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"Development on the margin"

Bushmeat Hunting and Sustainability of Blue Duiker Off-takes in the Northeastern Periphery of Korup National Park, South-West Cameroon

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Abstract

In Afrotropical rainforests, bushmeat off-takes exceed the sustainable harvest rates even if hunting is practised with rudimentary methods. The aim of the present study, carried out from May to September 2010 (during the rainy season) at the northeastern border of Korup National Park (KNP) in southwestern Cameroon, was to analyse patterns of bushmeat hunting and to evaluate the sustainability of blue duiker off-takes. A total of 65, out of the 187 hunters and trappers found in the study area, were monitored, in the forest and in villages, in order to map village hunting territories, to evaluate the hunting effort and to estimate the harvested biomass. Age structure of the blue duiker was determined by analysing the tooth eruption and wear in the lower jaw particularly for the molars. A questionnaire was administered to 47 out of the 65 hunters and trappers monitored. We found that trapping was performed by 80 % of hunters. The average number of traps per trapper was 108. Snare-traps density was 156 traps km^{-2}. Traps, that functioned continually days and nights, were checked on average every 3.1 days. The duration of a gun-hunting expedition, including resting time, was 5.5 days. The average harvested biomasses were 0.92 kg per gun-hunter per day and 0.7 kg per trapper per day. About 55 % of the total off-takes were sold, given a daily average income per hunter of 1179 CFA francs (*i.e.* 1.80 Euros). Blue duikers, the 3rd most hunted species in number, constitute up to 23 % of the total harvested biomass. When applying the Feer's (1996) logistic model, off-takes of blue duikers were 6 to 21.2 times higher than the maximum and minimum sustainable productions for the study area. However, sex and age class structures suggested that the blue duiker population could be recovering from the current level of off-takes. Therefore, to draw a definitive conclusion, it is necessary to collect similar data in the dry season.

Keywords: Blue duiker, bushmeat off-takes, gun-hunting, harvest model, Korup area, sustainability, trapping

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