

# WWF Living Amazon Initiative

## June 2014

External Newsletter



### Who are we?

The LAI (Living Amazon Initiative) is a well-integrated and strategic WWF Global Initiative that aims to inform and collaborate with civil society, governments and businesses about the importance of the Amazon and drive decisions and actions for a sustainable future of the region.

### The importance of the Amazon for Sustainable Development



The Amazon and its importance to the Objectives of UN Sustainable Development issues featured prominently during the Interdisciplinary Environmental Catholic University of Rio de Janeiro's Environment Week in June. Living Amazon Initiative staff were at the event.

### Invasive exotic species and protected areas



© David Paes

The vulnerability and resilience of protected areas to climate change will be topic of a workshop organized by RedParques in coordination with the authorities of the protected areas systems of Colombia, Ecuador and Peru together with WWF.

### Amazon voices

#### Interview: Rosalvo Duarte Rosa, biologist



© Zlg Koch / WWF

Acquiring in-depth knowledge of the fish fauna, especially migratory species, in the Tapajos River basin as a whole, and especially in the surroundings of the Juruena National Park (Brazilian Amazon) was one of the goals of the Rio Juruena Migratory Fish Species Expedition conducted by WWF in May. Biologist Rosalvo Duarte Rosa gives us more details of this study.



## Would you kiss a snake?

That's just one of the things you could do on a trip to Amazonas. Swimming with dolphins and getting to know cultural aspects of indigenous communities are other adventures tourists can experience in the Amazon Rainforest while in Amazonas! With the World Cup going on right now, tourism in Brazil is at its peak and the state of Amazonas is certainly a place to visit. See more at our facebook: <http://on.fb.me/1sUXg84>

## Amazon in the news

- **The Economist:** How Brazil became the world leader in reducing environmental degradation - <http://econ.st/1hEiRg3>

- **The Guardian:** Tackling climate change would grow global economy, World Bank says - <http://bit.ly/1l5cTzX>

- **The Guardian:** Dying to save the Amazonian rainforest - <http://bit.ly/SXElSN>

- **The Guardian:** Peru now has a 'licence to kill' environmental protesters - <http://bit.ly/1ofNoAz>

- **New Scientist:** Brazil's mega power line threatens Amazon's top reserve - <http://bit.ly/1lPDxSq>

## Invasive exotic species and protected areas

© David Pates



*Cueva de los Guacharos Protected Area, Colombia.*

RedParques in coordination with the authorities of the protected areas systems of Colombia, Ecuador and Peru together with WWF will be holding a workshop in Quito next week (July 8 and 9) to obtain up to date knowledge regarding the vulnerability and resilience of protected areas to climate change. The goal of the workshop is to build technical capacity and foster the exchange of knowledge and experiences regarding the status of Amazon protected areas with respect to their vulnerability and resilience to climate change, their provision of ecosystem services and the opportunities available to enhance their effectiveness.

The expected results include: a) sharing and discussing the various technical exercises that have been carried out in the context of the Amazon biome; b) defining the methodological pathway for analysing climate change resilience and vulnerability of protected areas, including their performance in the provision of ecosystem services and the identification of other conservation opportunities that could possibly complement the actual protected areas systems; and c) preparing and validating a preliminary proposal for complementary indicators to evaluate protected areas management efficiency in the light of climate change phenomena.

In that regard, the potential invasion of protected areas by exotic species might serve as an additional indicator. Invasive exotic species are those which for one reason or another have arrived in an area where they do not naturally belong, generally as the result of voluntary or involuntary human actions, and which accordingly bring about alterations to the native biodiversity (and eventually, cultural diversity) of the places where they

become established.

"One could consider protected areas to be immune to the introduction of species but the problems that have arisen from the introduction of rats, dogs, pigs, goats and other animals in islands such as those of the Galapagos National Park are well known. The situation in continental areas, such as with the introduction of alien plant species, is less well known", explains Tarcisio Granizo, coordinator for the WWF Living Amazon Initiative's Protected Areas and Indigenous Lands Strategy.

"It must be stated that not all introduced species are necessarily 'invaders'. Those that represent a threat are the ones that are capable of transforming the habitats, competing with and eventually extinguishing the native species", he adds.

The introduction of exotic plant and animal species is something that affects even those protected areas generally held to be "isolated".

