.2% of respondents in HOS and GNNP also indicated that, they were educated on these laws by Park Management respectively. In the Head Quarter of the park in Serti (68.8%) were provided with documents containing the laws against 93.5% in the main park in Gashaka Gumti. 88.8% and 97.1% of the respondents respectively claimed they understand the contents of the law.

Table 1. Awareness of Nigeria Wildlife Law among Gashaka Gumti National Park's Staff

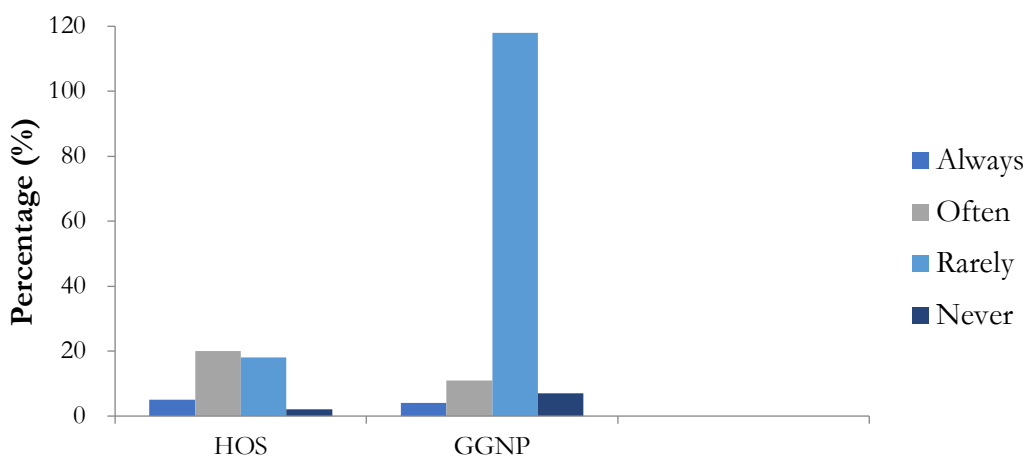| Respondents Answered	HOS(45)	GGNP(140)
Awareness of wildlife laws	34 (75.5%)	135 (96.4%)
Awareness of laws on wildlife in Nigeria	35 (77.7%)	137 (97.8%)
Informed of the law on employment	41 (91.1%)	138 (98.5%)
Education/training on the laws	42 (93.3%)	139(99.2%)
Provision of materials containing the law	31(68.8%)	131(93.5%)
Understanding of the content of the law	40 (88.8%)	136 (97.1%)

Figure 1. Frequencies at which the Nigerian Wildlife Laws are Studied among Officials of Gashaka Gumti National Park

Frequencies at which the Nigerian Wildlife Laws are Studied among Officials of Gashaka Gumti National Parks

The result on the frequencies at which the park staff read materials related to the conservation laws in the Head quarter is higher compare to the staff in main park.

Knowledge of Existing Wildlife Laws in Nigeria

Knowledge of existing wildlife laws is presented on Table 2. When respondents were asked to name any one of the wildlife laws, 156(84.3%) out of 185 respondents got it right. Decree No 46 of 1999 was rightly identified by 77.8% of the respondents as the law which established the national parks in Nigeria. Majority (95.7%) of the respondents indicated that there are seven (7) National parks in Nigeria. 15.6% and 17.9% of the respondents identified option of fine and maximum of five-year imprisonment for killing an elephant. On the law controlling trade and traffic of endangered species, 71.4% of the respondents stated CITES and Endangered Species Decree of 1985.

Table 2. Knowledge of Existing Wildlife Laws in Nigeria

Knowledge issues	HOS	GGNP	TOTAL
Name of any one of Nigeria wildlife laws	35(75.5%)	121(86.4%)	156 (84.3%)
Decree for the establishment of National Parks	41(91.1%)	136(97.1%)	177(95.7%)
Number of National Parks in Nigeria	43(95.6%)	138(98.6%)	181 (97.8%)
Fine stipulated for killing an elephant in the park	7(15.6%)	25(17.9%)	32(17.3%)
Maximum years of imprisonment for killing an elephant	21(33.3%)	123(78.9%)	68 (77.8%)
Law controlling trade/traffic of endangered species	20(44.4%)	112(80%)	132(71.4%)

Offences in a National Park according to Decree 46 of 1999

According to the National Park Decree 46 of 1999, illegal entry, hunting, tree felling, and grazing are offences in the national parks while noise making and forest fire are not listed as offences. The offences (Table 3) as indicated by majority of the respondents are illegal entry (85.6%), hunting (67.8%), tree felling (65.6%), and grazing (64.4%). However, 20.0% and 37.2% of the respondents indicated noise making and forest fire, respectively as offences.

Table 3. What Constitutes Offences in a National Park from Decree 46 of 1999 According to Respondents

Variable	HOS	GGNP	TOTAL
Illegal entry	44(97.8%)	138(98.6%)	182(98.4%)
Noise making	18 (40%)	25(17.9%)	43(23.2%)
Grazing	41(91.1%)	137(97.9%)	178(96.2%)
Hunting	45(100%)	140(100%)	185(100%)
Tree felling	43(95.6%)	136(97.1%)	179(96.8%)
Forest fire	29(64.4%)	41(29.3%)	67(37.2%)

Discussion

The results of this study revealed that a higher proportion of the respondents (97.8%) are aware wildlife laws in Nigeria. It also revealed that the respondents were informed on employment, taught, educated and were provided with materials containing the laws. Despite that a large proportion (97.1%) of the respondents from both locations claimed to understand the contents of the laws, results showed otherwise as a large proportion could not provide the right answers to the questions asked on the contents of the law. In other words, the respondents seem to be aware of the existing wildlife laws but are not familiar with the details of the laws. Also, the results showed that most park officials rarely study the wildlife laws causing them to lack some information about these laws. They however seem to be aware of the law that is responsible for the establishment of a National Park (National park decree no 11 of 1999 now National park act (CAP N65 2004) and the

number of national parks in the country (7). The respondents were provided with options of what constitute offences in the park according to the National Park Decree 11 of 1999 but a large proportion could not differentiate the right from wrong. A higher proportion of the park officials did not know the amount stipulated for the killing of an elephant, which is imprisonment with no option of fine, the maximum number of years of imprisonment for killing an elephant (5 years). It was however observed that higher proportion of park officials knew the law that seeks to control trade and traffic of endangered species (Endangered Species Act CAP E9 2010). It is essential for park official's to be familiar with the content of the law, so they can carry out their duties in the context of the laws. This agrees with the famous aphorism by Sir Francis Bacon "knowledge is power" which is a popular proverb. It means true power comes from knowledge, knowing things gives power. This proverb motivates one to study and acquire knowledge (Sawant and Nolan, 2015). It also agrees with the idea on competence knowledge which implies ability, not just in recognition upon re-encounter but with specific skill and ability to do things (Stanley, 2011). Factors affecting knowledge base of the park officials in this study can be summarized in the following points: Individual input to study and understand the content of the laws; Government provision of materials containing the laws; adequate regular orientation and education on the wildlife laws on employment.

Conclusion

Park officials of Gashaka Gumti National Park are adequately familiar with Nigerian wildlife conservation laws but lack the detailed content of the laws. For effective park management of the park, it is recommended that: government should provide copies of the law for all recruits of the park; proper orientation and education on the content of the laws should be given to the park officials at employment; proper orientation, education, training and re-training on the contents of the wildlife laws should be given to the park officials at regular intervals; park officials should be mandated to study the laws, frequent test should be administered to ensure park officials knowledge on the laws, and this can be a prerequisite for promotion.

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