

RAINFOREST REVIEW



SUMMER 2017

Costa Rica
Coastal forest and turtle conservation

Belize
The Chiquibul Forest of south west Belize

Colombia
Supporting conservation for Yaigoje Apaporis National Park

Ecuador
Threatened cloud forest of the Chocó-Andes

Chile
Fragmented Mediterranean lomas forest

Chile
Araucaria forests of southern Chile

Brazil
Opposing the Tapajós River dam

Peru
Threatened high-altitude polylepis forests

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Conserving threatened plant species in the Western Ghats

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Front cover photo of a golden-mantled tamarin in Ecuador. Back cover of forest in Ecuador. Both by Murray Cooper.

Has the world stopped caring?



We live in extraordinary times. In the past twelve months it seems US and UK governmental concern for the environment has been pushed back forty years.

How much damage can a single deluded US administration do? President Trump has recently signed an executive order to reverse former president Obama's climate change policies and vowed to pull the US out of the December 2015 Paris climate deal agreed by so many nations. Among the initiatives now rescinded is the Clean Power Plan, which required states to slash carbon emissions to meet US commitments under the Paris accord. He has also reduced the Environmental Protection Agency's budget by a third and appointed a hard line climate change sceptic as its new head. He has allowed two new massive and controversial oil pipelines despite protests by environmentalists, local governments and indigenous groups saying that it threatens their water resources and sacred native American sites and is a violation of law and tribal treaties.

Where will this stark irresponsibility end?

However, our own government has been remarkably quiet about criticising this policy. Far from setting an example we lag behind most of Western Europe in giving the environment the high priority it deserves. I attended the final stages of the Paris conference and within a couple of weeks of its conclusion, former Prime Minister Cameron allowed fracking to proceed in British National Parks and removed subsidies for solar energy. Meanwhile the green belt continues to be eroded.

Thankfully, it is not all doom and gloom as there have been some remarkable success stories in recent months. China announced a total ban of ivory imports after decades as the world's biggest consumer. But will this be enough to prevent the relentless poaching in time to save the perilous decline of elephants in the wild? And the Brazilian government were finally persuaded to cancel a mega-dam on the pristine Tapajós River, a major tributary of the Amazon (page 5).

There is a temptation to ask what is the point of caring for our natural environment when the odds seem so squarely stacked against it. So the message is truer now than ever, that we cannot rely on our governments to protect the environment.

For this reason Rainforest Concern continues to focus on making positive changes where modest funding can have the greatest effect. In Ecuador we considerably extended the Neblina Reserve and assisted our local partner DECOIN in its successful campaign against a proposed copper mine close to the reserve. In Colombia we helped Gaia Amazonas to develop the Triple A Corridor Project which, if successful, will create a vast protected corridor of forest in the northern Amazon. In Chile, we expanded the Nasampulli Araucaria Reserve in south of the country. In Romania, our partners continue to expand the Carpathia Wilderness Reserve. In Costa Rica, we have funded the creation of a new project to protect threatened leatherback turtles.

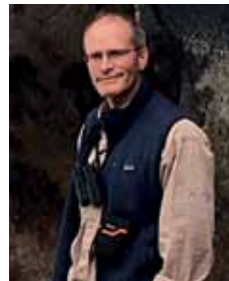
We hope you will enjoy reading about these projects and other news in the following pages.

Peter Bennett
Director, Rainforest Concern



Rainforest Concern is grateful to British Airways for their ongoing support.

Rainforest Concern welcomes a new trustee, Oliver Whalley



Oliver Whalley is the Latin America Projects Manager at Royal Botanic Gardens, Kew. For the past ten years his focus has been the conservation and restoration of coastal biodiversity of arid coastal ecosystems in Peru, although more recently he has extended his remit to Chile to

In 2016 we were delighted to welcome a new trustee to Rainforest Concern.

Oliver Whalley is the Latin America Projects

set up conservation for relict fragments and coastal lomas.

We are also very pleased to welcome Professor Antonio Lara, Austral University of Chile, Valdivia onto our Advisory Board.

It is with sadness that we announce the retirement of John Denham. John first became chairman of the trustees for Rainforest Concern in 1993. As well as being an invaluable and steady support for the charity, his passion for, and dedication to conservation has been inspirational. He founded the Endangered Wildlife Trust in 1989, with the vision of



John Denham at Pacuare Reserve

protecting the endangered sea turtles nesting on the Caribbean coast of Costa Rica as well as conserving and restoring the depleted forest along the coast. Since those early days the reduction in egg poaching on the Pacuare Reserve is now almost 100%, and the reserve is a haven for a huge variety of wildlife.

London Marathon and Bath Half

A big thank you to all of our marathon runners in 2015 and 2016.

We are so delighted to be a part of the London Marathon and the Bath Half Marathon and to have such eager runners who are so enthusiastic about raising funds for a good cause.



Carolina Brown storms along in spite of jetlag, London 2016



Kevin Silverthorn dressed as a rainforest ranger running alongside his wife, a rhino, London 2016

Our 2016 London Marathon runners; Kevin Silverthorn, Ben Walters, Ben Johnson, Andy Jay, Rowena Michell, Carolina Brown and Ali Boileau together managed to raise over £7,900.

Our 2016 Bath Half runners; Robbie Hirst, Robert Saunders, Rosie Cox, Spencer Drinkwater, Viv Talbot raised £670.

If you feel inspired to run for Rainforest Concern please do get in touch. Or sponsor online through JustGiving.com



James O'Geran keeps smiling, London 2015



Sweet success for Rowena Michell, London 2016

A rare victory in the Brazilian Amazon

by Christian Poirier, Programme Director, Amazon Watch



The Cururu river - a tributary of the pristine Tapajós River

On 4th August 2016 IBAMA, the environmental agency of Brazil, announced the cancellation of the license to build a mega-dam built on the Tapajós river.

In today's Brazilian Amazon, victories for environmental and social justice are few and far between. With deforestation up 30% since 2015, President Michel Temer's government is leading efforts to slash key environmental safeguards and abandon constitutional indigenous land rights, jeopardising the Amazon's remaining forests and free-flowing rivers. Given this dire context, last year's stunning cancellation of the São Luiz do Tapajós mega-dam is exceptional, as it demonstrates that resolute local resistance coupled with international solidarity can defeat a multi-billion dollar project.

Such a victory deserves deep recognition, with particular praise for the Munduruku people, whose struggle inspired a global movement to save the Tapajós River from dam-driven destruction. Yet this triumph must be weighed against the grim reality facing the Amazon and its traditional communities, as they confront a rising tide of existential threats. Only the continued vigilance of frontline defenders and their allies

will guarantee that this watershed achievement transforms into enduring protection of the Amazon. With the planet's largest, life-giving forest increasingly in jeopardy, our collective future hangs in the balance.

Amazon Watch has worked in Brazil for 10 years beside indigenous partners like the Munduruku, while forging alliances with the country's social movements, political leaders, scientists, and NGOs. During this time we've played a decisive role in directing global attention to the notorious Belo Monte mega-dam on the Amazon's Xingu River, while helping to mount one of the largest environmental and human rights campaigns in Brazil's history.

Today Belo Monte's concrete walls have strangled the mighty Xingu, shattering its communities, decimating its biodiversity, and razing its forests. Yet we, and our partners, endure to ensure that a similar tragedy never again befalls the Amazon. By bearing witness to the mega-dam's spiralling controversy, and exposing its manifold impacts and corrupt underpinnings, we helped to usher in last year's remarkable victory on the Tapajós River.

As part of a global coalition of allies, Amazon Watch, with support from

Rainforest Concern, provided key support to the campaign to stop Tapajós dams, helping to generate a polemic from Brasilia to the United Nations, while demanding the divestment of international corporate dam profiteers. This confluence of factors mounted a formidable roadblock that had much to bear in the cancellation of the mega-project.

However, Brazil's current political scenario demands redoubled efforts to preserve this victory while simultaneously forging new strategies to counter increasingly brazen threats against indigenous land rights. This year Amazon Watch will participate in a delegation to remote Munduruku villages to install solar panels, providing benefits that are both practical and political, as indigenous peoples send a message that their government must adopt clean, alternative energy to its destructive over-reliance on hydropower.

Meanwhile, we will continue to leverage our unique organisational niche that builds off a diversity of relationships, from grassroots partners to global allies, to shine a spotlight on abuses and push to reform the economic and political actors behind this unacceptable rollback on rights. From countering large dams to the destructive expansion of Brazil's agribusiness frontier into protected forests and indigenous territory, the ambitiousness of our objectives need to mirror the urgency of today's threats.



