

Evaluation of Human-monkey Conflicts in the University of Lagos, Nigeria: Public Perceptions and Resolution Options

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Abstract: Human-wildlife conflicts extend to urban areas, especially with species able to adapt to habitat change or conversion. The University of Lagos, a megacity institution, has a resident population of mona monkeys (*Cercopithecus mona*), a species that suffers continuous loss of its forest habitats. The monkeys have adapted to human foods, resulting in raiding and conflict. The conflicts are understudied, and in this study we determined causes, costs, and the perceptions of the conflicts in the campus. Data collection was through questionnaires administered to the staff, faculty, and students of the University, besides shop owners near the monkeys' habitat. Of the 151 questionnaire responses obtained, 145 were considered valid. Data were analysed using descriptive and inferential statistics. Students, staff and faculty, and shop operators made up 56.6%, 29.0%, and 13.1% of the respondents, respectively. Causes of the human-monkey interactions included human activities encroaching into the monkeys' habitat (70.3%), the presence of fruit trees in residential areas (83.4%), and the ease with which they could raid human foods (66.2%). Raiding of foodstuffs, processed foods, and fruit trees comprised (72.7%) of the conflicts, damage to properties (10.1%), and bodily injury (11.1%). The estimated cost of damage reported by 69.7% of respondents averaged \$10. Most respondents (82.0%) agreed that monkeys should be protected, 74.5% and 68.9%, respectively, indicated that monkeys and humans should not be allowed to encroach each other's habitats, while 66.9% disagreed that monkeys found raiding should be killed. Suggestions for co-existence included the designation of a monkey-raid reporting and recording office (57.3%), compensation by the university to victims of monkey raids (53.1%), and translocation of monkeys to game reserves/zoos (78.6%). There was a significant difference ($P < 0.05$) between age groups and their perception to causes of raids by monkeys and of the conservation of monkeys. The educational level of respondents did not significantly ($P > 0.05$) affect their perception on the causes of raiding by monkeys but did significantly ($P < 0.05$) affect their perception about mona monkey conservation. There was no report on incidence of retaliatory killings of monkeys by residents. Mona monkeys have survived six decades of co-existence with humans in this urban area and should be conserved in their natural habitat for ecological, educational and ecotourism values.

Keywords: Human-monkey conflicts, mona monkey, University of Lagos, urban wildlife

Introduction

In Africa, the majority of the people depend on nature for their livelihoods. Conflicts ensue as wildlife habitats are continuously encroached by humans to meet their needs, and wild animals are confined to ever smaller pockets of suitable areas. This is most common in rural communities, especially those that border protected areas (Nicole 2019). Human settlement in urban areas does not preclude, however, the presence of wildlife (Soulsbury and White 2015). Humans and wildlife are increasingly in conflict with each another because of competition for coexistence due mostly

to urbanization (McKinney 2002; Miller and Hobbs 2002; Lamarque *et al.* 2009). This often leads to devastating consequences for both wildlife and the human population involved (Hemson *et al.* 2009; WWF 2013; Loveridge *et al.* 2017).

Human-wildlife conflict (HWC) is described as any interaction between humans and wildlife that causes harm to humans, domesticated animals, property, and wildlife (Berryman 2019). It has been identified as a major threat to the survival of many wildlife species in various parts of the world, and can also be a significant threat to rural communities (WWF 2013; Nicole 2019). Human-wildlife conflict

affects public welfare, health and safety and has economic and social costs (Ogada *et al.* 2003), and is one of the most complex issues that affects both humans and wildlife negatively (Frank *et al.* 2019).

The mona monkey, *Cercopithecus mona* (Schreber, 1775), is native in Nigeria. It is commonly found in mangrove swamps and rainforests in the southern parts of the country, and some riparian and montane forests in the northern parts (Olaleru 2016). Due to its ability to adapt to disturbed habitats, including fragmented and degraded forests, it can be found around and in urban and semi-urban areas of the south (Nwufoh 2011; Onadeko *et al.* 2014; Olaleru 2016). Hunting and habitat destruction have driven the conservation status of this taxon on the IUCN Red List from Least Concern to Near Threatened (Matsuda Goodwin *et al.* 2020).

