

RAINFORESTREVIEW



SUMMER 2004

Protection for Chile's temperate forests

The Yawanawa of Brazil - a year on

High altitude forests of Peru

mmO₂ supports watershed project in Ecuador

10th ANNIVERSARY ISSUE

RAINFOREST REVIEW SUMMER 2004

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June 2004

The beginning of the year saw the tenth anniversary of Rainforest Concern. During that time we have grown from working with just two conservation projects in Costa Rica and Ecuador to thirteen projects in eight different countries. We have learnt a lot along the way. In particular, the importance of forming strong and lasting partnerships with conservation organisations in the countries where we have projects, the need to be patient in order to achieve the required results and of course, the ability to learn from mistakes.

In this edition of Rainforest Review those of you who are familiar with our work will find news on our existing projects but will also see we have spread our work to three new projects and countries. In Peru, we are now providing assistance for the protection and reforestation of high altitude polylepis forest fragments. In southern Chile we have embarked on a forest purchase programme for the seriously threatened araucaria forests. And in Colombia, we will soon begin a programme of forest protection for the tropical forest of the south west of this troubled country.

I am delighted to tell you that Hylton Murray-Philipson joined us as a Trustee last year. Having lived and worked in Brazil for five years, it was through him that our involvement with the Yawanawa people and their forests began (see pages 14 and 15). As we go to print, it appears possible that the Brazilian Government may increase the Yawanawa territory to almost 500,000 acres which, coming at a time when the pressure on Brazil's rainforests has dramatically increased, is great news indeed. It has been very productive for us to work with Hylton on this exciting project. In his first year as Trustee, he has brought a tremendous injection of energy, a wealth of ideas and many contacts in both London and in Latin America to assist us in our endeavours. Hylton, who speaks fluent Portuguese, combines a busy business life with a passion for the rainforests, believing that the pursuit of profit needs to be balanced with the protection of the natural world for the benefit of future generations.

We can only continue with this often difficult but worthwhile work if we continue to receive your generous support. I hope you agree after reading this report that we are making real progress to protect some of the planet's threatened forests. I urge you to help to make our eleventh year the most productive ever - by joining Rainforest Concern if you have not already done so.

Thank you for helping us to make a difference.

Peter Bennett

Director, Rainforest Concern

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Rainforest Concern's conservation projects:





NEWS

Ray Mears and Rainforest Concern

by Ralph Pannell



Over the past five years, Ray Mears has become a household name - known for his many TV series such as Tracks, World of Survival and Extreme Survival. Ray is also a well-known author and has written many books including 'Bushcraft'.

In recognition of our work, Ray Mears and his team from the Wilderness School of Bushcraft, Woodlore, have kindly supported Rainforest Concern with a donation for every participant of their Jungle Survival Courses in Borneo.

In January this year the course involved expert training from Ray Mears and his colleague Andi Wood on how to respect, survive and navigate in a rainforest environment with little more than a machete, cooking pot, map and compass. The ten course participants spent their four days working with Iban tribes people in the forests of Brunei. They were then flown by helicopter into a remote part of the forest where they built their own shelters and succeeded in surviving on palm hearts, crayfish and other food items available naturally from the rainforest.

At the heart of Ray Mears' training in bushcraft is the overriding respect for the wilderness and the traditional bush skills of people who still rely on it for their survival. It is out of Ray's respect for Rainforest Concern that he and the rest of his team at Woodlore continue to support our work.

If you would like to find out more about Ray Mears and Woodlore then visit their website at www.raymears.com

Nick Gordon: the loss of a great wildlife photographer



It's with great sadness that we report the death of the wildlife filmmaker and photographer Nick Gordon. Aged 51, Nick had been making a film about a rare species of tarantula in a remote area of Venezuela when he was suddenly taken ill.

He spent over 20 years travelling all over the world photographing, filming and writing on wildlife and the environment. He was a tireless perfectionist enduring any amount of time and discomfort to achieve the result required.



photos: NICK GORDON

John Hemming advises Rainforest Concern The distinguished explorer and writer Dr. John. Society from 1075 to 1006. He has been an

The distinguished explorer and writer Dr John Hemming has very kindly agreed to be on Rainforest Concern's new Advisory Panel. John Hemming was Director of the Royal Geographical



Society from 1975 to 1996. He has been on numerous research expeditions to unexplored parts of Amazonia and has probably visited more indigenous tribes than any other non-Brazilian. Dr Hemming is also an accomplished author having published 14 books - his recent and acclaimed 'Die If You Must' being the third volume of his history of Brazilian indigenous peoples since the arrival of the first Europeans. John has shown particular interest in our project in western Brazil with the Yawanawa people. We are delighted to benefit from his advice and experience.

Nick was an ongoing supporter of Rainforest Concern and donated his work for our use, which has been used in this magazine and in our advertising. He will be a great loss to anyone who had the pleasure of knowing him and to the wildlife he worked so hard to protect.



NEWS

Running for the Rainforests

Despite torrential rain, the 2004 London Marathon on 18th April was a tremendous success. We had a record eight runners for Rainforest Concern including our very own Ralph Pannell.

All the competitors who started the race completed the course. These were Danny Porter, Clare Johns, Ed Marley-Shaw, Koen Claeys, Cheryl Ashdown, Tim Skelly, Lizzie Kennett and Ralph. Sadly, due to injury, Philip Moore and Nathan Harmes were forced to pull out of the race beforehand, however their sponsors generously decided to support the charity anyway.

This year, the "Rainforest Winner" was Ralph, who ran the 26 miles in a very impressive 3 hours 25 minutes. He is shown here with Lizzie Kennett who ran the event in an fantastic 3 hours and 32 minutes. On going to press, the sponsorship money is still coming through but we anticipate the event will have raised over a staggering £15,000 for the rainforests – also a record for the event.

The last Review was published just before the 2003 Marathon, so we must not forget to say a special thank you to Bernard Juan and Jean-Pierre Montet who travelled all the way from Nice in the south of France to run in last year's race event.

As always, we would like to thank our street collectors who spent the day catching tubes, trains and even boats trying to keep up with the runners!

We are now recruiting for the 2005 London Marathon, but places are limited so to make sure you don't miss out, call Kirsten Smith on 020 7229 2093 and reserve your position on the start line. If you don't quite feel up to the run but would still like to get involved, come and join our street collectors - you'll still get plenty of exercise!

Although crossing the finish line will probably be one of the greatest moments of your life, running the Marathon will probably be one of the hardest. It might help you therefore to remember that every pace counts in the race to save the precious rainforests!



Ralph Pannell and Lizzie Kennett



Bernard Juan and Jean-Pierre Montet

Please keep recycling for the rainforests!

We are pleased to report that following the launch of our national recycling programme in the last edition of Rainforest Review, many people and companies have now started recycling for the rainforest.

Please remember that we can collect and recycle all mobile phone and phone chargers and most brands of printer and fax cartridges. This includes those cartridges used in ink jet printers, fax machines, photocopiers and laser jet printers. Not only does recycling reduce landfill waste in this country, but it provides much needed funds for Rainforest Concern to help protect threatened forests.

All you need to do is collect 10 items or more at home or at your office and then email us at recycling@rainforestconcern.org to arrange free collection.

For small items we can also send you FREEPOST envelopes.



mmO₂ fund expanded watershed protection project

Rainforest Concern recently won a £90,000 two-year grant from the communication company mmO_2 plc. The funding has been provided to expand our project to develop a network of forest watershed reserves in the buffer zone of the Choco-Andean Rainforest Corridor of north-west Ecuador.

The project builds on the considerable success achieved in the first phase of the project. It has so far included 12 communities of a target of 20 involving a protected area in excess of 1,000 hectares. Please see our detailed report by project director Carlos Zorilla on pages 12 and 13.

The funds are being raised through O2's "Fone back" recycling scheme, where customers are invited to donate their old mobile phone when exchanging for a new one.

Naturally we are delighted to have this association with O_2 who will be promoting our work to

in the UK and the Irish Republic.

millions of their customers



Bellway Homes support for reforestation projects

Amongst those who have contributed to land purchases within the Choco-Andean Corridor, is the company Bellway Plc - the well known UK house builder. In addition to supporting Rainforest Concern and the local Wildlife Trusts where their developments take place, Bellway has been making sure that all the timber it uses comes from accredited sustainable sources.

Almost all of this timber is of European softwood origins and in response to Rainforest Concern's recommendations, the company has been steadily increasing the proportion which is accredited under the Forest Stewardship Council scheme - the highest recognised standard. Bellway is also increasing the proportion of its sites which are brownfield (e.g. former industrial land) achieving a figure of 77% in 2003. Three of these sites are being developed to the new EcoHomes standard.

size: 756,946 km² (292,257 sq m) population: 13.3 million

capital: Santiago

CHILE

A new partnership with Parques Para Chile to protect the Namuncahue Corridor

Last year, Rainforest Concern formed a partnership with Parques Para Chile, a relatively new and dynamic Chilean conservation organisation run by a team of dedicated conservationists. Parques Para Chile is therefore the second organisation we are working with to protect Chile's temperate rainforests.

