

TOUCAN PROJECT

(Field research on Red Breasted Toucan - *Ramphastus dicolorus*)

SANTA CATARINA, BRAZIL

2009

Auspices & co-operation:

EKKO BRASIL & ECOVOLUNTEER PROGRAM

You can freely download this project file and files on other projects from the homepage for this project within the Ecovolunteer website: <http://www.ecovolunteer.org/> (or from the national ecovolunteer domains).

As it is necessary for participants in this project to be able to communicate in English (or Portuguese), this text is provided only in English.

The text of this brochure is developed in cooperation with the project staff. Annually, under the supervision of the staff the text is updated. Nevertheless you may experience some changes in the field compared to the brochure text. It is inherent to wildlife research programs that during operations incidental changes are necessary because of unexpected results such as weather conditions, wildlife and behaviour. Be prepared for such changes. (Last update November 2008)

1 PREFACE

This project offers you a unique opportunity to work with the one of the most charming Brazilian birds, the toucan. It's a bird easy to spot due to its colours and strong voice. It is not a shy species and it can be easily seen at the field. The Toucan Project started in 2005, which means that you will be also looking for description of the environment and helping to set some important steps for the research.

When you participate in this project, you support the protection of these birds with your time, your energy and your donation. You will be working in their natural environment in the company of a specialized coordinator who will tell you everything there is to know about these beautiful animals.

During your stay at the project, you will be working in different study areas, from coast to highlands. Some of the areas are located along the coastal region of the state, particularly at Santa Catarina Island (Florianópolis). Another one, for example, is located along the Cubatão River in the Natural Park "Parque Estadual da Sertra do Tabuleiro", the biggest and most beautiful park of Santa Catarina State.

The main base is an old mill. The accommodation house is attached to the old mill and specially adapted to accommodate researchers and ecovolunteers. Florianópolis is the capital of the State of Santa Catarina and is well known for its natural beauties (42 wonderful beaches), surfing, sailing and scuba diving.

The field work is based on the study of toucan populations from the coast to the highlands of Santa Catarina state. The research focuses on the conservation of toucans by increasing the knowledge of their ecology. Furthermore, the research tries to establish possible differences between populations in the different study areas.

There is a wide range of activities including analysis of toucan frequency in the area, mapping and monitoring of nests, ethological studies and food habits. The work is done mainly in the field. However you can expect some lab and data analysis. If you are or were a student in the field of environmental sciences you can also participate on numerical analysis of the data. Your experience, whatever it is, it will be very welcome and appreciated.



2 CONTENTS

1	Preface.....	2
2	Contents.....	4
3	Red-breasted toucan.....	6
4	The Coastal and Highlands Studies Areas.....	7
5	Toucan Project and the ecological approach	8
6	How you can help	9
7	Your participation climate neutral.....	10
8	Practical travel information	11
	8.1 Period.....	11
	8.2 Prices.....	11
	8.3 Participants.....	11
	8.4 Included in the price	11
	8.5 Not included in the price.....	12
	8.6 Flights.....	12
	8.7 Insurances.....	13
	8.8 Conditions for participation	13