At a Munduruku Assembly

A new paradigm for conservation born from the will of local communities

by Martín von Hildebrand, President, Gaia Amazonas



An indigenous ceremony for the spirits of water and the guardians of seeds

The southern part of the Guyana shield, in the western corner of the Amazon Basin is noted for its outstanding levels of biodiversity, cultural diversity, and minerals, such as gold. The geological formation and the many river rapids make it difficult to navigate, meaning the tropical forest in this region has remained largely intact.

Over 55 per cent of the Colombian Amazon has been legally recognised as indigenous territories. The legal title of *resguardo* has been used to ensure that these 26,000 hectares are collectively owned by the local indigenous communities, in perpetuity. But whereas the land, the trees, plants and animals belong to the communities, the subsoil (including any mineral or oil reserves) belongs to the Colombian nation.

A further 17 per cent of this region is protected via national natural parks, which create a barrier to

the exploitation of both the land and subsoil. In several cases in Colombia, a national park overlaps an indigenous *resguardo*. Where this happens the territory continues to belong to the communities and the national park status prevents any exploitation of the natural resources that could cause permanent damage to the biodiversity or ecosystem. There are 28 instances where a national park overlaps with an indigenous *resguardo*; when it does, the National Parks office must follow the principles in the 'Social Participation in Conservation' policy. In situations where the *resguardo* has been recognised before the creation of the protected area, the Government would need to have a specific interest in the biodiversity of the area, and due process including 'prior consultation' (in accordance with Article 6 of ILO Convention 169 on indigenous and tribal rights) must be carried out to make sure all

the communities are informed and involved in the decision-making.

More than 1,000 indigenous people live along the banks of the lower Apaporis River in Colombia, close to the Brazilian border in the southern tip of the Guiana Shield. Belonging to the Tanimuka, Letuama, Makuna and Yuhup cultures, they make a subsistence livelihood from forest agriculture, fishing, hunting and gathering. They live in relative isolation, aside from guerrilla forces who come and go in the region, and field officers from Gaia Amazonas who accompany the local indigenous organisations and provide technical or legal advice if needed.

These communities consider themselves part of nature, and live in reciprocity with the forest; taking and giving back. In their daily lives, traditions and rituals are guided by shamans who maintain contact with the guardian spirits of nature.

The rules of how to live with the forest are strict, expressed mainly in food and sexual restrictions. Sacred natural sites run through the territory; these are places from where guardian spirits guard the flow of the energy that maintains life in the forest. According to origin myths, some of these sites are more important than others; as they are believed to be the places from which the natural order of life began, while other sites emerged later and depend on the original ones. When they meditate, the shamans travel along a path that connects the sacred natural sites, giving priority to the major ones. In the worldview of the indigenous communities, without the sacred sites regulating the natural order, life would leave this world and the planet would return to chaos. There would be no more flow



of energy, no more reciprocity nor complementarity: life as we know it would cease to exist.

The Yaigojé Apaporis *resguardo*, covering over one million hectares, straddles the lower Apaporis River. Within this territory there is a small hill, close to some rapids in the river, called *Yuisi*. It is the most sacred place within the indigenous territory. Some years ago it was renamed La Libertad, by rubber tappers. It is here that the main guardian spirit of the forest, called *Yurupari*, taught the first humans how to live with the forest, how to respect it, how to flow within it, and the rules and restrictions that still exist to this day. Every year all the men of the communities retreat into the forest for two or three weeks to fast and meditate on the teachings of the *Yurupari*.

Near to this hill, and beyond the borders of the *resguardo*, a Canadian gold mining company, Cosigo Resources, obtained a mining title from the government. They then wanted to access the sacred site, which they claim is rich in minerals and gold. The indigenous communities have opposed this, but since the subsoil belongs to the nation they were unable to block the company from securing a mining title.

After performing several rituals, the shamans said that the only way of defending their sacred sites was to invite the government to

create a national park on top of the *resguardo*. They knew that whatever decision they took would affect future generations, and that a national park would be in perpetuity. The shamans insisted that they had consulted with the guardian spirits and it was clear that they had no other option to stop the company and the destruction of their sacred site. Their only hope was a clear, equitable and permanent alliance with the government through the national parks authority.

The government carried out scientific research and studies, along with requisite consultation with the local communities, and the Yaigojé Apaporis National Park was created in 2009.

During the process of 'prior consultation', the communities agreed with the government that the biodiversity and the ecosystems would be protected and managed in accordance with their traditional knowledge and customs. It was a landmark agreement, contrary to the conventional management of protected areas, which is based on western scientific and technical knowhow. There was one condition, however, and that was for the indigenous communities to clearly demonstrate over the following five years how their proposed management of the national park would take place.

For the last five years, with the support of Gaia Amazonas and guided by their shamans, the

communities started to carry out their own research and to write up their traditional way of managing the forest. Men and women, young and old, are participating – in total, over 60 indigenous researchers. Of course the elders could have dictated a manual on how to live in harmony with the forest, but having something on paper was not enough; what is needed is that the younger generation learn and put this knowledge into daily practice. The younger generation started recording the words and wisdom of the elders, transcribing this into their local languages, translating it into Spanish, making maps and ecological calendars, and documenting all this valuable knowledge, making digital copies on computers. All these skills had to be learned from scratch.

Three years into the process, the indigenous communities of the Yaigojé Apaporis were awarded the UNESCO Equator Prize – commended for putting their traditional values into practice in their daily lives, and caring for nature because they believe in it.

Meanwhile, when the mining company was blocked from *Yuisi* due to the creation of the national park, it took the Colombian protected areas authority to court and accused



Martín von Hildebrand and Peter Bennett



A community longhouse near the Miriti River

them of failing to carry out the 'prior consultation'. Four years later, a remarkable meeting took place, when judges from the Constitutional Court travelled to the heart of the Amazon, visited the sacred site, and talked face to face with the communities and representatives of the mining company. Their legal decision was in support of the national park and the indigenous communities.

Cosigo Resources, however, seems intent on taking its battle further. It has recently taken the Colombian

Government to an international court, claiming for a loss of profits they had calculated from the gold they planned to extract from devastating the sacred site of *Yuisi*. The communities are undiminished in their resolve. They have continued their research and in the next two years they expect to finalise, with the government, a special management regime for Yaigojé Apaporis National Park, based on their traditional indigenous knowledge and thousands of years of experience of living with the forest.

Not only is this outstanding as a process that is recognising traditional indigenous knowledge, and implementing the national and international agreements that provide a framework for this to happen; it also creates a new paradigm showing how we can live with the forest in an intimate and spiritual way beyond mere rationalism. It reminds us that our relationship with the environment must be more than just technical and scientific, it must also be ethical.

We are extremely grateful for Rainforest Concern's help in the creation of the Yaigojé Apaporis National Park and their ongoing support for the work of Gaia Amazonas.

You can access testimonies from the local researchers on vimeo: <https://vimeo.com/116700866>

The Gaia Foundation and Rainforest Concern hosted an inspiring talk by Martín von Hildebrand at Gaia House, London in May 2016. Martín spoke of a pioneering new initiative to protect a huge area of the northern Amazon: The Path of the Anacondas.



The Apaporis river

Introducing the younger generation to conservation

by Carlos Fernandez, Manager, Pacuare Nature Reserve

Pacuare Nature Reserve lies 30km north of the port of Limón on the Caribbean coast of Costa Rica. The Reserve is one of the most important nesting beaches for leatherback sea turtles in Costa Rica. It also provides a habitat for over 30 species of mammals and more than 230 species of birds.

A lot has been happening since we last reported in the Rainforest Review. At Pacuare we recognise the importance of educating communities in how vital it is to protect their environment. Because of this, in the last two years we have significantly expanded our environmental education programmes.

Nearly 400 school students had direct contact with the rainforest and learnt about the importance of its protection. They were introduced to the wildlife and to the different habitats. An 'environmental' play was performed in four primary schools and two secondary schools, reaching 537 students and 45 school teachers. And we continued our "Centinelas

group Education Programme". This focuses on teenagers at risk or from poor marginal groups. The teenagers take an active role at the reserve, carrying out tasks which range from beach cleaning and reforestation to maintenance, enabling them to channel their energy in a productive and purposeful way.

For the first time we incorporated a reforestation initiative into the programme so that high school students have hands on experience of habitat restoration. However, we have found that students take much longer planting the trees than we expected, so we now invite volunteer groups and adults from nearby communities to help with planting. As a result, in one year we planted around 4,000 saplings of 12 native species.