Human population growth and anthropogenic activities such as deforestation, agriculture and urbanisation lead to ever-increasing encroachment on wildlife habitats. They are degraded and fragmented, and even eliminated, through urbanization, resulting in small marginal patches (Sharma *et al.* 2011) among urban areas that are challenging environments for wildlife to survive in, and have profound impacts at all levels for the plant and animal communities that live there (McKinney 2002; Miller and Hobbs 2002). This process also results in great changes to ecosystem structures and processes (Grimm *et al.* 2008), and result in direct competition of wild animals with the local communities.

Urbanisation has led to the loss of species that have specialised breeding locations or habitat requirements (Olaleru *et al.* 2020). Expanding urbanisation worldwide creates more chances for people to encounter wildlife (Schell *et al.* 2021). As human-wildlife conflict (HWC) incidences are now common in urban and suburban areas (Soulsbury and White 2015), people and animals increasingly come into conflict over living space and food (Onadeko *et al.* 2014; Olaleru *et al.* 2020). Generally, HWC has been extensively studied, emphasizing the drivers, consequences, and associated mitigation strategies to resolve emerging conflicts.

Most human-wildlife encounters in urban environments result in negative outcomes (i.e., conflict) that include property loss or damage, pet loss, disease transmission, physical injury, and human or wildlife fatalities (Nwufoh 2011). With rates of urbanization increasing globally, there is a pressing need to understand the type and nature of human-wildlife interactions in urban environments, to help manage, mitigate or even promote these interactions (Soulsbury and White 2015). The intensity of conflict management can vary considerably by taxon, public perception, policy, religious and cultural beliefs, and geographic region, which underscores the complexity of developing flexible tools to reduce conflict (Schell *et al.* 2021).

The mona monkey is an Old World monkey native to the lowland forests of eastern Ghana, Togo, Benin, Nigeria and Western Cameroon (Matsuda Goodwin *et al.* 2020). Although mainly a forest species, it can adapt well to

secondary habitat and human-modified forests, and remains common in parts of its range. As long as hunting pressure is not intense, this monkey can persist in degraded habitats. Even though it has a high tolerance to human disturbance, it has been extirpated in some localities in its range countries (Chapman *et al.* 2004).

More than 40% of all primate species and subspecies are now endangered as a result of human conflict-related causes such as overexploitation, hunting and habitat destruction (Moinde-Fockler *et al.* 2007; Rylands and Mittermeier 2023). Human-monkey conflict is a common global issue in rural areas, where monkeys raid farms and are killed in retaliation (Nicole 2019). Humans and monkeys have interacted for thousands of years as a wild animal and also as pets in their homes (Wilson and Reeder 2005). The conflict is set to increase as Africa's human population keeps growing at a high rate, and encroachment of agriculture into land containing wildlife habitats continues (Hill 2017). As conflicts with wildlife escalate, monkeys' lives have not been spared. Some such as *Macaca mulatta* and *C. mona* take advantage of the fact that they are living in close proximity to human settlements and help themselves to free and easily obtained food from the farms and residences (Devi and Saikia 2008; Olaleru *et al.* 2020).

The University of Lagos, a mega-city higher institution, is naturally endowed with indigenous populations of mona monkey that are not under formal protection. Infrastructure development around the mona monkeys' range has claimed some of their habitats, leading to habitat loss and fragmentation. This has resulted in the monkeys being in close contact with human facilities and in incidents of raiding. The monkeys have adapted to human foods, leading to raids and conflicts.

There have been several incidences of mona monkeys entering students' hostels and lecture rooms, sometimes causing panic (Olaleru 2015). Members of the university community consider the monkeys to be a nuisance (Olaleru 2016). How they are a nuisance and how this could be solved have not been empirically studied. This study assessed the causes, costs, perceptions, and options for the resolution of human-monkey conflicts in the University of Lagos.

