



“Staying Together:” People-Wildlife Relationship in the Amboseli Ecosystem, Southern Kenya

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The relationship of Maasai pastoralists to the wild animals with which they share land and resources has been described as “harmonious” and “tolerant.” This research brief describes a study of local attitudes towards wildlife within Maasai communities of the Amboseli ecosystem. This study investigates the multiple dimensions of the relationship between pastoralists and wild animals in three Maasai group ranches in the Kajiado District of southeastern Kenya, under present conditions of demographic, cultural and socio-economic changes. Preliminary results reveal that despite a high perceived level of conflict between people and wild animals and the perceived lack of wildlife-based economic benefits, attitudes towards wild animals are generally positive, even though they are motivated by different factors, especially across age groups. The co-existence of people and wildlife in the Amboseli ecosystem is multifaceted and goes beyond assumptions that Maasai live in harmony with wildlife. Final research results will contribute a multi-layered and sensitive picture of the co-existence of humans, livestock and wild animals in the Amboseli ecosystem to guide policy-makers in smart planning and adaptive policies that integrate conservation and livelihoods.

Background

In East Africa, pastoralists and wildlife species have coexisted for 2,500 years (Collett 1987). Maasai, in particular, have been given credit for local wildlife abundances. Although the cultural role of wildlife should not be ignored, Maasai coexistence with wild animals is also due to large scales of resource exploitation, non-reliance on wild meat, and the fact that wildlife interfered mildly with the pastoral way of life. Today, Maasai areas retain greater wildlife populations than other parts of Kenya. However, these areas are undergoing rapid socioeconomic changes, which could affect the Maasai’s tolerant outlook on wild animals. For instance, new types of human-wildlife conflicts that accompany land tenure and land use changes and the provision of economic benefits from community-based conservation are hypothesized to affect local attitudes towards wildlife.

Wildlife conservation in Africa depends on the cooperation of local residents (Western 1982). In the Amboseli ecosystem, where wild ungulates seasonally disperse out of Amboseli National Park (ANP) onto Maasai Group Ranches (GR), conflict remains intense, despite efforts to reduce it (Campbell et al. 1999) It is recognized that strategies aimed at improving people’s willingness to live with wildlife should be based on their values and perceived problems and expectations, and not just on the assumption that economic benefits from wildlife will make them conservationists (Gibson & Marks 1995). Also, communities are

heterogeneous, and Maasai society is strongly stratified by age, gender and wealth (Hodgson 2000). Ongoing economic diversification, conversion to Christianity, and formal education are contributing to an increasing diversification of ideas and ways of life within Maasai society. In this context, knowing how different people perceive costs and benefits of living with wild animals, their attitudes towards wild animals, and the factors determining such attitudes is relevant for policy-making. For the purposes of this brief, an attitude is defined as an individual’s consistent tendency to respond favorably or unfavorably to a commodity, condition or event. It is thus a determinant of behavior (Taylor & Douglas 1999). Studies of attitudes are vital to research on environmental decision- and policy-making.

This project proposed to describe how local residents in Amboseli Maasai communities in southeastern Kajiado District perceive costs and benefits of living with wildlife to characterize their attitudes towards wild animals and to identify the factors that underlie those attitudes. In the Amboseli ecosystem, answering these questions is imperative at a time when crucial decisions (e.g. land privatization) are impending and when local land use changes are accelerating.

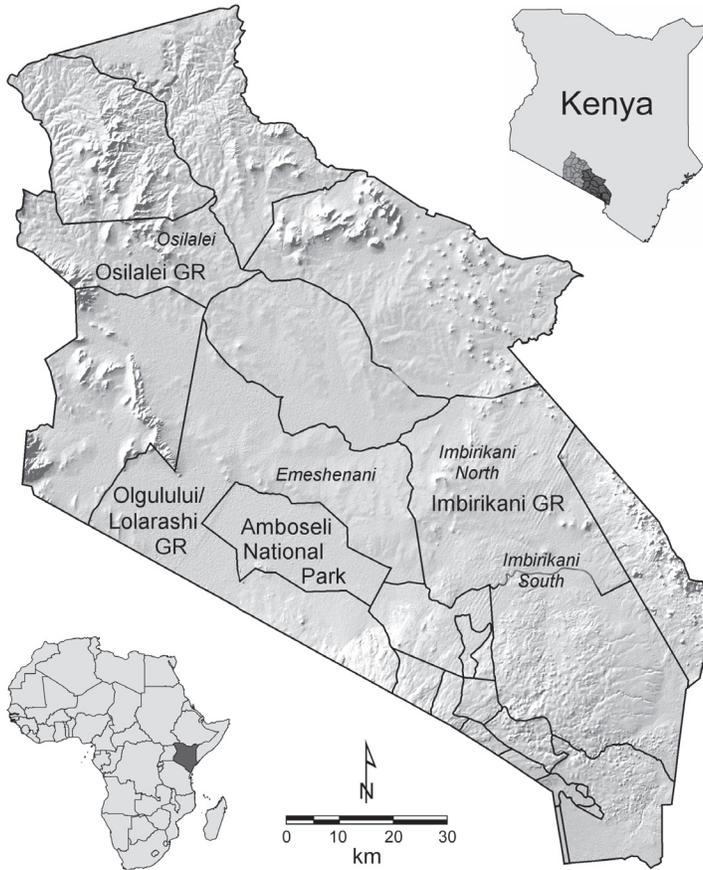
Methods. This study is a comparative survey of the attitudes of local residents towards wildlife in predominantly Maasai communities in the Amboseli ecosystem. Fieldwork is in progress in three study areas

