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DIEET OF GREEN MONKEYS (*Cercopithecus aethiops sabaucus*) IN SENEGAL

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During an 18 month survey in Senegal, west Africa, from february 1975 to july 1976, three troops of green monkeys (*Cercopithecus aethiops sabaucus*) were studied (more than 1544 direct observations hours) and their dietary habits recorded.

Two troops lived in th Senegal Valley, north Senegal, in sahelian thornbush riverine forest (rainfall less than 200mm per year). The membership of the first troop ranged from 33 to 47 members, according to the season, the other was larger: 140 to 174 members.

A third troop (33 members) lived in the Sine-Saloum estuary further south; part of its home range was in mangrove mud flats. Yearly average rainfall in this area was 1000 mm.

During the observations periods, all the food items eaten were recorded every 15 minutes by scanning of all visible troop members and the plant species and parts eaten were recorded. When a monkey started feeding between two scanning periods and when he changed its food items, he also scored.

As shown in table (1), *Cercopithecus aethiops sabaucus* is omnivorous. 34,4% of food items eaten were fruits (Senegal Valley: 34,7%; Sine-Saloum magrove : little more than 34,1%). In the Senegal Valley, most of them were fruits of *Acacia nilotica*, *Piliostigma thonningii*

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and two species of Ziziphus spp. In the Sine-Saloum mangrove, fruits of Ficus spp., Isocina senegalensis and of other Acacia spp. were preferred. Other vegetable material (tree leaves and fresh shoots, grass and herb blades and shoots, buds, flowers, fresh thorns, rhizomes and gums) accounted for 38,7% of the food eaten. These food items were preferred by the Senegal Valley populations where they accounted for 52,4% of the records, out of which 32,2% were green parts (tree leaves and fresh shoots, grass and herb blades and shoots) and 14,4% were gum of Acacia nilotica. Quite the contrary, in the Sine-Saloum mangrove this food category represented little less than 25% of the diet.

When species are considered regardless parts eaten, the most frequently eaten species were Acacia nilotica in the north Senegal (44%) and Bizophora mangle and B. racemosa in the Sine-Saloum mangrove swamp (16%). Most parts of Bizophora spp. were eaten (GALAT and GALAT-LUCAS, 1976). All the plant species mentioned are the commonest on the respective home ranges.

Animal foods were consumed by the three troops studied in Senegal: 11% of the food items observed in north Senegal and 40,9% in the Sine-Saloum mangrove (mean 26%).

In the Senegal Valley, animal preys were grass hoppers, caterpillars and chrysalids in most cases, but mammals and birds were eaten occasionally: hares (Lepus crawshai), rats (Arvicanthis niloticus), doves (Streptolalia senegalensis), hornbills (Ouceros erythrorhynchus), and sparrows (Passer griseus) eggs of birds were also eagerly eaten.

In the Sine-Saloum mangrove, green monkeys fed mostly upon fiddler crabs (Uca tangeri). The techniques used for their capture are described elsewhere (GALAT and GALAT-LUONG, 1976). Crab hunting occurred almost daily and crabs must be considered a staple food for the mangrove swamps population.

Senegal green monkeys are definitely omnivorous. According to local and ecological conditions, each of the three major component of the diet: fruits, other vegetable material and animal foods, varied and could account for more than one third of the diet. Also seasonal intra troop variation occurred too, the most drasting contrasts were found between the diets of the Senegal Valley populations and that of the Sine-Saloum population. In terms of percent of food categories eaten, 60,1% of overlap occurred between the whole diets of the two populations, but only 33 35% if fruits are excluded. Senegal Valley population fed two times more upon vegetable material, fruits excluded (52,4% versus 25,0%) than the Sine-Saloum troop, and four times less upon animal foods (11,0% versus 46,9%). Predation was also quite different in its strategy: in north Senegal, it was occasional and the nature of the preys varied considerably according to the season, in the Sine-Saloum mangrove, crab hunting appeared not to be dependent upon climatic variations.

Table (1) : Food eaten by green monkeys in Senegal as a percent of total number of records in each area.

Troop	A and 174	B	mean	Overlap
Country	Senegal Valley	Sine-Saloum mangrove		
Fruits	34.7	34.1	34.4	34.1
Other vegetable material and undetermined vegetable parts	52.4	25.0	38.7	35.0
Animal foods	11.0	40.9	26.0	11.0
Miscellaneous	1.9	0.0	0.9	0.0
Total	100	100	100	60.1
Number of records	15155	377	15532	

Reference

GALAT, G. and GALAT-LUONG, A. 1976; La colonisation de la mangrove par
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