Methods

Study area

The study was conducted in the University of Lagos (UNILAG). The University lies between 6°31.0'N and 3°23.10'E to 6°30.52'N and 3°24.18'E (Fig. 1). It is in the north eastern part of Yaba, Lagos (Olaleru 2016). There are mona monkeys in the remaining forested areas. Presently, the monkeys can be found in forests around Guest Houses, the Faculty of Arts/Senate Building, the back of the Faculty of Social Sciences Shopping Complex, the Faculty of Environmental Sciences and St. Augustine College of Education (Project TIME).

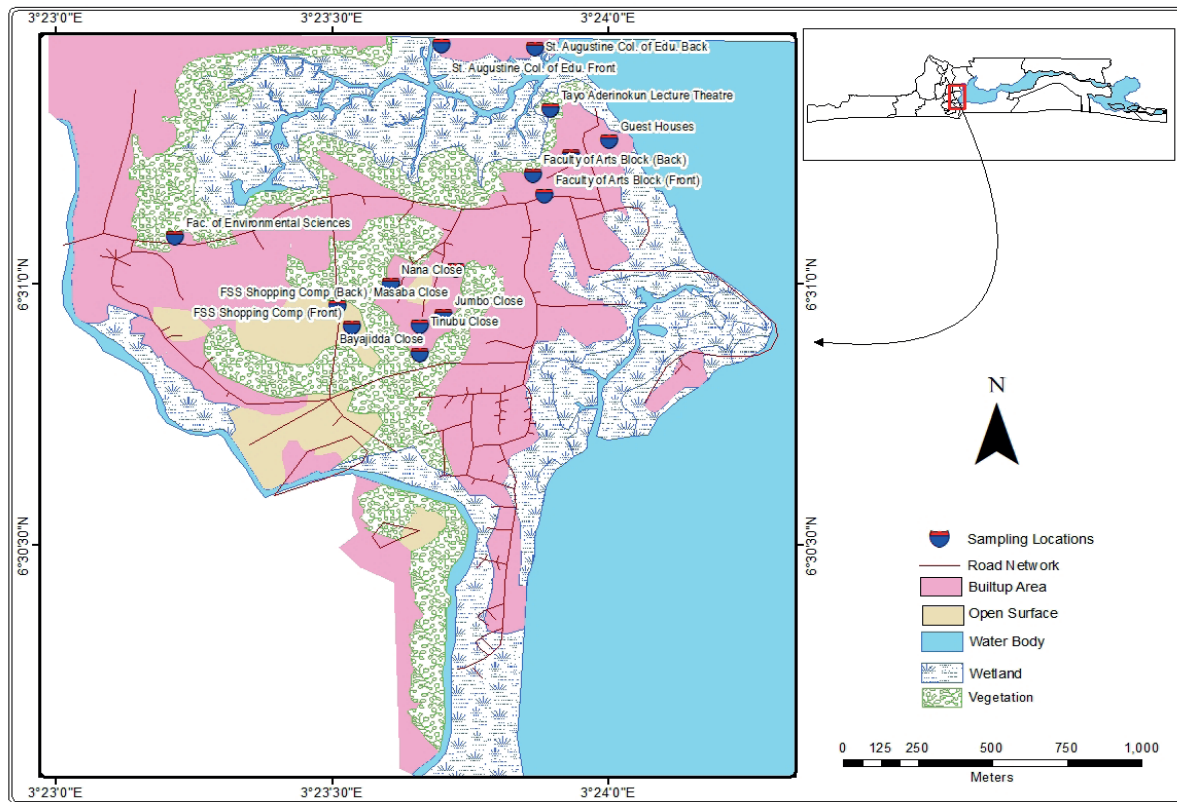


Figure 1. Map of the University of Lagos with sampling locations.

