

Brazil's National Parks

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Brazil is the largest country in South America in both population and area, and ranks fifth largest in the world at 8,511,965 km². Lying mainly in the tropics, its immense variety of habitat types ranges from the vast, luxuriant Amazon rain forests in the north to the Atlantic coastal forests in the east, the savannas of the central plateau and the Brazilian pine forests and flat, almost treeless pampas of the south; its great diversity of animal species includes some found nowhere else in the world.

As in many other countries, many of the most interesting animals have been decimated by man. Forty-two endangered species occur in Brazil, according to the IUCN *Red Data Book*: 22 mammals, 4 birds, and 16 reptiles and amphibians, 14 of them red sheet (highly endangered) species. The Endangered Species List issued by the Brazilian Conservation Foundation (FBCN) recognizes 45 species as being threatened with extinction (19 mammals, 24 birds, 2 reptiles—see Table 2). Fortunately, Brazilians have begun to realise the importance of their wildlife heritage and are taking steps to ensure its survival. Brazil now has a young and dynamic National Park System, a branch of the Brazilian Forestry Development Institute (Instituto Brasileiro de Desenvolvimento Florestal—IBDF), which is doing important conservation work. Already Brazil has seventeen national parks (Parques Nacionais) of which the first, Itatiaia, was created as far back as 1937, followed by Iguaçú and Serra dos Orgãos in 1939. In 1959 came Ubajara, Aparados da Serra and Araguaia, followed in 1961 by nine more: Emas, Chapada dos Veadeiros, Caparão, Sete Quedas, Sete Cidades, São Joaquim, Tijuca (Rio de Janeiro), Brasília and Monte Pascoal. The most recent are Serra da Bocaina (1971) and Serra da Canastra (1972). Other parks are being planned. Table 1 gives the planned size of each park as proposed in the governmental act establishing it, the effective size in 1972 and the territorial additions planned for the near future. In addition to the parks there are five federal biological reserves (Reservas Biológicas Federais).

NATIONAL PARKS

Aparados Da Serra

Created in 1959 and modified somewhat in 1972, this is the southernmost park, lying in the north-east of the State of Rio Grande do Sul and the south-east of Santa Catarina. Here the southern Brazilian plateau terminates sharply in precipices of up to 500 m., resulting in an impressive panorama of huge vertical rock walls. Many small pools and springs are to be found on the plateau and the forests of Brazilian pine *Araucaria angustifolia* here mark the south-eastern limit of this pine's distribution. The lower parts of the park are covered by Atlantic coastal forest.



National Parks

The southern coastal fauna of Santa Catarina finds refuge in the valleys, while the plateau species are well protected in the higher parts of the park. The transition from plateau to lowlands presents an ecotone in which rare and endemic species occur, and the park is a last refuge for local species from the drastic development surrounding the park. Endangered species in the park include pampas deer *Ozotoceros bezoarticus*, giant anteater *Myrmecophaga tridactyla*, and giant armadillo *Priodontes giganteus*.

The park's main tourist attraction is the Canyon of Itaimbezinho, with 400-metre-high waterfalls, and tourist facilities. There is an excellent road from Pôrto Alegre to Sao Francisco (126 km), from where it is 60 km by good road to the park gates. The postal address of the park administration is: Rua Coronel Vicente, no. 421-1° andar, Porto Alegre, Rio Grande do Sul.

Araguaia

Established in 1959 and modified in 1971, Araguaia is in the central western portion of Goiás State and includes part of the 2,000,000-hectare island of Bananal, the largest fluvial island in the world. The

main park land, situated between the main stream of the Rio Araguaia and a smaller branch, is flat, composed of quaternary fluvial sediments and covered with numerous lakes and flooded plains, with gallery forest along the rivers and a large forested area at the northern end. Araguaia is in the transition zone between Amazonian forest and the savanna-like 'cerrados'.

Endangered species there include giant anteater, maned wolf *Chrysocyon brachyurus*, bush dog *Speothos venaticus*, giant otter *Pteroneura brasiliensis*, marsh deer *Blastocercus dichotomus*, pampas deer, and harpy eagle *Harpia harpyja*.

