

## FIELD STUDIES ON TAMARINS, *SAGUINUS MYSTAX* AND *SAGUINUS FUSCICOLLIS*, IN NORTHEASTERN PERU

The German Primate Center (DPZ) has maintained a link with the Centro de Reproducción y Conservación de Primates (CRCP) in Iquitos, Peru, as from 1981. Since then, Peruvian scientists have visited DPZ to make use of its facilities, for data analysis, and to learn new techniques, and scientists and students from DPZ have likewise visited the CRCP for behavioural, ecological and pathological/parasitological studies. My own work on tamarins in Peru started with a behavioural study of moustached tamarins (*Saguinus mystax*) and saddle-back tamarins (*Saguinus fuscicollis*) in an outdoor enclosure of the CRCP. The focus of this study was on social behaviour and communication, and on interspecific relations between the two species. The work in the outdoor enclosure helped me to become familiar with the behavioural repertoire of the two tamarins and provided an excellent starting point for my field work.

The first field study was conducted between June 1985 and July 1986 at two different study sites in northeastern Peru. The first site was located on the right bank of the Quebrada Blanco (4°40'S 73°W), the Estación Biológica Quebrada Blanco 2 (EBQB 2), which had been established by Rogério Castro in 1984 (see Castro, 1991) and was close to the field site of Marleni Ramirez, Marilyn Norconk and Paul Garber on the left bank of Qda. Blanco (Estación Biológica Quebrada Blanco 1). The study site is characterized by lowland tropical rainforest of the "bosque de altura" type, according to the scheme provided by Encarnación (1985). A grid of trails covers an area of about 1 km<sup>2</sup> which facilitated observations. The primate species found in the study area of the Estación Biológica Quebrada Blanco 2 are listed in the box.

The second field site was located on Padre Isla, a small island on the river Amazon near Iquitos (3° 44'S 73°14'W), where wild-trapped moustached

tamarins had been released in 1977, 1978, and 1980. No other primate species live on Padre Isla. The island is subject to complete or nearly complete inundation during the height of the rainy season between March and May. The vegetation is characterised by young primary and secondary forests, by currently used plantations, and by abandoned plantations in different stages of regeneration.

One group was selected for observation at each site. At EBQB 2, the study group had been habituated by R. Castro, whereas on Padre Isla the study group was already accustomed to man due to the continuous presence of people living on the island. The focus of the study was intraspecific social behaviour and communication in moustached tamarins, but additional studies were carried out as EBQB 2, on the interspecific

relations between the two tamarin species which frequently form stable mixed-species troops in areas of sympatry.

Ursula Bartecki joined the project during the 1985/86 field study. She conducted a privately-financed study on activity patterns and scent-marking behaviour of the saddle-back tamarins (Bartecki & Heymann 1990). A second field study was carried out at EBQB 2 between May and

September 1990. Quite surprisingly, a tame, habituated group of moustached tamarins and saddle-back tamarins was encountered upon arrival at the site, although nobody had been studying tamarins there since July 1986. The focus of the 1990 study was on social behaviour, scent-marking and the use of sleeping sites in moustached tamarins.

The high degree of habituation of the tamarins to the presence of human observers during both studies allowed observation at close range (within 5 m and occasionally even within 2 m in the case of saddle-back tamarins). Individual recognition (without marking the animals) was possible in the moustached tamarins on the basis of size and pigmentation of the genitals and of individual characteristics (e.g., tail with a kink, stiff finger,

### Primates of the Estación Biológica Quebrada Blanco 2 ("p" denotes permanent residents, "v" species that visit the area occasionally)

- *Saguinus fuscicollis* - saddle-back tamarin (p)
- *Saguinus mystax* - moustached tamarin (p)
- *Cebuella pygmaea* - pygmy marmoset (v)
- *Saimiri sciureus* - squirrel monkey (v)
- *Callicebus cupreus* - titi monkey (p)
- *Aotus nancymae* - night monkey (p)
- *Pithecia monachus* - saki monkey (p)
- *Cacajao calvus ucayalii* - red uakari (v)
- *Cebus albifrons* - white-fronted capuchin (v)
- *Cebus apella* - brown capuchin (v)
- *Lagothrix lagotricha* - woolly monkey (v)
- *Alouatta seniculus* - red howler monkey (v)

hole in ear etc.). This was important for the collection of data on interactions and communication. The tameness of the tamarins also provided the opportunity to watch rare but significant events that had not been documented for callitrichids so far: predation on a moustached tamarin by a snake (Heymann 1987), snake-mobbing by saddle-back tamarins (Bartecki & Heymann 1987a), and geophagy, the consumption of soil, by moustached tamarins (Heymann & Hartmann 1991). Results of the studies have been partially published (Heymann 1990a, Heymann 1990b, Heymann 1990c, Heymann 1992 and references above), but part of the data is still in the process of analyses or writing-up (e.g., on scent-marking behaviour, long calling, and use of sleeping sites).

Both during the 1985/86 and 1990 studies, chance encounters with red uakaris (*C. c. ucayalii*) were used to collect information on group size and diet of this very little known species (Bartecki & Heymann 1987b; Heymann 1993). Field work will be continued in 1994 by a PhD student, Christoph Knogge, with a study on the role of the two tamarin species as seed dispersal agents. The field studies were supported by the Deutsche Forschungsgemeinschaft (Ku 131/8-[1-3]) in 1985/86 and by the German Primate Center in 1990. The forthcoming field study will be supported by a grant from the Deutsche Forschungsgemeinschaft (He 1870/3-1). Field work would not have been possible without the friendly help and support from the colleagues of the CRCP and the Ministry of Agriculture in Iquitos, especially from Drs. Jaime Moro, Filomeno Encarnación, and Luis Moya, to whom I would like to express my most sincere gratitude.

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## AN UPDATE ON THE BLACK-HEADED MARMOSET, *CALLITHRIX NIGRICEPS* FERRARI AND LOPES 1992

At the time of its description, the black-headed