Data collection

Data was collected through questionnaires. Two hundred were given to staff, students, and those who reside or operate businesses where the monkeys range. Only respondents that consented filled in the questionnaire. Of the 150 returned questionnaires, 145 were valid for analysis.

Data analyses

Descriptive statistics was used to summarize the respondents' biodata, their opinions on human-monkey interactions, and conservation options. The results were shown using tables and bar charts. Inferential statistics were used to compare the respondents' opinions on human-monkey conflicts and conservation. One-way analysis of variance (ANOVA) was used to compare means. Significant means $P < 0.05$ were separated through a *post hoc* test using Scheffe. This analysis was carried out to determine pairs of variables that were significantly different.

Results

Socio-demography of respondents

The socio-demography of the respondents is shown in Table 1. The highest number of respondents (44.1%) were in the 21–29 years age bracket. There were more male (55.2%) than female respondents. Regarding the level of education, tertiary institution graduates constituted 60.0%, and students (56.6%) formed the bulk of the respondents.

Locations of data collection

The questionnaires were given out in 12 locations in the University of Lagos campus (Table 2). Most of the respondents were from the Faculty of Arts (31.7%). This was followed by New Hall (17.9%), and then the Faculty of Management Sciences/Guest Houses (14.5%).

Number of groups sighted, group size, population status, and season of monkey raids

The population size and status of mona monkeys are shown in Table 3. All respondents indicated sighting between one to four groups. The modal group (33.8%) indicated sighting at least two groups, with group size (number of individuals per group) of about five individuals (62.1%). The groups were getting smaller as reported by 64.1% of respondents. The wet season was when the monkeys raided more, as indicated by 47.6% of the respondents.

Places and things raided, rate of raids and estimated cost of damage

Table 4 shows the places and things monkeys raided, rate of raids and estimated cost of damage. Classrooms, student hostels and shops were in descending order the commonest places raided by the monkeys. The monkeys raided processed foods, foodstuffs and foods scavenged from dustbins. The rate of raids on a daily basis was most frequent (48.5%), followed by weekly incidences (23.2%). Most of the respondents (69.7%) indicated that the estimated cost of damages caused by the monkeys' activities was less than

Table 1. Biodata of respondents

Variable	Frequency	Percentage
Age group (N=145)		
< 20 years	29	20.0
21–29 years	64	44.1
30–39 years	28	19.3
40–49 years	13	9.0
>50 years	11	7.6
Total	145	100.0
Sex (N =145)		
Male	80	55.2
Female	65	44.8
Total	145	100.0
Level of Education (N = 145)		
Primary School Leavers	6	4.1
Secondary School Leavers	52	35.9
Tertiary Institution graduates	87	60.0
Total	145	100.0
Career categories (N = 145)		
University staff (academic)	16	11.0
University staff (non-Academic)	16	17.9
Students	82	56.6
Traders	19	13.1
Others	2	1.4
Total	145	100

Table 2. Areas of where questionnaires were given out.

Residence/Office/Shop Areas	Frequency	Percentage
Bayajidda Close	13	9.0
Jumbo Close	4	2.8
Nana Close	4	2.8
Masaba Close	8	5.5
Emotan Close	1	0.7
Tinubu Close	3	2.1
Faculty of Social Science Shopping Complex	9	6.2
Faculty of Arts	46	31.7
Faculty of Environmental Sciences	4	2.8
Faculty of Management Sciences/Guest Houses	21	14.5
New Hall	26	17.9
New Hall Shops/Eateries	6	4.1
Total	145	100.0

N5000.00. This was followed by N5000.00-N10000.00 (10.1%). Using a conversion estimate of N500 to a dollar (USD), that was less than 10 USD.

