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# NEOTROPICAL PRIMATES

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A Newsletter of the Neotropical Section of the IUCN/SSC Primate Specialist Group

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## *Neotropical Primates*

The first newsletter of the Primate Specialist Group, produced in collaboration with the World Wildlife Fund-US Primate Program, appeared just over 10 years ago in October 1981. Reflecting its success, the *IUCN/SSC Primate Specialist Group Newsletter* changed its name, after the fourth issue in 1984 to *Primate Conservation*, with the fifth issue having 115 pages and the telling subtitle of "The Newsletter and Journal of the IUCN/SSC Primate Specialist Group". While still maintaining its news, *Primate Conservation* had matured to a full scale journal, providing a vehicle for publication of the activities of an ever increasing number of field workers, conservationists and non-governmental organizations concerned with the demise of some 114 species of primates, nearly 50% of the living non-human primates worldwide. 60 species are now considered endangered.

In the following issues it became evident that the dual role of Journal and Newsletter was becoming complicated due to the numbers of full articles submitted and the extraordinary increase in activities and events concerned with primate conservation that required a more agile journalism than was possible with issues reaching over 200 pages.

The increase in PSG membership, now totalling nearly 200 worldwide, reflecting the remarkable increase in the numbers of people working for the conservation of non-human primates and their ecosystems and concurrent with the opening up of new fronts for action and an overwhelming increase in the spectrum of problems and issues involved, has also argued for what might be termed a regionalization and decentralization of PSG's activities. A PSG meeting held during the XIVth Congress of the International Primatological Society in Strasbourg in August 1992, decided to elect co-chairpersons for the principal regions containing wild primate populations - the Neotropics (87 species), Africa (65 species), S.E. Asia and India (60 species), and Madagascar (30 species). Ernesto Rodríguez Luna of the Universidad Veracruzana, Mexico, and Anthony B. Rylands of the Universidade Federal de Minas Gerais, Brazil, were chosen Co-Vice Chairman for the Neotropics.

The tasks of the SSC, now composed of more than 100 Specialist Groups, include the provision of essential information on the status of species, and the elaboration of Action Plans for the conservation of species, ecosystems or specific regions around the world. Essential to this is an information network and, with a wide circulation, *Neotropical Primates* will hopefully provide a forum for those working for the conservation of New World monkeys and their varied habitats. Its success will, of course, depend not only on the editors, but on the willingness of Neotropical primatologists, primatological societies and conservationists to inform us of their activities, opinions, projects, and of events relating to the conservation of the 16 platyrrhine genera.

I would also like to take this opportunity to inform you that we are currently preparing three action plans for the Neotropical region, one for Mesoamerica to be coordinated by Ernesto Rodríguez Luna, and two others for the Atlantic region of eastern Brazil and adjacent regions, and for the greater Amazon, both coordinated by Anthony Rylands. We welcome your input on these, including suggestions for possible projects, which may be sent to Ernesto, Anthony or myself.



Russell A. Mittermeier  
Chairman - IUCN/SSC Primate Specialist Group  
President - Conservation International, Washington DC.

## Articles

### LA PRIMATOLOGIA EN COLOMBIA

Colombia por su ubicación geográfica, posee una diversidad faunística, florística y fisiográfica de las más ricas del neotrópico. Considerando una revisión más reciente, que incluye nuevas especies encontradas y adiciona las observaciones hechas en zonas fronterizas, se reportan para el país 12 géneros con 28 especies de primatas no humanos distribuidos por familias así: Familia Callitrichidae - dos géneros con siete especies; Familia Callimiconidae - una especie; y Familia Cebidae - nueve géneros con 20 especies. Sólo Brasil, con 16 géneros, 68 especies y una area territorial 6,5 veces mayor, es el único país neotropical que nos supera en especies de primatas.

El estudio de la primatología en Colombia se remonta al siglo XVIII, con las descripciones hechas por Linnaeus en 1758, de los *Cebus capucinus*, *Simia oedipus* (hoy, *Saguinus oedipus*) y *Simia seniculus* (hoy, *Alouatta seniculus*), todo ello basado en observaciones y referencias que realizaran otros autores, entre ellos el botánico Nikolaus Joseph von Jacquin. En 1882, Humboldt descubrió algunas especies junto con el botánico francés Aimee Bonpland. A principios del siglo, se iniciaron exploraciones mastozoológicas más sistemáticas en el país, con las colecciones realizadas por William Batty en el Valle del Cauca en 1904, por expediciones hechas entre 1912 a 1915 por el American Museum of Natural History y desde 1942 a 1944 y de 1951 a 1952 por el Dr. Philip Hershkovitz. A todo ello deben añadirse las colecciones del Museo del Instituto de la Salle (destruido en 1948), y las del Instituto de Ciencias Naturales y del Museo de Historia Natural de la Universidad de Bogotá, iniciadas en 1950.

Las primeras investigaciones biomédicas hechas

con primates no humanos, se relacionaron con la fiebre amarilla selvática en 1935, por los Institutos "Carlos Finlay" y "Roberto Franco", con la colaboración de la Fundación Rockefeller. A partir de 1969, el INDERENA (Instituto Nacional de Recursos Naturales Renovables), inició un

inventario de la fauna silvestre nacional, incluidos los primates y ello contó con el auspicio de la National Science Foundation, Universidad de Harvard, Universidad de Georgia, Universidad de California, Oficina Sanitaria Panamericana y los Cuerpos de Paz, entre otros. Investigadores extranjeros, como William Mason (Universidad de California), R. W. Thorington Jr. (Smithsonian Tropical Research Institute) y personal del Japan Monkey Center y Universidad de Kyoto, han realizado trabajos de taxonomía, distribución, ecología y comportamiento de primates no humanos. El descubrimiento del virus Herpes oncogénicos en monos colombianos, hecho en 1965, ha incrementado su demanda para investigaciones biomédicas; también la susceptibilidad del *Aotus trivirgatus* (mono nocturno), a la infección por *Plasmodium*, propició el desarrollo del Programa Nacional de Primatología en 1972, auspiciado por la OPS y que inició labores en abril de 1977 bajo convenio entre el Ministerio de Salud, OPS y INDERENA, que comenzó con la recolección de información etoecológica de dichos primates, en las poblaciones de los departamentos del norte del país,

bajo la dirección del Dr. Carlos Mejía; posteriormente, el Dr. Thomas Defler se incorporó al programa y realizó la investigación etoecológica de los primates en el territorio del Tuparro, Comisaría del Vichada.

Cabe añadir que, la información sobre el estado de las poblaciones silvestres, es aún fragmentaria y que la caza indiscriminada y la destrucción de los hábitats naturales han propiciado el hallazgo de nuevas especies.

