## REPORT ON THE POSSIBILITIES FOR PRIMATE STUDIES IN BRAZIL AND COLOMBIA

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# Report to the International Union for the Conservation of Nature

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This report is based on a two month survey conducted in Brazil between June and August, 1971, and is intended to give the student of primatology some idea of the possibilities that exist (for field research and museum work) in Brazil and the area around Leticia, Colombia. Governmental requirements for foreign researchers are clearly enumerated. Furthermore, several recommendations are made concerning equipment, travel, minimum language preparation, etc. The final section is a list of regional vernacular names, in Portuguese, of the various primate species and genera. This list will hopefully aid the student in locating animals and communicating with the local populace.

#### LETICIA, COLOMBIA

In Leticia, Colombia, the best contact is Mike Tsalickis, an American animal dealer. Tsalickis maintains a so-called "research station" on the small (5 km long x 2 km wide) island of Santa Sofia, in the middle of the Amazon River. Since 1967, he has introduced some 5,000 squirrel monkeys (Saimiri sciureus) onto this island and claims that, because of very successful reproduction, there are now approximately 20,000 (This figure is probably somewhat high). The island was partly cultivated and now consists of primarily secondary growth.

Accommodations include a dormitory with 8 beds, 8 hammocks, a bathroom and shower and, in the near future, light. The island has a caretaker and a cook to prepare three meals a day.

It is possible to go from the island to Leticia about 1-2 times per week. There are two boats on the island and several dugout canoes. The Tsalickis' water plane makes the roughly 40 km trip several times per month.

There are no medical facilities on the island but Leticia has several doctors.

Rates for staying on the island are \$10/ day for periods less than one month and \$6/ day for one month or more.

Aside from the introduced squirrel monkeys, a number of birds such as parrots, herons, egrets, hawks, etc. are also to be found. Small reptiles and insects are quite common.

The island of Santa Sofia would be most useful for someone without prior field experience. The squirrel monkeys are not very shy (because they are not hunted) and are easy to locate and follow. Several months on the island would be a good way to develop observational techniques for future primatological studies. One of the first projects that could be undertaken would be an accurate population count of the squirrel monkeys. For the student with prior field experience, Santa Sofia is not highly recommended. The best time to conduct studies there would be from June to December (the dry season). During the rainy season, from January to may, the three trails on the island are flooded and almost entirely useless.

Santa Sofia itself compares rather poorly with Barro Colorado Island, the field research station of the Smithsonian Tropical Research Institute in Panama. However, the Leticia region offers a number of possibilities. The Upper Amazon in which it is located is a region that is still fairly rich in primate species. Furthermore, Tsalickis has several workers that go down river into Brazil and up river into Peru each week to pick up monkeys from native collectors. He is willing to let students staying on Santa Sofia occasionally join these collecting trips. A really hardy student, with a good command of Portuguese, might even want to stay for severalweeks in one of the small villages and go out into the jungle with the collectors.

Tsalickis also claims that he could furnish guides to take people out to areas where it would be possible to study species like <u>Cacajao</u> <u>rubicundus</u>.

Among the species found in the Leticia area are the following: Cacajao rubicundus, Lagothrix lagothricha, Saimiri sciureus, Pithecia monachus, Cebuella pygmaea, Aotus trivirgatus, Saguinus labiatus and other Saguinus, Alouatta sp., Cebus sp., Ateles sp. and Callicebus sp.

Tsalickis' address is:

Mike Tsalickis Tarpon Zoo Leticia, Colombia

#### Requirements

1) Ordinarily, a permit is needed from the Colombian government, but Tsalickis is powerful enough and Leticia isolated enough to make a permit for study on privately owned Santa Sofia namecessary.

