

Project Update: March 2019

Aims of the Project

Anthropogenic activities in the Masito-Ugalla Ecosystem (MUE) in western Tanzania seem to be mainly driven by poverty which leads to over-dependence on natural resources, expansion of human settlements and farms, and increasing number of livestock resulting in human encroachment in one of the unprotected chimpanzee habitat in Tanzania. This project aims at identifying chimpanzee plant feeding species available in the MUE, finding out how anthropogenic activities influence chimpanzee plant feeding species, chimpanzee spatial distribution and habitat selection (nest tree selection) in the MUE.

Overview

The funds were received on 12th January 2019. Upon receiving the funds, preparations to start fieldwork in one of the four study sites were done. At first, we made sure the research project is cleared by the responsible national authorities and got a research permit. After obtaining a permit, the first survey was scheduled to start at Issa Valley which is within Tongwe East Forest Reserve.

Field Survey

The survey team arrived to Issa Valley on 31st January 2019 and commenced the field survey on 1st February 2019. The survey aimed to identify different chimpanzee feeding plant species and the damages associated with human activities within the area. The field team used 20 days of fieldwork from 1st to 20th February 2019. Eight transects which were 2 km long each, were established in the study site. Transects were established covering the major areas where chimpanzees are known to forage, nest etc. (i.e. riverine forests, miombo woodland and wooded grasslands). A total of 80 quadrat plots (25 × 25m) were surveyed whereby on each transect, ten quadrat plots at a constant interval of 200 m apart were installed.



Fig. 1a



Fig. 1b



Fig. 1c

Figure 1a, 1b & 1c: Using measuring tape to set up quadrat plots along the established transects

Field Observations

The observations made under the field survey at Issa Valley suggest a number of different chimpanzee plant feeding species are available in the area ranging from herbs, liana, climbers, shrubs and trees. Over 60 chimpanzee plant feeding species were identified in the area. Furthermore, the observations indicate different illegal anthropogenic activities taking place in the area. Signs of livestock grazing, poaching, recurrent fire outbreaks, beekeeping, harvest of woody plants for medicinal uses and logging for timber were observed. Additionally, damages to chimpanzee plant feeding species and non-chimpanzee food plants were also observed. Inferences made from the data (signs observed) collected within Issa valley shows the following human activities are prevailing; livestock grazing, illegal logging for timber, poaching, beekeeping, unsustainable tree harvest for medicinal purposes and recurrent fire outbreak.

The following are photos taken during a field survey at Issa Valley to show different illegal anthropogenic activities taking place in the area and the damages on plants

Livestock grazing



Fig. 2a



Fig. 2b



Fig. 2c



Fig. 2d



Fig. 2e

Figure 2a, 2b, 2c, 2d & 2e: Signs of livestock grazing observed during the field survey within Issa Valley. Figure 2a is a cattle horn and figures 2b, 2c, 2d and 2e are cattle feces.

Illegal logging for timber



Fig. 3a



Fig. 3b



Fig. 3c



Fig. 3d



Fig. 3e

Figure 3a, 3b, 3c, 3d & 3e: Signs of illegal logging for timber observed within Issa Valley

Poaching/Snare Setting/Beekeeping



Figure 4: Old poachers' camp (Poaching) sign.



Figure 5: A dropped torch in Issa-poaching sign.



Figure 6: A tree cut for snare setting (Poaching) Figure 7: A fallen beehive (Beekeeping sign)

Damages of recurrent fires to plants



Fig. 8a

Fig. 8b

Fig. 8c

Figure 8a, 8b & 8c shows the damages/impacts of fires on the plants within Issa Valley

Damages to plants due to harvest for medicinal requirements/livestock keepers' marks



Fig. 9a



Fig. 9b



Fig. 9c



Fig. 9d

Figure 9a: Unsustainable harvest of tree for medicinal purpose (removing the bark of tree). Figure 9b: A tree cut for the purpose of putting mark (livestock keepers' mark). Figure 9c: A tree completely cut down. Figure 9d: Livestock keepers' mark on a tree (Livestock grazing sign).

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Fig. 10a



Fig. 10b

Figure 10a & 10b: The field team at Issa Valley. In 10a is Simula Maijo (PI)-on the left, Shabani Kabangula (at centre) and Mwami Rashidi (on the right). In 10b at the centre is Judith.