#### Relación de las especies de primates de Colombia.

##### Familia Callitrichidae

1. *Cebuella pygmaea*
2. *Saguinus nigricollis*
3. *Saguinus fuscicollis*
4. *Saguinus inustus*
5. *Saguinus geoffroyi*
6. *Saguinus oedipus*
7. *Saguinus leucopus*

##### Familia Callimiconidae

8. *Callimico goeldii*

##### Familia Cebidae

9. *Alouatta palliata*
10. *Alouatta seniculus*
11. *Aotus brumbacki*
12. *Aotus lemurinus*
13. *Aotus trivirgatus*
14. *Aotus vociferans*
15. *Ateles belzebuth*
16. *Ateles fusciceps*
17. *Ateles paniscus*
18. *Ateles geoffroyi*
19. *Cacajao melanocephalus*
20. *Cacajao calvus*
21. *Callicebus cupreus*
22. *Callicebus torquatus*
23. *Cebus albifrons*
24. *Cebus apella*
25. *Cebus capucinus*
26. *Lagothrix lagotricha*
27. *Pithecia monachus*
28. *Saimiri sciureus*

### Algunos programas recientes o en curso

En seguida se lista una descripción breve de algunos proyectos primatológicos realizados en Colombia: en algunos casos, los nombres de los proyectos son aproximaciones al trabajo realizado.

\* Proyecto Primates, INDERENA. E. Guerrero. Realizado en Coloso, Sucre, allí hay 10 especies en cautiverio y 5 silvestres en los alrededores, 2 en semicautiverio.

\* Programa Desarrollo Vacuna Antimalárica. Manuel E. Patarroyo, R. Rodriguez, R. Amador, Instituto Inmunología Hospital San Juan de Dios, Universidad Nacional de Colombia. Colonia en Leticia.

\* Centro Experimental de Primatología. S. Herrera, J. Gardeacabal. Investigaciones Biomédicas, Cali.

\* Colonia de Primates. Investigaciones biomédicas y análisis citogenéticos, Bogotá.

\* Establecimiento de zocriaderos de primates de los géneros *Aotus*, *Saimiri* e otros. Jaime Umaña, Universidad Nacional de Colombia, Bogotá.

\* Estudios Comparativos en Ecología y Estructura Social de los Monos del Nuevo Mundo en La Macarena. Convenio Universidad de Los Andes y Universidad de Miyagi, Japón. Este proyecto comenzó en 1986, con estudios etológicos de primates para ser luego extendido al estudio de la biología del bosque húmedo tropical. Para lograr su conservación se han trabajado seis de las siete especies de primates presentes en el área, incluyendo distribución, ecología y etología.

\* Research on New World Monkeys. Convenio Universidad de Kyoto, INGEOMINAS (Instituto Nacional de Investigaciones Geológico-Mineras). Se ha estudiado la ecología y morfología de los micos de Sur América y la recolección de fósiles mamíferos de la era Terciaria; para ello, se han evaluado seis géneros de primates: *Aotus*, *Saimiri*, *Callicebus*, *Alouatta*, *Saguinus* y *Cebus*.

\* Ecología y Etología del *Lagothrix lagotricha* y *Cacajao melanocephalus*. Thomas Defler, Estación Caparú en el río Apaporis, Amazonas.

\* Genética y Conservación en Primates: Variaciones Genéticas de *Cebus capucinus* en Poblaciones Continentales y en la Isla de Gorgona. A. Espinel, Universidad de Los Andes, D. Sicard, N. Valenzuela. Cuenta con el apoyo del Fondo para la Conservación de la Naturaleza, José Celestino Mutis y el Comité de Investigaciones de la Universidad de Los Andes. Este estudio compara y cuantifica la variación genética en cuanto a grupos sanguíneos, electroforesis de

proteínas y polimorfismos cromosómicos.

\* Comparaciones cariotípicas en el género *Cebus*. O. M. Torres, C. Ramirez, E. Yuniz, Universidad Nacional. Análisis citogenético de Bandas Q y G para tres especies, así como para dos híbridos naturales del *C. capucinus* y *C. albifrons*.

\* Sociedad Colombiana de Primatología. Creada en abril de 1990. Tiene a su cargo coordinar y asesorar las diversas actividades en el área de primatología. Presidente actual: Jaime Umaña Amaya. Proyecta cursos regulares sobre conservación y manejo de especies de primates no humanos.

**Jaime A. Umaña Amaya**, Presidente de la Sociedad Colombiana de Primatología, Departamento de Patología, Facultad de Medicina Veterinaria y Zootecnia, Universidad Nacional de Colombia, Apartado Aéreo 053103, Bogotá D.E., Colombia.

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### A CONSERVATION PROGRAM FOR THE YELLOW-BREASTED CAPUCHIN, *CEBUS APELLA XANTHOSTERNOS*

The yellow-breasted capuchin is one of the four currently recognized subspecies of the tufted, or brown, capuchin monkeys which occur in central, northeastern and southeastern Brazil. It is a phenotypically and genetically distinct animal (Seuáñez *et al.*, 1986; Matayoshi *et al.*, 1987) and, depending on a taxonomic revision of the genus, may well be considered a valid species. It quite evidently had a widespread distribution in the past, east and south of the Rio São Francisco, east as far as the coastal forests in the state of Bahia. Today it is limited mainly to the coastal region of southern Bahia in Brazil, although evidence is coming to light that some populations may remain further inland in regions devastated in the distant past and now comprising mainly dry desert thorn scrub (*caatinga*). Populations inland are extremely rare, and have disappeared over enormous areas. They are evidently declining drastically throughout their range, not only because of forest destruction, which has accelerated dramatically over the last two decades, but also because of hunting (Mittermeier *et al.*, 1982, 1989; Coimbra-

Filho, 1986; Santos *et al.*, 1987; Oliver and Santos, 1991).

In the early 1980's, individuals maintained as pets were acquired for a breeding program at the Rio de Janeiro Primate Center (CPRJ-FEEMA, Rio de Janeiro State Environmental Agency), directed by Ademar Coimbra-Filho and Alcides Pissinatti. Between 1980 and 1983, nine (5.4) animals were acquired by CPRJ. However, due to problems of accommodation, four (3.1) were subsequently sent to the Natural History Museum in Belo Horizonte, Minas Gerais. One female died in 1986, four months after giving birth, and the founding population at CPRJ in 1987 was, therefore, based on only two breeding pairs, with five births (3.2) between October 1984 and January 1987 (one male died at one day old) (Coimbra-Filho *et al.*, 1992).