Our first contribution was to purchase The Namuncahue parcel, a key purchase for the Namuncahue Biological Corridor Project. The project is similar to Nasampulli in its aim to link several parcels of threatened araucaria forest. Namuncahue is also strategically placed at the centre of a valley and is ideal for creating a base to demonstrate restoration ecology and biodiversity conservation.

Now our attention is focused on the neighbouring Mora parcel, which is one of the last remaining parcels with nearly 100% primary old-growth rainforest. Many of the forest trees found within the 183 hectare parcel are over 500 years old. The land commands spectacular views of seven volcanoes on clear days, two large lakes, Villarrica and Colico, and several watersheds covered with dense, pristine, temperate rainforest. It will provide an excellent site for offering sensitive eco-tourism and horse riding expeditions.

The majority of the land parcel is covered in primary, high altitude, old-growth forests containing the Araucaria (CITES Appendix I species), Lenga, Ñirre and Dwarf Canelo. The rest of the parcel is covered in primary southern beech forests containing tree species such as Tepa, Ulmo, Arrayán, Laurel, Canelo, Olivillo, Coihue, Roble and Mañio.

The forests of the Corridor create unique niches for many key species. The Magellanic woodpecker, the largest species of woodpecker in the world, is often seen in the Corridor.



Entrance to Namuncahue Reserve



Existing protected areas shown in green and yellow, with next priority purchase shown in red

The Slender-billed Parakeet is only found in these araucaria forests and is thought to have evolved its specialised beak specifically because of its dependence on the piñon fruit of the araucaria trees. The charismatic puma or mountain lion are still thriving in this area and several sightings have been made this year. The Guiña, a small and beautiful mountain cat, has also been observed within Namuncahue and these sightings have indicated that a melanic (all black) strain of this cat is not only present, but more common than the spotted, coloured variety. A small and very elusive marsupial "monkey of the forest" lives in relatively large numbers within this habitat as does the pudu, one of the smallest and rarest deer in the world. One of the most important sightings, that consequently has drawn the attention of local ecologists, is the presence of the Huillín, an endangered species of river otter. The variety of amphibians, including the endangered Darwin's frog, which is found in many small streams in the area, makes the Namuncahue mountains the most diverse amphibian habitat within the region.

Like Namuncahue, the Mora Land Parcel is strategically located between two fragments of the Villarrica National Forest Reserve, totalling approximately 5000 hectares. Recently, the Mora parcel has been singled out for timber extraction so Parques Para Chile rapidly held serious negotiations with the owners in order to purchase the land. We have approximately half of the funds required to complete the purchase and we hope that the balance of the funds will be found in time.

The parcel contains a stunning high elevation corrie lake surrounded by araucaria and lenga forest (see photograph below).

Most recently Pargues Para Chile have effectively stopped the advance of a public road building project which directly threatened the Namuncahue parcel.

We are confident that, as with our friends at AIFBN / Universidad Austral in Valdivia, the partnership with Rainforest Concern will be a long lasting and fruitful one. If any of our supporters would particularly like to help secure protection of the Mora parcel please do help us now when your contribution is most needed!



the corrie lake at Mora

CHILE

Rainforest Concern's support for the araucaria forests of Southern Chile

by Martin Gardner, Royal Botanic Gardens Edinburgh

Conservation can only work effectively with good and reliable partnerships. Having such partners broadens the mind and gives a stronger foundation on which to operate and they also increase the potential audience. There is little doubt that two of the most important partners the International Conifer Conservation Programme (ICCP) is working with are the Universidad Austral de Chile, Valdivia (UACH) and Rainforest Concern.

The ICCP, which is based at the Royal Botanic Gardens Edinburgh, has been working with UACH since 1996. More recently we have been working in close collaboration, under a UK funded Darwin Initiative project, on the long-term conservation of some of Chile's most threatened rainforest plant species. All of these are unique to Chile and without our help their future looks particularly bleak.



These forests are home to the Pudu. the smallest deer in the world

In 2000, members of the ICCP joined forces with a consortium of dedicated Chilean academics and professionals, mostly from the Silviculture Institute of the Forestry Faculty, UACH, to make a private purchase of 171 hectares of threatened Chilean rainforest in the southern Andes near to Lago Carburgua. This forest, which contains impressive old-growth stands of araucaria or Monkey Puzzle trees, is now known as the Nasampulli Reserve. It is a remarkable part of Chile with stunning views across to many snow-capped peaks including the impressive Volcan Llaima.



Volcan Villarica with Nasampulli Reserve in foreground

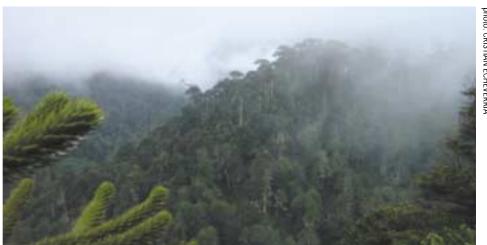
In January 2004, Rainforest Concern helped strengthen the Anglo-Chilean partnership by purchasing a further 152 hectares which has almost doubled the area of the Nasampulli Reserve. Even though the Monkey Puzzle tree itself is protected by Chilean law, strangely enough, its habitat is not, therefore there are large areas of degraded Monkey Puzzle forests that lead to the eventual demise of the tree itself. The main threats to these forests are pressure from timber extraction for furniture making and fuel wood. Importantly the Nasampulli Reserve is surrounded by privately owned land that is currently for sale. The purchase of further areas will make it possible to form important wildlife corridors to link with existing National Parks and National Reserves.

Rainforest Concern is committed to further expantion of the Nasampulli Reserve and intends to purchase another 900 hectares in the coming months.

This is yet another example of Rainforest Concern working effectively with local initiatives to help save important biodiversity. This is practical conservation that is really making a difference!



Araucaria and Coihue or beech forest





CHILE

The facts about the araucaria forests

by Cristian Echeverría and Gonzalo Medel University of Valdivia

Araucaria araucana or the monkey puzzle tree, as it is generally known, is an endemic evergreen conifer species which grows in temperate rainforests of south central Chile and adjacent areas in Argentina, under an amazing landscape covered by large areas of temperate rainforests with a high percentage of endemism. Araucaria araucana can reach up to 2 metres in diameter and 50 metres in height, and may live for over 1,000 years. The species grows in mixed forests with deciduous or evergreen species (depending on the location) or in pure stands. Araucaria araucana is one of eighteen species of araucaria found worldwide but for the purposes of this article I will refer to the tree as simply araucaria.

Distribution of Chilean araucaria is clearly divided in two areas: the Andes Range and the Coastal Range (Nahuelbuta mountain). 97% of araucaria forests are concentrated in the Andes Range, where the species can be found from around 900 to 1,700 metres. In the Coastal Range, the species covers about 7,000 hectares in two relatively small zones: in the north between 37°40′ and 37°50′ degrees, with a maximum elevation of 1,400 metres, and in the south at 38°40′, with an elevation of approximately 600 metres.

Historical, ecological, social and scientific importance of A. Araucana

Araucaria has played an important role in the historical and social aspects, and the culture of indigenous people from Chile and Argentina. Between November and December, female flowers start growing as spherical green cones formed by numerous coriaceous scales. Each cone





releases between 120 to 200 seeds, called piñones, which are 4 to 5cm long and 1.5cm wide. These seeds are edible and form an important part of the Pehuenche indigenous people's diet (Pehuenche means "people of Pehuén", the local name for A. araucana), consuming it raw, boiled or ground to make flour, among other uses. Seeds have a high carbohydrate content and the collection, storage, trade and preparation of meals is an important part of the traditional lives of the Pehuenche people. If the annual seed production decreases, Pehuenche's quality of life can deteriorate dramatically. In the past, monkey puzzle wood was widely used due to its high mechanical resistance and moderate resistance to fungal decay. The wood was used for beams in buildings, bridges, piers, roofs, furniture, boat structures, veneers and plywood.

Araucaria forms characteristic forests, which are recognised and appreciated for their uniqueness and natural beauty, providing important tourism and recreational opportunities for all the society. The tree has become the emblem of a number of national parks and provinces in both Chile and Argentina. Due to its high ornamental value, it is cultivated in gardens of Europe and America and this gives the misguided impression that the tree is more common that it is really is.

Araucaria is also used in dendrochronology to reconstruct climatic conditions by measuring the growth rings which may go back hundreds of years.

Conservation Status

In Chile, araucaria is actually listed in Appendix I of CITES, forbidding its international trade and listed as vulnerable species by the IUCN. The legal declaration of the araucaria as a Natural Monument in Chile means that its logging is forbidden. The Natural Monument status was revoked in 1987, but it was reinstated in 1990 due to pressure from conservationists and indigenous people. At present, the species is highly

threatened by human actions such as forest fires. During 2001-2002 thousands of hectares of araucaria forests were dramatically burnt in southern Chile. More than 8,300 hectares of native forest was burnt in the Malleco National Reserve, destroying 71% of the forests, and in Conguillio National Park 1,600 hectares of pure araucaria forests were burnt. Fire also affected 56% of the araucaria forests of Tolhuaca National Park. These fires converted these beautiful forests into a desolate landscape, which will take decades to recover, if at all.

