data on animals killed by Mekas hunters were collected by MUCHAAL, NGANDJUI and BESSALA during 1994 ; NGANDJUI and BESSALA during 1995, using two methods. During October and November both in 1994 and 1995, biological data on animals killed were collected daily in Mekas by a primary investigator (MUCHAAL or NGANDJUI) and the resident field technician (BESSALA). Between February and September (1994 and 1995), when hunting activities diminish and are more irregular, hunters were accompanied when possible on their snare visits and informations were also taken in the village. Anatomical measurements on captured animals were taken and the number of animals rotten on the snares was recorded.

Following the animal surveys on the transects, the animal densities were determined using the WHITESIDES *et al.* (1988) calculation method.

The sustainability of hunting was evaluated using the ROBINSON and REDFORD (1991) population growth model.

RESULTS

Densities of game species tended to increase from zone 1 to zone 4 that means with distance from human activities (hunting, agriculture, ...) and with decline of snare densities.

The Mekas hunters utilised a hunting area of approximately 300 km² which extend almost to 40 km walking distance from the village. The hunting techniques (snares or firearms) depend on seasons not on the destination (selling or subsistence consumption) of the off-take.

Duikers comprised the largest group of animals killed, representing numerically 64 % of the off-take and 78 % of biomass off-take of Mekas hunters from January 1994 through December 1995. The species recorded in the « Red Data Book » (IUCN, 1990) were less captured by Mekas hunters. During the two years study, one chimpanzee was killed near the village and one panther trapped in zone 2 at 27 km walking distance from Mekas.

Hunters wastage or animals found rotten on snares varied accross the 3 zones. The wastage was 4.5 and 2 times highest respectively in zone 2 (14.1 %) and 3 (6.8 %) compared to zone 1 (3.2 %).