As a result of the field surveys carried out by William Oliver and Ilmar Santos in 1986/1987 (financed by the Jersey Wildlife Preservation Trust, Wildlife Preservation Trust International, The Program for Studies in Tropical Conservation of the University of Florida, Gainesville, World Wildlife Fund-US, and the Department of Zoology of the Federal University of Minas Gerais), recommendations were made for the expansion of the captive breeding program, not only at CPRJ, but also in additional zoos and breeding centers (Oliver and Santos, 1991). This resulted in the preparation in 1990 of an "International Cooperative Breeding Program", with the participation of the Mulhouse Zoo, France (Lernould and Thouvenin, 1992), The North of England Zoological Society (based at Chester Zoo) and Zurich Zoo, Switzerland (Santos and Oliver, 1991). Under the terms of the agreement, any participating/signatory institutions receiving animals on breeding loan should not only manage them under the conditions stipulated by the Agreement, but also contribute to other measures designed to enhance the protection of wild populations, and provide financial support for any relevant management, research, conservation education and training programs in the future. In 1989 a further two animals (1.1) were acquired by CPRJ, and in 1990, two pairs (captive born) were sent to the Mulhouse Zoo. The Mulhouse Zoo and the North of England Zoological Society financed the construction of cages for the breeding program at CPRJ. These were completed in late 1992. In October 1991, Santos and Oliver carried out a field expedition in order to acquire additional

founders for the program. They located 37 animals kept as pets (23 animals, 10 females and five unsexed) in 14 different localities, all in southern Bahia. Ten of these (6.4) were considered suitable for the breeding program and sent to the Rio de Janeiro Primate Center (CPRJ). With three animals now on loan to the Rio de Janeiro Zoo (1.2), in March 1992, CPRJ housed a colony of 20 animals (10.10), 12 wildborn (7.5) and eight captive born (3.5).

In 1992, the Brazilian Institute of the Environment and Renewable Natural Resources (Ibama) established an international committee for the captive breeding program and conservation of *C.a.xanthosternos* and *C.a.robustus* (Edict N° 111/ 16 October 1992). Ilmar Santos and Jean-Marc Lernoould, both PSG members, were designated Chairperson and Vice-chairperson, respectively. *C.a.robustus*, which occurs south of the Rio Jequitinhonha and north of the Rio Doce in southern Bahia and northern Espírito Santo, was included as a result of the findings of Oliver and Santos that it is heavily hunted, that its range is seriously reduced, and that there is also an urgent need for a structured breeding program (Santos and Oliver, 1991). The role of the committee and its objectives are those which have been established for similar committees for the four lion tamarin species, *Leontopithecus* (see Mallinson, 1986), and involve the establishment of a viable captive breeding population and studbook, the promotion of field projects, and advice on conservation issues which directly or indirectly affect the two tufted capuchin monkey subspecies.

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**Jean-Marc Lernoould**, Parc Zoologique et Botanique, Ville de Mulhouse, B. P.3089, 6806 Mulhouse, France.

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## ESPECIES DE PRIMATES PRESENTES EN GUATEMALA Y LA SITUACION DE SUS POBLACIONES SILVESTRES

En Guatemala habitan tres especies de primates de la Familia Cebidae: *Alouatta palliata*, *Alouatta pigra* y *Ateles geoffroyi* con tres subespecies *A.g.pan*, *A.g.yucatanensis*, y *A.g.vellerosus*.

*Ateles geoffroyi* es, de las tres especies, la que se encuentra más ampliamente distribuida; es además, al igual que en todos los lugares, de distribución arborícola con un rango altitudinal

amplio. Se le encuentra al norte de los Departamentos del Petén, Izabal, Alta Verapaz y Quiché. En la región Sur y Centro Occidental se le ha encontrado antiguamente; sin embargo, el último reporte es de 1990, en donde un finguero reportó haberlo visto en Quetzaltenango en el Sur Occidente del país (López, com pers.). Aunque no hay nada documentado, la región Centro y Sur Occidental de Guatemala es la que en los últimos 50 años ha perdido en forma más acelerada su cobertura boscosa. *Ateles geoffroyi yucatanensis* es el que se ubica más al Norte del país, cercano a la Península de Yucatán, en el Departamento del Petén, junto con *A.g.vellerosus* que también se localiza en el Noreste del país: *A.g.pan*, o mono araña guatemalteco, aparentemente se encuentra en la Meseta Central; sin embargo, aún es dudosa su existencia.

Tradicionalmente, los zoológicos en Guatemala, así como en el resto do mundo, han considerado al mono araña como una especie común y reemplazable, no prioritaria; por lo tanto muy poca atención se ha puesto a aspectos de su taxonomía, comportamiento y manejo. Como resultado se ha producido una hibridación inadvertida en colonias cautivas de *Ateles*, reduciendo su valor genético para su conservación.

*Alouatta palliata* es quizás la especie más amenazada, enlistándose en el Apéndice I del CITES. Su distribución esta mas restringida, encontrándosele en la región Norte de los Departamentos de Izabal y Alta Verapaz. *Alouatta pigra* habita solamente en la región Norte y su distribución está restringida a Mexico y Guatemala, estando incluida dentro del Apéndice II del CITES.

Pueden existir poblaciones simpátricas de las tres especies, pero se separan por hábitos alimenticios y el dosel del bosque en que habitan. Es interesante hacer notar que aunque han existido algunos reportes informales sobre la presencia de *Cebus capucinus* en Guatemala, este dato no ha podido ser confirmado.

Lamentablemente, no se han realizado censos recientes de población que nos indiquen la situación actual de los primates guatemaltecos. Sin embargo, podemos decir que la conservación de las tres especies es prioritaria en el país.

Desgraciadamente, la amenaza para los primates, al igual que para toda la fauna guatemalteca, es

permanente y constante. La presión por la tala inmoderada para uso de leña o para fines de cultivo y la cacería ilegal es considerable. No se cuenta con datos precisos, pero en la actualidad la tasa de deforestación anual podría sobrepasar el 7%. Un dato que puede darnos una idea sobre el tráfico ilegal de primatas es el hecho de que, en 6 meses se recibieron 5 monos saraguatos o aullador (*Alouatta pigra*) en el Zoológico Nacional "La Aurora", todos provenientes de contrabando de fauna; no sabemos cuántos más salieron de la selva sin que nadie se diese cuenta.

El sistema de legislación ambiental y de fauna silvestre en Guatemala es joven y aún se está encausando. Una esperanza la representa las dos reservas de la biósfera recientemente declaradas, en donde habitan los primates guatemaltecos: La Reserva de la Biósfera Maya y La Reserva de la Biósfera de Las Minas. Del buen manejo que se les de a estas reservas depende en gran parte el futuro de nuestras especies.

Asimismo, es necesario establecer programas de investigación para establecer la situación actual de nuestros primates, y para poder implementar programas efectivos de reproducción y conservación. Son muy pocas las personas que hacen investigación primatológica en Guatemala:

\* Wildlife Preservation Trust International inició una investigación tendiente a separar las distintas subespecies de *Ateles geoffroyi* existentes en Centro América, con el fin de crear colonias puras de valor genético para la reproducción y conservación;

\* El Zoológico Nacional "La Aurora" tiene estudios de conducta en cautiverio y programas de enriquecimiento del comportamiento de *Ateles* e *Alouatta*.

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## News

### TWO NEW MARMOSETS FROM THE BRAZILIAN AMAZON

1992 saw the description of two new species of marmosets, *Callithrix nigriceps* Ferrari and

Lopes, and *Callithrix mauesi* Mittermeier, Schwarz and Ayres, both in the Emílio Goeldi Museum monograph series - *Goeldiana*.