At present, most of the araucaria forests are wellprotected in the Andes Ranges through national parks and reserves. Conversely, on the Coast most of the araucaria forests are owned by private land owners, without an appropriate protection system. Burning, grazing and conversion to Pinus radiata plantations have disturbed important areas in the Coastal Range, and these remain ongoing threats. In the southern limit of the Coastal range, there is a singular place of approximately 53 hectares, called Villa Las Araucaria, where an isolated population of araucaria is still growing and exposed to a high degree of alteration. Recent research has shown that this araucaria population possesses genetic differences from those populations located in the northern part of the Coastal Range and those in the Andes range. Therefore, the conservation of this unique population is of great importance. Due to this discovery, since 1997 several projects on conservation and restoration have been carried out in Villa Las Araucarias, by the Universidad Católica de Temuco and the Universidad Austral de Chile. These institutions have developed joint conservation initiatives to recover the structure and habitat of the araucaria.

Some institutions and landowners are still campaigning for the abolition of the current legal status of araucaria. If this happens, the species will be even more threatened, that is why these conservation initiatives are so crucial.

size: 283,561 km² (109,484 sq m) population: 12.7 million

capital: Quito

ECUADOR

The continuing threat of palm oil to Ecuador's rainforests

by Ralph Pannell, Rainforest Concern

You might have seen in the press recently articles about palm oil and how increasing demand continues to cause massive deforestation in the tropics. Those of you who have read past issues of the Rainforest Review will have seen that the unholy alliance of palm oil plantations and logging continue to be one of the biggest threats to the lowland forests, including western Ecuador and Colombia. The process is also a major cause of greenhouse gas emissions because once the forest has been cleared of its valuable timber, the remaining trees and vegetation are burned, emitting huge volumes of carbon dioxide.



A scene of devastation following clearance for oil palms

Since Rainforest Concern was established in 1993 we have been fighting the problem by buying and protecting land in Ecuador which was otherwise destined for logging, burning and conversion to palm oil plantations. An important landmark achievement came last year when, with our partners, we completed the northern phase of the Awacachi Corridor.

On a global scale, the bad news is that demand for palm oil continues to grow with a consequent continued loss of rainforest. The largest clearances continue to be in Indonesia where two million more hectares come under cultivation each year. According to figures available from the Malaysian and Indonesian oil palm industry, 48% of these plantations are being created through the clearance of primary and secondary forest.

The good news is that Rainforest Concern is not alone in its efforts to bring more attention to the issue. Friends of the Earth have just completed a study of the problem and are putting pressure on governments, companies and consumers to stop turning a blind eye. In their report entitled 'Greasy palms - palm oil, the environment and big business', FOE reports that there has been a 118% increase in the area under oil palm cultivation in Indonesia between 1995 - 2003. At the height of the destruction in 1997 and 1998,

forest fires in Indonesia engulfed the South East Asian region in thick smog. Of the palm oil produced in Indonesia, some 23% of the oil, 61% of the palm kernel oil and 87% of palm kernel meal is imported into the EU. UK demand represents 13% of this total finding its way into 1 in 3 of all products on our supermarket shelves!

One focus of FOE is to pressurise the British government to put legislation in place to make British companies accountable for their environmental and social impact overseas. Meanwhile, the WWF has been pushing forward a framework of self-regulation through the creation of a Palm Oil Round Table. WWF has been successful at drawing together NGO's (including Rainforest Concern) and companies in a process of defining what sustainable palm oil is and encouraging key producers and buyers to sign a Statement of Intent. For Rainforest Concern the most important element of this is a commitment to cease any further clearance of 'high conservation value' forest.

After a slow start, the number of signatories to the Statement of Intent has now reached 42. Signing on to a process is one thing, but action is what counts. The real test will be how many and how quickly these signatories stop the continued clearance of high conservation value forest. I am pleased to report that CDC, an investment group owned by the British government and with whom we have been in discussion for two years, have now committed to this. Their next challenge is to resolve some of the social problems which remain unresolved in their palm oil operations in Papua New Guinea.

Most retailers, manufacturers, importers and consumers in the UK continue to contribute to rainforest devastation through their purchasing



Very little wildlife is supported by palm oil plantations

patterns. With many new plantations continuing to be established on tribal land where traditional land rights are ignored, this also means that 1 in 3 products on our supermarket shelves are distinctly unfairly traded. These products include biscuits where palm oil commonly replaces butter as a constituent fat, margarines, oils in peanut butter, non-dairy ice creams, shampoos, detergents, soaps and crisps to name but a few.

To do your bit, please check whether products you use at home do (or may) contain palm oil. As we recommended last year, please write to the manufacturers and retailers whose products you use and ask them if they know whether or not their palm oil comes from plantation owners who continue to clear primary rainforest. Point out the great loss of biodiversity involved with clearing forests for monocultures of oil palm trees, as well as the associated emissions of the greenhouse gas Carbon Dioxide (between 20-30% of global greenhouse gas emissions comes from the burning of tropical forests!) Advise the companies you write to that sustainable sources of palm oil are available and that they can contact Rainforest Concern for details.

Many thanks to all of our supporters who wrote to companies last year and sent copies to us of the replies they received. Your efforts have helped to make a difference. A lot more difference still needs to be made.



photos: Friends of the Earth / Aulia Erlangg/



Reforestation: progress at Santa Lucía

by Pancho Molina, Santa Lucia Community Administrator

Thanks to the help given by Rainforest Concern, in 2003 we achieved incredible results for conservation in the cloud forest of Santa Lucía. It has been possible to reforest more than ten hectares in only two years and we have already started with a third year of reforestation in Santa Lucía.

Santa Lucía has achieved its goal to recover degraded pasture lands in the cloud forest, through a programme of reforestation and implementation of silvopasture systems (the planting of trees in pasture areas).

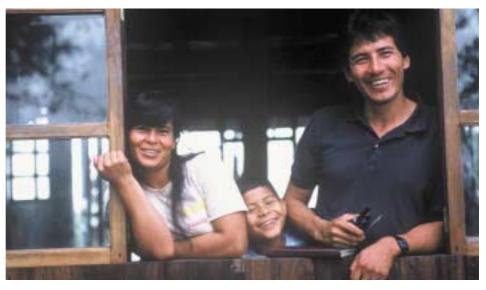
Silvopasture systems aid in the sustainable management of pastures because trees left among the grass fields help to maintain soil quality and prevent runoff and erosion during heavy rains. They also provide shade and foraging for cattle, as well as refuge and food for birds and wildlife. Especially on very steep hillsides and close to water sources, tree cover helps prevent erosion, conserve soils and preserve the quantity and quality of water.

Santa Lucía has established a native tree nursery, which has produced approximately 9,000 trees of more than a dozen native species. As detailed in previous reports, different methods of propagation were experimented with to find the most appropriate method for each species.



One of numerous species of orchid found at Santa Lucia

During the two-year project, more than 2,000 trees have been planted and maintained. Approximately half of the ten hectares is for reforestation and half is in areas for silvopasture. Santa Lucía has experimented with different methods of planting and maintenance, such as planting clover around the base of trees to reduce the necessity of frequent pasture clearance. Average mortality rates of approximately 10% and median growth rates of nearly 70% per annum (with some species at 300% or more) are indications of the success of the planting methods being used.



Santa Lucía has also experimented with the planting of different native species of trees. The aim is ultimately to plant a diversity of species that will mimic the diversity of trees in the forest. Santa Lucía's experience is that this can be achieved by first planting mainly pioneer species that are able to thrive in the open conditions of the pasture. Once there is sufficient cover, this is followed by planting trees, which require more shade. Species of trees planted have also been selected on the basis of whether or not they provide food for endangered species of birds and mammals.

Through experimentation and exchange of information with experts and others working in reforestation, Santa Lucía has built up its knowledge considerably and has increased capacity through both formal and informal training.

Conservation monitoring project

2003 was an important year for Santa Lucía. With the help of Anthony Johnson, an Australian volunteer, we began the monitoring project. The first stage of the project involved creating the GIS (Global Information System) database for mapping the forest, and incorporating such details as land use, topography, land ownership and other location data (trails, houses, rivers, etc). Four local people were employed and trained to work with this system, including collecting data with a handheld GPS unit (Global Positioning System).

At the moment, the second stage of the project is underway. Tristan Chan from New Zealand, a volunteer with a Masters in Environmental

Pancho, Cecilia and Pancholino Molina at the Lodge

Science, and Arturo Zuniga from Mexico are developing techniques for monitoring the ecology of the forest. The focus has been primarily on avifauna and there is now a point-count system for monitoring bird abundance and diversity at various locations around the forest. Basic climate data is also being collected, with simple methods being devised for monitoring fruiting and flowering cycles of some of the important plant families, and further work planned for monitoring other aspects of the forest. Local staff is being trained in data collection to ensure the monitoring is ongoing.



Spectacled bears have been observed at the reserve

The aims of the Project are to train local people as biologists to monitor the ecology of the forest, to improve knowledge of local avifauna (especially of endangered and migratory species) and to develop tools for scientific investigation and conservation in Santa Lucía.

Forest protection project

With the protection project in Santa Lucía we are able to contact other neighbouring organisations – joining forces to prevent the entry of people

who cut wood in the forest and identifying the borders between Santa Lucía Reserve and other organizations like Golan and Porvenir. In this project, salaries, basic equipment, training of our guards for patrolling and help monitoring our reserve have been provided. Five local people from Santa Lucía were trained to get licences ad-honorem from the Ministry of the Environment. The licences allow us to control animal and plant extraction with the help of authorities such as the police.

