

Fundación Natura Bolivia Internship Program provides a unique opportunity to gain valuable professional experience working with rural communities in a developing country. This hands-on program is designed to develop skills and strengthen their understanding on natural resources conservation and sustainable development projects.

#### What projects are available to work on?

In 2011, Natura is offering internships to work on one of the following projects. For the full descriptions please see the project descriptions below.

- **Project 1. Estimating the volume of carbon in the Rio Grande–Valles Cruceños protected area**  
Research question: How many tons of carbon, per forest type, exist in the Rio Grande–Valles Cruceños protected area?
- **Project 2. Designing a carbon neutral project in a poor country such as Bolivia**  
Research question: What is the potential for a company operating in Bolivia to develop a “Carbon neutral” business model?
- **Project 3: Evaluating the potential to produce biofuels in the Valles Cruceños**  
Research question: Is it socially and economically possible to develop a program for sustainable production of biofuels in the Valles Cruceños?
- **Project 4: Developing a business plan for the Rio Grande Canyon tourism attraction in the Río Grande-Valles Cruceños Protected Area**  
Research question: What is the potential for tourism in the Río Grande Canyon sector of the Río Grande -Valles Cruceños Reserve?

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conservación de sus **bosques**



- **Project 5: Developing a business plan for sustainable use of the endemic Sunkha Palm in the Río Grande-Valles Cruceños Protected Area**

Research question: What is the potential for sustainable management of the Palma de Sunkha, and economically viable marketing of handicrafts and other products?

- **Project 6: Developing a business plan for the sustainable production of honey and its derivatives in Los Negros**

Research question: What is the potential for sustainable production of honey in the area of Los Negros, and the economically viable marketing of honey products in the local and international market?

Natura will seek to match student interests to project needs, but depending on demand students seeking acceptance may need to be flexible. You will have the opportunity to indicate your preferences on the application form, which can be downloaded.

#### **How does the application process work?**

The application process is competitive and only five students will be selected in 2010.

Interested students should send their completed application form, cover letter and curriculum vitae to [joseluisizursa@naturabolivia.org](mailto:joseluisizursa@naturabolivia.org) by February 28, 2011. On the basis of these documents, students will be selected for oral interviews in Spanish, and successful applicants will be notified by March 11, 2010.

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## Project descriptions

### Project 1. Estimating the volume of carbon in the Rio Grande–Valles Cruceños protected area

**Research question:** How many tons of carbon, per forest type, exist in the Rio Grande–Valles Cruceños protected area?



#### Description

Deforestation in lowland Bolivia, including the newly created Cruceño Valleys Biosphere Reserve (734,000 ha), is continuing and increasing, for one basic reason: it is in the economic interest of most forest owners to mine their resource and to cut down the trees to increase their croplands. It will result in alternating flooding and water shortage in the Rio Grande watershed, which in turn contribute to and exacerbate regional and global climate change and cause loss of resources in eastern Bolivia.

This research project will estimate the carbon volumes in the protected area, which will allow Natura and partners to establish a baseline for the possible development of a REDD project in the Rio Grande–Valles Cruceños protected area. The study will involve GIS work, field trips and statistical estimates of the carbon volumes per forest type. This internship will require a revision of the different methodologies for the estimation of carbon volumes in tropical forests, as well as basic knowledge of tropical forest ecology.

The student will need to spend time in the field, measuring trees and estimating the carbon volumes within the different ecosystems in the protected area. The student will also need to interact with local communities and actors. The study will be undertaken with the assistance of local students, and equipment and vehicles for the field trips will be provided.

#### Qualifications

Forest or natural science students, with a minimum knowledge of ecology and techniques for measuring carbon stock in tropical forests would be ideal for this internship. The student must also have GIS and statistics capabilities, and be comfortable in written and spoken Spanish.



## Project 2: Designing a carbon neutral project in a poor country such as Bolivia

**Research question:** What is the potential for a company operating in Bolivia to develop a “Carbon neutral” business model?

### Description

Carbon neutrality, or having a net zero carbon footprint, refers to achieving net zero carbon emissions by balancing a measured amount of carbon released with an equivalent amount sequestered or offset.

Counting and analyzing the emissions that need to be eliminated, and the options for doing so, is the most crucial step in the cycle as it enables setting the priorities for action – from the products purchased to energy use and transport – and to start monitoring progress.