8.9 Money.....13

9 Advice on personal travelling necessities..... 14

10 Practical tips 16

10.1 Climate in the highlands 16

10.2 Climate in the coastal area 16

10.3 Electricity 16

10.4 Special days 16

10.5 Inoculations..... 17

10.6 Money..... 17

10.7 Passport and visa 17

10.8 Prices..... 17

10.9 Language 18

10.10 Telephone 18

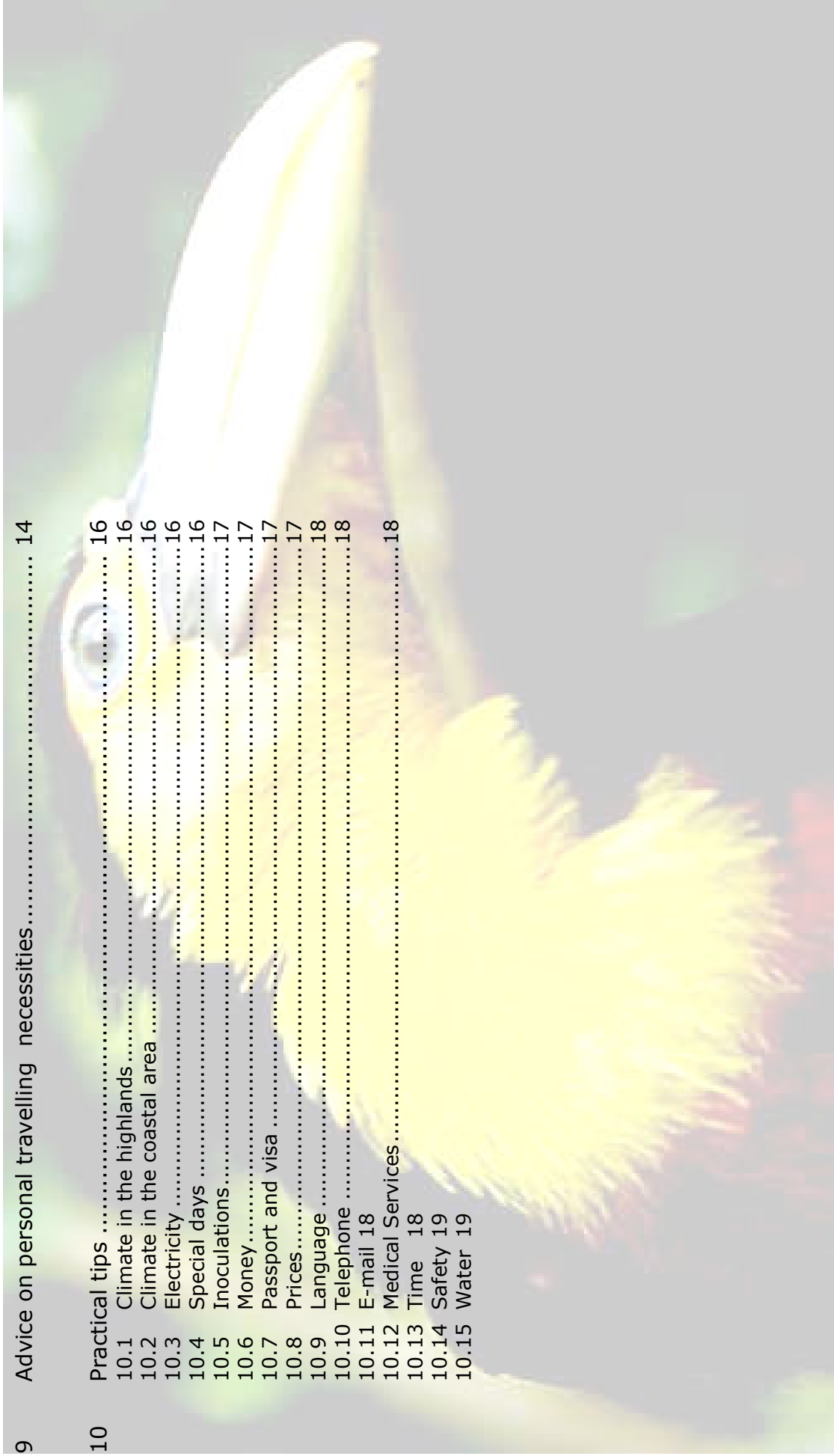
10.11 E-mail 18

10.12 Medical Services..... 18

10.13 Time 18

10.14 Safety 19

10.15 Water 19



3 RED-BREADED TOUCAN

The Red-breasted Toucan (*Ramphastus dicolorus*) belongs to the same family as the black-necked (araçaris) and spot-billed toucanet (saripocas). It is a forest bird that eats fruit and has a nervous temperament (always in movement). It has a huge green toothed bill, measuring up to 15 – 20 cm out of a total length of 48 cm. Its chest has a golden-yellow collar followed by vivid red. The wings are intense black. These combinations of colours make this species one of the most exuberant collared of all birds.

Toucans are still hunted because of their magnificence feathers and also for selling alive. However, the impact of hunting is small compared to the negative effects caused by pollution and destruction of the Atlantic Forest, their natural habitat. These factors limit the availability of food items, as they disturb the food-chain and reduce areas for the animal.

Some other species that can be found within the study areas are: Azure Jay (*Cyanocorax caeruleous*), Wood-peckers, Wild cats, Crab-eating fox (*Cerdocyon thous*), King Vulture (*Sarcorampus papa*), Brown Tinamou (*Crypturellus obsoletus*), and Crested Bobwhite (*Colinus cristatus*), River Otters (*Lontra longicaudis*), among many others.