With the idea of authentic ecotourism in mind, we have started some alternative projects in Santa Lucía. This year we installed compost toilets in Santa Lucía Lodge, which will not contaminate the water due to their special construction. In addition, the compost is used as fertiliser for the trees and it also serves for environmental education to visitors and the local community. In the future we are hoping to complete other alternative systems like hot showers, a nature refrigerator, electricity, etc.

Volunteer projects in Santa Lucía

The efforts of Quest Overseas volunteers contributed enormously to our conservation projects. The most important activity this year was reforestation and construction of a wonderful path to the waterfall for the ecotourism project in Santa Lucía. The volunteers also planted 1,000 coffee trees in the shade of existing trees in our permaculture site.

We have started working with BTCV, another volunteer organization, which helps with different development activities in Santa Lucía (such as reforestation, maintenance, plantation and ecotourism trails). In particular, BTCV has supported us a great deal with the maintenance of trails and reforestation. Last summer we had one volunteer group for 15 days and we hope to receive more groups of BTCV volunteers in 2004.

What we expect to do in the coming year

In 2004 we intend to plant five hectares of silvopasture with fast growing species of trees and to achieve this we will be welcoming more groups of volunteers. We hope to achieve the monitoring goals we have outlined and, with our biologists, we look forward to attracting students, researchers and scientists to Santa Lucía Reserve.

We plan to improve the main trail for easier access to the lodge and intend to generate solar and/or hydro energy in order to be independent of diesel generators.

In 2004 our priorities are to give a real push on promotion for the lodge and generate sufficient income for the families of Santa Lucía co-operative.



Dramatic landscape of Santa Lucia's cloud forest

Awacachi Corridor Project: an update by Jo Mew, Fauna and Flora International

Thanks to a grant from the Critical Ecosystem Partnership Fund (CEPF) secured by FFI in January 2003, the Awacachi Corridor Project continues to make good progress with the community development programme. A Management planning consultant was hired in December last year to carry out the first phase of the participatory management plan for the Corridor. This involves community workshops with neighbouring villagers and community baseline survey work to gather the socio-economic and cultural information required, as well as mapping the entire core corridor area, which in itself will require two months continuous field work. The first planning workshop, held in San Lorenzo in December 2003, was very successful, bringing five key local communities together to gain a better understanding of the Corridor's objectives and the benefits it will bring to local people and wildlife. The process for the first stage will take approximately six to eight months to complete.

In addition to the management planning process, alternative income generation projects have been initiated in the villages of Ventanas and Durango. In Ventanas, perhaps the most picturesque of the Corridor communities, and a wonderful spot for bird watching, we have started a pilot community ecotourism project funded by the Maurice Laing Foundation and CEPF. This builds on a previous alternative transport and water project, also

financed by the Maurice Laing Foundation, and will link in to an ecotourism initiative already started with Zoos Go Wild, who bring Danish and British tourists twice a year to visit the Awacachi Corridor and the nearby mangrove reserve.



Ocelot

A butterfly farming expert from Belize recently accompanied the project team to the forests surrounding the community of Durango where we will be establishing a community-based butterfly farm with the villagers. This initiative will bring much needed income to the village and will demonstrate how biodiversity can be used sustainably to improve community livelihoods.

photo: PETE OXFORD



Healthy forests mean safe water for communities in North-Western Ecuador

by Carlos Zorrilla, President of DECOIN

If there was ever an example of the symbiotic relationship between the preservation of our natural resources and the provision of a safe, clean water supply, it is to be found in the Intag region of North-western Ecuador. The area was once covered with lush rainforest but overuse of pesticides and insensitive development has taken its toll, not only on the biodiversity of the region but also on the local communities' access to essential water supplies.

For the past 27 months, DECOIN (Defensa y Conservacion Ecologica de Intag), a local grass-roots environmental organisation aided by Rainforest Concern, has been helping communities in Intag buy and protect the micro watersheds, their only supply of drinking water, whilst also preserving the area's extraordinary biological diversity. The importance of safeguarding this region becomes even clearer when one realises that there are only 25 such biologically diverse areas left on the entire planet. Once such areas are lost there is no way of getting them back.



A demonstration of water testing kits at Intag

More recently, the project has been given greater security and the opportunity to expand considerably, thanks to the assistance provided by an important two year grant from mmO₂, the British based international mobile communications company. Further assistance has been provided by the Rufford Maurice Lang Foundation and the R. D. Turner Charitable Trust.



and





The Santa Rosa nursery provides the project with over twenty species of native trees

400 families from several community reserves are benefiting from the DECOIN/Rainforest Concern scheme, and are working alongside the conservationists to protect around 130 hectares. Some of the reserves are covered in pastures; others are used intensively by small farmers to grow crops, which unfortunately require constant pesticide use. Thankfully however, many still harbour stunningly diverse native cloud forests.

During the first phase of the project, DECOIN researched the status of 60 community micro watersheds. Not surprisingly, given the high level of pesticide use, we discovered that all but a few were chemically contaminated or had parasitic infestation. The locals also had to cope with severe water shortages during the dry months. Many of the watersheds were being used by private owners to pasture cattle, or were being planted right up to the stream's edge with crops like tree tomatoes, which require heavy pesticide use. Not a single micro watershed was collectively owned, or protected by any governmental institution. We realised that unless we helped to tackle these issues, the long-term health implications for both people and forests was bleak.

In areas where the land is too degraded for the forest to naturally grow back, we are helping local people to reforest with native species. To assure a clean and ample supply of water from each watershed we are aiming to purchase a minimum of 100 meters of land on each side of the

watercourse. Once the project has been accepted by the majority of the community, the land is demarcated and measured by local representatives and by DECOIN staff. The process of buying the land is also undertaken by community members, and in the few cases where the joint project has not been able to afford the total cost of the land, each member of the community has contributed financially. This has given them a real stake in their own future.

What can a few hectares accomplish? The average size of a micro watershed is only 16 hectares, but the value of conserving safe haven "forest patches" of native vegetation is well documented. Despite land being a scarce and valuable commodity, dozens of inhabitants have sold their plot of land to help the wider community conserve its drinking water. It is a humbling experience to see such collaboration for the greater good.



The spectacular Cock-of-the-rock is a permanent resident of these forests



Reforestation, environmental education and biodiversity conservation

We estimate that about 30 to 40% of the land is in need of urgent reforestation. We will only use native trees for this purpose, which are grown and nurtured in local tree nurseries. DECOIN purchases the trees for the community, who then carry out the reforestation on a voluntary basis.

In the Peñaherra-Cristal micro watershed, all community members, including children, recently formed into reforestation "mingas" (work parties). It's impressive to see little kids carry bagged trees for 20 minutes over steep terrain to help reforest "their watershed". You can do a great deal with this kind of energy and commitment. In all, nearly 177 families will benefit from just this single micro watershed purchase. So far nearly 13,000 trees from 19 native tree species have been planted in 3 of the different community reserves.



Cleared areas will be reforested

I have lived in this region for 25 years. I know how hard it can be to convince farmers of the benefits of conservation when many are scraping a living from day to day. Reforestation and water-quality monitoring are, I believe, catalysts for change, making it much easier for people to see the connection between healthy forests and safe water. Once people have benefited directly from a "conservation" project they are much more receptive to environmental issues. If we can achieve this educational goal, we will have won a major battle to conserve Intag's highly threatened natural resources.

Management Plans and Monitoring Water Quality

We have started to draw up management plans for each of the watersheds. Working with a biologist and a reforestation expert, two or three members from each community are learning the basics of sustainable land use and conservation techniques, and will be trained in how to test and monitor their water. We have recently supplied them with simple-to-use water testing kits, and



Cerro Cotacachi overlooks some of the project's land

are also carrying out more extensive tests on water potability. With the support of a local university student whose thesis covers the use of aquatic insects as bio indicators in water monitoring, we are setting up a simple and inexpensive system so local people can gauge the quality of their water. Unbelievably this is often the first time the safety of their water has ever been tested.

The results of the water potability analysis have been very useful for some communities, because the institution carrying out the project has insisted that in certain cases the micro watersheds are legally protected. Our tests have been invaluable in speeding up the processes needed for the authorities to give such project approval, and we will ensure that any information gathered is given to County officials so that local government can more efficiently plan and carry out their work.

Our small NGO has been swamped by requests from local people who need our help, and although the project is small at its present stage -20 reserves in the three years originally planned, totalling 200 hectares - we are increasingly being asked to help purchase much larger areas, which is wonderful.

It is a principal tenet of the project that active community participation is the best way to ensure the preservation of the world's natural resources. Judging by the response to date, it has been, and will be, phenomenally successful. Perhaps we have been lucky in that the environmental consciousness of many of Intag's inhabitants was more advanced than in other rural areas in Ecuador due to threats presented by mining

projects - threats that still continue. However, I believe the overriding factor contributing to the project's success is the fundamental need for clean, safe water, and the acknowledgement that without a robust and healthy forest, good quality water will be a dwindling commodity.

