

## Forest Use and Conservation of Biodiversity in Witu Forest, Kenya



Argus reed frog (*Hyperolius argus*) - female. Photo: Chris Knowles

### Small Grant Project Completion Report

**Local partners:**  
Kipini Wildlife and Botanical Conservancy  
Kenya Wildlife Service  
Nature Kenya

## CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

### I. BASIC DATA

**Organization Legal Name:** Danish Zoological Society

**Project Title:** Forest Use and Conservation of Biodiversity in Witu Forest, Kenya.

**Implementation Partners for This Project:** Kipini Wildlife and Botanical Conservancy.

**Project Dates (as stated in the grant agreement):** January 1, 2007 – March 30, 2007.

**Date of Report (month/year):** May 30, 2007

### II. OPENING REMARKS

This project was conducted by the Danish Zoological Society (DZS). DZS was formed in December 2004 by a group of biologists from the University of Copenhagen in Denmark working on a voluntary basis. The mission of DZS is to support and conduct projects and research that contributes to conserving wild animals and their habitats and increases the knowledge of threatened species ecology, distribution and status. DZS has a strong focus on the Eastern Arc Mountains and coastal forests of Tanzania and Kenya.

The project was planned in cooperation with Farouk Sherman, protector and initiator of the Kipini Wildlife and Botanical Conservancy (KWBC). The KWBC is centered on the Kipini ranch which borders the Witu forest and part of the forest extends into the ranch. The Witu forest proper is considered within the wider zone of the conservancy's interest by the KWBC trust.

Partnership was also established with Nature Kenya and an affiliation was established with Kenya Wildlife Service.

The initial letter of enquiry to CEPF was submitted March 2005, resubmitted February 2006, accepted 21 November 2006 and the funds made available from January 2007. Due to the considerable amount of time from the initial application to the project was launched various circumstances in relation to the project had changed.

Unfortunately the two team members with experience from the area were not able to participate in the project as planned, due to the project manager, being diagnosed with breast cancer shortly before departure.



Green mamba (*Dendroaspis angusticeps*). Photo: Chris Knowles

### III. NARRATIVE QUESTIONS

#### 1. What was the initial objective of this project?

1. Conduct a survey of mammals in Witu forest and determine the presence and status of endangered species.
2. Evaluate the intensity and effect/impact of natural resource extraction (bush meat hunting and non-timber forest products) in Witu forest with focus on evaluating the threat to endangered species.
3. Evaluate the feasibility of an integrated conservation and development approach and local communities' involvement in natural resources management in Witu forest and KWBC.
4. Train locals as nature guides in association with KWBC.

#### 2. Did the objectives of your project change during implementation? If so, explain why and how.

The following objectives were adjusted to comply with local circumstances and realities:

##### Conduct a survey of mammals in Witu forest

This objective was extended to include birds. Reptiles, amphibians and insects were recorded on an ad hoc basis.

##### Evaluating the intensity of natural resource extraction

This objective was originally focusing on bushmeat hunting and non-timber forest products. During the project it was adjusted to include timber as the intensity of extraction the two original forest products appears to be minimal whereas illegal logging in Witu forest was extensive.

##### Training local people as nature guides

This objective included training local people as nature guides for ecotourism and providing them with animal field guides and binoculars. Due to difficulties in identifying local people possessing both the necessary language skills and knowledge about the forest simultaneously it was decided to focus on educating young people on the global importance of conserving biodiversity Seminars was therefore conducted at two primary schools in communities directly bordering the forest. Animal field guides and binoculars were handed over to the schools.

A seminar were similarly conducted with three local interest groups and a lecture was held by a member of a PFM association from the Arabuko-Sokoke forest. Equipment in terms of a tent, mattresses, mosquito nets, binoculars, GPS etc. were handed over to one conservation oriented NGO upon project completion.

#### 3. How was your project successful in achieving the expected objectives?

##### Objective 1 and 2:

Three transects of a total length of 5 km were established within the Witu forest proper. Eight camera traps were placed in the forest at animal holes and on animal trails crossing the transects. A total of 1224 hours of camera trapping were conducted. Transect surveys were conducted and observations of animals were recorded. Bird censuses were conducted on each transect by



identifying species from calls and visual observations and by mist netting. Reptiles, amphibians and insects were recorded through random observations and through bucket pitfall trapping. Ten buckets were used for a total of 445 trap hours. Based on this comprehensive species lists are compiled for mammals and birds. Threatened species and potential indicator species of disturbance and forest quality are identified.

Transect surveys were conducted recording the perpendicular distance to all observations of animal tracks and signs. Applying Whiteside's relative densities of relevant species were calculated. The status of relevant species is evaluated through comparison with other locations.

During transect surveys all signs of logging, use of fire, bushmeat hunting and harvesting of other non-timber forest products were recorded along the transects. Based on this an index of human disturbance were established. The effect of the disturbance is evaluated.

The species lists, relative mammal densities and index of human disturbance constitute a baseline for monitoring and evaluating trends in the status of the forest and the impact of conservation initiatives and Kenya's new forest act.

Results are presented in the report "Conservation and Use of Witu Forest, Kenya".

#### Objective 3:

Based on the results of objective 1 and 2 described above the potential for sustainable use of various forest resources in participatory forest management (PFM) agreements were evaluated and recommendations provided.

