# **Cross-Cultural Communication: Communities and Conservation**

# Case Study: Conservation of Sacred Monkeys in Igboland, Nigeria

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Local belief systems such as indigenous religions and social taboos have been credited with helping to conserve animal and plant species and particular sites worldwide. Certain species and sites are protected because they are considered *sacred*. Although the meaning of sacred varies across cultures, religions, and languages, in general sacred entities are distinguished from the everyday world and given respect and reverence (Stein & Stein 2005). Sacredness is often derived from religious beliefs (e.g., distinctions between what is "holy" and "unholy"). In African religions, sacred animals or plants may be protected due to their association with local deities or spirits or their role in local folklore (Baker et al. 2009). Sacred entities are usually associated with taboos that prohibit a group of people from killing, harming, or misusing them.

Taboos can thus serve as valuable conservation tools, but their effectiveness may change over time with changing human attitudes. Attitudes toward sacred animals can be affected by a variety of factors, including negative interactions with or perceived threats from these animals, perceived or actual risks of disease transmission, and crop-raiding behavior. People's beliefs may also be influenced by their education level, occupation (primary source of income), gender, and age. Religious change may have considerable influence on attitudes. Newly adopted religions whose doctrines differ from or are contradictory to a society's current belief systems may affect practices and beliefs toward sacred or taboo species and sites. The severe effect of religious change is frequently assumed, even though many examples exist of sacred species linked to indigenous religions persisting in sites where new religions have been widely adopted.

### Igboland, Nigeria

Christianity has long had a presence in the Igbo-speaking region of southeastern Nigeria (Igboland, Fig. 1), where the first Christian mission was established in 1857. Although the Igbo are thought to form the largest group of Christians in Nigeria, examples of sacredness and social taboos linked to indigenous Igbo religious beliefs (also known as "Odinani") still occur in the region, including several populations of sacred monkeys (Baker et al. 2009).

Igboland is a human-dense and mostly deforested region dominated by agriculture. Thus, little wildlife remains. The region has no official (government) protected areas, such as wildlife sanctuaries or national parks. Consequently,

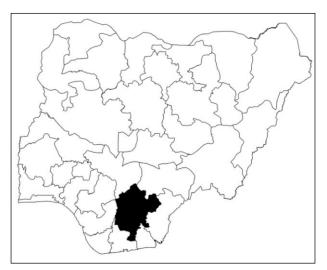


FIGURE 1. The major Igbo-speaking region of Nigeria (Igboland), which comprises five states.

sacred populations may be particularly important for the conservation of rare or endemic plants and animals. Such populations are likely to regularly encounter humans, whose beliefs regarding these species represent their only form of protection in the region. Understanding human attitudes toward sacred and taboo species is essential to initiating and achieving effective conservation efforts.

## Sclater's Monkey (Cercopithecus sclateri)

My research focuses on the ecology and conservation of hunted and sacred populations of Sclater's monkey (*Cercopithecus sclateri*) (Fig. 2). Sclater's monkey is endemic to southeastern Nigeria, with Igboland comprising a significant portion of its entire distribution (Baker & Olubode 2008). The southeast region largely comprises deforested and degraded habitats, owing to its high human population density and oil extraction and production operations.

### Sclater's monkey is listed as Vulnerable by the IUCN.

The species does not occur in any official protected areas, but does receive informal (cultural) protection in three communities where it is considered a sacred or taboo



FIGURE 2. Sclater's monkey (photo: Lynne R. Baker)

animal, linked to indigenous religious beliefs and/or local folklore. The species' special status in these sites is its only form of protection from exploitation across its geographic range.

The three communities harboring sacred populations of Sclater's monkey have little natural forest cover remaining; what does remain usually occurs as sacred forest groves. In a study in two of these sites in Igboland, remnant groves were relatively small ( $\bar{x} = 0.5$  and 2.1 ha), thus monkeys cannot rely on these forest patches for survival (Baker et al. 2009). As a result, monkeys live commensally with people, invade farms and gardens (Fig. 3), run on rooftops, and so are widely viewed as pests. For two communities, I found that more than half of the residents (59%) do not prefer the presence of monkeys in their



FIGURE 3. Sclater's monkey in Lagwa, Imo State, feeding on oil-palm fruits. Oil palm is an important cash crop in the region. (photo: Lynne R. Baker)

communities, and a similar number (54%) do not consider the monkeys to have any importance for the community (Baker 2009).

