ABSTRACT. This study provides preliminary data on the positional behavior and habitat use of the Philippine tarsier, *Tarsius syrichta*, which was studied in its natural habitat on the island of Leyte. The locomotor behavior of *T. syrichta* is quite comparable to the other species of tarsiers but frequency of use of different postures and support types does seem to distinguish this species from the others. *Tarsius bancanus* appears to be the most specialized, using vertical clinging postures the most frequently and sitting the least; *Tarsius dianae* uses vertical clinging the least frequently and sitting the most, and *T. syrichta* is intermediate. The Philippine tarsier has a small home range similar to that of *T. spectrum*. On the other hand, this species likely does not have the small family groups typical of Sulawesi tarsiers but instead uses a nøyau system like *T. bancanus*. This data supports some aspects of Niemitz's (1977) model of anatomical and behavioral specialization among tarsier species.

Key Words: *Tarsius*; Positional behavior; Locomotion; Social organization.

INTRODUCTION

Many aspects of the anatomy and physiology of the Philippine tarsier, *Tarsius syrichta* (Linnaeus, 1758), are fairly well known. It is well represented in museum collections, and live animals brought to the United States and Europe in the mid 20th century provided scientists with the opportunity to conduct detailed anatomical and physiological studies (Catchpole & Fulton, 1939, 1943; Clarke, 1943; Fulton, 1939, 1943; Hill, 1951, 1953a, b, c, d; Hill et al., 1952; Wharton, 1948, 1950). There are, however, virtually no studies of the behavior and ecology of this species in its natural habitat other than the brief remarks made on captured animals by Cuming (1838), Cook (1939), and Lewis (1939). This contrasts with the other species of tarsiers, which have been the subject of at least one such study (Crompton, 1989; Crompton & Andau, 1986, 1987; Fogden, 1974; Gursky, 1994, 1995, 1997, 1998, 2000; MacKinnon & MacKinnon, 1980; Niemitz, 1979a; Tremble et al., 1993). In order to increase knowledge of this primate, we conducted two brief studies of Philippine tarsiers in 1997 and 1998. This paper reports the results of our investigations of positional behavior and social organization.

METHODS

Only one species of Philippine tarsier, *Tarsius syrichta* (Linnaeus, 1758), is currently recognized, however, three subspecies have been described: *T. syrichta syrichta*, from Leyte and Samar; *T. s. carbonarius* (Heude, 1898) from Mindanao; and *T. s. fraterculus* (Miller, 1911) from Bohol. The morphological grounds for recognizing subspecies are rather unconvincing
Fig. 1. A map of the Philippine islands indicating the location of the field site. The inset shows the location of Mt. Pangasugan on Leyte.

(NIEMITZ, 1984a) and the taxonomic status of these populations is currently under study (DAGOSTO, in prep.). We conducted our study on the island of Leyte; therefore the animals we studied belong to *T. syrichta syrichta*.

The study site is located at Mt. Pangasugan, immediately east of the campus of the Visayas State College of Agriculture on the island of Leyte (Fig. 1). This site contains a variety of habitats from an “area of patchwork agricultural land, second growth and disturbed forest” (RICKART et al., 1993, p. 5) at the base of the mountain (50 – 100 m), to undisturbed primary forest at higher elevations (300 – 1200 m). This work was done in the lower elevations (~100 m) in areas with some remaining large trees, but primarily secondary growth with patches of land used for agricultural purposes. At Mt. Pangasugan, tarsiers can be found in almost any habitat with the exception of cleared areas without any large trees. They can be found in areas quite close to human habitation. Local farmers report that tarsiers sometimes visit agricultural plots when plants (i.e. bananas, abaca, and coffee) are in flower, presumably to hunt the insects attracted by the flowers. Others have also reported that Philippine tarsiers are more abundant in dense second growth at lower elevations than in primary forest at higher elevations (FULTON, 1939, 1943; HOOGSTRAAL, 1947, 1951; WHARTON, 1948, 1950).

Using local guides with hunting dogs, four male tarsiers were hand captured at their sleep sites. The tarsiers were weighed and fitted with radiocollars manufactured by Telonics. The collars weighed approximately 8 g, about 5 – 6 % of the animal’s body weight (Table 1), and were therefore within the guidelines suggested by GURSKY (1998). Using the same method, three tarsiers were recaptured at the end of the study in order to remove the collars. None had lost or gained more than 2 g during the time the collar was worn (4 – 6 weeks).

We conducted four to five dusk to dawn (17:30 – 05:00) and several half-night (dusk to 22:00) follows of each tarsier, with the exception of male 4 whose signal was difficult to follow. We also collected some information on an uncollared individual. Survey time totaled 182 hr, and although the animals were in radio contact during this time, they were not always in clear view. Episodes of continuous visual contact ranged from a few seconds to 90 min. The animals were first located with a radio signal, and then visually located with either a flashlight or nightscope (ITT model 150 30,000 Lux). The flashlight, which did disturb the tarsier, was