4 THE COASTAL AND HIGHLANDS STUDIES AREAS

The research work is done between two main geographic features of the Santa Catarina State, the highlands and the coastal area. The whole area includes one of the most endangered biomes in Brazil, the Atlantic Forest. This biome is well known by its high biodiversity.

The accommodation base is located right at the coastal area of the state, at its capital, Florianópolis. This base has been used for the River Otter Project since 1986, in the south of Santa Catarina Island. It is also located within a Park, surrounded by Atlantic Forest and coastal dunes vegetation. From this base you will be doing several trips to other coastal areas and to the highlands to the state.

The Atlantic Forest include species of trees such as Cedro (*Cedrela fissilis*), Guamirim (*Eugenia ramboi*), Canjerana (*Cabraela canjerana*), and several types of Canela and the Brazilian Pine, *Araucaria angustifolia*, in danger of extinction.

The Atlantic Forest a home also for many animals like the Crab-eating fox (*Cerdocyon thous*) and the Pampas fox (*Pseudalopex gymnocercus*), Ring-tailed coatis (*Nasua nasua*), different kinds of wild cats, and birds like the Azure Jay (*Cyanocorax caeruleus*) and the King Vulture (*Sarcorhampus pampa*), and the focus of this research, the Red-breasted toucan.

5 TOUCAN PROJECT AND THE ECOLOGICAL APPROACH

At the toucan project we look at different things in order to help to protect this animal. Our main focus is on the toucan, but we believe that in order to protect the species, there is a need to do something with the habitat where it lives. Therefore, other information about the area and other species are also important.

For example, the presence of the Atlantic Forest is of fundamental importance as it is one of the most important biomes in the state of Santa Catarina. In the past, the Atlantic Forest covered about 15% of the Brazilian territory. Nowadays the best estimates indicate that only 2 to 5% still remain, and that is the reason why this ecosystem is considered the second most endangered in the world.

The research team, coordinated by Dr. O. Carvalho Junior, believes that the toucan population is spatially organized as metapopulation. This means that there are several sub-populations which need to interact with each other in order to keep the meta-population viable. This is an important point of view due to the influence it can have to environmental management, especially with planning and management of conservation areas. This is the main reason why the study area is embraced by the coast and the cliffs of the highlands. The data collected are used to run some metapopulation models such as Ramas Ecolab, used to forecast possible extinction of the species.

6 HOW YOU CAN HELP

Toucan Project is not a tourist program. It is a project that is in need of ecovolunteers who want to participate in the research and conservation activities. The research project is coordinated by Dr. Carvalho Junior with assistance from a research/field team.

You should realize that you are participating in an ecovolunteer project, not a holiday trip. The needs of the project will decide what has to be done and when it has to be done. A weekly schedule, monthly defined shows you in advance what has to be done. Bear in mind that the research is at the beginning and might need some adjustments while you are there. We are sure you can help with ideas, even if your background has nothing to do with ecology or birds. You can be sure that there will also be enough time for entertainment and relaxation.

You will be lodged at the accommodation house at the project base of Ecological Station of Piri, but camping's and alternative accommodations should be expected during the field trips. The accommodation house offers comfortable rooms and shower facilities. Breakfast and dinner are provided and included in the accommodation cost. On Saturday and Sunday, breakfast and dinner are not provided. Small markets can be found around the base at walking distance. During working hours you will be supervised by the project team. From the main base you can easily get to the historic town of Florianopolis or fishermen villages around where craft shops and entertainment are in great number.

You can expect good and friendly supervision and cooperation from your local colleagues. The atmosphere is informal and the Brazilian 'relax & swing' attitude sets the tone. The Toucan Project is designed to integrate participants in a friendly and productive atmosphere. Activities vary and may include analysis of toucan frequency at different locations, looking and monitoring of nests, ethological studies and study of eating habits. The work is done mainly in the field but some laboratory and computer analysis might be involved.

7 YOUR PARTICIPATION CLIMATE NEUTRAL

This The Ecovolunteer Program aims to offset all carbon dioxide emissions caused by your participation in the project. For this we cooperate with the Trees for Travel Foundation.