Recent studies like those of Pauchard and Jiménez have confirmed that the number and abundance of exotic species in protected areas are usually much lower than in the adjacent landscapes more intensely affected by human activities. Nevertheless, over 15 years ago, authors like Lonsdale estimated that introduced species already represented more than 8% of the flora in protected areas and other recent studies have put that figure between 15 and 18% and as high as 60%, for example, in some of the Galapagos Islands. The evidence suggests that even though protected areas present natural and human barriers that restrict the invasion of alien species, those species nevertheless do invade and establish themselves.



- **Ecosystem Marketplace:** Fútbol Shines Light On Brazil's Forests - <http://bit.ly/TArHzR>

- **BBC:** UN: World's forests fundamental to human well-being - <http://bbc.in/1jIXoxI>

## Species spotlight - Brown-throated Three-toed Sloth

© Michael Gunther / WWF LAI



Have you ever heard of the Brown-throated Three-toed Sloth (*Bradypus variegatus*)? Matching its long name, this species occurs in a large number of countries: Brazil, Colombia, Venezuela, Ecuador, eastern Peru, eastern Bolivia, Paraguay, Argentina and Honduras. The mammal has an average weight of 4 kg (Approx. 8.8 lbs), lives almost entirely on leaves and its mating period varies depending on the year and geographical region, but occurs mainly in spring. Due to habitat loss, deforestation and illegal trading, the species is in the IUCN Redlist.

Source: IUCN

ves even in the most intact and well preserved areas, and are capable of giving rise to the same impacts that have been registered for areas with much higher levels of anthropic interference.

It is possible in certain scenarios, for climate change to favour the invasion of exotic species. Evidently, climate change is liable to alter the structure and composition of the native communities and consequently, the functioning of the respective ecosystems, establishing a regime of disturbances that heightens the risk of biological invasions.

The various resilience and vulnerability studies conducted in the Amazon basin, especially those led by WWF with funding from the German Environment Ministry's International Climate Initiative, can help predict future scenarios regarding invasive exotic species and succeed in facilitating implementation of suitable measures to avoid harm to the natural and cultural Andean and Amazon environments and landscapes.

*Tarsicio Granizo, Protected Areas and Indigenous Territories Strategy, coordinator.*

## The importance of the Amazon for Sustainable Development

© Zlg Koch / WWF



*Juruena River, near São Simão waterfall, Brazilian Amazon.*

The global importance of the Amazon and its relation to the UN Sustainable Development issues were addressed during Environment Week, organized by the Interdisciplinary Environmental Catholic University of Rio de Janeiro (NIMA / PUC-RIO) in early June.

The path to the definition of Sustainable Development Goals (SDG) emerged in 2012, during the UN Conference on Sustainable Development (Rio +20), when participating governments agreed to establish joint targets for implementation of sustainable development. The SDG should guide countries in achieving results, including universal access to sustainable energy and clean water, and should be integrated into the development agenda of the United Nations after 2015.

Critical to sustainable development is protecting key areas that provide ecosystem services. Latin America is the region of the world with the greatest biodiversity and the greatest volumes of water in addition to other rich natural resources, and the Amazon is largely responsible for that. The Amazon is not only the largest reserve of carbon on Earth, it also is

responsible for conducting moisture from the Atlantic Ocean into the Amazon, the Andes, south-central Brazil, and South America. Deforestation in the Amazon negatively affects climatic stability around the world. Closer to home, deforestation can lead to decreased rainfall outside the Amazon in south-central Brazil.

"But the Amazon is also a political group of eight countries and one overseas territory that shares parts of the biome and needs to be administered and managed to the benefit of its local communities and of the populations of the Amazonian countries with a sense of responsibility consonant with its global importance. The degradation of the Amazon forest, the most extensive and richest rainforest in the world, with the highest concentration of biodiversity, will have immeasurable consequences," said Claudio Maretti.

Maretti recalled that an integrated view of Amazon conservation is needed, not only protecting forests, but also ensuring the integrity of aquatic environments and the relationship between land and water upon which the ecological balance of the Amazon rests.

"It is no longer acceptable that the maximization of hydroelectric energy production should take precedence, to the detriment of other uses and benefits associated to the river basins. Furthermore, it is fundamentally important that we move forward and understand what is involved in the integrated responsible management of natural resources, river basins and ecosystems that are shared

by more than one country."

