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

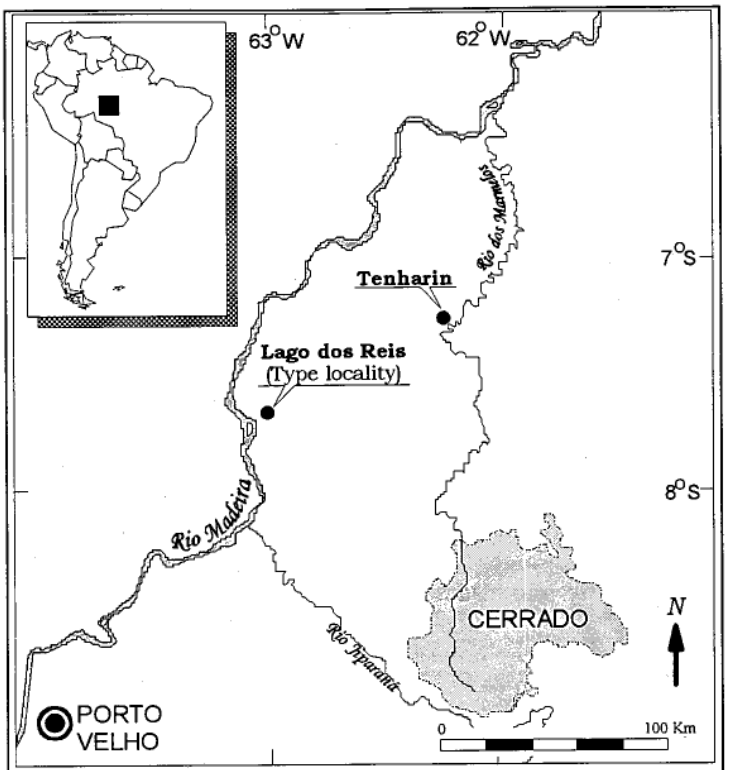


Figure 1. Map showing the distribution of and two localities for *Callithrix nigriceps*.

marmoset (*Callithrix nigriceps* Ferrari and Lopes 1992) was known from only two localities in the Brazilian states of Amazonas and Rondônia (Figure 1). Given the known distribution of the region's other callitrichid taxa (Hershkovitz, 1977; Vivo, 1991; Ferrari and Lopes, 1992b), there is little doubt that the western limit of the species' range is defined by the Jiparaná/Madeira river system. The eastern limit remained uncertain, although the occurrence of *Callithrix emiliae* on the left, or west, bank of the Rio Aripuanã (Vivo, 1991) implies that *C.nigriceps* does not occur this far east. Ferrari and Lopes (1992a) thus suggested that the eastern extreme of the range of *C.nigriceps* may coincide with the largest river in the region between the Jiparaná/Madeira and Rio Aripuanã, the Rio dos Marmelos (Figure 1). A second factor supporting this hypothesis was the presence of an area of *cerrado* or savanna vegetation covering the region between the upper reaches of the Rio dos Marmelos and the Rio Jiparaná (Brazil, Projeto Radambrasil, 1978).

A more precise definition of the geographical range of *C.nigriceps* was one of the primary aims of a second expedition to the region in March/April 1993, supported by the John D. and Catherine T.Macarthur Foundation, the Federal University of Pará (UFPA), and the National Indian Foundation (FUNAI). Marmosets were collected on both banks of the Rio dos Marmelos in the vicinity of the Tenharin Indian settlement, located at 07°57'S, 62°03'W (see Figure 1). Two adult males captured west of the Marmelos were typical *C.nigriceps*, whereas an adult female collected on the east bank was identified as *C.emiliae*, easily distinguished from the former by the lack of pigmentation of the facial skin.

The blackwater Rio dos Marmelos is 50-100 m wide at the Tenharin settlement, and relatively fast flowing. Approximately 15 km further south, *terra firme* forest was found to give way to almost treeless *campo* vegetation, which according to local informants extends as far as the Rio Jiparaná, confirming the findings of Projeto Radam (Brazil, Projeto Radambrasil, 1978). It seems likely that the combination of these features forms an effective barrier to regular migration between the marmoset populations, and that the southern and eastern limits of the geographical range of *C.nigriceps* are defined by this unforested habitat, in conjunction with the Jiparaná and Marmelos rivers. Given the evidence, it seems reasonable to assume that *C.nigriceps* does not occur east of the Rio dos Marmelos downriver (north) from the Tenharin settlement. This would make the species' geographical range one of the most precisely defined of any Amazonian primate (Figure 1), with an area of approximately 24,500 km$^2$. This evidence also implies that *C.nigriceps* is no more than parapatric with any other marmoset taxon, supporting its species' status.

Body size data collected during the study provide additional support. Mean body weight and head/body length for three males captured were 380 g and 210 mm, respectively; values extremely close to those recorded for the male holotype and paratypes (Ferrari and Lopes, 1992a). Mean body weight and head/body length for the six male specimens now available are 375.0 g and 208.2 mm. These values reconfirm the robustness of *C.nigriceps* in comparison with its geographically closest congener, *C.emiliae*, for which Ferrari and Lopes (*ibid.*) recorded mean values (for males only) of 313.3 g (N = 12) and 220.6 mm (N = 16). Ferrari *et al.* (1993) also found differences in gut

morphology between the two species, although their significance remains unclear.

The systematics of the callitrichids is still highly controversial (Rylands *et al.*, 1993), although the zoogeographical and morphological evidence now available on the *nigriceps* form would seem to favour its classification as a true species. Whatever its status, however, there are already a number of reasons for concern with regard to its conservation. Foremost is the Trans-Amazon highway, which bisects the southern half of *nigriceps*' range. Roads are the principal channels for colonisation in this region (Fearnside, 1990), and large-scale cattle-ranching is already well established everywhere along the Trans-Amazon between the Rios Marmelos and Madeira, with the exception of the Tenharin reservation (where it is incipient). A second problem is the lack of protected areas within the species' distribution (see Rylands and Bernardes, 1989), although the region of the Rio dos Marmelos has been designated top priority for the preservation of Amazonian diversity (Wetterberg *et al.*, 1976). Whether this will result in any more practical measures remains to be seen, but in the meantime it would seem essential to analyse the long-term prospects for the species' conservation in more detail.

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## La Primatologia de Campo en Argentina

Es el objetivo de esta reseña informar sobre los estudios de campo con primates de Argentina y abrir un canal de comunicación con otros grupos de investigación interesados en esta temática. En nuestro país, los estudios con primates cubren una gama de temáticas amplia, que incluye estudios de citogenética, fisiología reproductiva, investigaciones biomédicas y paleontológicas. Una revisión de las distintas lineas de investigación desarrolladas pueden encontrarse en Arditi *et al.* (1989). Los investigadores argentinos que desarrollamos trabajos de campo en primatología, nos nucleamos en el Grupo Argentino de Especialistas en Primates (GADEP). Este grupo edita desde 1985 el *Boletín Primatológico Argentino* y desde 1989 el *Boletín Primatológico Latinoamericano*, únicas revistas de primatología en idioma castellano. En esta contribución, nos referiremos exclusivamente a las investigaciones de campo que se han realizado en nuestro país.

Los hábitats extremos y marginales, como son los bosques subtropicales de Argentina, son sitios ideales para estudiar la plasticidad adaptativa y el rango de tolerancia de las especies de primates, que muchas veces evidencian comportamientos no encontrados en áreas tropicales (Brown y Zunino,