Some may feel that our work in Intag is on too small a scale to have any real impact. But for the people now drinking safe water and learning first hand the value of conservation, it is life-changing. For me, these projects are nothing less than miraculous: areas of hope and regions of inspiration showing a real commitment to conservation, and the start of the true greening of these tired and misused hills, forests and streams.



Carlos Zorilla and Ralph Pannell inspect young trees at a nursery

size: 8,511,965 km² (3,286,488 sq m)

population: 176 million capital: Brasilia

WESTERN BRAZIL

On the frontline in western Brazil by Daniel Reynolds, volunteer for Rainforst Concern

I should begin by explaining that I am a gap year student who happened to be in the right place at the right time, and spent three months as the guest of the Yawanawa and of the Commissao Pro-Indio do Acre (CPI) through whom Rainforest Concern are implementing the Yawanawa assistance programme.

I have therefore had the immense privilege of living and working with the Yawanawa in their forest community on the banks of the Rio Gregorio, as well as in their office in the nearest town of Tarauaca, and I have also spent time at the office of CPI in Rio Branco, and at their 'farm' on the edge of town.

CPI (Acre) was formed by a group of friends of the legendary Chico Mendes who did so much to bring the indigenous peoples and the non-indigenous rubber tappers together before he was brutally murdered by hired gunmen in December 1988. Instead of fighting one another, he persuaded both indians and rubber tappers that their survival depended on the survival of the forests, and united them in opposition to their common enemies notably absentee landlords and big ranchers clearing the forests to make way for cattle.



The tribe's chief, Tashka Yawanawa (right)

CPI has evolved from its crusading origins into an entity that helps indigenous communities in Acre with a wide range of issues arising out of their contact with 'civilisation'. This ranges from assistance with the legal demarcation of indigenous territory to a variety of projects in the fields of health, education and maintaining cultural identity. In addition to directly helping the Yawanawa, Rainforest Concern has also supported a week-long workshop on the construction of filtration systems for river water, and waste water disposal systems to reduce the instance of disease and infections that are otherwise endemic. Two or three times each year, CPI invites delegates ('indigenous teachers') to leave their forest communities and come together at CPI's 'farm' 25km from Rio Branco. In this wonderful location, the indigenous peoples gain strength by sharing experiences with each other,



New hope for the next generation

as well as learning appropriate skills for the 21st century including agro-forestry, health care and educational qualifications. Having completed their courses, the teachers return to their respective communities to transmit their learning, supported by occasional visits from CPI personnel.

I have witnessed with my own eyes the enthusiasm with which the teachers tackle their studies. I realise that when they return to their communities, they will be figures of great respect as it is through them that entire peoples will receive basic education - not just in 'western' subjects such as maths, science and Portuguese but also the legends and culture of their own people.

It has been tremendously exciting to see the indians learn about the white man's world. but also about their own different worlds. In the past, inter-tribal relations were often characterised by violence, so it was great to see so many different people working together, sharing, conversing and building a sense of identity.

One day I was asked to give a little talk in English, a language that is virtually unknown even on the professional staff of CPI. It was strange to feel that I was no more than a member of another tribe! They were intrigued to discover that someone from a far off tribe spoke another language, and pleased that I was interested in learning about them - one small step in linking communities all over the world.

Having witnessed CPI's work at first hand, both in individual communities and on their farm, I am full of admiration for the way that they genuinely empower indigenous people to take control of their own destiny. Although there are still many threats to the forest, notably those arising out of the paving of the BR364 that will provide access to the western Amazon from the Pacific coast for the first time. Acre is the most forested state of Brazil and therefore represents the frontline of conservation. Concern's support for CPI, and for the Yawanawa community in particular, is certainly making an invaluable contribution.



The Yawanawa Project, Brazil: a year on

by Hylton Murray-Philipson, Trustee of Rainforest Concern

The possibility of working with the Yawanawa people was highlighted in the last issue of Rainforest Review, and we are all tremendously excited that after more than two years' evaluation, we began supporting a series of initiatives in January 2004.

Brazil poses a different set of challenges to other Latin American countries. Its sheer scale makes it equal to the rest of the continent combined, and even if it loses an area of rainforest equivalent to Belgium each year, the Amazon eco-system still contains 50% of the rainforests of the world.

It is vital that we take action now to preserve as much of this great eco-system as possible for the benefit of future generations of all Mankind - be they Europeans, Brazilians or the indigenous people who actually inhabit the forest. To a greater or lesser extent, we all depend on them for rainfall to raise crops and oxygen to breathe. If we fail to act now, in 30 or 40 years time (a mere blink in evolutionary terms), the Amazon eco-system will be gone forever.

Amongst all this doom and gloom, it is wonderful to report that a remarkable 11% of the land-mass of Brazil (an area greater than France, Germany and Benelux combined) is reserved for indigenous peoples. There are 587 indigenous areas covering 105 million hectares or 405,000 sq miles, and I believe that the greatest hope for the forests lies in these areas, supporting these peoples.

Under Brazilian law, provided that these indigenous territories are properly registered, the



Yawanawa ceremonies can last for several days

indians within them have the inalienable right to live there in perpetuity - and outsiders are effectively banned. One of the main challenges is to ensure that these excellent theories are translated into practice on the ground and the enormous pressure from loggers, miners and ranchers is resisted in a local environment hundreds of miles from the nearest law enforcement agency.

In this context, we are working with the 670 members of the Yawanawa people so that they can, in effect, act as guardians of their 240,000 acres of forest. Pressures on their culture and on their forests will inevitably increase with the imminent asphalting of the BR364 road linking the State Capital Rio Branco to Peru which passes 100 miles from Yawanawa territory. We are trying to

strengthen their sense of identity by encouraging the use of the Yawanawa language in the village schools, by producing text books in the Yawanawa language for the first time, and by incorporating Yawanawa history into the curriculum.

In addition, we are encouraging the young people to learn about Yawanawa spiritual traditions and to respect the incredible knowledge of the plant world used by the shamans in traditional medical practice.

Furthermore, we are helping the Yawanawa broaden their diet by teaching them agro-forestry techniques and encouraging them to plant a wider variety of vegetables and fruit bearing trees. Now that the Yawanawa are largely concentrated in one place (the village of 'New Hope') and their numbers have more than doubled from the low point 10 years ago, hunting has had a significant impact on the availability of game in the immediate vicinity. With assistance from the government agency IBAMA, we are also looking at the feasibility of rearing fresh water turtles and even alligators to supplement their diet.

Last but not least, there were two Yawanawa delegates at the annual encounter of the indigenous teachers of Acre (see preceding page) during which they learnt about techniques to purify the river water for drinking, and establish a waste water system to prevent further pollution of the water courses.

We believe that these initiatives covering mind, body and spirit will combine to strengthen the self confidence and self sufficiency of the Yawanawa people. It will encourage the young people to remain in a vibrant community, living in harmony with the environment and adapting to the outside world at a pace of their own choosing.



The lowland forests of Acre are prime habitat for the Jaguar



PERU

size: 1,285,215 km² (496,222 sq m) population: 22.4 million

capital: Lima

PERU

Urgent protection of high altitude Polylepis forests in Peru by Martin Stanley, Rainforest Concern



People of all ages plant the young Polylepis saplings

Rainforest Concern was delighted to provide much needed funding for conservation and reforestation in Vilcanota Mountain forest of Polylepis in Peru. Specifically, this includes the Quechua communities of Choquechaca, Willoc, and Pallata in the Southern Cusco region.

Polylepis forest, named after the dominant tree, is found at the highest altitude of any type of forest in the world (2,500 metres to a staggering 4,800 metres above sea level) and is probably the most threatened habitat type in Latin America. The forest is found in several Latin American



Endangered Xenodacnis Parina is only found in these high-altitude forests

countries including Ecuador, Bolivia and Peru along the Andes, but now represents a tiny fraction of the area it used to cover. In fact many local inhabitants are unaware that their region used to have large forests, now that much of the land is bare and largely denuded. Typically, forested areas are small patches of several hectares often in ravines and steep slopes above the tree line in the paramo (humid) and puna (dry) zones, and contain a unique habitat with rare birds and plants. Endangered bird species include Royal Cinclodes, White-browed Tit-Spinetail, White-browed Gound-Tyrant, and Ash-breasted Tit-tyrant. There have been few detailed surveys of these forests, and so there is little knowledge of much of the plant and insect life found there, which are also threatened.

The current generally accepted view is these areas represent forest remnants, and the forest used to be more widely spread in previous centuries, but has suffered from human activities eg. over-grazing, collection of firewood, and burning of grassland to promote new growth of grasses. The remaining areas of forest tend to be far away from centres of population and where access is difficult. The sharp tree lines seen today are thought to be the result of thousands of years of



PERU



Polylepis forests are highly fragmented

burning of grasslands and, more recently, grazing by farm animals and other human activity. The Polylepis trees are incredibly slow growing, at a rate of just 0.1mm per annum in diameter, and in more humid zones might collect water from low cloud and mist, so helping the cycling of water. It has been found that water supply tends to dry up below deforested areas, and many of the mosses found amongst the trees tend to die after the trees have been cut down. The habitat gradually becomes very poor and then soil erosion follows. In some cases farms were created inside forested areas to help protect crops from wind and frost.