"Hydropower plants are the biggest threat, because they not only impact the rivers and their ecosystems, but also the entire region through their inducement to human occupation. We need to be proactive rather than trying to fix things after problems arise. The rapid advance of a hydroelectric frontier in the

Amazon, where around 400 hydropower projects are already being considered, requires a comprehensive regional plan to ensure the ecological integrity of the region and the preservation of the Amazon we want and need," Maretti added.

## Amazon voices

### Interview: Rosalvo Duarte Rosa, biologist

Biologist Rosalvo Duarte Rosa was a member of the technical staff of the Rio Juruena Migratory Fish Species Expedition conducted by WWF in May. He lives in Alto Floresta in the north of Mato Grosso state and has considerable knowledge and experience of the Southern Amazon, which embraces parts of the states of Amazonas, Rondonia and Mato Grosso. He spoke to WWF team about the expedition's work and the importance of conserving fish species in the region surrounding the Juruena National Park.

#### **Part of the expedition's work involved monitoring the fish species. How was that done in practice?**

We captured 20 specimens of the matrinxã (matrinsham) species (*Brycon amazonicus*) in the vicinity of the great waterfall known as Salto Augusto, inside the Juruena National Park limits. 10 specimens were caught above the falls and 10 below. The fish specimens were sent to the laboratories of the Federal University of Mato Grosso where they are now being analysed. We want to find out whether the two fish communities separated by the falls have exactly the same genetic characteristics and therefore belong to a single community or whether there are differences between them and they are in fact two distinct communities of the same species.

#### **What is the importance of this work?**

It is very important insofar as it enables us to determine the conditions of this species at this moment. In that way we will obtain information and knowledge of the species that currently does not exist. It means that in the future, in the event of hydroelectric projects being implanted in the region, for example, we will have baseline references that will help us to determine what may happen to these fish populations.

#### **Do have any idea when the work will be finalised and when the results of the study will become available?**

lable?

Possibly we will have some answers by the end of July or the beginning of August.

#### **How will people be able to access the research results?**

This research will probably be the object of a scientific article and it is highly probable that something will be published online as well so that the results can be made available to as many people as possible.

#### **Why is it so important to study the migratory fish species of the Juruena region, like the matrinxã, for example?**

Migratory fish species have an important dependence on undisturbed natural conditions, an integral habitat. It means that if we detect the presence of various migratory species here, we can be reasonably sure that the area has maintained its natural integrity and has not been degraded by human activities. Furthermore, these migratory species play an important role in the food consumption of the local riverside dwellers. The migratory fish species are the main component of local people's diet. That means it is important to know all about them, preserve them and do everything to prevent their extinction, thereby avoiding a serious problem for the riverside communities

#### **If something serious were to happen that jeopardised migratory fish species on a large scale, how would that affect the local riverside communities?**

It would mainly affect their food supply because these fish are the basis of the diet of all peoples that live along the riverbanks. Anywhere you go you find people mainly eat fish and farinha (manioc meal). If you interfere with the migratory flows of these fish species then you will be removing them from the places where they can usually be found



and caught by fishermen from the local communities. The first impact would be to make it hard for people to catch the fish that are the basis of their subsistence consumption and that would seriously jeopardise the lives of people living in these communities.

#### **Still on the subject of interfering with migratory patterns: would there be any impacts on the economic activities carried out in the regions surrounding the Juruena National Park?**

Yes, there would. We know that the sport angling lodges, which obviously depend on the presence of these fish, hire people from the local communities as guides and boatmen for the tourists that come to the region. So this tourism offers a source of employment and income to the people that live long the river banks. If the fish were to disappear, so would the jobs.

#### **Would it be possible to say that the amount of fish present in the Juruena River today is less than the amounts registered in previous years?**

Yes, we can already observe that there has been an impact. However, the Juruena River is not being affected so badly as the Teles Pires River where the reality is one of intensive agricultural production and large-scale plantations and the sil-



ting up of water courses is far more serious and extensive. In the Juruena, those processes are still incipient and their impacts have been smaller than in other regions. However, great care must be taken to ensure that there is no destruction of forest and river banks and no silting up with reductions in fish numbers.

**Do you think that Brazilian society as a whole manages its rivers and other water resources properly?**

No. I think people need to pay a lot

more attention to this issue. We can see, for example that there is a clearly defined policy of building big dams and hydroelectric installations without due assessment of the real impacts of such large-scale works. The Amazon has now become the target for the installation of such large scale hydroelectric projects, but I cannot see evidence of any concern for what is happening to the populations that reside in the areas surrounding them and who depend on all the resources found there. When you build a dam you generate an impact, above all, on the

area's fish, and that is a matter for serious concern. There are plans to build eight hydroelectric plants in the Tapajós River basin. All the riverside and regional communities from Jacareacanga to Barra de São Manuel and right up to the headwaters of the Juruena will suffer the consequences, just as the people living in the Teles Pires region are suffering today.