#### Recommendations

- 1) Some knowledge of Spanish or Portuguese would be most helpful since very few people in the Leticia area speak English.
- 2) Mosquito nets, insect repellent and malaria pills are an absolute necessity. Equally important is a good supply of medicine against diarrhoea, which everyone gets the first few weeks.
- 3) Binoculars are essential for field observations.
- 4) High boots that reach at least several inches above the ankle are the only practical footwear. They protect against mud, insects and poisonous snakes.
- 5) Leticia can be reached by air from Bogota. There are no roads to Leticia. One can take either Avianca, the national airlines, or Satena, which is the Colombian Air Force. Satena is not very comfortable but is about 50% cheaper than Avianca.

#### Conservation Notes

Tsalickis claims that Cacajao rubicundus is still an abundant

species. He says it is rarely brought in because it bravels in small groups and is difficult and unprofitable to catch.

Most of his animals come in illegally from Brazil or Peru.

His animals are caught alive in baited traps, so there is not much loss in the capture process. From what we were able to gather, the loss involved in transporting the animals from the capture site to faticia is also quite small.

We went down river to Brazil with some of Tsalickis' collectors to pick up two species of Saguinus and Cebuella pygmaea. For 20 Cebuella and 13 Saguinus, the native collectors were paid the equivalent of approximately \$60.00 U.S.

#### MANAUS, BRAZIL

The main contact in the Manaus area is the Instituto de Pesquisas da Amazônia (Amazon Research Institute). The Instituto has a jeep and several launches which it is willing to put at the disposal of foreign researchers. However, no research can be legally conducted in Brazil without an official permit (autorisação) from the Conselho Nacional de Pesquisas (National Research Council) in Rio de Janeiro. This permit usually takes about 6 months to obtain and requires the submission of a detailed program of study. For further information on permits, see the section on Rio de Janeiro Requirements in this report and also Decreto no. 65.057 of the Brazilian government.

The Instituto has no primate specialists, but an umber of people are familiar with the primates of the region and know where they can be found.

The Manaus region is still fairly rith in primates and the area outside the city is only sparsely inhabited by man. Several days journey up the Rio Negro by boat one can encounter some of the most sparsely inhabited territory in the world. Among the primate species that can be observed are: Cacajao melanocephalus (rare), Lagothrix lagothricha, Chiropotes satanas, Pithecia monachus, Saimiri sciureus (abundant), Saguinus sp. especially Saguinus bicolor, Ateles sp., Alouatta sp. (abundant), Cebus sp. (abundant) and Aotus trivirgatus.

Unfortunately, primates are heavily hunted for food throughout the Amazon area and rapidly flee at first sight of man.

In order to conduct research outside a roughly 200 km radius of Manaus, it would be necessary to organize an elaborate and expensive expedition. The only means of transportation are charter planes and boats. Provisions are generally not available outside Manaus and must be purchased in advance.

Anyone interested in a boat journey to some of the less accessible regions outside Manaus should contact Kurt Glück, a German tour guide. Glück has some 32 years experience in the Amazon area and is quite able and dependable. He charges \$20.00/ day for up to 4 people and also acts as cook. His boat is a small dugout with a 6 horsepower motor. It is slow but is the best means of transportation on the small winding back streams where one is most likely to see monkeys. Glück speaks German, English, Spanish and Portuguese and is well liked

by the Indians and Caboclos (Portuguese-Indian mixtures). His address is:

Kurt Glück Caixa Postal 361 Manaus, Amazonas Brasil

The Dest

The best time to conduct studies in the Manaus area is in the dry season (July-January).

For taxonomic work, the Instituto has a collection of primate skins and skulls, but they are not in outstanding shape and locality data is often lacking.

#### Requirements

- 1) Permit from the Conselho Nacional de Pesquisas. (See section on Rio de Janeiro Requirements in this report.)
- 2) Permission from the Instituto Nacional de Pesquisas da Amazônia in Manaus. The director of the Instituto is:

Dri Baulo de Almeida Machado Instituto Nacional de Pesquisas da Amazônia Caixa Postal 478 Manaus, Amazonas Brasil

For additional information on the primates of the Manaus area, write the taxidermist of the Instituto:

Mozarth Correa de Mello Ruaio de Julho N-823 Manaus, Amazonas Brasil.