Given these conditions, in many areas creating a nature reserve is unlikely to work, and any conservation effort needs to involve local communities, and trying to persuade them to change the way they farm the land to allow the forest to regenerate.

Rainforest Concern has recently started to support ECOAN, a local conservation organisation based in Cusco, run by Constantino Chutas. He has started a multi-pronged approach with two communities, Pallata and Willoc, in the Vilcanota highlands. ECOAN had already started a similar project in five neighbouring communities funded by the American Bird Conservancy, and is trying to raise more funds to extend the conservation effort rather than doing things on a piecemeal basis.

Much effort is put into setting up nurseries and planting saplings of Polylepis in deforested areas. The communities have to use seeds from trees found a few hundred metres below the forest remnants, as these are the only ones they have been able to grow so far. The hope is these saplings help stabilise the habitat and provide shelter for birds and animals, while allowing the forest remnants to slowly regenerate. The local community are doing this reforestation work under the guidance of Constantino and his colleagues, and funds from Rainforest Concern have so far paid for planting of 10,000 saplings. Also, a small eucalyptus plantation has been

started to provide firewood in the immediate short term. Although not a native species, and there are some disadvantages to using it, there is an urgent demand for firewood in this cold and harsh climate, which is currently being provided for from the slow growing Polylepis.

The villagers have been supplied with earthenware stoves, which are more fuel-efficient than traditional open-hearth fires, and so use less firewood.

ECOAN is also running a series of education programmes on the local radio station explaining the key points of the project for the villages and providing help in other ways, eg. some limited supplies of basic medicines. Constantino says that when more funds are available then the next steps will include providing fencing around these forest remnants to protect from cattle and sheep grazing, and setting up education programmes for families, including children at the communities.

It is hoped by taking this combination of actions, that local people will stop cutting down Polylepis trees for firewood and give this precious type of forest time to regenerate and gradually expand.

Rainforest Concern intends to continue supporting these communities and we are pleased to report that ECOAN has recently been successful in gaining more substantial funding from Conservation International to expand the number of communities involved in this most essential conservation project.



COSTA RICA

size: 51,022 km² (19,700 sq m) population: 3.7 million capital: San José

COSTA RICA

Mixed fortunes for the turtles at Pacuare

2003 was a year of mixed fortunes for the turtle conservation project at the Pacuare Reserve in Costa Rica. We recorded 489 leatherback nests, 70 green turtle nests and 4 hawksbill turtle nests. These depressing figures represent a little more than half of the 2002 figure which in itself was quite low. Other Costa Rican beaches and Soropta in Panama had similar experiences.

This is a very significant reduction for which experts have theories but no definitive explanation. The most alarming theory is that long-line fishing, which has been the primary cause of the near extinction of the leatherback in the Eastern Pacific, is becoming more common in the Atlantic and that we are feeling its first effects. Leatherback migratory routes and long-line fishing patterns could be starting to overlap. It will be interesting to see if numbers recover in 2004 or if a second poor year indicates something more sinister.



Volunteers assist the young hatchlings

The floods of January 2003 caused the lagoon to break through to the sea and threatened to undermine the main house. This made it necessary to quickly construct a sea wall. Now completed, the wall consists of cages of insulated wire measuring one cubic metre in size and filled with large rocks. These are then packed two high and two deep to form a considerable defence against the erosion of the sand. Despite up to 15 Nicaraguan labourers working on the construction, it was a painfully slow process with the rocks having to be transported by truck and then four miles in small boats up the canal and finally, lifted manually by a chain of men into position. Of course, the wall will need to be checked and repaired regularly.

Over 600 volunteers and students came to Pacuare in the 2003 season. The US volunteer organisation Ecology Project International provided most of our

visiting student groups. It is encouraging to see increased numbers of Costa Ricans taking such an interest in the project. In addition, GAP students from the UK came as volunteers to man the station at the northern end of the reserve.

Some prospective volunteers who are reading this article may wish to have an idea of what volunteering for the turtle project is like. In a word, it's tough - beach patrolling can typically last six or seven hours almost every night and so sleep must be taken during the day. A patrol group must stay with a laying turtle until it returns to the water after which the turtle's tracks in the sand must be raked over thoroughly to disguise the location of the fresh nest to prevent poachers from finding it. The poachers' technique is generally to cruise up and down the beach using binoculars to identify nest locations and then return at night to recover the eggs. The volunteers also measure and tag the arriving turtles and data on existing tags is recorded. Sometimes it is necessary to relocate eggs laid in vulnerable areas of the beach particularly when there is risk of the eggs being washed away by the sea. In these cases, a plastic bag is placed under the turtle at the critical moment so that the 80 to 90 eggs tumble into the bag just before the turtle starts to use her huge flippers to fill in the chamber. A man-made chamber is quickly dug in the sand in a safer location and the eggs are then carefully placed into it.

The work of the volunteers is much assisted by three guards who are contracted to look for and to challenge poachers on the beach. Thanks to the numbers of people on the beach during the season, the incidence of loss is very low and so the downturn in turtles' nests is certainly not due to an increase in poaching.



The tayra is occasionally seen at the Pacuare Reserve

The 2003 volunteer season was managed very capably by the Spanish couple, Monica and Iñaki. Fortunately, they have agreed to return for the 2004 season and their enthusiasm for the job has been encouraged by closer involvement with the research undertaken at the reserve. They assisted Belinda, our turtle biologist, and have also taken an active interest in the other "non-turtle" biodiversity of Reserve's 800 hectares of forest.

In particular, they have encouraged volunteers to look for animals along the trails and to identify trees and plants, and they also started classes at the small primary school at Pacuare. They have taken an active role in selecting the research assistants, so in 2004 we will have a balanced team of young biologists at the reserve who were recruited in Madrid. These include an experienced ornithologist who will bring the bird list up to date and two turtle specialists. Additionally, there will be experts specifically studying butterflies, small reptiles and amphibians, monkeys and beach dynamics. There are three species of monkeys at the reserve, howler, white-faced capuchins and spider monkeys, and all have healthy populations.

As I write this the new turtle season is under way, so let us sincerely hope that 2004 will be a much better one for the giant leatherback turtles returning to the safety of the Pacuare Reserve.



The lonely struggle to freedom for a leatherback hatchling

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PANAMA

Third year of successful turtle protection in Panama by John Denham, Trustee of Rainforest Concern

Our first year at Soropta beach in 2002 had exceeded our highest hopes - 449 nests, very few nests lost to poachers, and, most importantly, no turtles killed. "No turtles killed" was the all-important statistic as Soropta's reputation for being the worst killing beach in Panama was what first drew us to start a project there. For years we had been protecting the leatherbacks in Costa Rica where the poachers are skilful and numerous, but at least they only take the newly-laid turtle eggs. In Panama, they take the eggs and also kill leatherbacks for their meat.

Nobody knows how many were being killed each year on Soropta. Estimates vary but 30 to 50 is probably about right. If the biologists are correct in thinking that only one in a thousand hatchlings survive to adulthood, one can easily see how the killing of the adults can wipe out a whole turtle colony.



Carlos Fernandez, Alexandra Denham and Kieran at the reserve earlier this year

We maintained our good record in 2003 with no turtles slaughtered on the 6kms beach which we patrol, but the number of visiting turtles was much lower than the previous year - only 236 nests in the whole season. This was disappointing and worrying, especially as the same reduction in numbers was seen all down the Costa Rican coast and across the Panamanian border to Soropta. Biologists have no explanation for this dramatic fall. It could have something to do with sea temperature and jellyfish, the leatherbacks main food source. A more sinister explanation could be the increase in long line fishing in the Atlantic. We shall have to wait a few more seasons to know the answer.

Accommodation for volunteers at Soropta has been greatly improved and increased, thanks to the generosity of two individual donors. Last year



Clara, manager at Playa Larga in 2003

we were all crammed into the little blue house but early last year we built close by a new house of three large rooms with a wide balcony enclosed in mosquito-wire. Later, we built a small shower-and-loo block. You can see both of these in the photos.

As well as Soropta, we also manage the project on the lovely Playa Larga beach. This is a short beach of golden sand on a nearby island. There is just a basic house and a palm hut. It appeals to the Robinson Crusoes among our volunteers. There are no frills to life there - no shower block, no cook and no mosquito wire anywhere. Food is delivered once a week. Carla was in charge at Playa Larga. She has become a local resident and has long been a volunteer for turtle projects in the area. Three or four volunteers were at Playa Larga throughout the season, working with Carla at patrolling the beach and tagging turtles. Several long-term volunteers found this was the escapist life they were looking for, the perfect antidote to office life in a big city.

Strangely, Playa Larga was the only beach we know of to have registered more nests in 2003 than the previous year, - 158 against 127. Again, there is no ready explanation for this. Perhaps it could be something about Playa Larga being on an island,

unlike the other beaches. Despite increasing research, we know very little about the turtles and much of their behaviour is pure speculation.

Cristina, our Mexican biologist, was once again in overall charge of the whole operation, while Carla, a young biologist from Colombia, came down from the Pacuare reserve in Costa Rica to manage Soropta. The volunteers patrol the beach at night with four young local guards. They learn to tag each turtle as it comes ashore (or read the tag if it already has one) and to measure it. They also relocate nests to safer areas if the turtle has laid eggs too close to the sea or in a place especially exposed to poachers.