Human-monkey conflicts: perceptions and actions

The perceptions and actions of respondents to human-monkey conflicts are shown in Table 5. The situation was a

severe and moderate problem to 15.9% and 56.6% respectively of the respondents. Most respondents (59.3%) indicated they did not need compensation for the damages, even though most (71.7%) showed monkeys were the only animals that raided their facilities and farms. The major action respondents took on raiding monkeys was to scare them away (49.2%) or report them (17.2%). The various reasons

Table 3. Number of troops sighted, troop size, population status, and season of monkey raids.

Number of troops sighted	Frequency	Percentage
1 troop	28	19.3
2 troops	49	33.8
3 troops	28	19.3
>4 troops	40	27.6
Total	145	100.0
Troop size (number of individuals in a group)		
<5	90	62.1
5–10	39	26.9
>10	14	9.7
Not sure	2	1.4
Total	145	100.0
Population status (increasing or reducing)		
Increasing	48	33.1
Reducing	93	64.1
Not sure	4	2.8
Total	145	100.0
Season when monkeys raid most often		
Dry season	58	40.0
Wet season	69	47.6
Both dry and wet seasons	11	7.6
Not sure	7	4.8
Total	145	100.0

Table 4. Places and things monkeys raided, rate of raids and estimated cost of damage.

Places raided	Frequency	Percentage	Frequency of raids	Frequency	Percentage
Student hostels	22	22.2	Daily	48	48.5
Classrooms	36	36.4	Weekly	23	23.2
Staff quarters	8	8.1	Monthly	9	9.1
Offices	7	7.1	Seasonally	18	18.2
Shops	17	17.2	Not sure	1	1.0
Farms	7	7.1	Total	99	100
Others	2	2.0	Estimated cost of damage (in Naira)		
Total	99	100.0	<5,000.00	69	69.7
Things raided			N5,000.00 – N10,000.00	10	10.1
Fruits	19	19.2	N11,000.00 – N20,000.00	7	7.1
Foodstuffs	26	26.3	>N20,000.00	4	4.0
Processed foods	29	29.3	Not sure	9	9.1
Dustbins	24	24.2	Total	99	100.0
Others	1	1.0			
Total	99	100.0			

for protecting mona monkeys in the University of Lagos included ecological processes (29.7), ecotourism (22.1), and scientific study (17.9%).

Behavior of monkeys and their negative actions towards humans

Results on the behavior of monkeys and their negative actions towards humans are shown in Table 6. The monkeys were not afraid of people, as indicated by 41.7% of the

Table 5. Human-monkey conflicts (HMC): perceptions and actions.

To what extent is HMC a problem?	Frequency	Percentage	Reactions to monkey raids	Frequency	Percentage
Severe problem	23	15.9	Made a report	25	17.2
Moderate problem	82	56.6	Poisoned them	4	2.8
Not a problem	7	4.8	Hunted them	3	2.1
Not sure	33	22.8	Set traps	16	11.0
Total	145	100.0	Scared them away	71	49.0
Do you need compensation?			Took no action	22	15.2
Yes	51	35.2	Total	145	100.0
No	86	59.3	Reasons for monkey protection on University of Lagos campus		
No response	8	5.5	Scientific study	26	17.9
Total	145	100.0	Keep ecological balance	43	29.7
Are monkeys the only raiders on campus?			Preserve genetic resources	22	15.2
Yes	104	71.7	For ecotourism	32	22.1
No	38	26.2	For education	22	15.2
Do not know	3	2.1	Total	145	100.0
Total	145	100.0			

Table 6. Behavior of monkeys and their negative actions towards humans.

Behavior of monkeys towards humans	Frequency	Percentage	Negative actions of monkeys to humans	Frequency	Percentage
Aggressive	9	9.1	Injury	11	11.1
Friendly	20	20.2	Stealing of goods	72	72.7
Not afraid of people	41	41.4	Destruction of property	10	10.1
Hungrily searched for food	27	27.3	Transmission of disease	1	1.0
Others	2	2.0	Others	5	5.1
Total	99	100.0	Total	99	100.0

respondents, and 72.7% indicated that stealing things was the major negative behavior of the monkeys to humans. This was followed by injury (11.1%).