The major tourist areas are outside the park in the central and southern parts of Bananal Island. The provisional headquarters of the park is at Macaúbas, where there is an airstrip and a port for small boats. Postal address: Praça Cívica no. 10-4° andar, Goiânia, Goiás.

Brasília

Created in 1961 in the north-east part of the Federal District of Brazil, the terrain of this park is primarily smoothly rolling high plateau. Plans are under way to add 10,000 hectares in the north-east which would take in Pico do Rodeador (1341 m.), the highest point in the Federal District, and also deep valleys and many caves and waterfalls. Numerous springs that supply drinking water for the capital city are within the park. The vegetation is predominantly cerrado, with ciliary forests in the vicinity of the springs.

The fauna, which is typical of the central Brazilian plateau, includes several endangered species: giant otter, giant armadillo, maned wolf, bush dog, giant anteater, pampas deer, large-billed seedfinch *Oryzoborus crassirostris*, and lesser seed-finch *O. angolensis*.

This park is very popular both among residents of the capital, Brasília, from which it can be reached in fifteen minutes, and visitors from other parts of the country. Postal address: Caixa Postal, 2730, (12)-Brasília-DF.

Caparaó

Established in 1961 in the east of the State of Minas Gerais and the south-east of Espírito Santo, the terrain of this park is mountainous and includes the northernmost edge of the Serra do Mar range. Elevations of over 2500 metres are not uncommon, the highest point being the Pico de Bandeira (2890 m.).

The Espírito Santo part of the peak is entirely tropical rain forest thanks to the rain-bearing winds from the Atlantic, with several different vegetational levels on the west side, tropical forest up to 1800 m., low trees and associations of various smaller plants between 1800 and 2400 m., and above 2400 m. little more than bare ground between rocky outcrops.

The fauna is typical of high-altitude Atlantic coastal forest and endangered species include: buff-headed marmoset *Callithrix jacchus flaviceps*, giant armadillo, maned wolf, pampas deer and giant anteater. Tourists are few, but numbers are beginning to increase. To the east is the Rio-Bahía Highway, and to the

north the road linking Manhumirim and the state capital Vitória. Postal address: Rua Silvano Brandão s/n°, Caixa Postal no. 17. Presidente Soares, Minas Gerais.

Chapada dos Veadeiros

Created in 1961 in the centre of the State of Goiás, this park is still only in the planning stages, and the area will probably be reduced by some 170,000 hectares because of internal problems and habitat destruction by cattle ranchers. The Chapada dos Veadeiros plateau in the park is quite level and the vegetation typical of the savanna (cerrado) of central Brazil, with gallery forests and strips of dense forest in the most humid areas. *Red Data Book* species include giant armadillo, maned wolf, bush dog, giant otter, giant anteater, pampas deer, marsh deer, and dwarf tinamou *Taoniscus nanus*.

Isolated and difficult of access as it is—eleven hours by dirt road from Brasília—this park has few visitors. Postal address: Edifício do Ministério de Agricultura, Praça Cívica no. 10, 4° andar, Goiânia, Goiás.

Emas

On the border between south-eastern Goiás and eastern Mato Grosso, this park was created in 1961 and modified in 1972. The gently rolling terrain is typical of the central Brazilian plateau, the vegetation predominantly cerrado, with gallery forests along the rivers. The fauna, typical of the cerrados of central Brazil, includes several endangered species: giant armadillo, giant otter, maned wolf, giant anteater and marsh and pampas deer. Isolated and difficult to get to, there is little tourism at Emas—the choice is between a small plane from Goiânia, capital of Goiás, to Parna, or an unpaved road 650 km from Brasília via Rio Verde, Jatáí and Serranópolis. Postal address: Edifício do Ministério da Agricultura, Praça Cívica no. 10, 4° andar, Goiânia, Goiás.

Iguaçu

The highlight of this park, created in 1939 in the south-east of Paraná, near the confluence of the Rio Iguaçu and the Rio Paraná, is the mile-wide stretch of numerous, thundering waterfalls where the Rio Iguaçu drops off the steep edge of the southern Brazilian plateau—undoubtedly one of the most impressive natural scenic attractions in the Americas. It is contiguous with the Argentinian park of the same name.