#### Recommendations

- 1) See section on Leticia, Colombia for equipment.
- 2) At least some knowledge of spoken Portuguese is necessary. The people in the Instituto speak at best broken English and in the areas where one would be conducting research, Portuguese is the only language aside from Indian dialects.
- 3) Manaus can be reached by plane or boat from Leticia or Belem.

  Boat transportation is very undependable. Unless you have
  unlimited time, travelling by air is highly recommended. Cruzeiro
  do Sul and some other Brazilian airlines have regularly scheduled flights.

#### Conservation Notes

On a week long trip up some of the small affluents of the Rio Negro, the Rio Cuijeras and the Rio Branquile, we noticed that monkeys and other animals are heavily hunted for food. Even in this sparsely populated and undeveloped area, all the Indians and Caboclos have guns. Along a 30 km stretch of the Rio Cuijeras, we

were able to collect 22 monkey skulls in just 5 days (2 Pithecia monachus, 5 Cebus, 6 Alouatta, 9 unidentified). The human population of the area could not have exceeded 150. We saw one group of Saimiri sciureus and one mixed group of Saimiri and Cebus. Both groups fled immediately. In addition, we heard a group of Alouatta roaring in the distance.

Any animal that is even remotely edible is killed for food, from turtles and anacondas to tapirs and macaws. Furthermore, ocelots (Felis pardalis) and jaguars (Panthera onca) are hunted and trapped for their fur which fetches a good price in Manaus. Hunting the spotted cats is much easier and more profitable than spending tedious hours gathering rubber.

#### BELÉM, BRAZIL

The Belém area is not very good for field studies of primates. It has been inhabited for a long time and most of the animals in the vicinity of the city have been hunted out. The Museu Goeldi staff did not offer any facilities (jeeps, launches, etc.) so transportation to remoter areas would have to be arranged and paid for by the student.

The Museu does however have a very good collection of skins and skulls, usually with locality data, that would be useful for taxonomic work.

#### Requirements

- 1) Permit from the Conselho Nacional de Pesquisas. (See section on Rio de Janeiro Requirements in this report.)
- 2) Permission from the director of the Museu Goeldi.

Direkubz Miguel Scaff
Museu Paraense Emilio Goeldi
Caixa Postal 399
Belém, Para
Brasil

#### Recommendations

- For work in the Museu, Portuguese is not absolutely necessary but would help a great deal. For field work, Portuguese is, as usual, a necessity.
- 2) Belem can be reached by plane or boat from Manaus, but boat transportation is unreliable. Bus transportation from São Paulo, Rio and Brasilia is available.

#### RIO DE JANEIRO

The Rio area has a number of interesting primates, but most of them are very rare and endangered with extinction.

The Golden Lion Marmoset (Leontideus rosalia) is found only in the Rio area, but it is so nearly extinct that it is very strictly protected

It is highly doubtful that foreign investigators would be given permission to study this species.

Brachyteles arachnoides, the Woolly Spider Monkey, is another endangered species. It is found in several parks and reserves and could be studied if the proper permits were obtained. Alouatta fusca, Cebus apella and several species of Callithrix are also found in these parks and reserves. For further information on studying in protected areas, see the section on Requirements.

Callithrix jacchus has been introduced into a number of areas and would probably be the easiest primate to study in the Rio area. A population exists in the Tijuca National Park on the outskirts of the city. Another small population lives in the forest at the base of Sugarloaf Mountain (Pao de Acuçar), a famous tourist attraction. The latter population is within walking distance of Copacabana Beach and Some of the tourist hotels.

