Project Update: January 2022

1.Sensitisation meetings and capacity-building workshops in village communities of Kom-Wum Forest Reserve.

We conducted socio-economic surveys and conservation awareness meetings on December 26, 2021, and January 1, 2022 (figure 1) in Bu, Baiso, Mbongkissu, and Mbengkas villages of Kom-Wum Forest Reserve to identify: a) the essential plant species that the locals potentially use; and b) the drivers of bushmeat. Additionally, we organised one capacity-building workshop with Village Forest Management Associations per village (community eco-guards, farmers associations, and youth associations). The members of each association were informed on best tree domestication techniques. They were also advised to adopt more sustainable ways to exploit indigenous forest resources, especially plant species that chimpanzees of Kom-Wum use. Furthermore, members were informed on sustainable practices to prevent human-wildlife conflict, the Cameroon forestry laws, and penalties for illegal hunting. Ecoguards and local guides received training on monitoring the fruiting cycle of plant species that chimpanzees consume. We found that rattan cane (Eremospatha macrocarpa), bush pepper (Peper nigrum L), bitter cola (Garcinia kola), cola (Cola acuminata), prunus (Pygeum africanum) and Djangsang (Ricinodendron heudelotii), were the most important timber forest products harvested from Kom-Wum Forest Reserve by locals. Additionally, community members reported that lack of income and alternative protein sources were the significant drivers of bushmeat consumption. Respondents further said they would stop hunting if they were provided with pigs, goats, and fowl because it's challenging to go to the forest, and animals are becoming scarce.



Figure 1: Conservation awareness meetings with a) association of non-timber forest product collectors of Bu, b) farmers of Bu, c) village council of Baiso, and d) youth association of Baiso.

2. Field surveys on fruit availability and dietary ecology of chimpanzees.

2.1 Fruit availability

Field surveys on fruit availability and dietary ecology of chimpanzees started on December 28, 2021. We measured the circumference of all important chimpanzee feeding tress and noted the abundance of their fruits along line transects and recces (figure 2). We found many mature ripe, and unripe fruits of Landolphia (Landlophia sp.3) in liana (figure 3). Pycnanthus (Pycnanthus angolensis) had inflorescences, and Pseudospondias (Pseudospondias microcarpa) had just started fruiting (figure 3). In contrast, many trees of groundnut spice (Monodonra myristica) had no inflorescences and had a few dying fruits (figure 4).



Figure 2: Data collection with the principal investigator a) counting the fruits of Landlophia and b) measuring the circumference of a chimpanzee fruiting tree.





Figure 3: Phenology of important chimpanzee fruiting trees with a) mature fruits of Landolphia b) young fruits of pseudospondias, c) Pycnanthus inflorescences, and d) Groundnut spice inflorescence.



Figure 4: Monodonra myristica tree with dying fruits on a two-meter length branch.

2.2 Dietary ecology of chimpanzees

We heard chimpanzees vocalising seven times and found fresh chimpanzee nests. We followed them each time but found no faeces on their tracks nor beneath their nests. However, we found indirect feeding signs of chimpanzees, including tool use sites, and indirect signs of chimpanzees feeding on the pith of young palm trees, *Elaeis guineensis* (figure 5).



Figure 5: Indirect signs of chimpanzees with a) fibrous wadge of the chewed pith of palm trees b) young palm tree destroyed by chimpanzee for pith c) army ant feeding digging tools, and d) fresh chimpanzee nest.

3. Further planning

Data collection will continue on January 25, 2022, in Kom–Wum Forest Reserve.