The park is covered with humid subtropical forest almost as luxuriant as that of the Amazon region, and rich in tree ferns Cyatheaceae and epiphytes, with two palms, *Euterpe edulis* and *Cocos romanzoffiana*, especially abundant. Stands of Brazilian pine *Araucaria angustifolia*, associated with numerous palms and *Phoebe*, are limited to a small section in the north-east of the park.

Iguaçu is the largest forest reserve in south-east Brazil and provides protection for many animal species. The endangered ones include giant otter, La Plata otter *Lutra platensis*, giant anteater, pampas deer, solitary tinamou *Tinamus solitarius*, harpy eagle,

ornate hawk-eagle *Spizaetus ornatus*, black-fronted piping guan *Pipile jacutinga*, glaucous macaw *Anodorhynchus glaucus*, vinaceous-breasted parrot *Amazona vinacea*, and red-spectacled parrot *Amazona petrei*.

Tourists from all over the world come to Iguaçu to see the famous falls, and the park has an excellent hotel, a museum and various other facilities. In addition, there are numerous hotels and motels in the nearby town of Foz do Iguaçu and on the road between it and the park. Access is by commercial plane from São Paulo or by excellent highway from Curitiba, capital of the State of Paraná. Postal address: Parque Nacional de Iguaçu, Foz de Iguaçu, Estado do Paraná.

Itatiaia

The first of Brazil's national parks, established in 1937, Itatiaia is in the north of Rio de Janeiro State and south-east of Minas Gerais. The terrain is mountainous and includes the Serra de Mantiqueira Plateau (2200 m.), renowned for its giant boulders, mostly of volcanic origin, formed in the Jurassic. The highest point in the park is the 2787 m. Pico de Itatiaiuçu. The vegetation consists of tropical rain forest on the higher valleys, and above 1800 metres the typical sparse high-altitude flora.

The montane fauna of the Atlantic belt is well protected in Itatiaia. *Red Data Book* species include woolly spider monkey *Brachyteles arachnoides*, maned wolf, La Plata otter, giant anteater, three-toed sloth *Bradypus torquatus*, solitary tinamou, black hawk-eagle *Spizaetus tyrannus*, harpy eagle, black-fronted piping guan and red-capped parrot *Pionopsitta pileata*.

Itatiaia has many visitors, especially in holiday months (July and December to March) and at weekends. The park has sleeping facilities and there are many hotels and restaurants outside and in nearby towns. Postal address: Parque Nacional do Itatiaia, Rezende, Estado do Rio de Janeiro.

Monte Pascoal

This park in the south of Bahia State, established in 1961, takes its name from the isolated peak of Monte Pascoal (586 m.), the first land sighted in 1500 by the Portuguese mariners who discovered Brazil. Tropical rain forest covers almost the entire park, except for the eight kilometres of beach, with sandstone and conglomerate reefs, dunes, sandbanks and lakes, and some former agricultural plots that are in the process of regenerating. Shoreline vegetation is found on approximately 400 hectares. The tree called 'pau Brasil' *Caesalpinia echinata*, from which Brazil takes its name, occurs in Monte Pascoal.

The fauna is typical of the once forested southern part of Bahia, with *Red Data Book* species including woolly spider monkey, giant armadillo, giant otter, thin-spined porcupine *Chaetomys subspinus*, three-toed sloth, solitary tinamou, black and ornate hawk eagles, red-billed curassow *Crax blumenbachii*, black-footed piping



IGUACU FALLS—part of the mile-wide stretch of falls *Richard Fitter*

guan, large-billed and lesser seed-finches, and red-browed parrot *Amazona rhodocorytha*.

There is little tourism in Monte Pascoal, but it can be reached by plane—the park has two small airstrips—by road via Montinho, from which it is only 11 km—or boat from Porto Seguro to Ponta de Caraiva and Cabo de Corumbau. Postal address: Edifício Suerdick, Avenida Estado Unidos, 14-4° andar, ss/405/409, Salvador, Bahia.

Sao Joaquim

Created in 1961 in the south-east of Santa Catarina State, this park is still in the process of being established. In the future, it will be renamed Pedra Furada. It lies on the southern Brazilian plateau and every winter gets several days of snowfall, something quite unusual in tropical Brazil. The plateau is cut by numerous deep valleys in the bottoms of which are subtropical forests, with ciliary pine forests higher up. The top of the plateau is predominantly savanna. The fauna is typical of the southern plateau, mixed with forest species in the valleys. Address: Caixa Postal, 395, Florianópolis, Santa Catarina.