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Figure 1. Map of the study area within Kenya and in relation to the continent, including Imbirikani South, Emeshenani and Osilalei.



characterized by contrasting cultural contexts, land tenure and land use regimes, and provision of wildlife-based economic benefits. The study areas include Imbirikani South, Emeshenani and Osilalei (Figure 1).

In order to capture the demographic, socio-economic and cultural diversity within these three communities, in-depth household interviews are being conducted. In each study area, a random sample of 32 Maasai households stratified by land use was selected, and 64 people are being interviewed (n=192). A census of non-Maasai households present in the swamps area of Imbirikani was also carried out, followed by a survey of perceived costs and benefits of and attitudes towards wild animals (n=80; 27% of the non-Maasai population) of non-Maasai household heads. Additionally, to map and quantify human-wildlife conflict, records of human-wildlife conflicts are being kept by local enumerators in each study area. Existing wildlife-based benefits for the communities were determined through interviews with key informants and focus-groups.

Preliminary Findings

Non-Maasai households. Preliminary results from the non-Maasai survey show that 73.75% of the respondents

were Tanzanian citizens; 26.3% were Kenyans. All the respondents were crop farmers; only 7.5% possessed livestock (poultry only). In terms of economic losses to wildlife, 62.5% of the respondents suffered crop damage between January of 2002 and January 2003, with 54.25% of the damage reported in Isinet/Kalesirua, where no electric fence is present. For both Isinet/Kalesirua and Namelok, elephants were the wild animals most frequently reported as damaging crops (51.2%), followed by gazelles, buffaloes, eland, and baboons. Injuries of household members were rare (2.5%); no human deaths caused by wildlife were reported. The survey also showed that 25% of the households consumed meat from wild animals. This may be an underestimation, however, as respondents know this to be an illegal activity. Those who reported not eating wild meat invoked religious, cultural and health reasons. No other benefit from wildlife was mentioned because of what respondents call their "outsider" status, as many are illegal aliens from Tanzania and do not belong to the Imbirikani Group Ranches (GR), which would entitle them to wildlife-based benefits (e.g. school bursaries; financial help). Data relating to which wild species are consumed and preferred, details of wildlife-caused economic losses per study area, strategies to minimize wildlife-caused problems, perceived solutions

to wildlife-caused problems, and why specific species are liked and disliked are currently being analyzed.

Maasai households. In-depth interviews were carried out in 30 Maasai households in Imbirikani South. The majority of the informants (80%) were agro-pastoralists (irrigated and/or rain fed cultivation); the others were pastoralists. Two in-depth interviews have been carried out in Emeshenani. Although no analysis has yet been carried out for Imbirikani South, the following general points stand out:

- 1) Attitudes towards GR subdivision (potentially determining behaviors with negative consequences for wildlife) are generally positive across all land use and age/gender groups. The most frequently mentioned motivation is land ownership insecurity, followed by the idea that land users expect to make tourists pay for pictures of "their wild animals."
- 2) The most frequent problem caused by wildlife is crop damage (by elephants in Kalesirua; baboons in Namelok).
- 3) When there is knowledge of the local economic benefits from wildlife, it is usually incomplete and incorrect, across all land use and age/gender groups.
- 4) Few households acknowledged having received any benefits from wildlife; they believe that benefits remain

with few individuals (the GR leaders). 5) In the absence of benefits, when attitudes are positive, killing wildlife in retaliation or for cultural reasons (such as in the lion hunt) is considered wrong. Rather, pastoralists expect to enjoy the benefits of wildlife preservation for themselves and community members in the future. 6) Not all wild animals are considered “wild.” Linguistically, Maasai categorize animals in reference to domestic animals (*inkishu*). The non-domestic ones are divided into *inguesi*, which include the predators and harmful animals (rhinoceros, elephant, hippo, buffalo, baboons), and *ilcangit*, which comprise the harmless animals (eland, giraffe, gazelles, zebra). If *ilcangit* compete for grazing, it is acceptable because “God has created them in such a way that they also need to eat.” *Ilcangit* are therefore perceived more positively and are usually considered more beautiful than *inguesi*. 7) Among Maasai informants, positive attitudes towards eating wild meat cut across all groups, although its actual consumption is rare. Some wild species (ostrich) are never killed by Kisonko Maasai for cultural reasons. Furthermore, there is a strong cultural element underlying the refusal of wild meat by half of the informants.

