Project update: January 2020

1. Ecological and human factors influencing nesting-site selection in chimpanzees

We began field visits to investigate the ecological and human factors determining the selection of nesting sites in chimpanzees of Kom-Wum Forest Reserve on December 8, 2019, as planned. Data were collected along transect 23-2km line transects and 17km recce established in 2018.

1.1 Nesting sites, camera trap photographs and direct observations

Chimpanzees have constructed nests in the vicinity of previous nesting sites in the wet season (May to September 2018) and in seven new sites. Chimpanzee ground nests (N = 11, fig. 1d) and arboreal nests (N = 127, fig. 2d) have been recorded in Kom-Wum Forest Reserve. The group size, nest age, tree type, tree height, tree diameter, altitude, slope direction, the orientation of nest on a tree when on a slope, slope angle under the nest, forest type, canopy cover, understory and climatic variables (humidity, temperature and pressure) at the camp were also recorded. The decay rates of fresh nests (N = 57) are being monitored. One footage of five chimpanzees has been photographed by wildlife cameras (Fig.1a). We heard chimps vocalising on several occasions and directly observed one female chimpanzee using hands to fetch and drink water directly from a running stream. This chimp quickly escaped before we got a photograph of this behaviour.

1.2 Feeding and tool used behaviour

Chimpanzee tool used sites for catching ants (N = 4) have been found (fig. 2b). We found leaves assembled by a chimpanzee to wipe remnants of faecal matter from its buttocks beside chimpanzee faeces (fig. 2a). This is probably a new tool-use behaviour that requires further investigation. More chimpanzee faecal (N = 4, fig.1c) and hair samples (N = 13) have been collected for genetic analysis.

1.3 Human pressure

The human signs recorded during this phase of our survey include rattan cane and wild honey harvesting (N = 24), traps and active wire snares (N = fig.1b), timber exploitation (N = 1), new agricultural farms (N = 2) and hunting signs (N = 73). Cartridge shells (N = 8) were less frequently encountered, whereas the number of wire snares (N = 60) has increased in the reserve (fig. 1b).

1.4 Nocturnal primates

We encounter and confirmed the presence of the nocturnal primate, angwantibo (*Arctocebus calabarensis*) whose presence had been reported by other researchers using indirect signs (fig.2d).

Figure 1 a) Group of four chimpanzees photographed by wildlife cameras b) a wire snare c) a chimpanzee dung and d) ground nest of chimpanzee in the study area.

Figure 2 a) Plants parts fashioned by a chimpanzee to wipe remnants of faecal matter from its buttocks b) the principal investigator measuring the diameter of plant tools used by chimpanzees to catch army ants c) a research guide collecting chimpanzee hair from a fresh nest and d) Angwantibo *Arctocebus calabarensis* directly observed in the study area.