Serra da Bocaina

Created in 1971 in the south-east of Rio de Janeiro State and the north-east of São Paulo, this park is in the process of being established. It includes an island in the ocean, a cove and sandy and rocky beaches. In the northern part there are deep valleys that cut

into the Serra da Bocaina plateau, and a section of plateau above 1800 metres that is marked by gigantic rounded granite masses. Tropical rain forest predominates up to 1800 metres, above which it is replaced by plains and gallery forests of *Araucaria angustifolia* and *Podocarpus* species.

The fauna of the forested Atlantic slopes is protected in this park, as are species endemic to the grasslands and pine forests of the high plateau. Endangered species include woolly spider monkey, giant otter, La Plata otter, giant anteater, solitary tinamou, harpy eagle, ornate and black hawk-eagles, black-fronted piping guan and red-capped parrot.

This new park will probably become an important tourist attraction, since it is located between Brazil's two largest cities, Rio de Janeiro and São Paulo, and the new Rio-Santos highway will pass by it. Address: Delegacia Estadual do Rio de Janeiro, Alameda Sao Boaventura, 904, Fonseca-Niteroi.

Serra da Canastra

The newest park, created in 1972, this covers approximately 200,000 hectares in Minas Gerais. Within its borders are the springs that give rise to the Rio São Francisco, and the forests and high-altitude plains that provide outstanding panoramas.

Serra dos Órgãos

Created in 1939 in the centre of Rio de Janeiro State, this park takes in the rugged edge of the giant fault block of the Serra dos Órgãos massif, including the famous 'Dedo de Deus' (Finger of God). Typical Atlantic coastal forest predominates up to 1800 metres, then high-altitude forest between huge outcroppings of rock up to 2000 metres and above that mainly grass, bushes and small trees with moss and lichen-covered rocks. The endemic plant *Prepusa hookeriana*, of the gentian family, which is on the Brazilian Endangered Species List, is found here.

The park has many Atlantic coastal forest species, including woolly spider monkey, La Plata otter, three-toed sloth, solitary tinamou, ornate and black hawk-eagles, and black-fronted piping guan. Only two hours from the city of Rio de Janeiro by excellent highway, and close to the city of Teresópolis, this park is very popular and has many facilities for mountaineers and other tourists. It can also be reached via Petrópolis. Postal address: Parque Nacional da Serra dos Órgãos, Teresópolis, Rio de Janeiro.

Sete Cidades

Created in 1961, this park consists of a rolling terrain interrupted by unusual and beautiful formations of eroded Cretaceous sandstone, some of them appearing almost man-made. Savanna predominates, interrupted by gallery forests which contain Amazon palms *Mauritia vinifera*, and north-eastern palms *Copernicia cerifera*. The only reserve in this park is important for the protection of the north-eastern savanna fauna. It is probably the only area where bearded

bellbird *Procnias averano* and banded cotinga *Cotinga maculata*, two *Red Data Book* species, could be protected. Maned wolf, giant anteater, Brazilian three-banded armadillo *Tolypeutes tricinctus*, and pampas deer are also there.

Tourism is still minimal, but expected to increase. The park can be reached either from Piri-Piri via the Fortaleza-Terezina highway or via Brasília and Piracuruca. Postal address: Caixa Postal, 80, Bairro do Jóquei, Terezina, Piauí.

Sete Quedas

The major attraction in this 233-hectare park on the Rio Paraná, between Brazil and Paraguay, are the Falls of Guaira, or Seven Falls from which it takes its name. But its park status will be annulled in the near future, as the falls are to become part of a hydroelectric project. All the surrounding area has already been modified by agriculture and ranching.

Tijuca

Created in 1961 as the Rio de Janeiro National Park in south-eastern Guanabara, this park is almost entirely surrounded by the city of Rio de Janeiro and has within its boundaries the famous statue of Cristo Redentor, Christ the Redeemer. The terrain is mountainous and up to about 1500 was entirely covered by Atlantic coastal forest. Then for nearly 300 years it was used for pasture, and for coffee and sugar-cane plantations, and most of the original forest was destroyed. At the end of the 19th century, a large reforestation programme began and now self-regenerating tropical forest again covers some 95 per cent of the park.