*C. nigriceps*, given the common name of "sagüi-de-cabeça-preta" or the black-headed marmoset, was found at the Lago dos Reis (7° 31'S, 62° 52'W, = Lago Paraíso), 17 km east of Humaitá, Amazonas, Brazil, on the Trans-Amazon highway BR-230 (right or east bank of the Madeira river) in the state of Rondônia in south-western Amazonia. Ferrari and Lopes align this marmoset with the bare-eared "argentata" group, but they describe it as a full species following the taxonomy of Mário de Vivo (1991, *Taxonomia de Callithrix Erxleben, 1977 (Callitrichidae, Primates)*, Fundação Biodiversitas, Belo Horizonte). It is darker than the form *emiliae*, described by Vivo in 1985 (*Papéis Avulsos Zool., São Paulo*, 36(11), 103-10) from adjacent Rondônia, and differs in the pigmentation of the face and ears, pheomelanization of the forelimbs, mantle and ventrum, a brown rather than gray dorsum, an orange/russet coloration of the posterior limb, and pale hips and upper thighs. Although known from only two localities separated by little more than 50 km, the paratype locality being Calamá, (8° 03'S, 62° 53'W), Rondônia, Brazil, (right or east bank of Madeira river), east of the Jiparaná river, this marmoset is believed to occur between the Rio dos Marmelos in the north and east, the Rio Madeira in the west and the Rio Jiparaná in the south, in the state of Rondônia, Brazil. Ferrari and Lopes argued that it is unlikely to extend further west than the Roosevelt. The southeastern limits are defined by an area of savanna vegetation at the headwaters of the Rio dos Marmelos and along the middle Rio Jiparaná. Endemic to Brazil, Ferrari and Lopes indicated that its natural range is little more than 10,000 km<sup>2</sup>, one of the smallest of any Amazonian primate species, and potentially one of the most precarious. The area is currently undergoing rapid colonization, with access by asphalted highway from Rondônia, and is traversed by the Trans-Amazon. Principle threats include widespread logging, gold mining and cattle ranching. The authors pointed out that while marmosets are able to adapt to habitat disturbance in the short term, continued deforestation will eventually have deleterious effects on the population as a whole.

Mittermeier, Schwarz and Ayres suggested a common name of the "Rio Maués marmoset" for *C. mauesi*, due to its type locality on the west bank

of the Rio Maués-Açu ("large Maués" in Tupi-guarani), a southern tributary of the Rio Amazonas, between the Rios Madeira and Tapajós. It was discovered by Marco Schwarz in April 1985. The known and supposed range of this marmoset is very small, extending from the west bank of the Rio Maués/Maués-Açu from above the mouth of the Rio Urariá, east of the Rio Urariá and Abacaxis. It is sandwiched between the distributions of the tassel-eared marmosets. *C. chrysoleuca* to the west and *C. humeralifera* to the east, with which it is most closely related. It is, however, quite distinct, being darker than either and is easily distinguishable by both the form of the ear-tufts (upward pointing and with a "neatly trimmed" appearance) and its coloration. The back and shoulders lack the distinct whitish mantle characteristic of *C. humeralifera*, but like this species it has a light silvery hip patch.

The authors point out that the formal description of this marmoset, together with those of *C. nigriceps* and the also recently described black-headed lion tamarin, *Leontopithecus caissara* Lorini and Persson, 1990 (*Bol. Museu Nacional (Zoologia)*, Rio de Janeiro, 138:1-14) raises the number of Brazilian primate species to 68 in 16 genera, representing more than one-quarter of all primate species, and more than three-quarters of all Neotropical primates species. Like Ferrari and Lopes, Mittermeier, Schwarz and Ayres follow the taxonomy proposed by Mário de Vivo (cited above), although they also recognize *C. kuhli* from the Atlantic forest of southern Bahia as a distinct form. With 15 species, it is temporarily the largest of the Neotropical genera, although the number will probably be exceeded following future revision of such as the tamarins (*Saguinus*), night monkeys (*Aotus*), and titi monkeys (*Callicebus*).

The final word of Mittermeier, Schwarz, and Ayres is given over to emphasizing that the discovery of *C. nigriceps* and *C. mauesi* demonstrates how little we still know of the vast Amazon region, and the need for more basic research and exploration.

Ferrari, S. F., Lopes, M.A. 1992. A new species of marmoset, genus *Callithrix* Erxleben, 1777 (Callitrichidae, Primates), from western Brazilian Amazonia. *Goeldiana, Zoologia*, (12):1-13.

Mittermeier, R. A., Schwarz, M., and Ayres, J. M. 1992. A new species of marmoset, genus



*Callithrix* Erxleben, 1777 (Callitrichidae, Primates), from the Rio Maués region, state of Amazonas, central Brazilian Amazonia. *Goeldiana, Zoologia*, (14):1-17.

## BLACK-HEADED LION TAMARIN ADDED TO BRAZILIAN THREATENED SPECIES LIST

The black-headed lion tamarin, *Leontopithecus caissara*, was first described in 1990 by M.L.Lorini and V.G Persson (*Bol.Museu Nacional (Zoologia)*, Rio de Janeiro, (338):1-14). It is restricted to coastal lowland forests in the northeast of the state of Paraná, and parts of the adjacent state of São Paulo. In April 1992 (Edict N°045/92-N/ 27 April 1992), it was included on the Brazilian Official List of Fauna Threatened with Extinction (Edict N°1522/19 December 1989) of the Brazilian Institute for the Environment and Renewable Natural Resources (Ibama).

The addition of *L.caissara* brings the number of primate species included on the list to 25. They are as follows: *Alouatta belzebul belzebul*, *Alouatta fusca* (2 ssp.), *Ateles belzebuth* (2 ssp.), *Ateles paniscus* (2 ssp.), *Brachyteles arachnoides* (2 ssp.), *Cacajao calvus* (4 ssp.), *Cacajao melanocephalus* (2 ssp.), *Callicebus personatus* (4 ssp.), *Callimico goeldii*, *Callithrix argentata leucippe*, *Callithrix aurita*, *Callithrix flaviceps*, *Callithrix humeralifer* (3 ssp.), *Cebus apella xanthosternos*, *Chiropotes albinasus*, *Chiropotes satanas utahicki*, *Chiropotes satanas satanas*, *Lagothrix lagotricha* (3 ssp.), *Leontopithecus chrysomelas*, *Leontopithecus chrysopygus*, *Leontopithecus rosalia*, *Leontopithecus caissara*, *Pithecia albicans*, *Saguinus bicolor* (3 ssp.), *Saguinus imperator* (2 ssp.), and *Saimiri vanzolinii*.

Bernardes, A.T., Machado, A.B.M. and Rylands, A.B. 1990. *Fauna Brasileira Ameaçada de Extinção*. Fundação Biodiversitas, Belo Horizonte, 65pp. Text in English and Portuguese.

