Project Update: April 2015

Executive Summary

The field ecology and demography of the two threatened hinged-backed tortoises *Kinixys homeana* and *Kinixys erosa* remain poorly known in Ghana compared to other countries (Cameroon, Nigeria and Togo), making it impossible to implement relevant conservation interventions. This report presents preliminary results of our investigations into the species' habitat and population ecology in the Tano-Offin and Suhuma forest reserves in southwestern Ghana. The study revealed that the tortoises are collected all year round for food, trade and traditional medicine called JuJu. The species highest capture rates coincide with the mushroom season in October. In addition, habitat destruction resulting from farming, logging and illegal mining constitutes second most threat to the tortoises and other wildlife in our study areas. However, through this project we also educated and involved relevant stakeholders for the long-term conservation of the tortoises.

Output 1: Assessing species distribution, population dynamics and threats

We have achieved extensive surveys both in the field and in four fringe communities within our study areas.

We embarked on pre-project visits to fringe communities within our study areas to identify hunters and make arrangements for field and community surveys in April 2014. With the help of hunters, data on tortoises were collected opportunistically during random transect walks across potential suitable habitats. Through focus group meetings we administered questionnaires to locals. We also used community visits as an opportunity to search households for tortoises, record their numbers and take morphometric information.

- Field Surveys: During field surveys we identified five spots where hunters have picked *Kinixys* tortoises previously before our survey. *Kinixys* tortoises were picked within tree buttresses, under fallen logs and in thick leaf litter of closed canopied forest patches. Again, we recorded several forage activities of tortoises in October confirming prior information obtained during reconnaissance surveys. The tortoises are mostly captured in October when locals go in search of edible mushrooms, which are also consumed by tortoises.
- **Community household surveys and interviews:** Our community interviews and household surveys recorded 12 individuals. The majority of hunters interviewed had being carrying their hunting activities thrice in a week for more than 15 years. These hunters occasionally encountered tortoises during their hunting activities. *Kinixys* tortoises were described as very rare and difficult to detect in the forest in recent years compared to the past 10-20 years when they were in great abundance. Also, the majority of interviewees reported that other than for consumption (food and traditional medicine) they do not know about any importance of these tortoises and there are no taboos regarding their harvests. Although, local people reported various superstitious beliefs and folklores concerning tortoises. For example, in one of the communities, a local reported to the gods of the land confiscating his loot.
- **Threats:** The major use of tortoises in this area was for consumption (food) followed by traditional medicine. The trade in tortoises was reported to be occasional.

Hunting was practised with snares. Most snares were distributed near water bodies and under fruiting trees. Illegal logging, farming and mining activities mostly in tortoise habitats were also recorded to be predominant. Most trees fell were carved for canoe building. Illegal logging activities were rampant in every part even in upland areas where accessibility was difficult.

Output 2: Awareness Creation and Capacity building

We carried out community sensitisation and education programmes in surrounding communities and schools. We educated community members and school children on the importance of tortoises, the challenges they are facing and the need to conserve them and their habitats. We distributed educational materials (posters and flyers) to local stakeholders and the general public. Involving Wildlife Division, Forestry Commission and the Department of Wildlife and Range Management, KNUST we also conducted capacity building training for students, hunters and farmers (most of who also happen to be illegal loggers) on the basic ecology and the conservation needs of tortoises.

Future Plans

For the next few months ahead, we will embark on our last visit for dry season data. We hope to collaborate with IUCN Tortoise and Freshwater Turtle experts (Luca Luiselli *et al.*) to confirm identities of species and also conduct detailed statistical analysis on data collected for possible publications whiles reaching more audiences about the conservation needs of the species.



Top left: Locally hunted mushroom (also consumed by tortoise). Middle: Community interactions. Right: Education outreach in community schools. Bottom Left: Household surveys. Middle: Shell of tortoise captured during community surveys (mostly used for traditional medicine). Right: Tree felled and carved for canoe building.