Descriptive statistics, analysis of variance and post hoc, on the effect of age group of on their perception on the causes of monkey raids

Table 7 shows that respondents younger than 20 years old had the least understanding of the causes of monkey raids (25.55 ±4.53), while those in the 30–39 years age group had the most (30.86 ±5.69). The one-way ANOVA showed a significant age-group difference in the perception of the respondents on the causes of monkey raids (F = 7.04, p <0.05). The *post hoc* test showed that respondents whose age ranged from 30–39 years had a greater perception on the

causes of monkey raids than the respondents who were less than 20 years of age (mean difference = 5.305, P<0.003) and respondents whose age ranged from 20–29 years (4.779, P<0.05). All other comparisons were not significant.

Descriptive statistics, analysis of variance and post hoc on the effect of age groups of respondents on their perception on conservation of monkeys

The results presented in Table 8 showed descriptive statistics, ANOVA and *post hoc* on the effect of age groups of respondents on their perception on conservation of monkeys. Respondents in the age group of 40–49 years had the lowest opinions regarding the conservation of monkeys in UNILAG (25.00 ± 3.92), while respondents that were less than 20 years old had the highest (31.62 ±4.35). The one-way

Table 7. Descriptive statistics, one-way ANOVA, and *post hoc* test on effect of age group differences of respondents on their perception on the causes of monkey raids.

Age group (yrs.)	N	Mean	SD	Difference	Sum of squares	df	Mean square	F	Sig. p	(I) Age (yrs.)	(J) Age (yrs.)	Mean difference (I-J)	Sig. P
<20	29	25.55	4.53	Between groups	669.393	4	167.348	7.043	0.000*	30-39	<20	5.305*	0.003
20-29	64	26.08	4.74	Within groups	3326.469	140	23.760				20-29	4.779*	0.001
30-39	28	30.86	5.69	Total	3995.862	144							
40-49	13	30.38	5.04										
>50	11	28.27	3.98										
Total	145	27.45	5.268										

Table 8. Descriptive statistics, one-way ANOVA, and *post hoc* test on age group differences of respondents and their perception on conservation of monkeys in the University of Lagos.

Age group (yrs.)	N	Mean	SD	Difference	Sum of squares	df	Mean square	F	Sig.	(I) Age (yrs.)	(J) Age (yrs.)	Mean difference (I-J)	Sig.
<20	29	31.62	4.35	Between Groups	503.844	4	125.961	5.54	0.000*	<20 years	30-39 years	4.335*	0.023
20-29	64	28.98	5.34	Within Groups	3185.163	140	22.751				40-49 years	6.621*	0.003
30-39	28	27.29	3.77	Total	3689.007	144							
40-49	13	25.00	3.92										
>50	11	30.18	5.40										
Total	145	28.92	5.061										

ANOVA showed a significant age-group difference in the opinion towards conservation of monkeys in UNILAG ($F = 5.54$, $P < 0.05$). The *post hoc* test showed that respondents 20 years old or younger had significantly higher perceptions towards conservation of monkeys in UNILAG than those in the 30-39 year age group (mean difference = 4.335, $P < 0.05$), and those between 40-49 years (mean difference = 6.621, $P < 0.05$). All other comparisons were not significant.

Descriptive statistics and analysis of variance on differences in educational level of respondents on their perception on causes of monkey raids

Table 9 shows the descriptive statistics and one-way ANOVA on differences in educational level of respondents on their perception on the causes of monkey raids in the university. The respondents who had tertiary level of education had the lowest perception on the causes of monkey raids (27.16 ± 4.99), although only slightly lower than those with a secondary level of education (27.38 ± 5.70). The respondents with primary level of education had the highest perception (32.17 ± 3.25). The one-way ANOVA did not show

any significant difference in the perception of respondents based on their educational levels (mean difference = 2.60, $P = 0.078$).