Soropta beach is very close to the town of Changuinola which is a few miles away up a river. This is an advantage for getting supplies, checking emails, having a cold beer, etc. but makes it easy for poachers coming from the town or from the surrounding banana plantations. Cristina made several visits into the banana communities to talk about turtle conservation and we encourage the children to come and see the turtles at Soropta.

We depend very much on volunteers to keep our Panamanian operation going. In 2003 we had good support from Global Vision International, some of whose volunteers stayed for the whole season and GAP students from the UK also came, but for just a week or two, usually as an 'add-on' to a much longer stay in Costa Rica. We recruited a few volunteers locally but not enough. This year we will put an extra effort to increase the numbers. If anyone reading this article has a few weeks to spare, think about contacting Global Vision and come and help us save the turtles in Panama.



Volunteers arriving at the project

photos: EWT



SCHOOLS PAGES

Schools' support stronger than ever

by Fiona Dalrymple

Rudy Rocha of Taru Brazil has begun to visit schools and drum up support for Rainforest Concern. Their Amazon Experience gives an opportunity for children to take part in an audiovisual activity where they have a chance to experience a virtual trip to the Amazon. Participants learn how to play instruments which reproduce the sounds and atmosphere of the forest and the different elements of nature such as water, rain, birds and animals, creating a truly authentic rainforest experience.

Schools really have made a dramatic difference to the work of Rainforest Concern over the past year and we rely on the invaluable support they provide as ambassadors for the charity – keep up the good work!

We have always seen education as one of the most important ways of promoting awareness of the destruction of the world's rainforests. In 2003, with the introduction of citizenship lessons in schools, increased demand for information and generous support from several foundations, we were able to launch our interactive computer based education programme (e-Flet). One year on, over a third of all Local Education Authorities nation wide promote the use of our e-Flet as a teaching resource, and participation from schools around the world, eager to get involved with Rainforest Concern and our projects, increases on a daily basis.

As always, we are extremely grateful to all the schools who have raised money for Rainforest Concern over the past year. We would particularly



Rudy Rocha and his rainforest rhythms

like to thank St Clere's School in Stanford-le-Hope in Essex for their incredible fundraising endeavours. So far they have managed to protect 63 acres of rainforest which is a fantastic achievement. We would also like to thank Cefn Hengoed Comprehensive School in Swansea. The school Environment Club asked fellow pupils to bring in their spare coppers and raised £78, which sponsored over 3 acres of rainforest. This is on top of the 12 acres the school has already protected.

Last year the club won the Lord Mayor's Community Regeneration Award for the best Environment group in Swansea. (Members of the group are pictured with their copper collection and youth worker, Roger Smith, who helped the pupils aged 12 – 14 implement their ideas).



The students of Cefn Hengoed School collecting pennies for the planet

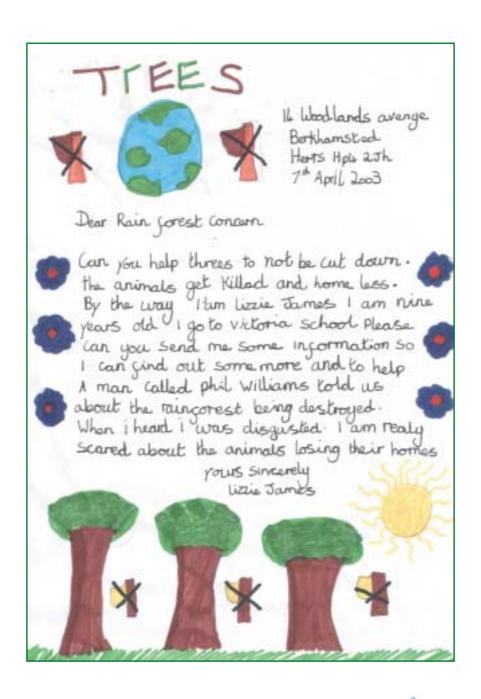
Dave and Sue Shaw have continued to gather

The girls of Manor Preparatory School and their fundraising Easter egg hunt

support from schools through their travelling Rainforest Roadshow, as has Phil Williams with his World in my Shoe talks. Both provide a unique and exciting experience for children of all ages and a magical insight into forest life. We are, as always, extremely grateful for their charisma, boundless energy and loyal support.



SCHOOLS PAGES





Our special thanks to the following schools that have joined us in the past year or have been actively involved with Rainforest Concern for many years:

George Fentham Endowed School; The Kingsway School; Rainforest Club; John of Rolleston Primary School; St. Cleres School; Ludlow Wildlife Watch; City of London School for Girls; Penyrheol School; Cefn Hengoed Community School; Oakfield Junior School; The Manor Prep School; William de Ferrers School; Pope Pius X Catholic High School; George Spencer School; Roberts Primary School; Dunblane Primary School; St Ignatius R.C Primary School; St Paul's Girls' School; Fivemiletown Primary School; Vale County First And Middle School; Moray Primary School; Kirkliston Primary School; Coaltown of Balgonie Primary School; Saint Luke's C of E; The Mount Madonna School Elementary; Willams Burgh Primary School; Oldfields Hall Middle School; Our Lady of Compassion Catholic Primary & Nursery School; Moat Hall Primary School; St Peter's School; Tremains Junior School; Newton Grange Primary School; Little Reading Primary School; St Aloysius' College; P7 Hopefield Primary School; Lowport Primary School; John Masefield School; Reddancourt School; The John Henry Newman School; Glenmead Primary School; Grangemouth High School; The First Junior School; Wallington High School for Girls; Care Today Children Services; Wombwell Oakfield Junior School; The Wey Valley School; Little Reddings Primary School; City College Norwich; Lyndhurst School; St Cedd's C of E Primary School; Brynmill Primary School; Vale First and Middle School; Williamsburgh Primary School; Stockton Heath Primary School; Rhydyfro Primary School; Lochgilphead Primary School; Dwr Y Felin Lower School; Plains Primary School; Ysbyty Ystwyth School; George Heriot's School; Elmbridge Infants School; Eddleston Primary School; Central Junior School; Sandfields Comprehensive School; Cleobury School; Rastrick High School; Chipping Norton School; Moat Hall Primary School; Dunvegan Primary School; George Watson's College; King Edward Primary School; Flora Stevenson Primary School; Low Port Primary School; Ormskirk School; The Friary School; Parkfields Middle School; Bromley High School; Stebon Primary School; Wallyford Primary School; Cuken Primary School; Crwys Primary School; Northallerton College; Lyndhurst School; Springfield Junior School; Arcadia Elementary School; Sunderland High School; The Bridgewater School Environment Club; The Manor Preparatory School and Addison Primary School.



VOLUNTARY WORK

Another successful year working with Rainforest Concern

Quest Teams 2003-2004 by Jon Cassidy, Quest Overseas



With the global situation putting many people off long-distance travel, Quest Overseas was concerned that perhaps we wouldn't be able to give the same level of volunteer support to Rainforest Concern projects as we had previously. Not so though - it just goes to show that gap year travellers will hit the roads no matter what the odds! With a total of seven teams sent out to three different Rainforest Concern projects in 2003, and a further five so far in 2004, we are delighted that we are still able to offer continued support through our volunteers.

Santa Lucia - A cattle-farming community now dedicated to conservation and ecology

Our first team spent their month working in the spectacular cloud forest community on the western slopes of the Ecuadorian Andes way back in February 2001. At that point, the community was divided; some believed strongly in the ideals of conservation and were determined to find a way to maintain the forest whilst still being able to maintain their families, while others were extremely cynical about the whole idea – how would they survive if they couldn't work the land, keep cattle and extract timber? Quest Overseas offered its support, by helping to establish the infrastructure for an ecotourism facility in the community - by creating trails, demonstrative forest farming plantations and reforesting areas of pastureland.

Four years on this work is nearly completed, and Santa Lucia is now an united community and is beginning to gain a reputation as one of the prime examples of ecotourism for visitors to Ecuador. Teams have created five different trails in the reserve including one that connects with a neighbouring conservation project in the community of Yunguilla, and another which leads down to the Maquipucuna Reserve. Nearly 20 of the 60 hectares of pastureland have been reforested with native species and demonstrative plantations of coffee, banana and

sugar cane have been created. This year, teams have been concentrating on constructing a 15 metre viewing tower in the heart of the primary forest, to offer a perfect vantage point for bird watchers to enjoy better sightings in the forest canopy. They have also been put to work to help create a giant bamboo plantation in a nearby community, in order to demonstrate to the locals a sustainable timber product, which can be used for construction. Our second Team left the project just the week before my writing this update and reports from our leader suggest they were extremely sad to leave. The people and the place once again made for an unforgettable experience.

Yachana - from conservation to community work

The Yachana project in the heart of the Amazon basin has always combined conservation with the needs of the local communities. To date, Quest Overseas has been focussing their efforts on the conservation side of the project, working to increase the buffer zone purchased between the Napo and Bueno rivers in order to help protect communities from logging corporations. This work is largely done, so this year our Teams have moved their focus onto the community aspects of the project.