The fauna was typical of Atlantic coastal forest, but many of the interesting species were exterminated during the 300 years of intensive use. Attempts are now being made to reintroduce some of them—see Table 3. Tijuca is also the home of the Lion Marmoset 'Bank' (IUCN Project no. 16-2 and WWF Project no. 793), a last-ditch attempt by Brazilian conservationists to save the three highly endangered forms of *Leontopithecus rosalia*—see page 437 and also *Oryx*, May 1971.

Many visitors from all over the world come to this park, most of them to see the statue and the spectacular views of Rio, Sugarloaf Mountain (Pão de Açúcar) and Guanabata Bay from the park's highest points. There are numerous restaurants and other facilities inside the park. Postal address: Parque Nacional de Tijuca, Rua Pacheco Leão, 2040, Gávea, Guanabara.

Ubajara

The smallest of Brazil's national parks, covering 5600 ha., this was created in 1959 in the north-east of Ceara State on the sandstone plateau of the Ibiapaba elevations. The terrain is rugged, with impressive limestone caves and precipices—the Ubajara Cave is a great tourist attraction. Savanna predominates on the plateau top with dense forests harbouring many Amazonian species on the steep slopes. Thorn-bush vegetation ('caatinga'), typical of Ceara State,

takes over at the base of the plateau. The fauna is still poorly known, but the transition zone between forest and 'caatinga' is certain to offer interesting research possibilities.

The park is only six km. from Frexeirinha-Araticum. Postal address: Rua Rufino de Alencar no. 134, Fortaleza, Ceará, Brazil.

FEDERAL BIOLOGICAL RESERVES

Brazil's five Federal Biological Reserves are protected areas roughly equivalent to National Parks. They are Cara-Cará, Córrego do Veado, Nove Lombardia, Serra Negra and Sooretama.

Cara-Cará

Comprising some 70,000 hectares on the Bolivian frontier, right in the swampland ('pantanal') of the Mato Grosso, the fauna of this reserve has not yet been studied, but it is known to contain maned wolf, giant and La Plata otters, bush dog, giant armadillo, giant anteater, marsh and pampas deer.

Córrego Do Veado

Covering roughly 2400 hectares, this reserve protects the fauna of the low-altitude coastal region of northern Espírito Santo. Many endangered species find refuge there from the drastic environmental alterations that are going on in this part of Brazil: three-toed sloth, giant anteater, giant otter, three-spined porcupine, solitary tinamou, harpy eagle, red-billed curassow, black-fronted piping guan, racket-tailed coquette *Discosura longicauda*, banded cotinga, white-winged cotinga *Xipholaena atropurpurea*, and large-billed and lesser seed-finches. This reserve also has one of the rarest humming-birds in the world *Ramphodon dohrni*, and species of the unusual invertebrate genus *Peripatus*, of the primitive arthropod class Onychophora.

Nova Lombardia

Covering some 4350 hectares in the mountainous Atlantic coastal region of Espírito Santo, this reserve and the Caparáo National Park are the only remaining relatively untouched areas in that part of the State. *Red Data Book* species include woolly spider monkey, thin-spined porcupine, buff-headed marmoset, red-capped parrot, racket-tailed coquette *Colibri delphinae grunwalti*, hooded visor-bearer *Augastes lumachelus*, large-billed and lesser seed-finches, solitary tinamou and black-fronted piping guan.

Serra Negra

This mountainous, forested 'oasis' of 1100 hectares in the thorn-bush 'caatinga' in Pernambuco State, has not yet been studied zoologically or botanically, but a programme with Recife University to investigate the area is now under way.