The Trees for Travel Foundation finances the planting, regeneration and maintenance of forests that will lock up greenhouse gases. The Foundation does her work in collaboration with local people and organisations to not only create a greener planet but also to fight against poverty. So we keep the greenhouse effect in check by contributing a modest amount to Trees for Travel to compensate your greenhouse gas emissions while participating in the Ecovolunteer project. Thus you help to make the world a better place at the same time.

The cost for climate compensation is not added to the price you pay, but is fully covered by the Ecovolunteer Program.

Please note that we only care for making your participation in the project climate neutral. Your travelling from your home to the project is not included. We recommend that you yourself will make your travels climate neutral as well. You could ask your travel agent or your airline to do so, or you can arrange that directly yourself through:

Trees for Travel Foundation: Website: <http://www.treesfortravel.info> Mail: info@treesfortravel.nl

8 PRACTICAL TRAVEL INFORMATION

8.1 Period

Participation is possible all year long, from January to December.

You can register for a period of a minimum of two or more weeks. Please enter your preferred starting date on the application form.

8.2 Prices

As specified on the ecovolunteer website <http://www.ecovolunteer.org/> or your national ecovolunteer domain (check <http://www.ecovolunteer.org/contact.html>).

8.3 Participants

A maximum of 4 participants per week is allowed to participate.

8.4 Included in the price

- Supervision by qualified Brazilian and one European staff member;
- Transfers in accordance with the program from local bus station and airport to and from the project base;
- Shared accommodation at the base;
- Breakfast and dinner at workdays when at the main base;
- Advice on personal travelling necessities and literature;

- Advice on rules of conduct;
 - Use of washing machine to wash clothes
 - Travels within the study areas, from Santa Catarina Island to the Highlands
- 8.5 Not included in the price**
- Airport taxes and excess luggage charges;
 - Cancellation insurance, travel insurance, luggage and accident insurance (see below);
 - Personal trips during your time off or during your stay at the station (public transport);
 - Lunches; and at Saturdays and Sundays also breakfast and diner;
 - Food while travelling or in between field work when away from the main base
 - Personal expenses such as souvenirs, drinks, entrance fees, and medicines;
 - Breakfast and dinner when away of the main base or travelling with the staff.

8.6 Flights

You will have to make your own flight arrangements. We advise you not to make reservations before your participation in the project has been confirmed. The project cannot do refunds of payments. Of course you can also plan your stay at this project as part of a longer trip.

You can fly directly to Florianópolis, Santa Catarina, Brazil or travel overland to Florianópolis by bus, for example via Rio de Janeiro (your booking office will inform you about these transfers). From Florianópolis you will be travelling to other study areas with the research staff.

8.7 Insurances

You are required to carry both travel insurance and cancellation insurance. The travel insurance should cover for full medical costs. The Ecovolunteer Program, the Toucan Project and your booking office, their officers and employees, the research station or their employees will not accept any liabilities that could have been covered by travel insurance or cancellation insurance.

8.8 Conditions for participation

This project is suitable for everyone in good physical health; walking and kayaking is part of the day by day activities. In a few study areas it is easier to spot toucans from the water, therefore also kayaking may be part of your activities. You must be able to take the heat (during the southern summer) and cold (during southern winter), and you must speak English or Spanish or Portuguese. Not all your Brazilian colleagues speak fluent English and it is important that you are patient and understanding. You must be 18 years or older and you must be committed to nature and animal protection, but you should also enjoy working with other people. If you have problems with hearing, walking or breathing, or if you are overweight, you may experience problems during this project.

8.9 Money

It is recommended that you change some money at the airport. Generally speaking, US dollars 100 should be enough for a start. Later, you will be able to exchange more if you want to.

9 ADVICE ON PERSONAL TRAVELLING NECESSITIES

You do not need a special outfit for Brazil. We advise you to bring airy cotton clothing and during the southern winter season (that is during the northern hemisphere summertime) you should bring a warm coat, as the evenings can be fairly cold (sometimes 5 degrees Celsius).

