

Project Update: February 2023

Activities conducted between November 2022 and February 2023 at the project area, Zanzibar

1. Assessment of the population size and distribution of *P. kirkii*.

As per our schedule of activities, the team continued to assess the local population size and distribution by collecting necessary information on movement of *P. kirkii* between thickets and mangrove forests of Vundwe and adjacent island of Uzi (**Fig 1 & 2**). During assessment, the researchers used methods such as presence absence, complete count method, and follow the groups on daily basis while recording information such as GPS coordinates, date and time, feeding habits, group size, group composition and habitat.



Left: **Fig 1:** Mangroves assessment. Right: **Fig 2:** Thickets assessment. **Fig 1 & 2:** Assessment of the population size of *P. kirkii* in thickets and mangrove forests in Vundwe island.

Initial findings

Detailed data analysis is in progress, however, very few groups of *P. kirkii* were encountered during assessment in Vundwe island. On average, two to three groups of *P. kirkii* were recorded in the island per day. Due to high deforestation, only few full matured plants were found to have fruits in Vundwe so the groups do not spend much of their time in the island and rather in farmers' fields in the nearby Uzi island searching for food. The encountered groups had relative few individuals ranging from four to 10 members unlike the typical family of a monkey species which can range from 20 to 50 individuals. It was also found that the species spend relatively equal time between

mangroves (in Uzi) and thickets (in Vundwe) in the early morning and late evening for feeding. Also, some groups were encountered outside the natural forests and particularly in the crop fields raiding on banana, pawpaw, cassava and cereal crops. Generally, very few individuals of the monkey species were recorded in Vundwe island, and the low population size could be due to various factors.

During assessment, the team recorded several human activities which might have contributed to the low number of *P. kirkii* species in Vundwe island. The team observed severe destruction of forest for timber, firewood, charcoal as well as pollution indicating that there are number of people who conduct various activities in the island (Figs. 3 - 6). We also found that during low tide, there is an extended rock pathway which can allow movement of *P. kirkii* between Vundwe and Uzi islands (Fig. 7 & 8). However, the same corridor is also used by fishermen, tree loggers, firewood collectors and others from nearby Uzi island which simplify their visits to Vundwe. Apart from human activities which continue to downgrade the thickets and mangrove forests, other factors such as direct and indirect hunting of the species might have contributed to the low population of this species in the study area. As reported in the previous reports, villagers hunt *P. kirkii* as food source for their domestic dogs so this as well reduce their population. Also, the monkeys are poisoned by farmers because they raid on crops from fields located outside Vundwe island. Another reason which might have affected the distribution and visitation of *P. kirkii* in Vundwe is lack of food and fresh water for drinking particularly during dry season. We found very few species of plants with fruits which are preferred by *P. kirkii*. According to villagers and through our observation during assessment, matured species of plants which used to bear abundant fruits for *P. kirkii* have been cleared mainly for timber and charcoal (Fig. 4). Because of that, the island is mainly dominated by immature plants with few fruits which do not support as many groups of *P. kirkii* as it used to be before deforestation. To safeguard the population of this endemic species of monkey in its natural habitat, there should be an immediate conservation action including restoration and improvement of the habitat. The degraded forest can be restored through reforestation and enhanced through construction of several shallow water wells which will serve as reservoirs to store rain water and used by *P. kirkii* throughout the year.



Left: **Fig 3:** Pollutants in Vundwe island. Right: **Fig 4:** Logging.



Left: **Fig 5:** Encountered visitors in Vundwe forest. Right: **Fig 6:** Bundle of firewood in Vundwe.



Fig 7 & 8: The rock corridor used during low tide connecting the Vundwe and Uzi islands.

2. Conservation education/Awareness raising

The team continue to provide conservation education to different groups including fishermen, farmers, tree loggers and secondary school students living adjacent to Vundwe island. The team is using focus group discussions, village assemblies, educational speeches and videos to enhance participant awareness on human activities threatening the population of *P. kirkii* in the area (Figs. 9 & 10). Also, the community is informed of the contribution of this flagship species in tourism industry of Zanzibar as well as appropriate conservation measures necessary for protection of *P. kirkii* in the project area.



Left: **Fig 9:** Conservation education to students. Right: **Fig 10:** Conservation education to villagers.

More information regarding the enhancement of the local community knowledge on the importance of conserving *P. kirkii* and its habitat through conservation education will be reported after accomplishment of the relevant activity. The outcome will then be included in the final report to be submitted in May 2023.

Conclusion

It has been observed that the Vundwe island which is used by *P. kirkii* as a refuge habitat continue to shrink due to increased human activities particularly deforestation. Because of this, the movement of this endemic species to the island continue to decline. The island which used to serve as potential habitat and provisioning of plenty of fruits due to presence of diverse plant species continue to be degraded. There is high vegetation clearing by adjacent community and there should be an immediate action to restore this important habitat to ensure that the population of *P. kirkii* is maintained. At the end of the project (May, 2023), the team will conduct a stakeholders meeting with both government and private partners so as to share what the project has found and recommend appropriate conservation measures that would help to protect the habitat.

Ongoing activities

1. The team continue to analyse data on population size and distribution of *P. kirkii*.
2. The team continue with education programme to enhance awareness of local community regarding the protection and conservation of *P. kirkii* in both Vundwe and adjacent areas of Uzi Island.