Sooretama

The purpose of this reserve, covering some 24,000 hectares in the north of Espírito Santo, is to protect the fauna of the once heavy forests of this area. Endangered species represented there include

Table 1
National Parks

	Size proposed in original act	Effective size 1972	Additions planned
1. Aparados da Serra	13,000 ha	3,550 ha	10,250 ha
2. Araguaia	2,000,000	3,000	460,000
3. Brasília	30,000	28,000	38,000
4. Caparaó	*	5,000	10,434
5. Chapada dos Veadeiros	625,000	**	171,924
6. Emas	*	79,000	100,000
7. Iguaçu	*	134,000	170,000
8. Itatiaia	12,000	10,000	11,943
9. Monte Pascoal	22,500	22,500	22,500
10. São Joaquim†	49,300	**	18,000
11. Serra da Bocaina	140,000	**	100,000
12. Serra da Canastra†	200,000	**	200,000
13. Serra dos Órgãos	*	5,000	10,000
14. Sete Cidades	7,700	5,051	6,221
15. Sete Quedas†	*	233	***
16. Tijuca	*	2,700	3,300
17. Ubajara†	4,000	64	563

† Not in the UN List of National Parks and Equivalent Reserves 1973

*—not in original act **—not yet in effect ***—to be annulled

giant anteater, three-toed sloth, giant armadillo, giant otter, thin-spined porcupine, solitary tinamou, harpy eagle, black hawk-eagle, red-billed curassow, black-fronted piping guan, racket-tailed coquette, banded and white-winged cotingas, and large-billed and lesser seed-finches.

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Table 2
Endangered Animal Species in Brazil

Mammals	Portuguese Name	English Names
<i>Brachyteles arachnoides</i>	Mono, muriqui	Woolly spider-monkey
<i>Cacajao calvus</i>	Uacari-branco	Red uakari
<i>Cacajao melanocephalus</i>	Uacari-de-cabeça-preta	Black-headed uakari
<i>Chiropotes albinasus</i>	Cuxiu-de-nariz-branco	White-nosed saki
<i>Callimico goeldii</i>	Calimico	Goeldi's monkey
<i>Leontopithecus rosalia rosalia</i>	Mico-leão	Golden lion marmoset
<i>Leontopithecus r. chrysomelas</i>	Mico-leão-de-cara-dourada	Golden-headed tamarin
<i>Leontopithecus r. chrysoopygus</i>	Mico-leão-prêto	Golden-rumped tamarin
<i>Chrysocyon brachyurus</i>	Guará, lobo	Maned wolf
<i>Pteronura brasiliensis</i>	Airanha	Giant Brazilian otter
<i>Lutra platensis</i>	Loutra	La Plata otter
<i>Speothos venaticus</i>	Cachorro-do-mato-vinagre	Bush dog
<i>Atelocynus microtis</i>	Cachorro-do-mato-de-orelha-curta	Small-eared fox
<i>Priodontes giganteus</i>	Tatu-canastra	Giant armadillo
<i>Mymecophaga tridactyla</i>	Tamanduá-bandeira	Giant anteater
<i>Bradypus torquatus</i>	Preguiça-de-coleira	Three-toed sloth
<i>Trichechus inunguis</i>	Peixe-boi	Manatee
<i>Blastocercus dichotomus</i>	Cervo	Marsh deer
<i>Ozotocercus bezoarticus</i>	Veado-campeiro	Pampas deer

List prepared by Dr José Candido de Melo Carvalho for the Fundação Brasileira para a Conservação da Natureza 1968.