Although religious change has played a role in how residents perceive the monkeys, the monkey's cropraiding behavior was cited overwhelmingly as the major disadvantage (Baker 2009). The long-term survival of these populations largely depends on the willingness of the local people to continue to adhere to the taboo against harming the monkeys despite depredation of their crops and associated loss in income, as well as the apparent erosion of the indigenous belief systems that confer protection on the monkeys due to the influence of new (Western) religions and cultures and modernization.

### **Stakeholder Perspectives**

# **Conservation Biologists**

Africa's most populous nation, Nigeria retains only a small fraction of its original forested area. Yet, Nigeria remains critically important for African primate diversity. The country harbors several threatened primate taxa, including the Niger Delta red colobus, the Cross River gorilla, and the Nigeria-Cameroon chimpanzee. Of the Nigerian primates currently afforded full species status, Sclater's monkey is the only taxon endemic to the country. The only regional protection conferred on wildlife across the range of Sclater's monkey is through social taboos and sacred forests.

Conservation biologists believe this unique primate and the region's remaining forests represent an opportunity to promote the conservation of both biological and cultural diversity ("bio-cultural diversity") and help ensure the long-term survival of the species. They believe the totemic and cultural position of sacred Sclater's monkeys should be promoted to ensure the survival of these populations.



FIGURE 4. Dr. Lynne Baker interviewing a chief shrine priest in Enugu State, summer 2010.

For example, a project involving the recording and documentation of oral histories and folklore in two Igbo communities has been completed (Fig. 4).

Conservation biologists see an opportunity to work with communities to build capacity and launch broader community-driven conservation programs, focused not only on monkeys, but also other natural resources, patterns of land use, agricultural practices, etc. They believe such programs can help the communities develop sustainably. Conservationists also suggest the establishment of ongoing research programs for both national and international students and other interested parties, particularly if research outcomes translate into increased economic opportunities for residents and solutions for decreasing crop raiding.

### Communities

The presence of the monkeys in the communities has resulted in long-standing human-wildlife conflict and, in turn, human-human conflict. Not everyone agrees on how to deal with the crop-raiding activities of the monkeys, or whether anything should be done. The holders of tradition in the communities, such as traditional rulers, shrine priests, and native doctors, are often in opposition with those who advocate for the removal or killing of the monkeys. Some residents' conversion to Christianity has played a role in their belief that monkeys should be removed; however, there is variation in the strength of these convictions according to various factors, including the denomination and type of church one attends (Baker 2009).

The actual financial impact of crop raiding on residents' livelihoods has not yet been quantified, but people whose primary source of income is derived from farming are the least in favor of continued protection of the monkeys. When describing crop-raiding events, local people often attributed human characteristics to the monkeys, such as calling them "thieves," and expressed great frustration with the monkeys' behavior (Baker 2009). For example:

They are spoiling our crops. If we see any means to kill them, we will do. Monkeys are our enemies. (*Female, age 23*)

Monkeys do not allow us to get monetary gains from fruit trees unlike [our] counterparts where monkeys are killed. (*Female, age 70*)

They behave like thieves on the farm, for when they see you coming, they will run to the top of [the] tree and start eating what they have stolen. (Female, age 65)

Consequently, monkeys have been and are being killed, sometimes by indigenes of the community and sometimes by outsiders hired by indigenes; those responsible often try to keep the killings secret (Baker 2009).

Local people have noted that they do not "benefit" in any way from the monkeys' presence. Many residents believe that monkeys do not do anything for them and thus are of little use: "I can't sell or eat it," "I can't send them on an errand," "the monkeys can't marry my daughter," "they can't go to market for me," "they can't fetch water for me" (Baker 2009). However, in one community, some people considered visits from outsiders or any prestige associated with the monkeys' presence as advantages. Thus, people may perceive any benefits obtained from research or ecotourism programs as the monkeys' own contribution to the community and a form of compensation for crop destruction.

