

in elm trees (*Elnus*) preferring those of smaller girth.

In the laboratory, the monkeys reacted to soaring birds as well as to aeroplanes, giving alarm calls and then approaching the skylights to search for the bird once it had disappeared. On the outside the monkeys responded to soaring birds of all kinds, gulls were common, by leaping into dense bushes and remaining still. The marmosets appeared to ignore a large rubber snake located on the ground or in the branches, even when the head was made to move [see Heymann, 1987]. I found a dead weasel (*Mustela nivalis*) that had been flattened laterally by a car, and wedged its dry form into some branches in a life-like position. Three of the four marmosets mobbed the animal, giving alarm calls and directing threats at the predator. The father, carrying the 1-month-old babies, approached most hesitantly, remaining about 1.5 m away; the adult female approached closest, to within 10 cm, and appeared to be the most active in the mobbing. Surprisingly, the juvenile males were not the most vigorous mobbers (Millar, Evans, and Chamove, 1988). After about five minutes, and when the weasel did not move off, the marmosets' interest decreased. They moved away, still giving sporadic alarm calls, and looking back at the immobile weasel.

When the study was published, there were few reports of responses to predators of South American primates, and we reported the response of the marmosets as being presumably abnormal, maladaptive, and unlike what would be expected from wild animals. The report by Philips (1995) seems to suggest that this might not be the case, with monkeys approaching predators more closely than humans would judge as safe. Philips' white-faced capuchins were mobbing a tayra, approaching to within 2 m. Only one animal approached, but it was one of the two adult males. The monkey (female) carrying an infant did not approach closely. The remaining group members were intermediate in distance. Just like the tayra, our weasel made no aggressive response towards the monkeys in response to their mobbing. Could it be that there is a single animal that is the prime defender in a group; that is has the "role" of defender (Chamove, 1983)?

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WILD PRIMATES - NATURAL RESERVOIRS OF THERMOTOLERANT CAMPYLOBACTERS IN EASTERN PERU

Thermotolerant campylobacters have been shown to be one of the most important etiological agents of acute enteritis in humans, but in other mammalian species the bacteria are present in an apparently healthy carrier-state in the majority of cases (Rosef *et al.*, 1983). In order to determine the importance of wild primates as reservoirs of these zoonotic microorganisms, rectal swabs were obtained from a total of 43 individuals representing nine species (Table 1) from different areas in the vicinity of the town of Iquitos.

All samples were immediately placed into the transport and enrichment medium (Fernández, 1992) and cultivated within eight hours on modified Skirrow's medium (Fernández, 1983), at 42°C for 48h, in microaerophilic conditions. Suspected colonies were identified (Luechtefeld *et al.*, 1981b) using catalase and oxidase tests (both positive) and the morphological features observed in Gram-stain (curved S-shaped rods). Later, the thermotolerant *Campylobacter* species were identified using the criteria proposed by Lior (1984) and Goossens and Butzler (1992).

Campylobacters were isolated from 9 (20.9%) of the animals studied (Table 1). However, none of the animals showed signs of enteritis or other illness. This isolation rate was higher than that reported by Luechtefeld *et al.*

Table 1. Prevalence of fecal cultures positive for thermotolerant campylobacters in wild primates.

Species	No. of individuals	Culture positive			Culture negative	Total no. positive
		<i>C. jejuni</i>	<i>C. coli</i>	<i>C. lari</i>		
<i>Saguinus labiatus</i>	12	1	2	0	9	3 (25.0)
<i>Saguinus mystax</i>	7	0	2	0	5	2 (28.6)
<i>Pithecia monachus</i>	6	0	2	0	4	2 (33.3)
<i>Saimiri sciureus</i>	4	0	0	0	4	0
<i>Lagothrix lagotricha</i>	4	0	0	0	4	0
<i>Cebus apella</i>	4	1	1	0	2	2 (50.0)
<i>Cebus albifrons</i>	2	0	0	0	2	0
<i>Ateles paniscus</i>	2	0	0	0	2	0
<i>Aotus</i> sp.	2	0	0	0	2	0
Total	43	2 (22.2)*	7 (77.8)*	0*	34	9 (20.9)

Numbers in parentheses = %. Numbers in parentheses with an asterisk = % of isolates.

(1981a) (9.3%) and similar to the results obtained by Fernández *et al.* (1987) in Brazil (19.0%). As reported previously (Russell *et al.*, 1988; Gozalo *et al.*, 1991), and supported by the present study, *C. coli* was the predominant bacteria isolated from the primates.

It is highly likely that mammalian species differ in their susceptibility to intestinal colonization by *C. jejuni* and *C. coli*, regardless of the degree of exposure to these bacteria. This circumstance may help to explain the different carriage rates detected in this and similar studies (Rosef *et al.*, 1983). Our data provide evidence that wild primates from Iquitos appear to be important reservoirs and infection sources of these bacteria for man. Further studies are required to clarify and understand the epidemiology of campylobacteriosis that is evidently a complex phenomenon in developing countries.

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NEWS

DISCOVERY OF A NEW SPECIES OF MARMOSET IN THE BRAZILIAN AMAZON

The existence of a new and undescribed marmoset near the Rio Madeira was first brought to our attention in June 1994 by Dr. José Márcio Ayres of the Wildlife Conservation Society, New York. Information available at the time indicated that it occurred in the region of the Rio Abacaxis in the east of the state of Amazonas. As a result, we organized an expedition to the area, made possible through collaboration with Drs. Horacio Schneider and Júlio Pieczarka of the Department of Genetics of the Federal University of Pará, and Dr. José Augusto Muniz of the National Primate Center, National Health Foundation, Belém. The expedition was financed by the John D. and Catherine T. MacArthur Foundation