There has also been a lot happening on other fronts. During the 2015 turtle nesting season we had 793 leatherback nests and recorded and tagged 421 individual females. Unfortunately, in the 2016 season, nest numbers declined compared

with 2015. We believe this is part of a natural cycle but need to investigate further what causes these swings. Thanks to the work of the permanent and temporary guards, and that of the other staff and volunteer groups patrolling the beaches, no nests were robbed during either turtle season.

The agami heron colony (listed as vulnerable on the IUCN Red List) nested successfully again in both 2015 and 2016. Renown heron expert, Dr. Jim Kushlan, came to study our colony, which is the second largest on the American Continent, and prepared a management plan for the colony that we have already put in practice.

Two PhD students have also been carrying out research at Pacuare: one study is on emergent diseases in crustaceans and amphibians; the other is looking at levels of oxygen and hatching success in leatherback nests.

The crocodile nested near South Station again, and amongst the very many animals at the reserve we've spotted male and female jaguars and a cub, as well as puma and ocelot.

All in all, it's been a busy and successful time, and we look forward to improving further on all fronts in the future.



School children visiting the Pacuare Reserve on the Caribbean coast



Bárbara Barrera and Johnny Hurtado moving vulnerable eggs to a nursery

Carlos Fernández and Zaida Hernández

New turtle conservation project shows success in its first year

by Carlos Fernandez, Manager, Pacuare Nature Reserve

Urpiano beach is a four and a half kilometre strip of land on the northern Caribbean coast of Costa Rica, three kilometres south of the Pacuare Nature Reserve, between the Caribbean Sea at the east and the Tortuguero Canal at the west.

From March to June every year leatherback sea turtles, or *Dermochelys coriácea*, (listed as critically endangered on the IUCN Red List) come to nest in this area, along with critically endangered hawksbill turtles (*Eretmochelys imbricata*) and endangered green turtles (*Chelonia mydas*), although in lesser numbers.

Unlike nearby beaches like the Pacuare Nature Reserve, whose 6 kilometres of beach has been

protected for the last 25 years, Urpiano beach has not been protected until now. Historically this beach has been known as a place where poachers and hunters come to poach turtle eggs and kill green and hawksbill turtles.

Thankfully, this has begun to change. At the beginning of 2015, the Black Rhino Foundation provided the funds to monitor the beach from March to July in order to research leatherback activity and numbers of nests. A biologist, Bárbara Barrera was contracted for that purpose. In May 2015, Peter Bennett, Director of Rainforest Concern, made a visit to Urpiano beach to see the situation for himself and to speak to Bárbara.

Her monitoring revealed that during the 2015 nesting season there were 900 nests of leatherbacks along the four and a half kilometre stretch. This is a higher density than Pacuare Nature Reserve, where during the same period there were 780 nests along the 6 kilometre stretch. During nesting season a devastating 98% of the nests were poached at the Urpiano beach: in comparison, the protected beach at Pacuare Nature Reserve had no poaching at all. The study also showed that the leatherback turtles nesting at Urpiano beach are part of the same population that nest at Pacuare Nature Reserve, la Estación las Tortugas and other turtle protection projects located north of Urpiano beach.

The findings of this initial survey showed the great importance of Urpiano beach and the critical need for the protection of this

turtle population due to the extremely high levels of poaching.

Armed with this information, in 2016 a new era of protection started for the Urpiano beach. Rainforest Concern gave their support to a local group led by Bárbara Barrera and her Costa Rican partner, Johnny Hurtado. Bárbara, Johnny and their team worked hard trying to save as many nests as possible. A hatchery was built at the little Urpiano station. Local people worked with them to patrol the beach every night, trying to collect the nests before poachers did, and the hatchery was guarded 24 hours a day to stop poachers from stealing the nests.

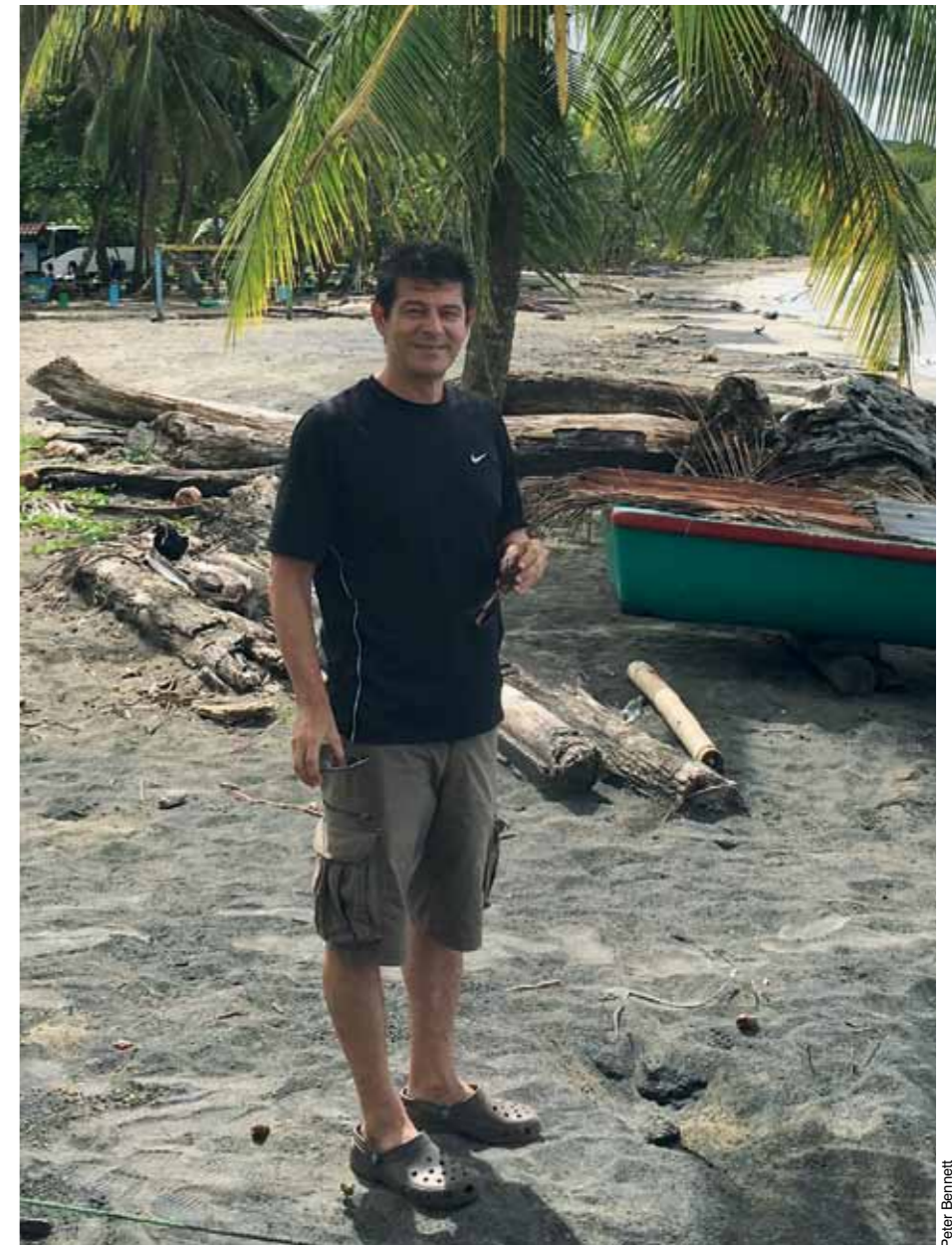
There were 658 nests during the 2016 nesting season. Although considerably less than the previous study year, this decline is considered a normal part of a cycle. Nonetheless, Bárbara and their team were able to save 121 nests, almost 20% of the total number of nests. This is a real success considering that for many years nearly 100% of nests have been poached, and we'd like to take the opportunity to congratulate Bárbara and Johnny for all their work.

But this is just the first step. 20% was the target for this first year of protection, and we are committed to continue the protection of this important beach into the future. We expect that with time and support we will be able to save more and more nests each year as the programme grows.



Building the turtle hatchery

Carlos Fernández and Zaida Hernández



Carlos Fernandez

Peter Bennett



Releasing leatherback hatchlings

Carlos Fernández and Zaida Hernández

Back from extinction! How one species of toad can create hope

by Carlos Zorrilla,
Executive Director, DECOIN

For the past 38 years, most days I walk through the forest. When I go, I seldom leave my house without a camera, and this has made it possible to record everything that I see there. You may imagine that after almost four decades of frequent visits and paying attention to the wildlife there would be nothing new to see. In most ecosystems this would hold true. But not so in Intag's cloud forests where I live and work.