Birds			
<i>Tinamus solitarius</i>	Macuco	Solitary tinamou	
<i>Tamiascus nanus</i>	Codorna-buraqueira	Dwarf tinamou	
<i>Mergus octosetaceus</i>	Mergulhador, patão	Brazilian merganser	
<i>Harpia harpyja</i>	Harpia, gayiã-real	Harpy eagle	
<i>Spizaetus ornatus</i>	Gaviao-de-penacho, apacaninim	Ornate hawk eagle	
<i>Spizaetus tyrannus</i>	Gaviao-pega-macaco	Black hawk eagle	
<i>Cyx blumenbachii</i>	Mutum	Red-billed curassow	
<i>Pipile jacutinga</i>	Jacutinga	Black-fronted piping guan	
<i>Anodorhynchus glaucus</i>	Arara-azul-pequena	Glaucous macaw	
<i>Anodorhynchus leari</i>	Arara-azul-pequena	Indigo macaw	
<i>Pyrrhura cruentata</i>	Tiriba, fura-mato	Ochre marked parakeet	
<i>Amazona vinacea</i>	Papagaio-de-peito-roxo	Vinaceous-breasted parrot	
<i>Amazona rhodocorytha</i>	Chauá acumatanga	Blue-cheeked parrot	
<i>Amazona pretrei</i>	Chorao	Red-spectacled parrot	
<i>Pionopsitta pileata</i>	Cuiu-cuiu	Red-capped parrot	
<i>Ramphodon dohrni</i>	Beija-flor-de-Dohrn	Hook-billed hermit	
<i>Colibri delphinae greenwalti</i>	Beija-flor-de-orelha-azul	Brown violetear	
<i>Discosura longicauda</i>	Beija-flor-de-rabo-redondo	Racket-tailed coquette	
<i>Augastes lumachellus</i>	Beija-flor	Hooded visorbearer	
<i>Procnias averano</i>	Araponga-do-nordeste	Bearded bell-bird	
<i>Cotinga maculata</i>	Crejôa	Banded cotinga	
<i>Xipholena atropurpurea</i>	Cotinga	White-winged cotinga	
<i>Oryzoborus crassirostris</i>	Bicudo	Large-billed seed finch	
<i>Oryzoborus angolensis</i>	Curio, avinhado	Lesser seed finch	
Reptiles			
<i>Dermochelys coriacea</i>	Tartaruga-de-couro	Leathery turtle	
<i>Eretmochelys imbricata</i>	Tartaruga-de-pente	Hawksbill turtle	

Table 3

Reintroductions in Tijuca National Park

Mammals

<i>Leontopithecus r. rosalia*</i>	to be reintroduced
<i>Brachyteles arachnoides*</i>	to be reintroduced
<i>Tamandua t. tetradactyla</i>	1 male, 1 female
<i>Bradypus infuscatus</i>	
<i>brasiliensis</i>	2 males, 3 females
<i>Bradypus torquatus*</i>	2 males, 1 female, 1 juvenile
<i>Dasypus n. novemcinctus</i>	1 juvenile
<i>Tayassu t. tajacu</i>	to be reintroduced
<i>Mazama americana jucunda</i>	to be reintroduced
<i>Sciurus aestuans ingrami</i>	exists in park (1 male, 1 female) added to population
<i>Dasyprocta a. aguti</i>	more to be introduced
<i>Agouti p. paca</i>	more to be introduced

Birds

<i>Tinamus s. solitarius*</i>	to be reintroduced
<i>Crypturellus soui albigularis</i>	to be reintroduced
<i>Crypturellus n. noctivagus</i>	to be reintroduced
<i>Crypturellus t. tataupa</i>	exists; 16 specimens to be added
<i>Penelope superciliaris</i>	
<i>jacupemba</i>	exists; 2 specimens to be added
<i>Pipile jacutinga*</i>	to be reintroduced
<i>Odontophorus c. capueira</i>	8 specimens
<i>Leptotila rufaxila reichenbachii</i>	exists; 2 specimens to be added
<i>Geotrygon m. montana</i>	exists; more to be introduced
<i>Pyrhura cruentata*</i>	66 specimens
<i>Pyrhura f. frontalis</i>	42 specimens
<i>Pyrhura l. leucotis</i>	95 specimens
<i>Brotogeris tirica</i>	exists; 3 specimens to be added
<i>Touit melanonota</i>	exists; more to be introduced
<i>Pionopsitta pileata*</i>	to be introduced
<i>Piaya cayana macroura</i>	to be reintroduced
<i>Ramphastus vitellinus ariel</i>	46 specimens
<i>Pteroglossus aracari wiedi</i>	to be reintroduced
<i>Selenidera m. maculirostris</i>	exists; more to be introduced
<i>Baillonius bailloni</i>	26 specimens
<i>Melanerpes flavifrons</i>	3 specimens
<i>Cacicus haemorrhous affinis</i>	39 specimens
<i>Icterus cayanensis tibialis</i>	24 specimens
<i>Saltator s. similis</i>	50 specimens

* Species in danger of extinction.

Reintroductions were made in 1970 and 1971. Almost all the reintroduced animals were confiscated from pet dealers or removed from areas where habitat destruction was under way. This list is from Coimbra-Filho and Aldrichi, 1971.