Descriptive statistics, analysis of variance and post hoc on differences in educational level of respondents on their opinion towards conservation of monkeys

Table 10 shows descriptive statistics, ANOVA and *post hoc* on differences in educational level of respondents on their opinion towards the conservation of monkeys. The respondents with a primary level of education had the lowest perception towards the conservation of monkeys in UNILAG (23.17 ± 1.72) while those with a secondary level of education had the highest opinion (30.12 ± 3.73). The one-way ANOVA showed a significant educational level difference in the perception of the respondents towards the conservation of monkeys in UNILAG ($F = 5.88$, $P < 0.05$). The *post hoc* test showed that respondents with secondary level of education had significantly higher perception towards conservation of monkeys in UNILAG than those with primary level of education (mean difference = 6.949, $P < 0.005$).

Table 9. Descriptive statistics, and one-way ANOVA on differences in educational level of respondents on their perception causes of monkey raids

Educational level	N	Mean	SD	Difference	Sum of squares	df	Mean square	F	Sig.
Primary	6	32.17	3.25	Between Groups	140.974	2	70.487	2.60	.078
Secondary	52	27.38	5.70	Within Groups	3854.888	142	27.147		
Tertiary	87	27.16	4.99	Total	3995.862	144			
Total	145	27.45	5.27						

Table 10. Descriptive statistics, one-way ANOVA, and *post hoc* test on differences in educational level of respondents on their opinion towards conservation of monkeys.

Educational level	N	Mean	SD	Difference	Sum of squares	df	Mean square	F	Sig.	(I) Edu. Level	(J) Edu. Level	Mean difference (I-J)	Sig.
Primary	6	23.17	1.72	Between Groups	281.946	2	140.973	5.88	0.004*	Secondary	Primary	6.949*	0.005
Secondary	52	30.12	5.73	Within Groups	3407.061	142	23.993			Tertiary	Primary	5.431*	0.034
Tertiary	87	28.60	4.47	Total	3689.007	144							
Total	145	28.92	5.06										

Respondents with a tertiary level of education had significantly higher perception than those with a primary level of education (mean difference = 5.431, $P < 0.034$). All other comparisons were not significant.

Discussion

The demography of the respondents with the highest feedback, ages 21–29 years, was an index that they were adults who had some knowledge about the monkeys. With a higher number of males participating in the survey, it seemed they had more interest in the happenings about their environment than their female counterparts. Being an academic environment, most of the respondents had tertiary education, and undergraduate students formed the bulk of the respondents. This could be expected since the monkeys raided classrooms and hostels, and the students had first-hand experience of the incidence of these conflicts.

The three study locations that had the highest numbers of respondents—the Faculty of Arts, New Hall, and the Faculty of Management Sciences/Guest Houses—had forest cover that served as foraging sites for the monkeys. In addition, the Faculty of Arts building has served as a sleeping site for a group of monkeys for decades. The student hostels in New Hall were used as a sleeping site until some two/three years ago when the monkeys deserted the area. The trees surrounding the Hall, which served as corridors and source of food were cut down. This was clear evidence of effects

of urbanization on wildlife habitats, as forest areas are being converted to educational facilities. Urban areas have taken over many natural habitats (Seto *et al.* 2012) that harbor wildlife. Randall (2018) stated that urban growth will make Nigeria lose most of its natural habitats by 2030. Onadeko *et al.* (2014) indicated that the mona monkeys’ habitats were being encroached upon in the university. The persistence of the monkeys in these areas could be an indication that what became lecture rooms and student hostels were once their habitat ranges. Since the monkeys have existed in this area before the creation of the university six decades ago, everywhere was their habitat.

The few groups with less than ten individuals per group could be due to the limited habitats available to sustain them. The small population size determined during field surveys was corroborated by the respondents’ observation in the monkeys’ decreasing population. Olaleru *et al.* (2020) attributed the decrease in the mona monkey population in University of Lagos to poaching, but in Soluyi, Gbagada, Lagos, the low population of mona monkeys was attributed to habitat conversion into residential areas. There were, however, few groups with sizes larger than ten individuals.