This can be achieved through an inventory that aims at answering questions such as:

- Which operations, activities, units should be included?
- Which sources should be included (direct and indirect emissions)?
- Who is responsible for which emissions?

The selected student will work with a 5 star hotel in the city of Santa Cruz, eastern Bolivia to help the hotel develop its carbon-neutral strategy. Prior literature reviews, web searches and perhaps even phone interviews with similar businesses in other countries will likely make the Bolivia-based research more productive. This five star hotel is already helping conservation effort in joint project with Foundation Natura.

### Qualifications

Candidates for this internship should have a background in environmental science or environmental economics with a solid understanding of carbon sequestration and international carbon policies. The student must be comfortable in spoken and written Spanish.



## Project 3: Evaluating the potential to produce biofuels in the Valles Cruceños

**Research question:** Is it socially and economically possible to develop a program for sustainable production of biofuels in the Valles Cruceños?



### Description

Biofuels represent a new priority among the efforts being made globally to reduce dependency on fossil fuels, reduce CO<sub>2</sub> emissions and as an opportunity to improve the agricultural economy in developing countries.

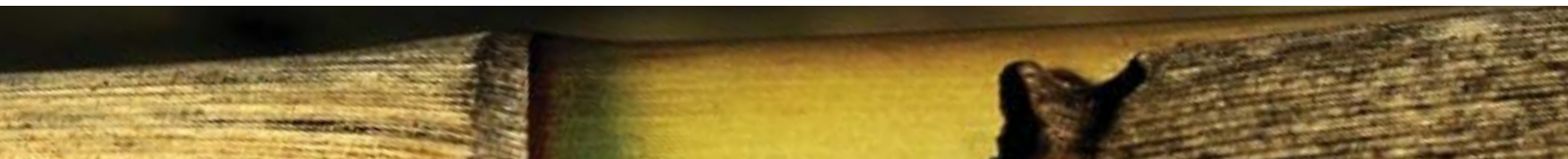
While the shift towards the use of renewable energy sources like biofuels (with lower emissions level than fossil fuels) is a major priority, there are a number of considerations to be taken into account.

Among these considerations, the decrease in carbon emissions during biofuel production (or energy crops) will depend greatly on where and how they are produced, because during its production may compromise the integrity of forests, savannas and grasslands as well as areas devoted to food production.

Natura has started a preliminary study to assess the possibility of producing biofuels in the Valles Cruceños, identifying which species are adapted ecologically to the area and mapping the areas where the crop could be produced. However we now need a second part, to evaluate if the production of these identified agrofuels is economically and socially possible. The intern will have to perform economical analysis and talk to potential producers in the communities to have a sense of people's predisposition to produce these crops.

### Qualifications

The student should have a background in economics and be fully capable of realizing a financial analysis and understand how to produce a business plan. He/she has to be very interested in working in the field and talking to people in the communities. The student must be comfortable in spoken and written Spanish.



## Project 4: Developing a business plan for the Rio Grande Canyon tourism attraction in the Río Grande-Valles Cruceños Protected Area

**Research question:** What is the potential for tourism in the Río Grande Canyon sector of the Río Grande - Valles Cruceños Reserve?



### Description

To the east of Bolivia, within the Santa Cruz department, the departmental government has created a new 734,000 ha protected area; the Río Grande-Valles Cruceños reserve. The reserve appears to have significant potential for ecotourism given its numerous attractions, including pristine landscapes and a rich biodiversity including an endemic charismatic bird species, the red-fronted macaw (*Ara rubrogenys*). Cultural attractions include the El Fuerte UNESCO World Heritage Site and the sites of Che Guevara's last revolution.

Together with the departmental government, Natura is working to establish sustainable financial mechanisms to support the protection of the reserve and generate income for local communities through payments for environmental services schemes, of which tourism is one of a number of options, along with carbon payments, hydrological services and biodiversity conservation. Within this context Natura is looking to develop a business plan to explore the potential for tourism in one of the attraction points in the reserve, the Rio Grande Canyons, a popular fishing and camping site.

The internship will require a literary review of the global tourism market and its growth, focusing on alternative tourism offerings linked to one natural attraction. The student will need to visit the site, identify the activities with investment potential, analyze the existing tourism market and competition, recommend the best way to package the products selected, and realize a financial analysis with different rates of return. Natura will expect the business plan to contain at least the following elements: executive summary, market analysis, description of the tourism offering, competition, marketing methods, financial analysis and all relevant annexes.

