Project Update: December 2019

The threat to natural resources has led protected area managers of Iyondji Community Bonobo Reserve to set up a biomonitoring system, which will be regularly analysed to allow probable adjustments. Bonobo nets counting continues in order to update the database on *Pan paniscus* population in the south east, the definition of their density, their abundance and relative distribution and the estimation of the impact of human activities in the Iyondji reserve. The method consists in walking through transect with an average speed of 1 km per hour, a global positioning system (GPS maps 60 CSx) is used to locate waypoints. The perpendicular distance is measured using a decameter from the closest nest to the transect. Visible nests from transect are noted in a notebook, then the total number of nests is reported, and a number is assigned to each nest. The nest age (fresh, recent, old, very old) and the tree on which the nest is built are also noted.

Nest sites are defined as the set of nests built by the same group and having the same age located at more or less 30m. The age of each nest has been raised, grouped into four classes as described by Tutin & Fernandez (1984):
Fresh: the leaves are still completely green and fresh;
Recent: the leaves are parched; the colouring begins to change;
Old: dead leaves, however the nest is entire;
Degraded: no more leaves, but the nest is still identifiable from the disintegrated branches.

The types of nests encountered have been defined as follows (Kano, 1983; Koops et al., 2012):
Sub-branch: the nest is built at the level of the branches of the tree;
Top: the nest is built at the top of the tree;
Integration: the nest is built using the branches of two or more trees;
Superimposed: the nest is built on another pre-existing nest, therefore a nest already used previously of the same tree.

Data collected are compiled on SMART (Spatial Monitoring and Reporting Tool) to facilitate management of law enforcement data and ecological monitoring in the protected area. An effective approach to monitor, evaluate and improve patrols effectiveness and enforcement of wildlife law based on the protection of biodiversity.

Left: Bonobo nest counting. Right: Co-researchers from Wamba Forestry Center.


Left: Community awareness gathering. Right: SMART (Spatial Monitoring and Reporting Tool) capacity building.