## ACHADO DE BRACHYTELES DO PLEISTOCENO FINAL

Na gruta da Boa Vista, no Município de Campo Formoso, estado da Bahia, Brasil, foram

encontrados dois esqueletos bastante completos, de *Brachyteles*, com os respectivos crânios e dentição, muito bem preservados. O material está em fase de preparação, tendo-se iniciado seu estudo. O local do achado situa-se a 70 km do Rio São Francisco (Petrolina), e está inserido em ecossistema atual de caatinga.

Pode-se adiantar que pertenceram os esqueletos a um macho e uma fêmea, sendo em volta de 20% mais avantajados do que os indivíduos atuais de *B. arachnoides*. Ao que parece, é a mesma espécie descoberta por Peter Lund na primeira metade do século, em grutas da Lagoa Santa, estado de Minas Gerais, e denominada *B. brasiliensis*. Além do tamanho mais avantajado, caracteres cranianos diferenciam a espécie extinta da atual, o que levaria a concluir pela validade da espécie de Lund. E de se notar que a localidade do achado dista da costa Atlântica mais de 400 km, até onde teria penetrado a Mata Atlântica.

Castor Cartelle, Instituto de Geociências, Universidade Federal de Minas Gerais, Belo Horizonte, Minas Gerais 31270, Brasil.

## PSG MEMBER AWARDED WWF GOLD MEDAL

The 1992 WWF Gold Medal was awarded to José Márcio Ayres, member of the SSC Primate Specialist Group. Márcio Ayres started his career in 1976 at the National Institute for Amazon Research (INPA). There he carried out pioneer studies of the bearded sakis, *Chiropotes albinasus* (northern Mato Grosso), and *C.satanas* (central Amazonia and the state of Pará). Part of this work was carried out in the "Minimal Critical Size of Ecosystems Project" of WWF and INPA, just north of the Manaus (now called the "Biological Dynamics of Forest Fragments Project", and administered by the Smithsonian Institution and INPA). His studies of the conservation and status of the black saki, *C.s.satanas*, in the south of Pará, resulted in its inclusion in the IUCN Red Data Book, and the recognition that it is probably one of the most endangered of the Brazilian Amazonian primates. He later extended his research on pitheciines to a major study of the ecology and behavior of the white saki, *Cacajao calvus calvus*, at Mamirauá on the Rio Japurá; the subject of his doctoral thesis for the Sub-Department of Veterinary Anatomy at the University of Cambridge, supervised by Dr. David

Chivers. Through Márcio's efforts, the entire region, one of the most important areas of inundated forest in the Brazilian Amazon, achieved protected status, being decreed, in 1990, the State Ecological Station of Mamirauá, with an area of 1,124,000 ha. During this time Márcio transferred to the Zoology Department of the Museu Goeldi, Belém. Ongoing studies of the ecology and wildlife of Mamirauá, are being financed by WWF, the British Overseas Development Organization (ODA), the Brazilian Science Council (CNPq), and also Wildlife Conservation International (WCI); New York. At present Márcio Ayres is affiliated as a Research Fellow to the New York Zoological Society. The WWF award recognizes his remarkable contribution to the conservation of Amazonian wildlife and ecosystems, and primates in particular.

## PRIMATE TAGS

Primate TAGs are Regional Primate Taxon Advisory Groups. Their aim is not just to put identification tags on primates in zoo collections. The key word is advisory.

A South American Primate Taxon Advisory Group was established in the US in order to facilitate the development of a long range comprehensive program for breeding primates in captivity - a joint effort of the IUCN/SSC Captive Breeding Specialist Group - CBSG (chaired by Ulysses S. Seal; Executive Officer, Thomas Foose) and the American Association of Zoological Parks and Aquaria (AAZPA). The reason for the establishment of the TAGs, and the South American Primates TAG in particular, was to provide formal channels for the exchange of information between the captive breeding community and captive and field researchers. The goals of the South American Primates TAG were established at its first meeting in September 1990. They are as follows:

1) to assess the current and future captive habitat in North America for Neotropical primates;

2) working in conjunction with the Primate Group of CBSG, to establish guidelines for identifying those taxa critically in need of captive breeding efforts;

3) working in conjunction with CBSG and the IUCN Primate Specialist Group (PSG), to develop management strategies, including estimates of

minimum viable population size, and encourage international efforts on behalf of specific taxa, including the recruitment of studbook keepers and species coordinators for the taxa identified; and

4) to develop a management strategy for those species presently in captivity for which specific captive breeding efforts are not recommended.

Assignments were made to provide preliminary evaluations of the captive populations with respect to demographics and genetics. They were as follows: *Aotus* and pitheciines - Tony Vecchio and Anne Savage (Roger Williams Zoo); *Callicebus* - Ken Kaemmerer (Dallas Zoo); *Alouatta* - Barbara Baker (Pittsburgh Zoo); *Cebus* - Lee Nesler (Pittsburgh Zoo); *Saimiri* - Alan Shoemaker (Riverbanks Zoo); *Ateles* - Anne Baker (Brookfield Zoo) and Ken Kaemmerer (Dallas Zoo); *Lagothrix* - Mary Jo Sterns (Fossil Rim); *Callimico* - Anne Baker (Brookfield Zoo); *Callithrix* - Beth Bahner and Dan Maloney (Philadelphia Zoo); *Saguinus oedipus* - Suzette Tardif (University of Tennessee, Knoxville); *Saguinus imperator* - Lee Nesler (Pittsburgh Zoo); remaining *Saguinus* spp. - Alan Sironen (Cleveland Zoo); and *Cebuella* - Anne Savage (Roger Williams Zoo). Other members of this South American Primate TAG include: Russell Mittermeier (Conservation International and State University of New York, Stony Brook) as general advisor; Bob Lacy (Brookfield Zoo) as genetics advisor; and Sue Crissey (Brookfield Zoo) as nutrition advisor. Anne Baker, Curator of Primates, Brookfield Zoo, Brookfield, Illinois 60513, USA, is the coordinator of this TAG, and Brint Spencer, Beardsley Zoological Gardens, Noble Avenue, Bridgeport, Connecticut 06610, USA, is the editor of a newsletter relating the TAG's activities. (See Baker, A. 1991. TAGs: Steering the Primate Ark. In: *AAZPA Regional Conference Proceedings* (1991):502-504).

A similar Primate TAG has been developed by the Joint Management of Species Committee (JMSC) (chaired by Miranda Stevenson, Edinburgh Zoo), a subcommittee of the Conservation and Animal Management Committee (CAM) of the Federation of Zoological Gardens of Great Britain and Ireland. Again the various TAGs set up by the JMSC work in close collaboration with the CBSG and the respective IUCN/SSC specialist groups, and their role is to select the species that are most in need of captive programs or coordination within the British Isles, as well as to organize the development of species' studbooks and breeding programs. The inaugural meeting of the Primate

TAG was held on the 26-27 March 1992 at Banham Zoo, Norfolk. At this meeting Jo Gipp (Director, Zoological Society of London, Regent's Park, London NW1 4RY) and Neil Bemment (Curator of Mammals, Paignton Zoological and Botanical Gardens, Totnes Road, Paignton, Devon TQ4 7EU) were elected joint chairman, and the TAG was divided into subgroups as follows: prosimians - Stephen Standley (Cricket St. Thomas Wildlife Park); Callitrichidae, including *Callimico* - J. Bryan Carroll (Jersey Wildlife Preservation Trust); Cebidae - Roy Powell (Paignton Zoo); Asian Cercopithecidae - Hilary Keating (Bristol Zoo) and Ernie Thetford (Howletts Zoo Park); African Cercopithecidae - Neil Bemment (Paignton Zoo); Hylobatidae - Sarah Christie (Zoological Society of London); and Pongidae - Jo Gipp (Zoological Society of London).