*Interviewed by Jorge Oliveira Dantas.*

## Stories from the region

### WWF-Brazil launches new campaign

Brasília (DF) – The National Energy Policy Council (CNPE, in portuguese) – is meeting in Brasília, June 24, when it may declare as “public utility” a part of the Juruena National Park, located on the border between the states of Mato Grosso and Amazonas. With nearly 2 million hectares, Juruena is the fourth largest national park in the country. It represents 2.5% of the area covered by the federal protected areas in the Legal Amazon and 5.3% of the area in national parks areas in the region. The park is part of ARPA (Amazon Region Protected Areas), which funded part of the actions for its implementation.

The Declaration of Public Utility (DUP, in Portuguese) is the first step towards a reduction of the protected area for the construction of the hydroelectric plants of São Simão Alto and Salto Augusto Baixo. They are part of a series of seven dams that the government plans to build in the Tapajós Basin, with significant social and environmental impacts.

In order to raise awareness of the society regarding these threats to the Juruena National Park and the Tapajós Basin, WWF-Brazil has launched this month, the SOS Juruena Campaign. The initiative calls for the support of society to pressure the government and block the construction of dams within the Juruena National Park, therefore ensuring that this protected area remains intact.

Once built, the reservoirs of the two plants will flood more than 40,000 hectares in the Juruena National Park, in the Juruena Igarapés State Park and indigenous territories of “Escondido” and “Apiaká do Pontal”, in Mato Grosso state. In the Amazon, portions of the Sucunduri State Park can be impacted as well as indigenous territories.

“This mosaic of protected areas is essential to curb deforestation, unplanned and illegal occupation that expanded aggressively from Mato Grosso towards

the Amazon, before the areas were created”, recalls Marco Lentini, coordinator of the Amazon Program for WWF-Brazil. According to Lentini, the region is of extreme biological importance for birds, mammals, reptiles, amphibians and plant species threatened with extinction. “Brazil has an international commitment to protect these species,” says the expert.

Aquatic - According to scholars, the health of aquatic ecosystems in Juruena River - as well as throughout the Amazon - depends on the annual cycles of flooding and drought, which influence the establishment of suitable environments for feeding and reproduction of fish, turtles and dolphins. The damming of Juruena River for the construction of Salto Augusto and São Simão plants will alter river flows and bring about the isolation or even the disappearance of some environments, which will be permanently flooded or not have enough water to be formed.

The area expected to be flooded is also a shelter for several native peoples, including some who live in complete isolation in the forest. “In the case of indigenous people and traditional communities”, says Lentini, “any action that might affect them must be preceded by Free, Prior and Informed Consultation, as determined by the Convention Nr. 169 of the International Labor Organization - ILO, signed by Brazil since 2004, and the Declaration of the Rights of Indigenous Peoples, UN 2006.”

In the dark - Chaired by the Ministry of Mines and Energy, the CNPE assists the



*Butterflies near the Augusto Falls on the Juruena River. Juruena National Park, Brazil*

Presidency of the Republic in the formulation of policies and guidelines for energy planning for the whole country. Created in 1997, the Council provides for the participation of civil society and academia since 2006. However, these vacancies have not been filled to the moment.

Seeking to participate in decisions of the CNPE, a group of civil society organizations submitted a letter to the Minister of Mines and Energy, Edison Lobão, last year, asking for clarification about the lack of civil representation on the board. The document pointed out the lack of transparency of the body, whose agendas are not published in advance and the minutes are known only months after each meeting.

“There has been no response and the board decisions continue to be taken without the debate with the society”, said Jean Timmers, director of Public Policies at WWF-Brazil.

For Timmers, “it is unacceptable that protected areas created through exhaustive social and environmental studies, political agreements between governments and productive sectors, essential

for the maintenance of ecosystem services and the fulfillment of international commitments for the conservation of biodiversity, might have their integrity threatened by unilateral decisions of exclusively governmental councils. He advocates for the opening of the discussion on the Brazilian energy policy for the entire society, supported by a qualified, transparent and democratic debate.”