Below you will find a list of items we recommend you to bring:

- valid passport
- printout of this information brochure
- pocket money, money belt
- small rucksack
- sunglasses, hat or cap
- sunscreen lotion
- swimsuit
- clothing (long trousers that dry quickly, shorts, T-shirts & shirts with long sleeves, sweatshirt)
- strong, dark and warm clothes (during winter)
- waterproof jacket
- comfortable shoes (for instance, sandals)
- walking shoes

- spare glasses for those who wear them
- personal first aid kit
- insect repellent
- comfortable shoes for daytime and spare time
- personal items
- flashlight (with spare batteries)
- light summer sleeping-bag, camping mattress
- watch, preferably with luminous dial
- plastic/waterproof bags to protect your luggage
- camera (with a zip bag or water proof bag)
- binoculars

Remember to start enjoying your travels before you leave: consult a good travel guide on your destination, as it is important to be well-informed about the political, social and cultural backgrounds of the country you are going to visit. Check a bookshop and/or the Internet: several good travel guides are available.

10 PRACTICAL TIPS

10.1 Climate in the highlands

In the highlands you find a fresh summer with average temperature of 17.7 degrees Celsius and cold winter with temperatures below 10 degrees Celsius in some days. The altitude can vary from 400 to 1000 meters above sea level.

10.2 Climate in the coastal area

Santa Catarina Island has a mild weather through the year. During winter you can expect temperatures normally between 15 and 20 degrees Celsius. During summer temperatures may rise to 30 degrees Celsius or more.

10.3 Electricity

The voltage in Santa Catarina State is 220 volts.

10.4 Special days

1 January: New Year

6 January: Epiphany

February: Carnival (date varies)

12 October: Our Lady of Aparecida Day

2 November: All Souls' Day

15 November: Proclamation of the Republic

25 December: Christmas

10.5 Inoculations

Usually recommended are DTP (diphtheria, tetanus, and polio), gamma-globulin or Havrix and typhoid tablets. Always check with appropriate health authorities in your home country for updated information.

10.6 Money

The monetary unit of Brazil is the real, R\$. One Real equals 100 centavos. In October 2007, One US dollar is approximately R\$ 1.80 and one Euro is approximately R\$ 2.57; check with an on-line currency converter for the present rates.

Credit cards and traveller cheques are normally accepted. Opening hours Shops, Mon-Fri: 08.00-18.00 or 19.00, Sat: 08.00-12.00. Some shops close during lunch time. Shopping centres close late.

Banks are open from Monday to Friday: 10.00-16.00 hrs.

10.7 Passport and visa

Citizens of most countries do not require a visa (USA and Canada are notable exceptions) but we advise you to check this with your booking agency or the Brazilian Embassy in your home country. You should bring enough money to finance your stay and have the ticket for your return trip. If you are from Canada or USA, please do all your VISA arrangements in advance and if you need some letter from the project saying why you are coming to Brazil you can ask at the Ecovolunteer Program that will contact the Project staff.

10.8 Prices

Excluding the expensive big cities (Rio de Janeiro, São Paulo, Salvador), the prices of goods in Brazil are relatively cheap and you can get almost anything you need.

10.9 Language

The official language is Portuguese but the Brazilian pronunciation differs from English on some points: instead of 'r', Brazilians say 'h' and their use of words is very different from that of the European Portuguese. If you want to study Portuguese before you visit Brazil, it is advised that you consult a 'Brazilian' tutor.

10.10 Telephone

Many public phones operate on special cards that you buy at newspaper stands, post offices or pharmacies.

10.11 E-mail

Internet, 24 hours connected, is available for free at the main base.

10.12 Medical Services

A medical centre with nurses and doctors is located in the village at 1.6 km from our base at Santa Catarina Island.

A University hospital is located as 15 km from our base at Santa Catarina Island; it is a government hospital and it is up to international standard.

Both the medical centre and the university hospital are free of charge.

A variety of good private hospitals is located within a range of 40 kilometres / 30 minutes, providing up-to-international standard service ranging from first aid up to heart-clinic, facilities for diabetes patients, and surgery. Most private hospitals accept patients covered by international insurance companies.

10.13 Time

Brazilian time at the project location is generally three hours earlier than Central European Time.

10.14 Safety

At the project base you do not have to worry about your personal safety when you go out. Of course, you should always be alert - the project is not liable for anything lost or stolen. There are no special safety boxes available at the project base.

10.15 Water

The water at the bases is of excellent quality. Do NOT use tap-water outside the bases. Do not eat raw meat, chicken, fish or shellfish on your own. Raw vegetables are produced organically at the base or from local farms. The tap-water in the cities is NOT trustworthy.