A few days ago, for example, I photographed a lizard I've never seen before. Two days earlier, I saw and photographed a katydid species of grasshopper for the first time. And, a couple of weeks before that, I found an orchid species I'd not seen, growing right next to a trail I've trodden at least a thousand times. These species could all be new to science. In 2016 I also saw a species of amphibian that, likewise, I had not spotted before. It is no different at night. For years I've been using a trap light to attract and photograph moths, and rare is the night that I don't see a species of moth for the first time.

The reason for such unusual diversity has much to do with Ecuador's equatorial location, the great changes in altitude due to its mountain topography, as well as the distinctly different rainfall regimes. For these reasons, Ecuador is one of the world's 17 mega diverse countries. It has more orchid and hummingbird species than Brazil, which is 32 times larger. At the same



Carlos Zorrilla

The *Atelopus longirostris*, thought extinct since 1989

time, the Andean nation has the unenviable distinction of having more species of animals and plants facing extinction than any other country on the planet. According to the latest statistics, it has 2,301 species threatened by extinction: that's more than Brazil, Mexico or the United States. The main culprit for this tragic loss is deforestation, but it is also a fact that Ecuador's ecosystems and species are some of the most studied in the tropical countries, which makes it easier to catalogue species loss.

While most of Ecuador's threatened species are plants (1842), a large number are mammals (45), birds (96), reptiles (26), fish (52), mollusks (48), invertebrates (17), plus 6 protists and 174 amphibians. This represents a significant percentage of Ecuador's total known species.

Many of the same factors threatening biodiversity in other countries also threaten Ecuador's species: logging (legal and illegal), hunting; invasive

species; expansion of agriculture and ranching; industrial activities (such as oil extraction); and climate change. As if this is not enough, amphibians, and frogs in particular, face another devastating threat: a lethal fungus that is wiping out species all over the world. In addition to these deforestation Horsemen of the Apocalypse, in Intag, *Atelopus* and other species are also facing the most environmentally destructive economic activity of all: large-scale open pit mining.

This brings us to a frog that was rediscovered in Intag's forests in March 2016. Until the data is revised, the Longnose Stubfoot Toad (*Atelopus longirostris*) is listed as extinct on IUCN's Red List. It will soon be "demoted" to Critically Endangered, which means it will be listed alongside the brown-face Spider Monkey, which also inhabit these forests, as well as many other species in the rapidly diminishing western forests of Ecuador. *Longirostris* was listed as

extinct because the last time it was seen was in 1989, despite concerted efforts to find it. It is a peculiar name for a frog that only measures about 35 mm from the tip of its long "nose" to the end of its abdomen. But rediscovering this little frog after 27 years searching was heartening news for biologists who are more used to the terrible extinction of amphibians.

The frog was found by a biologist DECOIN hired to undertake an amphibian inventory in the Junin community-owned forest reserve in a project supported by Rainforest Concern. He was only able to find two females and two males, but speculated that there would be healthy populations in other isolated areas of the forests. He also believed that, with enough time, several other new and "extinct" species would be discovered. In the five days quick inventory, the biologist went on to find eight more frog species on the IUCN Red List of threatened species. Three of the frogs are now in an amphibian center in Quito where they hope to establish a breeding programme, even though 25 of each sex is usually required for successful reproduction. Unfortunately, a fourth specimen died while at the lab. The 1500 hectare reserve where the frogs were found is one of the first forest reserves that DECOIN, with help from Rainforest Concern and other donors, purchased for the community in 1997-1998.

In spite of this success story, it is worthwhile calling attention to the fact that only three individuals of this species are known to exist on Earth. And they were found in a forest threatened by total and irreversible annihilation, a forest which holds many more critically endangered and threatened species.

As many of you know, Intag's forests are at the epicenter of a large, open-pit copper mining project that now also threatens most of the Intag region. The mining activity is still in the exploration stage, and is fully funded by Chile's state-owned

CODELCO mining company; the world's largest copper producer. Proposing this mine in primary forests harboring perhaps hundreds of species facing extinction is only a manifestation of a much more lethal condition that I see as monumental stupidity and gross short-sightedness. For these are some of the last remaining forests in western Ecuador, a region that harbours many more endangered species per hectare than the better known Amazonian forests, and which also happens to have fantastic ecological tourism



In the heart of Intag region

Sarah Fraser

potential. Where CODELCO is looking for copper is not only rich in primary forest, but also in pristine rivers and streams. If there ever is a tribunal to judge crimes against nature, this one will undoubtedly rate as one of the worse.

The discovery of *longirostris* underscores the importance of conserving as much forest as possible in biodiversity hotspots such as Intag. It also validates the support our donors have been directing to conserving Intag's forests and wildlife.

These, then, are the kinds of forests that we, with your support, are helping conserve. And please, don't think for a moment that buying forests is the only thing needed to help

the Longnose Stubfoot Toad and countless other species survive. We need to continue to raise awareness at all levels of society, secure firm and active international support, conduct scientific studies and put in place strong legal defense. Without these, we might as well write off the Intag cloud forest and similar forests that are home to the species like the Longnose Stubfoot Toad and the thousands of other species that depend on us, *Homo sapiens*, for survival.

Sources

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<http://www.iucnredlist.org/details/54522/0>

In spring 2015, Carlos Zorrilla talked about his work, and the threats of the extractive industries to the forests of Ecuador to a crowded audience at the University of London's Senate House.

Expansion of reserve and new discoveries bring welcome news for Neblina

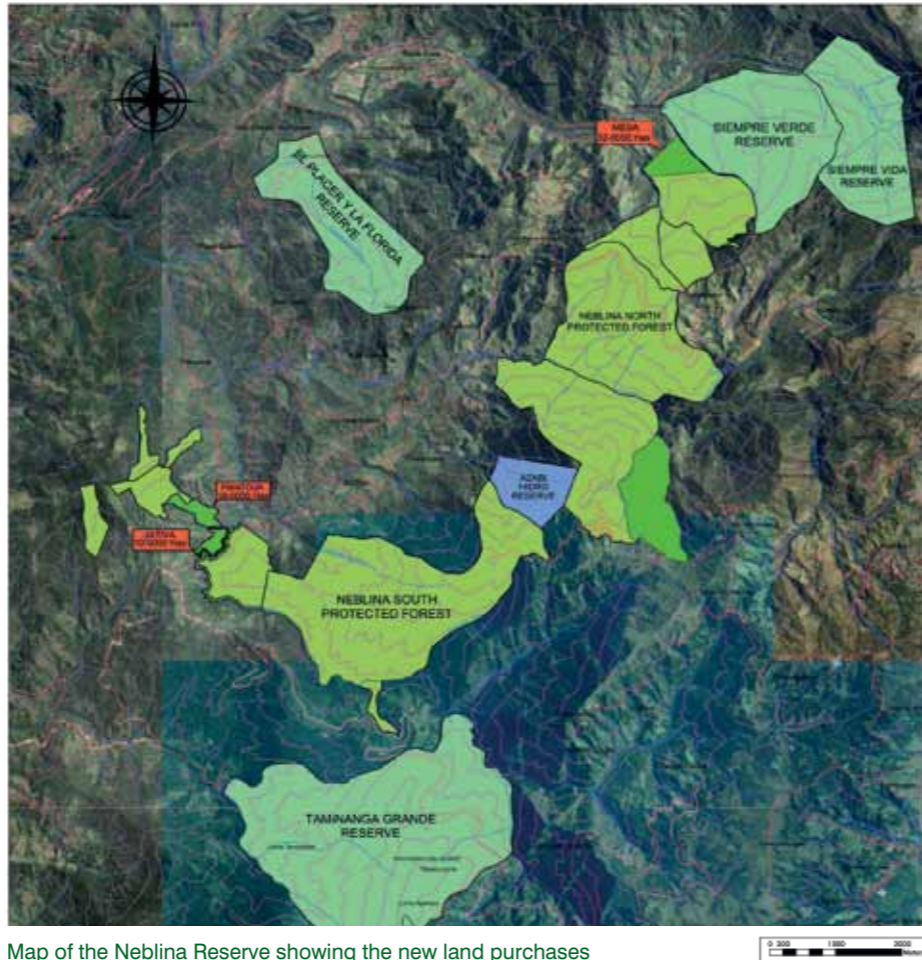
by Sonja Dillman,
Rainforest Concern, Ecuador

For the past 14 years, Rainforest Concern has been creating a protected forest reserve between the Pasa Alto mountain range and the Cotacachi-Cayapas Reserve, in an area known locally as Intag. Neblina Reserve is located in the north west Ecuador and forms part of the southern section of the Chocó Andean corridor project in the Ecuadorian Andes.