#### **Future Outlook**

For these communities, there are several conservation, research, and development opportunities, which could ultimately lead to a more reciprocal relationship between people and monkeys.

#### Research

The unique situation in these sites offers an opportunity for researchers to investigate questions at the intersection of ecology, conservation, and anthropology. My research program concentrates on the ecology, abundance, and crop-raiding behavior of Sclater's monkey; human-wildlife conflict; the conservation role of social taboos, folklore, and religious doctrines; and major influences that result



FIGURE 5. Primary school children playing a "chutes-and-ladders" conservation game.

in changes in indigenous belief systems. Nearly twothirds of the local residents who said they did not prefer the monkeys' presence indicated that they would be inclined to change their minds if the monkeys were no longer destructive (Baker 2009). Consequently, studies of crop raiding, including its effect on the livelihoods of people and methods for effectively deterring monkeys, deserve special attention. Other research opportunities include studies of primate behavior and disease ecology, particularly the potential for bidirectional pathogen transmission between primates and humans. I have observed monkeys on the ground near latrines and rummaging through garbage piles behind households. Other studies have shown that close associations between humans and sacred, pet, or temple-dwelling primates can result in parasitic and viral transmission.

#### Conservation

Before education programs were initiated in two communities, most residents were unaware of the uniqueness of Sclater's monkey, both within Nigeria and globally, and some expressed pride when made aware of this (Baker 2009). Educational programs for both adults and children could improve attitudes toward the monkeys, as well as programs for church leaders and congregations to encourage a dialogue on the Christian principle of environmental stewardship. Environmental education programs were initiated in the summer 2011 in primary and secondary schools (Fig. 5). The need also exists for habitat restoration, for example, to control erosion and increase connectivity with neighboring forested areas.

### Development

Ecotourism programs have been suggested as a way to help compensate the community for crop damage by monkeys. In Boabeng-Fiema in Ghana, where two primate species are considered sacred, strong adherence to a no-hunting taboo was partly attributed to a growth in tourism revenue, which even encouraged some neighboring communities to stop hunting monkeys and seek involvement in the Boabeng-Fiema ecotourism program (Saj et al. 2005). However, such an idea needs to be carefully considered for southeastern Nigeria. This region has been recently plagued by kidnappings for ransom. As a result of ongoing social and political instability in the country, Nigeria may not be able to sustain even a relatively stable ecotourism project in the region. Other development opportunities include capacity building, education (health, agricultural, etc.), alternative livelihoods programs, sustainable energy, and human-environment health initiatives.

### Sources & Additional Reading

- Baker, L.R. 2009. Sclater's Guenon in Nigeria: Outlook Good or Just Hanging On? Ecological and Human Dimensions of Hunted and Sacred Populations. PhD dissertation, University of Minnesota, Minneapolis.
- Baker, L.R. & Olubode, O.S. 2008. Correlates with the distribution and abundance of endangered Sclater's monkeys (*Cercopithecus sclateri*) in southern Nigeria. *African Journal of Ecology* 46:365-373.
- Baker, L.R., Arnold, T.W., Olubode, O.S. & Garshelis, D.L. 2011. Considerations for using occupancy surveys to monitor forest primates: a case study with Sclater's monkey (*Cercopithecus sclateri*). *Population Ecology* 53:549-561.
- Baker, L.R., Tanimola, A.A., Olubode, O.S. & Garshelis, D.L. 2009. Distribution and abundance of sacred monkeys in Igboland, Southern Nigeria. *American Journal of Primatology* 71:574-586.
- Saj, T.L., Teichroeb, J.A. & Sicotte, P. 2005. The population status of the ursine colobus (Colobus vellerosus) at Boabeng-Fiema, Ghana, in: J.D. Paterson, J. Wallis (Eds.), Commensalism and Conflict: The Human-Primate Interface. American Society of Primatologists, Norman (OK), pp. 350-375.
- Stein, R.L. & Stein, P.L. 2005. *The Anthropology of Religion, Magic, and Withcraft*. Pearson, Boston.

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