### IUCN/SSC PLAN DE ACCION PARA LOS PRIMATES DE MESOAMERICA

En fecha reciente se distribuyó un cuestionario a personas que desarrollan trabajo de campo sobre primates en Mesoamérica, con el fin de elaborar una base de datos para la realización de un primer borrador del "Plan de Acción para los Primates de Mesoamérica". Mediante este cuestionario se solicita información relativa al estado de las poblaciones silvestres de monos y de los factores que están determinando su situación actual; así como en caso de necesitarlo, se solicita que se propongan los estudios y acciones que se deberán hacer para lograr su conservación. Quienes estén interesados en participar en la elaboración de este documento, y no hayan recibido este cuestionario, favor de hacer contacto con: Ernesto Rodríguez Luna, A.P.566, C.P.91000, Xalapa, Veracruz, México. Tel: (281) 877-30, Fax: (281) 863-52 and (281) 765-39.

## Primate Societies

### AMERICAN SOCIETY OF PRIMATOLOGY (ASP) AWARDS

The American Society of Primatology is calling for nominations for its three Conservation Awards for 1993 (*ASP Bulletin* 17, No.1): *Subscription Award* - which provides a subscription to the *American Journal of Primatology* to worthy individuals in countries with a nonhuman primate

fauna (source countries); *Conservation Award* (US\$500) for students and young investigators (not more than five years since they received a higher degree) working on primate conservation in source countries; and the *Senior Biology and Conservation Award* (US\$500 Honorarium) which is one of ASP's highest honors and awarded to individuals without advanced degrees who have made a substantial contribution to conservation or other aspects of primatology over long periods (five years or more). In addition, ASP offers small grants (US\$500) for conservation projects in source countries. The deadline for the submission of award nominations (a letter of recommendation) and grant proposals (not exceeding 2000 words, typed and including budget) is 30 June 1993. For further information write to: Dr. Ramon Rhine, Psychology Department, University of California, Riverside, CA 92521, USA.

### PRIMATOLOGICAL SOCIETIES IN THE NEOTROPICS

Reflecting the extraordinary growth in primatological studies in the neotropics since the 1970's, there are currently eight primatological societies in Mexico and South and Central America, as well as four in the process of being formed, in Argentina, Cuba, Guatemala, and Paraguay. In addition there is the Latin American Primatological Society (SLAP), at present led by Ernesto Rodríguez Luna of the Universidad Veracruzana, Mexico. Here we provide a list of the current presidents, or those responsible, for each, and encourage primatologists to get in touch and affiliate themselves with their respective societies, the activities of which will be reported in future editions of the Newsletter.

#### SOCIEDAD LATINOAMERICANA DE PRIMATOLOGIA

President: Ernesto Rodríguez Luna  
Parque de la Flora y Fauna Silvestre Tropical  
Universidad Veracruzana  
Apartado Postal 566  
Xalapa, Veracruz 91000, Mexico  
Tel: (281) 8 77 30, Fax: (281) 8 77 30.

#### SOCIEDAD ARGENTINA DE PRIMATOLOGIA

President: Julio Cesar Ruiz  
Centro Argentino de Primates (CAPRIM)  
Casilla de Correos 145

3400 Corrientes, Argentina  
Tel: (783) 23156, Fax: (783) 27790.

**SOCIEDADE BRASILEIRA DE  
PRIMATOLOGIA**  
President: Horácio Schneider  
Departamento de Genética  
Centro de Ciências Biológicas  
Campus Universitário  
Universidade Federal do Pará  
66059 Belém, Pará, Brasil  
Tel: (091) 229-9785

**SOCIEDAD COLOMBIANA DE  
PRIMATOLOGIA**  
President: Jaime Umaña Amaya  
Departamento de Patología  
Facultad de Medicina Veterinaria y Zootecnia  
Universidad Nacional de Colombia  
Apartado Aereo 053103  
Bogota D.E., Colombia  
Tel: (1) 269-6450

**ASOCIACION PRIMATOLOGICA  
COSTARRICENSE**  
President: Grace Wong Reyes  
Programa Regional en Manejo de Vida Silvestre  
Universidad Nacional  
Apartado 1350, Heredia  
Heredia, Costa Rica

**SOCIEDAD CUBANA DE PRIMATOLOGIA**  
Director: Fernando González Bermudez  
Centro Nacional para la Producción de Animales  
de Laboratorio  
Academia de Ciencias de Cuba  
La Habana 2, Cuba  
Tel: (5) 6834589

**SOCIEDAD ECUATORIANA DE  
PRIMATOLOGIA**  
c/o Felipe Campos  
Universidad Católica de Quito  
Apartado 17-12-00576, Ecuador

**SOCIEDAD GUATEMALTECA DE  
PRIMATOLOGIA**  
c/o Johanna Motta Gill  
Instituto Técnico de Capacitación y Productividad  
Departamento Pecuario  
Calle Mateo Flores 7-51, zona 5  
Guatemala, Guatemala.  
Tel: 313342

**ASOCIACION MEXICANA DE  
PRIMATOLOGIA**  
President: Ernesto Rodríguez Luna  
Parque de la Flora y Fauna Silvestre Tropical  
Universidad Veracruzana  
Apartado Postal 566  
Xalapa, Veracruz 91000, Mexico  
Tel: (281) 8 77 30, Fax: (281) 8 77 30.

**PANAMA PRIMATE SOCIETY**  
c/o Felix Nuñez  
Escuela de Biología  
Universidad de Panama  
Panama City, República de Panama

**SOCIEDAD PERUANA DE PRIMATOLOGIA**  
Presidente: Filomeno Encarnación  
Proyecto Peruano de Primatología  
Apartado 621 or 575  
Iquitos, Loreto, Peru

**SOCIEDAD PARAGUAYA DE PRIMATOLOGIA**  
Head: Maria Teresa Rovira  
Proyecto Paraguayo de Primatología (PPP)  
Instituto de Investigaciones en Ciencias de la  
Salud  
Universidad Nacional de Asunción  
Rio de la Plata y la Gerenza  
Casilla de Correo 2511  
Asunción, Paraguay

**SOCIEDAD VENEZOLANA DE  
PRIMATOLOGIA**  
President: Roberta Bodini de Pepe  
Instituto de Zoología Tropical  
Facultad de Ciencias  
Universidad Central de Venezuela  
Apartado 47058 - Los Chaguaramos  
Caracas 1041 A, Venezuela

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**SOCIEDAD LATINOAMERICANA DE  
PRIMATOLOGIA (SLAP) -  
INTERNATIONAL PRIMATOLOGICAL  
SOCIETY (IPS)**

Cón el propósito de integrar firmemente las Sociedades Nacionales de Primatología de la Región Latinoamericana, se solicita que las directivas de dichas Sociedades, envíen sus actas constitutivas y directorio actualizado de miembros al Presidente de la Sociedad Latinoamericana de

Primatología (SLAP), a fin de incorporar la membresía latinoamericana dentro de la International Primatological Society (IPS). Asimismo, se invita a los primatólogos latinoamericanos a ser miembros de sus asociaciones nacionales primatológicas. Pagando su cuota de afiliación nacional, podrán ser miembros de la Sociedad Latinoamericana de Primatología y al mismo tiempo de la International Primatological Society. En caso de no existir una Sociedad Nacional en su país de origen, favor de dirigirse a: Ernesto Rodríguez Luna, Presidente de la Sociedad Latinoamericana de Primatología (SLAP).