Three local interest groups were identified. Meetings were held with the individual groups to establish their wishes and priorities in relation to Witu forest. A meeting was held with representatives from each group and efforts to establish an umbrella association for the three groups was initiated.

Options in Kenya's new forest act for involving local people in the management and monitoring of forest are identified and the experience with PFM in Kenya so far is evaluated. Recommendations for implementing participatory forest management and monitoring in Witu forest are provided.

Results are presented in the report "Conservation and Use of Witu Forest, Kenya".

#### Objective 4:

Seminars were conducted in two primary schools for respectively 3 and 2 classes with approximately 25-30 students each. The importance of ecosystem services derived from the forest were illustrated and discussed. Animal field guides and binoculars were handed over to the schools for use in lectures and projects.

Equipment in terms of a tent, mattresses, mosquito nets, binoculars and a GPS were provided to the NGO Witu Conservation Group. This contributes to build their capacity to conduct patrolling in Witu forest and monitor the status of natural resources in agreement with their mandate.

**4. Did your team experience any disappointments or failures during implementation? If so, please explain and comment on how the team addressed these disappointments and/or failures.**

According to agreements as specified in proposal KWBC trust were supposed to make a car available for the project and accommodation at the Nairobi ranch at an estimated value of US\$ 3.440. Shortly before initiation of fieldwork DZS spend US\$ 400 on repairs on the car in advance. The car, however, seemed to be worth less than that amount and repeatedly broke down, requiring the team to rent a car and spend considerable amounts on repairs.

Intensive illegal logging was discovered in the forest. The team's presence in the forest must have disrupted these activities. On one occasion the team removed a logging camp and brought the equipment to the police station. Subsequently, on two separate occasions, shots were fired over the transect in the forest where the team were working. Local people informed that it was rumored that this was commissioned in order to scare the team away. This situation required that DZS hired a number of armed guards to accompany the team during fieldwork.

**5. Describe any positive or negative lessons learned from this project that would be useful to share with other organizations interested in implementing a similar project.**

One month for fieldwork in the forest and the surrounding communities is very constrained and is insufficient for achieving the required community trust to perform quantitative assessments of the extraction and the socioeconomic importance of forest products.

The Witu Conservation Group is an important partner organization to cooperate with for any type of fieldwork in Witu forest. Their assistance is indispensable for arranging all aspects from field assistants, transport, food and accommodation. More important they possess considerable knowledge about previous and current use of the forest.

Specialist researchers and assistants from the Museum of Kenya and Nature Kenya can be hired with benefit to assist in data collection.

**6. Describe any follow-up activities related to this project.**

DZS has as of now no specific plans to conduct follow-up activities. It is, however, considered relevant and DZS would be interested in doing a follow-up study in 5 years to assess the impact of any conservation initiatives and Kenyas new forest act.

Connections are maintained with Witu Conservation Group and recommendations are provided on writing fund applications etc.

Nature Kenya may be considering enrolling Witu Conservation Group as a Nature Kenya support and conducting further bird surveys in the forest.

**7. Please provide any additional information to assist CEPF in understanding any other aspects of your completed project**

DZS hope that we have supplied all the information needed for this project completion report. The actual results of the survey and management recommendation are provided in the report "Conservation and use of Witu forest, Kenya: Biodiversity survey and management recommendations". The report will be available from DZS homepage ([www.zoologiskselskab.dk](http://www.zoologiskselskab.dk)) on completion. Queries and correspondence to: Team leader: Martin R. Nielsen  
E-mail: [nielsenmr@gmail.com](mailto:nielsenmr@gmail.com)

**IV. ADDITIONAL FUNDING**

Donor	Type of funding*	Amount	Notes
KWBC	A	USD 3,440.00	
Verdensnaturfondet Aase og Ejnar Danielsens Fond	C	DKK 25,000.00	

**\*Additional funding should be reported using the following categories:**

**A** Project co-financing (Other donors contribute to the direct costs of this CEPF project)

**B** Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF project)

**C** Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)

**D** Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)

**Provide details of whether this project will continue in the future and if so, how any additional funding already secured or fundraising plans will help ensure its sustainability.**

The project is completed.

**V. ADDITIONAL COMMENTS AND RECOMMENDATIONS**

It would be beneficial to people and organizations ability to plan their activities if the period from project application to the project is accepted and the funds transferred could be reduced considerably below the two years in this case.

**A note to the financial report:** Due to unforeseen circumstances (force majeure) we had to cover expenses for cancellation of tickets (receipt 6c), and the extra cost of a plane ticket from Greenland (receipt 2c), since one member of the team had to stay behind to undergo chemo treatment, and another team member had moved to Greenland during the two years that the application was under consideration at CEPF. Expenses of USD 4,027.85 that exceed the approved budget of USD 19,942.00 will be covered by the Danish Zoological Society.

#### **VI. INFORMATION SHARING**

CEPF aims to increase sharing of experiences, lessons learned and results among our grant recipients and the wider conservation and donor communities. One way we do this is by making the text of final project completion reports available on our Web site, [www.cepf.net](http://www.cepf.net), and by marketing these reports in our newsletter and other communications. Please indicate whether you would agree to publicly sharing your final project report with others in this way.

Yes  \_\_\_\_\_

No  \_\_\_\_\_

If yes, please also complete the following:

**For more information about this project, please contact:**

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Meeting with stakeholders in the local community, Witu village. Photo: Martin R. Nielsen