### Qualifications

The student should be capable of realizing a financial analysis and understand how to produce a business plan. He or she should preferably have knowledge of NGO operations and the difference between them and the private sector, and be willing and able to spend a significant part of his or her time in the field where the infrastructure may be very basic. The student must be capable in the use of Excel spreadsheets and be able to seek and analyze statistical data about the world tourism market. The project may be particularly suited to business administration or public policy students with knowledge and interest in the financial sustainability of this new protected area. The student must be comfortable in spoken and written Spanish.



## Project 5: Developing a business plan for sustainable use of the endemic Sunkha Palm in the Río Grande-Valles Cruceños Protected Area

**Research question:** What is the potential for sustainable management of the Palma de Sunkha, and economically viable marketing of handicrafts and other products?

### Description

To the east of Bolivia, within the Santa Cruz department, the departmental government has created a new 734,000 ha protected area; the Río Grande-Valles Cruceños reserve. Together with the departmental government, Natura is working to establish sustainable financial mechanisms to support the protection of the reserve and generate income for local communities through payments for environmental services schemes and sustainable management of timber and non-timber forest products.

Palma de Sunkha (*Parajubaea sunkha*) is a species of palm in the Arecaceae family that is endemic to the Río Grande-Valles Cruceños reserve. Its natural habitats are subtropical or tropical dry forests, dry savanna, subtropical or tropical dry lowland grassland, arable land, and heavily degraded former forest. It is threatened by habitat loss, but local communities use palm fibers to make dolls and other handicrafts. Natura wants to develop a business plan to assess if and how palm handicrafts can be produced in an environmentally sustainable and economically viable manner.



The internship will require a literary review of sustainable management of non-timber forest products focusing on handicraft production. The student will need to visit the area where the palm is managed, to describe and analyze production methods especially how they relate to sustainability, and recommend the best way to package the products selected.

### Qualifications

The student should be fully capable of realizing a financial analysis and understand how to produce a business plan. He or she should preferably have knowledge of NGO operations and the difference between them and the private sector, and be willing and able to spend a significant part of his or her time in the field in a developing country, where the infrastructure may be very basic. The student must be capable in the use of Excel spreadsheets and be able to seek and analyze statistical data. The project may be particularly suited to business administration or public policy students with knowledge and interest in the financial sustainability of small businesses. The student must be comfortable in spoken and written Spanish.



## Project 6: Developing a business plan for the sustainable production of honey and its derivatives in Los Negros

**Reserach question:** What is the potential for sustainable production of honey in the area of Los Negros, and the economically viable marketing of honey products in the local and international market?

### Description

For several years now the Municipality of Pam-pagrande, Florida Province, Department of Santa Cruz, more properly in the upper basin of Los Negros, the communities of Santa Rosa de Lima, Palmasola del Carmen, Sivingalito and Valle Hermoso, located in the southern part of the Amboro National Park have participated with Fundación Natura, in conserving their forests. Forests in this area are important sources of water production and they feed the river Blacks, which waters irrigate about 700 acres throughout the year, benefiting around 850 families directly.



These forests, because they are permanently flowering, are highly potential for beekeeping. As part of the compensation for environmental services, the upstream communities have received from Natura bee boxes and technical assistance to produce honey as an alternative to improve their incomes, while preserving the forests. Up to now, 49 families have organized themselves and formed an association of beekeepers, called APIASUR (Asociación de Apicultores Amboro Sur). This association provides a range of products, which may include: honey, propolis, shampoo, cough syrup, propolis ointment and facial cream. The main market for their products is the city of Santa Cruz and sales are made in two ways: 30% is sold in bulk and 70% is sold as bottled honey, generally sold in craft fairs.

It has identified the need to know more in detail the expectations and demands of the market for honey and its derivatives. The student will further investigate the potential for generating value-added products (fresh or processed) that allows APIASUR associates to increase their profits and expand their markets.

### Qualifications

The student should be fully capable of realizing a financial analysis and understand how to produce a business plan. He or she should preferably have knowledge of NGO operations and the difference between them and the private sector, and be willing and able to spend a significant part of his or her time in the field in a developing country, where the infrastructure may be very basic. The student must be capable in the use of Excel spreadsheets and be able to seek and analyze statistical data. The project may be particularly suited to business administration or public policy students with knowledge and interest in the financial sustainability of small businesses. The student must be comfortable in spoken and written Spanish.