The southern phase of the project lies between two Global Biodiversity hotspots: the Chocó-Darien and the Tropical Andes, and will link the vulnerable forests between Cotacachi-Cayapas Reserve to the north and the Maquipucuna, Mindo and Pululahua reserves to the south. The region is predominantly tropical montane cloud forest with exceptional biodiversity. According to DECOIN it provides a home for no less than 28 threatened species of mammals and birds, including large mammals such as the 'spectacled' Andean bear (*Tremarctos ornatus*), which is the only extant bear species in South America.

In addition to unsustainable agriculture and infrastructure development, mining is still a looming threat, and we keep a close eye on the status of proposed copper mining concession in the area of Junin in north west Intag. The risk of copper mining reinforces the importance of the Neblina Reserve, and the other protected forests and conservation initiatives that Rainforest Concern and other conservation organisations have put in place in Intag.

Over the past year we have been able to extend the Neblina Reserve by 163.5 hectares thanks to a generous donation by The Planet Foundation. This increases the reserve's total protected area to 2000



Map of the Neblina Reserve showing the new land purchases

hectares, strengthening connections within the Neblina Reserve and crucially extending the link from the Neblina Reserve to the Siempre Verde Reserve to the north. This furthers our ultimate goal of increasing the southern section of the Chocó Andean corridor to create continuous protected forest.

Also vital to our strategy of protection at Neblina are patrols by forest guards to check for hunting, illegal logging or opportunistic cattle grazing. The guards also provide valuable information on the recovery of the forest and its wildlife, both by sightings, and more recently using data from camera traps. Our forest guards have had initial training in the installation and use of camera traps by biologist Santiago Molina, from San Francisco University of Quito, a leading investigator of the Andean

bear. Data from the camera traps will help us to evaluate the effectiveness of newly acquired areas of the reserve, and sightings of key species will build up a picture of the overall health of the reserve and surrounding areas, providing evidence of the richness of biodiversity. Any sightings of the Andean bear in the Neblina Reserve will be reported to Santiago, and contribute to research into this vulnerable species.

At the end of 2015, I was pleased to welcome Sarah Fraser and Charlotte Cousley from Rainforest Concern, UK, to Ecuador. It provided a useful opportunity for us to inspect two recently purchased areas of reserve and to have a closer look at potential land we might consider incorporating into the reserve in the future. We also visited part of the northern section of

the reserve. In this area, Rainforest Concern had just begun the new initiative to monitor wildlife using camera traps. The goal was to access one of the camera traps. This would be the first time the camera had been checked since installation.

Accompanied by one of the forest guards from the Neblina North forest patrol group, Milton Arcos, it was a steep and rocky up-hill hike. The morning was especially beautiful and the cloud forest felt vibrant and alive. Hundreds of plant species cohabit in this unique ecosystem, and create a perfect equilibrium with the animals of the forest.

About half way to the camera trap, Milton spotted recent tracks of an adult puma (*Puma concolor*). Continuing on our hike, Milton pointed out other signs that the puma had passed that way.

On finally reaching the camera trap, we reviewed the photographs, and there it was: the puma! It had passed the camera just hours before. It was exciting and satisfying to know that this great and threatened animal has a shelter in the reserve.

Although the camera trap photo did not reveal an Andean bear for Santiago's research, these first images did reveal one of the big mammals and top predators of the cloud forests. The presence of the puma gives a strong indication of the healthy ecological balance that exists in the Neblina Reserve.

Some months have passed since that day. In the meantime the forest guards have moved the camera traps to other sites within the reserve and we are starting to build up a picture of the fauna thriving in Neblina Reserve. We have captured images of many animals, including more photographs of puma, but for months have seen no Andean bear.

However, today as I write this report from Cotacachi, I have just received the latest photos from the camera



Puma on a trail at the Neblina Reserve

traps. Two Andean bears have been caught on our cameras. One is young, and although we are waiting for confirmation, it appears that the other is an adult female. We now have evidence of breeding populations of Andean bears in the reserve.

What better news to bring you of the Neblina Reserve, and to show how important protected forest reserves are in conserving biodiversity in this unique and threatened region?



Andean spectacled bear caught on camera trap

Practical geography lessons in the forests

by Sarah Fraser and Charlotte Coulosey, Rainforest Concern

Visiting Ecuador and Chile in late 2015 to visit Rainforest Concern's projects, get to know our project partners and begin to have a subtler understanding of the issues facing them, was both fascinating and inspiring.

However, one of the less expected highlights of the trip was having the opportunity to be still and watch.

One night, staying with Carlos Zorrilla at the Intag Cloud Forest Reserve, in Ecuador, he set up a light and white cloth to attract moths. Although Carlos claimed it was a quiet night for insects, it was magical to see the cloth filled with so many moths and insects, from the huge hawk moth, *Xylophanes docilis*, to those no bigger than my little finger nail, wasp mimics, moths that looked like paper, and the incredibly delicate and beautiful *Leuciris beneclliata*, with its pearlised wings fringed with gold.

In the morning, sitting quietly on the shaded porch we watched the squirrel cuckoos and emerald toucanets; ovenbirds in their extraordinary nest by the edge of the forest; the diverse and multi-coloured world of the cheeky little tanagers flitting about the undergrowth. And although a common sight to Ecuadorians, there were precious moments glimpsing tiny hummingbirds. An iridescent flash, a whirr of beating wings: a hummingbird hovers to lap nectar from a flower for an instant before darting off to the next source of food.

Sitting on that porch we learnt that it's good to go out looking, but sometimes all you have to do is wait and the best things in life come to you.

In Chile, the trip brought to life the reality of the fate of threatened forests and the pressing need to preserve them.



Rufous tailed hummingbird

We first visited the coastal project, El Boldo, where we saw a vast amount of beautiful flora as we were guided along the trail by Denise Astoreca. El Boldo is a sclerophyllous forest watered by the mist from the sea. Standing at the top of the reserve we could see this in action as sea mist gathered on the horizon.

Further south, at the Nasampulli Reserve, we stayed in the research lodge with Carolina Brown under the expert guidance of Antonio Lara and



Charlotte Coulosey braves the snow at Nasampulli Reserve

Marco Cortes from the Universidad Austral de Chile, surrounded by the majestic *Araucaria araucana* (Monkey puzzle) trees.

It was great to see these trees and the efforts being put into preserving them, especially as there is only a devastating 200,000 hectares of *Araucaria* forest left on the planet.

As we trekked through the deep snow to reach a frozen lake, it was a practical reminder that rainforests are not all tropical!

Encouraging news from Zapallar, Chile

by Denise Astoreca, Corporación Bosques de Zapallar

This year, we have been very pleased that a new law has just been approved by Congress. This makes private conservation in Chile much simpler. In the past, several land owners in the Zapallar area around the El Boldo Reserve expressed their wish to protect valuable native forest on their property. However, they were discouraged because of the complicated legal process involved. Hopefully the new law will encourage them to make the decision, and we can see more of this rare forest protected in the future.

Corporación Bosques de Zapallar also started building three lookout decks at the El Boldo Reserve, situated at different points on the



Gabriel Rodriguez, Federico Ringeling, Denise Astoreca, Carmen Rosa Holmes, and Carolina Brown at the new viewing platform

trails. These will have spectacular views of the Zapallar bay and the ocean and will provide added incentives to bring visitors to Parque El Boldo.

On another front, new evidence has been found of a plant that was considered extinct in the Zapallar forest area and very scarce in the region. In October 2015, when

Martin Gardner and Sabina Knees came to Chile with a group from the Royal Botanic Gardens Edinburgh, they spotted and photographed the *Bartsia chilensis* in Parque El Boldo. "The significance of this species is that it is likely to be very rare in Chile.", Martin wrote. Another reason for protecting this valuable mediterranean forest.

A rare find

by Martin Gardner and Sabina Knees, Royal Botanic Garden Edinburgh

During our visit to El Boldo in October 2015 we came across *Bartsia chilensis* growing on the lower grassy slopes of El Boldo. In



Bartsia chilensis at El Boldo

all the field work we have carried out in Chile over the past 30 years this is the first time that we have seen this species, however, we recognised it straight away. Federico Johow mentioned this species in his "Flora of Zapallar" first published in 1945, but when the revision of the Flora was published in 2007, *Bartsia chilensis* along with 12 other species, was mentioned as extinct for the area.