According to the director, “sustainability requires transparency and broad social participation, ensuring balance between economic, social and environmental factors in the formulation of public policies, decision-making and actions that affect the whole or part of the Brazilian territory”.

**Green Alert** - The construction of hydroelectric plants without the assessment of existing alternatives and extensive debate with the society tend to increase deforestation, social and environmental degradation, river flooding and unnecessary damming. In largely preserved regions of the Amazon, such as the Tapajós Basin, these effects are multiplied. In this basin only, the government intends to introduce at least seven hydroelectric plants. The announcement is already attracting high impact activities for the region, such as illegal logging and mining.

Get to know the WWF-Brazil campaign at: [wwf.org.br/sosjuruena](http://wwf.org.br/sosjuruena).

About WWF-Brazil: It is a Brazilian non-

governmental organization dedicated to the conservation of nature with the objective of harmonizing human activity with biodiversity conservation and promoting the rational use of natural resources for the benefit of today's citizens and future generations. WWF-Brazil was created in 1996 and its office is located in Brasília. It develops projects throughout the whole country and it is part of the International WWF Organization, the largest independent environment conservation network, active in more than 100 countries. It is supported by over five million people, including associates and volunteers.

Watch a video and support the campaign: <http://chn.ge/1npaRgS>

## Peruvian community works on a new conservation model

© Diego Pérez / WWF Peru



Las Piedras River points out the entrance to a unique community: Boca Paríamanu, located at 2 hours by boat from Puerto Maldonado (Madre de Dios). This astonishing landscape is home to a wide array of flora and fauna species. Here the Amahuaca ethnic group, coming from Purus, is the heart of this community. Some other ethnic groups, such as the Shipibos and Quechuarunas, whose economy and wellbeing greatly depend upon conserving nature, live also here. The community is formed by over 100 local dwellers, distributed in about 36 families; one of each is duly organized in productive committees (Brazil nut, hungurahua, subsistence agriculture, timber, among others).

### Preserving nature for a better future

Nowadays, the community is embracing a new conservation model which not only allows reaching a better sustainable management of natural resources, but also improves life quality of local dwellers through new sustainable productive practices and by bolstering their culture and education, with aims to thrive as community by conserving their unique home: forests.

The steps carried out by the community with WWF's support were identifying an extension of forests for conservation, through zoning. In this regard, nearly 1536 hectares of forests were delimited – here an assessment study of flora and fauna species was carried out with aims to benefit both forest and community. Moreover, the Community Life Plan was defined, in order to lead the community in an organized and planned way by improving families' life quality and allowing them to enjoy a healthy and safe environment where they can live and work in harmony with nature, generating incomes through the sustainable use of natural resources. Also an Investment Plan was elaborated, with a 5-years projection. Finally, a Control and Surveillance Plan was developed with aims to halt illegal miners and loggers from entering to their forests and cause irreversible impacts. All these steps are duly framed and aim to a common objective: preserve forests, maintain local dwellers' life quality, and leave a lasting legacy for next generations.

### Knowing more about the community

Wilbert Inuma is the currently president of the community, who is now in charge of several activities along with NGOs and external stakeholders, in benefit of the community. We also got to know Marilu, a woman dedicated to the Brazil nut (*Bertholletia excelsa*) activity, who showed us that this is a forests-friendly activity that does not jeopardize standing forests because of its harvest nature, and thus avoiding all illegal logging and unsustainable use of resources. We also met Juan Inuma, former president and hunter by training, with whom, we ventured into the forest looking for fauna, with subsistence purposes. These are


some of the greatest actors in this unique community.

### Next steps

The community is really enthusiastic about letting the world know a little bit more about the way they live, and the natural resources they hold in their nearly 4,500 ha. Many exchanges of experiences have been performed with similar communities (e.g.: in Satipo) who already have a conservation model. One of the major drivers to successfully replicate these experiences is funding. With this, local dwellers will be able to adapt these experiences to their environment in order to improve their life quality and bolster their organization, always keeping in mind as priority the conservation of their legacy: the forests.


Facebook

[facebook.com/WWFLivingAmazonInitiative](https://facebook.com/WWFLivingAmazonInitiative)



YouTube

<http://bit.ly/1kXGPDq>



Website

[www.panda.org/amazon](http://www.panda.org/amazon)



**WWF Living Amazon Initiative**

Cláudio Marette, leader

Denise Oliveira, head of communications

[livingamazon@wwf.org.br](mailto:livingamazon@wwf.org.br)