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News

Behavioral Ecology Study of Red Uakari, *Cacajao calvus ucayalii*, in Northeastern Peru

A long-term behavioral ecology study of red uakari (*Cacajao calvus ucayalii*) was begun in April 1993 in northeastern Peru, approximately 110 km south of Iquitos, along the Quebrada Blanco and adjacent to the Reserva Comunal Tamshiyacu-Tahuayo (see Aquino, 1995). The principal investigator of this project, Suzi Leonard, works under the auspices of the Detroit Zoological Institute, and under the direction of Cynthia Bennett, Research Zoologist at the Dallas Zoo. The project was initiated in cooperation with I.V.I.T.A./The Peruvian Primate Project, and continues in conjunction with the biological science departments of the Universidad Nacional de La Amazonia Peruana in Iquitos.

This subspecies of uakari has been little studied in the wild. The critical information on the species comes from the work of Ayres (1986) with the white uakari (*C.c.calvus*) in Brazil. Ayres' long-term uakari work gives this species as a flooded-forest specialist. Our findings indicate that the red subspecies in our study area spend at least part of their time in terra firme forests. During the 1500+ hours searching for and following red uakari, we have totaled 270+ contact hours with the animals over 14 months (April 1993 - December 1995). All of these contact hours were in terra firme forests (following Encarnación, 1985). The approximately 90 km study area abuts flooded forest on the west, and possibly on the south, and the uakari may be spending time out of the study area in these locations. Based on search time versus contact time, we know these groups use immense ranges. Day range lengths averaged 7.3 km.

During four months in 1994, we totaled 151.5 hours of behavioral scans on red uakari groups, taken at 15-minute intervals (Altmann, 1974). Interestingly, almost 30% of those scans caught the uakari in association with other species of primates; and 76% of their associative time was with woolly monkeys (*Lagothrix lagotricha*). During the next two years, we will be concentrating on the food selection of both the uakari and the woollies, in and out of polyspecific groups, in an attempt to determine whether there is a resource advantage to association for one or both species. We also predict that, in an area where large eagles, including the harpy eagle (*Harpia harpyja*) still prey on primates (pers. obs.), avian predator protection (Struhsaker, 1981) may prove influential in uakari-woolly monkey decisions to associate.

In July 1995, with the aid of Kenneth Glander (Duke University Primate Center), Fred Koontz (Wildlife Conservation Society), and Wendy Westrom (DVM), we will be radio-collaring several uakari. Hopefully, telemetry will improve our contact time, help us to define home range boundaries, and identify individuals for edification of social systems.

Acknowledgments: This project would have been impossible without the strong encouragement of Dr Ron Kagan, Director of the Detroit Zoological Institute. We thank Filomeno Encarnación for his botanical expertise, and Rolando Aquino for his strong field work. Both are experienced biologists with IVITA, Peru. In the field, we would have been lost without the help of three outstanding assistants, Jeisen Shahuano, Hugo Huanaquiri, and Robert Piñedo.

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Black Lion Tamarins in the Central Park Wildlife Center, New York

Four black lion tamarins, *Leontopithecus chrysopygus*, are settling into their new home in the Central Park Wildlife Center, New York, USA. They are the first to be imported into North America. Efforts have been made to provide a varied and stimulating environment for both pairs, one of which is on exhibit, while the second pair remains behind the scenes. The black

lion tamarin exhibit, located in the Tropic Building, features trees with special feeding holes. Keepers place fruit, meal worms, and other foods into different combinations of holes each day to stimulate the tamarins to search for their meals. The exhibit also includes vines for climbing which can be moved around for variety. Similar environmental enrichmnents are also provided to the pair off exhibit.

In addition to providing the black lion tamarins with a stimulating environment, the Central Park Wildlife Center aims to educate the public about the threats to this species. Graphics explain that the endangered status of the black lion tamarin is due to the destruction of their rain forest home. The Wildlife Center also has two other types of tamarins, the cotton-top, *Saguinus oedipus*, and the golden-headed lion tamarin, *L. chrysomelas*, which also provide opportunities for education. In addition, a stage show presented for zoo visitors uses cotton-top tamarin puppets to educate children about the destruction of the forest, and the importance of saving this environment for tamarins and other animals which live there.

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1994 International Studbook for the Golden-Headed Lion Tamarin

The 1994 Studbook for the golden-headed lion tamarin, *Leontopithecus chrysomelas*, was recently published by the Royal Zoological Society of Antwerp on behalf of the International Recovery and Management Committee for the species. This, the 7th International Studbook, prepared by Helga De Bois, Antwerp Zoo, covers the period 1 January 1994 to 31 December 1994. It contains information on animal identities and locations, sex, parentage, and causes of deaths. In addition, it includes a list of addresses of holders, data on the current demographic and genetic status of the population, and a bibliography. It is maintained in SPARKS, developed by the International Species Information System (ISIS), and is available free of charge from the studbook keeper.

On 31 December 1994, the number of living animals in captivity was 616, distributed through Brazil (245 in 13 institutions), North America (99 in 19 institutions), Europe (233 in 25 institutions) and Asia (39 in two institutions). The number of founders increased from 108 to 160 (33 without living descendants). The percentage growth of the population during 1994 was 6%.

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EEP Studbook for the Emperor Tamarin

The first international studbook for *Saguinus imperator imperator* and *S. i. subgrisescens* (1991) was compiled by Lee Nesler, Pittsburgh Zoo (Nesler, 1993). The first studbook for the European population of emperor tamarins has now been compiled by the Studbook keeper and EEP Coordinator for the species, Eric Bairrão Ruivo, with assistance from Cristiane Silveira, both of the Lisbon Zoo, Portugal. It was sponsored by Compaq, and covers the entire history of the species in Europe up to 31st December 1994. The emperor tamarin EEP was first approved by the Executive Office of the European Endangered Species Program (EEP) in 1990, and, till 1994, Rob Colley, Penscynor Wildlife Park, was coordinator. Eric Bairrão Ruivo took over in 1994. The Studbook is divided into five sections: A summary of some taxonomic and biological aspects of the species; a full historical listing of the European population; a listing of the living population of the two subspecies by location; a studbook analysis; and an evaluation of the progress, status, and future action of the program for the species in European zoos and animal collections.

The European captive population of *S. i. imperator* has never been sizable. It began in 1962 with just one female, and only in 1976 were three more imported, and in 1977 a further four animals. The population grew to a maximum of 15 individuals in 1983, and declined from there on. On 31 December 1994, there were believed to be four animals (3.1) in Europe, although only one male (in the Frankfurt Zoo) is officially registered. *S. i. subgrisescens* was first registered for Europe in 1964, but no records were kept until 1978. Since then the population has increased to 128 (63.61.4) animals in 35 European institutions. The main problem with this captive population, however, is infant and juvenile mortality (45% mortality in the first year); the reason for a lack of increase in