Bartsia chilensis has a very limited distribution in central Chile with only a few known locations – much of its habitat has now disappeared due to urbanisation and agriculture. *Bartsia chilensis* is a small and a relatively insignificant herbaceous plant but it is vital that endemic species such as this are protected in Chile and to this end Parque El Boldo de Zapallar is providing the protection that is needed.

Nasampulli Reserve Project expands

by Antonio Lara with Marco Cortés, Enrique Cruz, Montserrat Lara, Austral University of Chile, Valdivia

This last year significant progress was made in the Nasampulli Project, the main goal of which is the long term conservation of the threatened Monkey puzzle (*Araucaria araucana*) forests and other valuable ecosystems of the Andes in the Araucania Region of South Central Chile. This project has been running since 2002 through the long lasting collaboration between Rainforest Concern, Forecos Foundation and Universidad Austral de Chile. The relevance of our conservation efforts is clearly seen from the threats that increasingly affect the Araucaria forests. In February and March 2015, at least 8,900 hectares of Araucaria forests were destroyed by human induced wildfires. To make things worse, these fires broke out

in Tolguaca and Conguillio National Parks, and in China Muerta National Reserve, stressing the importance of protecting the Araucaria forests and other ecosystems in private reserves, in addition to those in public hands.

One of the major accomplishments this year is that the opportunity to purchase land to be protected to add to the Nasampulli Reserve finally arrived. Marco Cortés, Nasampulli Reserve manager, dedicated a lot of effort to liaise with the prospective sellers, while Peter Bennett, on behalf of Rainforest Concern, succeeded in securing funds from The Planet Foundation to enable the purchase of the land.

The purchase is expected to take place in the next few months and this

will mean the addition of 220 hectares to the 1,263 ha already protected in the reserve. This will be a 14.8 % increase in the area of the reserve). The new area is located less than 1 km to the northern limit of the current reserve, at the other side of a deep valley. It is mainly covered by *Nothofagus dombeyi* and *N. pumilio* forests and to a lesser extent with Araucaria in the upper slopes. The new area is bordered to the south by a steep cliff formed by basalt rocks, and has a good view of the Pichapinga Valley and the northern portion of the Nasampulli Reserve. The 2016-2017 austral summer is quite exciting as we started conservation activities in this new area. Our plans include detailed mapping and surveying; setting up fences in crucial areas to prevent the entrance of cattle that used to graze in the area and contacting the cattle owners. We also plan to set up new camera traps to monitor wildlife and for surveillance, as well as establishing regular patrols by the Nasampulli Reserve ranger.

In addition to preparing for the purchase of the new land, other activities this year included the continuation of erosion control along the trail to *Laguna Trafampulli*, which used to be an old logging road. Erosion control fabric was laid down to hold soil and reduce surface runoff, and planting was carried out along the route.

We continued the planting of grass mats and the direct sowing of Araucaria seed (each seed is around 4-5 cm long). A bed for seed stratification and germination of Araucaria and *N. dombeyi* was also prepared. This will provide us with seedlings to be planted next season. We carried on with protection activities, trail and cabin maintenance, and made good progress towards building a new bridge over the Trafampulli river to replace the old one, which was in a very bad condition.



Nasampulli Reserve in deep winter



Installing meteorological monitoring instruments

Another important accomplishment was Dr. Marcos Cortés' exploration of the area of Villarica National Reserve adjacent to the Nasampulli Reserve. He discovered an outstanding lookout point, located around 5 km from the cabin, that we named "Mirador de los Volcanes", since it provides a fantastic view of the Volcanoes Llaima, Villarrica, Quetrupillán and Lanin. Close to this point is also a great view of the nearby Sollipulli Volcano and glacier.

The continued use of camera traps for monitoring native wildlife and invasive wild boars showed the presence of several mountain lions (*Puma concolor*) in different seasons, as well as chilla fox (*Lycalopex griseus*) and for the first time a Chilean skunk (*Conepatus chinga chinga*).

Another important achievement this year has been the instigation of a research project to assess the water balance and the role that Araucaria forests play in snow accumulation and water provision as a key ecosystem service. Snowpack reaches up to 2-3 meters deep between June and November. When the snow melts in spring and summer, it maintains the flow of the Trafampulli River during the dry and hot summer season. This river starts in the Nasampulli Reserve.

The project, costing \$28,000 was funded by FONDAP/CONICYT grant

1511000, given to the Centre of Climate and Resilience Research (CR)2 of which Prof. Antonio Lara is one of the Principal Investigators (www.cr2.cl). The project includes the transportation and installation of a six metre tall tower and other structures to hold sophisticated monitoring instruments: a snow and rain gauge, air temperature and relative humidity sensors, radiometer, ultrasonic sensor to measure the height of the accumulated

the Centre of Scientific Studies (CECS) provided the training, technical support and some additional instruments. With these developments, Nasampulli becomes the second site in Chile in which the role of forests in snow accumulation and in water provision as an ecosystem service is being studied. These data are highly relevant for the understanding of climate change in mountain ecosystems since these areas are the ones with the highest



Rainforest Concern's partners from FORECOS: Enrique Cruz, Montserrat Lara Sutulov and Prof Antonio Lara

snowpack, data loggers, and a sensor to estimate the streamflow in the Trafampulli river close to the cabin. David Lobos and Eduardo Vergara from the Research Centre deserve lots of credit for their significant efforts and strength in carrying the materials on the walk to Nasampulli, installing the instruments and getting the required training. Dr. James McPhee from the Faculty of Engineering of Universidad de Chile and Dr. Andrés Rivera from

temperature increase in Chile compared to lower elevation sites.

We also received two visits from Rainforest Concern. Both visits provided good opportunities to increase knowledge, to discuss issues and get feedback in the field. In November 2015 Sarah Fraser and Charlotte Coulesy from Rainforest Concern stayed at the Cabin, with Carolina Brown. In March 2016, Peter and Hala Bennett visited the Reserve. They came together with Oliver Whalley, who is a member of the Rainforest Concern Board of Trustees, his wife Paulina Hechenleitner from the Royal Botanic Garden in Edinburgh and their four-year old daughter Martha, who is the youngest person to have visited the Nasampulli Reserve and who hiked the 2.5km to reach the Cabin.



Cleared areas are filled through natural seed dispersal

The story of Gurukula Botanical Sanctuary

by Supi Seshan, Director, Gurukula Botanical Sanctuary

And so it came to pass, that a young man from Berlin found himself in the deep forests of Kerala during the torrid summer of 1971. He was 23 years old. He carried with him a shoulder bag with one little notebook in it. He was barefoot. He wore a waistcoat but no shirt; and a lungi, a clean but faded piece of cloth tied sarong-like around his waist. He had walked and hitch-hiked his way south after six months on the beaches of Goa.

Wolfgang Dieter Theuerkauf was looking for a place where he could be alone and quiet. The woods were not appealing but they suited his purpose: dissolution, self-enquiry and surrender.

Seven years went by in contemplative retreat. Seven years of solitude. I touch upon it here to acknowledge the fact that the Sanctuary's beginning was so simple that looking back, it is simply unbelievable, let alone interesting or remarkable. It feels like a fairy tale. A person in solitude in a forest, chopping wood, carrying water, stoking fires, with no idea to "do" ecology is the starter material (or seed) for a botanical sanctuary specialising in restoring rainforest and conserving native plants, which by the year 2017 is one of the largest assemblages of native species for India, within India.

There are many accounts of "self-made" men and women; heroic, admirable, poignant stories of individuals who rose out of indigent poverty to redefine society. The Sanctuary's story is rooted in an



Wolfgang examining an epiphyte with Purvy Jain, a colleague at GBS in 2012

individual who allowed himself to be shaped by the beauty and the power of plants.

Switch forward a few decades. Since last writing for Rainforest Review, Wolfgang has passed away. He'd lived on this hill for 40 years, grown a family, a community, a refuge for seekers, students and marginalised people, a steady workplace for the needy, a centre for conservation, an infant forest, and a fabulous plant sanctuary. He never went back to Germany.

He also left behind a small and resolute team of plant protectors, mostly women, each one responsible for hundreds of species of native plants.