Yachana recently completed the purchase of an area of land right on the banks of the Napo river. It is part forest and part agricultural land and the aim is to create a forest farming "technical college" for local youths who drop out of the traditional schooling system. Our Teams have been working alongside these young locals, helping to create the infrastructure for the college - creating plantations, building classrooms etc. The long-term contribution coupled with the fact they are working directly alongside people of their own age in the community is something we are particularly pleased with.

Ambue Ari Animal Sanctuary in Bolivia - the new park develops

Quest Overseas has been working in Ambue Ari for just two years now and it is great to see the progress that has taken place so far. The land for the new park was bought less than two years ago, and in that time a network of trails, a volunteer centre, running water and enclosures for three large cats have been constructed, on top of the continued care for the animals housed there. Teams this year have been concentrating on constructing two large enclosures for two new arrivals to the park – a pair of jaguars rescued from illegal pet traders.

New Projects for the Future - the Chilean Lake District

The partnership between Quest and Rainforest Concern has strengthened with the years and we are keen to become involved in any new ventures where our volunteers can be usefully engaged. We have recently been invited to become involved in two new projects in southern Chile (see pages 6 and 7), where Rainforest Concern has already started to protect the endangered araucaria forests, and are particularly excited about the possibility of having our volunteers there - watch this space!



Quest volunteers making a valuable contribution at Yachana

Finally, I would just like to take this opportunity to thank our volunteers for their continued hard work and generous contributions to the various projects. In the past two years, around 180 volunteers have contributed over £100,000 to Rainforest Concern supported projects, and we are extremely grateful for their support.

To find out more about joining a Quest Overseas Team, please check out our website on www.questoverseas.com or call the office on 01444 474744



MEMBERSHIP

WE ARE PARTICULARLY GRATEFUL TO THOSE OF YOU WHO BECAME BENEFACTORS OR GUARDIANS IN THE PAST YEAR:

Karen Murphy; R.L. Gay; Jonathan and Natalya Harris; Devon and Alya Magness; Lucy Alexander; Charlotte Balfour-Higgins; Katya Carew-Jones; Gemma Colman; Caitlin Dupuy; Guy Edwards; Ruth Gold; Sophia Jamieson; Carolyn Myatt; Catherine Oqq; Matthew Paulson-Ellis; Rupert Syme; Fiona Macpherson; Dominic Martin; Charles Watson; Tom Webb; Harriet Agnew; Sarah Anderson; Tanya Bainbridge; George Ball; Laura Beckerson; Catriona Blackwell; Edward Cooke; Olivia De Pree; Stuart Finlayson; Gemma Froggatt; Anna Jagan; Ronan O'Kelly; Geoffrey Raymond; Caroline Sherrington; Laura Symons; Devin Gray, Hannah Ratcliffe; Roxanna Kharrazi; Fleur Hutchinson; Gemma Town; Amy Hammond; Sophie Curtis; Gerard Harries; Nicholas Cross; Julien Lamontagne-Godwin; Alice Allen, Joanna Davis; Sam Richardson; Adam Loxton; Howard Brandwood; de Lance Holmes; Phil Welch; Serena Perkins; Kirsty Nicholson; Emma Jones; Jonathan Conway; Lucy Cracknell; Douglas Elvidge; Rachel Elton; Channa Frolic; Matt Hunt; Tim Wynn-Jones; Philippa Middleton; Laura Stockley; Tom Sutton; Emma Yarrow; Laura Hannam; W Stromberg; Sean Feeney; Malcolm Jempson; N Loftus; John M Reid; Paul Riley; Leslie Clark; Juliann Cunningham; Clare Owen; Kevin Banyard; Charlotte Shipton; Ann Brocklebank; Alyson Brown; Irene Green; Richard Rippen; Tim Cumine; Verity Altaras; Fran Lassman; Mostyn Taylor; Chris Pay; M Williams; Alison Cottrell; Debra Clarke; Lloyd James; Clare Mann; Toby Turnage; Una Ferris; S P Foster; Anthony Cramery; Peter Bolwell; Jackie Turner; Krystyna Deuss; Anita Anne Liga; Mark Fairbrass; S Clutten; R Mason; Matt Treacy; Matthew Chapman; Holly Dedman; Eve Delahooke; Sophie Duncanson; Tom Humphreys; Holly Jones; Joseph Motley; Tim Oates; Jonathan Peacock; Jenna Scott; Henrietta Spokes; Catherine Tapp; Isobel Taylor; Sarah Wales; Natalie Walsh; Sarah Walters; Karen Willcocks; Amanda Akass; Tamsin Ashworth; Michaela Boughton; Victoria Chappell; Rachel Copsey; Matt Depledge; Rosalind Goatly; Frederick Lerche-Lerchenborg; Graham McEvoy; Emma Palmer; Claire Ridley; Charlotte Symington; Jenny Taylor; Clementina Thavenot; David Alexander; William Bazeley; Sarah Benson; Fionnuala Byrne; Marianna Davis; Imogen Dunn; Robin Firth; Jennifer Gray; Geoff King; George Macdiarmid; Natasha Silver; Katherine Torry; Jonathan Ussher; Anna Wych; Emyr ap Sion; Richard Byam-Cook; Louise Couch; Robert Dunford; Bertie Elles; Joshua Freeman; Kate Gilbert; Sara Griffiths; Alexandra Hill; Laura Hyrapetian; Hannah Johnson; Ben Kenward; Emily Richardson; Jonathan Royce; Richard Ruberti; Timothy Stolerman; Sam Bass; Charlotte Berger; Katie Blundell; Natasha Briant-Evans; Laura Fox; James Greswell; Alexander Harris; Lydia Moore; David Nathan; Caroline Oqilvie; Kate Richards; Warwick Sharp; Kirsty Shaw; Annika Tingay; Lucy Williams; Hannah Yeadon; J Wyatt; Marinee Parrott; Simon Tiffin; Louis and Alfie Medd; Tim Pickering; Patricia Cameron; Peter Simister; Siham Bortcosh; Aniela Derodra; Helen Derodra; Liz Hobman; Patricia Lyne; Richard Sears; M.J. Price; Jason Bond; Alessandro Family; Alison Burton; Nick Bulloch; Andrew Ellul; E G Hutchens; James Redfern; Jaqueline Stokes; R G Sturton; B A Highfield; Krystyna Rawicz; Anne Goodwin; David Mann; Clive Sabel; Barrie Dunn; Susan Kingsman; R A Burges; Sofie and Liesje Pelsmakers; Julian Leaver; David Maggiori; Nicholas King; John Leathes; William Tacon; Phil Radcliff; Dawn Ades; J Kershaw; Matthew Last; Janet Inglis; Sally Whitaker; Colin Wilkinson; Tim Walker; Fox Family: Emma Fisher: M Horton: Hilary La Fontaine: Chris & Ginty Jackson: M A Hayman: J Chevalier: Peter Smith: Dawn Everson Watts: George Archer: Mark G July: Suzie Eiloart: Matthew Ridley: Adrian Harrison: Tim Whelan: James Southwick: Nashilu Mouen Makoua: David Parsons: G Rossdale: G Stefani: T Hodgkinson: Sean Hebden: James Bampfield; Priti Chotai; Aaron Prebenda; Andrew Schneider; Chris Newton; Paul Herbertson;; Geoffrey Millet; Anita Stone; Gemma Harding; Joanna Cooper; Sally Wren; Stephen Myler; William Goldsmith; John Shannnon; Daphne Churchill; Roger Harper; Oliver Caird; Ian Ferguson; W.J. Smyllie; B Burnand; Phyllida Lloyd; Nigel Moore; Michael Parish; Bullen; Patrick Mulford; Paul Cerrito; Kathleen Sterritt; Mr and Mrs Edwards; Digby Christmas; Rolf Jucker; Louise Fuller; Mr and Mrs Mason; William Jones; Roehie Chabot; Cate Detheridge; Thomas Verrall; G L Ayling; Ulick Staunton; April Quinton; Neil James; Sharon Ingram; Debbie Still; Peter Shaw; Laura Digan; Scott McDougall; Andrew Sortwell; Bernadette Thomas; David McQueen; Elizabeth Kennett; Heather Bolton; Andrew Crooks; Ross Castle; A Gregony; Graham Martin; Carey Roest; Peter Imeson; Jonathan Hofstetter; Oliver Browne-Wilkinson; Jane Hurdley; Robert M Pearson; Louis Dorton; Fleur Britten; Briony Thomson; Rory O'Connor; Dr N. Smith; Ian Griffin; Jennifer Angus; Kelly Chidgey; Karl Davey; Helen Davies; Jonathan Mears; Laura Price; Nicky Thomas and Charles Wheelhouse.

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If you are already, 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 full details upon request and you may of course choose a particular area to benefit from this.

Please take this opportunity to help us in the most direct and effective way possible, by becoming a Member of Rainforest Concern. Please tick one box only.	STANDING ORDER FORM I wish to pay monthly / yearly by Standing Order (please delete as appropriate):
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Guardian: Sponsoring 10 acres each year £21 per month £250 annually	Address Postcode
Benefactor: Sponsoring 20 acres each year £42 per month £500 annually	Name(s) of Account Holder(s)
Name Title	Account no Sort Code
Address	Instruction to your Bank - Please pay to Barclays Bank, 20-29-90, 50793086, Ref: RCSO.
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