It is clear from interview data so far that the Maasai population in Imbirikani South is enjoying few benefits at the household level, despite the provision of substantial wildlife-based economic benefits within the GR. Informants perceive that benefits are being “eaten” (or controlled) by a restricted group (e.g. the local leadership). When people have enjoyed community-wide benefits, including provision of health and schooling facilities and dams, provided through community-based conservation initiatives, few knew the origin of such benefits.

Nevertheless, despite the lack of economic benefits from wildlife in the household, attitudes towards wildlife seem, generally and without further analysis, positive, especially among representatives of older age-sets and younger generations. Attitudes are somewhat less positive among married agro-pastoralists of intermediate age. Positive attitudes seem to be driven by different factors. Older people invoked that people, livestock and wild animals have always “stayed together” because all are God’s creation and “this is the way it should be.” Representatives of the younger generations invoked wildlife as a “provider of foreign exchange.” Almost all informants mentioned the possibility of benefiting economically from wildlife in the future.

Practical Implications

Community-based conservation philosophy rests on the premise that economic benefits from wildlife promotes positive attitudes and behaviors towards wildlife. This approach has come under fire in recent years because many of its assumptions are unwarranted (for a review,

see Barrett and Arcese 1995), especially the assumption that individuals who benefit economically from wildlife will be more willing to share land and resources with wild animals, as well as to protect them as valued economic assets. Besides the fact that wild animals may also be valued for reasons that are not monetary (an aspect that is being investigated in this study), the availability of benefits does not necessarily imply that individuals will receive them, as shown here. Therefore, unless individuals in the Amboseli ecosystem receive the economic benefits to which they are entitled, the hypothesis that there is a direct relation between economic benefits and positive attitudes towards wildlife (and hence behaviors) cannot be tested.

In Imbirikani, despite not receiving benefits, attitudes towards wildlife are generally positive because of expectation of future benefits. However, under current leadership, this expectation is unlikely to be fulfilled. The ensuing frustration may actually hinder conservation objectives and compromise future attempts at reconciling people and wildlife. Attention must be paid to local governance when setting up schemes to compensate and benefit local people through wildlife-based activities, so as to ensure an equitable distribution of benefits. The changing ethnic composition of Imbirikani’s population may also become an issue. Group Ranch (GR) membership is a condition for enjoying most wildlife-based economic benefits. Thus, a substantial and growing part of the population, which is non-Maasai, is currently not benefiting from wildlife, while incurring the worst costs. In addition, non-Maasai land users have introduced wild meat consumption, which may have an impact on wildlife populations. Incorporating attitudes of non-Maasai elements into community conservation planning is an important step towards the sustainable management of human-wildlife relationships on Imbirikani GRs.

The co-existence of people and wildlife in the Amboseli ecosystem is multifaceted and goes beyond assumptions that Maasai live in harmony with wildlife. In recent times, socio-economic, land tenure and land use changes, and wildlife conservation measures have introduced layers of complexity in the relationship between land users and wildlife. Efforts at reconciling wildlife and people through the development of wildlife-based enterprises and the provision of benefits to individuals are commendable. However, such efforts are useless if heterogeneity within communities is not considered and the benefits not equally distributed. Through the mismanagement of expectations and the creation of frustration, the approach may backfire and make future conservation efforts more difficult. Final research results will contribute a multi-layered and sensitive picture of the co-existence of humans, livestock and wild animals in the Amboseli ecosystem to guide policy-makers in smart planning and adaptive policies that integrate conservation and livelihoods.

Further Reading

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The GL-CRSP POLEYC project (Integrated Assessment of Pastoral-Wildlife Interactions in East Africa: Implications for People, Policy, Conservation and Development in East Africa) focused on the development of integrated assessments of pastoral-wildlife interactions in East Africa and the corresponding implications for people, policy, conservation and development. The Principal Investigator was David Swift at Colorado State University. Email: davesw@nrel.colostate.edu. Prior to his passing, Dr. Jim Ellis was Principal Investigator for the POLEYC project. Dr. Ellis's scientific achievements and mentorship capabilities inspired the Jim Ellis Mentorship Program Fellowship award.



The Global Livestock CRSP is comprised of multidisciplinary, collaborative projects focused on human nutrition, economic growth, environment and policy related to animal agriculture and linked by a global theme of risk in a changing environment. The program is active in East and West Africa, Central Asia and Latin America.

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