The story goes that Wolfgang's love (and consequent concern) for plants at the Gurukula Botanical Sanctuary started with a single orchid. It appeared suddenly, one day, out of the confusing disarray of the wet dark green woods. An *Aerides crispa* astride a rotten branch – a bizarre, strangely different life form, stiff and waxy, with silver stilted velamen and strap like leaves. It was something he'd never noticed before – this epiphytic being, adapted to a

soil-less world, living off of humid tropical air and leaf wash and decomposed bark dust. It captivated him. And magic-ked him forevermore into the secret garden of nature.

That was the beginning, when he knew and understood nothing about plants, the forest or ecology. Now, three decades later, Gurukula Botanical Sanctuary is home to nearly 600 species of orchids, and many other incredible plants, over 2000 species in all, ranging from bryophytes and ferns, to orchids, impatiens and shrubs, trees, tubers and climbers. 63 acres are under our care. With the current land price at \$20,000 an acre, this is no small achievement. These 63 acres, full with myriad plant species are increasingly a refuge for wild animals too. There are elephants that wander through snacking at the bamboo rich stream, civet cats, Nilgiri langurs, the uncommon Nilgiri marten, over 20 species of frogs, 220 species of birds and many lizards, snakes and insects. It is clear that humans can assist nature, and that using a full spectrum of approaches is wise, yielding real benefits to all, and at different scales too.

We have learned about the ecology of the Western Ghats through intimate involvement with its myriad plants. Each one is specialized, with close affinities to specific conditions. By practicing the ancient art of cultivation, we have concerned ourselves with re-wilding species which are threatened by extinction, and in the process also nurtured habitats.

Now there are restoring areas (land left alone to recover to vegetation completely native to this place); there are rehabilitated areas (small areas with planted species growing into community, attaining resilience and diversity); there are areas under intensive cultivation; and nurseries, a bit like the intensive care units of hospitals.

Though there are now centres working on a similar range of issues, GBS remains unusual, in terms of both the diversity of native species and the numbers of each species propagated. Wild species are notoriously difficult to propagate in large numbers, yet that is



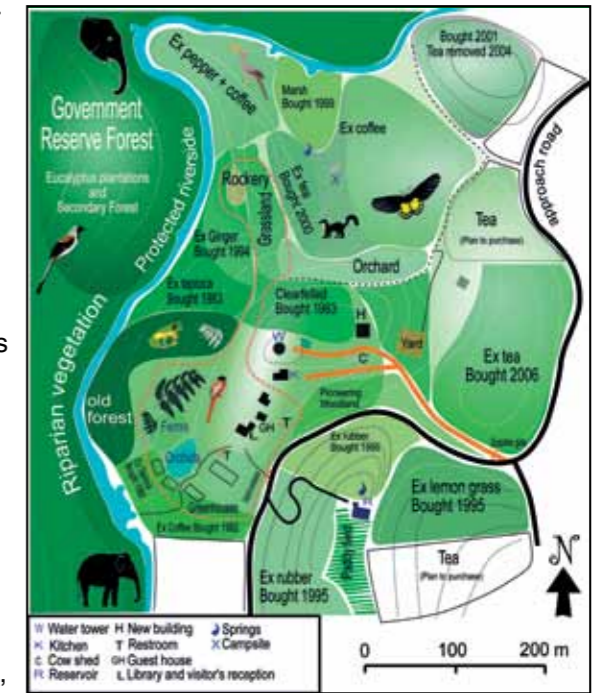
Supi Seshan at Gurukula Botanical Sanctuary

precisely what is needed for ensuring their survival.

This work requires an understanding of the complexity of the problem (habitat loss and degradation, and habitats altering, as well as habitats healing, and restoring); and of the diversity of techniques required, including detailed long-term observation, scientific knowledge, sound horticultural practice, rigorous experimentation, acting at different scales, from a single plant, to entire landscapes.

Under Wolfgang's guidance, our team developed a broad knowledge base of 100 plant families covering ecology, biogeography, taxonomy, plant pathology and horticulture. Primary to the whole process is the understanding that ex-situ conservation cannot be divorced from habitat protection. The principle is simple: plants require the forests, and forests require the plants. Where habitat protection has failed then the rescue and conservation of plants attains paramount urgency. Furthermore, ex-situ conservation can only work when rigorous standards of plant care and propagation and re-introduction are maintained. Data has to be maintained over a long period of time to observe how accessions, ecotypes and species behave in the wild, semi-wild or cultivated situations.

Rainforest Concern has been a steady champion of this tiny refuge in the mountains of southern India for 9 years. From irrigation equipment to land, materials for planting rare and endangered species, supporting the livelihoods of local women as well as restoration work in partnership with the state forest department and other NGOs, the help has been timely, vital, and encouraging.



In the last year we expanded the rockery, initiated a new grassland, multiplied hundreds of native species, liaised with taxonomists



Laly Doctor in the nursery

and conservationists, conducted search and rescue missions in the monsoon and played host to students from all over the region. While we miss our chief and founder very much, it's encouraging to see how his training continues to bear fruit, flower, spore, seed and community!

Thank you to Rainforest Concern for being part of this proliferation of life, and for sustaining this botanical sanctuary! Thank you Wolfgang!



Sunset over the Chiquibul National Park

Chris Minty

Saving a precious jewel in Central America

by Chris Minty MBE, Maya 2020

I have flown into Belize many times over the last 20 years, but I still get a thrill when I glimpse the mosaic of verdant and azure landscapes that cover this small country.

On this occasion, I am returning deep into the Chiquibul National Park, to the Las Cuevas Research Station, a cluster of wooded stilted buildings that provide accommodation, food and peaceful tranquility to scientists and students studying the forest. It is a place I know well, having been fortunate enough to manage it on behalf of the Natural History Museum London and the Belize Forest Department in the 1990's.

The Chiquibul National Park borders Guatemala and provides a buffer for

two other protected areas, known collectively, as Chiquibul Maya Mountains Key Biodiversity Area. An area the size of Cornwall, it constitutes part of the wider five million-hectare forest known as "La Selva Maya" or The Maya Forest. Classified as lowland tropical broad-leaved rainforest, the forest boasts approximately 375 plant species found nowhere else on earth; it provides refuge for countless rare and endangered species, such as the white lipped peccary, Bairds tapir, harpy eagle and howler monkey. You can often hear the rasping squawk of Scarlet Macaws as they fly freely overhead, and it is one of the few places on Earth where the five large neo-tropical cat species (jaguar, puma, ocelot, jaguarondi and margay) co-exist together.

The forest provides habitat for up to 400 species of birds, and in peak winter migratory months as many as several million birds will rest in the region.

The forest boasts approximately 375 plant species found nowhere else on earth and it provides refuge for countless rare and endangered species...

Due to extensive deforestation throughout much of Central America, this area is now one of the few remaining sanctuaries for many of



Steven Blackmore

Scarlet macaws are commonly seen at the reserve

these endangered species and it is therefore vital that we help all the local NGO's working to conserve it.

I am returning as a representative of the Maya 2020 Project, a UK based consortium of experts working with Friends of Conservation and Development, a local NGO responsible for managing the station and park. Rainforest Concern associate, Yalda Davis, joined me to learn more about the work of Maya 2020, and how Rainforest Concern could potentially support it.

The project will provide training, equipment and technological innovations to facilitate greater control of the Chiquibul National Park and thus ensure the protection of species.

Sadly, like so many of the world's rainforest, the Maya Forest has been under attack from deforestation for many years, sustaining around 40% loss. However, as this loss has been most pronounced in Guatemala and Mexico, we still have a chance in Belize to do something positive! If successful Maya 2020 will set a new global standard for forest protection, while preserving Belize's amazing natural heritage.



Birds eye view of Las Cuevas Research Station

Tony Rath

As we arrive, the evening mist is clinging to the canopy, and we are greeted by the squawking of Scarlet Macaws feeding on an old guam tree. The birds look well nourished –

a good indication that the forest is indeed providing the resource they need to survive, and a reminder that we need to do all we can to preserve this precious jewel in Central America.



Satellite image showing deforestation demarcating the Guatemala/Belize border

Satellite image from Google Maps



Wolves and other wildlife populations are increasing within the project areas

A triumph for wildlife: ban on trophy hunting in Romania

by Christoph Promberger, Director, Fundatia Conservation Carpathia

In co-operation with a number of other conservation NGOs in Romania, the Carpathia Project wrote history in October 2016: it managed to get all large carnivores protected and change the system from a trophy-hunting regime to damage control management. Although there is pressure to reverse this decision, now, for the first time ever in Romania, large carnivores are now fully protected and no hunting licenses will be given for trophy hunting of wolves, bears or cat species.