The Museu Nacional in Rio has a good collection of skins and skulls which would be useful for taxonomic studies. The nearby Museu de Fauna has several specimens of <u>Brachyteles</u> and the only two mounted museum specimens of <u>Leontideus chrysopygous</u> in the world. For information on the museum specimens, write:

Dr. José Candido de Mello Carvalho Museu Nacional Quinta da Boa Vista Rio de Janeiro/ GB Brasil

The Rio Zoo, located right between the Museu Nacional and the Museu de Fauna has 8 specimens of <u>Leontideus rosalia</u> and the only captive <u>Leontideus chrysomelas</u> in the world. These are owned by Dr. Adelmar F. Coimbra-Filho, the expert on <u>Leontideus</u>. For further information on these animals, write:

Dr. Adelmar F. Coimbra-Filho Rua Artur Araripe 60/902 Gavea Guanabara Brasil

#### Requirements

Dr. Alceo Magnanini, Director of the Instituto de Conservação of the IBDF (Instituto Brasileiro de Desenvolvimiento Florestal) summed up the requirements for research in Brazil as follows:

1) Permit for Research in General - This permit (autorisação) must be obtained from the Conselho Nacional de Pesquisas. The application for the permit must follow the rules set forth in the Decreto no. 65.057 - de 26 de Agôsto de 1969. The application must be sent to:

Conselho Nacional de Pesquisas Av. Marechal Camara, 350 6 Andar Rio de Janeiro/ GB Brasil A copy of Decreto no. 65.057 accompanies this report.

2) Permit to collect specimens (excluding National Parks and Reserves) - This permit must be obtained from:

Instituto Brasileiro de Desenvolvimiento Florestal Av. Antonio Carlos 607/ 120
Portaria 927
Rio de Janeiro/ GB
Brasil

- 3) Permit to collect specimens in National Parks and Reserves This permit must be obtained from the same address as above.
- 4) Permit to study or collect animals on the Endangered Species List (See copy of the Endangered Species List of Brazil accompanying this report.) This permit must be obtained from

Instituto Brasileiro de Desenvolvimiento Florestal Av. Antonio Carlos 607/ 12° Portaria 303 Rio de Janeiro/ GB Brasil

5) Permission from the particular Institute with which the student wishes to work.

Any questions concerning the permits required by the Brazilian government should be addressed to the authors of this report or to:

Dr. Alceo Magnanini Rua Pacheco Leão 2040 Gávea Guanabara Brasil

#### Recommendations

1) Knowledge of Portuguese is of course desirable in Rio, but not absolutely necessary. It is possible to get by with Spanish and most scientists speak at least some English.

2)nRio can be reached by air from most major cities in the world.

#### Conservation Notes

Leontideus rosalia is going extinct in Rio. Its last stronghold will be opened to development as soon as the bridge to Niteroi is completed. Magnanini and Coimbra-Filho give the animal  $1\frac{1}{2}$ -2 years before it goes extinct in the wild. Even the most conservative estimates give the species no more than fiyears. Magnanini and Coimbra-Filho are planning a captive breeding program for L. rosalia and L. chrysomelas, an equally endangered species from the south of the state of Bahia in Brazil. International aid is needed to save these species and to establish this breeding program.

Brachyteles arachnoides is presently protected in about 6 parks and reserves. It is not hunted for food outside the reserves, but only occasionally killed for sport. Habitat destruction is the greatest threat to the unprotected populations. Insofar as several protected populations exist, the species should probably get a white sheet instead of a pink sheet in the IUCN Red Data Book. Brachyteles situation is nowhere as grave as that of the three species of Leontideus.

Coimbra-Filho believes that four other species should be placed on the endangered species list.and should be given sheets in the IUCN Red Data Book. These are Alouatta fusca (= guariba), Callicebus personatus, Callithrix aurita and Callithrix flaviceps. Alouatta is endangered by habitat destruction and hunting for food, Callithrix by habitat destruction. Callicebus is rarely seen and almost nothing is known about it. A report on these species by Coimbra-Filho is forthcoming.

#### SÃO PAULO

The immediate São Paulo area is rather deficient in primates because it has been developed for so long. Most of the original forest in the state of São Paulo has been cut for lumber and pasture land.