Como un acuerdo de la nueva mesa directiva (1992-1996) de la IPS, el Presidente de la SLAP pasó a ocupar la posición de "Regional Secretary for the Americas" dentro de la IPS. De esta manera, se fortalecerá la presencia de la región latinoamericana dentro de la IPS.

Hacemos una atenta invitación a enviar contribuciones escritas para el Newsletter del IPS, en el idioma de su preferencia. Las contribuciones podrán ser enviadas al Presidente de la SLAP o directamente a: Dr Dorothy Fragazy, editor del Newsletter de IPS, Department of Psychology, University of Georgia, Athens, Georgia 30602, U.S.A.

## Recent Publications

*Cites: A conservation tool.* Provides information on the processes involved in including species in the "endangered" category (restricted trade). Available in English, Spanish and French from: Roger E. McManus, Chairman IUCN/SSC Trade Specialist Group, 1725 DeSales Street, NW, Suite 500, Washington, D.C. 20036, USA. Tel: (202) 429-5609. Fax: (202) 872-0619.

*Taxonomia de Callithrix Erxleben, 1777 (Callitrichidae, Primates),* by Mário de Vivo, published by Fundação Biodiversitas, Belo Horizonte, 1991, 105pp. (In Portuguese). Price US\$15.00. The results of a doctoral thesis for the University of São Paulo, Ribeirão Preto, the author provides an analysis of the geographical distributions and a revision of the taxonomic status of the marmosets, *Callithrix*. The author argues that all known forms should be considered species rather than subspecies. Available from:

Dr. Russell A. Mittermeier, Conservation International, 1015, 18th Street, NW., Suite 1000, Washington, DC. 20036, USA, Tel: (202) 429-9489, Fax:(202) 887-5188, or Fundação Biodiversitas, Rua Maria Vaz de Melo 71, Dona Clara, Belo Horizonte, Minas Gerais 3120-110, Brazil, Tel:(031) 443-2119, Fax: (031) 441-7037.

*A Primatologia no Brasil - 3,* edited by A.B. Rylands and A.T. Bernardes, published by Fundação Biodiversitas, Belo Horizonte, 1991, 459pp. Price US\$20.00. 48 articles in Portuguese and English. The proceedings of the III and IV Brazilian Primatological Congress, held in 1987 (Juiz de Fora, Minas Gerais) and 1989 (João Pessoa, Paraíba). Available from: Fundação Biodiversitas, Rua Maria Vaz de Melo 71, Dona Clara, Belo Horizonte, Minas Gerais 31260-110, Brazil, Tel: (031) 443-2119, Fax: (031) 441-7037.

*Lemurs of Madagascar: An Action Plan for their Conservation 1993-1999,* compiled by R.A. Mittermeier, W.R. Konstant, M.E. Nicoll, and O. Langrand. IUCN/SSC Primate Specialist Group, Gland, 1992, 58pp. Price US\$15.00. Available from Dr Russell A. Mittermeier, Conservation International, 1015, 18th Street, NW, Suite 1000, Washington, DC 20036, USA, Tel: (202) 429-9489, Fax: (202) 887-5188.

*Primates of the World,* by Rod and Ken Preston-Mafham. Facts on File, New York, 1992, 192pp. Price US\$24.95 + shipping. Available from: Zoo Book Sales, P.O.Box 349, Sanibel Island, Florida 33957, USA, Tel: (813) 472-5490, Fax: (813) 395-2727.

*Marmosets and Tamarins: Systematics, Behaviour and Ecology,* edited by A.B.Rylands, Oxford University Press, Oxford, 1993. This book is based on a symposium "Adaptive Unity in the Callitrichidae: a Systematic Comparison of Species Differences in the Family", held during the XII Congress of the International Primatological Society, Brasília, July 1988. As the title suggests, it is divided into three parts. The first contains three chapters reviewing: the taxonomy, distributions and conservation status of the callitrichids (A. B. Rylands, A. F. Coimbra-Filho and R. A. Mittermeier); phylogenetic considerations of species and generic differences in vocalizations (C. T. Snowdon); and captive and wild hybrids of *Callithrix* marmosets (A. F. Coimbra-Filho *et al.*). The second provides

comparative reviews concerning reproduction (D. Abbott *et al.*, A. Dixson, S. Tardif *et al.*), scent-marking (G. Epplé *et al.*), ontogeny (M.E. Yamamoto) and behavior in captivity (H. Rothe and K. Darms, N. Caine), and the third section discusses the ecology of each of the four genera (P. Soini, P.A. Garber, A.B. Rylands, and D. S. de Faria), with a review of ecological differentiation in the Callitrichidae (S. F. Ferrari). Available from: Oxford University Press, Order Department, 2001 Evans Road, Cary, North Carolina 27513, USA, or Oxford University Press, Science Publications, Walton Street, Oxford OX2 6DP, England, Tel: (0865) 56767, Fax: (0865) 56646.

*Faces in the Forest: The Endangered Muriqui Monkeys of Brazil*, by Karen B. Strier, Oxford University Press, New York, 1992, 160pp. Price US\$49.95. Karen Strier's field studies on the ecology, behavior and demography of *Brachyteles arachnoides* in the Fazenda Montes Claros, Minas Gerais. Available from: Oxford University Press, Order Department, 2001 Evans Road, Cary, North Carolina 27513, USA.

*Applying Ecological Principles to Captive Primate Environments: Needs and Environmental Design for Colony Management*, by Bruce Clark, Animal Curator, Jackson Zoo, published privately. 210pp. 880 citations. Price in USA, US\$15.50 (includes surface postage and handling), other countries US\$17.00, money order in US dollars only. A manual for zoos and laboratories, topics cover non human primate perception, communication, sociality, reproduction and ecology as pertaining to captive husbandry and cage design. Available from: Bruce Clark, 111 Wildwood Lane, Brandon, MS 39042-6646, USA.