Romania has the largest population of large carnivores in Europe, and had a hunting sport industry worth millions of euros. This industry had grown year by year since the country's accession into the European Union in 2007. During the

hunting season 2015/16 alone, the hunting quotas would have allowed the shooting of 479 bears, 588 wolves, and 486 wild cats.

The Carpathia Project has been trying to achieve a more balanced way of carnivore management, which focuses on resolving conflicts with locals rather than shooting carnivores for trophies. It participated in an expert working group for the Minister in which the NGOs proposed a stop on all trophy hunting, and at the same time the establishment of local rapid deployment forces for human-carnivore conflict resolution. The Minister accepted the proposals and communicated her decision in a press conference. The topic has been widely broadcast in the Romanian media and there is tremendous support from the general

public. There will be, of course, a lot of work to follow up on the local level, but the step is monumental and historic.

The project's long-term aim has been to create a world-class wilderness reserve in the Southern Romanian Carpathians, focusing around the Fagaras Mountains. This will be big enough to support sustainable populations of large carnivores. We intend that the reserve will be an icon for conservation in Europe. Once a significant amount of Carpathian forests have been protected we plan to return all land to the public domain in the form of a National Park.

Since the last Rainforest Review, we have made extremely positive steps towards this goal. The size of the protected area has substantially

increased due to the donation of land holdings to Fundatia Conservation Carpathia. This is a large step towards a National Park and a great sign of trust. We also managed to establish good contacts with the new government, and an open ear for the idea of a Fagaras Mountain National Park. In September, the Romanian government started the process to initiate this new National Park, and a working group as part of a private-public partnership has been established. In addition, throughout 2016 we intensified the dialogue with local communities and have now a good working relationship with a number of communes. However, with a new government now in place, we will have to see how things proceed.

On the ground, as part of our restoration plan, we planted over 300,000 new saplings. These were planted in areas clearfelled during the last decade. This logging practice with all trees cut down means deforestation, loss of topsoil and destruction of the ecosystems.



Brown bears are now protected from hunting



A wild cat is captured dining on a deer carcass

We planted predominantly beech, fir, sycamore and rowan, which will recreate the original composition of trees in the forest. We have now restored the forest floor on over 30,000m of eroded tractor tracks and this will help the rest of the ecosystem.



Wolves still live in the Carpathian forests

Although in the past 20 years wildlife populations in the Fagaras mountains have severely declined due to poaching, overhunting and habitat loss, our research shows us that numbers within protected areas are increasing.

All of this is very welcome news, and although we should never be complacent, it suggests that our conservation and restoration programme is already bringing benefits to the health of the forest ecosystem of the Carpathians.

A big thank you to all our school supporters!

For another year we have seen schools put so much time and thought into fundraising events for Rainforest Concern. We've enjoyed hearing about pupil's cake sales, farmer's markets, rainforest calendars and many more brilliant fundraising days.

Over the past year, schools have managed to raise over £12,000.

Thank you and congratulations to all who have raised money to support out conservation work.

Particular thanks to:

- **Portfield School** who raised £150, sponsoring 3 acres, by holding a raffle and a Fairtrade Rainforest Café.
- **South Haringay Junior School** raised £300, sponsoring 6 acres!
- **Discovery Day Academy Kindergarten** who sponsored 13 acres, £650. The pupils held a farmers market after learning all about the Amazon.



Children at Discovery Day Academy Kindergarten learnt about the Amazon and held a farmer's market



Amazing rainforest cakes made by St Mary's CE Academy



Townhill Primary School's rainforest display

- **St Mary's CE Academy, class 2JS and 2CW**, for raising £143.09 from selling their fabulous rainforest cakes.
- **St Helen's School, Keller House**, made and sold their annual calendar and raised an amazing £3,288.50.
- **Townhill Primary School** who raised £70 after being inspired by David High who gave a talk about rainforests.
- **'Worldwatch' group from Anglo-European School** who took part in Giving Nation fundraising events and raised £119.96
- **Reepham Primary School** held a cake sale and raised £108.88.
- **Eastertoun** raised a brilliant £480
- **Year 4 from Thomas Becket Junior School** for raising £383.25



Members of the 'Worldwatch group' at the Anglo-European School fundraising for Rainforest Concern

You can download educational materials from Rainforest Concern's website at http://www.rainforestconcern.org/education_resources/resources_for_schools/

Resources include worksheets and activity sheets, our rainforest booklet and copies of the Amazonas Comic. We can also send printed versions on request.

Please do send us your letters, artworks and photos and we will try to include as many as possible on our website and in the next newsletter!



Angharad Turner saving the rainforests

Thank you, Angharad!

Rainforest Concern would also like to send a special thank you to eight year old **Angharad Turner**, one of our youngest supporters. Over four weeks, she ran 20km and single handedly raised £553.00 sponsoring 11 acres of cloud forest. What a great effort, and what an inspirational young conservationist.

Project partner organisations

- Amazon Charitable Trust (UK)
- Amazon Conservation Team (USA & Surinam)
- Amazon Watch (Brazil & USA)
- Aqua-Firma (UK)
- CBZ (Chile)
- DECOIN (Ecuador)
- ECOAN (Peru)
- Endangered Wildlife Trust (Costa Rica, UK)
- FORECOS Foundation (Chile)
- Fundatia Conservarea Carpathia (Romania)
- Gaia Amazonas (Colombia)
- Gurukula Botanical Sanctuary (India)
- Indigenous People's Cultural Support Trust
- International Rivers (Brazil and USA)
- OAEYRG (Brazil)
- Parques Para Chile (Chile)
- ProAves (Colombia)
- Prospero World (UK)
- Quest Overseas (UK)
- Rainforest Information Centre (Australia)
- Royal Botanical Gardens Edinburgh (UK & Chile)
- Santa Lucia Co-operative (Ecuador)
- Selvana (Belize)
- The White Hawk Project (Costa Rica)
- Universidad Austral de Valdivia (Chile)
- Yachana Foundation (Ecuador and USA)
- Yakusinchi (Ecuador)

Become a member of Rainforest Concern

If you're not a member of Rainforest Concern, then please join us by completing the form below. If you are already a member, then perhaps you can encourage a friend to follow your example!

You might like to consider leaving a lasting legacy to the projects of Rainforest Concern in your will. We will be happy to provide details on request.

Please tick one box only

- Member:** Sponsoring 1 acre each year £5 per month £60 annually
- Friend:** Sponsoring 2 acres each year £10 per month £120 annually
- Guardian:** Sponsoring 6 acres each year £25 per month £300 annually
- Benefactor:** Sponsoring 12 acres each year £50 per month £600 annually

Name Title

Address

Postcode

Email

I would prefer to make a simple donation of £

Cheques should be made payable to 'Rainforest Concern'. To pay by credit card, please call 01225 481151

giftaid it You can make your donation worth even more! For every pound you give to us, we get an extra 25 pence from the Inland Revenue. All you need to do is tick the box.

I would like all donations I have made since 6 April 2014 and all donations in the future to be Gift Aid until I notify you otherwise.

To qualify for Gift Aid, what you pay in income tax or capital gains tax must be at least equal the amount we will claim in the tax year and you need to give us your home address.

If you wish to sponsor an acre as a gift for someone, please telephone us on 01225 481151 or visit www.rainforestconcern.org and click "Sponsor an acre online".

STANDING ORDER FORM

I wish to pay monthly/yearly by standing order (please delete as appropriate):

Name and full address of your bank

To: Bank/Building Society

Address Postcode

Name(s) of Account Holder(s)

Account No. Sort Code

Instruction to your Bank - Please pay to Barclays Bank, 20-29-90, 50793086. Ref: RCSO.

On day month year the sum of £

and the same amount on the same day of each month/year (please delete) until further notice

Signature Date

After one year's membership, Rainforest Concern Benefactors are entitled to two days free accommodation, meals and guided tours at one of our lodges in Ecuador. Guardians are entitled to this after two years' membership.

All our supporters receive an attractive certificate recording the level of their membership, our magazine Rainforest Review and regular updates. Guardians and Benefactors will receive a Rainforest Concern T-Shirt (XL/L/M, Lady fit S, M, L, Child size 3-4, 5-6, 7-8, 9-11) Please circle appropriate size. Please tick if T-Shirt NOT required.

Please tick if thank you letter is not required.

Please tick if you would like to receive our newsletter and any updates in emails instead of by post.

Please fill in the form and send to: Rainforest Concern, 66 Great Pulteney Street, Bath BA2 4DL
Tel: 01225 481151 Website: www.rainforestconcern.org Email: info@rainforestconcern.org
Registered Charity No. 1028947



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