

## **Project Update: March 2011**

### *Density and habitat requirement of marauding elephant*

The survey is underway at two locations including community sites around Nkoelon and Nybissan villages where elephant crop raiding is more prevalent. Desktop work was carried out for survey planning in January 2011 and line transect sampling was implemented in all sites. The sites were divided into geographic grids of 9 km<sup>2</sup>. One 1.5 km transect was surveyed in each grids. The transect route was decided in advance by plotting the course and the distance on the 1:200,000 maps. The starting point of the first transect from accessible zone was randomly generated. Other transects followed under the same latitude (or longitude) and their exact positions were determined in the field using GPS Map 60CX. Dung-counts were conducted along each line transects in February 2011 and these will be used for analysis to estimate elephant densities. Further analysis will indicates habitat preference, with less preferred habitats being inferred from lower elephant densities.

Care was taken during the data collection that dung on or near lines were never missed and that all the measurements of distances are accurately recorded with steel tapes to the nearest centimeter. The line itself was determined by a 50 m steel tape that was also helping in measuring the length of transects. Each transect was surveyed at a mean speed of 0.5 km/h for nest counts.

The surveys were designed to provide information on elephant density and habitat selection both within and between sites. Within site survey was carried out to provide information on the seasonal effect of weather and between site to compare a range of vegetation types including primary forest, secondary forest, fallows, and plantations.