

Quantitative Observations on Feeding Behavior in *Saguinus geoffroyi* (Callithricidae, Primates)

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ABSTRACT. Feeding behavior of a six-animal group of marmosets, *Saguinus geoffroyi*, was observed under field conditions in the Panama Canal Zone. The order of feeding was recorded as the marked animals fed from a limited access food source. A combined distribution of observed visitations to the food source was shown to be significantly non-random ($p < .005$). The juveniles of the group were seen to feed at the source before adults on the average.

INTRODUCTION

Saguinus geoffroyi (Pucheran) is a small, squirrel-sized, callithricid primate occurring in Panama and extending into northern Colombia and southern Costa Rica (HALL & KELSON, 1959). At present, the taxonomy of the genus is uncertain (HERSHKOVITZ, 1966; HILL, 1957). The habitat of *S. geoffroyi* is mainly second growth tropical forest (MOYNIHAN, 1970); the more mature forested areas of Panama are only sparsely inhabited (G. A. DAWSON, per. comm.).

Studies on social and sexual behavior of captive callithricids (including *S. geoffroyi*) were reported by EPPLÉ (1967, 1970, 1972). She observed a distinct dominance hierarchy with associated behavior patterns in all the species studied.

To date, the only field study of behavior was conducted by MOYNIHAN (1970), in which he observed groups of *S. geoffroyi* in the Panama Canal Zone. He acquired little quantitative data except sonagrams of vocalizations and their behavioral contexts. The present paper presents an analysis of feeding behavior observed in free-ranging animals. The analysis examined a hypothesis of a non-random sequence in the order of feeding at a limited access food source.

MATERIALS AND METHODS

Observations were conducted from April to July 1973 in the Rodman Naval Ammunition Depot in the Panama Canal Zone. Actual quantitative data were recorded in the period 13 June to 11 July. The area consists of second growth dry tropical forest, with heavy underbrush, which renders vision into the canopy difficult or impossible. It is undisturbed, except for a few poachers who rarely bother the marmoset population. A complete description including rainfall and habitat data can be found in FLEMING (1971).

The study site consisted of a blind constructed at ground level about 30-40 feet away from a tree which supported a feeding station situated at a height of 25 feet. A National live trap (with stiff wire mesh sides, 6" x 6" x 20") placed on a wooden

