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Small Mammals from Chaguaramas, Trinidad and Tobago

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NATURE NOTES

Small Mammals from Chaguaramas, Trinidad and Tobago

The Trinidad Regional Virus Laboratory (TRVL) established in 1952 had as its main objective the study of arboviruses (viruses transmitted by insects, ticks and mites) from various parts of Trinidad. The Chaguaramas area however, at that time was a United States Naval Station and not available for studies. Eventually, the Trinidad and Tobago Government gained control of that area and placed it under the jurisdiction of the Chaguaramas Development Authority. Since the area was earmarked for development and with possible increases of human activity, it was thought necessary to monitor that area for arbovirus activity. Initially, work was started in December 1969, but because of the military uprising in April 1970, studies came to an abrupt end.

Activities were restarted in June 1974 which consisted of trapping small mammals, capturing of birds, and the trapping of blood-sucking arthropods. Arboviruses have mammals and birds as hosts and are transmitted by blood-sucking arthropods. The data obtained from the studies at Chaguaramas were never published and there has been no other mammal study since the TRVL work. I therefore thought it useful to place the mammal data on record as baseline information for other workers who might want to work in the area.

Two areas were selected for study: Tucker Valley (TV), representing a lowland agricultural area at the edge of a grapefruit grove, while the second area was a hilly, forested area adjacent and west of Tucker Valley and known as Cano Venturo Rd. (CVR). The CVR area rises from sea level to 539 m in about 3.62 km. The collecting station was approximately 1.5 km along the CVR.

Seven small and medium sized Hav-a-hart traps baited with peanut butter and oats were used in each area. Trapping was done for four nights of the week alternately at TV and CVR from June to December, 1974.

A total of 80 small mammals representing 11 species (Table) was captured in 1584 trap nights. No virus was isolated from the Chaguaramas mammals. Overall, five mammals were caught per 100 trap/nights. However, at CVR 3.7 mammals were caught per 100 trap/night when compared to 6.9 per 100 trap/night at TV. The Spiny Pocket Mouse, *Heteromys anomalus* was the most commonly caught species. *Mus musculus* was captured at TV, but not at CVR, while the reverse was true for the opossum *Didelphis marsupialis.*

Most small mammal studies in Trinidad have been based on single night captures or at most over a few nights.

Table. Small mammals captured at Chaguaramas, Trinidad, June-December, 1974.

Species *	**CVR**	**TV**	**Totals**
Caluromys philander, Bare-tailed Woolly Opossum	1	2	3
Didelphis marsupialis, Common Opossum	2	0	2
Heteromys anomalus, Spiny Pocket Mouse	7	10	17
Hylaeamys megacephalus, Rice Rat	4	5	9
Marmosops fuscatus, Gray-bellied Slender Opossum	4	6	10
Marmosa robinsoni, Robinson's Mouse Opossum	1	7	8
Mus musculus, House Mouse	0	3	3
Necromys urichi, Grass Mouse	1	1	2
Nectomys palmipes, Water Rat	1	10	11
Proechimys trinitatus, Spiny Rat	12	1	13
Rattus rattus, Black/Roof Rat	1	1	2
Totals	**34**	**46**	**80**
Trap nights	920	664	1584
Animals captured/100 trap nights	3.7	6.9	5.0
* Common names follow Emmons and Feer (1997).			

The TRVL however, had conducted studies over several months and in many cases over several years in different locations in Trinidad. For example, Worth *et al.* (1968) working in Bush Bush Forest during the period 1960-1963 captured 11 species of small mammals. In the first year (1960), 6.5, mammals per 100 trap/nights were captured, but over the next three years the numbers collected were reduced each year to a low of 1.1 mammal per 100 trap/nights in 1963. The continual removal of these animals from the Bush Bush Forest environment might have led to a population crash in 1963.

Mammal species captured at Bush Bush Forest and Chaguaramas were similar except that the Grass Mouse, *Necromys urichi* and the Bare-tailed Woolly Opossum, *Caluromys philander* were not found at Bush Bush Forest while a species of Rice Rat *Oecomys trinitatus* (formerly *Oryzomys concolor*) was found in the Bush Bush Forest, but not at Chaguaramas.

Trapping of small mammals at Chaguaramas and Bush Bush Forest however, differed significantly from the results of Nelson and Nelson (2008) using Sherman traps at Spring Hill Estate, Arima Valley where the authors were only able to collect two species of rodents and one species of marsupial in 1848.5 trap nights. The difference in paucity of species at Spring Hill Estate might have been due to the type of traps used. I have used various types of mammal traps including Sherman traps over several years in various parts of Trinidad and found the Hav-a-hart trap the most successful.

Further trapping at Chaguaramas using different types of traps as well as the use of different types of bait at Chaguaramas might show the presence of other species.

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