A wild population of Alouatta fusca exists on the grounds of the São Paulo Zoo and could be studied with little difficulty.

In the western part of the state, about 800 km from the city of São Paulo, is the Morro do Diabo State Forest. Cebus apella is common there and Alouatta fusca is reported to occur. Morro do Diabo is also the last stronghold of Leontideus chrysopygous. The last remaining 100 or so known individuals are found within the borders of the forest. However, because of the extreme rarity of this primate, it would probably be most difficult to obtain permission to study it.

The Museum of Natural History in São Paulo has a very good collection of skins and skulls, including two L. chrysopygous, and would be a good place to do some taxonomic work.

The São Paulo Zoo has 6 <u>Brachyteles arachnoides</u> (2 00, 400) and <u>Callicebus personatus</u>. In addition, there is a good collection of <u>Ateles</u>, <u>Lagothrix</u>, <u>Cebus</u> and <u>Saimiri</u>.

For information on primate studies in the state of São Paulo, write to:

Dr. Paulo Nogueira Neto Caixa Postal 832 São Paulo Brasil

#### Requirements

1) Permit from the Conselho Nacional de Pesquisas. (See section on Rio de Janeiro Requirements in this report.)

#### Recommendations

- 1) For study in the Morro do Diabo State Forest, knowledge of Portuguese is necessary.
- 2) São Paulo can be reached by air from most major cities in the world.

#### OTHER PARTS OF BRAZIL

Primates are still fairly abundant throughout the Amazon Basin. However, research in areas outside of those mentioned above would have to assume expedition proportions and would be quite expensive. Some of the best remaining study areas are unfortunately also the most inaccessible.

The proper permits are necessary for research conducted anywhere in Brazil, whether or not the research is done under the auspices of a Brazilian institute or university.

VERNACULAR NAMES OF PRIMATES IN PORTUGUESE

Alouatta sp. - Guariba (in the Amazon); Barbado (southern Brazil);
Bugio (southern Brazil)

Aotus trivirgatus - Macaco da Noite; Macaco Boca d'Agua (in southern Brazil

Ateles sp. - Coata (in the Amazon); Macaco Aranha (southern Brazil)

Brachyteles arachnoides - Mono: Muriqui

Cacajao sp. - Macaco Uacari; Uacari

<u>Cacajao</u> <u>calvus</u> - Uacari-branco

<u>Cacajao melanocephalus</u> - Uacari-de-cabeça-preta

<u>Callicebus</u> sp. - Macaco Zogue-zogue (in the Amazon, especially Leticia); Uapussa (Belém); Japussá (name used in southern Brazil for northern species); Guigo (name used in southern Brazil for northern species)

Callicebus personatus - Sauá (species from southern Brazil)

Cebuella pygmaea - Leão; Saguim Leãozinho; Saui Leãozinho; Leoncito (Spanish name used around Leticia)

<u>Cebus</u> sp. - Macaco Prego (in the Amazon); Macaco Imoral (in the Amazon); Caiarara (southern Brazil).

Chiropotes sp. - Cuxíu

Chiropotes albinasus - Curiu-de-nariz-branco

Lagothrix lagothricha - Barrigudo

Leontideus chrysomelas - Mico-leão-de-cara-dourada

Leontideas chrysopygous - Mico-leão-prêto; Saui Prêto

Leontideus rosalia - Mico-leão

Pithecia sp. - Parauacu (in the Amazon); Macaco Cabeludo (in the Amazon); Parauaçu (in southern Brazil)

Saguinus sp. and Callithrix sp. - Saouin; Saguim; Sagim; Saui; Mico

Saguinus bicolor - Sagui de Buas Cores

Saguinus imperator - Sagui de Bigode

Saguinus labiatus - Boca Branca

Saimiri sciureus - Macaco do Cheiro

Callimico goeldii - Calimico

Callithrix jacchus and Callithrix penicillata - Sagui Estrela

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