*Conservation of Marmosets, Tamarins, and Callimico (Callitrichidae): a Bibliography: 1980-1992*, by Jean Balch Williams, November 1992 (322 citations, species and subject indexes). Price US\$6.50. Available from: Primate Information Center, SJ-50, University of Washington, Seattle, Washington 98195, USA. Tel: (206) 543-4376, Fax: (206) 685-0305.

## Meetings

### 1993

**SYMPOSIUM ON THE PRIMATE FAMILY CEBIDAE**, 2 May 1993, Pittsburgh, Philadelphia. Organized by the New World Primate Taxon Advisory Group (TAG). Contact: Ken Kaemmerer, Cebid Symposium Coordinator, Dallas Zoo, 621 East Clarendon Drive, Dallas, Texas 75203, USA.

**BIODIVERSITY AND ENVIRONMENT: BRAZILIAN THEMES FOR THE FUTURE**, 6-7 May 1993, Royal Geographical Society, Kensington Gore, London SW7 2AR. Organized by The Linnean Society of London and the Royal Botanical Gardens, Kew. Contact: The Executive Secretary, The Linnean Society, Burlington House, Piccadilly, London, W1V 0LQ, England. Tel: (071)-434 4479, Fax: (071) 287-9364.

**IV SIMPOSIO DE LA ASOCIACION MEXICANA DE PRIMATOLOGIA**, 17-20 May 1993, Zoologico Regional Miguel Alvarez del Toro, Tuxtla Gutierrez, Chiapas, Mexico. The symposium will include a meeting of the IUCN/SSC Primate Specialist Group - Section Mesoamerica, to discuss the preparation of the Action Plan for Mesoamerican Primates, and a workshop to evaluate the status of captive populations in Mexico, in collaboration with representatives from Mexican zoos. Contact: Ernesto Rodríguez Luna, A.P.566, C.P.91000, Xalapa, Veracruz, Mexico. Tel: (281) 877-30, Fax: (281) 863-52 and (281) 765-39.

**THIRTY YEARS OF TROPICAL BIOLOGY: ORGANISMS TO GLOBAL CHANGE**, 1-4 June 1993. Annual Meeting of the Association for Tropical Biology, El Convento Hotel, San Juan, Puerto Rico. In collaboration with the Organization for Tropical Studies, University of Puerto Rico, USDA Forest Service, and the Puerto Rico Science Teachers Association. Contact: Destinations Inc., P.O.Box 41272, San Juan, Puerto Rico 00940. Tel: (809) 765-6051/6022, Fax: (809) 754-6714, or Dr. James Ackerman/Dr. Linda Escobar, Department of Biology, University of Puerto Rico, P.O.Box 23360, San Juan, Puerto Rico 00931-3360, Tel: (809) 764-0000 X 4887;2023, Fax: (809) 764-2610 or (809) 751-5708.

**16TH MEETING OF THE AMERICAN SOCIETY OF PRIMATOLOGISTS**, 18-22 August 1993, New England Regional Primate Research Center, Sturbridge, Massachusetts. Contact: Andrew J. Petto, New England Regional Primate Research Center, Division of Behavioral Biology, P.O.Box 9102, Southborough, Massachusetts 01772-9102, USA.

**XXIII INTERNATIONAL ETHOLOGICAL CONFERENCE**, 1-9 September 1993, Torremolinos, Spain. Contact: Secretaria de Congressos Cordoba, C/Cano 3, 1-1, 14001 Cordoba, Spain. Tel:(9)57-480478, Fax:(9)57-479651, or Ana Omedes, General Secretary, Apartado 98033, Barcelona 08080, Spain.

## 1994

**67TH MEETING OF THE SPECIES SURVIVAL COMMISSION**, 15-17 January 1994, Buenos Aires, Argentina. Organizers: World Conservation Union (IUCN). Contact: Coordinadora logistica de la Asamblea General, IUCN, Rua Mauvernay 28, CH-1196 Gland, Switzerland. Tel: 41 22 999 0001, Fax: 41 22 999 0020.

**XIX SESSION OF THE IUCN GENERAL ASSEMBLY**, 18-26 January 1994, Buenos Aires, Argentina. Organizers: World Conservation Union (IUCN). Contact: Coordinadora logistica de la Asamblea General, IUCN, Rua Mauvernay 28, CH-1196 Gland, Switzerland. Tel: 41 22 999 0001, Fax: 41 22 999 0020.

**XVTH CONGRESS OF THE INTERNATIONAL PRIMATOLOGICAL SOCIETY**, 3-8 August 1994, Bali, Indonesia. Organizers: Directorate General of Forest Protection and Nature Conservation (PHPA), the Indonesian Wildlife Society (IWS) and the International Primatological Society (IPS). Contacts: Secretariat, 15th IPS Congress, PT, Bayu Buana Travel Service Ltd., Wisma Bank Dharmala 19th Fl, Jend.Sudirman Kav. 28, Jakarta 12910, Indonesia, or Dr Linda Prasetyo, c/o Perth Zoo, 20 Labouchere Road, Western Australia 6151, Australia, Tel: 09 368-1916, Fax: 09 367-3921, or Dr Soegardjito, WWF/US Asia-Pacific Program, 1250 Twenty-fourth Street, N.W., Washington, D.C. 20037, USA, Tel: (202) 861-8300, Fax: (202) 223-6971.

**VITH INTERNATIONAL CONGRESS OF ECOLOGY: ECOLOGICAL PROGRESS TO MEET THE**

**CHALLENGE OF ENVIRONMENTAL CHANGE**, 20-26 August 1994, University of Manchester, England. Contact: The Secretary, VI International Congress of Ecology, Department of Environmental Biology, The University, Manchester M13 9PL, England.

**FOREST CANOPIES - ECOLOGY, BIODIVERSITY AND CONSERVATION**, 10-13 November 1994, Marie Selby Botanical Gardens, Sarasota, Florida, USA. Contact: Dr. Meg Lowman, Director of Research, Selby Botanical Gardens, 811 South Palm Avenue, Sarasota, Florida 34236, USA.

## Contributions

We would be most grateful if you could send us information on projects, research groups, events such as congresses and symposia, workshops, recent publications, activities of primatological societies and NGO's, news items or opinions of recent events and suchlike, either in the form of manuscripts or in diskettes using IBM-compatible text editors. Manuscripts should be double-spaced. Articles (not exceeding 6 pages) can include small black and white photographs, figures, maps, tables and references, but please keep them to a minimum.

Please send contributions to the editors: **Anthony Rylands**, Departamento de Zoologia, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais, Belo Horizonte 31270-901, Minas Gerais, Brazil, Fax: (031) 441-1412, or c/o Conservation International, Rua Bueno Brandão 393, Belo Horizonte 31010-060, Minas Gerais, Brazil, Fax: (031) 222-8429, or **Ernesto Rodríguez Luna**, Parque de la Flora y Fauna Silvestre Tropical, Universidad Veracruzana, Apartado Postal 566, Xalapa, Veracruz 91000, Mexico, Fax: (281) 8 77 30.

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*NEOTROPICAL PRIMATES*

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