Raiding was experienced more during the wet season. This perhaps was the period when their natural foods were scarce. Since classrooms and hostels were the areas raided most, it connotes that the monkeys were more habituated to these places. Food resources seemed more readily available as the monkeys scavenged for human food leftovers from

dustbins and dumpsites. The frequency of raids implied that the monkeys were really in close proximity to human residences. This close proximity implied competition for space and resources characteristic of conflict scenarios (Bulte and Rondeau 2005). The conflicts included raiding of classrooms, hostels and small shops by monkeys for processed foods such as biscuits, bread, and pastries. The daily raids made their activities quite disturbing to the community members. The raiding of processed foods such as biscuits, bread, sausages, and pastries implied that the monkeys have adapted to obtaining and consuming them. Olaleru and Egonmwan (2012) reported similar adaptations in the feeding ecology of the mona monkeys. Because of the low monetary values of the estimated costs of damages due to monkey raids, compensation was not seen by respondents as a necessary recourse.

The activities of the monkeys was perceived as a mild problem. That was why people reacted by just scaring the monkeys away rather than poisoning or killing them. The lack of interest in compensation would imply that the residents can put up with the low level of the damages incurred or there has been no forum for such. This lack of demand for compensation could be because the damaged items may not constitute economical means of the residents' livelihood. Olaleru *et al.* (2020) indicated the seeming tolerance of the residents to the effects of such raids/stealing of food items. Although respondents did not seek compensation for damages made by the monkeys, they were not happy about the incidences. They always expressed their feelings with the corresponding author. If the monkeys are not confined to an area, raids may continue with more intensity if the monkeys' population increases. There could be retaliatory killings of the monkeys in such instances. This way, they do not bear the cost of the damages alone.

People living in proximity to protected areas bear the cost of conflicts (DeMotts and Hoon 2012). Compensation for them has been used in India to cushion the effects of crop and/or livestock losses, property damages, or human injuries caused by wildlife (Johnson *et al.* 2018). The practice of compensation has its own challenges. It was found that the process was quite bureaucratic and that the local community members affected did not receive the expected benefits to mitigate their economic losses due to damages caused by wildlife (Johnson *et al.* 2018). The perception of people on the mona monkey's presence and their ultimate conservation was influenced by age and educational levels. It would seem that residents know the ecological value of protecting the monkeys.

Conclusion and Recommendations

The mona monkeys in the University of Lagos existed before the establishment of the institution. As their habitats are shrinking due to human encroachment, their activities are negatively impacting human facilities. Even though the current monetary value of damages at the time of the study

was not high, inflation and the cost of replacing them calls for the need for compensation if affected people are to live in harmony with the monkeys. We recommend strongly that the monkeys should not be killed. To forestall future incidence of retaliatory killings of the monkeys by affected residents, the University of Lagos' Management should designate an office for reporting and verification of raid incidences. Genuine victims could then be compensated even though they are not presently agitating for such. This is to subsidize the cost of replacing damaged items.

For the harmonious and healthy co-existence of people and monkeys in the University of Lagos, the monkeys should not be allowed to encroach into residential/office/classroom areas; and humans should not encroach on wildlife habitats. This could be achieved through the incorporation of a conservation area in the University's Master Plan. The area should be protected from other development plans, and wildlife poaching. The place should be large enough, and have the trees the monkeys need for food and sleeping. The trees could be planted and allowed to grow before the monkeys are translocated to such a place, and monitored for successful adaptation. The University could benefit from such as it plans the area as an educational and ecotourism site for students and visitors. In the event of unavailable space, the groups that are critically close to humans could be relocated to a protected area in Lagos, such as the Lekki Conservation Center, a facility owned by the Nigerian Conservation Foundation. For ethical reasons, since the species has existed in this location before the creation of the University, it is good that they are conserved in the present environment.

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